



VMAPS

# VENTURA DIMENSIONAL HIGH GROWTH MODEL

## RESEARCH PACK

MAY 2022

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This Research Pack includes research reports on following Dimensional Funds:

- Dimensional Global Bond Trust
- Dimensional Australian Core Equity Trust
- Dimensional Australian Value Trust
- Dimensional Australian Small Company Trust
- Dimensional Global Value Trust
- Dimensional Global Small Company Trust
- Dimensional Emerging Markets Trust
- Dimensional Global Real Estate Trust
- Dimensional Global Core Equity Trust – Hedged Class

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# Dimensional Global Core Equity Tr AUDHdg 16843

## Morningstar Analyst Rating



28 Mar 2022 20:53, UTC  
Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022  
94 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
World - Currency Hedged

## Category Index

Morningstar DM xAus  
Large-Mid NR Hdg AUD

## Total Assets

4.6 AUD Bil

## Inception Date

9 Dec 2008

## Zunjar Sanzgiri

Senior Analyst

## Morningstar Pillars

Process (28 Mar 2022)	● Above Average
People (28 Mar 2022)	● Above Average
Parent (26 Mar 2021)	● High
Performance (28 Mar 2022)	
Price (28 Mar 2022)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Core

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

## Diversified and comprehensive global equity fund.

### Summary Zunjar Sanzgiri, 28 Mar 2022 20:53 UTC

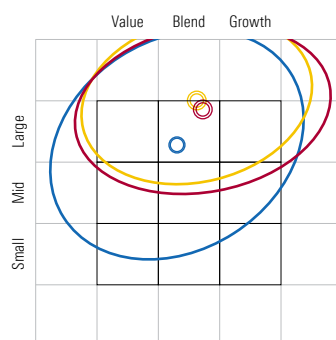
Dimensional Global Core Equity Trust (AUD Hedged) offers attractive global equity exposure via a well-diversified portfolio. Resting on the research of renowned academics such as Eugene Fama and Kenneth French, the strategy gives overweightings to stocks with lower valuations (measured by price/book ratio), smaller market caps, and higher profitability (using an adjusted measure of operating income). Evidence shows that stocks with these characteristics have tended to outperform over the long term. The fund offers exposure to stocks of all sizes listed in foreign developed markets while excluding emerging markets. The impact on the regional diversification is limited and should not affect the fund's long-term performance. The managers assign weights based on a stock's market cap and a market-cap multiplier. Larger multipliers are applied to stocks with smaller market caps, lower valuations, and higher profitability and smaller ones to stocks with opposite characteristics. This benefits investors in two ways. First, it tilts towards styles that have historically been associated with superior long-term returns, benefitting the fund when those styles are in favour. Second, it mitigates portfolio churn and subsequently lowers trading costs, because a stock's market cap is incorporated into the weighting scheme. It has also led to a modest bias towards the North American markets' stocks at the expense of European and Asian stocks. The fund is a representative and well-diversified strategy with a tilt towards smaller, cheaper, and more-profitable companies. In addition, the weighting approach limits turnover, trades are executed efficiently, and the fees (0.36%) are among the lowest relative to rival active peers. With these attributes, we can expect the fund to continue producing superior risk-adjusted returns relative to peers.

### Process ● Above Average | Zunjar Sanzgiri, 28 Mar 2022 20:53 UTC

## Approach

Dimensional aims to practically apply theoretical principles. Leveraging the research of renowned academics

## Equity Style



● Centroid ○ Ownership Zone

■ Investment 30 Apr 2022



■ Category Average 30 Apr 2022

■ Category Index 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	
												Investment Style Equity Style Box
												Total Return % (AUD)
	20.11	32.84	9.49	1.66	12.32	18.71	-11.40	24.99	5.09	24.81	-9.65	Investment
	18.08	30.35	10.14	2.73	8.73	20.44	-7.80	25.64	8.70	21.08	-12.20	Category Average
	19.27	32.83	12.42	4.03	10.42	20.20	-7.69	26.76	10.22	23.26	-11.99	Category Index
											N/A	Performance Quartile (within Category)
	12	16	56	76	12	72	91	53	75	15	N/A	Percentile Rank
	77	74	74	81	88	87	91	103	104	108	115	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity World - Currency Hedged as of 25 May 2022 | Index: Morningstar DM xAus Large-Mid NR Hdg AUD as of 25 May 2022 | Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Global Core Equity Tr AUDHdg 16843

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
 Silver	★★★		Australia Fund Equity World - Currency Hedged	Morningstar DM xAus Large-Mid NR Hdg AUD	4.6 AUD Bil	9 Dec 2008
28 Mar 2022 20:53, UTC Zunjar Sanzgiri, Senior Analyst	30 Apr 2022 94 Inv. in Category	31 Mar 2022				

such as Eugene Fama and Kenneth French, Dimensional aims to identify risk factors that are both cost-effective to capture and are sources of excess returns. Small size and value have been the mainstay factors, while profitability was introduced at the beginning of 2014. Rather than focusing on individual stock-picking or forecasting, Dimensional takes a highly diversified systematic approach to exploit each factor. Portfolio construction is driven by each stock's relative market cap and a range of weightings that Dimensional has assigned for each market segment based on the stock's characteristics, such as price/book ratio. This ensures overweightings in value, high-profitability, and small-cap stocks and underweightings in growth, low-profitability, and large-cap stocks. As a stock's market cap grows, exhibits low profitability, or develops growthlike traits, Dimensional rebalances to a new weighting rather than outright selling the position. This is a key method of reducing trading costs. Individual holding weights are capped at 5% at the time of purchase. The shop also considers momentum, delaying the purchase of downward momentum securities and delaying the disposal of securities with upward momentum. Both unhedged and hedged versions of the strategy are available.

## Portfolio


This strategy seeks out extra returns via small size, value, and profitability tilts. The portfolio has roughly 6,000 stocks, so any unsystematic risk should be diversified away. Unlike its other global equity strategies, Dimensional includes property trusts in this vehicle to provide a more extensive representation of the market. The small-cap and value tilts have led to sector biases in the portfolio relative to the MSCI World ex Australia Index, which is also the stated reference index. The fund is currently overweight in financials (ex property trusts) and energy while being underweight in technology and communication services. Some of the portfolio biases have been moderated by the introduction of profitability. The inclusion of more high-profit names in the portfolio counters some of the fund's value orientation against the MSCI index as highly profitable stocks tend to trade at higher valuations. However, as the fund is yet to undergo a full market cycle, the impact of the factors on the portfolio and returns through different market environments is still unclear. The process can lead to country skews, most notably to the United States. The fund invests in a total of 22 countries. The fund's style tilts and diversification make it a suitable core holding.

## People Above Average | Zunjar Sanzgiri, 28 Mar 2022 20:53 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses investment luminaries such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter includes senior executives and portfolio managers who meet twice a month to ensure the funds follow mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams and are spread throughout the world, but notably in Austin, Texas; Charlotte, North Carolina; Santa Monica, California; London; and Sydney. Overall responsibility and day-to-day running of this strategy lie with Asia-Pacific portfolio manager Bhanu Singh (appointed May 2015). He is supported by a team of more than a dozen investment professionals, including dedicated traders. The team is highly experienced, with an average of more than 12 years' experience and seven years of tenure at



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Dimensional. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been moderate, and even when turnover spikes the firm copes well thanks to its systematic approach. Globally, it's a high-calibre and experienced cohort of 100-plus investment professionals and traders.

**Parent**  High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.


Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

This strategy has traditionally outperformed peers over the long run, but the adverse market environment has caused the strategy's 10-year trailing returns to dip below the category average and MSCI World ex Australia Index. This is not surprising given that the portfolio's tilts towards value and small-cap factors have not been in favour for most of the past decade. The profitability factor was introduced in 2014 but has had only a modest positive impact on returns, thanks in part to several highly profitable energy names in the portfolio that collapsed in 2015. The strategy's small-cap and value bias often sees it underperform in down markets but rally well when markets recover. Returns were weaker in 2014 as overweightings in financials and underweightings in healthcare hurt. Performance slightly picked up in 2015 as financials took a turnaround and US exposure increased, though it still lagged the index. This strategy did well in 2016 as value stocks made a recovery but lagged when global equities took a leg down in late 2018. Performance for the year 2020 was well behind both peers and the index as both value and size, key tenets of Dimensional's approach, underperformed during the coronavirus-driven sell-off. The fund has made the most of the

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 <b>Silver</b>	★★★		Australia Fund Equity World - Currency Hedged	Morningstar DM xAus Large-Mid NR Hdg AUD	4.6 AUD Bil	9 Dec 2008
28 Mar 2022 20:53, UTC Zunjar Sanzgiri, Senior Analyst	30 Apr 2022 94 Inv. in Category	31 Mar 2022				

subsequent bull run and made up quite a bit of ground over 2021. Dimensional's value bias tends to deliver lumpy returns, but the sound research behind its approach suggests that the vehicle can deliver over the long term.


## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Silver.

## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

### How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. 

# Dimensional Global Core Equity Tr AUDHdg 16843

Process |  Above Average

## Morningstar Category

Australia Fund Equity World - Currency Hedged

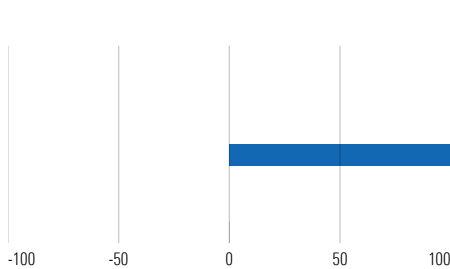
## Category Index

Morningstar DM xAus Large-Mid NR Hdg AUD

## Prospectus Benchmark

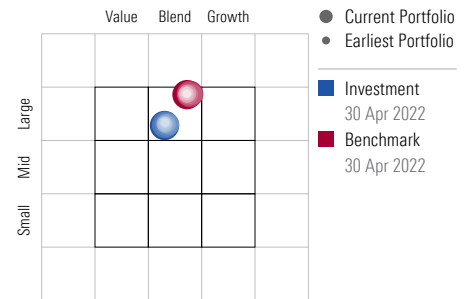
MSCI World ex Austr...Hdg AUD

## Asset Allocation 30 Apr 2022

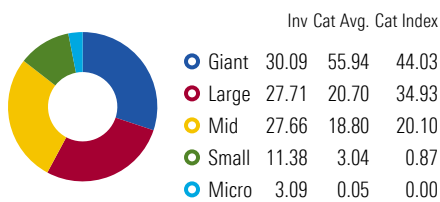


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.00	—	0.00	0.00	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	99.95	—	99.95	98.96	99.94
Cash	0.00	—	0.00	1.01	0.00
Other	0.05	—	0.05	0.03	0.06
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

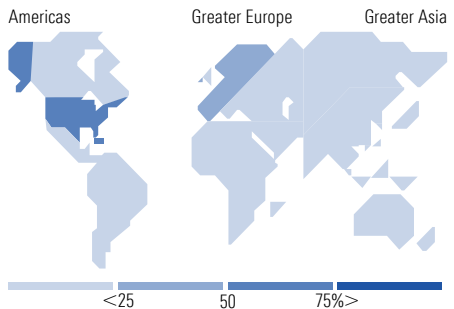
## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



## World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>73.34</b>	<b>72.00</b>	<b>71.15</b>
North America	73.19	71.39	71.03
Latin America	0.15	0.61	0.12
<b>Greater Europe</b>	<b>18.45</b>	<b>19.15</b>	<b>20.04</b>
United Kingdom	4.40	4.75	4.93
Europe-Developed	13.63	14.21	14.76
Europe-Emerging	0.02	0.00	0.11
Africa/Middle East	0.40	0.19	0.24
<b>Greater Asia</b>	<b>8.21</b>	<b>8.85</b>	<b>8.82</b>
Japan	6.70	6.03	7.35
Australasia	0.17	0.15	0.13
Asia-Developed	1.22	1.80	1.27
Asia-Emerging	0.12	0.87	0.07
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
United States	69.22	68.12	67.25
Japan	6.70	6.03	7.35
United Kingdom	4.40	4.75	4.93
Canada	3.97	3.27	3.78
Switzerland	2.97	3.50	3.38
France	2.51	3.07	2.98
Germany	2.26	2.29	2.28
Netherlands	1.28	1.61	1.49

## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	<b>35.02</b>	<b>33.48</b>	<b>33.09</b>
Basic Materials	5.64	4.47	4.13
Consumer Cyclical	11.17	11.70	11.01
Financial Services	14.42	14.90	14.52
Real Estate	3.79	2.41	3.43
<b>Sensitive</b>	<b>43.70</b>	<b>42.86</b>	<b>42.80</b>
Communication Svcs.	6.56	7.20	7.40
Energy	5.97	4.41	4.55
Industrials	13.78	11.05	10.92
Technology	17.39	20.20	19.93
<b>Defensive</b>	<b>21.29</b>	<b>23.66</b>	<b>24.11</b>
Consumer Defensive	7.36	7.81	7.81
Healthcare	10.93	13.36	13.24
Utilities	3.00	2.49	3.06

## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Wide Moat %	39.76	53.15	45.99
Narrow Moat %	40.91	33.81	39.26
No Moat %	19.33	13.03	14.76
Financial Health	B	B+	B+
Profitability	C+	B-	C+
Growth	C+	B-	C+
ROIC	16.60	19.24	17.74
Cash Return %	25.61	29.05	30.50
P/FCF Ratio	20.63	22.63	23.43
D/C Ratio	41.11	40.28	40.33

## Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	55.66	171.10	95.04
Turnover Ratio %	10	40	—
% Assets in Top 10	12	24	17
# of Holdings	6550	724	2583
Base Currency	AUD	AUD	USD

## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	13.41	15.65	15.84
P/B	2.05	2.67	2.41
P/Sales	1.31	1.98	1.79
P/Cash Flow	7.50	9.79	9.83
Dividend Yield %	2.12	1.96	2.01
Long-Term Earnings %	13.19	11.25	12.62
Historical Earnings %	23.18	21.30	22.75
Sales Growth %	4.31	5.82	5.19
Cash-Flow Growth %	9.58	14.06	11.65
Book Value Growth %	5.81	7.13	6.87

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight	Morningstar Rating	Total Rtn YTD %
Apple Inc	3.48	★★★★	-20.70
Microsoft Corp	3.14	★★★★★	-22.44
Amazon.com Inc	1.37	★★★★★	-37.56
Meta Platf...nc Class A	0.64	★★★★★	-46.10
Alphabet Inc Class C	0.62	★★★★★	-26.79
Alphabet Inc Class A	0.61	★★★★★	-26.84
JPMorgan Chase & Co	0.59	★★★★★	-18.94
Johnson & Johnson	0.59	★★★	7.32
Berkshire ...nc Class B	0.57	★★★★★	3.40
Verizon Co...ations Inc	0.53	★★★★★	0.00

# Dimensional Global Core Equity Tr AUDHdg 16843

People |  Above Average

Morningstar Category			Category Index			Prospectus Benchmark	
Australia Fund Equity World - Currency Hedged			Morningstar DM xAus Large-Mid NR Hdg AUD			MSCI World ex Austr...Hdg AUD	
Management	Inception Date	Number of Mgrs	Longest Tenure	Average Tenure	Advisor(s)	Subadvisor(s)	
	9 Dec 2008	0	—	—	DFA Australia Limited	—	

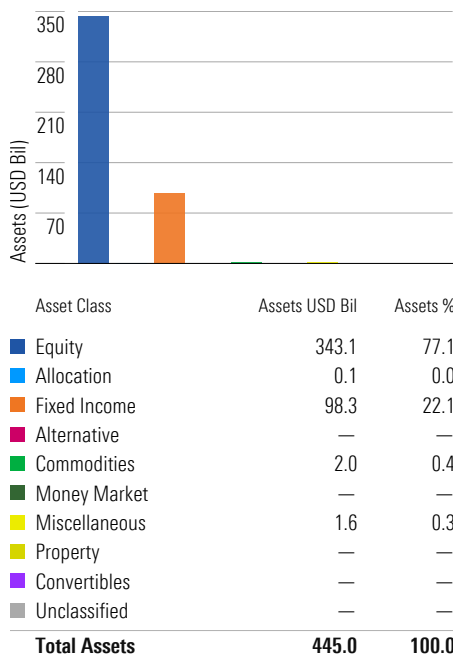
# Dimensional Global Core Equity Tr AUDHdg 16843

Parent |  High

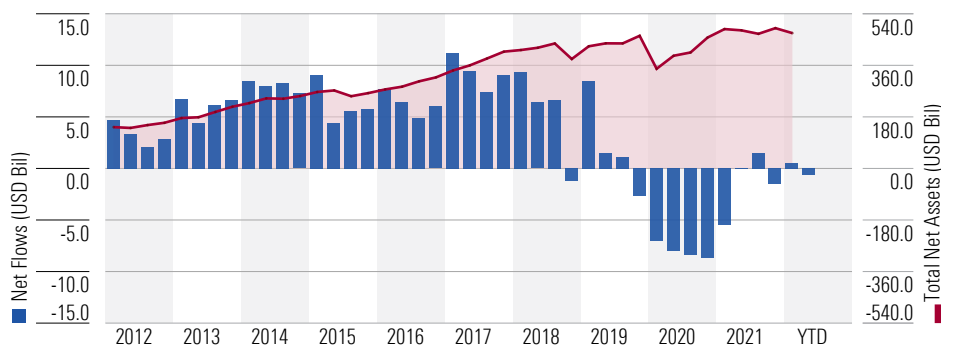
<b>Morningstar Category</b> Australia Fund Equity World - Currency Hedged	<b>Category Index</b> Morningstar DM xAus Large-Mid NR Hdg AUD	<b>Prospectus Benchmark</b> MSCI World ex Austr...Hdg AUD
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

**Branding Company Breakdowns:** Dimensional 30 Apr 2022

**Global Asset Class Breakdown** 30 Apr 2022

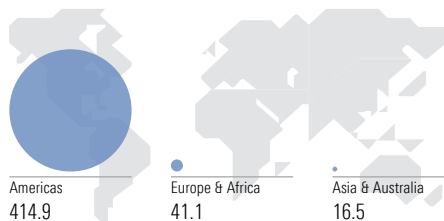


**Global Total Firm Assets and Investment Flows**



**Global Assets By Region, By Domicile** USD Bil

30 Apr 2022





# Dimensional Global Core Equity Tr AUDHdg 16843

## Performance

### Morningstar Category

Australia Fund Equity World - Currency Hedged

### Category Index

Morningstar DM xAus Large-Mid NR Hdg AUD

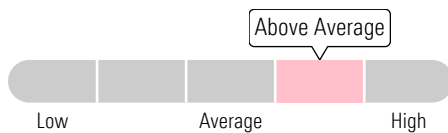
### Prospectus Benchmark

MSCI World ex Austr...Hdg AUD

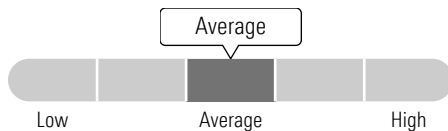
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years 94	8.45 Avg		Above Avg	★★★
5 Years 77	8.06 Avg		Above Avg	★★
10 Years 60	10.89 Avg		Above Avg	★★★
Overall	— Avg		Above Avg	★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	101.96	95.65	119.22
Downside Capture Ratio %	105.38	98.56	132.65
<b>Maximum Drawdown %</b>	<b>-26.09</b>	<b>-21.75</b>	<b>-21.21</b>
Drawdown Peak Date	1/1/20	1/1/20	1/1/20
Drawdown Valley Date	3/31/20	3/31/20	3/31/20
Max Drawdown Duration	3 Mo.	3 Mo.	3 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

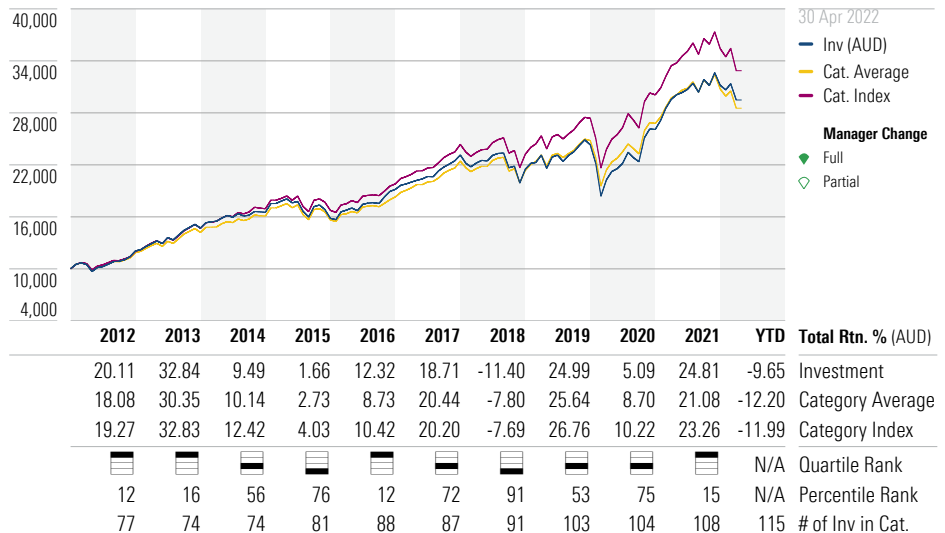
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	-0.25	-0.33	22.00	-3.15	-1.72
3 Years	8.45	9.20	39.00	8.01	9.04
5 Years	8.06	8.54	64.00	8.70	9.47
10 Years	10.89	9.85	47.00	10.63	11.98
Earl Avail*	12.18	—	—	—	—

\*Earliest Available as of 09 Dec 2008

### Rolling Return Summary 30 Apr 2022

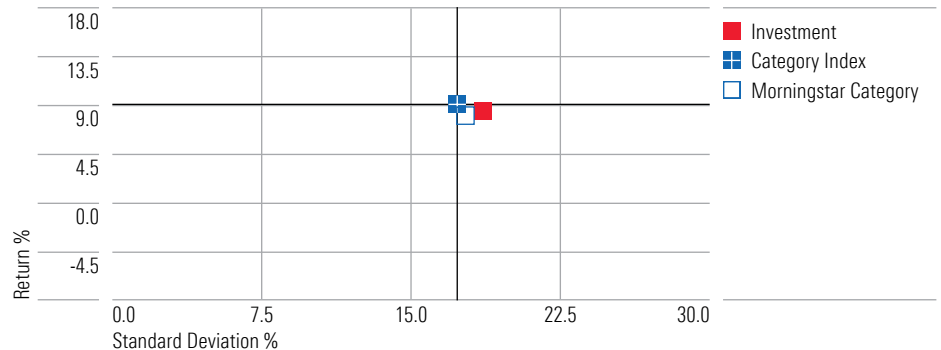
19%	36-Month Rolling Periods
29	125 Observations, 11 Years
36	The shading and percentages
16	correspond to how often the
	strategy returns landed in each
	category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	-0.88	-0.69	-1.44	-1.63	-0.52	-1.96	-1.37	-0.85	-0.24
Beta	1.06	0.99	1.25	1.05	0.99	1.16	1.05	0.97	0.93
R-Squared	97.19	92.62	68.42	97.29	92.95	66.02	97.29	91.29	55.12
Sharpe Ratio	0.51	0.51	0.57	0.50	0.56	0.61	0.71	0.72	0.82
Standard Deviation %	18.61	17.73	17.32	16.20	15.54	15.16	13.59	13.00	12.80

# Dimensional Global Core Equity Tr AUDHdg 16843

## Price

### Morningstar Category

Australia Fund Equity World - Currency Hedged

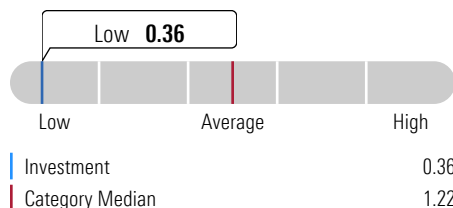
### Category Index

Morningstar DM xAus Large-Mid NR Hdg AUD

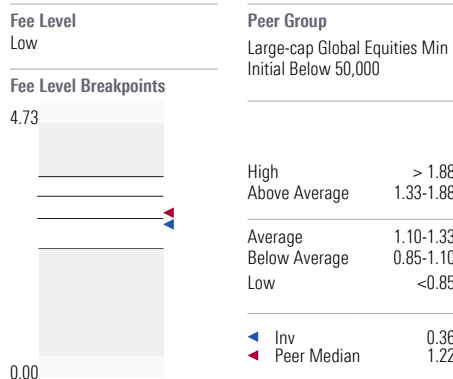
### Prospectus Benchmark

MSCI World ex Austr...Hdg AUD

### Prospective TCR 26 May 2020



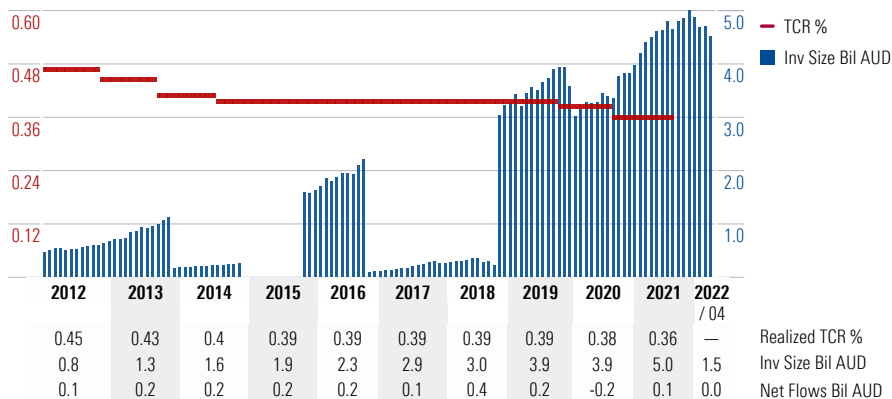
### Fee Level



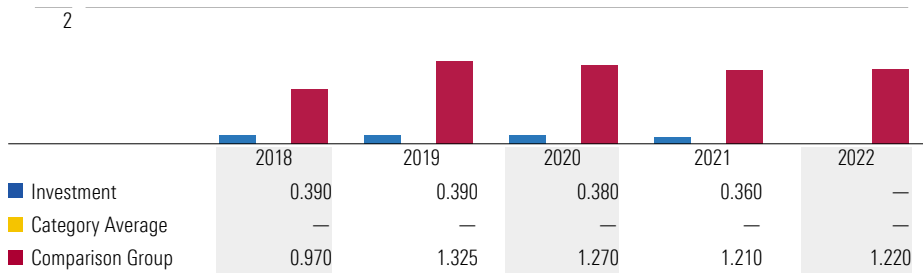
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.36
Investment Management Fee %	0.36
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.00
Representative Cost 05/31/22	0.36

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Large-cap Global Equities Min Initial Below 50,000

### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Gl...Equity AUD Hdg	DFA0009AU	Open	Low	0.36	—	0.00	10,000	1.49 Bil	7.01 Mil	AUD

# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Global Core Equity AUD Hgd	—	—	—	—	—	—	12-09-2008	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
Morningstar DM xAus Large-Mid NR Hdg AUD			10.07	11.43	12.68	12.58	08-06-2018					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Dimensional Global Core Equity AUD Hgd	—	—	—	—	12-09-2008	—	—	—	—	—

## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.



**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

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**Morningstar Analyst Rating**

	2020	2021	2022
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			

For a list of managed investments which Morningstar currently covers and provides written analysis on please contact your local Morningstar office. For information on the historical Morningstar Analyst Rating or Morningstar Quantitative Rating for this managed investment or any managed investment Morningstar covers, please contact your local Morningstar office.

Please note that investments in securities (including managed investments) are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security's investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Risk, Return and Star Rating serve as useful data points with respect to evaluating a managed investment's risk profile.

A current yield percentage is not a reflection of the actual return an investor will receive in all cases as market prices for securities are constantly changing due to such things as market factors. Where a security is denominated in a different currency than the currency of the User or User's clients, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment.

Indexes noted within the report are unmanaged, their returns do not include payment of any sales charges or fees an investor would pay to purchase securities, and cannot be invested in directly.

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ive analysis on any such managed investment as well as imposing informational barriers (both technology and non-technology), having separate organizational reporting lines between the Manager Research group and Morningstar's Index team, and monitoring by the compliance department. However, such managed investments are eligible to receive a Morningstar Quantitative Rating, which is a quantitative system that assigns forward-looking ratings based on a machine-learning algorithm.

- Morningstar's Investment Management group has arrangements with financial institutions to provide portfolio management/investment advice, some of which an analyst may issue investment research reports on. In addition, the Investment Management group creates and maintains model portfolios whose underlying holdings can include financial products, including managed investments that may be the subject of this Report. However, analysts do not have authority over Morningstar's Investment Management group's business arrangements nor allow employees from the Investment Management group to participate or influence the analysis or opinion prepared by them.
- Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a managed investment which is the subject of this Report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s most recent Proxy Statement and refer to the section titled "Security Ownership of Certain Beneficial Owners and Management" at <https://shareholders.morningstar.com/investor-relations/financials/sec-filings/default.aspx>. A managed investment's holding of Morningstar stock has no bearing on and is not a requirement for managed investments Morningstar determines to cover.

Analysts do not have any other material conflicts of interest at the time of publication. Users wishing to obtain further information should contact their local Morningstar office or refer to <http://global.morningstar.com/equitydisclosures>.

### The Morningstar Analyst Rating™ for Managed Investments

The Morningstar Analyst Rating™ for Managed Investments is a forward-looking analysis of a managed investment. The Morningstar Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each managed investment within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most

competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

For more information about methodology in analyzing stocks, please go to [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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#### For Recipients in Australia and New Zealand: Information regarding Flagship Fund Analyst Rating

The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.



### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-

term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in

managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager

Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio



within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is



above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of

a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the

end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its

obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Global Small Company Trust 6467

## Morningstar Analyst Rating



27 Jul 2021 22:13, UTC  
Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022  
35 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
World Mid/Small

## Category Index

MSCI World Small Cap  
NR USD

## Total Assets

519.4 AUD Mil

## Inception Date

18 Aug 2000

## Kongkon Gogoi

Senior Analyst

## Morningstar Pillars

Process (27 Jul 2021)	● Above Average
People (27 Jul 2021)	● Above Average
Parent (26 Mar 2021)	● High
Performance (27 Jul 2021)	
Price (27 Jul 2021)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Supporting Player

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

## Diversified small-cap exposure with class-leading execution.

**Summary** Kongkon Gogoi, 27 Jul 2021 22:13 UTC

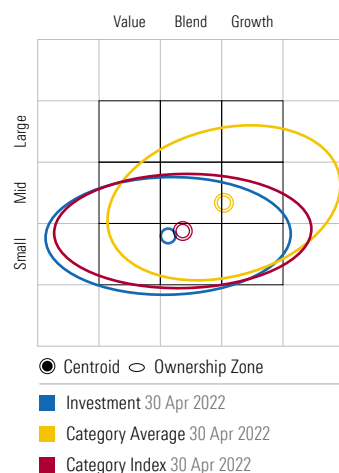
Dimensional Global Small Cap follows a simple and repeatable approach that blankets nearly every small- and micro-cap stock in the world. Resting on the research of renowned academics such as Eugene Fama and Kenneth French, the strategy is overweight in stocks with lower valuations, smaller market caps, and higher profitability. Research shows that stocks with these characteristics have tended to outperform over the long term. The managers exclude the most expensive and unprofitable companies and apply market-cap multipliers to go under- or overweight in the remaining stocks, depending on how well they possess the desired characteristics. The resulting portfolio is broad and well-diversified, with an overweighting in micro-caps at the expense of mid- and small caps, and a higher return on invested capital compared with the average peer in the global small-cap equity Morningstar Category. The use of market-cap multipliers to weight holdings limits fund turnover. It has also led to a modest bias to the United States relative to category peers, which has played in the fund's favor since inception. The fund has performed in line with the average category peer in risk-adjusted terms over the past three and five years. This fund is a representative and well-diversified strategy that consists of nearly 4,700 holdings with a tilt towards smaller, cheaper, and more-profitable companies. In addition, the weighting approach limits turnover, trades are executed efficiently, and fees (0.65%) are low. With these attributes, we can expect the fund to continue producing superior risk-adjusted returns relative to peers.

**Process** ● Above Average | Kongkon Gogoi, 27 Jul 2021 22:13 UTC

## Approach

This fund is well-representative of the opportunity set and oriented towards size, value (measured by price/book), and profitability. This approach was motivated by academic research demonstrating that these characteristics have historically been associated with higher returns. The portfolio covers more than 99% of

## Equity Style



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	
												<b>Investment Style</b>
												Equity Style Box
												<b>Total Return % (AUD)</b>
	15.84	56.82	8.39	13.05	14.51	12.39	-6.48	24.98	1.64	26.70	-10.30	Investment
	15.05	56.46	10.57	11.56	7.34	13.20	-5.40	23.60	12.21	23.03	-17.74	Category Average
	16.08	53.62	11.40	12.13	13.25	13.56	-4.29	26.38	5.64	22.86	-11.81	Category Index
											N/A	<b>Performance Quartile</b>
	31	60	77	43	1	56	56	52	80	33	N/A	(within Category)
	30	32	32	31	34	27	28	35	39	44	57	Percentile Rank
												# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity World Mid/Small as of 25 May 2022 | Index: MSCI World Small Cap NR USD as of 25 May 2022 | *Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For*

*standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement. \*Performance Disclosure: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.*



# Dimensional Global Small Company Trust 6467

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
Gold	★★★		Australia Fund Equity World Mid/Small	MSCI World Small Cap NR USD	519.4 AUD Mil	18 Aug 2000
27 Jul 2021 22:13, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 35 Inv. in Category	31 Mar 2022				

the small- and micro-cap stocks listed across 23 developed countries. Companies that exhibit the opposite characteristics are underweighted, or in some cases excluded. DFA portfolio managers use this in combination with market cap in their weighting approach, which promotes low turnover because changes in market prices usually mirror changes in the target weights. DFA's flexible trading approach helps to minimize trading costs. Dedicated traders patiently work into and out of positions and have the flexibility to substitute stocks that exhibit similar characteristics.

## Portfolio

This diversified and broad portfolio captures most of the global developed small-cap segment. With its underlying portfolio, the fund holds nearly 4,700 stocks. Because of its tilt toward smaller and micro-cap companies, the average market cap as of 31 May 2021 was AUD 4.9 billion, around two thirds of the category average. The portfolio holds more than 11% in micro-caps and 40% in small caps versus the average peer's 4% and 36%, respectively. Although the fund tilts explicitly towards value companies, it sits in the small-blend area of the Morningstar Style Box, while the category seems slightly more oriented towards growth. Industrials are the fund's largest sector exposure (17%-20%), followed by financial services and consumer cyclicals (both 13%-15%) and technology (11%-14%). Relative to the average peer, most sector weights vary within the 0%-4% range. Companies from the US account for more than two thirds of assets, followed by Japan (6%-8%), the United Kingdom (4%-6%), and Canada (2%-4%). As of 31 May 2021, the fund is overweight in the US and underweight in all other regions compared with the average peer.

## People Above Average | Kongkon Gogoi, 27 Jul 2021 22:13 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses investment luminaries such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter includes senior executives and portfolio managers who meet twice a month to ensure the funds follow mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams and are spread throughout the world, but notably in Austin, Texas; Santa Monica, California; London; and Sydney. Overall responsibility and day-to-day running of this strategy lies with Asia-Pacific portfolio manager Bhanu Singh (appointed May 2015). He is supported by a team of more than a dozen investment professionals, including dedicated traders. The team is highly experienced, with an average of more than 12 years' experience and seven years of tenure at Dimensional. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been moderate, and even when turnover spikes, the firm copes well thanks to its systematic approach. Globally, it is a high-calibre and experienced cohort of more than 100 investment professionals and traders.

## Parent High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

# Dimensional Global Small Company Trust 6467

## Morningstar Analyst Rating



27 Jul 2021 22:13, UTC

Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022

35 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
World Mid/Small

## Category Index

MSCI World Small Cap  
NR USD

## Total Assets

519.4 AUD Mil

## Inception Date

18 Aug 2000

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.

Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

Despite the prolonged underperformance of value factor, Dimensional Global Small Company Trust has maintained an edge over its category peers while delivering category indexlike performance over the past decade. In a segment of the market which is considered inefficient enough for active managers to add incremental value, Dimensional's performance is significant given its systematic investment approach that is value-biased. The long-term risk-adjusted performance of the strategy is inspiring, showcasing DFA's ability to compensate investors well over time for risk taken relative to the category average. Over the trailing five and 10 years through 30 June 2021, it has outperformed the category index and category average by 0.13% and 0.17% & 0.31% and 0.11% respectively. More recently, when the value factor made a rebound toward the end of last year through the first quarter of 2021 (November 2020-March 2021), the strategy outpaced its average peer by 9.4%.

## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Gold.


## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

## How do we decide what funds receive an ESG Commitment Level ?

# Dimensional Global Small Company Trust 6467

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
 27 Jul 2021 22:13, UTC Kongkon Gogoi, Senior Analyst	 30 Apr 2022 35 Inv. in Category	 31 Mar 2022	Australia Fund Equity World Mid/Small	MSCI World Small Cap NR USD	519.4 AUD Mil	18 Aug 2000

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. 

# Dimensional Global Small Company Trust 6467

Process |  Above Average

## Morningstar Category

Australia Fund Equity World Mid/Small

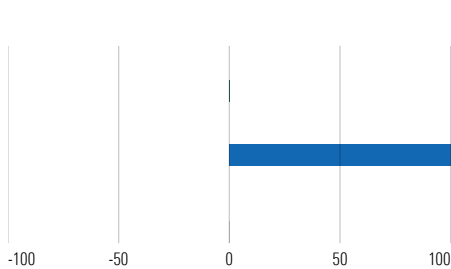
## Category Index

MSCI World Small Cap NR USD

## Prospectus Benchmark

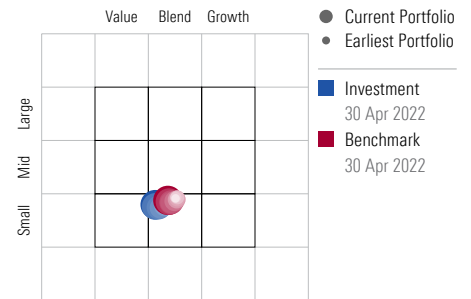
MSCI World Ex AUS Sm... NR AUD

## Asset Allocation 30 Apr 2022

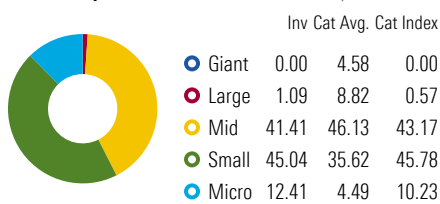


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.01	—	0.01	0.00	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	99.98	—	99.98	99.76	99.78
Cash	0.00	—	0.00	0.18	0.00
Other	0.01	—	0.01	0.05	0.22
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>99.99</b>	<b>100.00</b>

## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



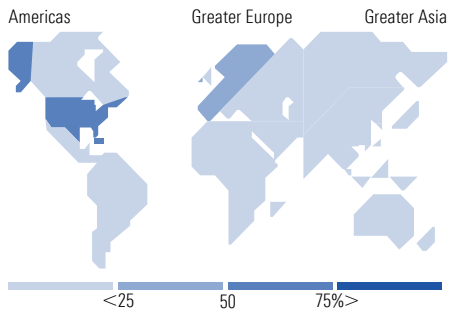
## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	10.94	16.28	12.41
P/B	1.53	2.19	1.56
P/Sales	0.91	1.55	1.05
P/Cash Flow	5.79	9.89	6.36
Dividend Yield %	1.79	1.38	1.93
Long-Term Earnings %	15.29	12.51	14.28
Historical Earnings %	20.98	19.51	22.03
Sales Growth %	2.89	1.85	-6.15
Cash-Flow Growth %	3.81	6.26	3.46
Book Value Growth %	4.61	8.66	2.44

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight	Morningstar Rating	Total Rtn YTD %
Devon Energy Corp	0.47	★	62.07
Coterra En...ary Shares	0.32	★★★	77.68
The Mosaic Co	0.31	★★	48.42
Diamondback Energy Inc	0.28	★★★	29.28
Marathon Oil Corp	0.28	★★	71.92
Avis Budget Group Inc	0.24		-15.48
Targa Resources Corp	0.23	★★★	33.37
Carlisle Companies Inc	0.22		-1.38
APA Corp	0.22	★★	63.15
Steel Dynamics Inc	0.21		26.37

## World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>72.55</b>	<b>62.22</b>	<b>63.47</b>
North America	72.23	61.09	63.14
Latin America	0.32	1.13	0.33
<b>Greater Europe</b>	<b>18.30</b>	<b>25.35</b>	<b>20.78</b>
United Kingdom	4.19	7.59	5.77
Europe-Developed	13.13	16.90	13.70
Europe-Emerging	0.07	0.21	0.06
Africa/Middle East	0.91	0.65	1.25
<b>Greater Asia</b>	<b>9.15</b>	<b>12.43</b>	<b>15.76</b>
Japan	7.42	7.76	9.81
Australasia	0.23	0.85	4.23
Asia-Developed	1.19	2.45	1.56
Asia-Emerging	0.31	1.37	0.16
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
United States	68.60	56.39	59.16
Japan	7.42	7.76	9.81
United Kingdom	4.19	7.59	5.77
Canada	3.63	4.70	3.98
Switzerland	2.38	1.87	1.81
Germany	2.17	3.18	1.96
France	1.50	1.36	1.25
Italy	1.21	2.02	1.07

## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	<b>39.26</b>	<b>33.47</b>	<b>44.00</b>
Basic Materials	7.02	4.63	7.00
Consumer Cyclical	14.01	11.71	13.08
Financial Services	16.19	11.88	13.04
Real Estate	2.04	5.25	10.88
<b>Sensitive</b>	<b>43.24</b>	<b>48.80</b>	<b>38.96</b>
Communication Svcs.	3.25	4.59	3.07
Energy	7.30	2.73	5.51
Industrials	19.83	21.95	18.39
Technology	12.86	19.53	11.99
<b>Defensive</b>	<b>17.51</b>	<b>17.74</b>	<b>17.06</b>
Consumer Defensive	4.98	3.89	4.72
Healthcare	9.03	12.52	9.51
Utilities	3.50	1.33	2.83

## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Wide Moat %</b>	<b>6.63</b>	<b>29.96</b>	<b>4.94</b>
<b>Narrow Moat %</b>	<b>48.56</b>	<b>55.99</b>	<b>40.98</b>
<b>No Moat %</b>	<b>44.81</b>	<b>14.05</b>	<b>54.08</b>
Financial Health	B-	B	B-
Profitability	C	C+	C-
Growth	C+	C+	C+
ROIC	9.70	14.84	7.64
Cash Return %	34.01	11.87	31.79
P/FCF Ratio	23.96	27.01	28.83
D/C Ratio	36.71	34.61	36.67

## Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	4.67	9.31	3.17
Turnover Ratio %	15	43	—
% Assets in Top 10	3	16	2
# of Holdings	4894	911	4502
Base Currency	AUD	AUD	USD

# Dimensional Global Small Company Trust 6467

People |  Above Average

Morningstar Category	Category Index	Prospectus Benchmark
Australia Fund Equity World Mid/Small	MSCI World Small Cap NR USD	MSCI World Ex AUS Sm... NR AUD

Management	Inception Date	Number of Mgrs	Longest Tenure	Average Tenure	Advisor(s)	Subadvisor(s)
	18 Aug 2000	2	18.4 Years	18.4 Years	DFA Australia Limited	—

Timeline <div><div></div> Past <div></div> Current</div>																										
Portfolio Manager	Tenure																Position In Investment									
	(Years)	Start Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	End Date	0K	10	50	100	500	1M	>					
Robert Ness	18.4	12/31/2003	<div></div>														N/A	<div></div>								
Bhanu P. Singh	18.4	12/31/2003	<div></div>														N/A	<div></div>								

Robert Ness	Years of Experience	Position In Investment	Current Investments Managed				Investment AUM	
	19.4	N/A	11				10.016 Bil USD	
Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
Dimensional Australian Core Equity Trust	01 Jan 2015 to 25 May 2022	1 of 2	3.72	AUD	—	9.64	9.89	8.78
Dimensional Global Core Equity Tr	05 Dec 2006 to 25 May 2022	1 of 2	2.55	AUD	—	9.64	6.32	7.15
Dimensional Australian Value Trust	01 Jan 2015 to 25 May 2022	1 of 2	0.97	AUD	—	14.16	10.59	8.78
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	0.75	AUD	—	1.72	4.61	3.83
Dimensional Australian Large Company Tru	01 Jan 2015 to 25 May 2022	1 of 2	0.74	AUD	—	9.45	8.85	8.78

Bhanu P. Singh	Years of Experience	Position In Investment		Current Investments Managed			Investment AUM	
	19.4	N/A		60			179.635 Bil USD	
Largest Investments Managed	Tenure Dates	Role	Inv.Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88



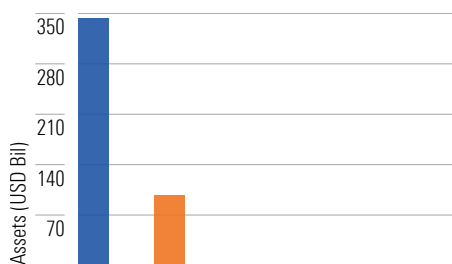
# Dimensional Global Small Company Trust 6467

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity World Mid/Small	<b>Category Index</b> MSCI World Small Cap NR USD	<b>Prospectus Benchmark</b> MSCI World Ex AUS Sm... NR AUD
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

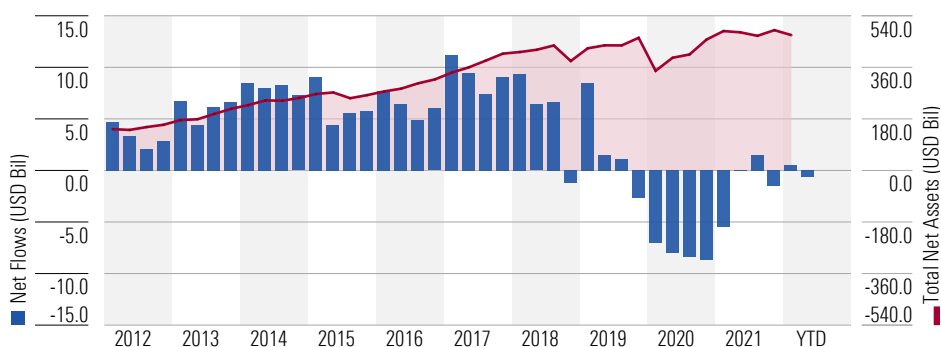
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



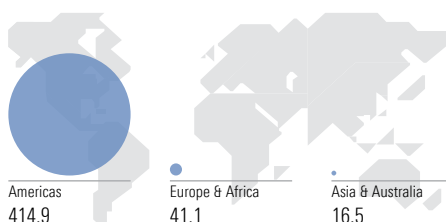
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Global Small Company Trust 6467

## Performance

### Morningstar Category

Australia Fund Equity World Mid/Small

### Category Index

MSCI World Small Cap NR USD

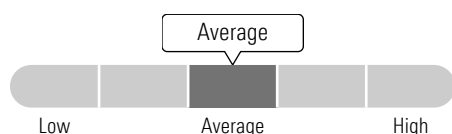
### Prospectus Benchmark

MSCI World Ex AUS Sm... NR AUD

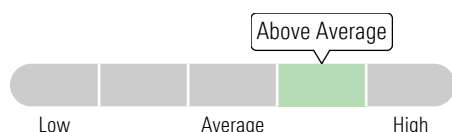
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years	7.34	Above Avg	Avg	★★★★
35				
5 Years	7.95	Avg	Avg	★★★
26				
10 Years	13.47	Avg	Below Avg	★★★
19				
Overall	—	Avg	Avg	★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	101.71	100.57	—
Downside Capture Ratio %	101.78	102.09	—
<b>Maximum Drawdown %</b>	<b>-22.09</b>	<b>-19.46</b>	<b>-30.06</b>
Drawdown Peak Date	2/1/20	2/1/20	1/1/20
Drawdown Valley Date	3/31/20	3/31/20	3/31/20
Max Drawdown Duration	2 Mo.	2 Mo.	3 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

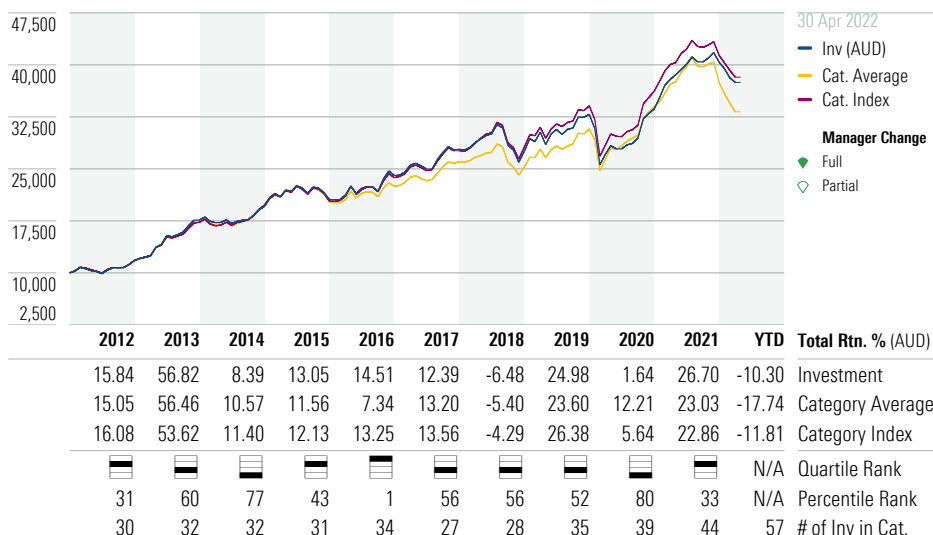
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	-1.14	-0.33	13.00	-9.66	-4.59
3 Years	7.34	8.13	29.00	7.07	7.24
5 Years	7.95	8.42	47.00	7.35	8.62
10 Years	13.47	13.69	39.00	11.82	13.58
Earl Avail*	7.29	—	—	—	—

\*Earliest Available as of 18 Aug 2000

### Rolling Return Summary 30 Apr 2022

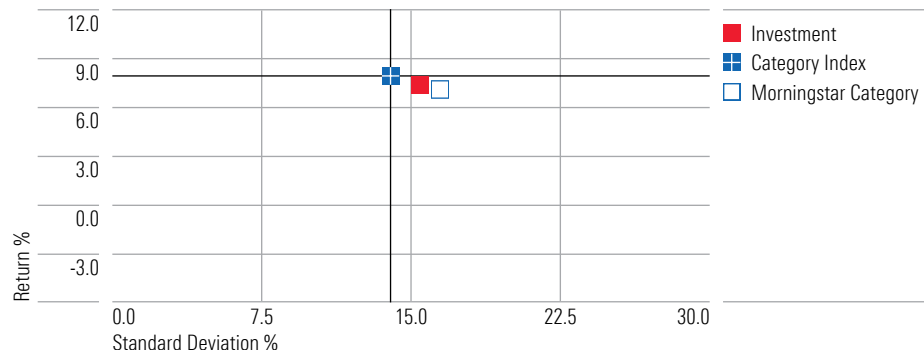
24%	36-Month Rolling Periods
34	203 Observations, 17 Years
29	
13	The shading and percentages correspond to how often the strategy returns landed in each category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	0.12	0.25	-1.99	-0.64	-0.69	-2.15	-0.15	-1.09	-0.52
Beta	1.00	0.97	1.14	1.01	0.95	1.12	1.01	0.96	1.06
R-Squared	97.69	81.57	87.05	97.99	83.07	88.27	98.08	86.23	89.03
Sharpe Ratio	0.52	0.48	0.59	0.54	0.50	0.69	0.91	0.78	1.02
Standard Deviation %	15.45	16.46	13.97	14.27	14.71	12.70	13.00	13.33	11.50

# Dimensional Global Small Company Trust 6467

## Price

### Morningstar Category

Australia Fund Equity World Mid/Small

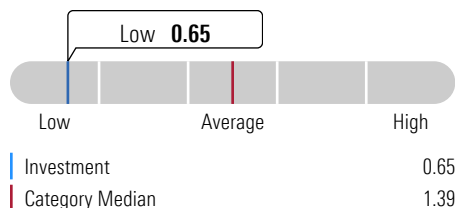
### Category Index

MSCI World Small Cap NR USD

### Prospectus Benchmark

MSCI World Ex AUS Sm... NR AUD

### Prospective TCR 26 May 2020



### Fee Level

#### Fee Level

Low

#### Peer Group

Small-cap Global Equities Min Initial Below 50,000

#### Fee Level Breakpoints

6.86

High > 2.96

Above Average 1.50-2.96

Average 1.35-1.50

Below Average 1.25-1.35

Low < 1.25

Inv 0.65

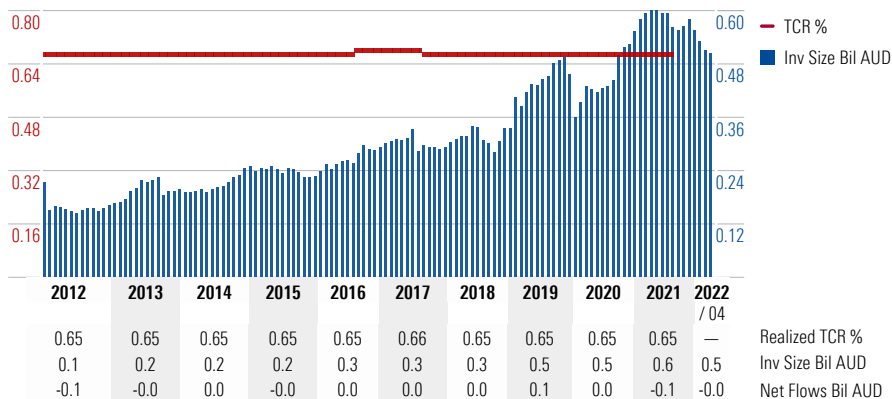
Peer Median 1.39

0.00

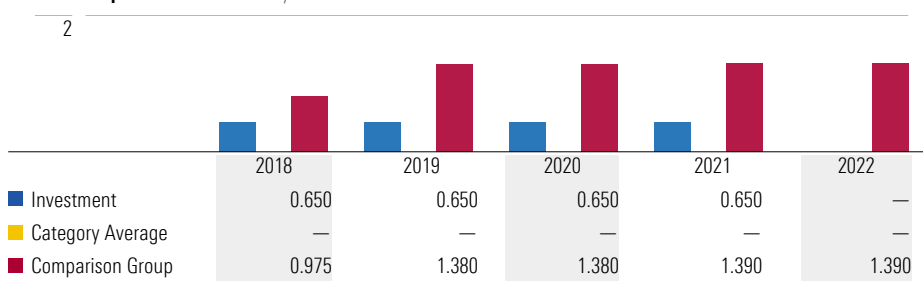
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.65
Investment Management Fee %	0.64
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.00
Representative Cost 05/31/22	0.65

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Small-cap Global Equities Min Initial Below 50,000

### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Gl... Company Trust	DFA0106AU	Open	Low	0.65	—	0.00	10,000	519.43 Mil	-67.07 Mil	AUD

# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Global Small Company Trust	—	—	—	—	—	—	08-18-2000	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
MSCI World Small Cap NR USD			-1.09	9.72	10.14	9.42	12-29-2000					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Global Small Company Trust	—	—	—	—	08-18-2000	—	—	—	—

## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense



risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

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**Morningstar Analyst Rating**

	2020	2021	2022
EO			
☆			
VA			
EO			
☆			
VA			
EO			
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VA			
EO			
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EO			
☆			
VA			

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The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most



competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

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#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

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When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.

### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-

term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (moths or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in

managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager



Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio



within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is

above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™

The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

●●●●●	High	Highest 10%
●●●●	Above Average	Next 22.5%
●●●	Average	Next 35%
●●	Below Average	Next 22.5%
●	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of

a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the

end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its



obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Global Value Trust 5841

## Morningstar Analyst Rating



28 Mar 2022 22:28, UTC  
Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022  
46 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
World Large Value

## Category Index

MSCI World Ex  
Australia NR AUD

## Total Assets

653.6 AUD Mil

## Inception Date

26 Aug 1999

## Zunjar Sanzgiri

Senior Analyst

## Morningstar Pillars

Process (28 Mar 2022)		Above Average
People (28 Mar 2022)		Above Average
Parent (26 Mar 2021)		High
Performance (28 Mar 2022)		
Price (28 Mar 2022)		

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Core

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

## Deep-value orientation in a global equity portfolio.

**Summary** Zunjar Sanzgiri, 28 Mar 2022 22:28 UTC

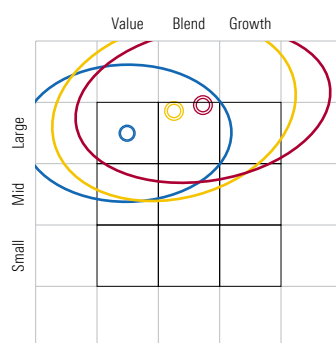
Dimensional Global Value Trust provides cheap access to an excellent value proposition packaged in a well-diversified portfolio of international stocks. The adherence to a systematic process, supported by skilled management and optimised trading execution, strengthens our conviction in the fund's long-term performance.

Based on the research findings of acclaimed academics such as Eugene Fama and Kenneth French, the portfolio construction process begins with filtering out the smallest 10%-15% of companies in each country (measured by total market cap). Using a metric of price/book value, the fund identifies the cheapest stocks from the investment universe by targeting the bottom 30%. A profitability overlay is then applied, which moderates the value tilt and the resulting sector skews. This also lessens the volatility and risk in the portfolio by limiting the value bias. To mitigate unnecessary turnover, the fund implements a flexible approach, incorporating momentum to ensure rising (or declining) stocks are not sold (or purchased) when the prices are showing directional movement.

Borne out of the above process, the portfolio consists of large- and mid-cap stocks across 22 developed markets. The geographical allocations of the portfolio are similar to the MSCI World ex Australia Index, with around 70% in US-listed stocks. However, the sectoral exposures borne out of the distinctive methodology are quite different. The fund is overweight in energy, healthcare, and financial services and underweight in technology, consumer durables, industrials, and utilities.

The value orientation of the fund has led to a fickle historical record with intermittent bursts of outperformance. In general, value-tilted strategies have faced difficult times over the past decade. However, with a fee of 0.46%, the fund remains a strong contender to generate alpha over the long term, provided that the investor is at ease with the accompanying volatility. In all, the fund is a top-notch choice within the world large-value Morningstar Category.

## Equity Style



● Centroid ○ Ownership Zone

■ Investment 30 Apr 2022

■ Category Average 30 Apr 2022

■ Category Index 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Investment Style
												Equity Style Box
												Total Return % (AUD)
	16.49	50.99	9.16	6.15	15.01	13.30	-4.93	22.07	-12.38	31.04	-1.99	Investment
	10.91	43.21	11.65	9.10	7.12	12.22	-2.85	21.11	-4.88	25.93	-4.33	Category Average
	14.14	48.03	15.01	11.80	7.92	13.38	1.52	27.97	5.73	29.58	-11.32	Category Index
											N/A	Performance Quartile (within Category)
	11	15	71	79	1	30	77	45	91	15	N/A	Percentile Rank
	57	57	57	55	47	47	45	52	49	50	58	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity World Large Value as of 25 May 2022 | Index: MSCI World Ex Australia NR AUD as of 25 May 2022 | Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Global Value Trust 5841

## Morningstar Analyst Rating



28 Mar 2022 22:28, UTC

Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022

46 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
World Large Value

## Category Index

MSCI World Ex  
Australia NR AUD

## Total Assets

653.6 AUD Mil

## Inception Date

26 Aug 1999

**Process** Above Average | Zunjar Sanzgiri, 28 Mar 2022 22:28 UTC

### Approach

Dimensional aims to practically apply theoretical principles. Leveraging the research of renowned academics such as Eugene Fama and Kenneth French, Dimensional aims to identify risk factors that are cost-effective to capture sources of excess returns. Value has been the mainstay factor, while profitability was introduced in early 2014. Dimensional doesn't pick stocks but rather takes a highly diversified systematic approach to exploit each factor. Portfolio construction is driven by each stock's relative market cap and a range of weightings Dimensional has assigned for each market segment based on the stock's characteristics, such as price/book ratio. This ensures an overweighting in value and high-profitability stocks while excluding growth and low-profitability stocks. As a stock exhibits low profitability or develops growthlike traits, Dimensional will gradually sell out of the positions. This is a key method of reducing trading costs. The shop also considers momentum, delaying the purchase of downward momentum securities and delaying the disposal of securities with upward momentum that are eligible for sale. Individual stock positions are capped at 5% at the time of purchase. Property trusts are typically excluded from Dimensional's equity offerings as they do not have a high correlation to equities.

### Portfolio

This portfolio is well-diversified, with 600-plus holdings across more than 20 countries. Portfolio construction begins with filtering out the smallest 10%-15% of companies in each country (measured by total market cap). The fund targets value by selecting only the cheapest 30% of companies, measured by price/book ratio. This tilts the fund to more mid-cap names compared with many peers, making it more volatile. Profitability is captured by tilting the portfolio toward high-profitability stocks (using an adjusted measure of operating income). The value tilt has led to sector biases relative to the MSCI World ex Australia Index. For example, the fund typically will have overweightings in financials (excluding property trusts) and energy and underweightings in technology and healthcare. These biases have been somewhat moderated since profitability was introduced, but they remain pronounced. The profitability skew should also counter some of the fund's value orientation against the MSCI index, since highly profitable stocks tend to trade at higher valuations. We are yet to see evidence of this, though, and, given the short time frame, it is difficult to determine their impact on the portfolio and returns through different market environments. The strategy's value tilt and diversification make it a suitable core holding.

**People** Above Average | Zunjar Sanzgiri, 28 Mar 2022 22:28 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and an investment committee. The former houses investment luminaries such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter includes senior executives and portfolio managers who meet twice a month to ensure the funds follow mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams and are spread throughout the world, but notably in Austin, Texas;

# Dimensional Global Value Trust 5841

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Charlotte, North Carolina; Santa Monica, California; London; and Sydney. Overall responsibility and day-to-day running of this strategy lie with Asia-Pacific portfolio manager Bhanu Singh (appointed May 2015). He is supported by a team of more than a dozen investment professionals, including dedicated traders. The team is highly experienced, with an average of more than 12 years' experience and seven years of tenure at Dimensional. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been moderate, and even when turnover spikes the firm copes well thanks to its systematic approach. Globally, it's a high-calibre and experienced cohort of 100-plus investment professionals and traders.

**Parent** High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.

Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

Dimensional's value bias can outperform or underperform for long periods of time and sometimes deliver lumpy returns. Since its 1999 inception, this strategy has convincingly outperformed the MSCI World ex Australia Index and index rivals that track it, as well as thrashing the category average, which includes fully active rivals. However, much of the outperformance came between the tech wreck and the global financial crisis. Over the decade to 28 Feb 2022, Dimensional's results have been mixed, roughly in line with the category average but well below the index. The portfolio's tilt toward value has not been in favour for most of the past decade. The strategy's value bias often sees it underperform in down markets but rally when markets recover. For example, it underperformed in 2008 (the global financial crisis) and 2011 (the European

# Dimensional Global Value Trust 5841

## Morningstar Analyst Rating



28 Mar 2022 22:28, UTC

Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022

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## Morningstar Category

Australia Fund Equity  
World Large Value

## Category Index

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Australia NR AUD

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debt crisis) but performed better in the recoveries of 2009, 2012, and 2013. The fund topped its category in 2016, though, as value made a remarkable cyclical comeback concentrated over a three-month period. Significant underperformance occurred during the coronavirus sell-off in February 2020 as both the value and small size factors did poorly. In the subsequent recovery, the fund posted top-quartile returns over 2021, and in 2022 it remains ahead of the category as at the end of February.

## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Gold.


## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

## How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors.

# Dimensional Global Value Trust 5841

Process |  Above Average

## Morningstar Category

Australia Fund Equity World Large Value

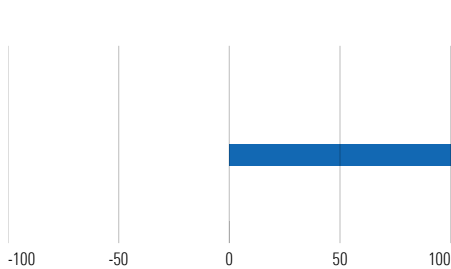
## Category Index

MSCI World Ex Australia NR AUD

## Prospectus Benchmark

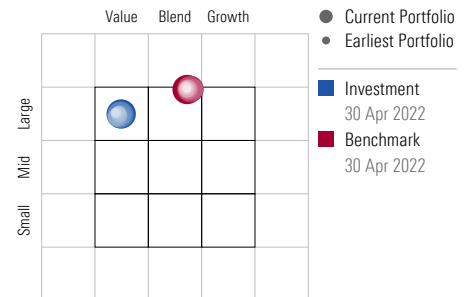
MSCI World Ex Australia NR AUD

## Asset Allocation 30 Apr 2022

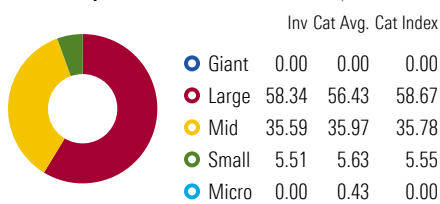


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.07	0.00
Preferred	0.00	—	0.00	0.00	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	99.87	—	99.87	86.70	99.97
Cash	0.00	—	0.00	13.77	0.00
Other	0.13	—	0.13	-0.55	0.03
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>99.99</b>	<b>100.00</b>

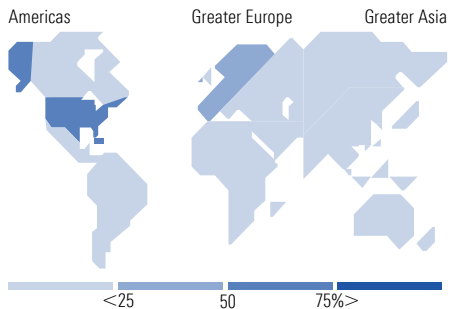
## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



## World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>71.96</b>	<b>59.33</b>	<b>73.38</b>
North America	71.83	58.44	73.26
Latin America	0.13	0.89	0.12
<b>Greater Europe</b>	<b>20.26</b>	<b>25.03</b>	<b>19.03</b>
United Kingdom	5.37	7.74	4.69
Europe-Developed	14.75	17.17	14.15
Europe-Emerging	0.00	0.02	0.00
Africa/Middle East	0.14	0.10	0.19
<b>Greater Asia</b>	<b>7.78</b>	<b>15.66</b>	<b>7.59</b>
Japan	6.51	6.00	6.24
Australasia	0.16	0.32	0.07
Asia-Developed	1.00	2.65	1.25
Asia-Emerging	0.11	6.69	0.03
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	<b>38.34</b>	<b>42.06</b>	<b>32.22</b>
Basic Materials	8.96	6.89	3.94
Consumer Cyclical	8.06	14.33	10.86
Financial Services	20.31	17.45	14.50
Real Estate	1.01	3.39	2.92
<b>Sensitive</b>	<b>39.89</b>	<b>35.66</b>	<b>43.09</b>
Communication Svcs.	8.06	9.29	7.76
Energy	14.18	3.54	4.63
Industrials	11.14	9.18	10.11
Technology	6.51	13.65	20.59
<b>Defensive</b>	<b>21.76</b>	<b>22.29</b>	<b>24.68</b>
Consumer Defensive	6.30	11.07	8.06
Healthcare	15.19	8.16	13.56
Utilities	0.27	3.06	3.06

## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	10.31	13.74	16.07
P/B	1.41	2.02	2.51
P/Sales	1.03	1.57	1.88
P/Cash Flow	5.74	8.10	10.12
Dividend Yield %	3.04	2.25	2.01
Long-Term Earnings %	14.24	12.33	12.48
Historical Earnings %	23.34	19.54	21.46
Sales Growth %	4.06	5.11	5.42
Cash-Flow Growth %	10.44	10.98	12.75
Book Value Growth %	5.92	5.82	6.82

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight	Morningstar Rating	Total Rtn YTD %
Chevron Corp	1.71	★★	49.54
JPMorgan Chase & Co	1.62	★★★★	-18.94
Exxon Mobil Corp	1.60	★★★	57.15
Pfizer Inc	1.38	★★★	-8.20
Intel Corp	1.34	★★★★	-17.67
Berkshire ...nc Class B	1.28	★★★★	3.40
Shell PLC ...ry Shares)	1.24	★★★	39.26
ConocoPhillips	1.17	★★★	53.37
Anthem Inc	1.13	★★★	9.28
Comcast Corp Class A	1.11	★★★★	-13.39

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
United States	67.98	55.50	69.48
Japan	6.51	6.00	6.24
United Kingdom	5.37	7.74	4.69
Switzerland	3.86	5.33	3.37
Canada	3.85	2.94	3.78
France	3.28	2.77	3.05
Germany	2.79	4.04	2.29
Netherlands	1.22	0.99	1.44

## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Wide Moat %	25.18	57.32	46.52
Narrow Moat %	46.68	25.79	39.53
No Moat %	28.14	16.89	13.95
Financial Health	B	B	B+
Profitability	C	C+	B-
Growth	C+	C+	B-
ROIC	11.79	13.80	18.33
Cash Return %	22.17	22.31	29.53
P/FCF Ratio	14.31	22.80	23.40
D/C Ratio	38.06	40.01	40.76

## Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	77.96	107.82	114.46
Turnover Ratio %	20	45	—
% Assets in Top 10	14	22	18
# of Holdings	661	719	1479
Base Currency	AUD	AUD	USD

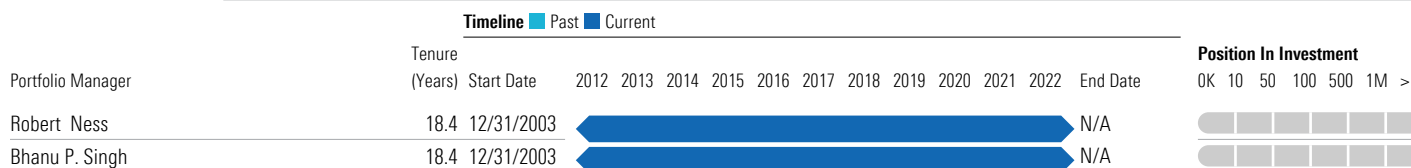


# Dimensional Global Value Trust 5841

People |  Above Average

<b>Morningstar Category</b>	<b>Category Index</b>	<b>Prospectus Benchmark</b>
Australia Fund Equity World Large Value	MSCI World Ex Australia NR AUD	MSCI World Ex Australia NR AUD

Management	Inception Date	Number of Mgrs	Longest Tenure	Average Tenure	Advisor(s)	Subadvisor(s)
	26 Aug 1999	2	18.4 Years	18.4 Years	DFA Australia Limited	—



Robert Ness	Years of Experience	Position In Investment		Current Investments Managed			Investment AUM	
	19.4	N/A		11			10.016 Bil USD	
Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
Dimensional Australian Core Equity Trust	01 Jan 2015 to 25 May 2022	1 of 2	3.72	AUD	—	9.64	9.89	8.78
Dimensional Global Core Equity Tr	05 Dec 2006 to 25 May 2022	1 of 2	2.55	AUD	—	9.64	6.32	7.15
Dimensional Australian Value Trust	01 Jan 2015 to 25 May 2022	1 of 2	0.97	AUD	—	14.16	10.59	8.78
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	0.75	AUD	—	1.72	4.61	3.83
Dimensional Australian Large Company Tru	01 Jan 2015 to 25 May 2022	1 of 2	0.74	AUD	—	9.45	8.85	8.78

Bhanu P. Singh	Years of Experience	Position In Investment		Current Investments Managed			Investment AUM	
	19.4	N/A		60			179.635 Bil USD	
Largest Investments Managed	Tenure Dates	Role	Inv.Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88

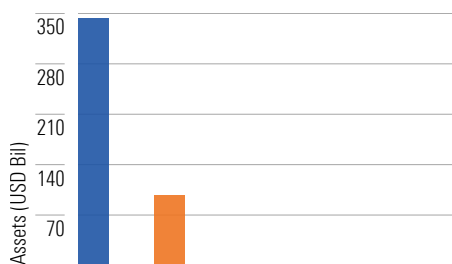
# Dimensional Global Value Trust 5841

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity World Large Value	<b>Category Index</b> MSCI World Ex Australia NR AUD	<b>Prospectus Benchmark</b> MSCI World Ex Australia NR AUD
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

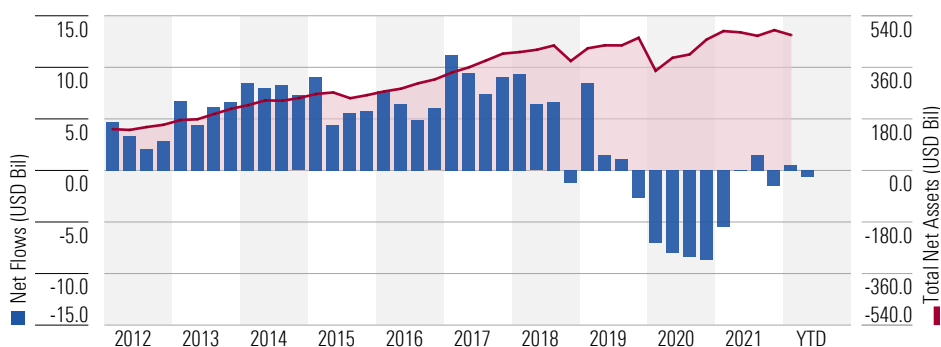
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



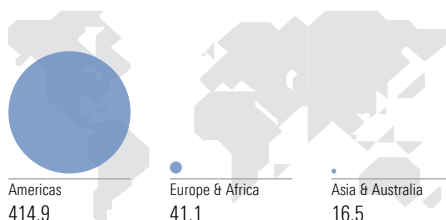
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Global Value Trust 5841

## Performance

### Morningstar Category

Australia Fund Equity World Large Value

### Category Index

MSCI World Ex Australia NR AUD

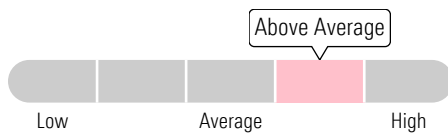
### Prospectus Benchmark

MSCI World Ex Australia NR AUD

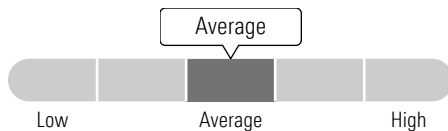
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years 46	6.39 Avg		Above Avg	★★
5 Years 39	7.74 Avg		High	★★★
10 Years 27	12.48 Avg		High	★★★
Overall	— Avg		High	★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	86.65	77.19	—
Downside Capture Ratio %	103.79	82.32	—
<b>Maximum Drawdown %</b>	<b>-22.89</b>	<b>-17.34</b>	<b>-12.79</b>
Drawdown Peak Date	12/1/19	2/1/20	2/1/20
Drawdown Valley Date	7/31/20	3/31/20	3/31/20
Max Drawdown Duration	8 Mo.	2 Mo.	2 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

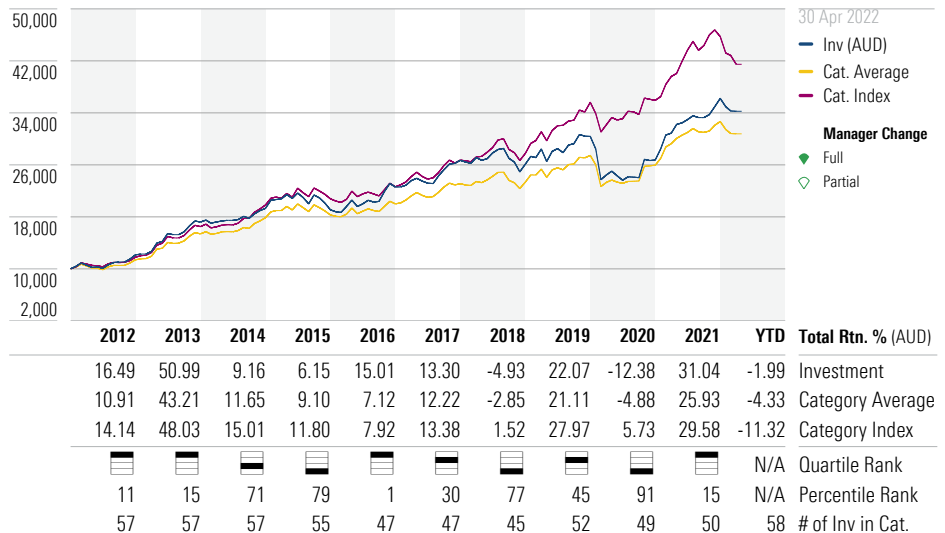
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	10.89	10.80	25.00	6.56	4.73
3 Years	6.39	6.21	58.00	7.12	10.07
5 Years	7.74	8.43	55.00	8.50	11.37
10 Years	12.48	13.07	35.00	11.91	14.47
Earl Avail*	5.94	—	—	—	—

\*Earliest Available as of 31 Aug 1999

### Rolling Return Summary 30 Apr 2022

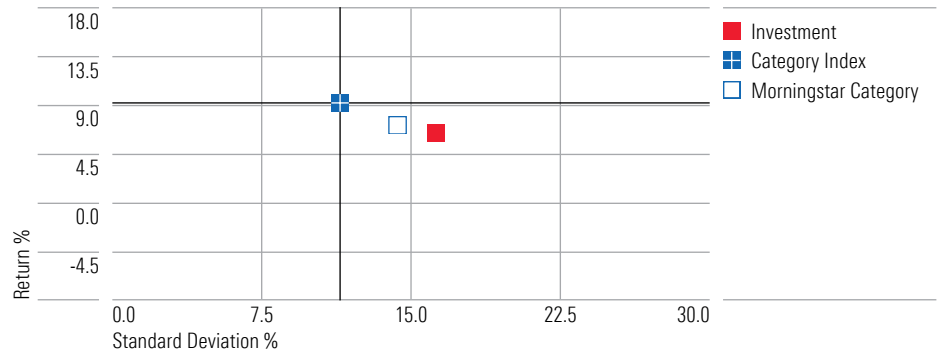
36%	36-Month Rolling Periods
29	203 Observations, 17 Years
24	
10	The shading and percentages correspond to how often the strategy returns landed in each category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Trailing Alpha	-3.68	-1.61	—	-3.46	-1.22	—	-2.18	-1.19	—
Beta	1.09	0.92	—	1.05	0.87	—	1.05	0.91	—
R-Squared	64.88	64.11	—	69.24	69.40	—	77.41	79.63	—
Sharpe Ratio	0.44	0.57	0.80	0.53	0.67	0.92	0.84	0.92	1.13
Standard Deviation %	16.25	14.32	11.44	14.13	11.94	10.65	13.01	11.15	10.27

# Dimensional Global Value Trust 5841

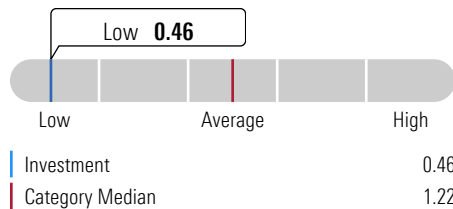
## Price

**Morningstar Category**  
Australia Fund Equity World Large Value

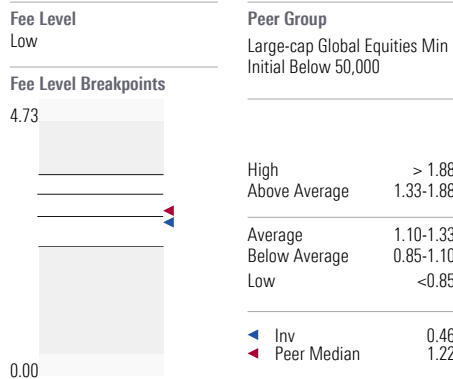
**Category Index**  
MSCI World Ex Australia NR AUD

**Prospectus Benchmark**  
MSCI World Ex Australia NR AUD

### Prospective TCR 26 May 2020



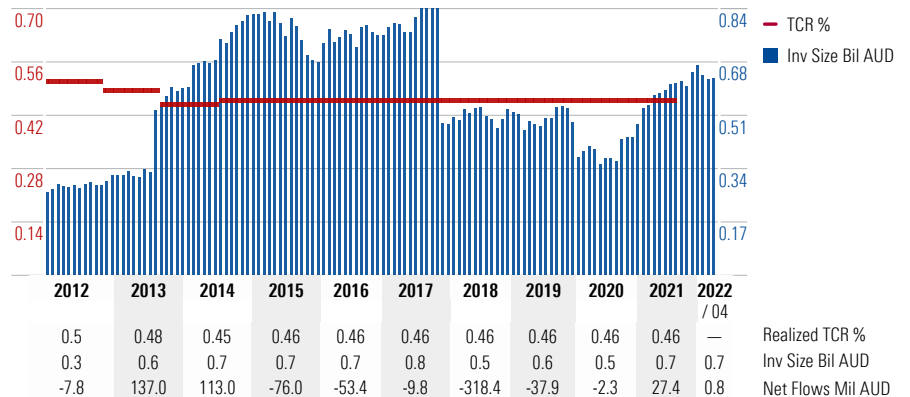
### Fee Level



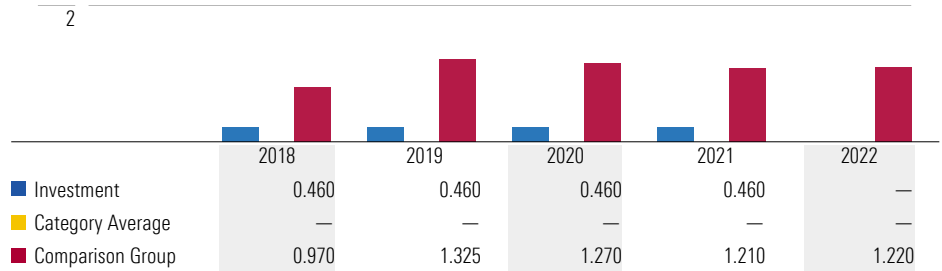
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.46
Investment Management Fee %	0.46
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.00
Representative Cost 05/31/22	0.46

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Large-cap Global Equities Min Initial Below 50,000

### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Global Value Trust	DFA0102AU	Open	Low	0.46	—	0.00	10,000	653.57 Mil	16.55 Mil	AUD

# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Global Value Trust	—	—	—	—	—	—	08-26-1999	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
MSCI World Ex Australia NR AUD			11.60	12.88	14.64	9.91	12-31-1969					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Global Value Trust	—	—	—	—	08-26-1999	—	—	—	—



## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

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Quantitatively-Driven Content is calculated monthly for securities which do not receive a Morningstar Analyst Rating™ or analyst-derived Pillar Scores, and therefore also do not receive written analysis produced by a person in their capacity as an analyst for Morningstar's Manager Research Group.

Quantitatively-driven analysis is written by taking the unique, underlying statistics that drive an investment product's pillar rating, as well as other supporting data, and translating those values into sentences and paragraphs. The framework in which quantitatively-driven analysis is generated uses mental models meant to mirror analyst-driven written analysis.

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### Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security's investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions.

Ratings, Pillar Scores, and ESG Commitment Levels are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the content in this Report. A change in the fundamental factors underlying the Report's content can mean that the information shown herein is subsequently no longer accurate.

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ratings, Pillar Scores, and ESG Commitment Levels within this Report are statements of opinions; they are not statements of fact.

Morningstar believes reasonable efforts were made by its analysts to carefully research information contained in their analysis and by the Quantitative Research team in creating methodologies and choosing supporting data. The information on which the analysis is based has been obtained from sources which are believed to be reliable such as, for example, the fund's prospectus and shareholder reports (or their equivalents), managed investment company website, interviews with managed investment company personnel, and relevant and appropriate press sources as well as data, statistics and information within Morningstar's own database. While Morningstar, its analysts, and the Quantitative Research team has obtained data, statistics and information from sources it believes to be reliable, the data, statistics, and information has not been audited or independently verified.

Prices noted with the Report are the closing prices on the last stock-market trading day before the publication date stated, unless another point in time is explicitly stated.

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ing an investment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

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### Morningstar Analyst Rating

	2020	2021	2022
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			
EO			
☆			
VA			

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### The Morningstar Analyst Rating™ for Managed Investments

The Morningstar Analyst Rating™ for Managed Investments is a forward-looking analysis of a managed investment. The Morningstar Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each managed investment within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most



competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

For more information about methodology in analyzing stocks, please go to [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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#### For Recipients in Australia and New Zealand: Information regarding Flagship Fund Analyst Rating

The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.

### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-

term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in



managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager



Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio

within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is

above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of

a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the



end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its



obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Australian Small Company Trust 6907

**Morningstar Analyst Rating**  
**Neutral**

22 Feb 2022 19:33, UTC  
Kongkon Gogoi, Senior Analyst

**Morningstar Rating**  
★★

30 Apr 2022  
89 Inv. in Category

**Sustainability Rating**  
★★★★★

31 Mar 2022

**Morningstar Category**  
Australia Fund Equity  
Australia Mid/Small Blend Ordinaries TR AUD

**Category Index**  
S&P/ASX Small

**Total Assets**  
334.8 AUD Mil

**Inception Date**  
2 Oct 2000

**Kongkon Gogoi**  
Senior Analyst

## Morningstar Pillars

Process (22 Feb 2022)	Below Average
People (22 Feb 2022)	Above Average
Parent (26 Mar 2021)	High
Performance (22 Feb 2022)	
Price (22 Feb 2022)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Supporting Player

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

Systematic, low-cost exposure to small-cap Australian equities but there are better alternatives available.

**Summary** Kongkon Gogoi, 22 Feb 2022 19:33 UTC

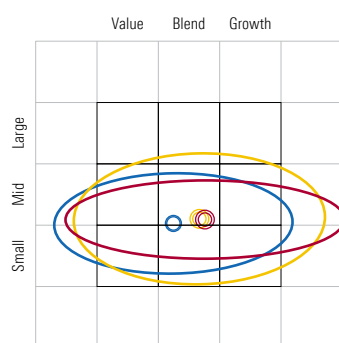
DFA Australian Small Company Trust is a reasonable choice for Australian small-cap exposure specifically for its appealing low fee. However, active fundamental stock-pickers have an edge over DFA in this competitive segment. The strategy applies a systematic approach to stock selection and portfolio construction to capture risk premia identified by well-regarded academics Eugene Fama and Kenneth French.

DFA postulates that small-caps compensate for their higher risk by delivering a premium in the long run. The investment universe is wide, going all way down to AUD 50 million market cap, but DFA holds stocks only from the bottom 15% of the market-cap spectrum in the Australia equity market. This yields a diversified portfolio that carries fewer idiosyncratic risks than most peers. The process also has a profitability factor overlay that reduces exposure to unprofitable companies but better-rated active managers navigate around unprofitable smaller companies more efficiently in our view. As such, whether the profitability factor arms DFA with any competitive advantage is debatable.

The strategy does not involve individual stock-picking, as DFA believes markets are fairly priced, but focuses on constructing portfolios that exhibit size and profitability characteristics. The portfolio management team is experienced, stable, and knowledgeable, ably supported by a large team of investment researchers, traders, and academics both locally and internationally. Performance has waxed and waned with fourth-quartile performance from 2011-15 and second- or third-quartile thereafter to December 2021. The low fee of 0.61% per year has been a boon, elevating the long-term returns to beat the index modestly. It, however, has delivered protracted underperformance relative to its peers. Most rivals have done well in exploiting pricing inefficiencies and compensated investors better for risk taken in the small-cap segment.

In summary, DFA Australian Small Company Trust does offer some appealing benefits like low cost and a

## Equity Style



● Centroid ○ Ownership Zone

■ Investment 30 Apr 2022


■ Category Average 30 Apr 2022

■ Category Index 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	
												<b>Investment Style</b>
												Equity Style Box
												<b>Total Return % (AUD)</b>
	10.81	4.78	-4.96	8.84	13.90	15.31	-8.35	21.92	8.54	20.37	-3.66	Investment
	21.03	13.98	1.29	18.21	8.44	18.14	-7.97	27.53	15.93	21.07	-8.67	Category Average
	6.58	-0.76	-3.81	10.16	13.18	20.02	-8.67	21.36	9.21	16.90	-5.65	Category Index
												<b>Performance Quartile</b>
												(within Category)
	93	80	80	75	17	62	47	59	87	48	N/A	Percentile Rank
	63	62	65	66	81	79	86	92	100	113	113	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity Australia Mid/Small Blend as of 25 May 2022 | Index: S&P/ASX Small Ordinaries TR AUD as of 25 May 2022 | Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Australian Small Company Trust 6907

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
<b>Neutral</b>	★★		Australia Fund Equity Australia Mid/Small Blend Ordinaries TR AUD	S&P/ASX Small	334.8 AUD Mil	2 Oct 2000
22 Feb 2022 19:33, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 89 Inv. in Category	31 Mar 2022				

diversified portfolio with a slight profitability tilt, but it is not our preferred choice. We opine that skillful stock selection and active risk management is a more suitable approach to navigate the esoteric and idiosyncratic risks associated with the small-caps exposure.

**Process**  Below Average | Kongkon Gogoi, 22 Feb 2022 19:33 UTC

## Approach

DFA believes that, in the long run, small-caps trade at a relative discount to the market because of their greater risk and that investors can earn a premium by investing efficiently in this segment. The strategy defines the smallest 15% of Australian-listed companies by market cap down to AUD 50 million market cap as its investment universe. It excludes all the stocks in the bottom quartile of profitability. As illiquidity and high trading costs can negate the potential premium, Dimensional attempts to gain exposure to small-caps as efficiently as possible. The strategy doesn't forecast or search for mispriced securities, instead focusing on constructing a well-diversified portfolio of 200-300 names. The team applies several filters based on momentum and liquidity and excludes REITs, IPOs, and investment companies. Dimensional implemented the profitability factor on this segment at the end of 2013, which serves as a supplementary quality metric. Dimensional exercises patience when dealing, focusing on price rather than execution speed, and acts as a supplier of liquidity. DFA may choose to delay purchases on stocks that have expressed negative momentum and delay the profit-taking of those that have had positive momentum. Turnover is reasonably low at 15% to 30% annually.


## Portfolio

Dimensional's highly diversified portfolio takes small stock positions, which limits the idiosyncratic risks. However, this strategy is quite different from the S&P/ASX Small Ordinaries Index. In particular, it has consistently had minimal REIT exposure; Dimensional views REITs as insufficiently equity like for its process to work effectively. This gap has widened as REITs rose as a proportion of the overall small-cap market since 2012. The portfolio has consistently had overweighting in the industrials and consumer discretionary sectors. Since the small-cap and low-profitability exclusion criteria were implemented in September 2015, the overweighting in energy has shifted to sectors such as healthcare. This also led to the portfolio's price/book ratio becoming marginally higher than the index. In addition, the change in the investment universe has resulted in the portfolio's average market cap rising above that of the index. The strategy's exclusion of the bottom quartile of profitability stocks reduces exposure to unprofitable and often speculative companies. While the strategy is highly diversified, it's best used as a supporting player because of the inherent volatility and liquidity risks of small-caps.

**People**  Above Average | Kongkon Gogoi, 22 Feb 2022 19:33 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses investment academics such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter

# Dimensional Australian Small Company Trust 6907

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
<b>Neutral</b>	★★		Australia Fund Equity Australia Mid/Small Blend Ordinaries TR AUD	S&P/ASX Small	334.8 AUD Mil	2 Oct 2000
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includes senior executives and portfolio managers who meet bimonthly to ensure the funds follow their mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams spread throughout the world but notably in Austin, Santa Monica, London, and Sydney. Overall responsibility for this strategy lies with Bhanu Singh, the head of Asia-Pacific portfolio management, who was appointed in May 2015. He is supported by a highly experienced team consisting of a further 16 investment professionals and five traders. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been low, and, even when turnover spikes, the firm copes well because of its systematic approach. Globally, it is a well-resourced and experienced cohort of investment professionals and traders. Dimensional's portfolio managers are evaluated primarily on their ability to implement the strategies.

**Parent**  High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.


Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

Dimensional Australian Small Company Trust has beaten the S&P/ASX Small Ordinaries Index (although modestly) over the trailing 10 and 15 years through December 2021, but we view this benchmark as a poor yardstick for success. Against category peers, this strategy has fared poorly, with bottom-quartile returns during the trailing three-, five-, 10-, and 15-year periods to December 2021. Dimensional surpassed the index in each calendar year from 2010 to 2013 but lagged in 2014, 2015, and 2017 because of the portfolio's overweighting in the materials and energy sectors. The strategy trailed its category average by a significant

# Dimensional Australian Small Company Trust 6907

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
<b>Neutral</b>	★★		Australia Fund Equity Australia Mid/Small Blend Ordinaries TR AUD	S&P/ASX Small	334.8 AUD Mil	2 Oct 2000
22 Feb 2022 19:33, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 89 Inv. in Category	31 Mar 2022				

margin from 2011 through 2019 except 2016, and this peer-relative underperformance far outweighed its relative outperformance in 2007-10. Performance in 2016 was initially muted, owing in part to Dimensional's structural underweighting in the REIT sector and an underweighting in materials because of the low-profitability exclusion rules. However, this strategy posted a staggering rebound in the final few months of 2016, which enabled it to deliver top-quartile returns against category peers. Over the trailing three years through December 2021, category relative performance has been hurt by poor stock selection, specifically in materials and information technology.


## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class may not be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating.

## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

### How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. 



# Dimensional Australian Small Company Trust 6907

## Process | Below Average

### Morningstar Category

Australia Fund Equity Australia Mid/Small Blend

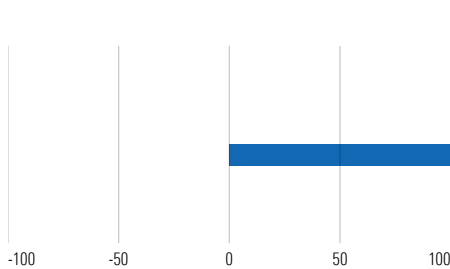
### Category Index

S&amp;P/ASX Small Ordinaries TR AUD

### Prospectus Benchmark

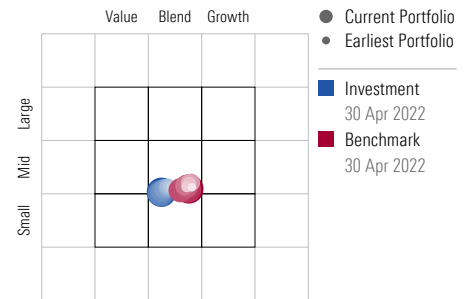
S&amp;P/ASX Small Ordina... TR AUD

### Asset Allocation 30 Apr 2022



Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.00	—	0.00	0.00	0.00
Convertible	0.00	—	0.00	0.02	0.00
Equity	100.00	—	100.00	94.83	100.00
Cash	0.00	—	0.00	5.14	0.00
Other	0.00	—	0.00	0.01	0.00
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

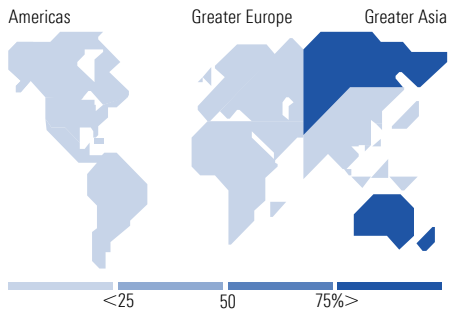
### Morningstar Style Trail 30 Apr 2022



### Market Capitalization Breakdown % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
● Giant	0	0	27.60
● Large	0	0	23.42
● Mid	0	0	14.99
● Small	0	0	3.62
● Micro	0	0	0.12

### World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>2.19</b>	<b>2.71</b>	<b>2.98</b>
North America	2.19	2.71	2.98
Latin America	0.00	0.00	0.00
<b>Greater Europe</b>	<b>0.00</b>	<b>0.43</b>	<b>0.74</b>
United Kingdom	0.00	0.14	0.00
Europe-Developed	0.00	0.15	0.49
Europe-Emerging	0.00	0.14	0.25
Africa/Middle East	0.00	0.00	0.00
<b>Greater Asia</b>	<b>97.81</b>	<b>96.86</b>	<b>96.29</b>
Japan	0.00	0.00	0.00
Australasia	97.27	96.70	96.29
Asia-Developed	0.19	0.00	0.00
Asia-Emerging	0.35	0.16	0.00
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	<b>54.84</b>	<b>51.11</b>	<b>62.58</b>
Basic Materials	22.13	16.50	25.38
Consumer Cyclical	15.79	14.11	12.85
Financial Services	15.67	14.98	10.32
Real Estate	1.25	5.52	14.03
<b>Sensitive</b>	<b>30.79</b>	<b>34.06</b>	<b>27.01</b>
Communication Svcs.	6.15	9.27	6.23
Energy	6.95	3.51	5.92
Industrials	9.25	12.73	7.93
Technology	8.44	8.55	6.93
<b>Defensive</b>	<b>14.37</b>	<b>14.83</b>	<b>10.40</b>
Consumer Defensive	8.34	5.41	5.42
Healthcare	5.12	8.16	4.98
Utilities	0.91	1.26	0.00

### Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	12.52	15.60	14.29
P/B	1.88	1.99	1.79
P/Sales	1.18	1.61	1.64
P/Cash Flow	7.44	10.06	8.71
Dividend Yield %	3.05	2.62	2.68
Long-Term Earnings %	11.85	9.35	6.48
Historical Earnings %	8.21	14.35	20.03
Sales Growth %	-0.43	0.38	3.46
Cash-Flow Growth %	7.93	6.77	7.90
Book Value Growth %	2.12	4.05	4.33

### Top Holdings 30 Apr 2022

Holdings	Portfolio Weight	Morningstar Rating	Total Rtn YTD %
Metcash Ltd	1.94	★★	-3.78
Whitehaven Coal Ltd	1.69	★★★	105.75
Iluka Resources Ltd	1.68	★★★	7.13
Altium Ltd	1.62		-37.64
Challenger Ltd	1.56	★★★	13.25
Downer EDI Ltd	1.44	★★★	-4.36
Beach Energy Ltd	1.41	★★★★	26.59
Orora Ltd	1.40		12.86
Steadfast Group Ltd	1.40	★★★	-3.39
Breville Group Ltd	1.36	★★★	-36.44

### Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
Australia	97.27	90.35	93.20
Canada	1.16	0.21	1.03
United States	1.03	2.50	1.95
China	0.35	0.00	0.00
Singapore	0.19	0.00	0.00

### Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Wide Moat %	2.36	3.62	3.92
Narrow Moat %	27.45	33.79	25.55
No Moat %	70.19	62.58	70.53
Financial Health	—	—	—
Profitability	C+	C	C-
Growth	C	C	C
ROIC	13.23	7.73	5.68
Cash Return %	123.85	119.16	133.69
P/FCF Ratio	21.83	34.51	47.13
D/C Ratio	24.49	26.51	24.92

### Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	1.86	2.00	2.09
Turnover Ratio %	18	61	—
% Assets in Top 10	16	10	13
# of Holdings	302	429	198
Base Currency	AUD	AUD	AUD

# Dimensional Australian Small Company Trust 6907

People |  Above Average

<b>Morningstar Category</b>	<b>Category Index</b>	<b>Prospectus Benchmark</b>
Australia Fund Equity Australia Mid/Small Blend	S&P/ASX Small Ordinaries TR AUD	S&P/ASX Small Ordina... TR AUD

<b>Management</b>	<b>Inception Date</b>	<b>Number of Mgrs</b>	<b>Longest Tenure</b>	<b>Average Tenure</b>	<b>Advisor(s)</b>	<b>Subadvisor(s)</b>
	2 Oct 2000	2	18.4 Years	12.9 Years	DFA Australia Limited	—

Timeline <div><div>Past</div><div>Current</div></div>																											
		Tenure															Position In Investment										
Portfolio Manager	(Years)	Start Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	End Date	0K	10	50	100	500	1M	>						
Robert Ness	18.4	12/31/2003	<div></div>												N/A	<div></div>											
Bhanu P. Singh	7.4	01/01/2015					<div></div>												N/A	<div></div>							
Graham Lennon	6.9	01/31/2008	<div></div>																01/01/2015	<div></div>							

Robert Ness	Years of Experience	Position In Investment		Current Investments Managed			Investment AUM	
	19.4	N/A		11			10.016 Bil USD	
Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
Dimensional Australian Core Equity Trust	01 Jan 2015 to 25 May 2022	1 of 2	3.72	AUD	—	9.64	9.89	8.78
Dimensional Global Core Equity Tr	05 Dec 2006 to 25 May 2022	1 of 2	2.55	AUD	—	9.64	6.32	7.15
Dimensional Australian Value Trust	01 Jan 2015 to 25 May 2022	1 of 2	0.97	AUD	—	14.16	10.59	8.78
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	0.75	AUD	—	1.72	4.61	3.83
Dimensional Australian Large Company Tru	01 Jan 2015 to 25 May 2022	1 of 2	0.74	AUD	—	9.45	8.85	8.78

Bhanu P. Singh	Years of Experience	Position In Investment		Current Investments Managed			Investment AUM	
	19.4	N/A		60			179.635 Bil USD	
Largest Investments Managed	Tenure Dates	Role	Inv.Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88

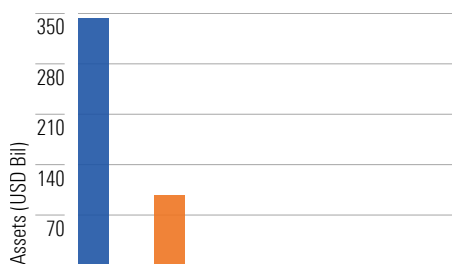
# Dimensional Australian Small Company Trust 6907

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity Australia Mid/Small Blend	<b>Category Index</b> S&P/ASX Small Ordinaries TR AUD	<b>Prospectus Benchmark</b> S&P/ASX Small Ordina... TR AUD
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

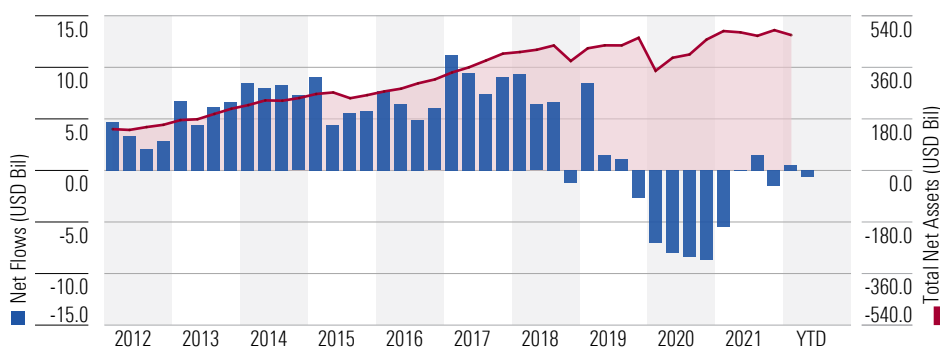
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



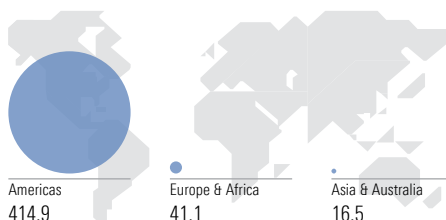
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Australian Small Company Trust 6907

## Performance

### Morningstar Category

Australia Fund Equity Australia Mid/Small Blend

### Category Index

S&amp;P/ASX Small Ordinaries TR AUD

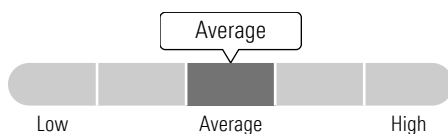
### Prospectus Benchmark

S&amp;P/ASX Small Ordina... TR AUD

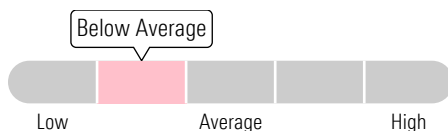
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years 89	9.27	Below Avg	Avg	★★★
5 Years 75	9.63	Below Avg	Avg	★★
10 Years 51	6.83	Below Avg	Avg	★★
Overall	—	Below Avg	Avg	★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	103.95	107.57	152.63
Downside Capture Ratio %	97.68	87.22	138.07
<b>Maximum Drawdown %</b>	<b>-32.21</b>	<b>-30.62</b>	<b>-29.12</b>
Drawdown Peak Date	2/1/20	2/1/20	2/1/20
Drawdown Valley Date	3/31/20	3/31/20	3/31/20
Max Drawdown Duration	2 Mo.	2 Mo.	2 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

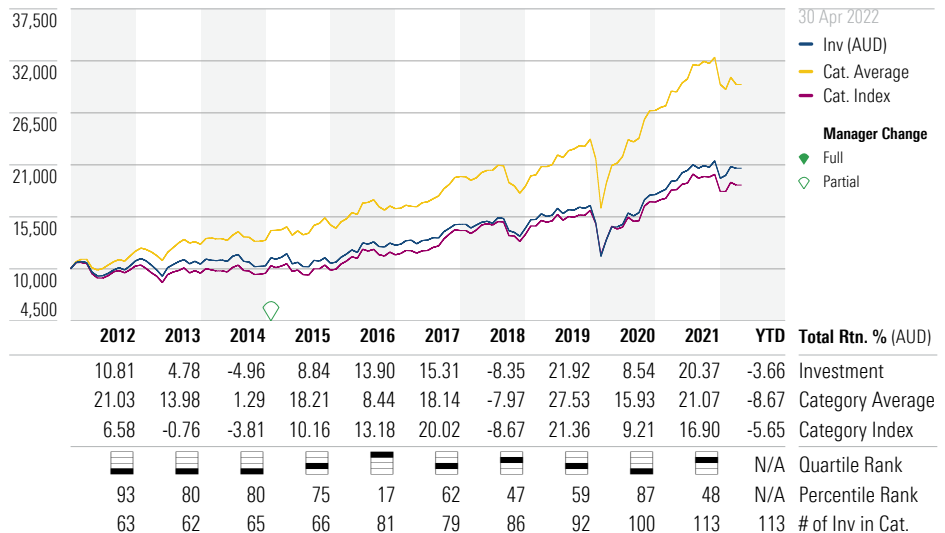
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	7.19	7.29	28.00	2.87	2.91
3 Years	9.27	9.18	73.00	12.74	7.64
5 Years	9.63	9.69	75.00	12.65	9.62
10 Years	6.83	6.39	86.00	10.63	5.96
Earl Avail*	8.34	—	—	—	—

\*Earliest Available as of 30 Nov 2000

### Rolling Return Summary 30 Apr 2022

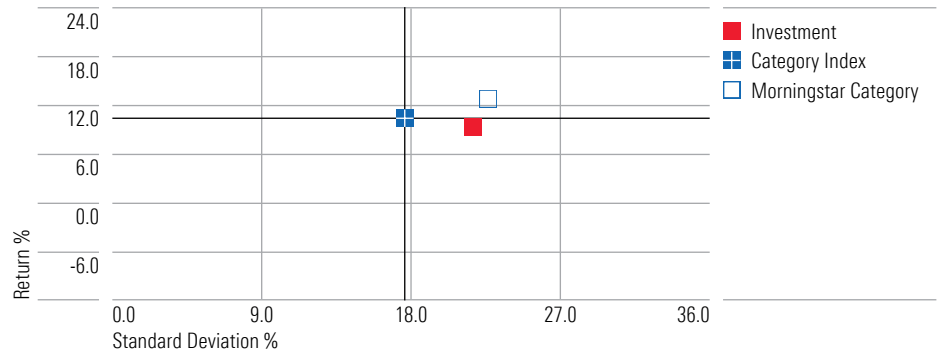
11%	36-Month Rolling Periods
12	203 Observations, 17 Years
42	The shading and percentages
35	correspond to how often the
	strategy returns landed in each
	category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	1.52	4.97	—	0.10	3.22	—	0.90	4.86	—
Beta	1.02	1.01	—	1.00	0.97	—	0.99	0.89	—
R-Squared	97.24	88.23	—	96.43	86.35	—	96.81	83.54	—
Sharpe Ratio	0.51	0.63	0.63	0.55	0.68	0.61	0.39	0.62	0.67
Standard Deviation %	21.76	22.64	17.62	18.22	18.75	14.79	16.25	15.69	13.54

# Dimensional Australian Small Company Trust 6907

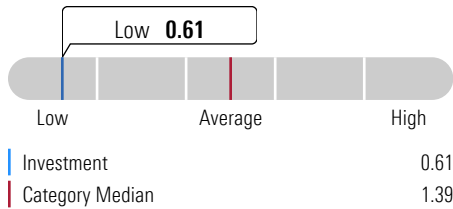
## Price

**Morningstar Category**  
Australia Fund Equity Australia Mid/Small Blend

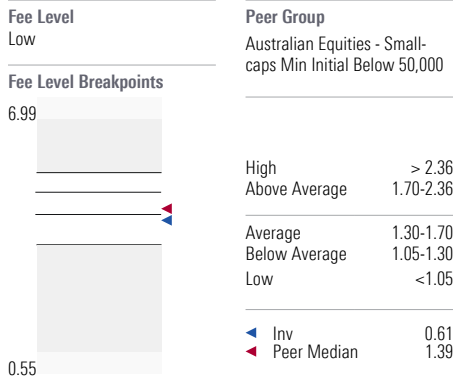
**Category Index**  
S&P/ASX Small Ordinaries TR AUD

**Prospectus Benchmark**  
S&P/ASX Small Ordina... TR AUD

### Prospective TCR 26 May 2020



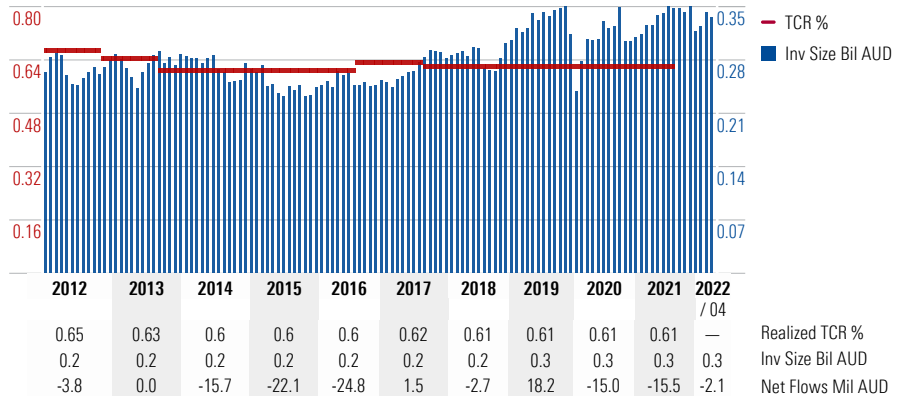
### Fee Level



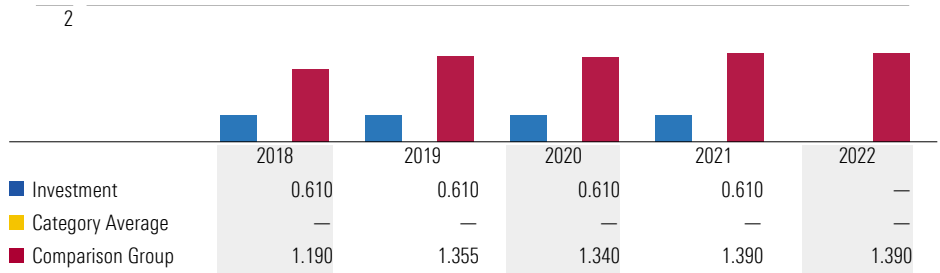
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.61
Investment Management Fee %	0.60
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.03
Representative Cost 05/31/22	0.61

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Au... Company Trust	DFA0104AU	Open	Low	0.61	—	0.03	10,000	334.75 Mil	-11.23 Mil	AUD



# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Aust Small Company Trust	—	—	—	—	—	—	10-02-2000	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
S&P/ASX Small Ordinaries TR AUD			9.68	9.90	6.02	6.07	04-03-2000					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Aust Small Company Trust	—	—	—	—	10-02-2000	—	—	—	—

## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

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Quantitatively-driven analysis is written by taking the unique, underlying statistics that drive an investment product's pillar rating, as well as other supporting data, and translating those values into sentences and paragraphs. The framework in which quantitatively-driven analysis is generated uses mental models meant to mirror analyst-driven written analysis.

Morningstar Analyst Ratings, Pillar Scores, ESG Commitment Levels, and/or written analysis that are not denoted by a superscripted "Q" were prepared by the person(s) noted in this Report in their capacity as an analyst for Morningstar's Manager Research group. For information regarding conflicts of interest, visit [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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ratings, Pillar Scores, and ESG Commitment Levels within this Report are statements of opinions; they are not statements of fact.

Morningstar believes reasonable efforts were made by its analysts to carefully research information contained in their analysis and by the Quantitative Research team in creating methodologies and choosing supporting data. The information on which the analysis is based has been obtained from sources which are believed to be reliable such as, for example, the fund's prospectus and shareholder reports (or their equivalents), managed investment company website, interviews with managed investment company personnel, and relevant and appropriate press sources as well as data, statistics and information within Morningstar's own database. While Morningstar, its analysts, and the Quantitative Research team has obtained data, statistics and information from sources it believes to be reliable, the data, statistics, and information has not been audited or independently verified.

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Morningstar Analyst Rating

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ive analysis on any such managed investment as well as imposing informational barriers (both technology and non-technology), having separate organizational reporting lines between the Manager Research group and Morningstar's Index team, and monitoring by the compliance department. However, such managed investments are eligible to receive a Morningstar Quantitative Rating, which is a quantitative system that assigns forward-looking ratings based on a machine-learning algorithm.

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### The Morningstar Analyst Rating™ for Managed Investments

The Morningstar Analyst Rating™ for Managed Investments is a forward-looking analysis of a managed investment. The Morningstar Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each managed investment within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most

competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

For more information about methodology in analyzing stocks, please go to [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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#### For Recipients in Australia and New Zealand: Information regarding Flagship Fund Analyst Rating

The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

statement for further information on fees.

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D003806 auprès de la CNCIF, Association agréée auprès de l'AMF.

## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.

### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-



term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in



managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager

Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio

within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is

above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™

The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

●●●●●	High	Highest 10%
●●●●	Above Average	Next 22.5%
●●●	Average	Next 35%
●●	Below Average	Next 22.5%
●	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of



a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the



end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its

obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Australian Value Trust 5840

## Morningstar Analyst Rating



11 Feb 2022 14:33, UTC  
Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022  
98 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Australia Large Value

## Category Index

S&P/ASX 200 TR AUD

## Total Assets

965.4 AUD Mil

## Inception Date

8 Jun 1999

## Kongkon Gogoi

Senior Analyst

## Morningstar Pillars

Process (11 Feb 2022)	● Average
People (11 Feb 2022)	● Above Average
Parent (26 Mar 2021)	● High
Performance (11 Feb 2022)	
Price (11 Feb 2022)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Core

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

## Academic roots underpin this well-executed broad-based value strategy.

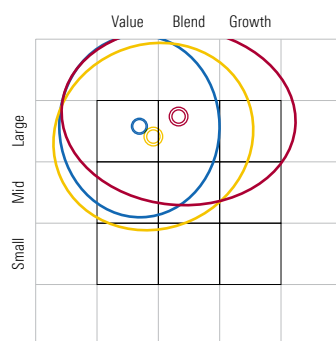
**Summary** Kongkon Gogoi, 11 Feb 2022 14:33 UTC

DFA Australian Value Equity Trust is a reliable option for value tilted Australian equities exposure with a time tested disciplined and systematic approach to investing. Its low cost is an advantage over the active counterparts.

Its investment approach is anchored in the factor research conducted by Eugene Fama and Kenneth French. The strategy applies value, size and profitability factors across the market cap spectrum but holds stocks from the lowest 45% by price/book ratios, with a tilt to lower-cap stocks. As such, value is the key long-standing factor premia that this strategy seeks to pursue. Average market cap is likely to remain well below category index (ASX 200), given its minimum size threshold of AUD 50 million. The strategy also has a profitability factor overlay that reduces exposure to unprofitable companies. The strategy does not involve individual stock-picking, as Dimensional believes markets are fairly priced, but focuses on constructing portfolios that exhibit value, size, and profitability characteristics. DFA may choose to delay purchases on stocks that have expressed negative momentum and delay the profit-taking of those that have had positive momentum. The resulting portfolio has low turnover and largely represents the 120–150 value names from the S&P/ASX 300 Index.

The portfolio management team is experienced, stable, and knowledgeable, ably supported by a large team of investment researchers, traders, and academics both locally and internationally. Performance has waxed and waned with fourth quartile performance from 2011–15 and first- or second-quartile thereafter to December 2021. Cumulatively, the strategy has modestly outperformed the peer group average but has delivered index relative underperformance on net of fee basis. We expect this reasonably uneven pattern of performance to continue due to the cyclical nature of the factors. In summary, we continue to view this

## Equity Style



- Investment 30 Apr 2022
- Category Average 30 Apr 2022
- Category Index 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Investment Style
												Equity Style Box
												Total Return % (AUD)
	13.82	18.27	0.01	-1.47	28.50	12.97	-5.93	20.47	-0.55	19.19	8.77	Investment
	20.98	22.95	5.66	2.21	10.53	8.68	-7.70	18.43	-1.47	18.28	4.69	Category Average
	20.26	20.20	5.61	2.56	11.80	11.80	-2.84	23.40	1.40	17.23	1.37	Category Index
												Performance Quartile (within Category)
	100	90	95	84	1	8	29	37	40	42	N/A	Percentile Rank
	100	104	100	100	105	103	106	107	108	102	105	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity Australia Large Value as of 25 May 2022 | Index: S&P/ASX 200 TR AUD as of 25 May 2022 | *Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement.* **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Australian Value Trust 5840

## Morningstar Analyst Rating



11 Feb 2022 14:33, UTC  
Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022  
98 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
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## Category Index

S&P/ASX 200 TR AUD

## Total Assets

965.4 AUD Mil

## Inception Date

8 Jun 1999

strategy as a preferable choice for factor-based (value and profitability) exposure to Australian equity for its attractive fee, skillful implementation, and diversified portfolio.

**Process** Average | Kongkon Gogoi, 11 Feb 2022 14:33 UTC

### Approach

Dimensional Australian Value takes an academic and practical approach to investing in Australian equities. The team leverages the research of renowned academics Eugene Fama and Kenneth French to identify factors that capture sources of excess returns. Value underpins as the main factor, while profitability was introduced in early 2014. This strategy invests in the 45% of stocks with the lowest price/book ratios and weights positions according to their relative market cap. Dimensional implements a profitability overlay to the universe by assigning higher weightings to more-profitable stocks and excluding the 10% least-profitable. As high-profitability stocks are oriented towards large-cap growth names, a slight tilt to smaller-cap stocks is applied to raise expected returns. Additional filters exclude initial public offerings, merging companies, stocks in bankruptcy, highly regulated utilities, and REITs. Individual stock purchases are limited to 10% of the portfolio. As a stock exhibits low profitability or develops growth like traits, Dimensional Australian Value Trust sells out of that stock. This is a key method of reducing trading costs. Momentum is also considered when buying or selling a stock, as Dimensional typically delays selling stocks that have done well and delays the purchase of those that have struggled.

### Portfolio

Dimensional Australian Value runs a diversified portfolio and applies Dimensional's value, size and profitability factors. The strategy is not benchmark-aware, and its investable universe is limited to stocks with the lowest 45% of price/book ratios. Following the implementation of the profitability factor, the portfolio's holdings have come down to about 150-190 stocks from 265 at the end of 2013. Sector biases are driven by the strategy's value tilt as it will tend to have an overweighting to out-of-favor names. The allocation to materials and financials is significant: The fund is 9.1% overweight financial services ex REITS and over 10.2% overweight to materials as of December 2021 relative to ASX 200. It is notable that the portfolio's exposure to the top ten holdings is approx. 55% of the total assets, which illustrates this strategy's fully benchmark-unaware approach. This is made up for with overweight positions to the four big banks, and BHP Billiton is the star materials name, comprising over 5.6% of the portfolio. Conversely, the portfolio explicitly excludes REITs from consideration, and its approach leads it to being underweight healthcare. This is a high tracking-error strategy, and investors should expect significantly different outcomes to the index, but the portfolio remains sufficiently diversified to be a core allocation to an investor's portfolio.

**People** Above Average | Kongkon Gogoi, 11 Feb 2022 14:33 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses investment academics such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter

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includes senior executives and portfolio managers who meet bimonthly to ensure the funds follow their mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams spread throughout the world but notably in Austin, Texas; Santa Monica, California; London; and Sydney. Overall responsibility for this strategy lies with head of Asia-Pacific portfolio management Bhanu Singh, who was appointed in May 2015. He is supported by a highly experienced team consisting of a further 16 investment professionals and five traders. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been low, and even when turnover spikes, the firm copes well thanks to its systematic approach. Globally, it is a well-resourced and experienced cohort of investment professionals and traders. Dimensional's portfolio managers are evaluated primarily on their ability to implement the strategies.

**Parent** High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.

Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy.

Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

Value-tilted strategies in general have had challenging few years since 2011, but Dimensional did worse than most counterparts through to 2015. 2016 and 2017 were the years of turnaround for the strategy. The returns have just been enough to bring long-term returns slightly above the Morningstar Category average and index. Stock exclusions have been a big reason for this underperformance, as this fund does not invest in REITs, one of the best performing sectors over that period. Underweights to the banking sector had similar results. Significant leanings to materials and energy further compounded poor performance. However, it was



# Dimensional Australian Value Trust 5840

## Morningstar Analyst Rating



11 Feb 2022 14:33, UTC

Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022

98 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Australia Large Value

## Category Index

S&amp;P/ASX 200 TR AUD

## Total Assets

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## Inception Date

8 Jun 1999

those same tilts that paid off strongly through 2016 to 2019. Early in 2016, materials and energy names staged a huge rally as commodity prices reversed. The second half of the year meanwhile was the scene of a massive rally in value stocks--to which Dimensional was highly exposed. Value stocks generally had a good year in 2021 (especially the first quarter). Reflecting the same sentiment, DFA delivered peer leading performance (19.2% versus 18.2% for the peer average) for the calendar year. Category index relative returns are impressive too as it beat the index (ASX 200) by 2%. An overweight to financial services and underweight to growth sector of healthcare compared to the ASX 200 were the biggest contributors of performance in 2021.

## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating.

## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

## How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. ■■■

# Dimensional Australian Value Trust 5840

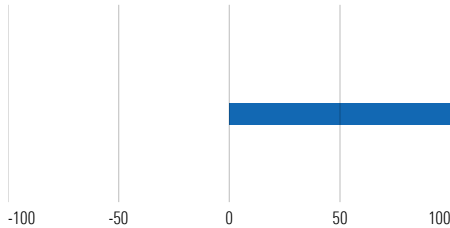
Process |  Average

**Morningstar Category**  
Australia Fund Equity Australia Large Value

**Category Index**  
S&P/ASX 200 TR AUD

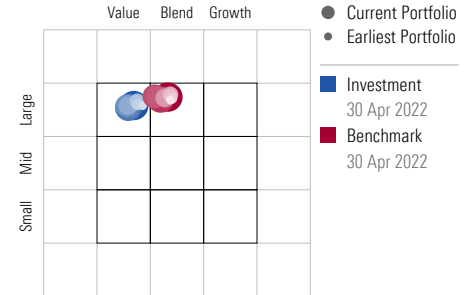
**Prospectus Benchmark**  
S&P/ASX 300 TR

## Asset Allocation 30 Apr 2022

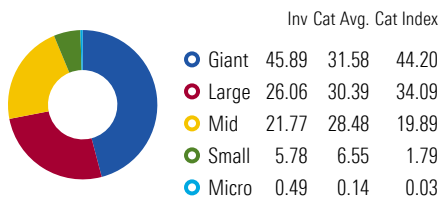


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.00	—	0.00	0.00	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	100.00	—	100.00	96.54	100.00
Cash	0.00	—	0.00	2.44	0.00
Other	0.00	—	0.00	1.02	0.00
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



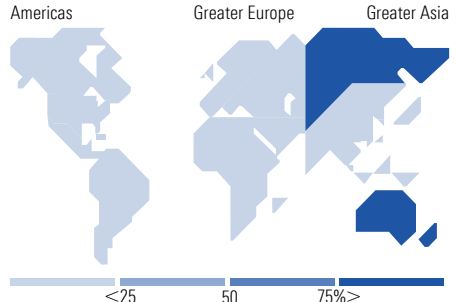
## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	11.63	13.65	15.21
P/B	1.61	1.89	2.16
P/Sales	1.89	1.78	2.52
P/Cash Flow	5.41	7.70	8.30
Dividend Yield %	5.22	4.40	4.92
Long-Term Earnings %	7.86	7.36	7.95
Historical Earnings %	21.76	14.87	16.70
Sales Growth %	1.43	-2.23	0.07
Cash-Flow Growth %	17.65	13.35	22.34
Book Value Growth %	3.36	1.15	3.06

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight %	Morningstar Rating	Total Rtn YTD %
National Australia Bank Ltd	10.08	★★★★	12.31
Westpac Banking Corp	8.44	★★★★	14.66
Australia ... Group Ltd	7.96	★★★★	-4.22
Commonwealth Bank of Australia	7.37	★★★	6.85
BHP Group Ltd	5.58	★★★	20.19
Telstra Corp Ltd	3.73	★★★	-4.07
Santos Ltd	3.73	★★★★	32.30
Rio Tinto Ltd	3.62	★★★	18.46
Woodside Petroleum Ltd	3.09	★★★★	38.86
Fortescue ... Group Ltd	2.84	★★	12.13

## World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>0.47</b>	<b>1.17</b>	<b>2.41</b>
North America	0.47	1.17	2.41
Latin America	0.00	0.00	0.00
<b>Greater Europe</b>	<b>0.00</b>	<b>2.24</b>	<b>0.76</b>
United Kingdom	0.00	1.21	0.18
Europe-Developed	0.00	1.03	0.58
Europe-Emerging	0.00	0.00	0.00
Africa/Middle East	0.00	0.00	0.00
<b>Greater Asia</b>	<b>99.52</b>	<b>96.60</b>	<b>96.83</b>
Japan	0.00	0.00	0.00
Australasia	99.48	96.60	96.83
Asia-Developed	0.02	0.00	0.00
Asia-Emerging	0.02	0.00	0.00
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
Australia	99.48	94.99	95.70
United States	0.37	0.99	2.28
Canada	0.10	0.18	0.12
China	0.02	0.00	0.00
Singapore	0.02	0.00	0.00

## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	73.68	66.23	66.88
Basic Materials	29.39	23.05	24.17
Consumer Cyclical	5.33	10.31	6.06
Financial Services	38.83	28.33	29.80
Real Estate	0.13	4.54	6.85
<b>Sensitive</b>	21.02	21.08	17.67
Communication Svcs.	5.57	6.16	4.52
Energy	10.45	7.04	4.47
Industrials	4.56	6.96	6.17
Technology	0.44	0.92	2.51
<b>Defensive</b>	5.30	12.70	15.45
Consumer Defensive	2.94	6.03	5.21
Healthcare	2.36	5.98	9.36
Utilities	0.00	0.69	0.88


## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Wide Moat %</b>	35.85	23.86	30.02
<b>Narrow Moat %</b>	10.14	22.46	29.89
<b>No Moat %</b>	54.01	53.68	40.09
Financial Health	—	—	—
Profitability	C-	C	C
Growth	C-	C	C
ROIC	13.88	13.47	15.22
Cash Return %	20.98	41.33	66.06
P/FCF Ratio	13.29	16.55	17.10
D/C Ratio	41.17	39.59	40.57

## Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	28.15	20.95	38.23
Turnover Ratio %	14	47	—
% Assets in Top 10	56	35	47
# of Holdings	188	394	200
Base Currency	AUD	AUD	AUD

# Dimensional Australian Value Trust 5840

People |  Above Average

<b>Morningstar Category</b>	<b>Category Index</b>	<b>Prospectus Benchmark</b>
Australia Fund Equity Australia Large Value	S&P/ASX 200 TR AUD	S&P/ASX 300 TR

<b>Management</b>	<b>Inception Date</b>	<b>Number of Mgrs</b>	<b>Longest Tenure</b>	<b>Average Tenure</b>	<b>Advisor(s)</b>	<b>Subadvisor(s)</b>
	8 Jun 1999	2	7.3 Years	7.3 Years	DFA Australia Limited	—

Timeline <div><div>Past</div><div>Current</div></div>																	Position In Investment						
Portfolio Manager	Tenure (Years)	Start Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	End Date	OK	10	50	100	500	1M	>		
Robert Ness	7.4	01/01/2015												N/A									
Bhanu P. Singh	7.4	01/01/2015												N/A									
Graham Lennon	6.9	02/02/2008												01/01/2015									

<b>Robert Ness</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	11	10.016 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
Dimensional Australian Core Equity Trust	01 Jan 2015 to 25 May 2022	1 of 2	3.72	AUD	—	9.64	9.89	8.78
Dimensional Global Core Equity Tr	05 Dec 2006 to 25 May 2022	1 of 2	2.55	AUD	—	9.64	6.32	7.15
Dimensional Australian Value Trust	01 Jan 2015 to 25 May 2022	1 of 2	0.97	AUD	—	14.16	10.59	8.78
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	0.75	AUD	—	1.72	4.61	3.83
Dimensional Australian Large Company Tru	01 Jan 2015 to 25 May 2022	1 of 2	0.74	AUD	—	9.45	8.85	8.78

<b>Bhanu P. Singh</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	60	179.635 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88

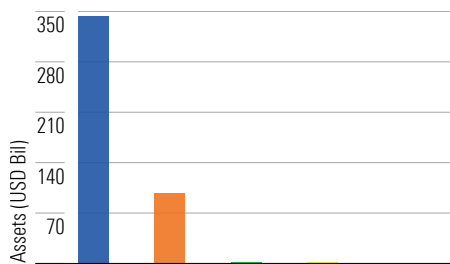
# Dimensional Australian Value Trust 5840

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity Australia Large Value	<b>Category Index</b> S&P/ASX 200 TR AUD	<b>Prospectus Benchmark</b> S&P/ASX 300 TR
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

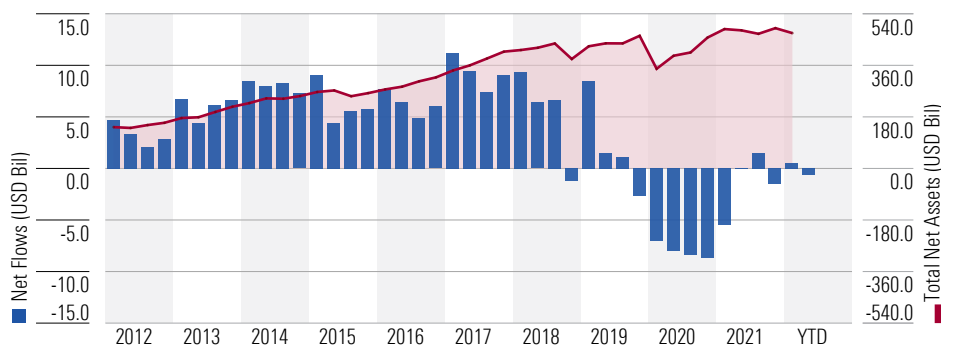
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



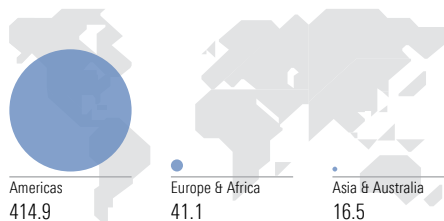
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Australian Value Trust 5840

## Performance

**Morningstar Category**  
Australia Fund Equity Australia Large Value

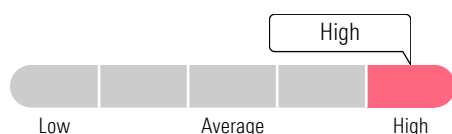
**Category Index**  
S&P/ASX 200 TR AUD

**Prospectus Benchmark**  
S&P/ASX 300 TR

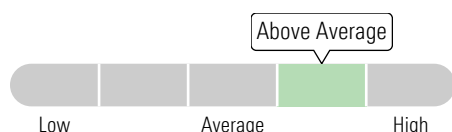
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years 98	10.58	Above Avg	High	★★★
5 Years 87	9.56	High	High	★★★★★
10 Years 72	9.76	Above Avg	High	★★★
Overall	—	Above Avg	High	★★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	114.22	93.93	128.26
Downside Capture Ratio %	114.76	94.59	91.81
<b>Maximum Drawdown %</b>	<b>-32.14</b>	<b>-28.14</b>	<b>-26.75</b>
Drawdown Peak Date	2/1/20	2/1/20	2/1/20
Drawdown Valley Date	3/31/20	3/31/20	3/31/20
Max Drawdown Duration	2 Mo.	2 Mo.	2 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

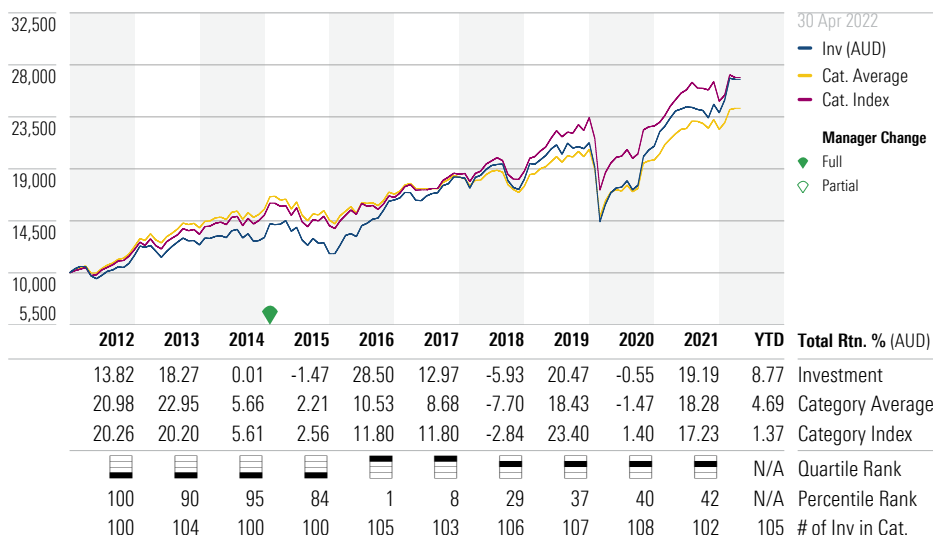
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	14.26	14.27	30.00	13.18	10.16
3 Years	10.58	11.07	17.00	8.77	9.42
5 Years	9.56	9.97	5.00	6.84	8.81
10 Years	9.76	9.62	27.00	9.19	9.90
Earl Avail*	9.71	—	—	—	—

\*Earliest Available as of 08 Jun 1999

### Rolling Return Summary 30 Apr 2022

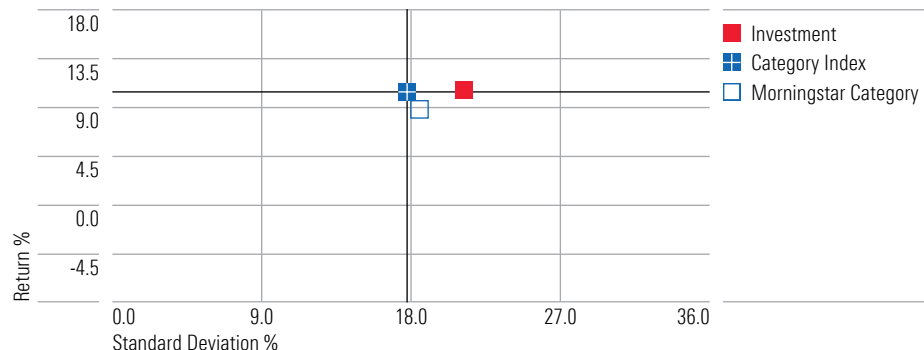
57%	36-Month Rolling Periods
15	203 Observations, 17 Years
3	
25	The shading and percentages correspond to how often the strategy returns landed in each category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	0.32	-0.36	6.47	-0.08	-1.56	3.84	-0.65	-0.30	2.91
Beta	1.15	0.99	1.16	1.15	0.98	0.98	1.10	0.96	0.82
R-Squared	91.03	89.46	47.19	91.08	87.92	42.54	88.31	88.86	36.04
Sharpe Ratio	0.57	0.53	0.63	0.55	0.44	0.61	0.57	0.59	0.67
Standard Deviation %	21.17	18.51	17.76	17.83	15.45	14.87	15.66	13.71	13.53



# Dimensional Australian Value Trust 5840

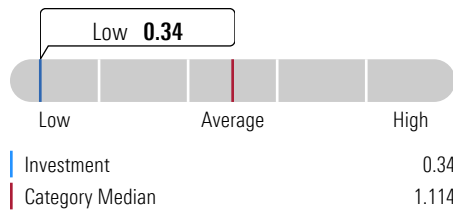
## Price

**Morningstar Category**  
Australia Fund Equity Australia Large Value

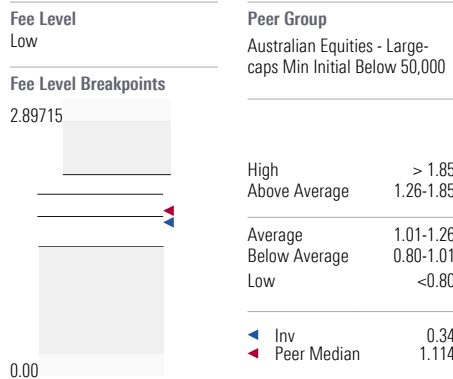
**Category Index**  
S&P/ASX 200 TR AUD

**Prospectus Benchmark**  
S&P/ASX 300 TR

### Prospective TCR 26 May 2020



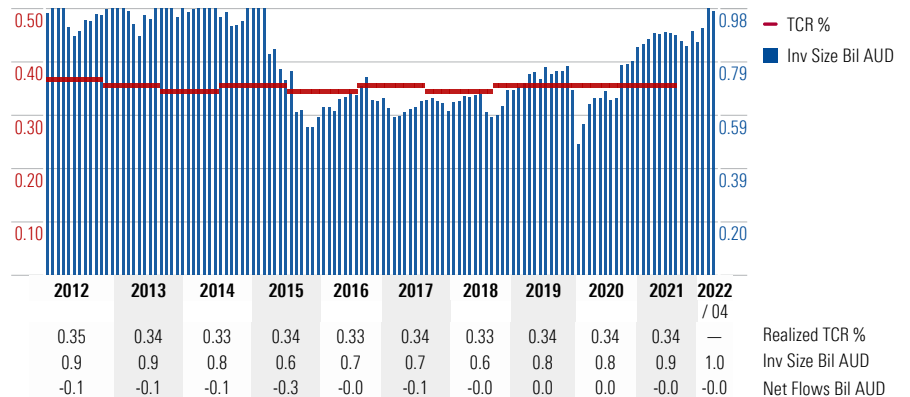
### Fee Level



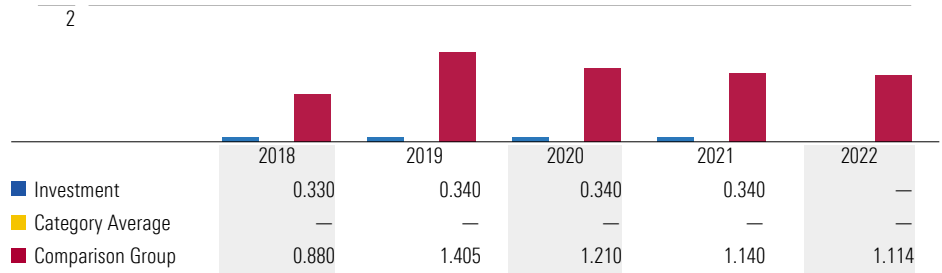
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.34
Investment Management Fee %	0.34
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.01
Representative Cost 05/31/22	0.34

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Australian Equities - Large-caps Min Initial Below 50,000

### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Australian Value Trust	DFA0101AU	Open	Low	0.34	—	0.01	10,000	965.37 Mil	-26.08 Mil	AUD

# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Australian Value Trust	—	—	—	—	—	—	06-08-1999	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
S&P/ASX 200 TR AUD			14.97	9.22	10.15	11.18	04-03-2000					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Australian Value Trust	—	—	—	—	06-08-1999	—	—	—	—

## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

## Analyst-Driven and Quantitatively-Driven Content

The Managed Investment Report ("Report") may contain a Morningstar Quantitative Rating™, Quantitative Pillar Scores, and/or Quantitatively-driven written analysis (collectively, "Quantitatively-Driven Content") generated by a series of statistical models intended to replicate Morningstar's analyst output ("Analyst-Driven Content"). If included in the Report, Quantitatively-Driven Content is denoted by a superscripted "Q".

Morningstar's Manager Research Group consists of employees of various Morningstar, Inc. subsidiaries who prepare analysis on investment products. In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. For the avoidance of doubt, Quantitatively-Driven Content has not been prepared by any person in their capacity as an analyst from Morningstar's Manager Research Group.

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	2020	2021	2022
EO			
☆			
VA			
EO			
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VA			
EO			
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EO			
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EO			
☆			
VA			

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The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most

competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

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#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.



### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-



term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in

managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager

Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio

within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is



above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of



a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the

end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its

obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Global Bond Trust 19212

## Morningstar Analyst Rating



25 Feb 2022 23:53, UTC  
Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022  
61 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Bonds -  
Global

## Category Index

Bloomberg Global  
Aggregate TR Hdq AUD

## Total Assets

2.0 AUD Bil

## Inception Date

10 Nov 2011

## Zunjar Sanzgiri

Senior Analyst

## Morningstar Pillars

Process (25 Feb 2022)	● Average
People (25 Feb 2022)	● Above Average
Parent (26 Mar 2021)	● High
Performance (25 Feb 2022)	
Price (25 Feb 2022)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Core

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

## Straightforward systematic process delivering consistent performance.

**Summary** Zunjar Sanzgiri, 25 Feb 2022 23:53 UTC

Dimensional Global Bond is constructed on a clear and straightforward process, providing investors a competent avenue to take on international bond exposure. Rather than anticipating macroeconomic or prospective rate changes, Dimensional relies on investing in fixed-income securities at the steepest point of the yield curve. Theoretically, it provides the optimal risk-adjusted return over the long term.

The portfolio has historically favoured higher-rated instruments at the top of the credit-quality spectrum, and the exposure to AAA and AA rated securities has only crept upwards over the past few years. As per the mandate, the duration of the fund is constrained to remain between plus 0.5 to minus 1.5 years of the index. Thus, the fund has managed to eke out decent outperformance, but the returns follow a similar pattern as that of the benchmark. Our previous concerns over these constraints have diminished as it has navigated an increasing variety of conditions effectively, including recent central bank intervention in global bond markets to control yield curves. The approach to managing corporate credit has worked favourably for the fund, aiming to take more (less) credit risk when spreads are historically wide (narrow). Consistent with its design, the portfolio began adding credit spread exposure during March 2020 when coronavirus market stress caused spreads to balloon. Implementation is patient, allowing Dimensional to achieve value-add execution compared with peers through this period also. As of December 2021, the fund has outperformed the benchmark over seven of the past 10 calendar years, net of fees. Over the past year, duration has worked against fund performance as interest rates have been on the rise. Dimensional retains a credible team with the scope and credentials to undertake quality research. The systematic nature of the process insulates the strategy's performance from investment team changes. The strategy is a solid low-cost choice as a global fixed-income investment.

## Fixed Income Style Surveyed 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	
												Investment Style
												Fixed Income Style Box
												Total Return % (AUD)
	11.00	-0.14	10.78	3.39	6.17	3.90	1.39	8.82	6.56	-2.50	-10.27	Investment
	10.47	1.90	9.81	1.71	4.86	3.05	0.87	6.98	4.89	-2.03	-8.13	Category Average
	9.66	2.27	10.37	3.35	5.24	3.68	1.65	7.19	5.09	-1.53	-7.72	Category Index
											N/A	Performance Quartile (within Category)
	40	87	32	16	18	31	40	12	16	75	N/A	Percentile Rank
	54	57	57	56	61	60	66	73	66	66	69	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Bonds - Global as of 25 May 2022 | Index: Bloomberg Global Aggregate TR Hdq AUD as of 25 May 2022 | *Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement.* **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Global Bond Trust 19212

## Morningstar Analyst Rating



25 Feb 2022 23:53, UTC

Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022

61 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Bonds -  
Global

## Category Index

Bloomberg Global  
Aggregate TR Hdq AUD

## Total Assets

2.0 AUD Bil

## Inception Date

10 Nov 2011

**Process** Average | Zunjar Sanzgiri, 25 Feb 2022 23:53 UTC

### Approach

Dimensional doesn't forecast changes in the economy or bond markets. Instead, the systematic approach simply buys bonds at the steepest part of the yield curve. If the curve shifts, or as time passes, Dimensional sells bonds that are no longer in the sweet spot and reinvests at the steepest part of the curve again. The house believes that when yield curves are flat or inverted (when long-term interest rates are equal to or lower than short-term rates), then investors will probably not be rewarded for the risk of longer-dated bonds. This fund also takes on credit risk, though yield-curve positioning has historically been a more prominent performance driver. Dimensional takes on more credit risk when spreads are wide and reduces credit risk when spreads are narrow relative to their long-term history. There is flexibility to invest in sovereign, semigovernment, and investment-grade corporate paper but not subordinated debt or securitised products. If a bond is downgraded to below BBB, the manager will typically sell it gradually. Foreign-exchange exposure is fully hedged. Importantly, the strategy's duration is range-bound: minus 1.5/plus 0.5 years of the Bloomberg Global Aggregate Bond Index. Minimising transaction costs is a major focus, especially weighing up the cost of a trade against its potential benefit. A flexible and patient trading approach also helps to add value over time.

### Portfolio

Dimensional Global Bond typically invests in high-quality global government, government-related, and corporate bonds within developed markets. More than three fourths of the portfolio is invested at the upper end of the investment-grade spectrum. Exposure has historically been split 50/50 between government and corporate sectors since the strategy's inception, but exposure to sovereigns has increased in the past couple of years. Duration has hovered within a reasonably close band to benchmark, as per the fund's mandate. Duration positioning was slightly long at 30 Sept 2021, 7.76 years compared with the index's 7.53. US dollar bonds have historically been the biggest regional weight, marginally increasing throughout 2020 and 2021. Exposures to the US dollar represented more than 50% of the portfolio, while the euro exposure has been trimmed significantly over the past year as at September 2021, substituting it with additional Canadian dollar investments. All currency positions are hedged to the Australian dollar. Total assets in this strategy exceeded AUD 2.7 billion including NZ clients in September 2021. The fund's relatively high credit quality, embedded duration, and diversity makes it a suitable core fixed-interest holding.

**People** Above Average | Zunjar Sanzgiri, 25 Feb 2022 23:53 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses investment luminaries such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. Head of Asia-Pacific portfolio management Bhanu Singh has had oversight of the regional team managing this portfolio since May 2015. Stephen Garth retired in January 2020, with senior portfolio manager Gillian Wilson exiting the firm in 2021. Wilson's responsibilities have passed on to Timo Zauner, who joined in 2017



# Dimensional Global Bond Trust 19212

## Morningstar Analyst Rating



25 Feb 2022 23:53, UTC

Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022

61 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Bonds -  
Global

## Category Index

Bloomberg Global  
Aggregate TR Hdq AUD

## Total Assets

2.0 AUD Bil

## Inception Date

10 Nov 2011

and was appointed a fixed-income portfolio manager in October 2020. Although relatively new to portfolio management, Zauner has a wide industry experience. Also, the firm's systematic processes ensure consistency in management even when there are personnel changes. Dimensional's portfolio managers are evaluated primarily on their ability to implement the strategies. An experienced team of traders based in Sydney is responsible for execution in the Asia Pacific region, with other trading handled by the shop's London and US teams. Currency hedging occurs at the firm's Austin base. Interaction between the global investment committee and local traders and portfolio managers ensures that the approach and execution remain cutting-edge.

**Parent** High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.

Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

Long-term returns for Dimensional Global Bond have eclipsed the Global Aggregate Index from its inception in 2011 to 31 Dec 2021. Performance in 2013 was poor, dragging the strategy well behind the index and most peers. The May-June 2013 sell-off in global bonds particularly stung, courtesy of the fund's indexlike duration. The strategy has since fared better from 2014 to 2019. Its short-duration tilt and overweighting in corporate bonds hurt returns as credit spreads widened in 2015. Performance was strong in 2016, better than most rivals and the index. Exposure to developed-markets government bonds, particularly in the United States and United Kingdom, boosted returns amid uncertainty following the Brexit referendum in the middle of the year. The strategy remained ahead of the index during 2017, helped by a longer duration as yields

# Dimensional Global Bond Trust 19212

## Morningstar Analyst Rating



25 Feb 2022 23:53, UTC

Zunjar Sanzgiri, Senior Analyst

## Morningstar Rating



30 Apr 2022

61 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Bonds -  
Global

## Category Index

Bloomberg Global  
Aggregate TR Hdq AUD

## Total Assets

2.0 AUD Bil

## Inception Date

10 Nov 2011

declined. Dimensional was modestly behind the benchmark in 2018 before rebounding strongly in 2019. The consistently longer average duration and holdings in US (underweight) and Australian (overweight) dollar bonds were the main factors behind the portfolio's peer-leading results in 2019. The fund fared well in 2020 as interest rates continued to decline in the aftermath of the initial coronavirus breakout. The year 2021 has been relatively difficult as yields have spiked globally, particular in overweight currencies such as US and Australia.


## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's second-cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Bronze.

## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

## How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. 

# Dimensional Global Bond Trust 19212

Process |  Average

## Morningstar Category

Australia Fund Bonds - Global

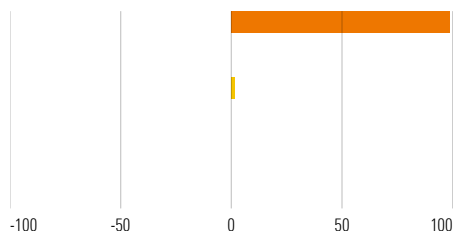
## Category Index

Bloomberg Global Aggregate TR Hdg AUD

## Prospectus Benchmark

Bloomberg Global Agg...Hdg AUD

## Asset Allocation 30 Apr 2022

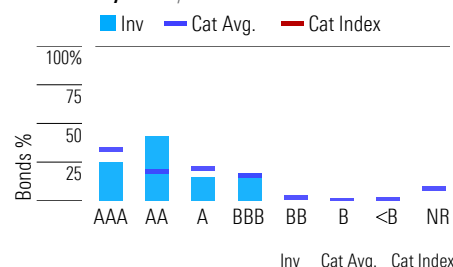


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	98.62	—	98.62	86.65	—
Preferred	0.00	—	0.00	0.00	—
Convertible	1.38	—	1.38	1.77	—
Equity	0.00	—	0.00	-0.01	—
Cash	0.00	—	0.00	12.66	—
Other	0.00	—	0.00	-1.07	—
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>—</b>

## World Regions % 30 Apr 2022

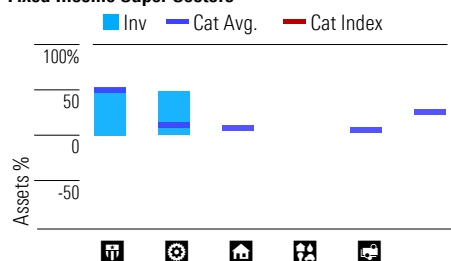
	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>59.26</b>	<b>51.55</b>	—
North America	59.26	49.40	—
Latin America	0.00	2.15	—
<b>Greater Europe</b>	<b>29.49</b>	<b>25.39</b>	—
United Kingdom	4.49	6.48	—
Europe-Developed	24.77	17.44	—
Europe-Emerging	0.24	0.56	—
Africa/Middle East	0.00	0.90	—
<b>Greater Asia</b>	<b>11.24</b>	<b>23.06</b>	—
Japan	2.14	12.93	—
Australasia	8.25	4.60	—
Asia-Developed	0.85	1.49	—
Asia-Emerging	0.00	4.04	—
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	—
<b>Developed Markets</b>	<b>99.78</b>	<b>93.91</b>	—
<b>Emerging Markets</b>	<b>0.22</b>	<b>6.09</b>	—

## Credit Quality Surveyed 31 Mar 2022



## Sectors 31 Mar 2022

### Fixed Income Super Sectors



Investment Grade	AAA	AA	A	BBB	BB	B	<B	NR
Inv	25.2	41.8	15.1	17.8	0.0	0.0	0.0	0.0
Cat Avg.	33.2	18.7	20.6	16.3	2.2	0.4	0.9	7.7
Cat Index	—	—	—	—	—	—	—	—
<b>Total %</b>	<b>99.9</b>	<b>88.8</b>	<b>0.0</b>	<b>11.2</b>	<b>0.0</b>	<b>11.2</b>	<b>0.0</b>	<b>11.2</b>

Fixed Income Sectors	Inv	Cat Avg.	Cat Index
<b>Government</b>	<b>52.1</b>	<b>49.4</b>	—
Treasury	3.2	22.8	—
Inflation Protected	0.0	0.7	—
Agency/Quasi-Agency	40.9	6.0	—
Other Government Related	8.0	20.0	—
<b>Corporate</b>	<b>47.9</b>	<b>11.2</b>	—
Corporate Bond	46.4	10.2	—
Bank Loan	0.0	0.0	—
Convertible	1.5	0.9	—
Preferred	0.0	0.0	—
<b>Securitized</b>	<b>0.0</b>	<b>7.9</b>	—
Agency Mortgage-Backed	0.0	3.3	—
Non Agency Residential	0.0	1.3	—
Commercial MBS	0.0	0.3	—
Asset-Backed	0.0	1.9	—
Covered Bond	0.0	1.1	—
<b>Municipal</b>	<b>0.0</b>	<b>0.0</b>	—
<b>Cash &amp; Equivalents</b>	<b>0.0</b>	<b>6.0</b>	—
<b>Other</b>	<b>0.0</b>	<b>25.5</b>	—

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
United States	37.39	43.12	—
Canada	17.05	4.96	—
Other Countries	8.20	4.42	—
France	7.91	3.69	—
Australia	6.85	3.36	—
Netherlands	5.70	1.41	—
United Kingdom	4.12	6.31	—
Norway	3.49	0.61	—
Japan	1.96	12.58	—
Germany	1.70	3.60	—






## Income 30 Apr 2022

	Inv	Cat Avg.	Cat Index
12-Month Yield	0.1	5.5	—
Average Coupon	2.7	2.2	—
Avg Coupon surveyed 30 Apr 2022			

## Interest Rate Sensitivity 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg Effective Duration	7.4	6.4	—
Avg Modified Duration	—	6.3	—
Avg Effective Maturity	8.4	7.1	—

## Top Portfolio Holdings 30 Apr 2022







	Country	Currency	Assets %	Super Sector	Primary Sector	Secondary Sector
Kommunalbanken AS 1.125%	NOR	—	2.52	 Government	—	Agency/Quasi Agency
Inter-American Development Bank 1.125%	XSN	—	2.08	 Government	—	Supranational
Federal National Mo... Association 0.875%	USA	—	1.74	 Government	—	Agency/Quasi Agency
Caisse d Amortissem...La Dette Sociale 1%	FRA	—	1.65	 Government	—	Agency/Quasi Agency
Province of British Columbia 2.2%	CAN	—	1.52	 Government	—	Agency/Quasi Agency

# Dimensional Global Bond Trust 19212

People |  Above Average

<b>Morningstar Category</b>	<b>Category Index</b>	<b>Prospectus Benchmark</b>
Australia Fund Bonds - Global	Bloomberg Global Aggregate TR Hdg AUD	Bloomberg Global Agg...Hdg AUD

<b>Management</b>	<b>Inception Date</b>	<b>Number of Mgrs</b>	<b>Longest Tenure</b>	<b>Average Tenure</b>	<b>Advisor(s)</b>	<b>Subadvisor(s)</b>
	10 Nov 2011	2	10.5 Years	8.9 Years	DFA Australia Limited	—

	Timeline  Past  Current														Position In Investment
	Tenure (Years)	Start Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	End Date	
Portfolio Manager															
Gillian Wilson	10.5	11/10/2011												N/A	
Bhanu P. Singh	7.4	01/01/2015												N/A	
Stephen Garth	8.2	11/10/2011												01/31/2020	
David Schnell	3.0	01/01/2014												01/08/2017	

<b>Gillian Wilson</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	14.4	N/A	4	3.822 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
Dimensional-Five Year Diversified Fixed	01 Jan 2008 to 25 May 2022	1 of 2	1.69	AUD	—	90.91	3.89	5.21
Dimensional Global Bond Trust	10 Nov 2011 to 25 May 2022	1 of 2	1.53	AUD	—	16.39	3.61	3.77
Dimensional 2-Yr Sustainability F/I Tr	01 Jan 2008 to 25 May 2022	1 of 2	0.82	AUD	—	6.21	2.95	5.21
Dimensional Short Term Fixed Interest Tr	01 Jan 2008 to 25 May 2022	1 of 2	0.52	AUD	—	8.6	2.85	2.79

<b>Bhanu P. Singh</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	60	179.635 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88

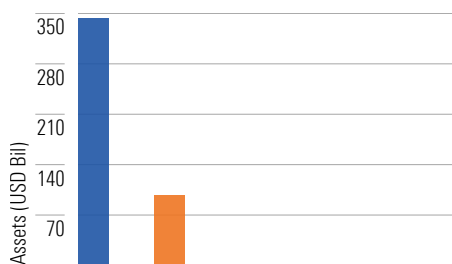
# Dimensional Global Bond Trust 19212

Parent |  High

<b>Morningstar Category</b> Australia Fund Bonds - Global	<b>Category Index</b> Bloomberg Global Aggregate TR Hdg AUD	<b>Prospectus Benchmark</b> Bloomberg Global Agg...Hdg AUD
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

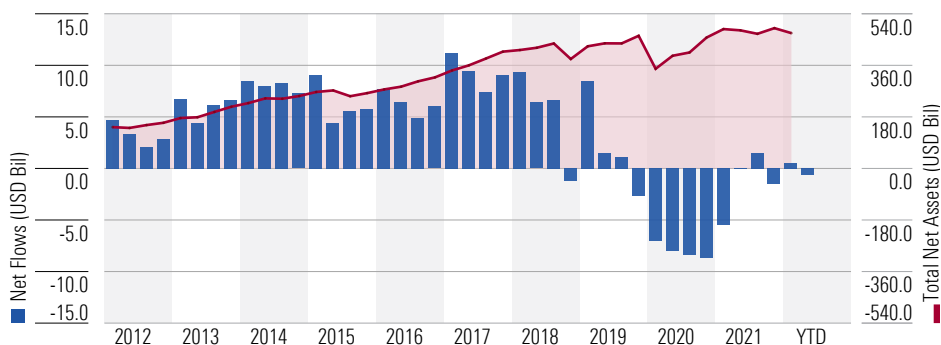
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



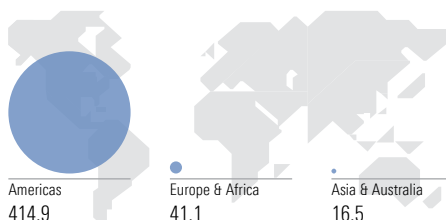
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022





# Dimensional Global Bond Trust 19212

## Performance

### Morningstar Category

Australia Fund Bonds - Global

### Category Index

Bloomberg Global Aggregate TR Hdg AUD

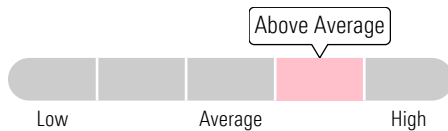
### Prospectus Benchmark

Bloomberg Global Agg...Hdg AUD

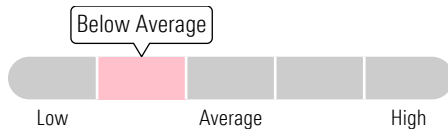
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years	-0.85	Below Avg	Above Avg	★★
61				
5 Years	0.93	Below Avg	Above Avg	★★
44				
10 Years	3.35	Avg	Above Avg	★★★
29				
Overall	—	Avg	Above Avg	★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	138.50	106.93	—
Downside Capture Ratio %	150.22	111.88	—
<b>Maximum Drawdown %</b>	<b>-12.52</b>	<b>-9.91</b>	<b>-9.13</b>
Drawdown Peak Date	1/1/21	1/1/21	1/1/21
Drawdown Valley Date	4/30/22	4/30/22	4/30/22
Max Drawdown Duration	16 Mo.	16 Mo.	16 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	-9.37	-10.25	87.00	-7.47	-7.00
3 Years	-0.85	-3.15	84.00	-0.42	-0.14
5 Years	0.93	-1.28	69.00	0.91	1.24
10 Years	3.35	-0.25	35.00	3.01	3.47
Earl Avail*	3.61	—	—	—	—

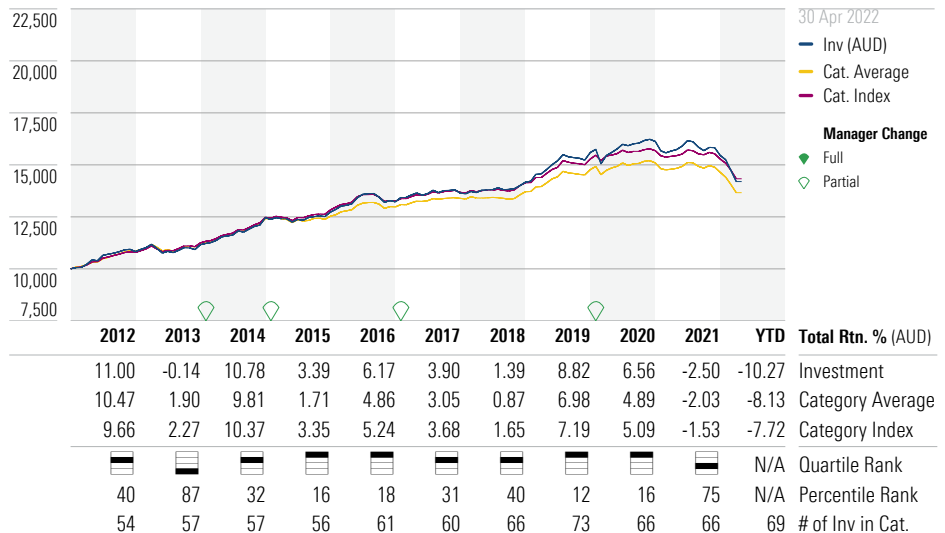
\*Earliest Available as of 10 Nov 2011

### Rolling Return Summary 30 Apr 2022

67%	36-Month Rolling Periods
24	90 Observations, 8 Years
8	
1	

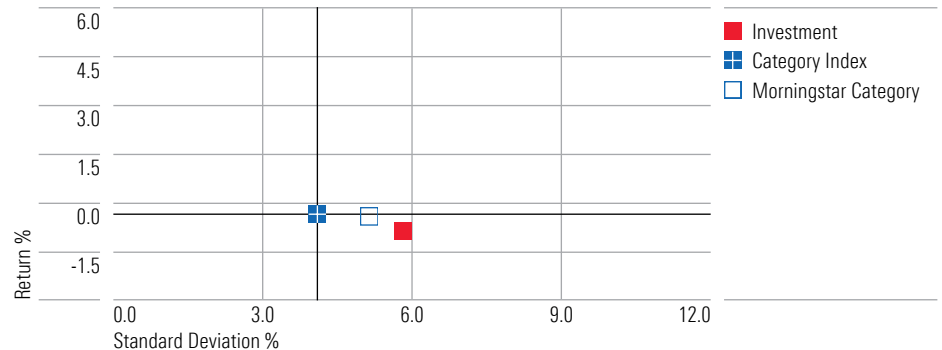
The shading and percentages correspond to how often the strategy returns landed in each category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Trailing Alpha	-0.46	-0.18	-0.67	-0.37	-0.28	0.00	-0.68	-0.38	1.34
Beta	1.41	1.07	0.12	1.38	1.04	0.12	1.34	0.99	0.08
R-Squared	90.80	78.29	12.16	90.10	74.90	12.76	91.87	73.37	7.64
Sharpe Ratio	-0.18	-0.15	-0.15	0.02	0.01	0.06	0.40	0.37	0.55
Standard Deviation %	5.82	5.14	4.10	4.82	4.26	3.46	4.30	3.94	3.18

# Dimensional Global Bond Trust 19212

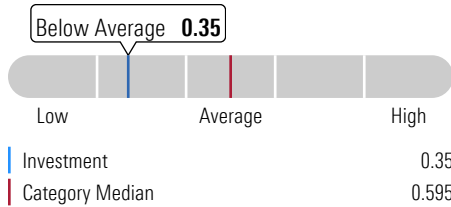
## Price

**Morningstar Category**  
Australia Fund Bonds - Global

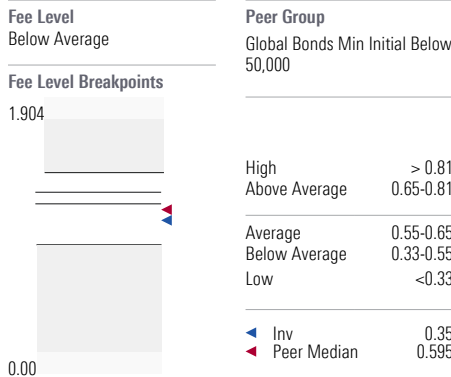
**Category Index**  
Bloomberg Global Aggregate TR Hdg AUD

**Prospectus Benchmark**  
Bloomberg Global Agg...Hdg AUD

### Prospective TCR 26 May 2020



### Fee Level



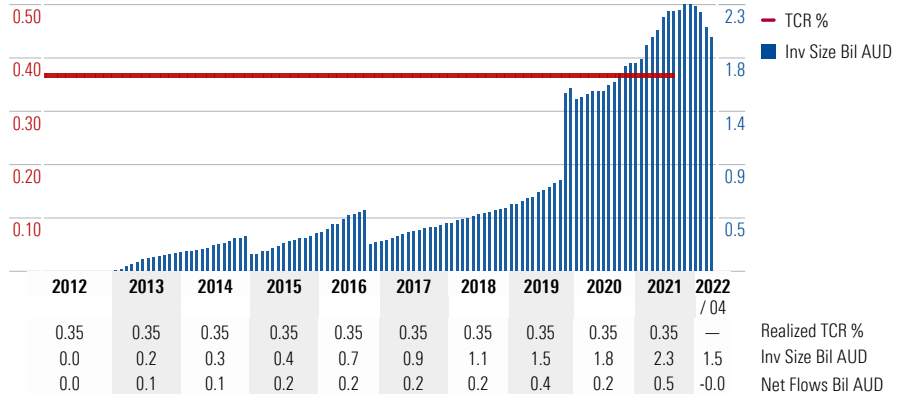
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.35
Investment Management Fee %	0.35
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.00
Representative Cost 05/31/22	0.35

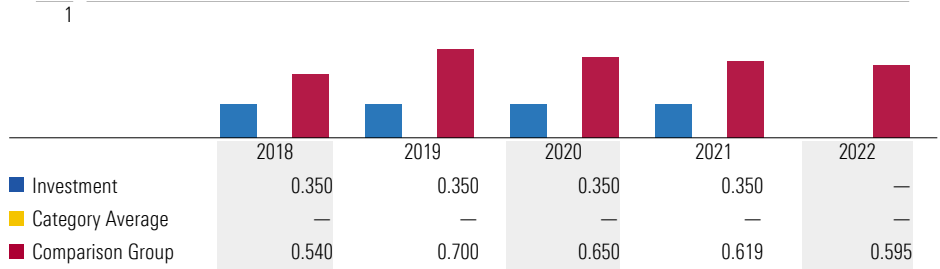
### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Global Bond Trust	DFA0028AU	Open	Below Average	0.35	—	0.00	10,000	1.53 Bil	305.82 Mil	AUD

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Global Bonds Min Initial Below 50,000

# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Global Bond Trust	—	—	—	—	—	—	11-10-2011	—	—	—	—	—
Bloomberg Global Aggregate TR Hdg AUD			-4.01	1.99	3.88	7.53	02-01-1990					
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution					On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception
Dimensional Global Bond Trust	—	—	—	—	11-10-2011	—	—	—	—

## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.



**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

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**Morningstar Analyst Rating**

	2020	2021	2022
EU	      		
VA	    		
EU	      		
VA	    		
EU	      		
VA	    		
EU	      		
VA	    		
EU	      		
VA	    		
EU	      		
VA	    		
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EU	      		
VA	    		
EU	      		
VA	    		
EU	      		
VA	    		

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### The Morningstar Analyst Rating™ for Managed Investments

The Morningstar Analyst Rating™ for Managed Investments is a forward-looking analysis of a managed investment. The Morningstar Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each managed investment within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most

competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

For more information about methodology in analyzing stocks, please go to [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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#### For Recipients in Australia and New Zealand: Information regarding Flagship Fund Analyst Rating

The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

statement for further information on fees.

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.



### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-

term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in

managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager

Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio



within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The "centroid" in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar's analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment's Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar's expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar's quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Ratings").

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment's when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar's forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst's conviction in the managed investment's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar's analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the managed investment's manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the managed investment's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar's quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company's funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock's current price relative to the analyst's estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst's educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its "fair value"), using a detailed, long-term cash flow forecast for the company. A stock's star rating depends on whether its current market price is



above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of

a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the

end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its

obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Global Real Estate Trust 15778

## Morningstar Analyst Rating



3 Nov 2021 19:33, UTC  
Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022  
58 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Global Real Estate

## Category Index

FTSE EPRA Nareit  
Developed NR Hdq AUD

## Total Assets

818.5 AUD Mil

## Inception Date

29 Oct 2007

## Kongkon Gogoi

Senior Analyst

## Morningstar Pillars

Process (03 Nov 2021)	● Average
People (03 Nov 2021)	● Above Average
Parent (26 Mar 2021)	● High
Performance (03 Nov 2021)	
Price (03 Nov 2021)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Supporting Player

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

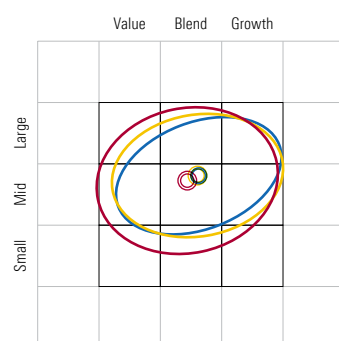
## A truly global REIT strategy with a pleasingly distinct return profile.

### Summary Kongkon Gogoi, 3 Nov 2021 19:33 UTC

Dimensional Global Real Estate Trust is a unique strategy that blends global real estate exposure with Australian REITs. For its solid cost-value balance and diversified portfolio, it upholds our conviction to deliver long-term outperformance.

Distinct geographic and factor tilts in addition to unhedged currency exposure delineate this portfolio from its peers. Dimensional has designed this portfolio keeping in minds the clients who seek comprehensive global REIT exposure. As such, it has four times higher weighting to Australia vis-à-vis the category average and three times more than the category index, FTSE EPRA Nareit Developed Index. This manifests in the portfolio's characteristics such as a dividend yield which is higher than the category average as well as the category index. Dimensional's internal research postulates that global real estate is a unique asset class in the sense that currency hedging does not smoothen returns. Therefore, the strategy is not currency hedged despite the portfolio having 66% exposure to the US. This feature has worked well as the Australian dollar has depreciated versus the US dollar in the past 10 years. DFA buys REITs like a typical index manager, at market-cap weightings. The distinction is the investment universe and flexible trading approach the manager adopts. DFA invests only in sufficiently liquid stocks and in countries where REIT legislation is deemed appropriate, including a small slice of emerging markets. This is quite different from a typical global REIT strategy where developed-markets exposure dominates. The team is willing to deviate from market-cap weighting when the trading becomes expensive. The diversified portfolio helps the strategy to patiently weather stock-specific short-term volatility resulting in low turnover. The above nuances paired with a custom universe result in a pleasingly different category-relative return profile. But investors should be careful and not extrapolate the past performance. Moreover, global real estate industry is esoteric in nature

## Equity Style



● Centroid ○ Ownership Zone

■ Investment 30 Apr 2022

■ Category Average 30 Apr 2022

■ Category Index 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Investment Style
												Equity Style Box
	23.83	15.26	32.73	12.66	6.95	1.55	5.51	25.37	-14.55	38.58	-6.81	Investment
	27.46	7.13	26.66	6.46	3.20	7.50	-2.76	24.26	-12.07	32.00	-7.00	Category Average
	31.07	9.09	22.42	4.28	5.99	8.20	-3.95	21.15	-13.74	28.60	-7.41	Category Index
												Performance Quartile (within Category)
	83	4	4	7	6	96	4	20	81	6	N/A	Percentile Rank
	61	57	56	60	61	61	62	64	63	66	67	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity Global Real Estate as of 25 May 2022 | Index: FTSE EPRA Nareit Developed NR Hdq AUD as of 25 May 2022 | *Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement. \*Performance Disclosure: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.*



# Dimensional Global Real Estate Trust 15778

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
 <b>Bronze</b>	★★★★★		Australia Fund Equity Global Real Estate	FTSE EPRA Nareit Developed NR Hdq AUD	818.5 AUD Mil	29 Oct 2007
3 Nov 2021 19:33, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 58 Inv. in Category	31 Mar 2022				

and under-researched, creating sufficient inefficiencies (and thus more opportunities) for active management to add risk adjusted value over long term. But finding such an active manager is a special skill in itself. Ergo, for investors seeking a simple solution for both global and Australian real estate exposure, Dimensional Global Real Estate Trust remains a recommended option as a one-stop, low-cost, and systematic solution.

**Process**  Average | Kongkon Gogoi, 3 Nov 2021 19:33 UTC

## Approach

This fund's performance benchmark is a composite of the S&P ASX 300 Property Trust and S&P Developed ex Australia Broad Market REIT indexes, though the portfolio is constructed to be agnostic to any index. It uses a custom investment universe that covers all countries with REIT-friendly legislation and, within that, all REITs that satisfy tax transparency criteria. It focuses on rent collection, excluding REITs with significant operational businesses such as prison REITs or developers. IPOs and companies with excessive insolvency risk are excluded. Position sizes are determined by market cap, but DFA allows some temporary deviation from this because of its focus on low trading costs; getting the best possible price is preferred over speed of execution or conforming to tracking-error bounds. Cash flows rebalance or populate portfolios while trading around corporate actions, and dividend payments also help reduce transaction costs. Low annual turnover keeps capital gains tax limited, and the realization of capital gains is deferred where possible. Active loss harvesting also helps offset any realized capital gains through reduced taxes. Key differences from other global REIT strategies include a triple-weighting in Australia and no currency hedging. This fund is best seen as a core property fund but a supporting player in an investor's overall portfolio.

## Portfolio

DFA defines its own custom universe of global REITs. The firm first determines whether a country has REIT-friendly legislation, then ascertains whether individual REITs meet its criteria of size, liquidity, and business model. The focus is on rent-collecting REITs while excluding specialty REITs such as timber and prison REITs. By holding modest positions in many different names, this portfolio has more stock diversification than many rivals. Even so, more than half of DFA's portfolio is in the US. A key difference is that DFA has a triple-weighting in Australia, recognizing that the firm's clientele wants a home-country bias and a one-stop shop for both domestic and global exposure. A small allocation to emerging markets is included. The portfolio holds about 434 names, offering broad diversification across real estate sectors and geographies. The number of holdings may increase over time, as previously excluded REITs qualify for inclusion under DFA's rules; however, consolidation offsets this to a degree (for example, the merger of Westfield and Unibail-Rodamco).

**People**  Above Average | Kongkon Gogoi, 3 Nov 2021 19:33 UTC

Dimensional's investment, ESG, research, and implementation efforts are overseen by an investment research committee, investment stewardship committee, and investment committee. The former houses

# Dimensional Global Real Estate Trust 15778

## Morningstar Analyst Rating



3 Nov 2021 19:33, UTC

Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022

58 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Global Real Estate

## Category Index

FTSE EPRA Nareit  
Developed NR Hdq AUD

## Total Assets

818.5 AUD Mil

## Inception Date

29 Oct 2007

investment luminaries such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter includes senior executives and portfolio managers who meet twice a month to ensure the funds follow mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams and are spread throughout the world, but notably in Austin, Texas; Santa Monica, California; Charlotte, North Carolina; London; and Sydney. Overall responsibility and day-to-day running of this strategy lie with Asia-Pacific portfolio manager Bhanu Singh (appointed May 2015). He is supported by a team of more than a dozen investment professionals, including dedicated traders. Joseph Chi was promoted to the head of responsible investment in late 2019, having held various roles since he started with Dimensional in 2005. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been moderate and even when it spikes, the firm copes well thanks to its systematic approach. Globally, it's a high-calibre and experienced cohort of 100-plus investment professionals and traders.

## Parent High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.

Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

Performance comparisons of Dimensional Global Real Estate Trust and its other global REIT peers should be done with caution. DFA provides combining exposure to the local and global real estate segment. This has led to DFA's pleasingly distinct performance profile from its peers in all assessment periods. Over the trailing three and five years through to September 2021, the strategy has outperformed its category average by 2.3%

# Dimensional Global Real Estate Trust 15778

## Morningstar Analyst Rating



3 Nov 2021 19:33, UTC

Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022

58 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Global Real Estate

## Category Index

FTSE EPRA Nareit  
Developed NR Hdq AUD

## Total Assets

818.5 AUD Mil

## Inception Date

29 Oct 2007

and 1.4% respectively on net of fee basis. The strategy, however, had a mediocre start as it missed the bull run following 2008 crash. But it has more than compensated for it in the subsequent years.

Robust performance in 2013-15, and again in the first half of 2018, was attributable largely to lack of currency hedges, with the substantial decline in the Australian dollar noticeably boosting returns relative to fully hedged rivals. 2016 was another strong year for the strategy, delivering 6.95% versus the category's 3.20%. Over the period from 2018 to September 2021, the strategy has beaten the hedged and unhedged version of the category index, the FTSE EPRA Nareit Developed Index, by 2.2% and 5% per year, respectively. This serves as a reminder that this diversified global real estate portfolio has a quite distinctive design from its rivals' and investors should not extrapolate the past performance. For better or worse, investors should expect a ride different from that of peers and mainstream global REIT indexes.

## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating.

## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

## How do we decide what funds receive an ESG Commitment Level?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. ■■■

# Dimensional Global Real Estate Trust 15778

Process |  Average

## Morningstar Category

Australia Fund Equity Global Real Estate

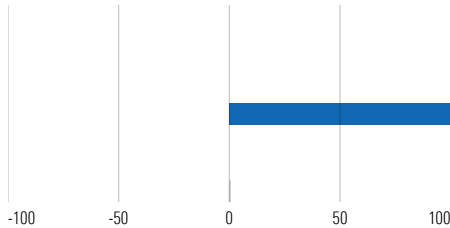
## Category Index

FTSE EPRA Nareit Developed NR Hdq AUD

## Prospectus Benchmark

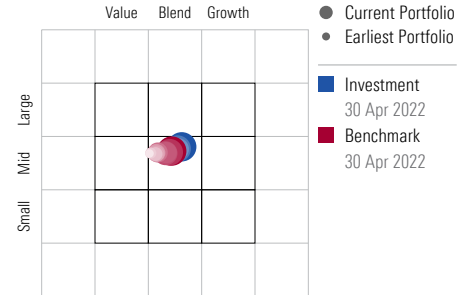
S&P/ASX 300 AREIT & ...T Index

## Asset Allocation 30 Apr 2022

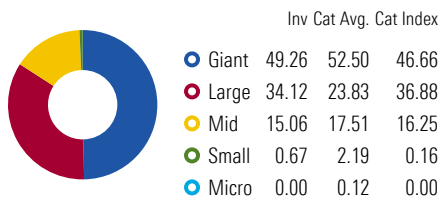


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.00	—	0.00	0.00	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	99.43	—	99.43	97.37	99.00
Cash	0.00	—	0.00	1.66	0.00
Other	0.57	—	0.57	0.97	1.00
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



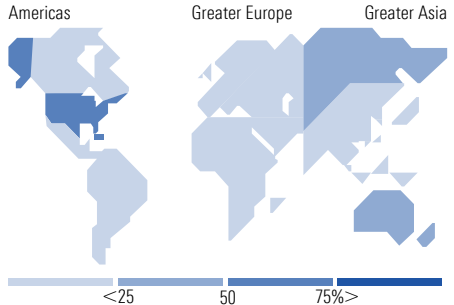
## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	29.73	29.81	26.55
P/B	1.81	1.55	1.41
P/Sales	9.20	8.60	7.16
P/Cash Flow	20.41	20.69	18.69
Dividend Yield %	3.25	3.02	3.35
Long-Term Earnings %	6.75	7.16	7.42
Historical Earnings %	40.28	12.98	34.10
Sales Growth %	-8.70	-0.41	-1.25
Cash-Flow Growth %	2.61	-1.55	-1.06
Book Value Growth %	0.54	4.28	2.34

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight	Morningstar Rating	Total Rtn YTD %
Prologis Inc	5.71	★★★	-28.21
American Tower Corp	5.36	★★	-11.14
Goodman Group	4.51	★★★	-26.68
Crown Cast...ional Corp	3.78	★★	-7.50
Equinix Inc	3.03	★★	-19.84
Public Storage	2.78	★★★	-12.43
Digital Realty Trust Inc	1.93	★★★	-22.06
Welltower Inc	1.90	★★★	4.51
Realty Income Corp	1.89	★★★★	-3.02
Simon Property Group Inc	1.87	★★★★	-31.46

## World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>68.13</b>	<b>67.88</b>	<b>65.20</b>
North America	67.81	67.83	65.20
Latin America	0.32	0.05	0.00
<b>Greater Europe</b>	<b>6.39</b>	<b>14.74</b>	<b>13.39</b>
United Kingdom	3.11	5.63	3.75
Europe-Developed	2.79	8.95	9.40
Europe-Emerging	0.06	0.00	0.00
Africa/Middle East	0.43	0.16	0.24
<b>Greater Asia</b>	<b>25.50</b>	<b>17.39</b>	<b>21.41</b>
Japan	5.30	6.68	9.18
Australasia	16.51	6.06	4.10
Asia-Developed	3.57	4.47	8.13
Asia-Emerging	0.12	0.18	0.00
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
United States	66.51	65.17	62.22
Australia	16.26	5.95	3.86
Japan	5.30	6.68	9.18
United Kingdom	3.11	5.63	3.75
Singapore	2.41	2.12	3.62
France	1.34	2.17	1.40
Canada	1.30	2.66	2.98
Hong Kong	1.07	2.32	4.47

## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	<b>100.00</b>	<b>99.50</b>	<b>100.00</b>
Basic Materials	0.00	0.00	0.00
Consumer Cyclical	0.00	0.27	0.07
Financial Services	0.09	0.04	0.00
Real Estate	99.91	99.19	99.93
<b>Sensitive</b>	<b>0.00</b>	<b>0.50</b>	<b>0.00</b>
Communication Svcs.	0.00	0.06	0.00
Energy	0.00	0.00	0.00
Industrials	0.00	0.00	0.00
Technology	0.00	0.44	0.00
<b>Defensive</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Consumer Defensive	0.00	0.00	0.00
Healthcare	0.00	0.00	0.00
Utilities	0.00	0.00	0.00

## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Wide Moat %</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Narrow Moat %</b>	<b>39.07</b>	<b>19.72</b>	<b>18.70</b>
<b>No Moat %</b>	<b>60.93</b>	<b>80.28</b>	<b>81.30</b>
Financial Health	B+	B+	B+
Profitability	C+	C	C
Growth	C	C+	C
ROIC	—	—	—
Cash Return %	70.44	26.10	67.55
P/FCF Ratio	—	—	—
D/C Ratio	46.10	41.97	43.91

## Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	21.61	22.55	12.14
Turnover Ratio %	2	54	—
% Assets in Top 10	33	40	26
# of Holdings	448	365	381
Base Currency	AUD	AUD	EUR

# Dimensional Global Real Estate Trust 15778

People |  Above Average

<b>Morningstar Category</b>	<b>Category Index</b>	<b>Prospectus Benchmark</b>
Australia Fund Equity Global Real Estate	FTSE EPRA Nareit Developed NR Hdq AUD	S&P/ASX 300 AREIT & ...T Index

<b>Management</b>	<b>Inception Date</b>	<b>Number of Mgrs</b>	<b>Longest Tenure</b>	<b>Average Tenure</b>	<b>Advisor(s)</b>	<b>Subadvisor(s)</b>
	29 Oct 2007	3	14.6 Years	14.6 Years	DFA Australia Limited	—

		Timeline <div><div></div> Past <div></div> Current</div>																						
Portfolio Manager	Tenure	Start Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	End Date	Position In Investment									
	(Years)														0K	10	50	100	500	1M	>			
Robert Ness	14.6	10/29/2007	<div></div>												N/A	<div></div>								
Slava Platkov	14.6	10/29/2007	<div></div>												N/A	<div></div>								
Bhanu P. Singh	14.6	10/29/2007	<div></div>												N/A	<div></div>								

<b>Robert Ness</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	11	10.016 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
Dimensional Australian Core Equity Trust	01 Jan 2015 to 25 May 2022	1 of 2	3.72	AUD	—	9.64	9.89	8.78
Dimensional Global Core Equity Tr	05 Dec 2006 to 25 May 2022	1 of 2	2.55	AUD	—	9.64	6.32	7.15
Dimensional Australian Value Trust	01 Jan 2015 to 25 May 2022	1 of 2	0.97	AUD	—	14.16	10.59	8.78
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	0.75	AUD	—	1.72	4.61	3.83
Dimensional Australian Large Company Tru	01 Jan 2015 to 25 May 2022	1 of 2	0.74	AUD	—	9.45	8.85	8.78

<b>Slava Platkov</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	—	N/A	1	581.641 Mil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Mil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	750.87	AUD	—	1.72	4.61	3.83

<b>Bhanu P. Singh</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	60	179.635 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret %	Index Ret
							30 Apr 2022	30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88



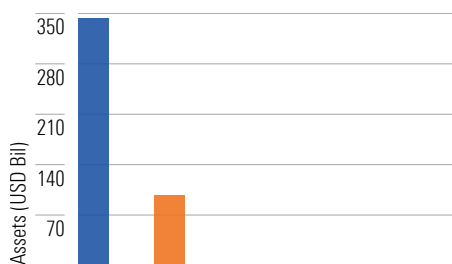
# Dimensional Global Real Estate Trust 15778

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity Global Real Estate	<b>Category Index</b> FTSE EPRA Nareit Developed NR Hdq AUD	<b>Prospectus Benchmark</b> S&P/ASX 300 AREIT & ...T Index
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

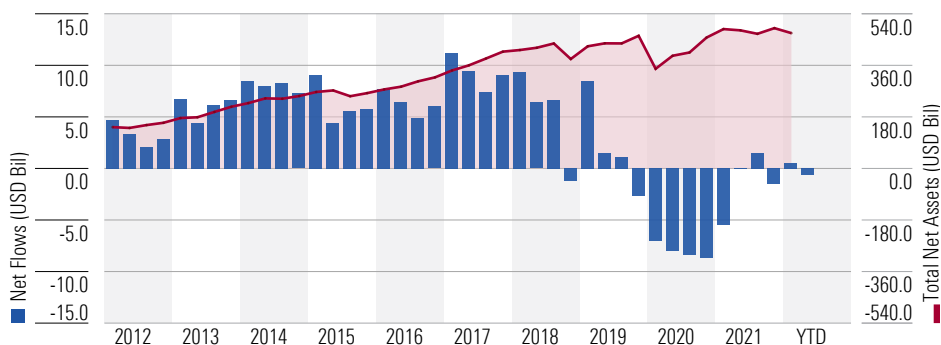
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



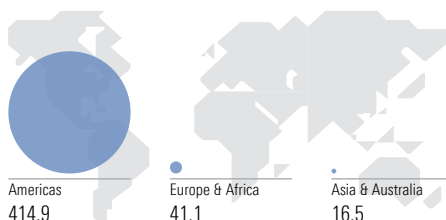
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Global Real Estate Trust 15778

## Performance

### Morningstar Category

Australia Fund Equity Global Real Estate

### Category Index

FTSE EPRA Nareit Developed NR Hdq AUD

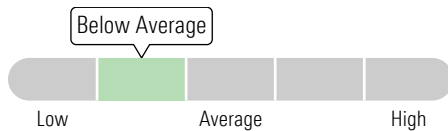
### Prospectus Benchmark

S&amp;P/ASX 300 AREIT &amp; ...T Index

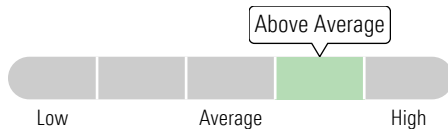
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years	6.65	Above Avg	Below Avg	★★★★
58				
5 Years	8.20	Above Avg	Below Avg	★★★★★
54				
10 Years	11.63	High	Below Avg	★★★★★
45				
Overall	—	High	Below Avg	★★★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	78.03	98.02	94.63
Downside Capture Ratio %	59.66	89.36	137.89
<b>Maximum Drawdown %</b>	<b>-22.91</b>	<b>-26.72</b>	<b>-29.56</b>
Drawdown Peak Date	2/1/20	2/1/20	2/1/20
Drawdown Valley Date	10/31/20	3/31/20	3/31/20
Max Drawdown Duration	9 Mo.	2 Mo.	2 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	15.06	14.84	7.00	8.64	5.02
3 Years	6.65	7.20	18.00	5.01	3.18
5 Years	8.20	8.66	15.00	6.42	4.80
10 Years	11.63	11.08	4.00	8.61	8.01
Earl Avail*	4.61	—	—	—	—

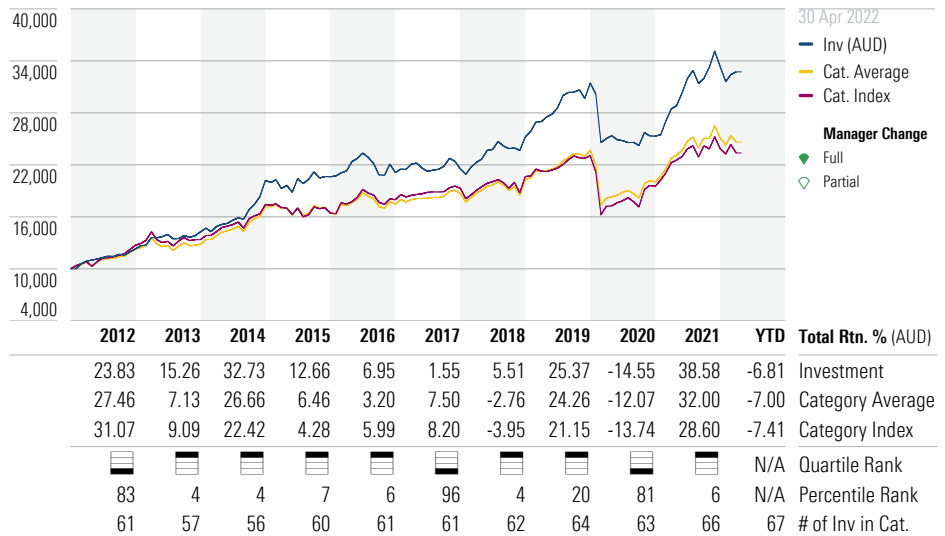
\*Earliest Available as of 29 Oct 2007

### Rolling Return Summary 30 Apr 2022

63%	36-Month Rolling Periods
9	139 Observations, 12 Years
4	
24	

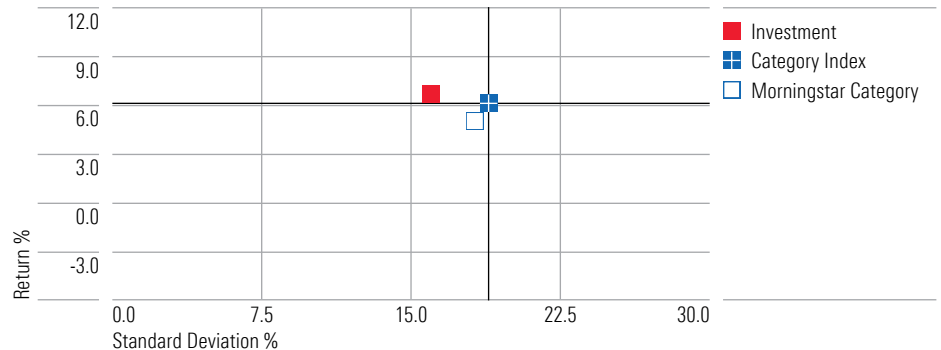
The shading and percentages correspond to how often the strategy returns landed in each category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	4.10	2.03	-3.37	4.38	1.97	-2.60	5.30	1.09	1.04
Beta	0.70	0.91	1.20	0.68	0.91	0.97	0.68	0.94	0.61
R-Squared	71.47	91.88	53.07	67.89	90.35	40.82	61.17	91.12	19.43
Sharpe Ratio	0.46	0.35	0.39	0.58	0.43	0.42	0.82	0.56	0.57
Standard Deviation %	15.99	18.20	18.90	13.67	15.66	16.24	12.39	13.91	14.19

# Dimensional Global Real Estate Trust 15778

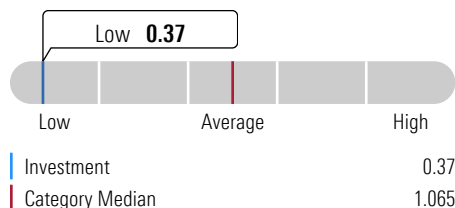
## Price

**Morningstar Category**  
Australia Fund Equity Global Real Estate

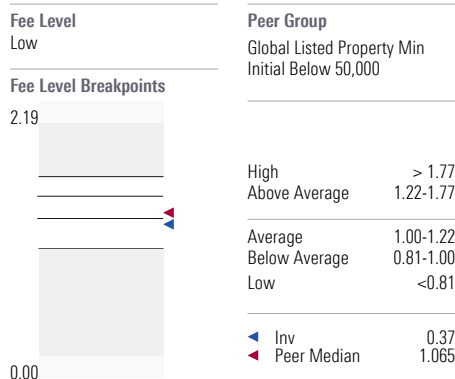
**Category Index**  
FTSE EPRA Nareit Developed NR Hdg AUD

**Prospectus Benchmark**  
S&P/ASX 300 AREIT & ...T Index

### Prospective TCR 26 May 2020



### Fee Level



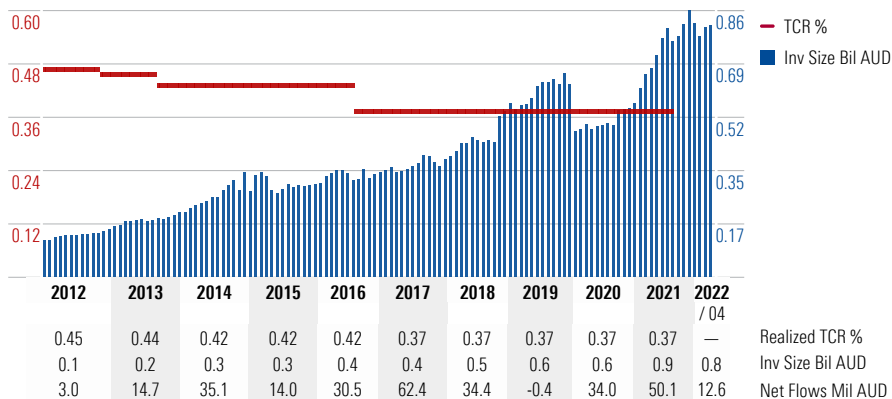
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.37
Investment Management Fee %	0.37
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.00
Representative Cost 05/31/22	0.37

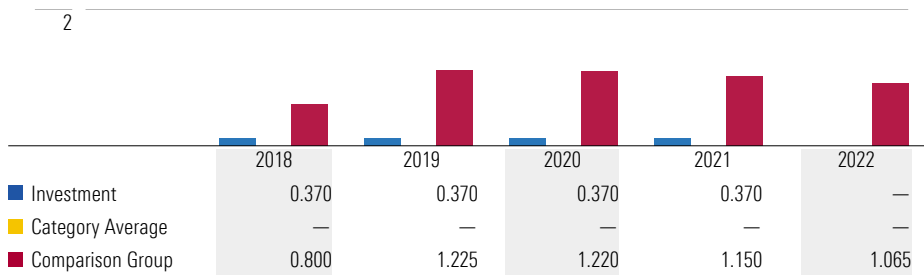
### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Gl...I Estate Trust	DFA0005AU	Open	Low	0.37	—	0.00	10,000	750.87 Mil	38.40 Mil	AUD

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Global Listed Property Min Initial Below 50,000

## Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

### Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Global Real Estate Trust	—	—	—	—	—	—	10-29-2007	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
FTSE EPRA Nareit Developed NR Hdg AUD			15.65	5.89	8.68	7.00	02-28-2005					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

### Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Global Real Estate Trust	—	—	—	—	10-29-2007	—	—	—	—

# Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

## Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

## Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense



risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

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### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

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While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

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Quantitatively-driven analysis is written by taking the unique, underlying statistics that drive an investment product's pillar rating, as well as other supporting data, and translating those values into sentences and paragraphs. The framework in which quantitatively-driven analysis is generated uses mental models meant to mirror analyst-driven written analysis.

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Morningstar Analyst Rating

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ive analysis on any such managed investment as well as imposing informational barriers (both technology and non-technology), having separate organizational reporting lines between the Manager Research group and Morningstar's Index team, and monitoring by the compliance department. However, such managed investments are eligible to receive a Morningstar Quantitative Rating, which is a quantitative system that assigns forward-looking ratings based on a machine-learning algorithm.

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The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most



competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

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The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.

### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-

term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in

managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager



Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio



within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is

above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of

a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the

end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its



obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Emerging Markets Value Trust 6468

**Morningstar Analyst Rating**  
**Neutral**

28 Jun 2021 22:28, UTC  
Kongkon Gogoi, Senior Analyst

**Morningstar Rating**  
★★★★★

30 Apr 2022  
65 Inv. in Category

**Sustainability Rating**  
★★★★★

31 Mar 2022

**Morningstar Category**  
Australia Fund Equity  
Emerging Markets

**Category Index**  
MSCI EM NR AUD

**Total Assets**  
505.2 AUD Mil

**Inception Date**  
31 Aug 2000

**Kongkon Gogoi**  
Senior Analyst

## Morningstar Pillars

Process (28 Jun 2021)	Below Average
People (28 Jun 2021)	Above Average
Parent (26 Mar 2021)	High
Performance (28 Jun 2021)	
Price (28 Jun 2021)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Supporting Player

### Morningstar Analyst Rating

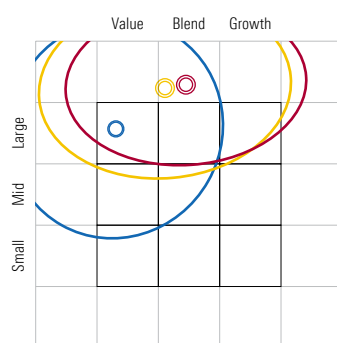
Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.






















A sensible investment approach offered at a low price, though risks are not adequately compensated.

**Summary** Kongkon Gogoi, 28 Jun 2021 22:28 UTC

DFA Emerging Markets Trust is an investible strategy that diversifies stock-specific risk and its process systematically applies moderate tilts to stocks with lower valuations, higher yields, and smaller market caps. However, in making these active bets, the strategy takes on certain risks that may not be adequately compensated. These include significant country-level concentration and a systematic tilt to smaller, cheaper stocks, which introduces sector biases. Our conviction in the strategy's ability to outperform its equity emerging-markets Morningstar Category peers going forward has weakened on a relative basis. DFA's investment approach creates a portfolio that is tilted to value and small-cap stocks. While the size and value factors offer attractive long-term upside potential, they often come at the expense of incremental volatility. Moreover, emerging markets face a few other unique risks. Like the MSCI Emerging Markets Index, it has a growing concentration in the Chinese market. As of March 2021, the fund's 36% allocation to Chinese stocks was on par with the benchmark's but higher than the category average of 29%. With state-owned enterprises making up about 20% of this fund, these companies increase risk as governments may not always prioritise the interests of public shareholders. The portfolio is offered at an annual fee of 0.73%, giving it a significant and durable advantage over local actively managed category peers (fees range from 0.96% to 3.2%). Compared with passive peers, it sits on the upper end of the category where fees range from 0.55% to 0.57%. The strategy's excess returns versus the category average have been inconsistent over the long term. The portfolio typically has large positive swings in performance when the market rebounds sharply off a nearby bottom. For example, in the road to recovery from the early-2020 coronavirus-driven sell off, the fund has outperformed by 4.9% and 3.1% over the MSCI Emerging Markets Index and category average, respectively. In periods of low volatility when growth stocks rally, the fund can struggle to keep


## Equity Style



2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	
											Investment Style
											Equity Style Box
Total Return % (AUD)											
16.62	13.56	5.21	-8.50	18.30	21.90	-2.21	10.94	-6.70	19.50	0.17	Investment
16.40	12.15	5.89	-3.79	10.29	24.06	-5.17	18.73	6.46	5.78	-12.09	Category Average
16.74	13.03	6.93	-4.30	11.72	27.09	-5.10	18.61	7.77	3.44	-10.12	Category Index
										N/A	Performance Quartile (within Category)
45	47	47	89	10	55	18	96	97	3	N/A	Percentile Rank
45	45	47	49	54	57	62	67	75	72	85	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity Emerging Markets as of 25 May 2022 | Index: MSCI EM NR AUD as of 25 May 2022 | Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Emerging Markets Value Trust 6468

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
<b>Neutral</b>	★★★★		Australia Fund Equity Emerging Markets	MSCI EM NR AUD	505.2 AUD Mil	31 Aug 2000
28 Jun 2021 22:28, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 65 Inv. in Category	31 Mar 2022				

pace for extended periods.

**Process**  Below Average | Kongkon Gogoi, 28 Jun 2021 22:28 UTC

## Approach

The fund's strong value tilt can pull its holdings towards volatile stocks that don't always compensate investors for their high risk. In establishing its value tilt by setting its opportunity set as the bottom 33% of the emerging-markets universe, the fund is somewhat limited against peers that have less-restricted investment strategies and better represent the underlying opportunity set. The global emerging-markets equity category is fairly diversified, and with around 50% of the category belonging to the large-blend style bucket, the category carries many dynamic strategies that have better potential to capitalise on both ends of the growth-value spectrum. To manage trading and rebalancing costs, Dimensional removed this strategy's 17.5% country cap on Oct. 1, 2019, a transition that was largely completed as of September 2020. The fund's China allocation now sits at around 35%, representing a closer step towards the concentration-risk concerns associated with hefty China allocations in the category.

## Portfolio

The managers start with stocks listed in emerging-markets countries, excluding REITs, regulated utilities, and firms with market caps less than \$50 million. It screens qualifying firms by price/book and targets those landing in the cheapest third. With market cap limit lifted and its China allocation now sitting much closer to the MSCI Emerging Markets Index's at around 36%, country-specific active bets now play a smaller role in adding relative value. The fund still diversifies stock-specific risk better than most of its category peers and maintains a high tracking error relative to the benchmark. The average market cap of this portfolio is about one fourth that of the category average, and the average price/book value of its holdings is one of the lowest in the category. The fund's pronounced value tilt causes exposure to various risks, from overweightings in stocks in challenging sectors such as materials and energy (5%-10%), to heightened volatility from small-cap companies, to state-owned enterprise holding concerns. Evidence for risk-adjusted returns that compensate investors for these active risks has been mixed. Tilting towards profitable companies is generally supposed to help control these risks, but as the measure is relative to book value and is also offset by the emphasis on small caps, it fails to maintain a satisfactory level of portfolio quality.

**People**  Above Average | Kongkon Gogoi, 28 Jun 2021 22:28 UTC

DFA's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses luminaries such as Eugene Fama, Kenneth French, Robert Merton, and Robert Novy-Marx and is responsible for recommending strategy enhancements and new strategies. The latter includes senior executives and portfolio managers who meet twice a month to ensure the funds follow mandates and to approve strategy implementations. Portfolio management and trading staff are spread throughout the world, including Singapore; Austin, Charlotte, and Santa Monica in the United States; London, United Kingdom; Tokyo, Japan; and Sydney, Australia. Overall responsibility and day-to-day

# Dimensional Emerging Markets Value Trust 6468

## Morningstar Analyst Rating

**Neutral**

28 Jun 2021 22:28, UTC

Kongkon Gogoi, Senior Analyst

## Morningstar Rating

★★★★★

30 Apr 2022

65 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Emerging Markets

## Category Index

MSCI EM NR AUD

## Total Assets

505.2 AUD Mil

## Inception Date

31 Aug 2000

running of this strategy lies with Asia-Pacific portfolio manager Bhanu Singh (appointed May 2015). He is supported by a team of more than a dozen investment professionals, including dedicated traders. The team is highly experienced, with an average of more than 12 years' experience and seven years of tenure at Dimensional. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been moderate, and even when turnover spikes, the firm copes well thanks to its systematic approach. Globally, it is a high-caliber and experienced cohort of 100-plus investment professionals and traders.

**Parent**  High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.


Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

## Performance

The fund has struggled to differentiate itself from the MSCI Emerging Markets Index, trailing the benchmark by 1.65% per year over the trailing 10 years through April 2021. The strategy's bias for stocks with low valuations has been a detractor from relative risk-adjusted returns, and while factor rallies tend to be largely cyclical in nature, the extended underperformance has been concerning, considering the value that category peers have been able to offer. Bouts of strong upside capture have waned materially owing to challenges around security selection and largely fall short of compensating investors for the extended periods of underperformance. Following its typical characteristics, the strategy has rebounded strongly after the coronavirus-driven sell-off of 2020; however, it is still not adequate to lift the medium-term performance. As of April 2021, the fund has underperformed an average category manager by 4.60% per year over the trailing

# Dimensional Emerging Markets Value Trust 6468

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
<b>Neutral</b>	★★★★		Australia Fund Equity Emerging Markets	MSCI EM NR AUD	505.2 AUD Mil	31 Aug 2000
28 Jun 2021 22:28, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 65 Inv. in Category	31 Mar 2022				

three years. The fund also continued to exhibit heightened volatility of around 1.6% more compared with the category average over the trailing five years through April 2021. Over the same period on a risk-adjusted basis, the fund sat in the 75th percentile of the category, reflecting a relative lack of value offered in exchange for the extra risk.


## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's second-cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating of Neutral.


## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

### How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. 

# Dimensional Emerging Markets Value Trust 6468

Process |  Below Average

## Morningstar Category

Australia Fund Equity Emerging Markets

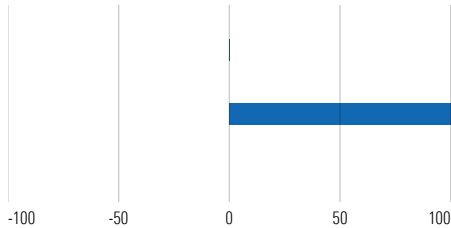
## Category Index

MSCI EM NR AUD

## Prospectus Benchmark

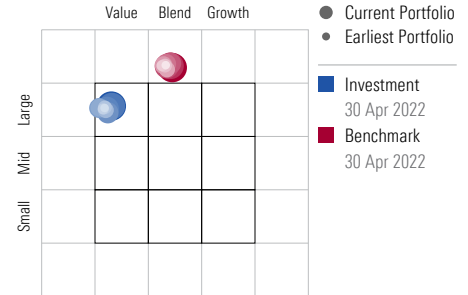
MSCI EM NR AUD

## Asset Allocation 30 Apr 2022

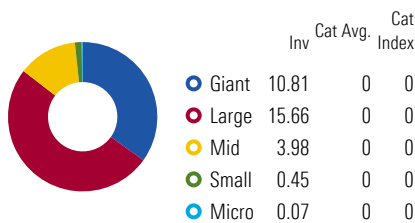


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.04	—	0.04	0.03	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	99.96	—	99.96	97.53	100.00
Cash	0.00	—	0.00	2.22	0.00
Other	0.00	—	0.00	0.22	0.00
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

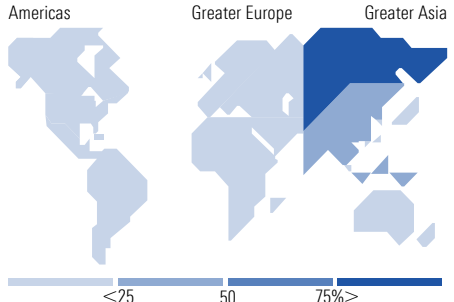
## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



## World Regions % 30 Apr 2022



## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	59.05	44.12	45.95
Basic Materials	15.46	7.55	9.27
Consumer Cyclical	8.03	10.24	12.40
Financial Services	30.36	24.16	22.14
Real Estate	5.20	2.17	2.14
<b>Sensitive</b>	35.51	42.00	41.64
Communication Svcs.	2.79	9.24	10.60
Energy	12.16	5.03	5.01
Industrials	9.89	5.91	5.40
Technology	10.67	21.82	20.63
<b>Defensive</b>	5.43	13.88	12.41
Consumer Defensive	2.49	7.65	5.70
Healthcare	1.98	3.06	4.00
Utilities	0.96	3.17	2.71

## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	6.59	10.20	10.94
P/B	0.76	1.38	1.51
P/Sales	0.57	1.19	1.27
P/Cash Flow	2.96	6.01	5.57
Dividend Yield %	4.53	3.79	3.15
Long-Term Earnings %	23.30	12.70	17.39
Historical Earnings %	34.85	1.99	22.09
Sales Growth %	9.11	8.56	10.37
Cash-Flow Growth %	39.68	10.85	17.89
Book Value Growth %	9.26	8.56	11.15

	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>7.29</b>	<b>13.25</b>	<b>8.52</b>
North America	0.23	2.42	0.23
Latin America	7.06	10.83	8.29
<b>Greater Europe</b>	<b>9.98</b>	<b>12.93</b>	<b>13.37</b>
United Kingdom	0.01	0.76	0.00
Europe-Developed	0.23	1.93	0.31
Europe-Emerging	1.13	2.02	1.29
Africa/Middle East	8.61	8.22	11.77
<b>Greater Asia</b>	<b>82.74</b>	<b>73.82</b>	<b>78.11</b>
Japan	0.00	0.11	0.00
Australasia	0.00	0.04	0.00
Asia-Developed	33.24	29.17	28.23
Asia-Emerging	49.50	44.50	49.88
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Wide Moat %</b>	<b>4.33</b>	<b>30.93</b>	<b>35.83</b>
<b>Narrow Moat %</b>	<b>30.00</b>	<b>40.39</b>	<b>33.48</b>
<b>No Moat %</b>	<b>65.68</b>	<b>28.68</b>	<b>30.69</b>
Financial Health	C-	C+	C
Profitability	C	C	C+
Growth	C+	B-	B-
ROIC	9.68	15.60	15.11
Cash Return %	26.62	60.76	43.88
P/FCF Ratio	13.89	10.96	22.89
D/C Ratio	30.71	26.53	25.80

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight %	Morningstar Rating	Total Rtn YTD %
Reliance Industries Ltd	4.51		10.30
China Cons...rp Class H	2.79	★★★★	4.81
Ping An In...td Class H	1.77	★★★★★	-16.56
Petroleo B... Preferred	1.53		34.35
Petroleo B... Petrobras	1.49		33.62
Hon Hai Pr...try Co Ltd	1.33	★★★	5.29
Samsung EL...ics Co Ltd	1.10	★★★★	-14.81
Industrial...td Class H	1.07	★★★★	5.91
Axis Bank Ltd	0.95		-2.14
Saudi Basi...tries Corp	0.89		-0.65

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
China	27.35	26.32	30.14
Taiwan	18.30	16.56	15.39
India	15.05	12.84	13.64
South Korea	14.52	10.56	12.51
Other Countries	5.19	5.58	8.22
Brazil	4.67	6.81	5.25
South Africa	3.43	2.80	3.64
Thailand	2.15	1.46	1.88

## Portfolio Holdings 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	16.02	51.67	38.65
Turnover Ratio %	20	34	—
% Assets in Top 10	17	25	24
# of Holdings	1823	774	1398
Base Currency	AUD	AUD	USD

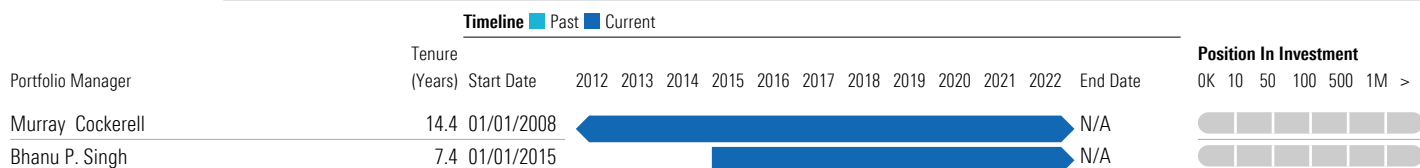


# Dimensional Emerging Markets Value Trust 6468

People |  Above Average

Morningstar Category	Category Index	Prospectus Benchmark
Australia Fund Equity Emerging Markets	MSCI EM NR AUD	MSCI EM NR AUD

Management	Inception Date	Number of Mgrs	Longest Tenure	Average Tenure	Advisor(s)	Subadvisor(s)
	31 Aug 2000	2	14.3 Years	10.8 Years	DFA Australia Limited	—



Murray Cockerell	Years of Experience	Position In Investment	Current Investments Managed	Investment AUM
	14.4	N/A	1	359.040 Mil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Mil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
Dimensional Emerging Markets Value Trust	01 Jan 2008 to 25 May 2022	1 of 2	505.23	AUD	—	20.08	3.08	2.85

Bhanu P. Singh	Years of Experience	Position In Investment	Current Investments Managed	Investment AUM
	19.4	N/A	60	179.635 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88

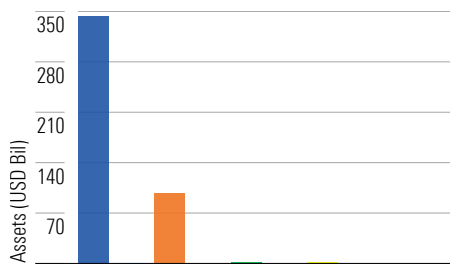
# Dimensional Emerging Markets Value Trust 6468

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity Emerging Markets	<b>Category Index</b> MSCI EM NR AUD	<b>Prospectus Benchmark</b> MSCI EM NR AUD
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

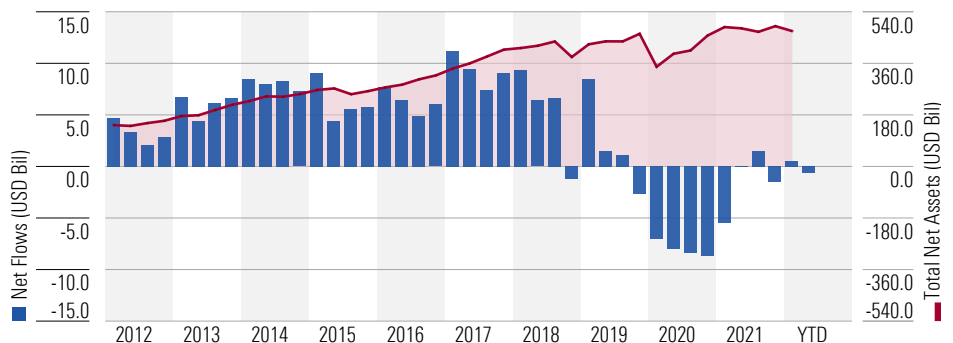
**Branding Company Breakdowns:** Dimensional 30 Apr 2022

## Global Asset Class Breakdown 30 Apr 2022



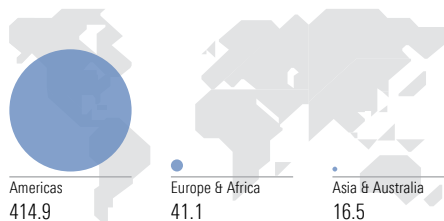
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

## Global Total Firm Assets and Investment Flows



## Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Emerging Markets Value Trust 6468

## Performance

**Morningstar Category**  
Australia Fund Equity Emerging Markets

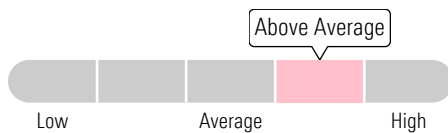
**Category Index**  
MSCI EM NR AUD

**Prospectus Benchmark**  
MSCI EM NR AUD

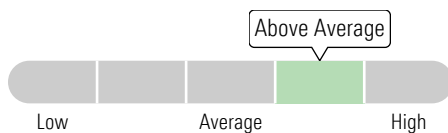
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years	4.59	Above Avg	Above Avg	★★★★
65				
5 Years	6.08	Above Avg	Above Avg	★★★★
51				
10 Years	7.27	Above Avg	Above Avg	★★★★
34				
Overall	—	Above Avg	Above Avg	★★★★

### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	93.54	94.67	—
Downside Capture Ratio %	76.49	95.98	—
<b>Maximum Drawdown %</b>	<b>-21.87</b>	<b>-16.16</b>	<b>-15.82</b>
Drawdown Peak Date	1/1/20	9/1/21	7/1/21
Drawdown Valley Date	3/31/20	4/30/22	4/30/22
Max Drawdown Duration	3 Mo.	8 Mo.	10 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

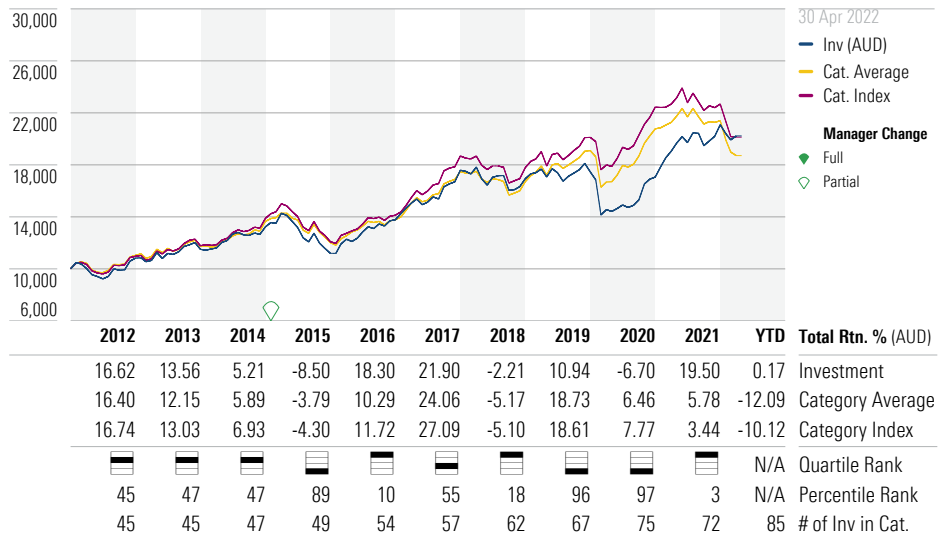
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	6.15	6.61	1.00	-11.75	-11.23
3 Years	4.59	4.56	15.00	1.69	1.92
5 Years	6.08	6.11	16.00	4.34	5.39
10 Years	7.27	7.36	14.00	6.03	6.90
Earl Avail*	5.69	—	—	—	—

\*Earliest Available as of 31 Aug 2000

### Rolling Return Summary 30 Apr 2022

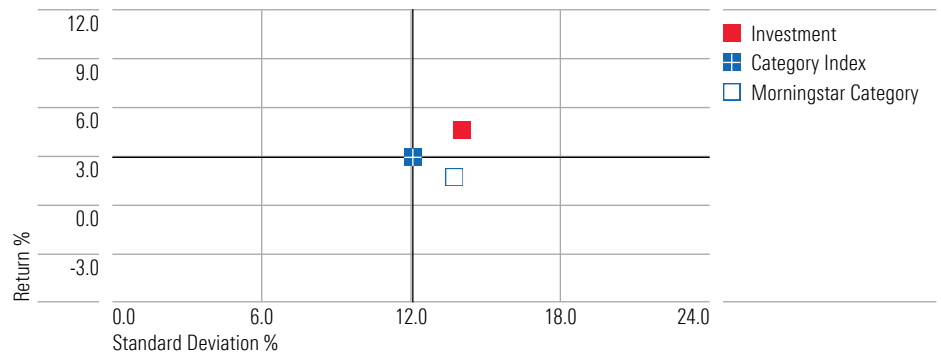
16%	36-Month Rolling Periods
37	202 Observations, 17 Years
25	The shading and percentages
22	correspond to how often the
	strategy returns landed in each
	category quartile.

### Growth of \$10,000



Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement at the end of this report. **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	2.98	0.00	-0.51	1.04	-0.65	0.77	0.49	-0.28	0.07
Beta	0.95	0.98	0.92	0.96	0.94	0.91	1.00	0.93	0.81
R-Squared	67.92	79.30	63.80	73.06	78.78	65.44	80.48	82.00	58.63
Sharpe Ratio	0.37	0.15	0.27	0.46	0.33	0.51	0.51	0.45	0.59
Standard Deviation %	14.04	13.74	12.07	12.61	12.19	11.08	11.72	10.84	10.43

# Dimensional Emerging Markets Value Trust 6468

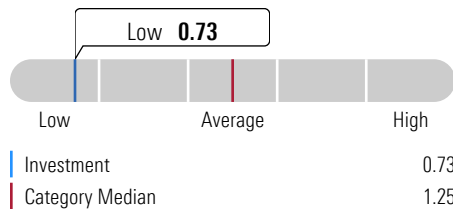
## Price

**Morningstar Category**  
Australia Fund Equity Emerging Markets

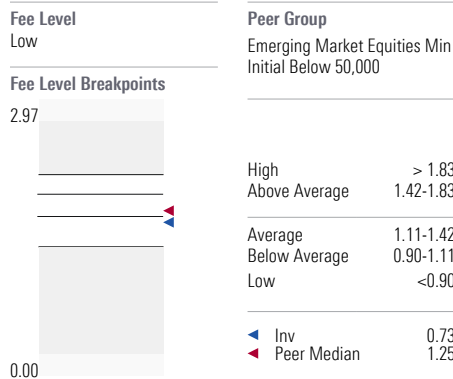
**Category Index**  
MSCI EM NR AUD

**Prospectus Benchmark**  
MSCI EM NR AUD

### Prospective TCR 02 Aug 2021



### Fee Level



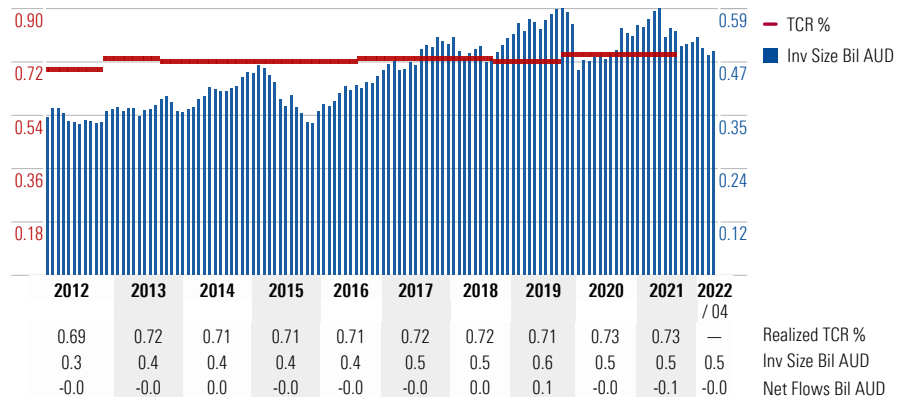
### Prospective Expense Breakdown 02 Aug 2021

Total Cost Ratio (Prospective) %	0.73
Investment Management Fee %	0.71
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.02
Representative Cost 05/31/22	0.73

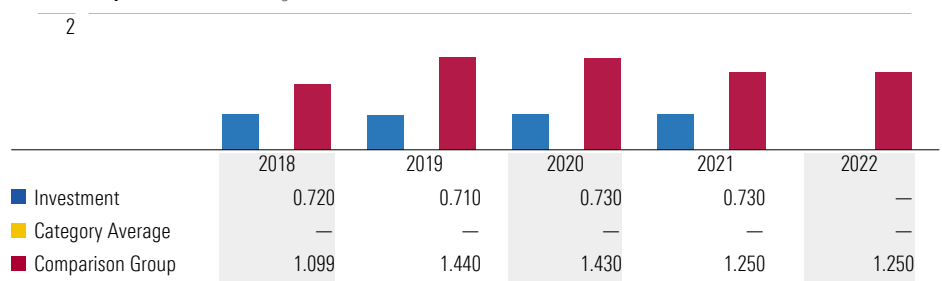
### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Em...ts Value Trust	DFA0107AU	Open	Low	0.73	—	0.02	10,000	505.23 Mil	-85.77 Mil	AUD

### Expense History 02 Aug 2021



### Historical Expense Ratio % 02 Aug 2021



Realized TCRt | Fee Level Comparison Group: Emerging Market Equities Min Initial Below 50,000

# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Emerging Markets Value Trust	—	—	—	—	—	—	08-31-2000	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
MSCI EM NR AUD			-10.10	6.31	6.74	6.97	12-29-2000					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Emerging Markets Value Trust	—	—	—	—	08-31-2000	—	—	—	—



## Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

### Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

## Analyst-Driven and Quantitatively-Driven Content

The Managed Investment Report ("Report") may contain a Morningstar Quantitative Rating™, Quantitative Pillar Scores, and/or Quantitatively-driven written analysis (collectively, "Quantitatively-Driven Content") generated by a series of statistical models intended to replicate Morningstar's analyst output ("Analyst-Driven Content"). If included in the Report, Quantitatively-Driven Content is denoted by a superscripted "Q".

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Quantitatively-Driven Content is calculated monthly for securities which do not receive a Morningstar Analyst Rating™ or analyst-derived Pillar Scores, and therefore also do not receive written analysis produced by a person in their capacity as an analyst for Morningstar's Manager Research Group.

Quantitatively-driven analysis is written by taking the unique, underlying statistics that drive an investment product's pillar rating, as well as other supporting data, and translating those values into sentences and paragraphs. The framework in which quantitatively-driven analysis is generated uses mental models meant to mirror analyst-driven written analysis.

Morningstar Analyst Ratings, Pillar Scores, ESG Commitment Levels, and/or written analysis that are not denoted by a superscripted "Q" were prepared by the person(s) noted in this Report in their capacity as an analyst for Morningstar's Manager Research group. For information regarding conflicts of interest, visit [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

### Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security's investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions.

Ratings, Pillar Scores, and ESG Commitment Levels are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the content in this Report. A change in the fundamental factors underlying the Report's content can mean that the information shown herein is subsequently no longer accurate.

For more information about Morningstar's methodologies, please visit [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

## Conflict Disclosure

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The analysis within this Report can be Quantitatively-Driven Content, Analyst-Driven Content (i.e., opinions expressed and prepared by the person(s) noted in their capacity as an analyst for Morningstar's Manager Research Group), or a combination. The opinions expressed within the Report are given in good faith, are as of the date of the Report and are subject to change without notice. Neither the analyst nor Morningstar commits themselves in advance to whether and in which intervals updates to the Report are expected to be made. The written analysis,

ratings, Pillar Scores, and ESG Commitment Levels within this Report are statements of opinions; they are not statements of fact.

Morningstar believes reasonable efforts were made by its analysts to carefully research information contained in their analysis and by the Quantitative Research team in creating methodologies and choosing supporting data. The information on which the analysis is based has been obtained from sources which are believed to be reliable such as, for example, the fund's prospectus and shareholder reports (or their equivalents), managed investment company website, interviews with managed investment company personnel, and relevant and appropriate press sources as well as data, statistics and information within Morningstar's own database. While Morningstar, its analysts, and the Quantitative Research team has obtained data, statistics and information from sources it believes to be reliable, the data, statistics, and information has not been audited or independently verified.

Prices noted with the Report are the closing prices on the last stock-market trading day before the publication date stated, unless another point in time is explicitly stated.

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**Morningstar Analyst Rating**

	2020	2021	2022
EU	       		
✱	       		
VA	       		
EU	       		
✱	       		
VA	       		
EU	       		
✱	       		
VA	       		
EU	       		
✱	       		
VA	       		
EU	       		
✱	       		
VA	       		
EU	       		
✱	       		
VA	       		

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The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most



competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

For more information about methodology in analyzing stocks, please go to [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.

### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-

term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (months or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in



managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager



Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio

within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is

above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of

a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the



end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its



obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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# Dimensional Australian Core Equity Trust 14318

## Morningstar Analyst Rating



24 Jan 2022 21:28, UTC  
Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022  
301 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

Australia Fund Equity  
Australia Large Blend

## Category Index

S&P/ASX 200 TR AUD

## Total Assets

3.7 AUD Bil

## Inception Date

3 Jul 2006

## Kongkon Gogoi

Senior Analyst

## Morningstar Pillars

Process (24 Jan 2022)	● Average
People (24 Jan 2022)	● Above Average
Parent (26 Mar 2021)	● High
Performance (24 Jan 2022)	
Price (24 Jan 2022)	

## Historical Analyst Rating

	2020	2021	2022
Gold			
Silver			
Bronze			
Neutral			
Negative			
Under Review			
Not Ratable			

## Role in Portfolio: Core

### Morningstar Analyst Rating

Morningstar evaluates funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission.

An efficient factor-based strategy for those looking for broad exposure to Australian equities.

**Summary** Kongkon Gogoi, 24 Jan 2022 21:28 UTC

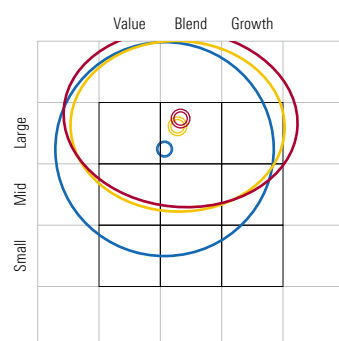
DFA Australian Core Equity Trust strategy is an efficient option for low-cost multifactor diversified Australian equities exposure with a time-tested disciplined systematic approach to investing, although our conviction on the strategy to deliver alpha in the long term has slightly moderated in light of its Morningstar Category recategorization to Australia large-cap blend from Australia large-cap value.

The strategy's investment approach is anchored in the factor research conducted by Eugene Fama and Kenneth French. Value (assessed on low price/book ratio) and size are the two key long-standing factor premiums the strategy seeks to pursue. To further augment reliability and size of the returns, Dimensional continues to explore areas for investment process enhancements (profitability and momentum overlay are notable examples), a feature we like.

The strategy does not involve individual stock-picking, as Dimensional believes markets are fairly priced, but focuses on constructing portfolios that exhibit the value, size, and profitability characteristics. DFA may choose to delay purchases on stocks that have expressed negative momentum and delay the profit-taking of those that have had positive momentum leading to a low turnover, highly diversified portfolio of approximately 565 names with an average market cap of around AUD 13 billion. REITs feature in this portfolio at market weights.

The portfolio management team is experienced, stable, and knowledgeable, ably supported by a large team of investment researchers, traders, and academics both locally and internationally. Performance has been

## Equity Style



● Centroid ○ Ownership Zone

■ Investment 30 Apr 2022



■ Category Average 30 Apr 2022

■ Category Index 30 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Investment Style
												Equity Style Box
												Total Return % (AUD)
	15.91	17.00	4.59	3.02	17.08	14.12	-5.23	22.68	2.24	18.93	2.55	Investment
	18.20	20.88	4.29	3.44	8.85	11.88	-5.54	22.67	2.01	18.08	0.69	Category Average
	20.26	20.20	5.61	2.56	11.80	11.80	-2.84	23.40	1.40	17.23	1.37	Category Index
												Performance Quartile (within Category)
	85	95	64	36	14	6	17	12	20	32	N/A	Percentile Rank
	314	324	329	341	349	333	340	363	345	341	336	# of Inv in Cat.

YTD Investment as of 30 Apr 2022 | Category: Australia Fund Equity Australia Large Blend as of 25 May 2022 | Index: S&P/ASX 200 TR AUD as of 25 May 2022 | *Italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. Performance data presented is non-standardized. For standardized performance see the Standardized and Tax Adjusted Returns Disclosure Statement.* **\*Performance Disclosure:** The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit <http://advisor.morningstar.com/familyinfo.asp>.

# Dimensional Australian Core Equity Trust 14318

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
 <b>Bronze</b>	★★★		Australia Fund Equity Australia Large Blend	S&P/ASX 200 TR AUD	3.7 AUD Bil	3 Jul 2006
24 Jan 2022 21:28, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 301 Inv. in Category	31 Mar 2022				

patchy and intertwined with the performance of the value factor. Cumulatively, returns have been peer-matching with very modest index-relative underperformance on a net-of-fees basis. We expect this reasonably uneven pattern of performance to continue owing to the cyclical nature of the factors.

In summary, we continue to view this strategy as a preferable choice for factor-based exposure to Australian equity for its attractive fee, skillful implementation, and a diversified portfolio.

**Process**  Average | Kongkon Gogoi, 24 Jan 2022 21:28 UTC

## Approach

Dimensional takes a highly academic and practical approach to investing in Australian equities. The team leverages the research of renowned academics Eugene Fama and Kenneth French to identify risk factors that should capture excess returns. Size and value have been the main factors, and profitability was introduced at the beginning of 2014. Rather than focusing on individual stock-picking, Dimensional takes a decidedly diversified systematic approach to exploit each factor. This does not involve forecasting or searching for mispriced securities. Portfolio construction is driven by each stock's relative market cap and a range of weightings that Dimensional has assigned for each market segment based on the stock's characteristics, such as price/book ratio. This ensures an overweighting in value, high profitability, and smaller market-cap stocks. Conversely, this means an underweighting in growth, low profitability, and larger stocks. As a stock's market cap grows, exhibits low profitability, or develops growthlike traits, Dimensional rebalances to a new weight rather than an outright sale. This is a key method of reducing trading costs. Momentum is also considered when buying or selling a stock, with Dimensional typically delaying the sale of securities that have performed well and postponing purchases that have struggled.

## Portfolio

Dimensional Australian Core Equity runs a highly diversified portfolio and applies all three of Dimensional's equity risk premiums: value, size, and profitability. The portfolio on average holds approximately 565 stocks and has a sizable tilt to mid- and small-cap stocks. The small-cap and value tilt has also led to distinct sector tilts. The strategy's overweighting in the materials sector has spiked over the years and it is the largest sectoral allocation (24.2%) as of 31 Dec 2021 versus the 16.1% category average. This is driven by low price/book opportunities from the slowdown in the mining sector. As of 31 Dec 2021, the fund's top 10 holdings account for about 28.1% of the total assets (565 total holdings), and the largest absolute holding accounts for 4.9% of assets (BHP Group), which effectively diversifies firm-specific risk. Financials exposure (20.8%) has discernibly come down over the years, and is underweight compared with the peer average. The shift in sector weighting for materials and financials became specifically pronounced following the introduction of the profitability factor. This strategy includes REITs at the S&P/ASX 300 Index's weight. Whilst this may smooth out the strategy's returns, it also reduces the excess return potential. For its factor-based broad Australia equity exposure, the strategy can be used as a core equity holding.

# Dimensional Australian Core Equity Trust 14318

## Morningstar Analyst Rating



24 Jan 2022 21:28, UTC

Kongkon Gogoi, Senior Analyst

## Morningstar Rating



30 Apr 2022

301 Inv. in Category

## Sustainability Rating



31 Mar 2022

## Morningstar Category

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## Category Index

S&amp;P/ASX 200 TR AUD

## Total Assets

3.7 AUD Bil

## Inception Date

3 Jul 2006

### People Above Average | Kongkon Gogoi, 24 Jan 2022 21:28 UTC

Dimensional's investment, research, and implementation efforts are overseen by an investment research committee and investment committee. The former houses investment academics such as Eugene Fama and Kenneth French and is responsible for recommending strategy enhancements and new strategies. The latter includes senior executives and portfolio managers who meet bimonthly to ensure the funds follow their mandates and to approve strategy implementations. The key day-to-day players sit within the portfolio management and trading teams spread throughout the world but notably in Austin, Texas; Santa Monica, California; London; and Sydney. Overall responsibility for this strategy lies with head of Asia-Pacific portfolio management Bhanu Singh, who was appointed in May 2015. He is supported by a highly experienced team consisting of a further 12 investment professionals and five traders. Staff fit is highly important, and this has led to some turnover in the junior ranks. At the senior level, turnover has generally been low, and even when turnover spikes, the firm copes well thanks to its systematic approach. Globally, it is a well-resourced and experienced cohort of investment professionals and traders. Dimensional's portfolio managers are evaluated primarily on their ability to implement the strategies.

### Parent High | Daniel Sotiroff, 26 Mar 2021 16:20 UTC

Dimensional Fund Advisors has faced some challenges in recent years, but it remains committed to its clients and maintains its High Parent Pillar rating.

Turnover in its upper ranks and firmwide outflows have tested Dimensional's mettle, but it has stayed on course. Co-CEOs David Butler and Gerard O'Reilly remain committed to clients and haven't wavered from the firm's investment philosophy that centers on market efficiency.



Dimensional responded to these challenges in ways that will benefit clients. The firm cut management fees on two thirds of its U.S.-domiciled mutual funds. It launched a U.S. exchange-traded fund lineup in late 2020 in response to its advisor clients' growing preference for the investment wrapper. Also, it is working to reduce investment minimums for separate accounts to customize portfolios for a broader spectrum of its clientele.

Flows have been more stable for funds domiciled outside of the United States. The firm maintains a presence in Europe and Australia and takes opportunities to expand when opportunities align with its philosophy. Dimensional has not abandoned its long-standing policies designed to protect client interests. Product launches and research remain as disciplined as ever, and shuttered funds are rare. Its mutual funds remain fenced-off to retail investors--a strategy meant to mitigate trading costs and taxes.

### Performance

The strategy has posted impressive relative performance from late 2015 to December 2021, after a multiyear stretch of poor performance in the preceding years. Specifically, solid one-year performance through

# Dimensional Australian Core Equity Trust 14318

Morningstar Analyst Rating	Morningstar Rating	Sustainability Rating	Morningstar Category	Category Index	Total Assets	Inception Date
 <b>Bronze</b>	★★★		Australia Fund Equity Australia Large Blend	S&P/ASX 200 TR AUD	3.7 AUD Bil	3 Jul 2006
24 Jan 2022 21:28, UTC Kongkon Gogoi, Senior Analyst	30 Apr 2022 301 Inv. in Category	31 Mar 2022				

December 2021 has helped to elevate its record over the trailing five-year period, offsetting the loss greater than the category average during the coronavirus-induced volatility in March/April 2020. This has allowed the fund to post second-quintile returns over three and five years and marginally beat the peer group average over the trailing 10-year period through December 2021.

Dimensional's deep-value style means its returns can deviate meaningfully from the market, which was what really caused the challenges in performance from 2011 to 2014. The tilt led to an underweighting in the strong-performing banking sector while overweighting the struggling materials sector. This illustrates how the fund can lag when the stocks favored by Dimensional's systematic approach are out of favor.

The strategy's shift toward more growth names vis-à-vis the category average since 2015 onward has led to the turnaround in performance. Overweightings in materials and technology, an underweighting in financials, and equal weight in communication services contributed to performance over the trailing five years ended 31 Dec 2021.


## Price

It's critical to evaluate expenses, as they come directly out of returns. The share class on this report levies a fee that ranks in its Morningstar category's cheapest quintile. Based on our assessment of the fund's People, Process and Parent pillars in the context of these fees, we think this share class will be able to deliver positive alpha relative to the category benchmark index, explaining its Morningstar Analyst Rating.

## ESG Commitment Level

An ESG Commitment Level is not assigned to this fund.

### How do we decide what funds receive an ESG Commitment Level ?

Morningstar analysts award an ESG Commitment Level to funds that also receive Morningstar Analyst Ratings. Not all funds currently have ESG Commitment Levels. Morningstar is expanding its coverage, prioritizing funds that are most relevant to investors. 



# Dimensional Australian Core Equity Trust 14318

Process |  Average

## Morningstar Category

Australia Fund Equity Australia Large Blend

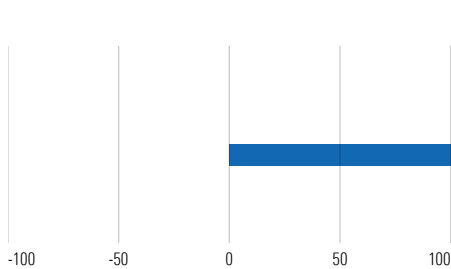
## Category Index

S&P/ASX 200 TR AUD

## Prospectus Benchmark

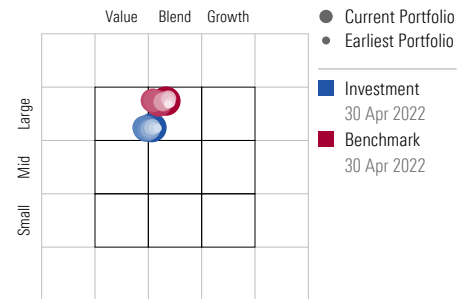
S&P/ASX 300 TR

## Asset Allocation 30 Apr 2022

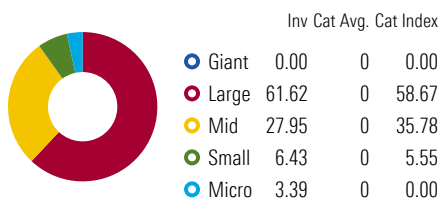


Asset Class	Net	Short	Long	Cat Avg.	Cat Index
Fixed Income	0.00	—	0.00	0.00	0.00
Preferred	0.00	—	0.00	0.00	0.00
Convertible	0.00	—	0.00	0.00	0.00
Equity	100.00	—	100.00	97.91	100.00
Cash	0.00	—	0.00	1.70	0.00
Other	0.00	—	0.00	0.39	0.00
<b>Total</b>	<b>100.00</b>	<b>—</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## Morningstar Style Trail 30 Apr 2022



## Market Capitalization Breakdown % 30 Apr 2022



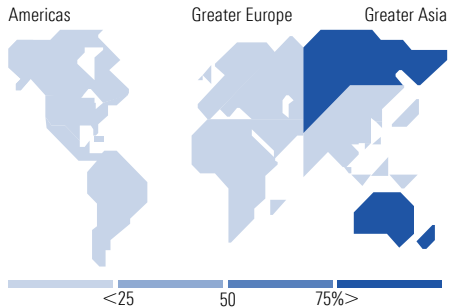
## Value & Growth Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
P/E	13.31	15.34	15.21
P/B	1.94	2.09	2.16
P/Sales	1.79	2.33	2.52
P/Cash Flow	7.14	9.05	8.30
Dividend Yield %	4.97	4.34	4.92
Long-Term Earnings %	8.33	7.83	7.95
Historical Earnings %	17.68	15.37	16.70
Sales Growth %	-0.23	-0.98	0.07
Cash-Flow Growth %	16.65	17.12	22.34
Book Value Growth %	2.33	2.29	3.06

## Top Holdings 30 Apr 2022

Holdings	Portfolio Weight %	Morningstar Rating	Total Rtn YTD %
BHP Group Ltd	8.54	★★★	20.19
Commonweal... Australia	3.79	★★	6.85
National A...a Bank Ltd	3.33	★★★	12.31
CSL Ltd	3.06	★★★★	-5.40
Westpac Banking Corp	2.41	★★★★★	14.66
Australia ... Group Ltd	2.19	★★★★★	-4.22
Macquarie Group Ltd	2.02	★★★★	-11.50
Fortescue ... Group Ltd	1.90	★★	12.13
Rio Tinto Ltd	1.87	★★★	18.46
Goodman Group	1.73	★★★	-26.68

## World Regions % 30 Apr 2022



	Inv	Cat Avg.	Cat Index
<b>Americas</b>	<b>1.33</b>	<b>2.95</b>	<b>2.41</b>
North America	1.33	2.95	2.41
Latin America	0.00	0.00	0.00
<b>Greater Europe</b>	<b>0.00</b>	<b>1.35</b>	<b>0.76</b>
United Kingdom	0.00	0.38	0.18
Europe-Developed	0.00	0.96	0.58
Europe-Emerging	0.00	0.00	0.00
Africa/Middle East	0.00	0.01	0.00
<b>Greater Asia</b>	<b>98.67</b>	<b>95.70</b>	<b>96.83</b>
Japan	0.00	0.03	0.00
Australasia	98.64	95.67	96.83
Asia-Developed	0.02	0.00	0.00
Asia-Emerging	0.01	0.00	0.00
<b>Not Classified</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Top Country Exposure % 30 Apr 2022

Country	Inv	Cat Avg.	Cat Index
Australia	98.44	93.63	95.70
United States	0.99	2.86	2.28
Canada	0.34	0.09	0.12
New Zealand	0.20	2.04	1.13
Singapore	0.02	0.00	0.00
China	0.01	0.00	0.00

## Sector Weightings % 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Cyclical</b>	65.09	64.44	66.88
Basic Materials	27.85	20.20	24.17
Consumer Cyclical	8.41	6.74	6.06
Financial Services	21.48	26.70	29.80
Real Estate	7.35	10.80	6.85
<b>Sensitive</b>	21.86	19.98	17.67
Communication Svcs.	4.68	6.09	4.52
Energy	6.86	4.31	4.47
Industrials	7.85	7.19	6.17
Technology	2.47	2.39	2.51
<b>Defensive</b>	13.03	15.60	15.45
Consumer Defensive	5.38	5.57	5.21
Healthcare	6.93	9.47	9.36
Utilities	0.72	0.56	0.88

## Financial Metrics 30 Apr 2022

	Inv	Cat Avg.	Cat Index
<b>Wide Moat %</b>	19.54	25.86	30.02
<b>Narrow Moat %</b>	26.11	32.83	29.89
<b>No Moat %</b>	54.35	41.30	40.09
Financial Health	—	—	—
Profitability	C	C	C
Growth	C	C	C
ROIC	14.00	14.72	15.22
Cash Return %	66.12	51.12	66.06
P/FCF Ratio	17.27	17.46	17.10
D/C Ratio	34.91	40.02	40.57

## Portfolio Holdings 30 Apr 2022

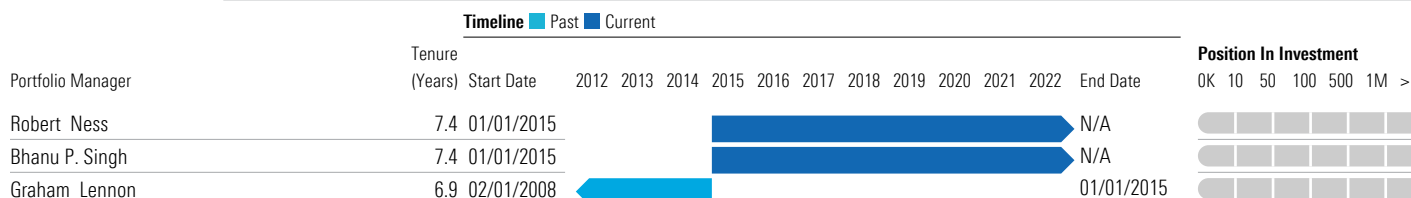
	Inv	Cat Avg.	Cat Index
Avg. Market Cap (AUD Bil)	14.97	29.83	38.23
Turnover Ratio %	10	46	—
% Assets in Top 10	31	41	47
# of Holdings	588	566	200
Base Currency	AUD	AUD	AUD

# Dimensional Australian Core Equity Trust 14318

People |  Above Average

<b>Morningstar Category</b>	<b>Category Index</b>	<b>Prospectus Benchmark</b>
Australia Fund Equity Australia Large Blend	S&P/ASX 200 TR AUD	S&P/ASX 300 TR

<b>Management</b>	<b>Inception Date</b>	<b>Number of Mgrs</b>	<b>Longest Tenure</b>	<b>Average Tenure</b>	<b>Advisor(s)</b>	<b>Subadvisor(s)</b>
	3 Jul 2006	2	7.3 Years	7.3 Years	DFA Australia Limited	—



<b>Robert Ness</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	11	10.016 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
Dimensional Australian Core Equity Trust	01 Jan 2015 to 25 May 2022	1 of 2	3.72	AUD	—	9.64	9.89	8.78
Dimensional Global Core Equity Tr	05 Dec 2006 to 25 May 2022	1 of 2	2.55	AUD	—	9.64	6.32	7.15
Dimensional Australian Value Trust	01 Jan 2015 to 25 May 2022	1 of 2	0.97	AUD	—	14.16	10.59	8.78
Dimensional Global Real Estate Trust	29 Oct 2007 to 25 May 2022	1 of 3	0.75	AUD	—	1.72	4.61	3.83
Dimensional Australian Large Company Tru	01 Jan 2015 to 25 May 2022	1 of 2	0.74	AUD	—	9.45	8.85	8.78

<b>Bhanu P. Singh</b>	<b>Years of Experience</b>	<b>Position In Investment</b>	<b>Current Investments Managed</b>	<b>Investment AUM</b>
	19.4	N/A	60	179.635 Bil USD

Largest Investments Managed	Tenure Dates	Role	Inv. Size Bil	Currency	Inv. Mil	Turnover Ratio %	Tenure Ret % 30 Apr 2022	Index Ret 30 Apr 2022
DFA International Core Equity Portfolio	21 Jul 2015 to 25 May 2022	1 of 5	31.07	USD	0	8	4.80	4.12
DFA Emerging Markets Core Equity Fund	21 Jul 2015 to 25 May 2022	1 of 5	25.93	USD	0	10	5.20	4.34
DFA International Small Cap Value Port	21 Jul 2015 to 25 May 2022	1 of 4	11.55	USD	<0.01	15	4.12	4.25
DFA Emerging Markets Value Portfolio	21 Jul 2015 to 25 May 2022	1 of 4	11.52	USD	<0.01	14	5.46	4.34
DFA International Small Company Port	21 Jul 2015 to 25 May 2022	1 of 4	10.97	USD	<0.01	22	5.59	4.88

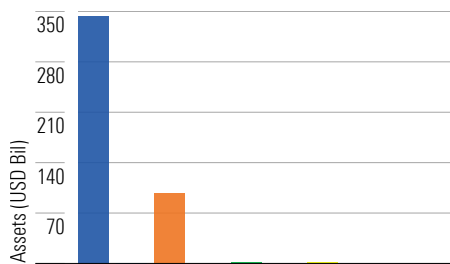
# Dimensional Australian Core Equity Trust 14318

Parent |  High

<b>Morningstar Category</b> Australia Fund Equity Australia Large Blend	<b>Category Index</b> S&P/ASX 200 TR AUD	<b>Prospectus Benchmark</b> S&P/ASX 300 TR
<b>Firm / Investment Provider</b> DFA Australia Limited	<b>Advisor</b> DFA Australia Limited	<b>Subadvisor</b> —

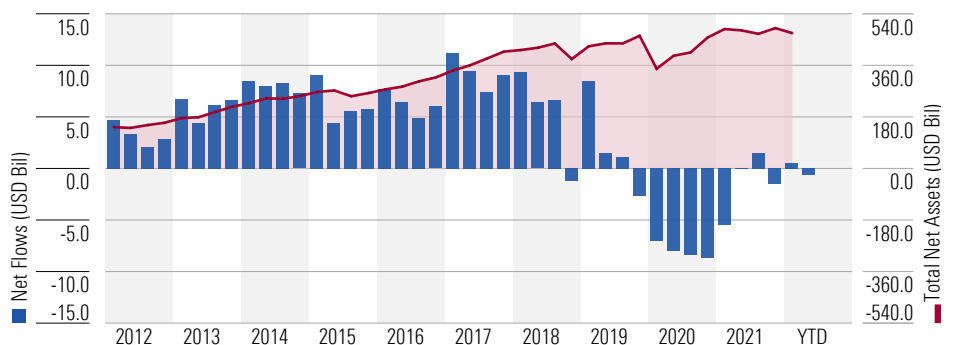
## Branding Company Breakdowns: Dimensional 30 Apr 2022

### Global Asset Class Breakdown 30 Apr 2022



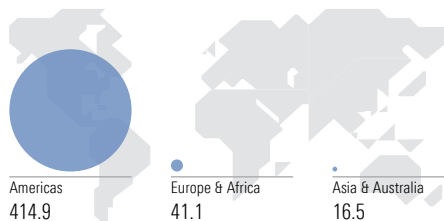
Asset Class	Assets USD Bil	Assets %
Equity	343.1	77.1
Allocation	0.1	0.0
Fixed Income	98.3	22.1
Alternative	—	—
Commodities	2.0	0.4
Money Market	—	—
Miscellaneous	1.6	0.3
Property	—	—
Convertibles	—	—
Unclassified	—	—
<b>Total Assets</b>	<b>445.0</b>	<b>100.0</b>

### Global Total Firm Assets and Investment Flows



### Global Assets By Region, By Domicile USD Bil

30 Apr 2022



# Dimensional Australian Core Equity Trust 14318

## Performance

**Morningstar Category**  
Australia Fund Equity Australia Large Blend

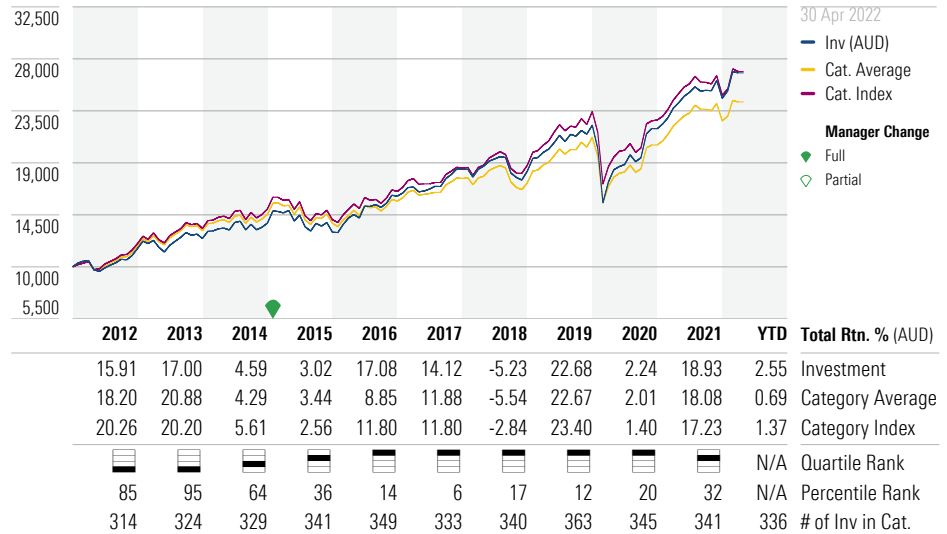
**Category Index**  
S&P/ASX 200 TR AUD

**Prospectus Benchmark**  
S&P/ASX 300 TR

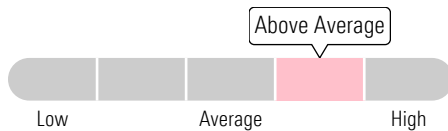
### Morningstar Rating and Risk 30 Apr 2022

Period / Inv in Cat	Total Return %	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating
3 Years 301	10.40	Above Avg	Above Avg	★★★
5 Years 267	9.64	Above Avg	Above Avg	★★★★
10 Years 233	9.78	Above Avg	Above Avg	★★★
Overall	—	Above Avg	Above Avg	★★★

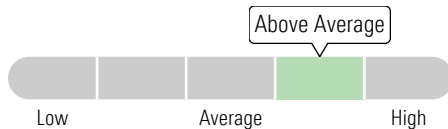
### Growth of \$10,000



### 3-Year Risk vs. Category Avg 30 Apr 2022



### 3-Year Return vs. Category Avg 30 Apr 2022



### 3-Year Market Volatility Measures 30 Apr 2022

	Inv	Cat Avg.	Cat Index
Upside Capture Ratio %	105.76	95.51	128.26
Downside Capture Ratio %	103.26	95.46	91.81
<b>Maximum Drawdown %</b>	<b>-30.11</b>	<b>-26.63</b>	<b>-26.75</b>
Drawdown Peak Date	2/1/20	2/1/20	2/1/20
Drawdown Valley Date	3/31/20	3/31/20	3/31/20
Max Drawdown Duration	2 Mo.	2 Mo.	2 Mo.

### Trailing Returns (Annualized) 30 Apr 2022

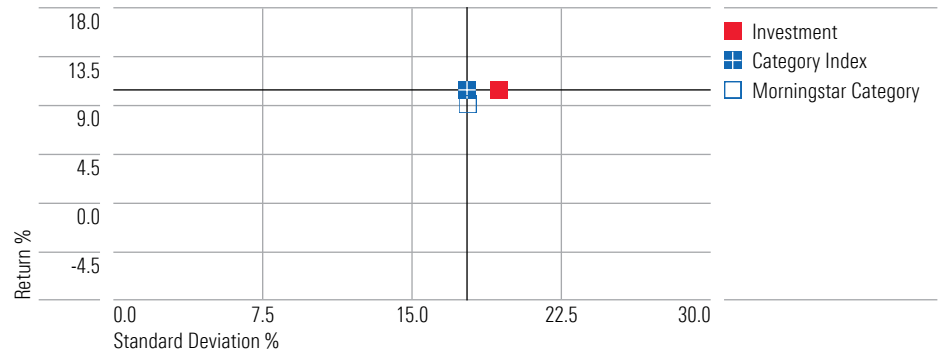
	Total Ret %	Investor Ret %	% Rank in Cat	Category Ret %	Index Ret %
1 Year	12.90	12.89	23.00	10.02	10.16
3 Years	10.40	10.66	28.00	9.07	9.42
5 Years	9.64	9.89	20.00	8.37	8.81
10 Years	9.78	9.98	32.00	9.32	9.90
Earl Avail*	6.81	—	—	—	—

\*Earliest Available as of 03 Jul 2006

### Rolling Return Summary 30 Apr 2022

46%	36-Month Rolling Periods
8	154 Observations, 13 Years
21	The shading and percentages correspond to how often the strategy returns landed in each category quartile.
24	

### 3-Year Risk vs. Return Scatterplot 30 Apr 2022



### Risk & Return Measures 30 Apr 2022

	3-Year			5-Year			10-Year		
Trailing	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index	Investment	Cat Avg.	Cat Index
Alpha	0.38	-0.02	6.47	0.34	-0.12	3.84	-0.37	-0.29	2.91
Beta	1.09	0.97	1.16	1.08	0.97	0.98	1.05	0.98	0.82
R-Squared	97.66	93.04	47.19	97.39	92.73	42.54	96.56	93.02	36.04
Sharpe Ratio	0.60	0.57	0.63	0.60	0.56	0.61	0.61	0.61	0.67
Standard Deviation %	19.39	17.80	17.76	16.11	14.93	14.87	14.23	13.56	13.53

# Dimensional Australian Core Equity Trust 14318

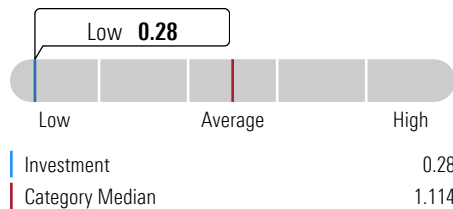
## Price

**Morningstar Category**  
Australia Fund Equity Australia Large Blend

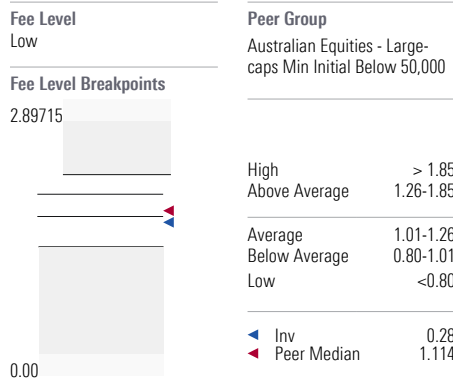
**Category Index**  
S&P/ASX 200 TR AUD

**Prospectus Benchmark**  
S&P/ASX 300 TR

### Prospective TCR 26 May 2020



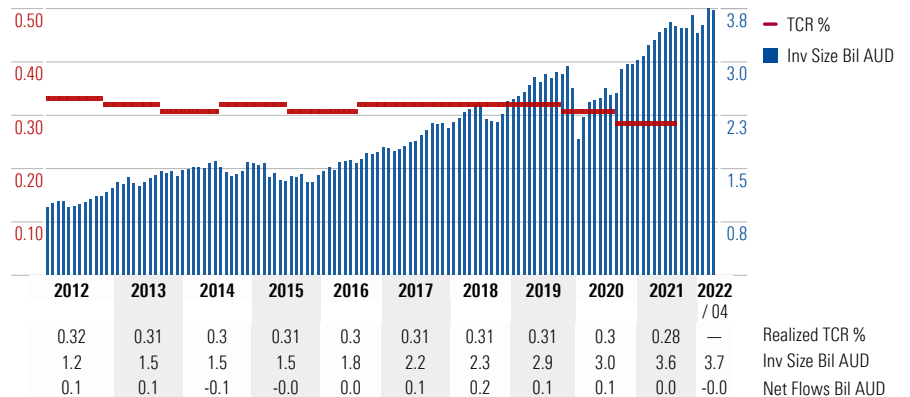
### Fee Level



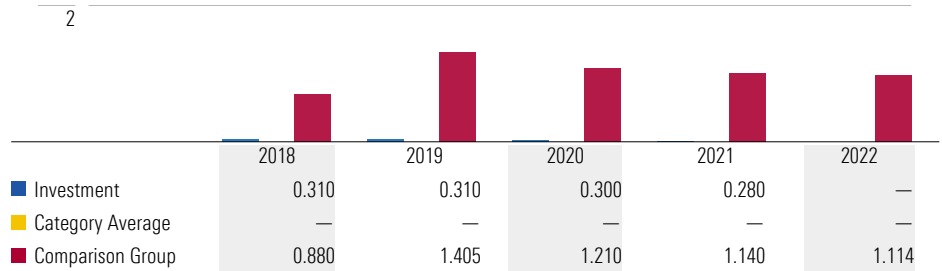
### Prospective Expense Breakdown 26 May 2020

Total Cost Ratio (Prospective) %	0.28
Investment Management Fee %	0.28
Performance Fee Costs %	—
Administration Fees & Costs %	—
Annual Dollar-Based Charges	—
Net T&O Costs 06/30/21	0.01
Representative Cost 05/31/22	0.28

### Expense History 26 May 2020



### Historical Expense Ratio % 26 May 2020



Realized TCRt | Fee Level Comparison Group: Australian Equities - Large-caps Min Initial Below 50,000

### Share Class Information

Investment Name	APIR	Status	Fee Level	TCR (P)	Performance Fee Costs	Net T&O Cost	Minimum Initial Investment	Assets	1-Yr Flow	Currency
Dimensional Au...e Equity Trust	DFA0003AU	Open	Low	0.28	—	0.01	10,000	3.72 Bil	28.23 Mil	AUD



# Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>

An investment in a money-market vehicle is not insured or guaranteed by the FDIC or any other government agency. The current yield quotation reflects the current earnings of the money market more closely than the total return quotation. Although money markets seek to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in them.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

## Annualized Returns 03-31-2022

Standardized Returns (%)	7-day Yield Subsidized	7-day Yield Unsubsidized	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Dimensional Australian Core Equity Trust	—	—	—	—	—	—	07-03-2006	—	—	—	—	—
Bloomberg US Agg Bond TR USD			-4.15	2.14	2.24	6.93	01-03-1980					
MSCI EAFE NR USD			1.16	6.72	6.27	8.54	03-31-1986					
S&P 500 TR USD			15.65	15.99	14.64	11.09	01-30-1970					
S&P/ASX 200 TR AUD			14.97	9.22	10.15	11.18	04-03-2000					
USTREAS T-Bill Auction Ave 3 Mon			0.12	1.10	0.62	3.85	02-28-1941					

## Return after Tax (%)

	On Distribution				Inception Date	On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception		1Yr	5Yr	10Yr	Since Inception
Dimensional Australian Core Equity Trust	—	—	—	—	07-03-2006	—	—	—	—

# Disclosure Statement

The Managed Investment Report is supplemental sales literature, and therefore must be preceded or accompanied by the investment's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Managed Investment Report. Morningstar is not itself a FINRA-member firm. All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, collective investment trust funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities. The definition of "managed investment" includes funds, variable annuity or variable life subaccounts, separate accounts, and models.

Prior to 2016, Morningstar's methodology evaluated open end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

## Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market,

such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net asset value minus a deferred sales charge and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

## Comparison of Other Managed Investment Types

Variable annuities are tax-deferred investments structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. The insurance company offering a variable contract will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the contract, mortality and expense

risk (M&E Risk) charges based on a percentage of a sub-account's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. A variable annuity investor will also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges if the investor makes a withdrawal prior to a specified time. If the variable annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution.

Variable life insurance is a cash-value life insurance that has a variable cash value and/or death benefit depending on the investment performance of the subaccount into which premium payments are invested. Unlike traditional life insurance, variable life insurance has inherent risks associated with it, including market volatility, and is not viewed as a short-term liquid investment. For more information on a variable life product, including each subaccount, please read the current prospectus. Please note, the financial ratings noted on the report are quoted for an insurance company and do not apply to the separate account and its subaccount.

A separate account is a portfolio of securities (such as stocks, bonds, and cash) that follows a specified investment strategy and is managed by an investment professional. The securities in the portfolio are directly owned by the separate account's owner. Separate accounts are unregistered investment vehicles; therefore, they do not have the same performance and holding reporting responsibilities that registered securities have. Separate account performance data is reported to Morningstar from the investment manager as a composite of similarly managed portfolios. As such, investors in the same separate account may have slightly different portfolio holdings because each investor has customized account needs, tax considerations and security preferences. The method for calculating composite returns can vary. The composite performance for each separate account manager may differ from actual returns in specific client accounts during the same period for a number of reasons. Different separate account managers may use different methods in constructing or computing performance figures. Thus, performance and risk figures for different separate account managers may not be fully comparable to each other. Likewise, performance and risk information of certain separate account managers may include only composites of larger accounts, which may or may not have more holdings, different diversification, different trading patterns and different performance than smaller accounts with the same strategy. Finally, composite performance of the separate account offered by the money manager may or may not reflect the reinvestment of dividends and capital gains. Gross returns are collected on a monthly and quarterly basis for separate accounts and commingled pools. This information is collected directly from the asset management firm running the product(s). Morningstar

calculates total returns, using the raw data (gross monthly and quarterly returns), collected from these asset management firms. The performance data reported by the separate account managers will not represent actual performance net of management fees, brokerage commissions or other expenses. Management fees as well as other expenses a client may incur will reduce individual returns for that client. Because fees are deducted regularly, the compounding effect will increase the impact of the fee deduction on gross account performance by a greater percentage than that of the annual fee charged. For example, if an account is charged a 1% management fee per year and has gross performance of 12% during that same period, the compounding effect of the quarterly fee assessments will result in an actual return of approximately 10.9%. Clients should refer to the disclosure document of the separate account manager and their advisor for specific information regarding fees and expenses. The analysis in this report may be based, in part, on adjusted historical returns for periods prior to an insurance group separate account's (IGSA's) actual inception. When pre-inception data are presented in the report, the header at the top of the report will indicate this and the affected data elements will be displayed in italics. These calculated returns reflect the historical performance of the oldest share class of the underlying fund, adjusted to reflect the management fees of the current IGSA. While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of an IGSA based on the underlying fund's performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the IGSA itself. Morningstar % Rank within Morningstar Category does not account for a separate account's sales charge (if applicable).

A model, as defined by Morningstar, is a portfolio of securities (such as mutual funds, ETFs, and cash) created by a model manager (such as a broker-dealer, investment adviser, or asset manager) that is distributed through centralized platforms to various types of investors or financial professionals. Models are not created with regard to the investment objectives, financial situation, or particular needs of any specific investor and therefore will not be suitable for everyone. A model is intended to provide information to assist investors in making their own investment decisions; investors must exercise their own independent judgment as to the suitability of a model and its holdings in light of their own investment objectives, experience, taxation status, and financial position. Model managers do not guarantee the performance of a model or its underlying holdings, or that a model's objective will be achieved. An investor using a model can incur a loss. Unless the model manager and an investor enter in an agreement stating otherwise, the model manager is not responsible for an investor's decision to invest in accordance with a model, the suitability of the model for a specific investor, or trading decisions, and does not manage

or have access to the investor account. Instead, the investor (or their financial professional) chooses whether and how to implement the model and is ultimately responsible for related investment decisions. If an investor chooses to invest in accordance with a model, the securities in the account are directly owned by the investor.

A collective investment trust (CIT) may also be called a commingled or collective fund. CITs are tax-exempt, pooled investment vehicles maintained by a bank or trust company exclusively for qualified plans, including 401(k)s, and certain types of government plans. CITs are unregistered investment vehicles subject to banking regulations of the Office of the Comptroller of the Currency (OCC), which means they are typically less expensive than other investment options due to lower marketing, overhead, and compliance-related costs. CITs are not available to the general public but are managed only for specific retirement plans.

### Sustainalytics

Sustainalytics is an environmental, social, and governance and corporate governance research, ratings, and analysis firm. Morningstar acquired Sustainalytics in 2020. Sustainalytics provides ESG scores on companies, which are evaluated within global industry peer groups, and tracks and categorizes ESG-related controversial incidents on companies. Morningstar uses Sustainalytics' company level ESG analytics to calculate ratings for managed products and indexes using Morningstar's portfolio holdings database.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Managed investment portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

### Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

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### Morningstar Analyst Rating

	2020	2021	2022
EO			
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The Morningstar Analyst Rating™ for Managed Investments is a forward-looking analysis of a managed investment. The Morningstar Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each managed investment within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which a Morningstar Manager Research analyst assigned or reaffirmed the current rating for the managed investment based on the analyst's latest review and research report for the managed investment.

- For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting.
- For passive strategies, process receives an 80% weighting, while people and parent each receive a

10% weighting.

- For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
- The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.
- For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

### The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of managed investments: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a managed investment as well as the interaction between the pillars, which we believe is crucial to understanding a managed investment's overall merit.

#### People

The overall quality of a managed investment's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a managed investment's investment team requires that analysts assess several relevant items including how key decisions are made.

#### Parent

We believe the parent organization is of utmost importance in evaluating managed investment. The managed investment's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

#### Process

We look for managed investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

#### Performance

We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of people and process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a managed investment is delivering to our expectations.

#### Price

To reflect actual investor experience, rated managed in-

vestments are directly penalized by the amount of their fee, including of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a managed investment; the difference between them corresponds to differences in the level of analyst conviction in a managed investment ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

#### Gold

Represents managed investment that our analyst has the highest conviction in for that given investment mandate. By giving a managed investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a managed investment must distinguish itself across the five pillars that are the basis for our analysis.

#### Silver

Represents managed investments our analyst has high conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these managed investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

#### Bronze

Represents managed investments that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these managed investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

#### Neutral

Represents managed investments in which our analysts don't have a strong positive or negative conviction. In our judgment, these managed investments are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

#### Negative

Represents managed investments that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these managed investments are inferior to most

competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

#### Under Review

This designation means that a change that occurred with the managed investment or at the managed investment company requires further review to determine the impact on the rating.

#### Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>

#### Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods –three-, five-, and ten-years– and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance. Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

#### Equity-Related Data Points

The Report lists the percentage of the managed investment's underlying holdings that have a wide, narrow, or no moat.

#### Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic

moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

For more information about methodology in analyzing stocks, please go to [global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

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#### For Recipients in Australia and New Zealand: Information regarding Flagship Fund Analyst Rating

The Morningstar Flagship Fund Analyst Rating has been allocated to platform versions of the relevant strategy. A Morningstar Analyst Rating is assigned to the flagship fund which is the primary share class that the Australian manager research team considers to best represent the underlying strategy, using criteria such as fund size and its age. Platform vehicles are typically distributed through channels that are separate to the manager of the flagship fund. Platform versions of Australia and New Zealand funds carrying the Flagship Fund Analyst Rating have not been separately rated under the Morningstar Analyst Rating methodology. This approach recognises that platform versions can have negotiable fees and reliable representative cost data may not be readily available. As a result, platform versions of the strategy retain the linkage and the rating of the Flagship share class.

When a fund is assigned a Flagship Fund Analyst Rating, all text commentary refers to the relevant Flagship fund. Consequently, the price text commentary may not align with the fee charged by the share class shown in this report. All other data shown remains relevant to this report. Please refer to the fund's product disclosure

statement for further information on fees.

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## Data Definitions

### 12 Month Yield %

12 Month Yield % is derived by summing the trailing 12-months' income distributions and dividing the sum by the last month's ending NAV, plus any capital gains distributed over the same period. Income refers only to interest payments from fixed-income securities and dividend payoffs from common stocks.

### 12b1 Expense %

A 12b-1 fee is a fee used to pay for a fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

### 30-Day SEC Yield

The 30-day SEC Yield is a calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period. The figure listed lags by one month. When a dash appears, the yield available is more than 30 days old. This information is taken from fund surveys.

### 30-Day Unsubsidized Yield

The 30-day Unsubsidized Yield is computed under a SEC standardized formula based on net income earned over the past 30 days. It excludes contractual expense reimbursements, resulting in a lower yield.

### Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

### Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the managed investment against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the managed investment's managers are buying and how they are positioning the managed investment's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the

managed investment's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most managed investment portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of managed investment holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of managed investment holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the managed investment only.

### Asset Class Breakdown

The asset class breakdown section shows the amount and percentage of assets by asset class for managed investments associated with a Parent Company.

### Attribution Statistics

Total attribution, or excess return, is the difference between the managed investment and category index performance figures. Morningstar separates a managed investment's total attribution into several factors known as attribution effects. The primary effects are: sector weightings, country weightings, security selection, and fees. Sector weightings effect refers to the portion of a managed investment's value- add attributable to the managed investment manager's decision on how much to allocate to each Morningstar Global Equity Sector (a managed investment manager's decision to have an

overweighting or an underweighting in certain sectors compared with the benchmark). For managed investments in the international-stock categories, country weightings effect is provided to measure the impact of a managed investment's country allocation as a secondary decision, based on the Morningstar Country classification. In this case, a managed investment manager's decision to have an overweighting or an underweighting in certain countries within each sector is evaluated. Security selection effect represents the portion of performance attributable to the managed investment manager's stock- picking skill. Fee effect represents the impact of managed investment expense ratio on excess return. Morningstar attribution analysis primarily focuses on these four attribution effects. There are two remaining effects, known as interaction and residual, in order for the total attribution to be the sum of the effects. The interaction effect, as its name suggests, is the interaction between the combination of sector weightings and country weightings relative to the security selection effects, and it does not represent an explicit decision of the managed investment manager and is thus not considered a primary focus of Morningstar attribution analysis. The residual effect is the portion of return that cannot be explained by the equity and cash- holdings composition at the beginning of the analysis period.

If a managed investment holds another managed investment as part of its holdings (such as when a mutual fund holds an exchange-traded fund or another mutual fund), the calculation will drill down to the individual security holdings of the underlying managed investment for analysis. The following securities are excluded from the attribution analysis, and the remaining holdings are rescaled to 100% when performing attribution analysis.

- ▶ Nonequity securities (except cash, which is included as a standalone sector).
- ▶ Unidentified or unrecognized securities. These are securities Morningstar is not able to identify.
- ▶ Unclassified securities. These are securities that are missing sector or country classification.
- ▶ Missing performance. These are securities that are missing returns for the month; they are excluded from that monthly attribution calculation.

Ranking is provided for three-year attribution statistics. Each managed investment is ranked against its peers in the same Morningstar Category.

### Average Effective Duration

Average Effective Duration is a weighted average of the effective durations of fixed income and certain derivative holdings. The portfolio average is computed by weighting each holding effective duration by the market value of the holding (notional value for derivatives) and then averaging by the sum of holding values. Effective duration is a measure of price elasticity relative to change in yield which accounts for the impact of redemption options on return of principal. It is expressed as a factor which represents the percentage change in value that is expected for a specific unit change in yield.

### Average Effective Maturity

Average Effective Maturity is a weighted average of the length of time, measured in years, until return of principal can be reasonably expected for debt securities, and is computed by weighting each holding effective maturity term by the market value of the holding and then averaging by the sum of holding values. The effective maturity may be the nominal maturity date, the next put date, the average life of a sinking fund, the weighted average life of an amortizing prepayment, or a proxy maturity date for perpetual securities. NOTE: Effective Maturity is measured only for holdings which have a principal value or reference a security with a principal value and exclude many derivatives.

### Average Market Capitalization

Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

### Average Weighted Coupon

Average weighted Coupon is the weighted average of the rates of interest paid of the fixed income and certain derivative securities in a portfolio. The average is computed by weighting each holding price by the market value of the holding and then averaging by the sum of holding values. For securities which pay no periodic interest but accrete in value at an assigned interest rate, (e.g. zero coupons), the value of the coupon is 0%. For non-periodic instruments which pay interest at maturity, (e.g. short-term bills/notes), the interest rate at issuance is assigned as the coupon rate.

### Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

### Book Value Growth %

Book value is the estimation of the book value growth for a stock. This is calculated by averaging the book-value growth rate per share of the stock for up to the previous four years. A managed investment's book value % is calculated by taking an asset-weighted average of the book value of all the stocks in the portfolio.

### Cash Flow Growth %

Cash Flow Growth is the estimation of the cash flow growth for a stock. This is calculated by averaging the cash flow growth rate per share of the stock for up to the previous four years. A managed investment's cash flow growth % is calculated by taking a share-weighted average of the cash flow of all the stocks in its portfolio.

### Cash Return %

Cash return is calculated by dividing the company's free cash flow by its enterprise value, or market capitalization, plus net debt. This number tells you what cash return you would get if you bought the entire company, including its debt.

### Company ESG Score Description

The ESG Score Description ranks the company-level ESG Risk Score for companies against their Sustainability peer group. The ESG Score Description is depicted as a range from Negligible to Severe, where Negligible equals a company that scores well below average relative to its peer group and Severe equals a company that scores well above average relative to its peer group. Breakpoints for the score description are established annually by determining how company scores fall into the following ranges within a peer group:

Negligible	Highest 5%
Low	Next 11%
Medium	Next 68%
High	Next 11%
Severe	Lowest 5%

Each month, a company's ESG Risk Score is compared to its peer group breakpoints and assigned a company score description. Morningstar lists the ESG Score Description for the largest holdings underlying a managed investment's portfolio.

### Cost Illustration

The cost illustration chart provides an example of the fees you would pay over a one-, five-, or ten-year holding period for a \$10,000 investment in the managed investment, and assumes you redeem all of your shares at the end of the period. The example assumes that investment earns a 5.00% return, and that the investment's operating expenses remain the same. Fees may be paid by you in a variety of ways: when you purchase a managed investment; by direct withdrawal from your account during the time you own a managed investment; or when you sell the managed investment.

The cost illustration is designed to provide information to help you assess the importance of fees and expenses, and to understand how changes in your holding period may impact your investment. Assumptions and calculations applied in this analysis are critical to the outcomes shown in the cost illustration.

The fee projection analysis was generated using a managed investment, investment amount, and hypothetical rate of return. It is important that these assumptions be accurate estimations, as they are key inputs that impact the fee projection analysis. Applicable front-end charges were assessed at the point of purchase and deferred charges and redemption fees, when applicable, were assessed at the point of sale. The analysis does not account for reinvestment of any applicable dividends or capital gains.

The information generated in the cost illustration is hypothetical in nature and assumes the managed investment's returns and expenses remain the same each year. Because returns and expenses vary over time, an investor's actual returns and expenses may be higher or lower. The hypothetical rate of return used in this analysis should not be considered indicative of future results. Actual results may differ substantially from that

shown here. Principal value and investment return will fluctuate, so that your shares of securities, when redeemed, may be worth more or less than your original investment, and may include a possible loss of your principal.

Morningstar uses the Prospectus Net Expense Ratio in its ongoing fees, fee level, and ranking calculations for most funds. However, the Annual Report Net Expense Ratio is used for closed-end funds because prospectuses are published infrequently.

Purchase fees and expenses are those costs incurred by an investor when they buy shares of a fund. Such fees and expenses may include front-end loads and/or trading commissions.

Redemption fees and expenses are those costs incurred by an investor when they sell shares of a fund.

Ongoing fees and expenses are those costs an investor incurs while holding shares of a fund. Such expenses may include asset-based fees and operating and management fees.

### Credit Quality

The credit quality breakdowns are shown for corporate bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a NRSRO. Bonds not rated by an NRSRO are included in the not-rated category.

### Credit Quality Breakdown

Displays the weighted distribution of holdings by credit rating symbol categories. The percentage for each rating category is computed by weighting each holding's credit rating by the market value of the holding and then averaging by the sum of holding values. For holdings that have more than one credit rating the ratings will be combined and an average rating for the holding will be computed. The distribution is based upon available credit ratings from recognized credit rating agencies such as a Nationally Recognized Statistical Rating Organization (NRSRO) in the U.S. (For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-current-nrsros.html>.) The categories are based on the rating scale produced by Morningstar Credit Ratings, LLC and range from AAA, indicating the highest level of credit quality, to D, indicating a security which has defaulted on its payment obligations. Holdings for which no credit rating is available are assigned to a "Not Rated", or "NR" category. Morningstar calculates Long, Short, and Net values.

### Current Yield

Current yield is derived by taking the ratio of a bond's annual interest payment to the current price.

### D/C Ratio

The debt-to-capital ratio for a managed investment's underlying stock holdings is calculated by dividing each security's long-term debt by its total capitalization (the sum of common equity plus preferred equity and long-



term debt) and is a measure of the company's financial leverage.

All else being equal, stocks with high D/C ratios are generally riskier than those with low D/C ratios. Note that debt-to-capital figures can be misleading owing to accounting conventions.

Because balance sheets are based on historic cost accounting, they may bear little resemblance to current market values. Morningstar aggregates debt-to-capital figures for managed investments using a median methodology, whereby domestic stocks are ordered from highest to lowest based on their D/C ratios. One adds up the asset weighting of each holding until the total is equal to or greater than half of the total weighting of all domestic stocks in the managed investment. The debt/total cap for that stock is then used to represent the debt/total cap of the total portfolio.

#### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a managed investment. The percentage of the load charged generally declines the longer the managed investment's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### Dividend Yield %

The dividends per share of the company over the trailing one-year period as a percentage of the current stock price.

#### Downside Capture Ratio %

Downside Capture Ratio measures a managed investment's performance in down markets. A down market is defined as those periods (moths or quarters) in which market return is less than 0. In essence, it tells you what percentage of the down market was captured by the managed investment. For example, if the ratio is 110%, the managed investment captured 110% of the down market and therefore underperformed the market on the downside.

#### ESG Risk Score %

Sustainalytics' ESG Risk Ratings are designed to help investors identify and understand financially material ESG risks at the security and portfolio level. The ESG Risk Ratings are based on a two-dimensional materiality framework that measures a company's exposure to industry-specific material risks and how well a company is managing those risks. ESG Risk Ratings are categorized across five risk levels: negligible, low, medium, high and severe. Ratings scale is from 0-100, with 100 being the most severe.

#### Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred

by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

#### Fee Level

Morningstar Fee Level puts the expenses of the managed investment in context by showing the range of fees charged by its peers. An overall Fee Level for the managed investment is shown, along with breakpoints for five quintiles of Fee Levels for the managed investment's peer group. Morningstar defines Fee Level peer groups by combining some categories with similar expected expenses, such as large value, large blend, and large growth, then segmenting the category group by distribution class of front-load, deferred-load, level-load, no-load, or institutional to provide more-relevant fee comparisons.

#### Fee Quintile Breakdown

The fee quintile breakdown section sums the percentage of share classes associated with a Parent Company that has a Morningstar Fee Level—Distribution of Low, Below Average, Average, Above Average, and High.

#### Financial Health

One of the three quantitative grades that Morningstar assigns to each stock as a quick way to get a handle on its fundamentals. To get a good grade in this area, a company should have low financial leverage (assets/equity), high cash-flow coverage (total cash flow/long-term debt), and a high cash position (cash/assets) relative to its sector.

#### Free Cash Flow Yield

Equal to operating cash flow minus capital spending. Free cash flow represents the cash a company has left over after investing in the growth of its business. Young, aggressive companies often have negative free cash flow, because they're investing heavily in their futures. As companies mature, though, they should start generating free cash flow.

#### Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

#### Growth

The Morningstar Growth Grade is based on the trend in revenue per share using data from the past five years. For the purpose of calculating revenue per share we use the past five years' revenue figures and corresponding year-end fully diluted shares outstanding; if year-end fully diluted shares outstanding is not available, we calculate this figure by dividing the company's reported net income applicable to common shareholders by the reported fully diluted earnings per share. A company must have a minimum of four consecutive years of positive and non-zero revenue, including the latest fiscal year, to qualify for

a grade.

In calculating the revenue per share growth rate, we calculate the slope of the regression line of historical revenue per share. We then divide the slope of the regression line by the arithmetic average of historical revenue per share figures. The result of the regression is a normalized historical increase or decrease in the rate of growth for sales per share. We then calculate a z-score by subtracting the universe mean revenue growth from the company's revenue growth and dividing by the standard deviation of the universe's growth rates.

Stocks are sorted based on the z-score of their revenue per share growth rate calculated above, from the most negative z-score to the most positive z-score. Stocks are then ranked based on their z-score from 1 to the total number of qualified stocks. We assign grades based on this ranking.

#### Growth of 10,000

For managed investments, this graph compares the growth of an investment of 10,000 (in the base currency of the managed investment) with that of an index and/or with that of the average for all managed investments in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A managed investment's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### Historical Earnings %

The historical earnings % is an estimation of the historical earnings growth for a stock. This is calculated by averaging the earnings-growth rate per share of the stock for up to the previous four years. A managed investment's historical earnings % is calculated by taking an asset-weighted average of the historical earnings of all the stocks in the portfolio.

#### Index Return %

Index Return % measures the relevant index's annualized return for a specified time period.

#### Long-Term Earnings Growth %

Long-Term Earnings Growth is the estimation of the long-term earnings growth forecast of a stock. This is collected as a third-party estimate. A managed investment's long-term earnings % is calculated by taking an asset-weighted average of the long-term earnings of all the stocks in the portfolio.

#### Manger Ownership

Manager ownership sums the percentage of assets in



managed investments with maximum manager ownership levels of more than \$1 million, \$500,001 to \$1 million, \$100,001 to \$500,000, \$50,001 to \$100,000, \$10,001 to \$50,000, \$1 to \$10,000, and \$0, as well as no data on manager ownership.

### Manager Tenure

Manager tenure sums the percentage of assets in managed investments with longest-tenured manager stays of 0-3 years, 3-6 years, 6-9 years, 9-12 years, 12-15 years, and more than 15 years.

### Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

### Maximum Drawdown %

Maximum Drawdown measures the peak-to-trough decline during a specific record period of a managed investment. It is usually quoted as the percentage between the peak and trough.

### Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is

deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

### Morningstar Analyst Rating Breakdown

For share classes associated with this parent company and have a Morningstar Analyst Rating, this is the Morningstar Analyst Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we're also providing the total number of share classes rated.

### Morningstar Category

Morningstar Category is assigned by placing managed investments into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed

investments are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Economic Moat

An economic moat is a structural feature that Morningstar believes positions a firm to sustain excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow moat companies are those Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which Morningstar believes excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction related risks related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

### Morningstar Equity Style Box™

The Morningstar Style Box™ reveals a managed investment's investment strategy as of the date noted on this report. For equity managed investments, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box indicates the weighted average style of the portfolio.

### Morningstar ESG Commitment Level

The Morningstar ESG Commitment Level is the summary expression of our analysts' opinion of the strength of the ESG investment program at the strategy and asset-manager level.

The date shown next to the Morningstar ESG Commitment Level for Strategies and the Morningstar ESG Commitment Level for Asset Managers is the date on which the Morningstar Manager Research analyst assigned or reaffirmed the current assessment for the managed investment based on the analyst's latest review and research report for the managed investment. The Morningstar ESG Commitment Level for Strategies is reevaluated at least every 14 months while the Morningstar ESG Commitment Level for Asset Managers is reevaluated at least every 18 months.

The Morningstar ESG Commitment Level is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager

Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The Morningstar ESG Commitment Level scale is Leader, Advanced, Basic, and Low. The level of rating for the Morningstar ESG Commitment Level for Strategies is based on our analysts' evaluation of a strategy's ESG process, resources, and asset manager. The level of rating for the Morningstar ESG Commitment Level for Asset Managers is based on our analysts' evaluation of a firm's ESG philosophy and process, resources, and active ownership.

For more detailed information about Morningstar ESG Commitment Level, including its methodology, please go to <http://global.morningstar.com/equitydisclosures>.

The Morningstar ESG Commitment Level (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

#### **Morningstar Fixed Income Style Box™**

The Morningstar Style Box reveals a managed investment's investment style as of the date noted on this report.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low; and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the Equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more

than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied.

Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the managed investment. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in the Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Managed investments with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less, "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values; "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, and "Extensive" is assigned to portfolios with effective durations of more than 6 years.

Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index

value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

#### **Morningstar Global Category**

Morningstar Global Categories are peer groups for managed portfolios domiciled anywhere in the world. The Global Category is assigned by placing managed investments into peer groups based on the characteristics of their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a managed investment's prospectus may not be sufficiently detailed for our proprietary classification methodology. Managed investments are placed in a category based on their portfolio statistics and compositions over the past three years. If the managed investment is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent global category assignment. Global categories may be changed based on recent changes to the portfolio. Not all managed investments are available to purchase within your country. Returns- based analysis may not be valid in some circumstances due to the impact of currencies.

#### **Morningstar Historical Sustainability Score**

The Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk on a consistent historical basis.

#### **Morningstar Investor Return**

Morningstar Investor Return (also known as "dollar-weighted return") measures how the average investor fared in a fund over a period of time. Investor Return incorporates the impact of cash inflows and outflows from purchases and sales and the growth in fund assets. In contrast to total returns, Investor Returns account for all cash flows into and out of the fund to measure how the average investor performed over time. Investor Return is calculated in a similar manner as internal rate of return. Investor Return measures the compound growth rate in the value of all dollars invested in the fund over the evaluation period. Investor Return is the growth rate that will link the beginning total net assets plus all intermediate cash flows to the ending total net assets.

#### **Morningstar Ownership Zone**

The Morningstar Ownership Zone provides a graphic representation of the size and investment style of long stocks in managed investment's portfolio. The Ownership Zone is derived by plotting each stock in the portfolio

within the Morningstar Style Box™. The Ownership Zone is the shaded area that represents 75% of the assets in the portfolio and indicates the level of concentration in the holdings. The “centroid” in the middle of the Ownership Zone represents the weighted average of all the holdings. The Ownership Zone helps investors differentiate between portfolios that may otherwise look similar. Investors can also use the Ownership Zone to construct diversified portfolios and model how multiple managed investments complement one another in a portfolio.

### Morningstar Pillar Ratings

Morningstar Pillar Ratings are subjective evaluations of managed investments performed by manager research analysts of Morningstar. Morningstar evaluates managed investments based on five key pillars, which are people, process, parent, performance and price. Morningstar’s analysts assign the people, process and parent pillars a rating of Low, Below Average, Average, Above Average, or High. Price and performance then used to help determine the managed investment’s Morningstar Analyst Rating.

The Morningstar Pillar Rating should not be used as the sole basis in evaluating a managed investment. Morningstar Pillar Ratings involve unknown risks and uncertainties which may cause Morningstar’s expectations not to occur or outcomes to differ significantly from what we expected.

### Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of company-level ESG Risk scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

### Morningstar Quantitative Rating™

Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the “Quantitative Ratings”).

The Quantitative Ratings are calculated monthly and derived from the analyst-driven ratings of a managed investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Ratings for managed investment’s when an analyst rating does not exist as part of its qualitative coverage.

**Morningstar Quantitative Rating:** Intended to be comparable to the Morningstar Analyst Ratings for managed investments, which is the summary expression of Morningstar’s forward-looking analysis of a managed investment. The Morningstar Analyst Rating is based on the analyst’s conviction in the managed investment’s ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calcu-

lates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our analysts assign to managed investments. Please go to <http://global.morningstar.com/equitydisclosures> for information about the Morningstar Analyst Ratings Morningstar’s analysts assign to managed investments.

**Quantitative Parent pillar:** Intended to be comparable to Morningstar’s Parent pillar scores, which provides Morningstar’s analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative People Pillar:** Intended to be comparable to Morningstar’s People pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s manager’s talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

**Quantitative Process Pillar:** Intended to be comparable to Morningstar’s Process pillar scores, which provides Morningstar’s analyst opinion on the managed investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our analysts would assign to the managed investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

**Risk Warning:** The Quantitative Ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the Quantitative Ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the Quantitative Ratings can mean that the recommendation is subsequently no longer accurate. For more information about Morningstar’s quantitative methodology, please visit <http://global.morningstar.com/equitydisclosures>.

### Morningstar Quantitative Rating Breakdown

For share classes associated with this parent company and have a Morningstar Quantitative Rating, this is the Morningstar Quantitative Rating breakdown, based on Asset %. To give investors a sense of the number of share classes analyzed, we’re also providing the total number of share classes rated.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a managed investment at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or “star rating”, is calculated for managed products (including mutual funds, variable annuity and variable life subaccounts, exchange traded funds, closed-end funds, and separate accounts) with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/ 40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

### Morningstar Rating Breakdown

The Morningstar rating breakdown section sums the percentage of assets in a Parent Company’s funds (share classes) that receive, 5-, 4-, 3-, 2-, 1-star, or Not Rated Morningstar Ratings.

### Morningstar Rating for Stocks

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock’s current price relative to the analyst’s estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst’s educated opinion, is cheap, expensive, or fairly priced. To rate a stock, an analyst estimates what he thinks it is worth (its “fair value”), using a detailed, long-term cash flow forecast for the company. A stock’s star rating depends on whether its current market price is

above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is fairly close to the analyst's fair value estimate.

### Morningstar Return

The Morningstar Return rates a managed investment's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Avg), and the bottom 10% Low (Low). Morningstar Return is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Risk

Morningstar Risk evaluates a managed investment's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

### Morningstar Style Trail

The Morningstar Style Trail give you a historical view of the movement of a managed investment's portfolio over time in terms of equity style based on historical periods. This helps to clearly define the management of a portfolio over time and determine the consistency of that management.

### Morningstar Sustainability Rating™






The Morningstar Sustainability Rating™ is intended to measure how well the issuing companies of the securities within a managed investment's portfolio holdings are managing their financially material environmental, social and governance, or ESG, risks relative to the managed investment's Morningstar Global Category peers.

The Morningstar Sustainability Rating calculation is a five-step process. First, each managed investment with at least 67% of assets covered by a company-level ESG Risk Score from Sustainalytics receives a Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score is an asset-weighted average of

company-level ESG Risk Scores. The Portfolio Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk.

Second, the Historical Sustainability Score is an exponential weighted moving average of the Portfolio Sustainability Scores over the past 12 months. The process rescales the current Portfolio Sustainability Score to reflect the consistency of the scores. The Historical Sustainability Score ranges between 0 to 100, with a higher score indicating that a managed investment has, on average, more of its assets invested in companies with high ESG Risk, on a consistent historical basis.

Third, the Sustainability Rating is then assigned to all scored managed investments within Morningstar Global Categories in which at least thirty (30) managed investments receive a Historical Sustainability Score and is determined by each managed investment's Morningstar Sustainability Rating Score rank within the following distribution:

	High	Highest 10%
	Above Average	Next 22.5%
	Average	Next 35%
	Below Average	Next 22.5%
	Low	Lowest 10%

Fourth, we apply a 1% rating buffer from the previous month to increase rating stability. This means a managed investment must move 1% beyond the rating breakpoint to change ratings.

Fifth, we adjust downward positive Sustainability Ratings to managed investments with a with high ESG Risk scores. The logic is as follows:

- If Portfolio Sustainability score is above 40, then the managed investment receives a Low Sustainability Rating.
- If Portfolio Sustainability score is above 35 and preliminary rating is Average or better, then the managed investment is downgraded to Below Average.
- If Portfolio Sustainability score is above 30 and preliminary rating is Above Average, then the managed investment is downgraded to Average.
- If Portfolio Sustainability score is below 30, then no adjustment is made.

The Morningstar Sustainability Rating is depicted by globe icons where High equals 5 globes and Low equals 1 globe. Since a Sustainability Rating is assigned to all managed investments that meet the above criteria, the rating it is not limited to managed investments with explicit sustainable or responsible investment mandates.

Morningstar updates its Sustainability Ratings monthly. The Portfolio Sustainability Score is calculated when Morningstar receives a new portfolio. Then, the Historical Sustainability Score and the Sustainability Rating is

calculated one month and six business days after the reported as-of date of the most recent portfolio. As part of the evaluation process, Morningstar uses Sustainalytics' ESG scores from the same month as the portfolio as-of date.

Please go to <http://corporate1.morningstar.com/SustainableInvesting/> for more detailed information about the Morningstar Sustainability Rating methodology and calculation frequency.

### NAV

A managed investment's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a managed investment's total net assets by its number of shares outstanding.

### Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, managed investments within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

### Peer Group

The Peer Group, or rating group, is a group of similar managed investments that are compared against each other for the purpose of assigning Morningstar ratings. For managed investments, the rating group is the Morningstar Category.

### Percentile Rank in Global Category

Percentile Rank is a standardized way of ranking items within a peer group. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable.

### Performance Quartile

Performance Quartile reflects a managed investment's Morningstar Rank.

### Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

### Price/Book Ratio

The Price/Book Ratio (or P/B Ratio) for a managed investment is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of



a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

#### Price/Cash Flow Ratio

The Price/Cash Flow Ratio (or P/C Ratio) for a managed investment is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

#### Price/Earnings Ratio

The Price/Earnings Ratio (or P/E Ratio) for a managed investment is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. It can act as a gauge of a managed investment's investment strategy in the current market climate, and whether it has a value or growth orientation. Companies in those industries enjoying a surge of popularity tend to have high P/E Ratios, reflecting a growth orientation. More staid industries tend to have low P/E Ratios, reflecting a value orientation.

#### Price/Sales Ratio

The Price/Sales Ratio (or P/S Ratio) for a managed investment is the weighted average of the price/sales ratios of the stocks in its portfolio. Price/sales represents the amount an investor is willing to pay for a dollar of revenue generated from a particular company's operations.

#### Profitability

The profitability grade is based on return on shareholders' equity (ROE) using data from the past five years. Companies with less than four years of consecutive ROE figures, including the ROE figure for the latest fiscal year, are excluded from the calculations. For the remaining universe of stocks, the profitability grade is based on the following three components:

1. The historical growth rate of ROE
2. The average level of historical ROE
3. The level of ROE in the latest fiscal year

#### R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

#### Representative Cost

Representative cost incorporates re-occurring costs charged by a fund to facilitate comparison of funds that calculate fees in different ways. For most markets, the representative cost is calculated using the net expense ratio excluding transaction costs. In the U.S., the representative cost does not include acquired expenses from other funds it may invest in, one-off costs, costs charged by third parties such as financial professionals or platforms, or one-off costs charged on entry or exit.

#### Risk vs Return Scatterplot

The risk vs return scatterplot graph plots the return and risk (measured by standard deviation) for a selection of securities and a benchmark index for the trailing period identified in the report.

The returns noted for a security reflect any sales charges that were applied in the illustration over the time period selected, but do not reflect impacts of taxation. If impacts of taxation were reflected, the returns would be lower than those indicated in the report.

The return plotted in the graph is mean geometric return. Standard deviation is a statistical measure of the volatility of the security's or portfolio's returns in relation to the mean return. The larger the standard deviation, the greater the volatility of return in relation to the mean return.

#### ROIC

This figure is the percentage a company earns on its invested capital in a given year (Year 1, 2, etc.).

The calculation is net operating profit after tax divided by average invested capital. The resulting figure is then multiplied by 100. Invested capital equals the sum of total stockholders' equity, long-term debt and capital lease obligation, and short-term debt and capital lease obligation. ROIC shows how much profit a company generates on its capital base. The better the company, the more profit it generates as a percentage of its invested capital. The company's net income is found in the income statement. The components of the company's invested capital are found in the balance sheet.

#### Sales Growth %

Sales Growth is the estimation of the growth of sales for a stock. This is calculated by averaging the sales-growth rate per share of the stock for up to the previous four years. A managed investment's sales growth % is calculated by taking a share weighted average of the collective sales for all stocks in its portfolio.

#### Role in Portfolio

Role in portfolio assists with portfolio allocation, managed investments can be designated "core", "supporting", or "specialty". Core funds should typically be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of an investor's portfolio.

#### Sector Weightings %

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Fixed-income Super Sectors represent Morningstar's broadest classification of fixed-income sectors. Securities held in domestic taxable-bond portfolios are mapped into one of 14 fixed-income sectors, which in turn, roll up to five super sectors. The Government Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions, and provinces. The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities. The Corporate Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock. The Securitized Super Sector includes all types of mortgage-based securities, covered bonds, and asset-backed securities. The Cash & Equivalents Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in certain short time frames, commercial paper, and repurchase agreements. The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options, and swaps. This sector may be displayed as "Other" in certain reports.

#### Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

#### Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility of return.

#### Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the



end, incurring transaction charges.

### Tax Cost Ratio

The Morningstar Tax Cost Ratio measures how much a managed investment's annualized return is reduced by the taxes investors pay on distributions. Mutual funds regularly distribute stock dividends, bond dividends and capital gains to their shareholders. Investors then must pay taxes on those distributions during the year they were received.

Like an expense ratio, the tax cost ratio is a measure of how one factor can negatively impact performance. Also like an expense ratio, it is usually concentrated in the range of 0-5%. 0% indicates that the managed investment had no taxable distributions and 5% indicates that the managed investment was less tax efficient.

### Tenure Return %

Tenure Return % is the annualized return of a managed investment since the manager started running the strategy. This is useful to compare with the Index Return %, which measures the relevant index's annualized return in the same time period.

### Total Firm Assets and Fund Flows

Morningstar estimates fund-level flow data and aggregates it at the firm level. The Flows graph shows quarterly net flows and the firm's asset growth rate. This information illustrates the movement of money into and out of the firm's funds over time, which can be particularly illustrative in times of market volatility.

### Trailing Returns

Trailing Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the managed investment was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes

reinvestment of dividends and capital gains. It is the return an investor would have experienced if the managed investment was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a managed investment has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

### Turnover Ratio %

Turnover Ratio measures the trading activity in a managed investment's portfolio by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. In practical terms, the resulting percentage loosely represents the percentage of the managed investment's underlying holdings that have changed over the past year. The inverse of a managed investment's turnover ratio is the average holding period for a security in that managed investment.

### Upside Capture Ratio %

Upside Capture Ratio measures a managed investment's performance in up markets relative to the market (benchmark) itself. It is calculated by taking the managed investment's upside capture return and dividing it by the benchmark's upside capture return.

### World Regions %

The world regions is a display of the portfolio's assets invested in the regions shown on the report.

## Investment Risks

### International/Emerging Market Equities

Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

### Sector Strategies

Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

### Non-Diversified Strategies

Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

### Small Cap Equities

Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

### Mid Cap Equities

Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

### High-Yield Bonds

Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

### Tax-Free Municipal Bonds

The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

### Bonds

Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

### HOLDRs

The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

### Hedge Funds

The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

### Bank Loan/Senior Debt

Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

### Exchange Traded Notes (ETNs)

ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its

obligations. ETNs do not typically pay interest.

### Leveraged ETFs

Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their managed investment objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, - 200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the managed investment to be either greater or less than the index performance multiplied by the multiple stated within the managed investments objective over a stated time period.

### Short Positions

When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

### Long-Short

Due to the strategies used by long-short managed investments, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these managed investments may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

### Liquidity Risk

Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

### Market Price Risk

The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

### Market Risk

The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

### Target-Date Funds

Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at

any time, including at the fund's target date.

### High double- and triple-digit returns

High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

## Benchmark Disclosure

### Barclays US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage- Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which include the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond.

### MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000.

### S&P500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500.

### USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

### Bloomberg Indexes

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