## American Funds Capital World Gr&Inc R6 RWIGX

Morningstar Category World Large Stock

Morningstar Index MSCI ACWI Ex USA NR USD

#### Portfolio Manager(s)

Mark Denning since 03-1993 Sung Lee since 02-2006 L. Barroso since 02-2007 David Riley since 02-2007 Joyce Gordon since 02-2008 Alex Sheynkman since 02-2014 Michael Cohen since 11-2014 Jin Lee since 02-2019

#### **Quantitative Screens**

Performance: The fund has finished in the World Large Stock category's top three quartiles in 8 of the 9 years it's been in existence.

Management: The fund's management has been in place for 26.03 years.

Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years

Net Expense: The fund's expense ratio of 0.44 is 61.4% lower than the World Large Stock category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change Fund: \$10,000 Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 8.10 -7.23 19.56 25.28 4.36 -1.88 6.85 25.08 -9 97 12.25 Total Return %

2.35

1.31

34

725

35

0.45

-2.11

1.47

33

790

35

0.45

4.23

-0.33

56

892

49

0.44

1.94

-0.02

46

958

+/- Benchmark

+/- Category

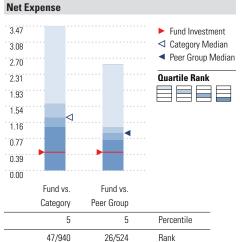
Turnover %

Expense Ratio

Tot Ret % Rank in Cat

# of Funds in Cat





6.48

0.70

42

440

27

2.73

3.72

23

476

23

0.45

9.99

0.09

51

551

24

0.45

8.23

1.57

30

617

36

0.44

3.78

-0.19

55

668

35

0.45

-3.05

-5.64

84

406

25

26/524 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	3.13	-	2.87
Beta	0.87	_	0.87
R-Squared	91.10	_	73.88
Standard Deviation	9.63	10.56	10.69
Sharpe Ratio	0.94	0.67	0.82
Tracking Error	3.18	_	5.76
Information Ratio	0.73	_	0.33
Up Capture Ratio	94.18	_	90.55
Down Capture Ratio	71.27	-	68.59

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.14	15.22	17.26
Price/Book Ratio	2.42	1.58	2.15
Geom Avg Mkt Cap \$B	55.41	30.69	39.85
ROE	23.66	15.65	18.92



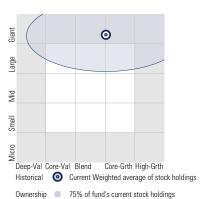
# American Funds Capital World Gr&Inc R6 RWIGX

#### Morningstar Category World Large Stock

**Morningstar Index** MSCI ACWI Ex USA NR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

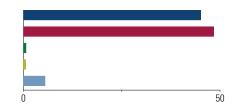
. ,			
26	34	34	Luigo
1	2	3	19110
0	0	0	OI I

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10

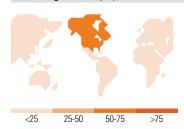
#### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	5.46	0.49
Cash	0.51	3.55
Bonds	0.62	-0.42
Non-US Stocks	48.35	42.86
US Stocks	45.06	53.52
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund Fenchmark Category Average
Ն	Cyclical	34.28	44.07	36.55	
ů.	Basic Materials	4.97	7.90	4.29	
4	Consumer Cyclical	12.05	11.01	13.14	
<b>,</b>	Financial Services	13.38	21.61	17.05	
ŧ	Real Estate	3.88	3.55	2.07	
M	Sensitive	40.22	34.15	38.57	
	Communication Services	3.13	4.08	3.24	
•	Energy	7.28	7.42	4.52	
¢	Industrials	8.46	10.74	11.70	
	Technology	21.35	11.91	19.11	
<b>→</b>	Defensive	25.51	21.78	24.87	
=	Consumer Defensive	8.07	10.08	8.55	
٠	Healthcare	13.66	8.40	13.64	
•	Utilities	3.78	3.30	2.68	

### World Regions % Equity 03-31-2019



Greater Asia	Fund % 19.26	Cat % 16.50	
Japan	3.67	5.92	
Australasia	0.36	1.05	
Asia-4 Tigers	8.65	3.75	
Asia-ex 4 Tigers	6.58	5.78	
Not Classified	0.00	0.00	

Americas	Fund % 53.08	Cat % 58.54	Greater Europe	Fund % 27.65	Cat % 24.97	Market Maturity	Fund %
North America Central/Latin	50.55 2.53	57.62 0.92	United Kingdom W euro-ex UK Emrgng Europe Africa	10.38 16.38 0.45 0.44	7.12 16.92 0.31 0.62	Developed Markets Emerging Markets Not Available	90.25 9.75 0.00

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	5.01	5.01	_	_
⊖ Broadcom Inc	2.76	7.77	19.30	Technology
⊕ AbbVie Inc	1.99	9.76	-11.42	Healthcare
	1.83	11.59	16.57	Technology
⊕ Novartis AG	1.51	13.10	18.97	Healthcare
Netflix Inc	1.47	14.57	33.21	Consumer Cyclical
⊕ UnitedHealth Group Inc	1.45	16.02	-0.39	Healthcare
⊕ Facebook Inc A	1.38	17.40	27.16	Technology
⊕ Intel Corp	1.34	18.74	15.10	Technology
⊕ Airbus SE	1.29	20.03	40.69	Industrials

### Total Holdings 351

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:Decrease}$  New to Portfolio



### American Funds Europacific Growth R6 RERGX

**Morningstar Category** Foreign Large Growth

Morningstar Index MSCI EAFE NR USD

#### Portfolio Manager(s)

Mark Denning since 12-1991 Carl Kawaja since 06-2001 Nicholas Grace since 06-2002 Sung Lee since 06-2002 Jesper Lyckeus since 06-2004 Jonathan Knowles since 06-2006 Andrew Suzman since 06-2007 Christopher Thomsen since 06-2008 Lawrence Kymisis since 06-2014

#### **Quantitative Screens**

Performance: The fund has finished in the Foreign Large Growth category's top three quartiles in 9 of the 9 years it's been in existence.

Management: The fund's management has been in place for 27.27 years.

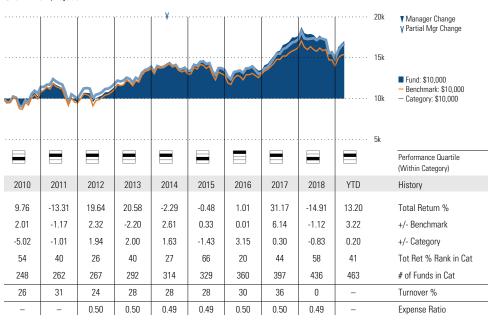
Style: The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three

Net Expense: The fund's expense ratio of 0.49 is 56.64% lower than the Foreign Large Growth category

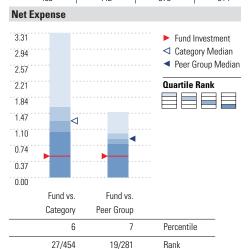
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000







19/281 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	1.90	_	0.81
Beta	1.01	_	0.99
R-Squared	87.04	_	_
Standard Deviation	11.38	10.47	11.66
Sharpe Ratio	0.73	0.60	0.59
Tracking Error	4.10	_	5.26
Information Ratio	0.50	_	0.08
Up Capture Ratio	100.32	_	95.37
Down Capture Ratio	83.90	_	87.27

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.75	16.19	17.86
Price/Book Ratio	1.88	1.58	2.37
Geom Avg Mkt Cap \$B	39.57	35.93	31.37
ROE	19.74	15.50	19.30



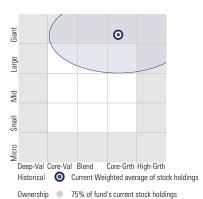
## American Funds Europacific Growth R6 RERGX

### Morningstar Category Foreign Large Growth

#### **Morningstar Index** MSCI EAFE NR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



#### Style Breakdown

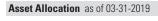
Equity

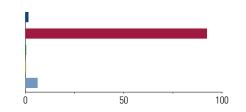
16	26	49	Large
2	2	6	Mid
0	0	0	Small

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10

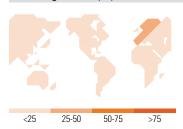




Total	100.00	100.00
Other	6.03	0.58
Cash	0.19	2.98
Bonds	0.22	0.06
Non-US Stocks	92.22	88.19
US Stocks	1.33	8.20
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund Benchmark Category Average
<u></u>	Cyclical	42.04	42.08	36.95	
A	Basic Materials	8.57	7.79	6.10	
A	Consumer Cyclical	12.99	11.50	13.23	
<del>,</del>	Financial Services	18.68	18.86	16.75	· ·
ŵ	Real Estate	1.80	3.93	0.87	<b>•••</b>
W	Sensitive	38.99	30.90	36.23	
	Communication Services	1.88	3.98	1.53	
•	Energy	6.91	5.95	3.32	
₽	Industrials	11.04	13.21	13.43	
	Technology	19.16	7.76	17.95	
<b>→</b>	Defensive	18.96	27.01	26.82	
Ħ	Consumer Defensive	6.52	11.92	13.37	
٠	Healthcare	9.39	11.35	12.40	
	Utilities	3.05	3.74	1.05	
					0% 5 10 15 20 25 30 35 40 45

### World Regions % Equity 03-31-2019



	Fund %	Cat %
Greater Asia	49.18	32.42
Japan	13.63	13.72
Australasia	0.90	2.47
Asia-4 Tigers	13.03	6.52
Asia-ex 4 Tigers	21.62	9.71
Not Classified	0.00	0.00

	14.69	Greater Europe	39.32	52.88	Market Maturity	Fund %
5.48	12.64	United Kingdom	10.09	13.24	Developed Markets	70.92
6.02	2.05	W euro-ex UK	26.91	38.40	Emerging Markets	29.08
		Emrgng Europe	0.69	0.35	Not Available	0.00
		Africa	1.63	0.89		
	5.48	5.48 12.64	5.48 12.64 United Kingdom 6.02 2.05 W euro-ex UK Emrgng Europe	5.48 12.64 United Kingdom 10.09 6.02 2.05 W euro-ex UK 26.91 Emrgng Europe 0.69	5.48 12.64 United Kingdom 10.09 13.24 6.02 2.05 W euro-ex UK 26.91 38.40 Emrgng Europe 0.69 0.35	5.48         12.64         United Kingdom         10.09         13.24         Developed Markets           6.02         2.05         W euro-ex UK         26.91         38.40         Emerging Markets           Emrgng Europe         0.69         0.35         Not Available

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	5.94	5.94	_	_
⊕ AIA Group Ltd	2.88	8.83	20.23	Financial Services
⊕ Airbus SE	2.72	11.54	40.69	Industrials
⊕ Alibaba Group Holding Ltd ADR	2.49	14.03	_	Consumer Cyclical
Reliance Industries Ltd	2.47	16.50	21.58	Energy
⊕ HDFC Bank Ltd	2.40	18.90	9.29	Financial Services
⊕ Samsung Electronics Co Ltd	1.99	20.89	-	Technology
Nintendo Co Ltd	1.65	22.54	12.18	Technology
∀ Vale SA ADR	1.49	24.04	-0.99	Basic Materials
☐ Tencent Holdings Ltd	1.46	25.50	14.97	Technology

### Total Holdings 342

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:Decrease}$  New to Portfolio



## **Baird Aggregate Bond Inst** BAGIX

#### Morningstar Category Intermediate Core Bond

Morningstar Index

BBgBarc US Agg Bond TR USD

#### Portfolio Manager(s)

Charles Groeschell since 09-2000
Daniel Tranchita since 09-2000
Warren Pierson since 09-2000
Mary Stanek since 09-2000
M. deGuzman since 09-2000
Gary Elfe since 09-2000

#### **Quantitative Screens**

Performance: The fund has finished in the Intermediate-Term Bond category's top three quartiles in 10 of the 10 years it's been in existence.

Management: The fund's management has been in place for 18.51 years.

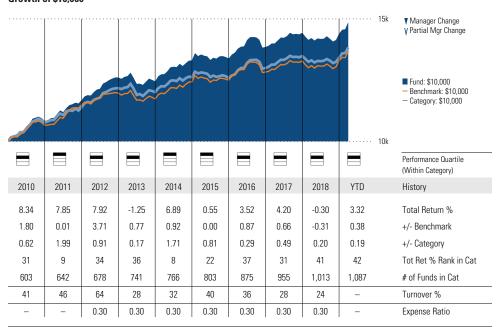
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.3 is 60% lower than the Intermediate-Term Bond category average.

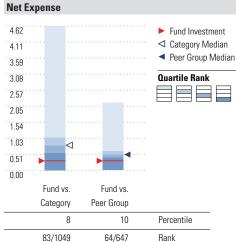
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000







3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	0.52	-	-0.02
Beta	0.99	_	0.92
R-Squared	99.09	_	95.52
Standard Deviation	2.97	2.97	2.78
Sharpe Ratio	0.43	0.26	0.20
Tracking Error	0.28	_	0.62
Information Ratio	1.84	_	-0.55
Up Capture Ratio	106.29	_	90.84
Down Capture Ratio	92.84	_	91.14

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	5.87	4.43	5.35
Avg Eff Maturity	8.09	_	7.45



Duration

## **Baird Aggregate Bond Inst** BAGIX

	J	3 3	
Style Ana	lysis as	s of 03-31-2019	
Style Break	down		
Fixed Income		Quality	
		High	
		Mid	
		Low	
Ltd Mod	Ext	J	

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	55.60	3.53	45.77
AA	4.70	74.59	9.32
A	17.70	10.82	20.99
BBB	21.60	8.32	18.62
BB	0.40	0.28	3.17
В	0.00	0.00	0.91
Below B	0.00	0.00	0.42
Not Rated	0.00	2.46	0.81

#### Asset Allocation as of 03-31-2019 Asset Class Net % Cat% US Stocks 0.00 0.04 Non-US Stocks 0.00 0.00 Bonds 92.55 105.23 Cash 6.14 -6.85 Other 1.31 1.59 50 100 Total 100.00 100.00

**Morningstar Category** 

Intermediate Core Bond

Morningstar Index

BBgBarc US Agg Bond TR USD

Other	0.00	0.00	1.57	į I	-		-	- :	- 1			
Cash & Equivalents	6.14	5.48	5.23	, ,								
Municipal	0.68	0.76	0.57	•	,							
Covered Bond	0.00	0.00	0.04	Ú,								
Asset-Backed	3.08	0.02	6.87									
Commercial MBS	4.37	1.61	5.01	<u>,                                    </u>								
Non-Agency Residential MBS	1.15	0.42	1.08									
Agency MBS CMO	3.31	0.00	1.45									
Agency MBS ARM	0.00	0.19	0.14	ĺ								
Agency MBS Pass-Through	20.61	27.43	21.73	_						1		
Securitized	32.52	29.67	36.32									
Preferred	0.00	0.02	0.04	ĺ						<u>:</u>		
Convertible	0.67	0.00	0.28	Ö								
Bank Loan	0.00	0.64	0.04									
Corporate Bond	38.75	19.42	25.56					<b>T</b>				
Corporate	39.42	20.08	25.92									
Other Government Related	0.03	1.16	10.72	*		0						
Agency/Quasi Agency	0.22	8.36	1.48	1 [		۲						
Inflation – Protected	0.00	0.00	1.44	í []								
Treasury	20.98	34.51	16.74								•	
Government	21.23	44.03	30.38							1		
	Fund	Bmark	Cat	Fund	•	Bench	mark	Cate	gory Ave	erage		

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
	, 22.2			
⊕ First American Government Obligs U	_	4.64	4.64	_
⊕ United States Treasury Bonds 2.88%	_	3.84	8.48	-
⊕ United States Treasury Notes 1.88%	03-2022	3.40	11.88	_
⊕ United States Treasury Notes 2.5%	05-2024	3.28	15.16	-
⊕ United States Treasury Notes 2.25%	11-2025	3.25	18.41	_
	_	2.22	20.63	_
⊕ United States Treasury Bonds 2.5%	_	2.11	22.74	_
⊕ United States Treasury Notes 2%	11-2026	1.57	24.31	_
⇒ Fidelity® Inv MM Fds Government Instl	_	1.28	25.60	_
United States Treasury Notes 2.25%	11-2027	0.82	26.42	_

Total Holdings 1151



### Eaton Vance Income Fund of Boston R6 EIBRX

Morningstar Category High Yield Bond

Morningstar Index

ICE BofAML US High Yield TR USD

#### Portfolio Manager(s)

Michael Weilheimer since 01-1996 Stephen Concannon since 11-2014

#### **Quantitative Screens**

Performance: The fund has finished in the High Yield Bond category's top three quartiles in 4 of the 4 years it's been in existence.

Management: The fund's management has been in place for 23.26 years.

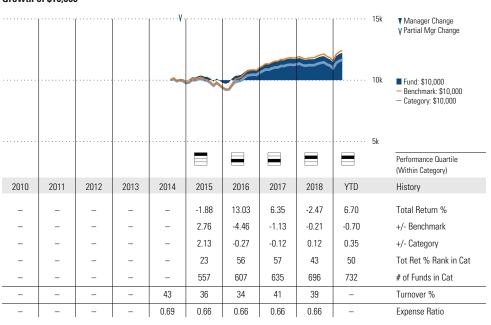
Style Consistency is not calculated for Fixed Income funds.

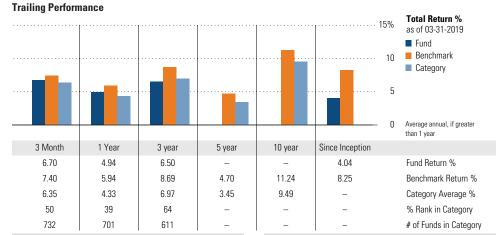
Net Expense: The fund's expense ratio of 0.66 is 34.65% lower than the High Yield Bond category average.

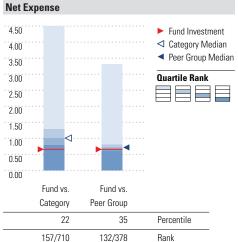
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000







132/378 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year KISK Wietrics			
	Fund	Bmark	Cat
Alpha	-0.47	_	-0.49
Beta	0.81	_	0.87
R-Squared	95.01	-	89.85
Standard Deviation	3.83	4.61	4.25
Sharpe Ratio	1.31	1.53	1.31
Tracking Error	1.22	_	1.53
Information Ratio	-1.78	_	-1.33
Up Capture Ratio	77.55	_	83.92
Down Capture Ratio	84.67	_	94.45

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	3.93	_	3.09
Avg Eff Maturity	5.84	_	5.10

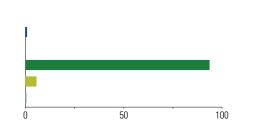


### Eaton Vance Income Fund of Boston R6 EIBRX

**Morningstar Category** Morningstar Index High Yield Bond

ICE BofAML US High Yield TR USD





Asset Allocation as of 03-31-2019



Credit Rating Breakdown	Fund	Bmark	Cat
AAA	0.00	-	2.81
AA	0.00	_	0.24
A	0.00	_	0.98
BBB	4.61	_	4.44
BB	42.54	_	33.12
В	42.17	_	40.07
Below B	8.24	_	16.57
Not Rated	2.44	_	1.77

	Fund	Bmark	Cat	Fund	▼ Be	ench	mark	. [	Ca	teg	ory A	Aver	age		
Government	0.00	_	2.42	101						-	i				
Treasury	0.00	-	0.73	0											
Inflation – Protected	0.00	-	0.00	i i											
Agency/Quasi Agency	0.00	-	0.05	İ											
Other Government Related	0.00	-	1.64	i0 i											
Corporate	94.45	_	89.65												i
Corporate Bond	86.94	_	88.07				÷	ė							
Bank Loan	7.42	_	0.35												
Convertible	0.00	_	1.06												
Preferred	0.09	_	0.17	İ											
Securitized	0.00	_	1.57	10											
Agency MBS Pass-Through	0.00	-	0.05	İ											
Agency MBS ARM	0.00	-	0.00	Ó											
Agency MBS CMO	0.00	-	0.36												
Non-Agency Residential MBS	0.00	_	0.18												
Commercial MBS	0.00	_	0.18												
Asset-Backed	0.00	_	0.80												
Covered Bond	0.00	_	0.00	i i i											
Municipal	0.00	-	0.00	l l											
Cash & Equivalents	5.55	-	4.83												
Other	0.00	_	1.51	10											

Top 10 Holdings as of 03-31-2019 Name Maturity Date % Net Asset Cumulative % Fixed Income Sector ⊕ Ev Cash Reserves Fund Llc 4.06 4.06 MPH Acquisition Holdings LLC 7.12% 06-2024 1.20 5.26 Asurion 1.07 08-2025 6.33 Sprint Corporation 7.88% 09-2023 1.01 7.34 CrownRock LP 5.62% 10-2025 0.78 8.12 Graftech Finance, Inc. 02-2025 0.70 8.82 Laureate Education, Inc. 8.25% 05-2025 0.69 9.51 ① Press Ganey Holdings, Inc. 10-2023 0.67 10.18 Jaguar Holding Co II/Pharmaceutical Product Development LLC 6.38% 08-2023 0.65 10.83 Viking Cruises, Ltd. 5.88% 09-2027 0.63 11.45

Total Holdings 462



### Federated Government Ultrashrt Dur R6 FGULX

**Morningstar Category** Ultrashort Bond

Morningstar Index BBgBarc US Agg Bond TR USD

#### Portfolio Manager(s)

Susan Hill since 07-1997 Liam O'Connell since 11-2010

#### **Quantitative Screens**

The Performance screen is not applicable for funds with less than three years of data.

Management: The fund's management has been in place for 21.74 years.

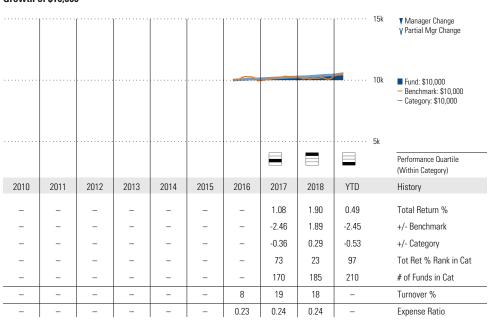
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.24 is 50% lower than the Ultrashort Bond category average.

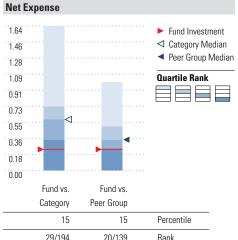
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

20/139

Rank

Fund	Bmark	Cat
1.31	-	1.69
0.02	_	0.03
5.90	_	16.89
0.24	2.97	0.45
0.31	0.26	0.89
2.92	_	2.91
-0.23	_	-0.10
16.64	_	23.48
-18.92	_	-21.26
	1.31 0.02 5.90 0.24 0.31 2.92 -0.23 16.64	1.31 - 0.02 - 5.90 - 0.24 2.97 0.31 0.26 2.920.23 - 16.64 -

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	0.29	4.43	0.83
Avg Eff Maturity	1.99	-	1.55



### Federated Government Ultrashrt Dur R6 FGULX

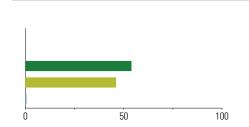
Morningstar Category
Ultrashort Bond

Morningstar Index BBgBarc US Agg Bond TR USD

**Style Analysis** as of 03-31-2019 **Style Breakdown** 

Duration





Asset Allocation as of 03-31-2019

0.00 0.00 53.72 45.98 0.30	0.01 0.00 71.17 27.58 1.22
0.00	0.00 71.17
0.00	0.00
0.00	0.01
Net %	Cat%
	Net %

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	100.00	3.53	50.22
AA	0.00	74.59	10.73
A	0.00	10.82	19.78
BBB	0.00	8.32	14.86
BB	0.00	0.28	0.82
В	0.00	0.00	0.26
Below B	0.00	0.00	0.15
Not Rated	0.00	2.46	3.18

Sector Weighting as of 03-											
	Fund	Bmark	Cat	Fund	▼ Bench	mark    C	ategory A	Averag	je	,	
Government	17.12	44.03	13.34						į		
Treasury	1.69	34.51	3.23								
Inflation – Protected	0.00	0.00	0.25	Ó							
Agency/Quasi Agency	10.25	8.36	2.52								
Other Government Related	5.18	1.16	7.34	•							
Corporate	0.00	20.08	31.35	1 1							
Corporate Bond	0.00	19.42	30.52	<u> </u>		•					
Bank Loan	0.00	0.64	0.46	<u></u>							
Convertible	0.00	0.00	0.37	į							
Preferred	0.00	0.02	0.00	ĺ							
Securitized	36.77	29.67	26.11								
Agency MBS Pass-Through	0.12	27.43	0.97	<u>[</u> ]							
Agency MBS ARM	3.60	0.19	0.67								
Agency MBS CMO	33.05	0.00	1.02								
Non-Agency Residential MBS	0.00	0.42	0.87	i]							
Commercial MBS	0.00	1.61	3.97	[ 10							
Asset-Backed	0.00	0.02	18.58	<u>I</u>							
Covered Bond	0.00	0.00	0.03	<u> </u>							
Municipal	0.00	0.76	1.73								
Cash & Equivalents	46.12	5.48	27.11								
Other	0.00	0.00	0.31	h :							

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ Bmo Capital Markets Corp., 3.000%, Dated 12/31/2018, Due 1/2/2019	01-2019	20.90	20.90	_
⊕ Hsbc Securities (Usa), Inc., 3.010%, Dated 12/31/2018, Due 1/2/2019	01-2019	18.13	39.03	_
	01-2065	3.23	42.26	_
⊕ Government National Mortgage Association 2.96%	02-2065	3.22	45.48	_
→ Federal National Mortgage Association 3%	01-2037	2.85	48.33	_
⊖ Government National Mortgage Association 2.69%	09-2062	2.83	51.16	_
⊖ Government National Mortgage Association 2.81%	06-2062	2.63	53.79	_
	11-2062	2.34	56.13	_
⊕ Federal National Mortgage Association Remic, Series 2012-116, Class Fa, 2.8	10-2042	2.33	58.46	_
⊖ Government National Mortgage Association 2.65%	02-2062	2.04	60.50	_

Total Holdings 194



### Invesco Growth and Income R6 GIFFX

Morningstar Category
Large Value

Morningstar Index Russell 1000 Value TR USD

#### Portfolio Manager(s)

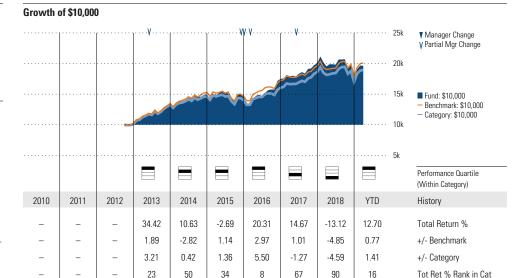
Thomas Bastian since 03-2003 Sergio Marcheli since 03-2003 Brian Jurkash since 12-2015 Matthew Titus since 01-2016

#### **Quantitative Screens**

- ❷ Performance: The fund has finished in the Large Value category's top three quartiles in 5 of the 6 years it's been in existence.
- Management: The fund's management has been in place for 16.09 years.
- ✓ Net Expense: The fund's expense ratio of 0.38 is 60.42% lower than the Large Value category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.



1,091

18

0.38

1,144

16

0.39

1,253

1,225

29

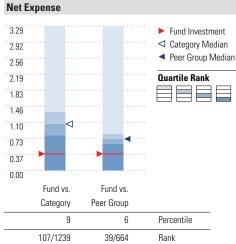
0.38

# of Funds in Cat

Turnover %

Expense Ratio





877

29

0.38

25

931

31

0.38

992

23

0.38

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.75	-	-0.34
Beta	1.18	-	0.99
R-Squared	91.66	-	90.71
Standard Deviation	13.12	10.63	11.11
Sharpe Ratio	0.79	0.87	0.80
Tracking Error	4.25	-	3.38
Information Ratio	0.23	_	-0.18
Up Capture Ratio	109.20	-	96.39
Down Capture Ratio	109.36	_	97.63

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.87	16.59	16.45
Price/Book Ratio	1.77	1.83	2.17
Geom Avg Mkt Cap \$B	55.85	53.25	87.27
ROE	12.81	13.49	19.10



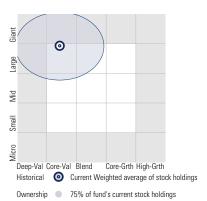
## Invesco Growth and Income R6 GIFFX

# Morningstar Category Large Value

Morningstar Index Russell 1000 Value TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

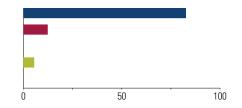
	24	6	Large
8	6	0	MIG
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.00	0.63
Cash	5.31	1.91
Bonds	0.00	0.15
Non-US Stocks	12.19	5.92
US Stocks	82.49	91.39
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019												
		Fund	Bmark	Cat	Func	١ ,	Bench	nmark	[] Cateo	gory Ave	rage		_	
Դ	Cyclical	40.78	37.04	36.61										
A.	Basic Materials	2.91	3.69	3.24		0								
<b>A</b>	Consumer Cyclical	8.92	6.66	8.23		. ,								
æ	Financial Services	28.95	21.39	22.13			1							
<b>fi</b>	Real Estate	0.00	5.30	3.01	i I	]								
W	Sensitive	34.97	33.05	34.32										
	Communication Services	3.07	5.53	5.26		I []	1							
ð	Energy	14.07	9.78	9.59										
Ф	Industrials	6.53	8.11	7.69			0							
	Technology	11.30	9.63	11.78							1			
<b>-</b>	Defensive	24.25	29.92	29.06							[]			
=	Consumer Defensive	6.38	8.44	9.62										
٠	Healthcare	16.74	15.10	14.26										
•	Utilities	1.13	6.38	5.18		[								
					0%	5	10	15	20	25	30	35	40	4

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
○ Citigroup Inc	4.59	4.59	20.38	Financial Services
⊕ Bank of America Corporation	3.87	8.46	12.58	Financial Services
⊕ Stsb_gl_fxgl	3.46	11.92	_	-
⊕ Meln_gl_fxgl	3.44	15.36	_	-
	3.16	18.52	9.02	Healthcare
	2.73	21.24	4.52	Financial Services
⊕ American International Group Inc	2.52	23.76	10.07	Financial Services
→ Philip Morris International Inc	2.47	26.23	34.11	Consumer Defensive
○ Cisco Systems Inc	2.47	28.70	25.36	Technology
General Motors Co	2.46	31.16	12.05	Consumer Cyclical
⊕ Intel Corp	2.38	33.53	15.10	Technology
Oracle Corp	2.35	35.88	19.38	Technology
	2.34	38.22	7.19	Financial Services
	2.30	40.53	25.36	Consumer Defensive
⊕ Royal Dutch Shell PLC Class A	2.22	42.75	_	Energy

**Total Holdings** 80



### MFS Growth R6 MFEKX

#### Portfolio Manager(s)

Eric Fischman since 04-2002 Paul Gordon since 07-2017

#### **Quantitative Screens**

Performance: The fund has finished in the Large Growth category's top three quartiles in 7 of the 7 years it's been in existence.

Management: The fund's management has been in place for 17.01 years.

Style: The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three

Net Expense: The fund's expense ratio of 0.57 is 45.19% lower than the Large Growth category average.

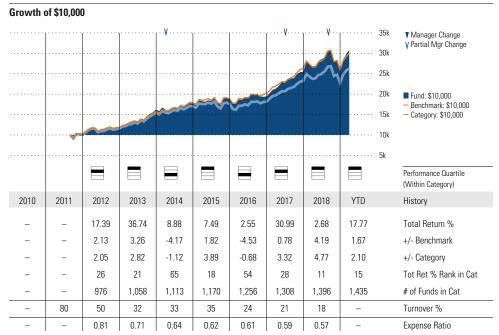
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

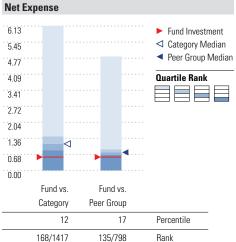
### **Morningstar Category**

Morningstar Index

Large Growth Russell 1000 Growth TR USD







135/798 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year Kisk Metrics			
	Fund	Bmark	Cat
Alpha	1.54	_	-0.67
Beta	0.99	_	0.99
R-Squared	93.80	_	89.81
Standard Deviation	12.49	12.19	12.79
Sharpe Ratio	1.30	1.22	1.10
Tracking Error	3.11	_	4.11
Information Ratio	0.52	_	-0.38
Up Capture Ratio	102.71	_	95.28
Down Capture Ratio	92.55	_	97.60

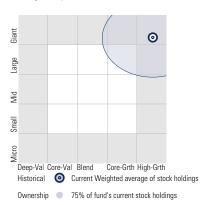
Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	26.50	21.82	23.08
Price/Book Ratio	4.50	5.15	4.39
Geom Avg Mkt Cap \$B	50.98	55.71	72.96
ROE	20.27	27.80	23.94



### MFS Growth R6 MFEKX

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

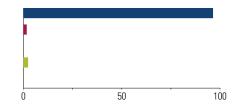
4	10		Large
0	0	4	Mid
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

#### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.00	0.73
Cash	2.19	1.81
Bonds	0.00	0.04
Non-US Stocks	1.50	5.33
US Stocks	96.31	92.09
Asset Class	Net %	Cat%

Morningstar Index

Russell 1000 Growth TR USD

**Morningstar Category** 

Large Growth

Sec	ctor Weighting as of 03-	31-2019														
		Fund	Bmark	Cat	Fun	d	▼ Be	nchma	rk [	Cate	gory Av	/erage				
Դ	Cyclical	31.05	29.87	32.64	Ţ						į					
A	Basic Materials	2.71	1.66	1.79												
A	Consumer Cyclical	14.19	17.44	17.05												
<b>P</b>	Financial Services	14.04	9.04	12.75			V:	[]								
命	Real Estate	0.11	1.73	1.05	i []											
W	Sensitive	48.08	51.01	45.93											• "	
	Communication Services	2.91	1.26	2.28												
•	Energy	0.42	0.74	1.59	1											
Ф	Industrials	13.39	12.92	9.56				<b>'</b>								
	Technology	31.36	36.09	32.50								] [				
<b>-</b>	Defensive	20.87	19.12	21.43												
Ħ	Consumer Defensive	5.26	6.12	5.03												
٠	Healthcare	15.61	13.00	15.87												
•	Utilities	0.00	0.00	0.53												
					0%	5	10	15	20	25	30	35	40	45	50	55

N	0/ 11 . 1	0 1 1 6	\/TD D	M :
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Microsoft Corp	6.65	6.65	16.57	Technology
Amazon.com Inc	6.02	12.67	18.56	Consumer Cyclical
Visa Inc Class A	4.65	17.33	18.57	Financial Services
Adobe Inc	4.14	21.47	17.79	Technology
⊕ Alphabet Inc A	4.08	25.55	12.63	Technology
Mastercard Inc A	3.83	29.38	24.98	Financial Services
Thermo Fisher Scientific Inc	2.69	32.07	22.40	Healthcare
Salesforce.com Inc	2.64	34.71	15.62	Technology
⊖ Facebook Inc A	2.61	37.32	27.16	Technology
Alphabet Inc Class C	2.30	39.62	-	Technology
Fiserv Inc	2.27	41.89	20.13	Industrials
Netflix Inc	2.18	44.07	33.21	Consumer Cyclical
⊕ Cash Cash	2.17	46.24	_	-
Danaher Corp	2.14	48.38	28.19	Healthcare
Intuit Inc	1.99	50.37	33.04	Technology

**Total Holdings 83** 



### MFS Massachusetts Investors Tr R6 MITJX

**Morningstar Category** Large Blend

Morningstar Index S&P 500 TR USD

#### Portfolio Manager(s)

T. Kevin Beatty since 07-2004 Edward (ted) Maloney since 04-2012 Alison Mackey since 05-2018

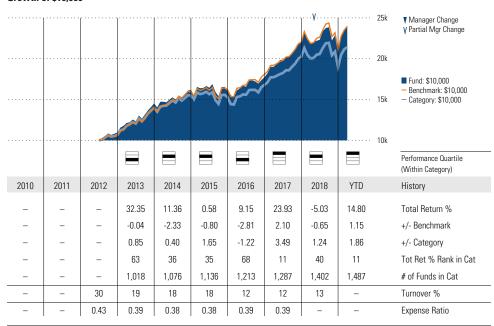
#### **Quantitative Screens**

- Performance: The fund has finished in the Large Blend category's top three quartiles in 6 of the 6 years it's been in
- Management: The fund's management has been in place for 14.76 years.
- × Style: The fund has landed in its primary style box Large Blend — 14.29 % of the time over the past three years.
- Net Expense: The fund's expense ratio of 0.39 is 57.14% lower than the Large Blend category average.

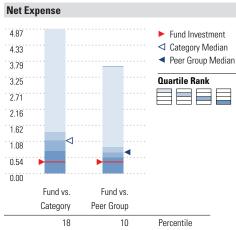
#### **Morningstar Investment Management LLC Analysis**

This fund fails our style consistency screen owing to frequent drift into the growth column of our style box. We're not concerned about this matter, as the drift has been slight, and the portfolio still represents a core strategy

#### Growth of \$10,000







70/700 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	0.76	-	-1.27
Beta	0.98	-	0.97
R-Squared	95.71	_	91.55
Standard Deviation	10.79	10.73	10.83
Sharpe Ratio	1.16	1.12	0.96
Tracking Error	2.24	-	2.93
Information Ratio	0.27	_	-1.32
Up Capture Ratio	100.58	_	90.88
Down Capture Ratio	95.02	_	97.96

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	20.34	18.71	17.87
Price/Book Ratio	2.83	2.74	2.65
Geom Avg Mkt Cap \$B	56.60	73.09	97.84
ROE	20.01	21.80	22.01



254/1457

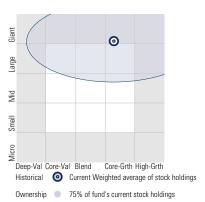
### MFS Massachusetts Investors Tr R6 MITJX

Morningstar Category
Large Blend

Morningstar Index S&P 500 TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

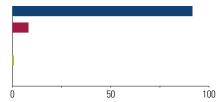
. ,			
23	22	47	Laige
4	1	2	MIN
0	0	0	JIIaii
Value	Blend	Growth	

Weight %

>50 25-50 10-25 0-10



Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.00	1.08
Cash	0.56	-2.54
Bonds	0.00	4.19
Non-US Stocks	7.99	3.15
US Stocks	91.45	94.10
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-3	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark [] Category Average
<b>Դ</b>	Cyclical	29.19	32.26	37.60	
A.	Basic Materials	2.41	2.46	2.78	
<b>A</b>	Consumer Cyclical	8.47	11.90	11.68	
ê	Financial Services	18.31	15.40	20.85	
<b>fi</b>	Real Estate	0.00	2.50	2.29	
W	Sensitive	42.54	42.16	37.07	
	Communication Services	5.00	3.56	3.37	
ð	Energy	4.86	5.43	5.15	
Ф	Industrials	8.85	10.23	7.03	
	Technology	23.83	22.94	21.52	
<b>→</b>	Defensive	28.27	25.59	25.35	
	Consumer Defensive	11.21	7.77	7.92	
+	Healthcare	16.53	14.49	14.68	
•	Utilities	0.53	3.33	2.75	• 0'
					0% 5 10 15 20 25 30 35 40 4

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Alphabet Inc A	3.39	3.39	12.63	Technology
Visa Inc Class A	3.36	6.75	18.57	Financial Services
American Tower Corp	2.95	9.70	24.57	Communication Svc
∋ JPMorgan Chase & Co	2.69	12.39	4.52	Financial Services
∋ Johnson & Johnson	2.61	15.00	9.02	Healthcare
Thermo Fisher Scientific Inc	2.49	17.49	22.40	Healthcare
Danaher Corp	2.49	19.98	28.19	Healthcare
Mastercard Inc A	2.35	22.33	24.98	Financial Services
Bank of America Corporation	2.34	24.67	12.58	Financial Services
Medtronic PLC	2.31	26.99	0.68	Healthcare
Fidelity National Information Services Inc	2.13	29.11	10.63	Industrials
Comcast Corp Class A	2.02	31.13	17.42	Communication Svc
Accenture PLC Class A	1.94	33.08	24.83	Technology
Honeywell International Inc	1.92	35.00	20.91	Industrials
Mondelez International Inc Class A	1.85	36.85	25.36	Consumer Defensive

Total Holdings 74



#### MFS Mid Cap Growth R6 OTCKX

**Morningstar Category** Mid-Cap Growth

Morningstar Index

Russell Mid Cap Growth TR USD

#### Portfolio Manager(s)

Eric Fischman since 11-2008 Paul Gordon since 05-2011

#### **Quantitative Screens**

Performance: The fund has finished in the Mid-Cap Growth category's top three quartiles in 5 of the 5 years it's been in existence.

Management: The fund's management has been in place for 10.36 years.

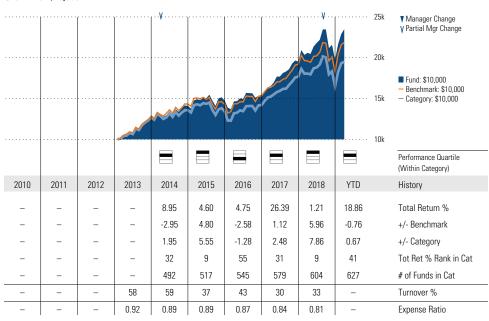
Style: The fund has landed in its primary style box — Mid-Cap Growth — 100 % of the time over the past three

Net Expense: The fund's expense ratio of 0.81 is 30.77% lower than the Mid-Cap Growth category average.

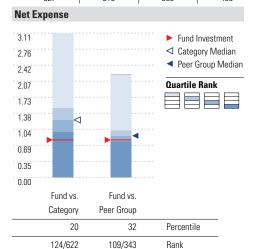
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.









Peer group is a subset of the category and includes funds with the	е
same management style (active vs. passive) and similar share class	SS
characteristics.	

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	2.90	_	-0.08
Beta	0.92	-	1.00
R-Squared	93.22	_	90.20
Standard Deviation	12.63	13.29	14.00
Sharpe Ratio	1.22	1.03	0.97
Tracking Error	3.47	_	4.36
Information Ratio	0.58	_	-0.22
Up Capture Ratio	101.85	_	98.22
Down Capture Ratio	86.96	_	98.37

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	26.79	24.43	24.72
Price/Book Ratio	4.39	4.75	4.01
Geom Avg Mkt Cap \$B	10.33	11.70	9.33
ROE	18.68	21.26	18.42



## MFS Mid Cap Growth R6 OTCKX

## Morningstar Category Mid-Cap Growth

Morningstar Index

Russell Mid Cap Growth TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

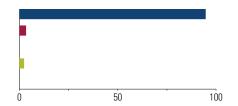
0	4	35	Large
0	9	52	MIG
0	0	0	Small

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.00	0.30
Cash	2.19	3.26
Bonds	0.00	0.02
Non-US Stocks	3.20	3.84
US Stocks	94.61	92.58
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund	ł	▼ Be	nchma	rk [	Categ	jory Av	/erage		
ŀ	Cyclical	31.73	30.09	31.74										
ů.	Basic Materials	3.72	2.91	2.65										
4	Consumer Cyclical	17.38	17.68	15.41					•					
£	Financial Services	8.12	7.26	9.76		- '								
t	Real Estate	2.51	2.24	3.92										
M	Sensitive	50.15	51.68	47.14										_
d	Communication Services	2.29	0.85	1.34										
•	Energy	0.67	1.47	1.60										
ф	Industrials	22.70	18.46	16.98					1					
3	Technology	24.49	30.90	27.22							] [			
<b>→</b>	Defensive	18.11	18.24	21.13										
	Consumer Defensive	1.70	4.61	3.88		[								
٠	Healthcare	16.41	13.63	16.48										
7	Utilities	0.00	0.00	0.77	Ī									

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Bright Horizons Family Solutions Inc	3.40	3.40	14.05	Consumer Cyclical
⊕ PerkinElmer Inc	2.83	6.23	22.76	Healthcare
⊕ Global Payments Inc	2.35	8.58	32.39	Industrials
⊕ Cadence Design Systems Inc	2.19	10.77	46.07	Technology
⊕ Cash Cash	2.19	12.96	-	_
€ AMETEK Inc	2.18	15.14	22.76	Industrials
Verisk Analytics Inc	2.12	17.25	22.20	Industrials
Roper Technologies Inc	2.04	19.30	28.48	Industrials
€ STERIS Ltd	1.99	21.28	20.14	Healthcare
₱ Fiserv Inc	1.93	23.21	20.13	Industrials
€ Copart Inc	1.82	25.03	26.81	Consumer Cyclical
€ Worldpay Inc Class A	1.73	26.76	48.50	Industrials
D Autodesk Inc	1.72	28.49	21.16	Technology
Ð IHS Markit Ltd	1.70	30.19	13.36	Industrials
Ð Nasdag Inc	1.69	31.88	7.80	Financial Services

#### **Total Holdings** 102



### Oppenheimer Developing Markets I ODVIX

## Morningstar CategoryMorningstar IndexDiversified Emerging MktsMSCI EM NR USD

### Portfolio Manager(s)

Justin Leverenz since 05-2007

#### **Quantitative Screens**

Performance: The fund has finished in the Diversified Emerging Mkts category's top three quartiles in 7 of the 7 years it's been in existence.

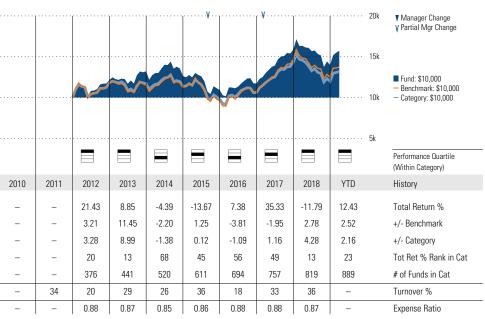
Management: The fund's management has been in place for 11.92 years.

✓ Net Expense: The fund's expense ratio of 0.87 is
33.08% lower than the Diversified Emerging Mkts category average.

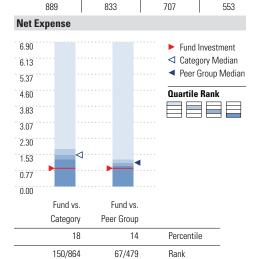
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	2.13	_	-0.58
Beta	0.89	_	0.93
R-Squared	89.46	_	86.10
Standard Deviation	12.27	13.02	13.02
Sharpe Ratio	0.87	0.74	0.64
Tracking Error	4.23	_	4.84
Information Ratio	0.27	_	-0.31
Up Capture Ratio	93.47	_	92.48
Down Capture Ratio	80.94	_	97.54

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	19.11	12.62	13.55
Price/Book Ratio	2.39	1.49	1.87
Geom Avg Mkt Cap \$B	18.22	19.61	20.39
ROE	18.04	17.14	20.22



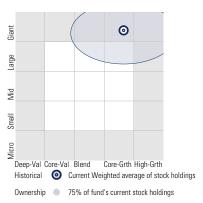
# of Funds in Category

## Oppenheimer Developing Markets I ODVIX

### Morningstar CategoryMorningstar IndexDiversified Emerging MktsMSCI EM NR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



#### Style Breakdown

Equity

9	28		Large
1	2	8	Mid
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10



50

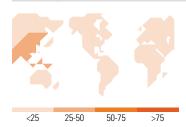
Asset Allocation as of 03-31-2019

Total	100.00	100.00
Other	4.45	0.53
Cash	2.57	-0.32
Bonds	0.00	1.02
Non-US Stocks	92.37	96.05
US Stocks	0.61	2.72
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-3	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark 🛛 Category Average
<sub>Մ</sub>	Cyclical	63.27	46.59	46.79	
å.	Basic Materials	8.03	7.59	6.26	
A	Consumer Cyclical	27.87	11.57	12.64	
<b>,</b>	Financial Services	24.94	24.14	25.38	
<b>fi</b>	Real Estate	2.43	3.29	2.51	
M	Sensitive	25.00	41.79	39.12	
ď	Communication Services	0.00	4.57	3.91	
ð	Energy	5.22	7.88	6.64	
Ċ.	Industrials	3.60	4.97	5.46	
	Technology	16.18	24.37	23.11	
<b>→</b>	Defensive	11.73	11.62	14.09	
=	Consumer Defensive	7.34	6.64	9.26	
٠	Healthcare	4.39	2.50	2.86	
•	Utilities	0.00	2.48	1.97	
					0% 5 10 15 20 25 30 35 40 45 50 55 60

100

### World Regions % Equity 03-31-2019



Greater Asia	Fund % 57.46	Cat % 69.31	
Japan	0.00	0.08	
Australasia	0.00	0.02	
Asia-4 Tigers	16.50	23.14	
Asia-ex 4 Tigers	40.96	46.07	
Not Classified	0.00	0.00	

Americas	Fund % 16.80	Cat % 15.52	Greater Europe	Fund % 25.74	Cat % 15.19	Market Maturity	Fund %
North America	0.66	1.38	United Kingdom	0.00	0.69	Developed Markets	30.33
Central/Latin	16.14	14.14	W euro-ex UK	12.14	1.33	Emerging Markets	69.67
			Emrgng Europe	9.66	6.69	Not Available	0.00
			Africa	3.94	6.48		

<b>Fop 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Alibaba Group Holding Ltd ADR	6.64	6.64	_	Consumer Cyclical
Taiwan Semiconductor Manufacturing Co Ltd	5.05	11.69	8.87	Technology
Kering SA	4.11	15.80	33.53	Consumer Cyclical
NOVATEK PJSC GDR	3.84	19.64	0.23	Energy
Tencent Holdings Ltd	3.78	23.42	14.97	Technology
Glencore PLC	3.63	27.05	11.98	Basic Materials
Housing Development Finance Corp Ltd	3.58	30.63	0.17	Financial Services
Kotak Mahindra Bank Ltd	3.15	33.78	6.46	Financial Services
AIA Group Ltd	3.01	36.79	20.23	Financial Services
Master China Series 1	2.74	39.53	_	_

#### Total Holdings 96

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:Decrease}$  New to Portfolio



### **Oppenheimer International Growth A** OIGAX

39

248

23

16

262

19

14

267

15

1.28

8

292

12

1.20

86

314

41

1.14

25

329

10

1.14

**Morningstar Category**Foreign Large Growth

Morningstar Index MSCI EAFE NR USD

#### Portfolio Manager(s)

George Evans since 03-1996 Robert Dunphy since 03-2012

#### **Quantitative Screens**

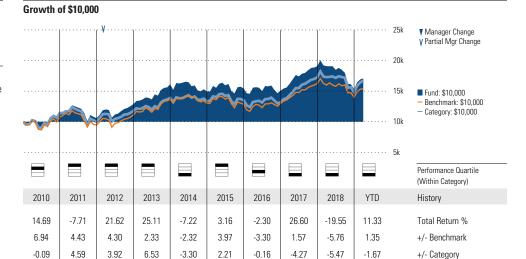
Performance: The fund has finished in the Foreign Large Growth category's top three quartiles in 7 of the 10 years it's been in existence.

Management: The fund's management has been in place for 23.03 years.

Net Expense: The fund's expense ratio of 1.11 is 1.77% lower than the Foreign Large Growth category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.



51

360

9

1.14

80

397

22

1.11

94

436

18

1.11

79

463

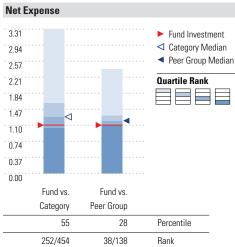
Tot Ret % Rank in Cat

# of Funds in Cat

Turnover %

Expense Ratio





3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	-4.18	_	0.81
Beta	1.05	_	0.99
R-Squared	86.96	_	-
Standard Deviation	11.77	10.47	11.66
Sharpe Ratio	0.21	0.60	0.59
Tracking Error	4.28	-	5.26
Information Ratio	-0.97	_	0.08
Up Capture Ratio	86.87	-	95.37
Down Capture Ratio	113.59	_	87.27

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	22.08	16.19	17.86
Price/Book Ratio	3.18	1.58	2.37
Geom Avg Mkt Cap \$B	15.13	35.93	31.37
ROE	23.39	15.50	19.30



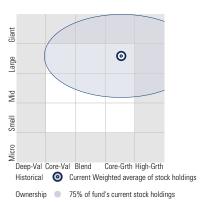
## Oppenheimer International Growth A OIGAX

#### Morningstar Index **Morningstar Category** Foreign Large Growth

### MSCI EAFE NR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



#### Style Breakdown

Equity

12	13	44	Large
6	8	16	Mid
0	1	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10



50

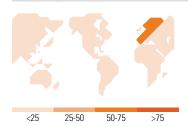
Asset Allocation as of 03-31-2019



		Fund	Bmark	Cat	Fund	•	Bench	mark	Categ	gory Ave	erage		
<sub>Մ</sub>	Cyclical	27.73	42.08	36.95									'
A	Basic Materials	2.07	7.79	6.10			•						
<b>A</b>	Consumer Cyclical	18.78	11.50	13.23			: V						
	Financial Services	6.88	18.86	16.75				0	*				
命	Real Estate	0.00	3.93	0.87		1							
W	Sensitive	44.26	30.90	36.23									
	Communication Services	1.03	3.98	1.53		1							
•	Energy	1.13	5.95	3.32									
Ф	Industrials	15.47	13.21	13.43									
	Technology	26.63	7.76	17.95			<b>v</b> :				. :		
<b>-</b>	Defensive	28.01	27.01	26.82									
Ħ	Consumer Defensive	14.76	11.92	13.37			, ,						
+	Healthcare	13.25	11.35	12.40									
•	Utilities	0.00	3.74	1.05	i []	*							

100

### World Regions % Equity 03-31-2019



Greater Asia	Fund % 24.08	Cat % 32.42
Japan	12.57	13.72
Australasia	3.40	2.47
Asia-4 Tigers	1.43	6.52
Asia-ex 4 Tigers	6.68	9.71
Not Classified	0.00	0.00

Americas	Fund % 11.12	Cat % 14.69	Greater Europe	Fund % 64.80	Cat % 52.88	Market Maturity	Fund %
North America	11.12	12.64	United Kingdom	10.01	13.24	Developed Markets	92.19
Central/Latin	0.00	2.05	W euro-ex UK	53.66	38.40	Emerging Markets	7.81
			Emrgng Europe	1.13	0.35	Not Available	0.00
			Africa	0.00	0.89		

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
SAP SE	2.63	2.63	18.02	Technology
ICICI Bank Ltd ADR	2.38	5.01	11.37	Financial Services
Infineon Technologies AG	2.26	7.26	3.19	Technology
Bunzl PLC	2.15	9.42	6.88	Consumer Defensive
⊕ Keyence Corp	2.04	11.46	25.12	Technology
Hermes International SA	2.04	13.50	24.63	Consumer Cyclical
Novo Nordisk A/S B	1.97	15.46	20.35	Healthcare
Nokia Oyj	1.93	17.39	0.99	Technology
Temenos AG	1.92	19.32	24.60	Technology
ASML Holding NV	1.92	21.24	22.37	Technology

### **Total Holdings 83**



## PIMCO Commodity Real Ret Strat Instl PCRIX

#### Morningstar Category Commodities Broad Basket

Morningstar Index

Bloomberg Commodity TR USD

#### Portfolio Manager(s)

Mihir Worah since 12-2007 Nicholas Johnson since 01-2015 Greg Sharenow since 11-2018 Stephen Rodosky since 01-2019

#### **Quantitative Screens**

Management: The fund's management has been in place for 11.25 years.

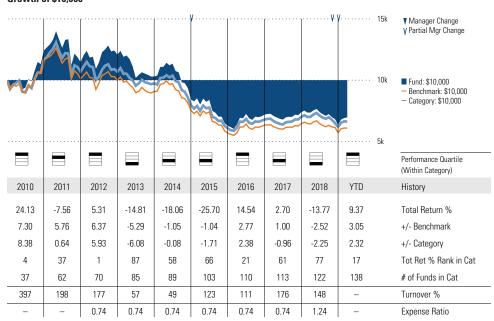
Style Consistency is not calculated for Fixed Income funds.

✓ Net Expense: The fund's expense ratio of 1.24 is 6.9% higher than the Commodities Broad Basket category average.

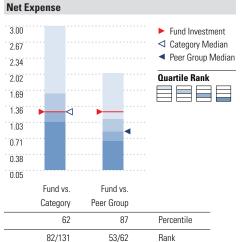
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000







3-Year KISK Welrics			
	Fund	Bmark	Cat
Alpha	0.58	_	1.10
Beta	1.07	_	0.98
R-Squared	96.86	_	79.11
Standard Deviation	10.77	9.89	11.09
Sharpe Ratio	0.20	0.14	0.19
Tracking Error	2.04	-	4.95
Information Ratio	0.34	-	-0.01
Up Capture Ratio	113.87	-	109.09
Down Capture Ratio	110.22	-	102.78

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	12.32	_	17.61
Price/Book Ratio	1.51	_	2.09
Geom Avg Mkt Cap \$B	20.09	_	34.02
ROE	16.78	-	11.39

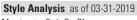


## PIMCO Commodity Real Ret Strat Instl PCRIX

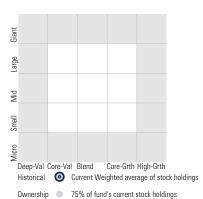
### Morningstar CategoryMoCommodities Broad BasketBlo

Morningstar Index

Bloomberg Commodity TR USD



Morningstar Style Box™



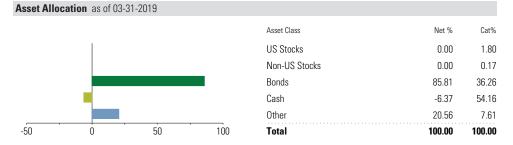


Equity



Weight %

>50 25-50 10-25 0-10



		Fund	Bmark	Cat	Fund	d t	Beno	hmark	Categ	ory A	veraç	je		
<b>Դ</b>	Cyclical	64.28	-	-										
A.	Basic Materials	7.14	-	_										
<b>A</b>	Consumer Cyclical	7.14	_	_										
æ	Financial Services	14.29	_	_										
ŵ	Real Estate	35.71	_	_										
W	Sensitive	28.57	-	-										
	Communication Services	7.14	_	_										
ð	Energy	0.00	_	_	i i									
Ф	Industrials	7.14	_	_										
	Technology	14.29	_	_										
<b>—</b>	Defensive	7.14	_	-										
	Consumer Defensive	7.14	_	_										
٠	Healthcare	0.00	_	_	İ									
•	Utilities	0.00	_	_	i									

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
☆ CashOffSet	17.75	17.75	_	_
⊕ Pimco Cayman Cmdty Fd Ltd Instl	17.61	35.37	_	_
⊕ Offset: Unsettled Trades	16.93	52.30	_	_
⊕ 90 Day Eurodollar Future June19	15.97	68.27	_	_
⊕ 90 Day Eurodollar Future June20	15.82	84.10	_	_
⊕ United States Treasury Notes 0.12%	13.63	97.73	_	_
─ United States Treasury Notes 0.12%	11.43	109.16	_	_
⊕ Federal National Mortgage Association 4%	8.18	117.34	_	_
⊕ U.S. Treasury Bond Mar19	7.85	125.19	_	_
⊕ Federal National Mortgage Association 3.5%	7.66	132.85	_	_
─ United States Treasury Notes 0.12%	7.03	139.88	_	_
⊕ US 10 Year Note (CBT) Mar19	6.84	146.73	-	_
⊕ U S Tips Rev Repo	6.13	152.86	-	_
⊕ United States Treasury Bonds 2.38%	6.11	158.97	_	_
⊕ Fin Fut Uk Gilt Ice 03/27/19	5.84	164.80	_	_

**Total Holdings 892** 



### PIMCO Income Instl PIMIX

#### Portfolio Manager(s)

Daniel Ivascyn since 03-2007 Alfred Murata since 03-2013 Joshua Anderson since 07-2018

#### **Quantitative Screens**

Performance: The fund has finished in the Multisector Bond category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 12.01 years.

Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.72 is 32.08% lower than the Multisector Bond category average.

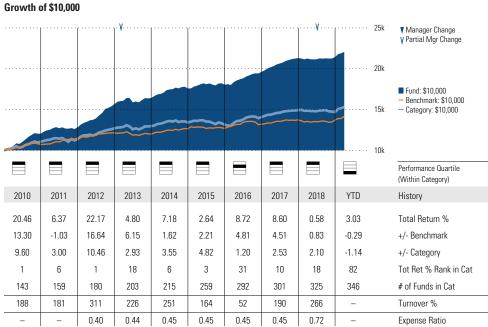
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

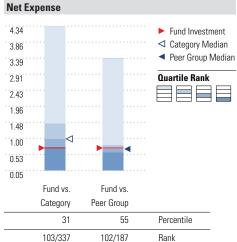
#### **Morningstar Category** Multisector Bond

Morningstar Index BBgBarc US Universal TR USD









3-1 car bisk interics			
	Fund	Bmark	Cat
Alpha	5.12	_	2.90
Beta	0.39	-	0.61
R-Squared	41.18	_	36.40
Standard Deviation	1.74	2.83	3.07
Sharpe Ratio	2.67	0.49	1.09
Tracking Error	2.17	-	2.77
Information Ratio	1.70	-	0.66
Up Capture Ratio	110.61	-	104.11
Down Capture Ratio	-18.31	-	35.35

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	1.96	4.55	4.04
Avg Eff Maturity	3.80	7.69	7.46



## PIMCO Income Insti PIMIX

Style Analysis as of 03-31-2019
Style Breakdown
Fixed Income

Quality

G

C

Ltd Mod Ext

Duration

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	56.00	67.64	20.16
AA	7.00	3.23	4.70
A	4.00	10.03	12.02
BBB	14.00	10.89	24.41
BB	6.00	3.19	18.10
В	7.00	3.64	11.89
Below B	6.00	1.38	3.98
Not Rated	0.00	0.00	4.74

#### Multisector Bond BBgBarc US Universal TR USD Asset Allocation as of 03-31-2019 Asset Class Cat% Net % US Stocks 0.28 1.17 Non-US Stocks 0.14 0.15 Bonds 136.83 92.13 Cash -41.65 2.55 Other 4.38 4.00 Ó 50 100 150 Total 100.00 100.00

**Morningstar Category** 

Morningstar Index

Sector Weighting as of 03-	31-2019									
	Fund	Bmark	Cat	Fund	▼ Benchm	ark [] Cate	gory Average	)		
Government	27.99	_	25.29							
Treasury	6.35	_	9.99							
Inflation - Protected	0.87	_	1.63							
Agency/Quasi Agency	0.10	_	1.02	i []						
Other Government Related	20.67	_	12.65							
Corporate	9.35	-	30.63						0	
Corporate Bond	6.43	_	27.77							
Bank Loan	1.53	_	0.45							
Convertible	1.38	_	1.41							
Preferred	0.01	_	1.00							
Securitized	27.44	-	30.48							
Agency MBS Pass-Through	8.66	_	9.08							
Agency MBS ARM	0.00	_	0.04							
Agency MBS CMO	0.80	_	5.38							
Non-Agency Residential MBS	4.24	_	5.80							
Commercial MBS	1.73	_	0.55							
Asset-Backed	11.84	_	9.54							
Covered Bond	0.17	_	0.09							
Municipal	0.08	_	0.89	i [						
Cash & Equivalents	17.62	_	8.71							
Other	17.03	-	3.63							
				0%	5 10	15	20	25	30	35

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
☆ CashOffSet	_	21.79	21.79	_
⊕ Irs Jpy 0.45000 03/20/19-10y Lch	03-2029	16.25	38.04	_
☐ Irs Usd 2.75000 12/19/18-5y Cme	12-2023	16.08	54.12	_
⊕ Irs Usd 2.75000 12/19/18-5y Cme	12-2023	15.96	70.08	_
⊕ Irs Jpy 0.45000 03/20/19-10y Lch	03-2029	15.84	85.92	-
⊕ Irs Usd 3.14000 07/19/18-5y* Cme	10-2023	9.42	95.34	_
Cirs Usd 4y Mat 3.85/2.00% M 7/2020 Dub	07-2022	9.23	104.58	_
Cirs Usd 4y Mat 3.82/2.00% M 7/2020 Glm	07-2022	9.23	113.80	_
Cirs Usd 4y Mat 3.82/2.00% M 6/2020 Myc	06-2022	9.22	123.02	_
⊕ Cirs Usd 4y Mat 3.85/2.00% M 7/2020 Dub	07-2022	9.19	132.22	_

Total Holdings 7182



### State St Russell Sm Cap® Gr Indx NL CI C

Morningstar Category

Small Growth

Morningstar Index

Russell 2000 Growth TR USD

#### Portfolio Manager(s)

Management Team since 09-2009

#### **Quantitative Screens**

Performance: The fund has finished in the Small Growth category's top three quartiles in 9 of the 9 years it's been in existence.

Management: The fund's management has been in place for 9.66 years.

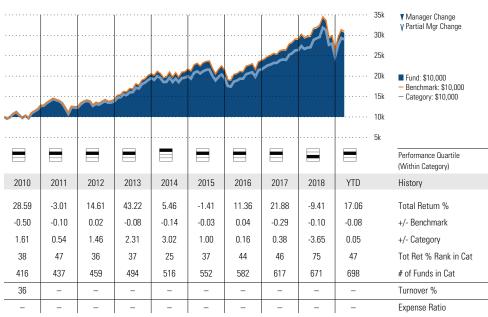
Style: The fund has landed in its primary style box — Small Growth — 100 % of the time over the past three years

The Expense screen is not applicable for funds without data

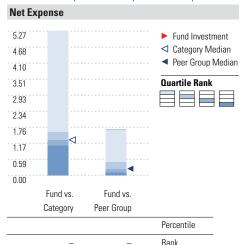
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000







3-1 car hisk menics			
	Fund	Bmark	Cat
Alpha	-0.11	_	-0.46
Beta	1.00	_	0.93
R-Squared	99.99	_	94.91
Standard Deviation	16.26	16.27	15.52
Sharpe Ratio	0.85	0.86	0.80
Tracking Error	0.12	_	3.13
Information Ratio	-1.09	_	-0.37
Up Capture Ratio	99.62	_	90.97
Down Capture Ratio	100.08	_	92.50

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	25.99	24.72	-
Price/Book Ratio	4.11	3.88	-
Geom Avg Mkt Cap \$B	1.57	1.66	-
ROE	8.90	10.22	-



# State St Russell Sm Cap® Gr Indx NL CI C

## Morningstar Category Small Growth

Morningstar Index

Russell 2000 Growth TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

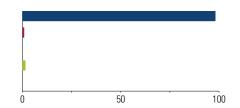
Equity

0	0	0	Large
1	6	22	Mid
9	21	42	Small
Value	Blend	Growth	

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.00	0.40
Cash	1.28	2.22
Bonds	0.00	0.00
Non-US Stocks	0.73	3.37
US Stocks	97.99	94.01
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019													
		Fund	Bmark	Cat	Fun	d	▼ Ben	chmark	[] Ca	ategory	Avera	ge			
Դ	Cyclical	30.95	30.89	29.93											
A	Basic Materials	5.57	5.49	4.41				Ĺ							
A	Consumer Cyclical	15.28	15.27	12.90											
<del>L</del>	Financial Services	6.91	6.95	9.55											
<b>fi</b>	Real Estate	3.19	3.18	3.07											
W	Sensitive	40.53	40.52	45.56											
	Communication Services	1.52	1.50	0.95	•										
•	Energy	1.77	1.77	1.90											
Ф	Industrials	15.14	15.14	16.09											
	Technology	22.10	22.11	26.62											
<b>-</b>	Defensive	28.52	28.58	24.50											
Ħ	Consumer Defensive	3.71	3.69	4.63		<b>[</b> ]				Ė					
+	Healthcare	24.30	24.37	18.94						=					
•	Utilities	0.51	0.52	0.93											
					0%	5	10	15	20	25	30	35	40	45	50

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ E-Mini Russ 2000 Jun19 Xcme 20190621	1.40	1.40	_	_
State Street Corporation Short Term Investment Fund	1.22	2.62	_	_
⊕ Etsy Inc	0.74	3.36	_	Consumer Cyclical
⊕ Five Below Inc	0.62	3.98	21.43	Consumer Cyclical
⊕ The Trade Desk Inc A	0.60	4.58	_	Technology
⊕ Integrated Device Technology Inc	0.59	5.16	_	Technology
⊕ HubSpot Inc	0.57	5.73	_	Technology
⊕ Planet Fitness Inc A	0.56	6.29	_	Consumer Cyclical
⊕ Primerica Inc	0.49	6.78	25.36	Financial Services
⊕ Array BioPharma Inc	0.48	7.25	71.09	Healthcare
⊕ Entegris Inc	0.47	7.72	28.20	Technology
⊕ Coupa Software Inc	0.47	8.19	-	Technology
	0.47	8.66	27.95	Industrials
⊕ Nexstar Media Group Inc Class A	0.45	9.10	38.38	Consumer Cyclical
⊕ Horizon Pharma PLC	0.44	9.54	35.26	Healthcare

#### **Total Holdings** 1201



### State St Russell Sm Cp® Val Indx NL Cl C

**Morningstar Category** ■ Small Value

Morningstar Index

### Russell 2000 Value TR USD

#### Portfolio Manager(s)

Management Team since 09-2009

#### **Quantitative Screens**

Performance: The fund has finished in the Small Value category's top three quartiles in 9 of the 9 years it's been in

Management: The fund's management has been in place for 9.66 years.

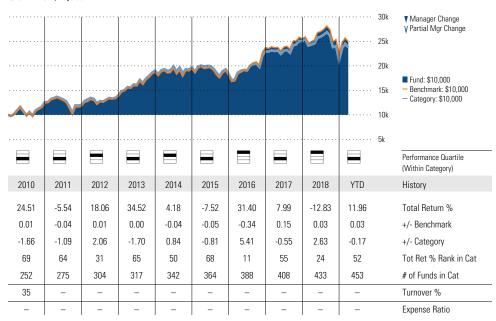
Style: The fund has landed in its primary style box — Small Value — 100 % of the time over the past three years.

The Expense screen is not applicable for funds without

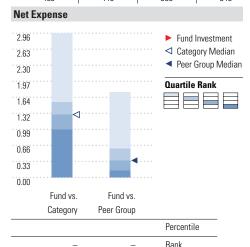
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000







3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	0.01	_	-1.28
Beta	1.00	_	1.00
R-Squared	100.00	_	97.26
Standard Deviation	16.08	16.12	16.40
Sharpe Ratio	0.64	0.64	0.56
Tracking Error	0.10	_	2.06
Information Ratio	-0.06	_	-0.90
Up Capture Ratio	99.92	_	94.81
Down Capture Ratio	99.91	_	100.04

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.64	18.52	_
Price/Book Ratio	1.54	1.45	_
Geom Avg Mkt Cap \$B	1.32	1.34	_
ROE	5.85	6.22	_



## State St Russell Sm Cp® Val Indx NL CI C

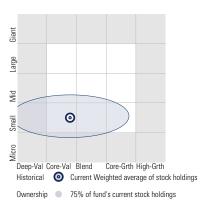
## Morningstar Category Small Value

Morningstar Index

Russell 2000 Value TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

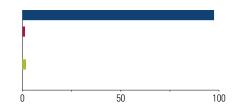
Lquity			
0	0	0	Large
9	6	3	Mid
38	33	12	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

#### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.00	0.04
Cash	1.63	2.75
Bonds	0.00	-0.06
Non-US Stocks	1.04	2.51
US Stocks	97.33	94.77
Asset Class	Net %	Cat%

	ctor Weighting as of 03-		Б 1	0 :	5 1 D 1 1 0 . A
		Fund	Bmark	Cat	Fund • Benchmark   Category Average
ŀ	Cyclical	55.46	55.33	55.67	
î.	Basic Materials	4.69	4.61	7.13	
<b>A</b>	Consumer Cyclical	10.12	9.92	13.38	
ê	Financial Services	25.83	25.96	25.72	
t	Real Estate	14.82	14.84	9.44	
M	Sensitive	30.05	30.07	33.19	
d	Communication Services	1.16	1.15	0.59	
•	Energy	4.50	4.49	4.92	
Ф	Industrials	12.43	12.46	16.01	
	Technology	11.96	11.97	11.67	
<b>→</b>	Defensive	14.49	14.60	11.14	
-	Consumer Defensive	3.36	3.36	3.64	
٠	Healthcare	3.84	3.91	3.44	
?	Utilities	7.29	7.33	4.06	

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ E-Mini Russ 2000 Jun19 Xcme 20190621	1.94	1.94	_	_
⊕ State Street Corporation Short Term Investment Fund	1.54	3.49	_	-
⊕ Cree Inc	0.59	4.08	33.77	Technology
Ciena Corp	0.53	4.61	10.12	Technology
Idacorp Inc	0.50	5.11	7.64	Utilities
	0.47	5.58	26.10	Financial Services
Portland General Electric Co	0.46	6.05	13.85	Utilities
ONE Gas Inc	0.46	6.51	_	Utilities
Radian Group Inc	0.45	6.96	26.79	Financial Services
CACI International Inc Class A	0.45	7.40	26.38	Technology
⊕ Southwest Gas Holdings Inc	0.43	7.84	8.21	Utilities
Viasat Inc	0.43	8.26	31.47	Technology
→ ALLETE Inc	0.42	8.68	8.66	Utilities
Cousins Properties Inc	0.41	9.09	23.10	Real Estate
Spire Inc	0.40	9.49	11.88	Utilities

Total Holdings 1294



## Templeton Global Bond R6 FBNRX

Morningstar Category World Bond Morningstar Index

BBgBarc Gbl Agg Ex USD TR USD

### Portfolio Manager(s)

Michael Hasenstab since 12-2001 Calvin Ho since 12-2018

#### **Quantitative Screens**

Performance: The fund has finished in the World Bond category's top three quartiles in 4 of the 5 years it's been in existence.

Management: The fund's management has been in place for 17.26 years.

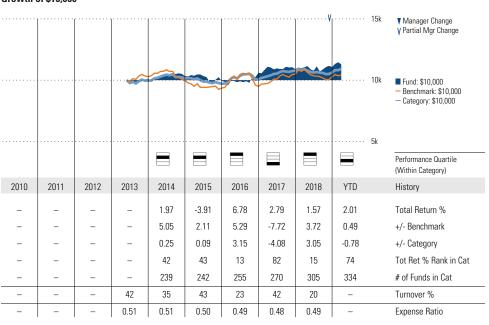
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.49 is 44.94% lower than the World Bond category average.

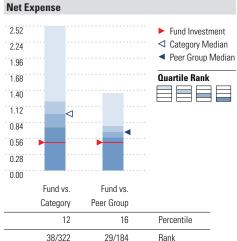
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000







3-Year RISK Wetrics			
	Fund	Bmark	Cat
Alpha	4.63	_	1.30
Beta	-0.18	_	0.63
R-Squared	4.41	_	71.26
Standard Deviation	5.90	6.78	5.42
Sharpe Ratio	0.53	-0.01	0.20
Tracking Error	9.88	_	3.85
Information Ratio	0.34	_	0.15
Up Capture Ratio	8.18	_	72.20
Down Capture Ratio	-40.05	_	58.57

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	-1.60	-	5.69
Avg Eff Maturity	2.71	-	8.62



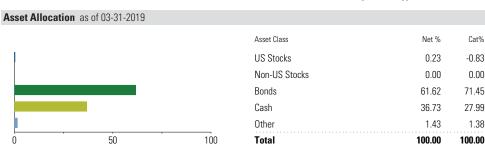
# Templeton Global Bond R6 FBNRX

Style Analysis as of 03-31-2019
Style Breakdown
Fixed Income

Quality

Given Service S

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	15.92	_	32.19
AA	6.33	_	11.74
A	16.73	_	23.73
BBB	33.80	_	18.89
BB	16.88	_	6.46
В	9.68	_	3.13
Below B	0.00	_	0.65
Not Rated	0.66	-	3.21



**Morningstar Category** 

World Bond

Morningstar Index

BBgBarc Gbl Agg Ex USD TR USD

Other	0.00	_	13.55												
Cash & Equivalents	37.34	-	23.82				n								
Municipal	0.00	-	0.02	ļ					-						
Covered Bond	0.00	_	0.75												
Asset-Backed	0.00	_	1.63	[]											
Commercial MBS	0.00	_	0.55	0											
Non-Agency Residential MBS	0.00	-	0.58	0											
Agency MBS CMO	0.00	_	0.37												
Agency MBS ARM	0.00	_	0.02	Ô											
Agency MBS Pass-Through	0.00	_	2.53	[											
Securitized	0.00	-	6.43	İ											
Preferred	0.00	_	0.02	Ô											
Convertible	0.00	_	0.44	0											
Bank Loan	0.00	_	0.04												
Corporate Bond	0.45	_	12.22	Ī		1									
Corporate	0.45	_	12.72												
Other Government Related	0.35	_	14.98	j			0								
Agency/Quasi Agency	4.66	_	2.50												
Inflation – Protected	0.23	_	1.61	i [											
Treasury	56.96	_	24.10												
Government	62.20	_	43.19												
	Fund	Bmark	Cat	Fun	d	7	Bench	nmark	[] (	Categ	ory A	verag	e		

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
	-	22.64	22.64	_
Mexico (United Mexican States) 8%	06-2020	7.96	30.60	_
Mexico (United Mexican States) 6.5%	06-2021	4.07	34.68	_
Brazil (Federative Republic) 9.76%	01-2023	3.73	38.41	_
Brazil (Federative Republic) 9.76%	01-2021	2.90	41.31	-
⊕ United States Treasury Bills 0%	01-2019	2.64	43.95	_
Secretaria Tesouro Nacional 0%	07-2020	2.27	46.22	_
Indonesia (Republic of) 8.38%	03-2024	2.11	48.33	_
∋ India (Republic of) 8.83%	11-2023	1.92	50.25	_
United States Treasury Bills 0%	02-2019	1.69	51.95	_

Total Holdings 141



## Vanguard 500 Index Admiral VFIAX

## Morningstar Category Large Blend

Morningstar Index S&P 500 TR USD

### Portfolio Manager(s)

Donald Butler since 04-2016 Michelle Louie since 11-2017

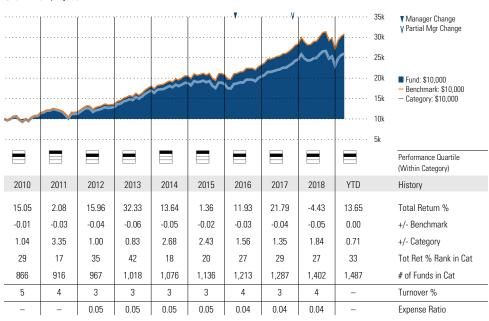
#### **Quantitative Screens**

- ❷ Performance: The fund has finished in the Large Blend category's top three quartiles in 10 of the 10 years it's been in existence.
- × *Management:* The fund's management team has been in place for less than three years.
- Net Expense: The fund's expense ratio of 0.04 is 95.6% lower than the Large Blend category average.

#### **Morningstar Investment Management LLC Analysis**

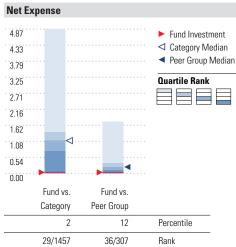
This fund fails our manager tenure screen; however, since it is an index fund, we are not overly concerned about the manager change.

#### Growth of \$10,000





3-Year Risk Metrics



•			
	Fund	Bmark	Cat
Alpha	-0.04	_	-1.27
Beta	1.00	_	0.97
R-Squared	100.00	_	91.55
Standard Deviation	10.73	10.73	10.83
Sharpe Ratio	1.11	1.12	0.96
Tracking Error	0.01	_	2.93
Information Ratio	-4.37	_	-1.32
Up Capture Ratio	99.86	_	90.88
Down Capture Ratio	100.08	_	97.96

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.64	18.71	17.87
Price/Book Ratio	2.69	2.74	2.65
Geom Avg Mkt Cap \$B	71.43	73.09	97.84
ROE	21.19	21.80	22.01



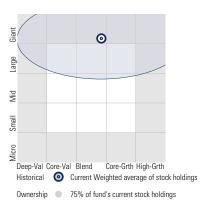
# Vanguard 500 Index Admiral VFIAX

#### **Morningstar Category** Large Blend

Morningstar Index S&P 500 TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

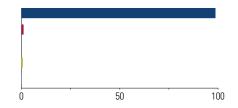
Equity

29	30	31	Laige
4	4	2	MIN
0	0	0	JIIdii
Value	Blend	Growth	

Weight %

>50 25-50 10-25 0-10

#### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.05	1.08
Cash	0.49	-2.54
Bonds	0.00	4.19
Non-US Stocks	0.91	3.15
US Stocks	98.55	94.10
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019												
		Fund	Bmark	Cat	Fund	i	▼ Bench	mark	[] Cateo	jory Ave	erage	_		
<b>Դ</b>	Cyclical	32.19	32.26	37.60								· :		
A.	Basic Materials	2.40	2.46	2.78										
<b>A</b>	Consumer Cyclical	11.90	11.90	11.68										
<del>,</del>	Financial Services	15.39	15.40	20.85			- :	ľ						
<b>fi</b>	Real Estate	2.50	2.50	2.29										
W	Sensitive	42.18	42.16	37.07										İ
	Communication Services	3.57	3.56	3.37		(								
ð	Energy	5.43	5.43	5.15										
Ф	Industrials	10.23	10.23	7.03										
	Technology	22.95	22.94	21.52						ľ į				
<b>→</b>	Defensive	25.62	25.59	25.35										
=	Consumer Defensive	7.77	7.77	7.92										
+	Healthcare	14.51	14.49	14.68										
•	Utilities	3.34	3.33	2.75		)								
					0%	5	10	15	20	25	30	35	40	45

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Name	% INET Y2261	Guillulative %	TTD neturn 76	Widillingstal Sector
⊕ Microsoft Corp	3.81	3.81	16.57	Technology
⊕ Apple Inc	3.59	7.40	20.88	Technology
⊕ Amazon.com Inc	3.10	10.49	18.56	Consumer Cyclical
⊕ Facebook Inc A	1.68	12.17	27.16	Technology
⊕ Berkshire Hathaway Inc B	1.59	13.76	-1.61	Financial Services
⊕ Johnson & Johnson	1.57	15.33	9.02	Healthcare
⊕ Alphabet Inc Class C	1.52	16.85	_	Technology
⊕ Alphabet Inc A	1.49	18.34	12.63	Technology
⊕ Exxon Mobil Corp	1.44	19.78	19.69	Energy
	1.40	21.17	4.52	Financial Services
⊕ Visa Inc Class A	1.15	22.33	18.57	Financial Services
⊕ Procter & Gamble Co	1.10	23.42	13.98	Consumer Defensive
⇒ Bank of America Corporation	1.04	24.47	12.58	Financial Services
→ Verizon Communications Inc	1.03	25.50	6.25	Communication Svc
⊕ Intel Corp	1.02	26.51	15.10	Technology

Total Holdings 516



### Vanguard Inflation-Protected Secs Adm VAIPX

Morningstar Category Inflation-Protected Bond Morningstar Index

BBgBarc US Treasury US TIPS TR USD

#### Portfolio Manager(s)

Gemma Wright-Casparius since 08-2011

#### **Quantitative Screens**

❷ Performance: The fund has finished in the InflationProtected Bond category's top three quartiles in 10 of the 10 years it's been in existence.

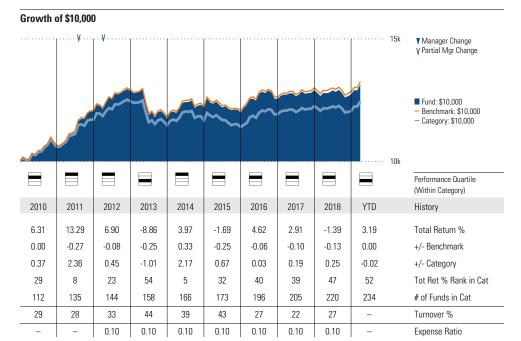
Management: The fund's management has been in place for 7.62 years.

Style Consistency is not calculated for Fixed Income funds.

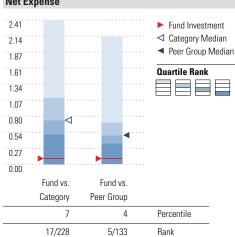
Net Expense: The fund's expense ratio of 0.1 is 87.01% lower than the Inflation-Protected Bond category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.16	_	0.18
Beta	1.02	_	0.82
R-Squared	98.72	_	83.66
Standard Deviation	3.12	3.04	2.80
Sharpe Ratio	0.10	0.15	0.10
Tracking Error	0.36	_	1.25
Information Ratio	-0.37	_	-0.48
Up Capture Ratio	99.73	_	82.46
Down Capture Ratio	103.44	_	77.43

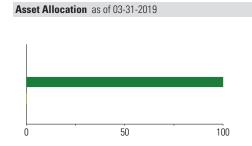
Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	7.58	4.52	6.19
Avg Eff Maturity	8.20	_	7.38



## Vanguard Inflation-Protected Secs Adm VAIPX

Morningstar Category Inflation-Protected Bond Morningstar Index BBgBarc US Treasury US TIPS TR USD





Asset Class	Net %	Cat%
US Stocks	0.00	0.01
Non-US Stocks	0.00	0.01
Bonds	99.94	99.27
Cash	0.06	0.35
Other	0.00	0.36
Total	100.00	100.00

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	100.00	0.00	91.95
AA	0.00	99.60	1.66
А	0.00	0.00	1.99
BBB	0.00	0.00	2.70
BB	0.00	0.00	0.72
В	0.00	0.00	0.66
Below B	0.00	0.00	0.08
Not Rated	0.00	0.40	0.24

							По						
	Fund	Bmark	Cat	Fund	▼ Bench	mark	[] Ca	itego	ry Av	erage	9		
Government	99.94	99.20	85.26										
Treasury	0.00	0.00	1.03	Ü									
Inflation – Protected	99.94	99.20	76.92										
Agency/Quasi Agency	0.00	0.00	0.11	İ									
Other Government Related	0.00	0.00	7.20	<u> </u>									
Corporate	0.00	0.00	2.62	[0]									
Corporate Bond	0.00	0.00	2.54	[0]									
Bank Loan	0.00	0.00	0.01	i i i i									
Convertible	0.00	0.00	0.07	ĺ									
Preferred	0.00	0.00	0.00										
Securitized	0.00	0.00	5.33										
Agency MBS Pass-Through	0.00	0.00	2.06										
Agency MBS ARM	0.00	0.00	0.01	į i									
Agency MBS CMO	0.00	0.00	0.78	j i									
Non-Agency Residential MBS	0.00	0.00	0.23										
Commercial MBS	0.00	0.00	0.39										
Asset-Backed	0.00	0.00	1.84										
Covered Bond	0.00	0.00	0.02	Į i									
Municipal	0.00	0.00	0.00	<u> </u>									
Cash & Equivalents	0.06	0.80	5.98	Ţ.									
Other	0.00	0.00	0.80	0									

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
United States Treasury Notes 0.12%	04-2021	5.21	5.21	_
United States Treasury Notes 0.12%	01-2023	3.85	9.07	_
	04-2023	3.81	12.87	_
United States Treasury Notes 0.12%	01-2022	3.78	16.66	_
⊕ United States Treasury Notes 0.62%	01-2024	3.67	20.33	-
United States Treasury Notes 0.38%	07-2023	3.64	23.97	_
⊕ United States Treasury Notes 0.12%	04-2022	3.61	27.58	_
€ United States Treasury Notes 0.38%	07-2025	3.59	31.17	_
€ United States Treasury Notes 0.12%	07-2024	3.57	34.74	_
United States Treasury Notes 0.12%	04-2020	3.48	38.23	_



## Vanguard International Value Inv VTRIX

Morningstar Category Foreign Large Value Morningstar Index MSCI EAFE NR USD

### Portfolio Manager(s)

Sandy Nairn since 05-2008 Michael Bennett since 05-2010 Michael Fry since 05-2010 A. Krishna since 08-2012 Steven Morrow since 08-2012

#### **Quantitative Screens**

✓ Performance: The fund has finished in the Foreign Large Value category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 10.88 years.

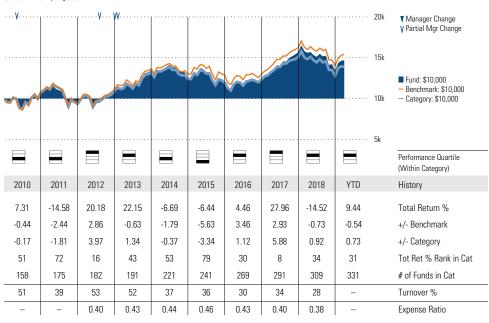
 $\times$  *Style:* The fund has landed in its primary style box — Large Value — 9.09 % of the time over the past three years.

Q Net Expense: The fund's expense ratio of 0.38 is 64.81% lower than the Foreign Large Value category average.

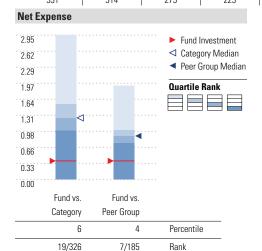
### **Morningstar Investment Management LLC Analysis**

This foreign large value fund fails our style consistency screen owing to its occasional drift into the blend portion of the style box. However, the movement has been minor and the fund still pursues a value-oriented strategy.

### Growth of \$10,000







3-Year KISK Wietrics			
	Fund	Bmark	Cat
Alpha	1.12	_	-1.65
Beta	0.93	_	0.97
R-Squared	92.60	_	86.56
Standard Deviation	10.08	10.47	11.01
Sharpe Ratio	0.68	0.60	0.40
Tracking Error	2.85	_	3.98
Information Ratio	0.23	_	-0.56
Up Capture Ratio	95.79	_	90.62
Down Capture Ratio	88.07	_	101.87

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	14.58	16.19	14.35
Price/Book Ratio	1.35	1.58	1.42
Geom Avg Mkt Cap \$B	33.22	35.93	39.24
ROE	15.10	15.50	14.08



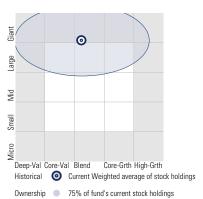
# Vanguard International Value Inv VTRIX

#### **Morningstar Category** Foreign Large Value MSCI EAFE NR USD

Morningstar Index

Style Analysis as of 03-31-2019





### Style Breakdown

Equity

35	31	25	Large
5	3	2	Mid
0	0	0	Small

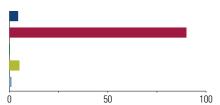
Value Blend Growth

Weight %

>50 25-50 10-25 0-10



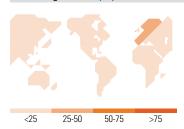
Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.84	0.06
Cash	4.94	1.36
Bonds	0.06	0.41
Non-US Stocks	89.90	95.17
US Stocks	4.26	3.01
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund	•	Ben	chmark	( ] Ca	ategory	Avera	ge			
<sub>Մ</sub>	Cyclical	39.69	42.08	45.69											
A.	Basic Materials	2.55	7.79	9.00		'									
Д	Consumer Cyclical	9.93	11.50	11.18											
	Financial Services	25.03	18.86	23.49		į,			<b>*</b> :						
<b>fi</b>	Real Estate	2.18	3.93	2.02											
W	Sensitive	42.38	30.90	34.29							- '				
0	Communication Services	6.35	3.98	6.12	1										
•	Energy	8.72	5.95	9.36			•								
Ф	Industrials	9.93	13.21	11.42				1							
	Technology	17.38	7.76	7.39					ı i						
<b>-</b>	Defensive	17.93	27.01	20.02											
Ħ	Consumer Defensive	5.53	11.92	6.69											
+	Healthcare	10.39	11.35	9.96											
•	Utilities	2.01	3.74	3.37											
					0%	5	10	15	20	25	30	35	40	45	

### World Regions % Equity 03-31-2019



Greater Asia	Fund % 39.14	Cat % 32.33
Japan	17.71	17.16
Australasia	1.55	3.51
Asia-4 Tigers	9.17	6.96
Asia-ex 4 Tigers	10.71	4.70
Not Classified	0.00	0.00

Americas	Fund % 8.73	Cat % 7.61	Greater Europe	Fund % 52.13	Cat % 60.06	Market Maturity	Fund %
North America Central/Latin	7.70 1.03	6.83 0.78	United Kingdom W euro-ex UK Emrgng Europe Africa	15.75 34.63 0.87 0.88	20.58 38.23 0.60 0.65	Developed Markets Emerging Markets Not Available	86.51 13.49 0.00

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
	4.84	4.84	_	_
⊕ Novartis AG	2.56	7.40	17.43	Healthcare
⊕ Royal Dutch Shell PLC Class A	2.16	9.56	6.15	Energy
ICICI Bank Ltd ADR	2.06	11.62	11.37	Financial Services
Roche Holding AG Dividend Right Cert.	1.74	13.36	10.24	Healthcare
⊕ Total SA	1.61	14.97	8.62	Energy
DBS Group Holdings Ltd	1.52	16.49	_	Financial Services
⇒ Sanofi SA	1.45	17.94	4.07	Healthcare
Sumitomo Mitsui Financial Group Inc	1.42	19.36	8.67	Financial Services
	1.37	20.73	-8.57	Communication Svc

### **Total Holdings** 151



## Vanguard LifeStrategy Cnsrv Gr Inv VSCGX

Morningstar Category Allocation--30% to 50%

Morningstar Index

Morningstar Mod Con Tgt Risk TR USD

### Portfolio Manager(s)

Management Team since 09-1994

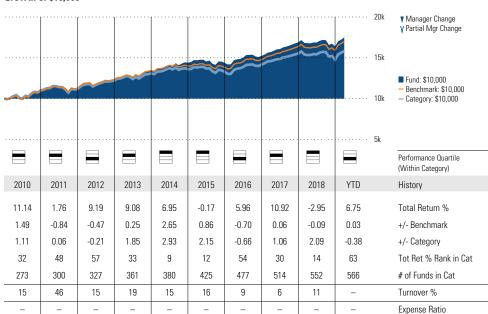
#### **Quantitative Screens**

- Performance: The fund has finished in the Allocation--30% to 50% Equity category's top three quartiles in 10 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 24.52 years.
- Style: The fund has landed in its primary style box Large Blend — 100 % of the time over the past three years.
- Net Expense: The fund's expense ratio of 0.12 is 88.99% lower than the Allocation--30% to 50% Equity category average.

### **Morningstar Investment Management LLC Analysis**

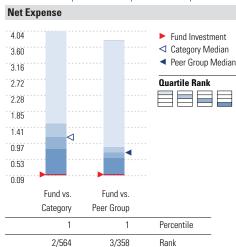
This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

# Growth of \$10,000





3-Year Risk Metrics



	Fund	Bmark	Cat
Alpha	-0.16	_	-1.05
Beta	1.00	_	1.09
R-Squared	99.10	_	86.95
Standard Deviation	4.38	4.36	5.14
Sharpe Ratio	1.05	1.10	0.84
Tracking Error	0.42	_	1.96
Information Ratio	-0.41	_	-0.46
Up Capture Ratio	99.30	_	98.28
Down Capture Ratio	102.93	_	112.37

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.77	17.27	18.06
Price/Book Ratio	2.19	2.06	2.35
Avg Eff Duration	6.56	5.17	4.28



# Vanguard LifeStrategy Cnsrv Gr Inv VSCGX

Morningstar Category Allocation--30% to 50% Morningstar Index

Morningstar Mod Con Tgt Risk TR USD

Cat%

25.89

9.25

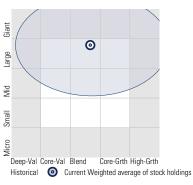
53.64

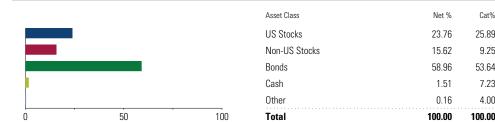
7.23

4.00

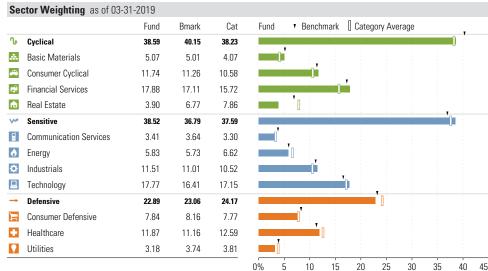
Style Analysis as of 03-31-2019

Morningstar Style Box™





#### A Basic Materials 5.07 Ownership 75% of fund's current stock holdings Consumer Cyclical 11.74 Financial Services 17.88 侖 Real Estate 3.90 Style Breakdown Fixed Income Equity 38.52 Quality Large High 3.41 **Communication Services** 25 • Energy 5.83 MidMid6 6 6 Ф Industrials 11.51 Low Technology 17.77 2 2 2 Defensive 22.89 Value Blend Growth Ltd Mod Consumer Defensive 7.84 Duration Healthcare 11.87 Weight % Utilities 3.18 >50 25-50 10-25 0-10



<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Bond Market II ldx Inv	_	42.09	42.09	_	_
○ Vanguard Total Stock Mkt Idx Inv	-	24.02	66.11	_	-
	-	17.86	83.97	_	-
○ Vanguard Total Intl Stock Index Inv	-	16.01	99.98	_	-
○ Cmt Market Liquidity Rate	_	0.02	100.00	-	_

Asset Allocation as of 03-31-2019

### Total Holdings 5

## Vanguard LifeStrategy Growth Inv VASGX

Morningstar Category Allocation--70% to 85% Morningstar Index

Morningstar Mod Agg Tgt Risk TR USD

Equity

#### Portfolio Manager(s)

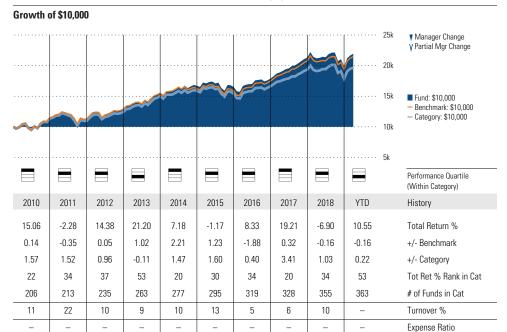
Management Team since 09-1994

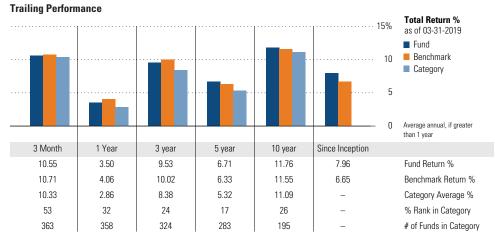
#### **Quantitative Screens**

- Performance: The fund has finished in the Allocation--70% to 85% Equity category's top three quartiles in 9 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 24.52 years.
- Net Expense: The fund's expense ratio of 0.14 is
   88.03% lower than the Allocation--70% to 85% Equity
   category average.

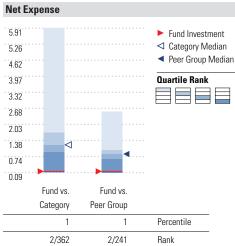
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.





3-Year Risk Metrics



Peer group is a subset of the category and includes funds with the
same management style (active vs. passive) and similar share class
characteristics

	Fund	Bmark	Cat
Alpha	-0.50	_	-1.83
Beta	1.01	_	1.03
R-Squared	99.44	_	91.80
Standard Deviation	8.15	8.08	8.77
Sharpe Ratio	1.00	1.06	0.83
Tracking Error	0.61	_	2.51
Information Ratio	-0.80	_	-0.76
Up Capture Ratio	98.43	_	93.55
Down Capture Ratio	103.17	_	108.73

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.58	17.22	17.92
Price/Book Ratio	2.16	2.03	2.23
Avg Eff Duration	6.56	5.22	4.74



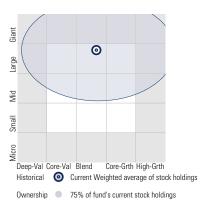
# Vanguard LifeStrategy Growth Inv VASGX

Morningstar Category Allocation--70% to 85% Morningstar Index

Morningstar Mod Agg Tgt Risk TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



Asset Allocation as of 03-31-2019



### Style Breakdown

Equity				Fixed Ir	ncome		Q
26	25	25	Large				⊖ High
6	6	6	Mid				Mid
2	2	2	Small				Low
Value	Blend	Growth		Ltd	Mod	Ext	

1		-	
ality			

Zb	25	25	
6	6	6	
2	2	2	
Value	Blend	Growth	



>50 25-50 10-25 0-10

		Fund	Bmark	Cat	Fund	ı t	Bench	mark	Categ	jory Ave	rage		
b	Cyclical	38.56	41.07	36.05									
i.	Basic Materials	5.06	5.15	4.06									
<b></b>	Consumer Cyclical	11.73	11.42	11.52									
ê	Financial Services	17.87	16.85	16.19		- :							
b	Real Estate	3.90	7.65	4.28		<b>[</b> ]	•						
NF	Sensitive	38.52	36.40	38.75									
	Communication Services	3.40	3.43	3.27		(							
•	Energy	5.83	5.65	5.92									
\$	Industrials	11.49	11.08	11.03									
2	Technology	17.80	16.24	18.53				- '	<b>[</b> ]	_			
+	Defensive	22.91	22.54	25.20									
=	Consumer Defensive	7.84	7.89	7.93			•						
ì	Healthcare	11.88	10.88	14.30									
?	Utilities	3.19	3.77	2.97									

50

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt ldx Inv	_	48.17	48.17	_	_
	-	31.75	79.92	_	_
→ Vanguard Total Bond Market II Idx Inv	-	14.09	94.01	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	5.93	99.94	-	_
⊕ Cmt Market Liquidity Rate	_	0.06	100.00	_	_

### Total Holdings 5



## Vanguard LifeStrategy Income Inv VASIX

Morningstar Category Allocation--15% to 30% Morningstar Index

Fauity

Morningstar Mod Tgt Risk TR USD

### Portfolio Manager(s)

Management Team since 09-1994

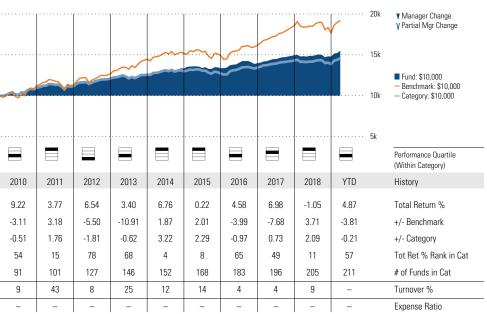
#### **Quantitative Screens**

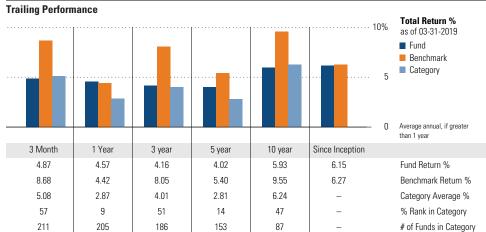
- Performance: The fund has finished in the Allocation--15% to 30% Equity category's top three quartiles in 8 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 24.52 years.
- Net Expense: The fund's expense ratio of 0.11 is
   89.11% lower than the Allocation--15% to 30% Equity
   category average.

### **Morningstar Investment Management LLC Analysis**

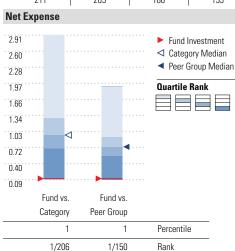
This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







3-Year Risk Metrics



	Fund	Bmark	Cat
Alpha	1.05	_	0.30
Beta	0.39	-	0.51
R-Squared	62.02	_	77.64
Standard Deviation	3.00	6.11	3.60
Sharpe Ratio	0.95	1.08	0.84
Tracking Error	4.18	_	3.57
Information Ratio	-0.93	_	-1.05
Up Capture Ratio	45.49	_	52.07
Down Capture Ratio	34.10	_	47.62

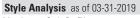
Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.25	_
Price/Book Ratio	2.19	2.05	-
Avg Eff Duration	6.56	5.24	3.89



# Vanguard LifeStrategy Income Inv VASIX

Morningstar Category Allocation--15% to 30%

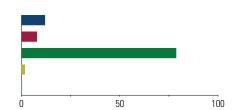
Morningstar Mod Tgt Risk TR USD



Morningstar Style Box™



## Asset Allocation as of 03-31-2019





### Style Breakdown

Equity

Lquity				١
26	25	25	Large	
6	6	6	Mid	
2	2	2	Small	
Value	Blend	Growth		L



Weight %

>50 25-50 10-25 0-10

		Fund	Bmark	Cat	Fund	t	▼ Bench	nmark	Categ	ory Ave	rage	_
وا	Cyclical	38.57	41.10	38.92								
1	Basic Materials	5.05	5.06	3.83								
•	Consumer Cyclical	11.73	11.34	9.51								
<u></u>	Financial Services	17.86	16.91	13.61								
à	Real Estate	3.93	7.79	11.97			<b>'</b>   [					
UF.	Sensitive	38.48	36.27	35.36								
	Communication Services	3.42	3.43	4.24		<b>[</b> ]						
	Energy	5.82	5.65	7.73								
}	Industrials	11.48	11.06	8.89								
3	Technology	17.76	16.13	14.50								
+	Defensive	22.96	22.63	25.73								
7	Consumer Defensive	7.86	7.99	7.39		1	0					
	Healthcare	11.89	10.89	10.88								
1	Utilities	3.21	3.75	7.46		· '						

<b>Top 5 Holdings</b>	as of 03-31-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Total Bond Market II ldx Inv	_	56.09	56.09	_	_
⊕ Vanguard Total Intl Bd Idx Investor	-	23.86	79.95	_	-
─ Vanguard Total Stock Mkt Idx Inv	-	12.00	91.95	_	-
─ Vanguard Total Intl Stock Index Inv	-	7.96	99.92	_	-
	_	0.08	100.00	-	_

### Total Holdings 5

## Vanguard LifeStrategy Moderate Gr Inv VSMGX

Morningstar Category Allocation--50% to 70% Morningstar Index

Equity

Morningstar Mod Tgt Risk TR USD

### Portfolio Manager(s)

Management Team since 09-1994

#### **Quantitative Screens**

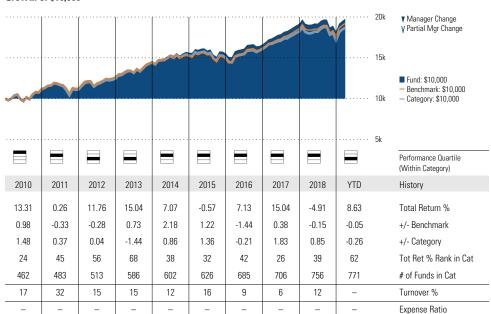
Performance: The fund has finished in the Allocation-50% to 70% Equity category's top three quartiles in 10 of the 10 years it's been in existence.

Management: The fund's management has been in place for 24.52 years.

#### **Morningstar Investment Management LLC Analysis**

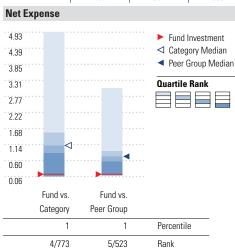
This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000





3-Year Risk Metrics



	Fund	Bmark	Cat
Alpha	-0.33	-	-1.16
Beta	1.01	-	1.07
R-Squared	99.36	-	89.99
Standard Deviation	6.20	6.11	6.95
Sharpe Ratio	1.03	1.08	0.88
Tracking Error	0.50	-	2.27
Information Ratio	-0.54	-	-0.39
Up Capture Ratio	99.29	-	100.12
Down Capture Ratio	103.53	_	113.93

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.25	17.99
Price/Book Ratio	2.19	2.05	2.31
Avg Eff Duration	6.56	5.24	4.79

# Vanguard LifeStrategy Moderate Gr Inv VSMGX

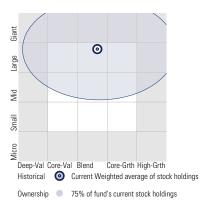
Morningstar Category Allocation--50% to 70%

Morningstar Index

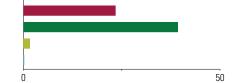
Morningstar Mod Tgt Risk TR USD

Style Analysis as of 03-31-2019

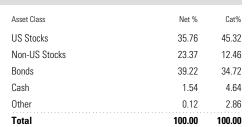
Morningstar Style Box™





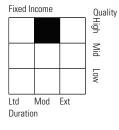


Asset Allocation as of 03-31-2019



## Style Breakdown





### Weight %

>50 25-50 10-25 0-10

	Fund	Bmark	Cat	Fund	•	Bench	mark	Categ	jory Ave	rage	
⊌ Cyclical	38.57	41.10	34.89								
Basic Materials	5.07	5.06	3.76								
Consumer Cyclical	11.73	11.34	11.04								
Financial Services	17.87	16.91	16.77								
Real Estate	3.90	7.79	3.32			1					
✓ Sensitive	38.52	36.27	39.54								
Communication Services	3.41	3.43	3.39		0						
Energy	5.82	5.65	5.90								
Industrials	11.50	11.06	11.02		ė						
Technology	17.79	16.13	19.23				- '	<b>I</b>	_		
→ Defensive	22.91	22.63	25.59								
Consumer Defensive	7.83	7.99	7.67			0					
Healthcare	11.89	10.89	14.55								
Utilities	3.19	3.75	3.37		[						

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	36.15	36.15	_	_
◆ Vanguard Total Bond Market II ldx Inv	-	28.01	64.16	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	23.94	88.10	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	11.86	99.97	_	_
	_	0.03	100.00	_	_

### Total Holdings 5



## Vanguard Mid-Cap Value Index Admiral VMVAX

Morningstar Category

Mid-Cap Value

**Morningstar Index** Russell Mid Cap Value TR USD

### Portfolio Manager(s)

Donald Butler since 08-2006 Michael Johnson since 04-2016

#### **Quantitative Screens**

❷ Performance: The fund has finished in the Mid-Cap
Value category's top three quartiles in 7 of the 7 years it's
been in existence.

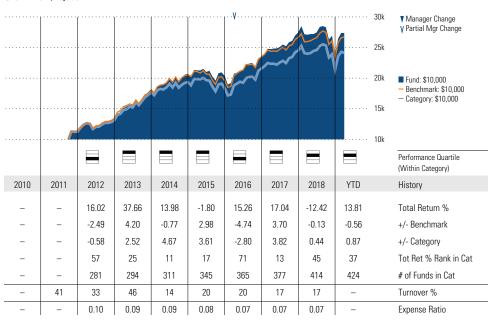
Management: The fund's management has been in place for 12.63 years.

Net Expense: The fund's expense ratio of 0.07 is 93.4% lower than the Mid-Cap Value category average.

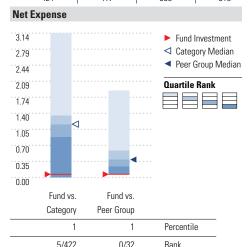
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	0.41	_	-1.22
Beta	0.98	_	1.04
R-Squared	97.29	-	91.01
Standard Deviation	11.89	11.94	13.07
Sharpe Ratio	0.73	0.71	0.60
Tracking Error	1.97	-	4.01
Information Ratio	0.13	-	-0.29
Up Capture Ratio	95.86	_	94.74
Down Capture Ratio	89.93	-	99.49

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.51	18.90	17.75
Price/Book Ratio	2.00	1.81	1.74
Geom Avg Mkt Cap \$B	9.97	9.71	8.73
ROE	15.32	11.29	11.96



# Vanguard Mid-Cap Value Index Admiral VMVAX

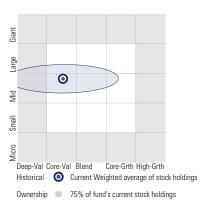
# Morningstar Category Mid-Cap Value

### Morningstar Index

Russell Mid Cap Value TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

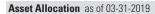
Equity

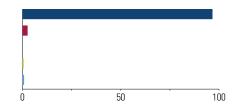
9	11	2	Large
45	29	4	Mid
0	0	0	Small

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.67	0.17
Cash	0.38	3.35
Bonds	0.00	0.05
Non-US Stocks	2.45	4.62
US Stocks	96.50	91.83
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund	ł	▼ Be	nchma	ırk [	Cateo	jory Av	erage		_
b	Cyclical	50.04	47.86	48.43										
À.	Basic Materials	4.89	5.08	5.79										
4	Consumer Cyclical	20.08	11.71	14.17										
£	Financial Services	18.70	16.22	21.04					<b>[</b>					
b	Real Estate	6.37	14.85	7.43										
M	Sensitive	25.35	28.74	32.04										
	Communication Services	2.07	1.02	0.79										
•	Energy	3.69	6.28	6.57										
þ	Industrials	8.62	13.09	13.84										
2	Technology	10.97	8.35	10.84										
+	Defensive	24.61	23.39	19.54										
Ę	Consumer Defensive	5.09	5.62	5.69										
1	Healthcare	6.17	6.59	7.19			Ė							
?	Utilities	13.35	11.18	6.66			: 1							

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
	1.23	1.23	15.03	Utilities
	1.13	2.35	22.56	Technology
→ Willis Towers Watson PLC	1.12	3.48	16.09	Financial Services
⊖ DTE Energy Co	1.11	4.59	13.95	Utilities
Eversource Energy	1.10	5.69	9.91	Utilities
⊕ FirstEnergy Corp	1.08	6.78	11.82	Utilities
⊕ M&T Bank Corp	1.01	7.79	10.40	Financial Services
⊖ Clorox Co	1.01	8.80	4.72	Consumer Defensive
⊖ Ball Corp	0.96	9.76	26.05	Consumer Cyclical
Royal Caribbean Cruises Ltd	0.94	10.70	17.93	Consumer Cyclical
Newmont Mining Corp	0.94	11.64	3.64	Basic Materials
⊕ American Water Works Co Inc	0.93	12.56	15.36	Utilities
	0.88	13.45	13.48	Utilities
	0.88	14.32	12.53	Financial Services
	0.87	15.19	25.51	Basic Materials

### Total Holdings 206



# Vanguard Real Estate Index Admiral VGSLX

Morningstar Category Real Estate Morningstar Index

S&P United States REIT TR USD

### Portfolio Manager(s)

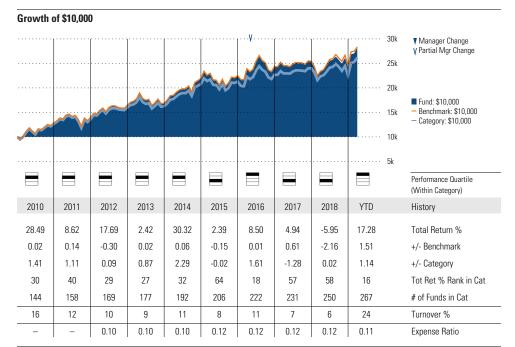
Gerard O'Reilly since 05-1996 Walter Nejman since 05-2016

#### **Quantitative Screens**

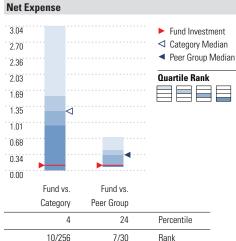
- Performance: The fund has finished in the Real Estate category's top three quartiles in 10 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 22.9 years.
- Net Expense: The fund's expense ratio of 0.11 is
   90.43% lower than the Real Estate category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.03	_	0.30
Beta	0.98	_	0.90
R-Squared	99.39	_	94.22
Standard Deviation	13.82	14.01	13.05
Sharpe Ratio	0.38	0.38	0.40
Tracking Error	1.11	-	3.11
Information Ratio	-0.11	-	-0.25
Up Capture Ratio	97.64	-	89.13
Down Capture Ratio	97.61	-	87.03

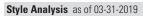
Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	40.39	38.46	36.08
Price/Book Ratio	2.39	2.42	2.60
Geom Avg Mkt Cap \$B	9.32	9.35	11.72
ROE	8.61	9.56	11.65



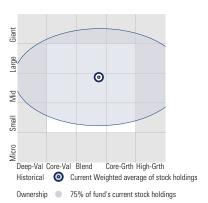
# Vanguard Real Estate Index Admiral VGSLX

#### **Morningstar Category** Morningstar Index Real Estate

S&P United States REIT TR USD



Morningstar Style Box™



### Style Breakdown

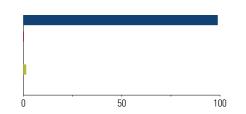
Equity

17 arge	2	2 mal
29	27	6
2	9	5

Value Blend Growth

Weight %

>50 25-50 10-25 0-10



Asset Allocation as of 03-31-2019

Total	100.00	100.00
Other	0.00	4.56
Cash	1.25	3.86
Bonds	0.00	3.52
Non-US Stocks	0.04	0.78
US Stocks	98.71	87.30
Asset Class	Net %	Cat%

	Fund	Bmark	Cat	Fund	•	Bench	mark	[] C	atego	ry A	verag	е		
Cyclical	89.63	99.13	94.62											
Basic Materials	2.08	0.00	0.58	()										
Consumer Cyclical	0.00	0.13	0.84	Ö										
Financial Services	0.00	0.00	0.10	Ŏ										
Real Estate	87.55	99.00	93.10											- [
✓ Sensitive	10.37	0.87	5.29											
Communication Services	9.47	0.00	4.45											
Energy	0.00	0.00	0.02	<u> </u>										
Industrials	0.90	0.87	0.50	Ŭ i										
Technology	0.00	0.00	0.32	İ										
→ Defensive	0.00	0.00	0.08	İ										
Consumer Defensive	0.00	0.00	0.00	ĺ										
Healthcare	0.00	0.00	0.03	<u> </u>										
Utilities	0.00	0.00	0.05	i										

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Real Estate II Index	11.00	11.00	_	_
⊕ American Tower Corp	6.65	17.65	24.57	Communication Svc
⊕ Simon Property Group Inc	4.32	21.97	9.69	Real Estate
⊕ Crown Castle International Corp	4.07	26.04	18.87	Real Estate
→ Prologis Inc	3.47	29.51	23.43	Real Estate
⊕ Equinix Inc	2.79	32.30	29.23	Real Estate
⊕ Public Storage	2.62	34.91	8.58	Real Estate
Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     ■     Welltower Inc     Welltower	2.23	37.15	13.05	Real Estate
⊕ Equity Residential	2.12	39.27	14.96	Real Estate
AvalonBay Communities Inc	2.12	41.40	16.20	Real Estate
⊕ Digital Realty Trust Inc	1.88	43.28	12.70	Real Estate
	1.74	45.02	10.26	Real Estate
◆ SBA Communications Corp	1.73	46.75	23.33	Communication Svc
⊕ Realty Income Corp	1.66	48.41	17.76	Real Estate
Boston Properties Inc	1.59	50.00	19.80	Real Estate

Total Holdings 190



## **Vanguard Target Retirement 2015 Inv** VTXVX

**Morningstar Category** Target-Date 2015

Morningstar Index Morningstar Lifetime Mod 2015 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

Performance: The fund has finished in the Target-Date 2015 category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 6.1 years.

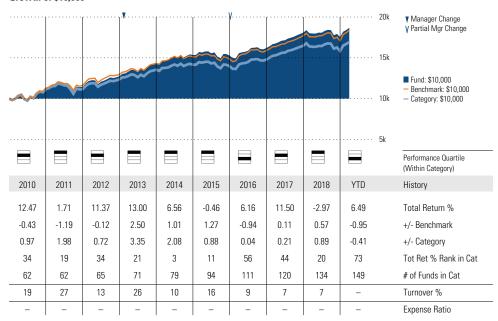
Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.13 is 81.94% lower than the Target-Date 2015 category average.

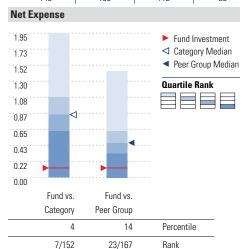
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3- Tear hisk wietrics			
	Fund	Bmark	Cat
Alpha	0.55	_	-0.06
Beta	0.89	_	0.97
R-Squared	97.99	_	94.17
Standard Deviation	4.39	4.89	4.90
Sharpe Ratio	1.11	1.03	0.98
Tracking Error	0.83	_	1.24
Information Ratio	-0.17	_	-0.19
Up Capture Ratio	93.25	_	94.97
Down Capture Ratio	85.71	_	93.14

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.82	18.03
Price/Book Ratio	2.19	2.17	2.27
Avg Eff Duration	5.78	7.24	4.31

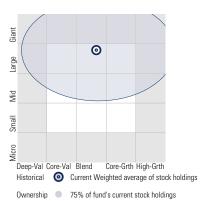


# Vanguard Target Retirement 2015 Inv VTXVX

Morningstar Index Morningstar Lifetime Mod 2015 TR USD **Morningstar Category** Target-Date 2015

## Style Analysis as of 03-31-2019

Morningstar Style Box™



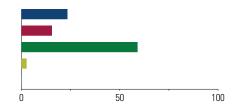
### Style Breakdown

Equity				Fixed Ir	ncome		Quality
26	25	25	Large				High
6	6	6	Mid				Mid
2	2	2	Small				Low
Value	Blend	Growth		Ltd Duratio	Mod	Ext	

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.13	3.00
Cash	2.46	4.78
Bonds	58.93	50.87
Non-US Stocks	15.27	14.73
US Stocks	23.21	26.63
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund ▼ Benchmark [] Category Average
وا	Cyclical	38.58	41.29	37.11	
ì.	Basic Materials	5.08	4.78	4.59	
•	Consumer Cyclical	11.72	10.87	11.31	
<u></u>	Financial Services	17.87	16.15	17.23	
à	Real Estate	3.91	9.49	3.98	
ŲF	Sensitive	38.50	35.89	38.56	
	Communication Services	3.41	3.76	3.27	
)	Energy	5.83	5.49	6.38	
Þ	Industrials	11.49	11.04	10.46	
1	Technology	17.77	15.60	18.45	
+	Defensive	22.92	22.81	24.32	
-	Consumer Defensive	7.84	7.90	8.04	
ř	Healthcare	11.88	11.20	12.98	
1	Utilities	3.20	3.71	3.30	

<b>Top 6 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Bond Market II ldx Inv	_	33.85	33.85	_	_
─ Vanguard Total Stock Mkt Idx Inv	_	23.46	57.31	_	-
─ Vanguard Total Intl Stock Index Inv	_	15.65	72.96	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	14.39	87.36	_	_
⊕ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	-	12.61	99.96	-	_
— ⊝ Cmt Market Liquidity Rate	-	0.04	100.00	_	_

### Total Holdings 6



## Vanguard Target Retirement 2020 Inv VTWNX

Morningstar Category Target-Date 2020 Morningstar Index Morningstar Lifetime Mod 2020 TR USD

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### **Quantitative Screens**

❷ Performance: The fund has finished in the Target-Date
2020 category's top three quartiles in 10 of the 10 years it's
been in existence.

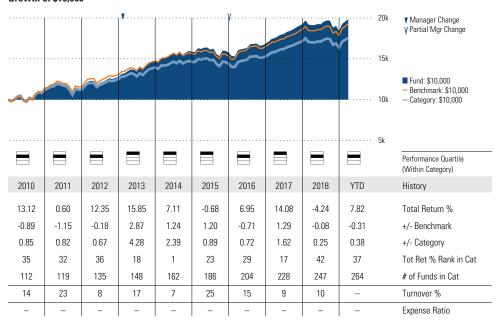
Management: The fund's management has been in place for 6.1 years.

Net Expense: The fund's expense ratio of 0.13 is 83.33% lower than the Target-Date 2020 category average.

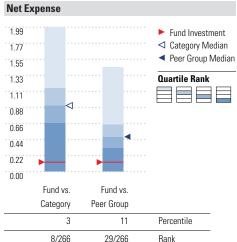
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	0.21	_	-0.19
Beta	1.01	_	0.93
R-Squared	97.39	_	92.47
Standard Deviation	5.58	5.44	5.28
Sharpe Ratio	1.07	1.05	0.95
Tracking Error	0.90	_	1.51
Information Ratio	0.34	_	-0.40
Up Capture Ratio	103.04	_	91.98
Down Capture Ratio	101.02	-	94.25

Fund	Bmark	Cat
17.76	17.75	17.87
2.19	2.15	2.22
6.09	7.97	5.46
	17.76 2.19	17.76 17.75 2.19 2.15



# Vanguard Target Retirement 2020 Inv VTWNX

Quality High MidLow

**Morningstar Category** Target-Date 2020

**Morningstar Index** Morningstar Lifetime Mod 2020 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

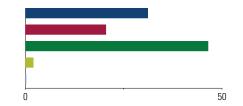
Equity				Fixed Income
26	25	25	Large	
6	6	6	Mid	
2	2	2	Small	
1/ 1	DI .	0 1		Let MA I

Value Blend Growth

Mod I td Duration Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.12	2.95
Cash	1.94	4.48
Bonds	46.43	49.67
Non-US Stocks	20.43	13.79
US Stocks	31.08	29.11
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund Benchmark Category Average
ŀ	Cyclical	38.60	41.32	38.49	
ů.	Basic Materials	5.08	4.87	4.31	
<b>A</b>	Consumer Cyclical	11.74	10.94	11.93	
÷	Financial Services	17.87	16.27	17.63	
À	Real Estate	3.91	9.24	4.62	T T
M	Sensitive	38.50	35.93	38.20	
₫	Communication Services	3.41	3.70	3.11	
ð	Energy	5.82	5.52	5.45	
Ф	Industrials	11.50	11.11	10.66	
	Technology	17.77	15.60	18.98	
<b>→</b>	Defensive	22.90	22.77	23.31	
=	Consumer Defensive	7.84	7.92	7.64	
٠	Healthcare	11.87	11.13	12.56	
•	Utilities	3.19	3.72	3.11	

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
O Vanguard Total Stock Mkt Idx Inv	_	31.41	31.41	_	_
○ Vanguard Total Bond Market II Idx Inv	_	29.32	60.73	_	_
─ Vanguard Total Intl Stock Index Inv	_	20.94	81.67	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	12.37	94.04	_	_
⊕ Vanguard Shrt-Term Infl-Prot Sec ldx Inv	-	5.96	100.00	-	-
	_	0.00	100.00	_	_

Total Holdings 6



## Vanguard Target Retirement 2025 Inv VTTVX

**Morningstar Category** Target-Date 2025

Morningstar Index Morningstar Lifetime Mod 2025 TR USD

Turnover %

Expense Ratio

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### Quantitative Screens

Performance: The fund has finished in the Target-Date 2025 category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 6.1 years.

Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.13 is 83.12% lower than the Target-Date 2025 category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

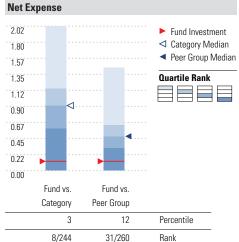
#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change 20k ■ Fund: \$10,000 - Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 13.84 -0.37 13.29 18.14 7.17 -0.85 7.48 15.94 -5.15 8.82 Total Return % -0.61 -0.38 1.86 1.21 -0.91 1.40 -0.25 -0.14 -1.31 1.13 +/- Benchmark 2.84 2.10 0.55 1.69 0.26 0.74 0.75 1.27 0.19 0.38 +/- Category 37 16 43 24 4 24 23 21 42 27 Tot Ret % Rank in Cat 88 98 134 144 187 # of Funds in Cat 109 167 206 223 242



15

10

8



31/260 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year hisk ivietrics			
	Fund	Bmark	Cat
Alpha	-0.02	-	-0.41
Beta	1.04	-	0.99
R-Squared	98.06	-	95.81
Standard Deviation	6.44	6.16	6.23
Sharpe Ratio	1.05	1.06	0.97
Tracking Error	0.92	-	1.38
Information Ratio	0.28	-	-0.40
Up Capture Ratio	104.20	-	96.63
Down Capture Ratio	105.90	-	101.88

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.78	17.67	17.99
Price/Book Ratio	2.19	2.12	2.26
Avg Eff Duration	6.56	8.54	5.45



11

23

9

16

7

24

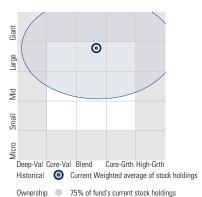
# Vanguard Target Retirement 2025 Inv VTTVX

Quality

**Morningstar Index** Morningstar Lifetime Mod 2025 TR USD **Morningstar Category** Target-Date 2025

Style Analysis as of 03-31-2019

Morningstar Style Box™

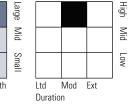




Equity 26



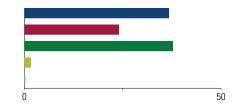
Value Blend Growth



Fixed Income

Weight % >50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100 00	100 00
Other	0.12	3.82
Cash	1.54	3.74
Bonds	37.66	38.46
Non-US Stocks	23.97	18.57
US Stocks	36.71	35.41
Asset Class	Net %	Cat%

				_	
		Fund	Bmark	Cat	Fund   Benchmark Category Average
<sub>Մ</sub>	Cyclical	38.56	41.27	39.14	
A.	Basic Materials	5.07	4.97	4.42	
A	Consumer Cyclical	11.73	11.03	11.81	
<del>,</del>	Financial Services	17.86	16.43	17.35	
ŵ	Real Estate	3.90	8.84	5.56	
Ma.	Sensitive	38.52	35.98	37.83	
	Communication Services	3.40	3.67	3.12	
ð	Energy	5.82	5.55	5.43	
Ф	Industrials	11.50	11.16	10.89	
	Technology	17.80	15.60	18.39	
<b>→</b>	Defensive	22.90	22.74	23.02	
=	Consumer Defensive	7.83	7.94	7.61	
+	Healthcare	11.88	11.08	12.31	
•	Utilities	3.19	3.72	3.10	

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
○ Vanguard Total Stock Mkt Idx Inv	_	37.10	37.10	_	_
⊕ Vanguard Total Bond Market II ldx Inv	-	26.87	63.98	_	-
⊕ Vanguard Total Intl Stock Index Inv	-	24.56	88.54	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	11.43	99.97	_	_
	_	0.03	100.00	_	_

### Total Holdings 5



## Vanguard Target Retirement 2030 Inv VTHRX

Morningstar Category Target-Date 2030 Morningstar Index Morningstar Lifetime Mod 2030 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

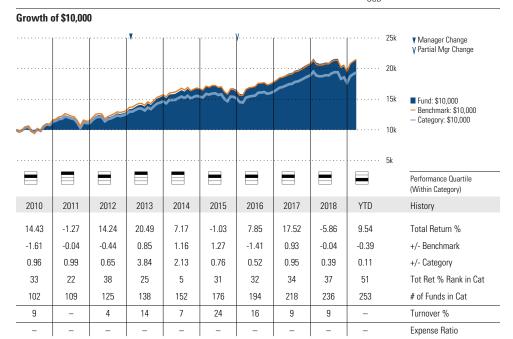
❷ Performance: The fund has finished in the Target-Date
2030 category's top three quartiles in 10 of the 10 years it's
been in existence.

Management: The fund's management has been in place for 6.1 years.

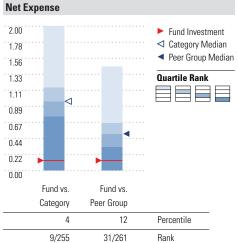
Net Expense: The fund's expense ratio of 0.14 is
 82.72% lower than the Target-Date 2030 category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







2-1 cai mor memos			
	Fund	Bmark	Cat
Alpha	-0.13	_	-0.57
Beta	1.01	_	0.99
R-Squared	98.69	_	94.78
Standard Deviation	7.18	7.09	7.22
Sharpe Ratio	1.04	1.06	0.95
Tracking Error	0.82	_	1.53
Information Ratio	-0.11	_	-0.47
Up Capture Ratio	100.61	_	96.71
Down Capture Ratio	103.10	_	103.57

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.78	17.60	17.87
Price/Book Ratio	2.19	2.10	2.20
Avg Eff Duration	6.56	8.89	5.54



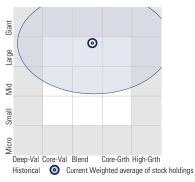
# Vanguard Target Retirement 2030 Inv VTHRX

**Morningstar Category** Target-Date 2030

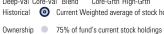
**Morningstar Index** Morningstar Lifetime Mod 2030 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™







Asset Allocation as of 03-31-2019



### Style Breakdown

Weight %

Equity			
26	25	25	Large
6	6	6	Mid
2	2	2	Small



Value Blend Growth

>50 25-50 10-25 0-10

		Fund	Bmark	Cat	Fund ▼ Benchmark [] Category Average
_					runu • benchinark    Category Average
<del>ا</del>	Cyclical	38.57	41.23	39.71	
	Basic Materials	5.06	5.07	4.48	, i i i i i i i i i i i i i i i i i i i
<b>-</b>	Consumer Cyclical	11.74	11.11	11.78	
<u> </u>	Financial Services	17.86	16.60	17.35	
b	Real Estate	3.91	8.45	6.10	
NF	Sensitive	38.53	36.03	37.57	
	Communication Services	3.41	3.60	3.11	
•	Energy	5.82	5.58	5.42	
þ	Industrials	11.49	11.23	10.92	
1	Technology	17.81	15.62	18.12	
+	Defensive	22.91	22.73	22.73	
Ę	Consumer Defensive	7.83	7.96	7.49	
ř	Healthcare	11.90	11.03	12.13	
2	Utilities	3.18	3.74	3.11	

50

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Total Stock Mkt Idx Inv	_	41.72	41.72	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	27.37	69.10	_	_
⊕ Vanguard Total Bond Market II Idx Inv	-	21.70	90.80	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	9.19	99.99	_	_
	_	0.01	100.00	_	_

#### Total Holdings 5



## Vanguard Target Retirement 2035 Inv VTTHX

Morningstar Category Target-Date 2035 Morningstar Index Morningstar Lifetime Mod 2035 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

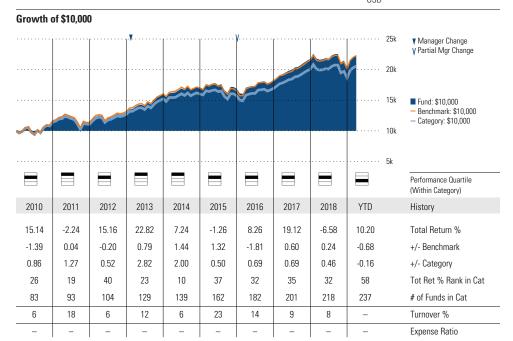
❷ Performance: The fund has finished in the Target-Date
2035 category's top three quartiles in 10 of the 10 years it's
been in existence.

Management: The fund's management has been in place for 6.1 years.

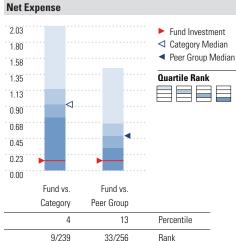
Net Expense: The fund's expense ratio of 0.14 is 82.05% lower than the Target-Date 2035 category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







2-1 cai mor memos			
	Fund	Bmark	Cat
Alpha	-0.09	_	-0.63
Beta	0.98	_	0.99
R-Squared	98.98	_	97.56
Standard Deviation	7.92	8.07	8.11
Sharpe Ratio	1.02	1.05	0.95
Tracking Error	0.82	_	1.33
Information Ratio	-0.42	_	-0.60
Up Capture Ratio	97.77	_	96.27
Down Capture Ratio	99.54	_	102.04

Portfolio Metrics								
Fund	Bmark	Cat						
17.77	17.52	18.00						
2.19	2.08	2.24						
6.56	8.97	5.73						
	17.77	17.77 17.52 2.19 2.08						



# Vanguard Target Retirement 2035 Inv VTTHX

**Morningstar Category** Target-Date 2035

**Morningstar Index** Morningstar Lifetime Mod 2035 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™





Equity				Fixed Income
26	25	25	Large	
6	6	6	Mid	
2	2	2	Small	
	DI .	0 1		Lil MA L

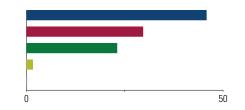
Value Blend Growth

Quality High MidLow Mod

I td Duration Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019





Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund Benchmark Category Average
<u></u>	Cyclical	38.55	41.22	39.92	
A.	Basic Materials	5.06	5.16	4.46	
A	Consumer Cyclical	11.73	11.18	11.80	
æ	Financial Services	17.85	16.75	17.35	<u> </u>
<b>fi</b>	Real Estate	3.91	8.13	6.31	
W	Sensitive	38.52	36.08	37.51	
d	Communication Services	3.41	3.57	3.08	
•	Energy	5.81	5.61	5.38	<b></b> j
Ф	Industrials	11.49	11.28	10.88	
	Technology	17.81	15.62	18.17	
<b>→</b>	Defensive	22.92	22.70	22.56	
Ħ	Consumer Defensive	7.84	7.99	7.57	
٠	Healthcare	11.89	10.97	11.91	
•	Utilities	3.19	3.74	3.08	
					0% 5 10 15 20 25 30 35 40 45

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
① Vanguard Total Stock Mkt ldx Inv	_	46.25	46.25	_	_
Vanguard Total Intl Stock Index Inv	_	30.33	76.58	-	-
① Vanguard Total Bond Market II ldx Inv	-	16.46	93.05	_	_
	-	6.94	99.98	_	_
○ Cmt Market Liquidity Rate	-	0.02	100.00	_	-

#### Total Holdings 5



## Vanguard Target Retirement 2040 Inv VFORX

Morningstar Category Target-Date 2040 Morningstar Index Morningstar Lifetime Mod 2040 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

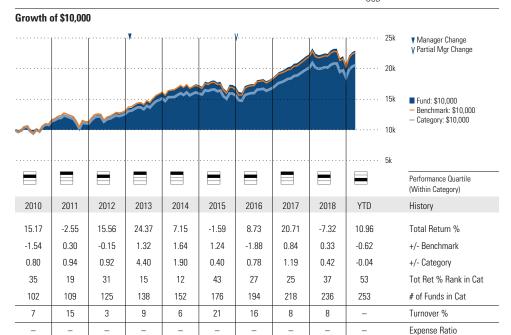
Q Performance: The fund has finished in the Target-Date 2040 category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 6.1 years.

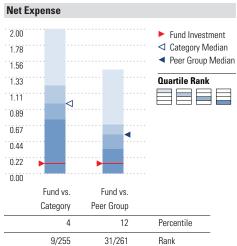
Net Expense: The fund's expense ratio of 0.14 is 82.93% lower than the Target-Date 2040 category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







3-Year KISK Wietrics			
	Fund	Bmark	Cat
Alpha	0.00	_	-0.56
Beta	0.98	_	0.96
R-Squared	99.08	_	95.35
Standard Deviation	8.66	8.82	8.71
Sharpe Ratio	1.02	1.02	0.93
Tracking Error	0.85	_	1.60
Information Ratio	-0.27	_	-0.67
Up Capture Ratio	98.44	_	94.39
Down Capture Ratio	99.32	_	99.69

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.44	17.85
Price/Book Ratio	2.19	2.06	2.20
Avg Eff Duration	6.55	9.04	5.69



# Vanguard Target Retirement 2040 Inv VFORX

Quality High MidLow

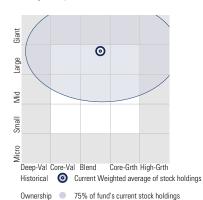
Duration

**Morningstar Category** Target-Date 2040

**Morningstar Index** Morningstar Lifetime Mod 2040 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

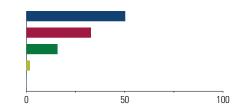
Equity				Fixed	Income
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	Mod

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.07	2.83
Cash	1.54	2.72
Bonds	15.66	12.94
Non-US Stocks	32.61	29.16
US Stocks	50.11	52.37
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund	d t	Bench	mark	Categ	ory Ave	erage		
Ն	Cyclical	38.57	41.30	40.24								<b>-</b> [	
A.	Basic Materials	5.07	5.25	4.46									
<b>A</b>	Consumer Cyclical	11.73	11.22	11.78									
<del>,</del>	Financial Services	17.87	16.85	17.07			- :						
<b>fi</b>	Real Estate	3.90	7.98	6.93			<b>'</b>						
M	Sensitive	38.51	36.10	37.30					- :	- :	- :		
	Communication Services	3.41	3.57	3.03		0							
•	Energy	5.82	5.64	5.31									
Ф	Industrials	11.49	11.29	10.94									
	Technology	17.79	15.60	18.02						_ :			
<b>→</b>	Defensive	22.92	22.60	22.45						)			
=	Consumer Defensive	7.84	7.99	7.42			0						
٠	Healthcare	11.89	10.88	11.96									
•	Utilities	3.19	3.73	3.07		ſ							

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	50.64	50.64	_	_
◆ Vanguard Total Intl Stock Index Inv	-	33.42	84.06	_	_
⊕ Vanguard Total Bond Market II Idx Inv	-	11.25	95.31	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	4.69	99.99	-	_
	_	0.01	100.00	_	_

### Total Holdings 5



## Vanguard Target Retirement 2045 Inv VTIVX

**Morningstar Category** Target-Date 2045

Morningstar Index Morningstar Lifetime Mod 2045 TR USD

Expense Ratio

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### Quantitative Screens

Performance: The fund has finished in the Target-Date 2045 category's top three quartiles in 9 of the 10 years it's been in existence.

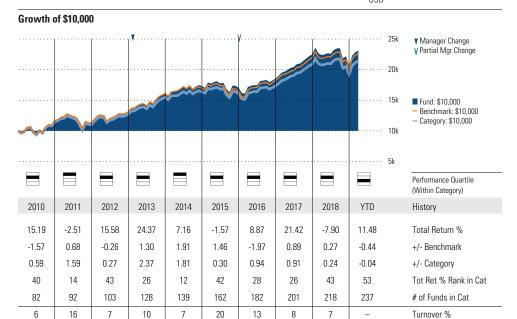
Management: The fund's management has been in place for 6.1 years.

Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

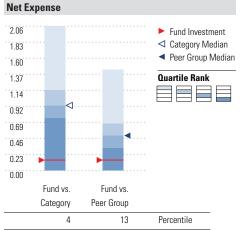
Net Expense: The fund's expense ratio of 0.15 is 81.01% lower than the Target-Date 2045 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.







33/256 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-1 cai mok memes			
	Fund	Bmark	Cat
Alpha	-0.09	_	-0.57
Beta	0.99	_	0.98
R-Squared	99.14	_	97.88
Standard Deviation	9.14	9.19	9.14
Sharpe Ratio	0.99	1.01	0.93
Tracking Error	0.85	_	1.36
Information Ratio	-0.25	_	-0.62
Up Capture Ratio	98.99	_	96.00
Down Capture Ratio	100.30	_	100.70

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.36	18.17
Price/Book Ratio	2.19	2.04	2.23
Avg Eff Duration	6.54	-	5.80



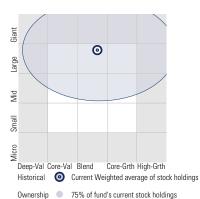
10/239

# Vanguard Target Retirement 2045 Inv VTIVX

Morningstar Category Target-Date 2045 **Morningstar Index** Morningstar Lifetime Mod 2045 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

Weight %

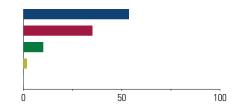
Lquity			
26	25	25	Large
6	6	6	Mid
2	2	2	Small

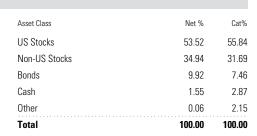


Value Blend Growth

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019





Sec	ctor Weighting as of 03-3	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark [] Category Average
<u></u>	Cyclical	38.57	41.53	40.67	
æ.	Basic Materials	5.07	5.33	4.27	
A	Consumer Cyclical	11.73	11.25	11.45	
<del>,</del>	Financial Services	17.86	16.94	16.27	
ŵ	Real Estate	3.91	8.01	8.68	
W	Sensitive	38.52	36.03	36.63	
	Communication Services	3.41	3.55	2.90	
•	Energy	5.83	5.65	5.30	
Ф	Industrials	11.49	11.29	10.21	
	Technology	17.79	15.54	18.22	
<b>→</b>	Defensive	22.92	22.45	22.70	
Ħ	Consumer Defensive	7.84	7.97	7.42	
+	Healthcare	11.88	10.76	12.24	
•	Utilities	3.20	3.72	3.04	
					0% 5 10 15 20 25 30 35 40 4

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt ldx Inv	_	54.09	54.09	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	35.81	89.90	_	_
⊕ Vanguard Total Bond Market II ldx Inv	-	7.18	97.08	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	2.91	99.99	_	_
	_	0.01	100.00	_	_

### Total Holdings 5



## Vanguard Target Retirement 2050 Inv VFIFX

Morningstar Category Target-Date 2050 Morningstar Index Morningstar Lifetime Mod 2050 TR USD

Expense Ratio

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

Performance: The fund has finished in the Target-Date
 2050 category's top three quartiles in 9 of the 10 years it's
 been in existence.

Management: The fund's management has been in place for 6.1 years.

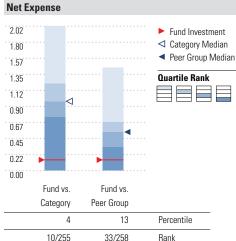
Net Expense: The fund's expense ratio of 0.15 is
 81.93% lower than the Target-Date 2050 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change ■ Fund: \$10,000 - Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 15.20 -2.54 15.58 24.34 7.18 -1.58 8.85 21.39 -7.90 11.50 Total Return % -1.58 0.93 -0.36 1.51 2.18 1.61 -2.04 0.61 0.51 -0.50 +/- Benchmark 0.67 3.32 1.76 0.43 1.28 0.51 0.63 0.72 0.51 -0.16 +/- Category 37 14 44 30 16 45 29 38 37 59 Tot Ret % Rank in Cat 84 98 137 152 176 194 # of Funds in Cat 116 218 236 253 10 15 4 9 7 18 12 6 7 Turnover %





	Fund	Bmark	Cat
Alpha	-0.02	_	-0.48
Beta	0.98	_	0.97
R-Squared	99.14	_	95.37
Standard Deviation	9.15	9.30	9.27
Sharpe Ratio	0.99	1.00	0.92
Tracking Error	0.87	_	1.67
Information Ratio	-0.27	_	-0.55
Up Capture Ratio	98.45	_	95.78
Down Capture Ratio	99.28	_	100.37

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.28	18.03
Price/Book Ratio	2.19	2.02	2.21
Avg Eff Duration	6.55	_	5.63



# Vanguard Target Retirement 2050 Inv VFIFX

Quality High Μid Low

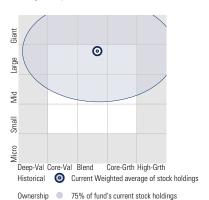
Mod

Duration

**Morningstar Index** Morningstar Lifetime Mod 2050 TR USD **Morningstar Category** Target-Date 2050

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity				Fixed In	come
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Rland	Crowth		Ltd	Mod

Value Blend Growth

Weight % >50 25-50 10-25 0-10



50

Asset Allocation as of 03-31-2019

Asset Class Net % Cat% US Stocks 53.58 56.31 Non-US Stocks 34.99 31.68 Bonds 9.82 6.57 Cash 1.54 2.53 Other 0.06 2.91

100.00

100.00

Sec	ctor Weighting as of 03-3	31-2019												
		Fund	Bmark	Cat	Fund	,	Bench	mark	Cate	gory Ave	erage			
<u></u>	Cyclical	38.58	41.77	40.15										_
A	Basic Materials	5.07	5.41	4.37			_							
A	Consumer Cyclical	11.73	11.25	11.44					_ :					
<b>F</b>	Financial Services	17.87	16.99	15.87					1					
俞	Real Estate	3.91	8.12	8.47										
W	Sensitive	38.51	35.95	37.10										
	Communication Services	3.41	3.55	2.92		ľ								
•	Energy	5.82	5.65	5.46										
Ф	Industrials	11.49	11.28	10.34										
	Technology	17.79	15.47	18.38				.,	<b>[</b> ]					
<b>→</b>	Defensive	22.92	22.29	22.75										
Ħ	Consumer Defensive	7.85	7.95	7.35			)							
+	Healthcare	11.88	10.64	12.39			[							
•	Utilities	3.19	3.70	3.01										
					0%	5	10	15	20	25	30	35	40	4

100

Total

#### **Top 5 Holdings** as of 03-31-2019 Maturity Date % Net Asset Cumulative % YTD Return % Name Morningstar Sector Vanguard Total Stock Mkt Idx Inv 54.15 54.15 Vanguard Total Intl Stock Index Inv 35.85 90.00 Vanguard Total Bond Market II ldx Inv 7.08 97.09 Yanguard Total Intl Bd Idx Investor 2.91 100.00 0.00 100.00 Cmt Market Liquidity Rate

#### Total Holdings 5



## Vanguard Target Retirement 2055 Inv VFFVX

Morningstar Category Target-Date 2055 Morningstar Index Morningstar Lifetime Mod 2055 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

❷ Performance: The fund has finished in the Target-Date
2055 category's top three quartiles in 8 of the 8 years it's
been in existence.

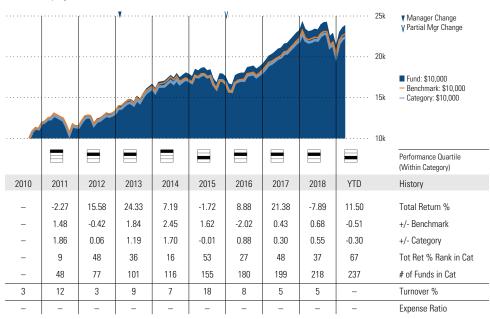
Management: The fund's management has been in place for 6.1 years.

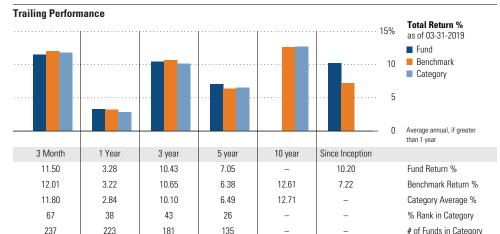
Net Expense: The fund's expense ratio of 0.15 is
 81.25% lower than the Target-Date 2055 category average.

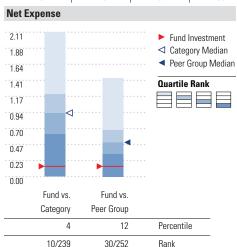
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	0.05	_	-0.51
Beta	0.97	_	0.99
R-Squared	99.17	_	97.75
Standard Deviation	9.13	9.33	9.36
Sharpe Ratio	0.99	0.99	0.93
Tracking Error	0.87	_	1.43
Information Ratio	-0.25	_	-0.48
Up Capture Ratio	98.25	_	97.15
Down Capture Ratio	98.58	_	101.39

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.75	17.19	17.92
Price/Book Ratio	2.19	2.00	2.19
Avg Eff Duration	6.54	_	5.94



# Vanguard Target Retirement 2055 Inv VFFVX

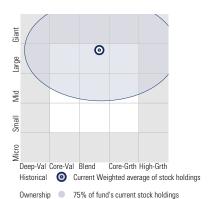
Quality High Mid

**Morningstar Category** Target-Date 2055

Morningstar Index Morningstar Lifetime Mod 2055 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



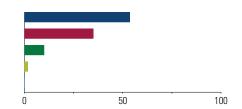
### Style Breakdown

	Equity				rixeu II	icome	
	26	25	25	Large			
	6	6	6	Mid			
	2	2	2	Small			
,	Value	Blend	Growth		Ltd Duratio	Mod n	Ext

Eivad Incomo

Weight % >50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.06	1.91
Cash	1.60	2.64
Bonds	9.90	6.24
Non-US Stocks	34.94	33.36
US Stocks	53.48	55.85
Asset Class	Net %	Cat%

	ctor Weighting as of 03-3			_	n
		Fund	Bmark	Cat	Fund   Benchmark Category Average
b	Cyclical	38.58	42.02	40.52	
ė.	Basic Materials	5.07	5.48	4.34	
<b>A</b>	Consumer Cyclical	11.73	11.25	11.38	
	Financial Services	17.87	17.05	16.34	
æ	Real Estate	3.91	8.24	8.46	
M	Sensitive	38.53	35.86	36.93	
	Communication Services	3.41	3.54	2.93	
ð	Energy	5.83	5.65	5.48	
Ф	Industrials	11.50	11.26	10.22	
	Technology	17.79	15.41	18.30	
<b>→</b>	Defensive	22.90	22.11	22.56	
=	Consumer Defensive	7.83	7.92	7.44	
٠	Healthcare	11.88	10.51	12.16	
•	Utilities	3.19	3.68	2.96	

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	54.06	54.06	_	_
	_	35.80	89.86	_	_
	_	7.17	97.03	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	2.91	99.93	_	_
Cmt Market Liquidity Rate	_	0.07	100.00	_	_

### Total Holdings 5



## Vanguard Target Retirement 2060 Inv VTTSX

Morningstar Category Target-Date 2060+ Morningstar Index Morningstar Lifetime Mod 2060 TR USD

### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### **Quantitative Screens**

❷ Performance: The fund has finished in the Target-Date
2060+ category's top three quartiles in 6 of the 6 years it's
been in existence.

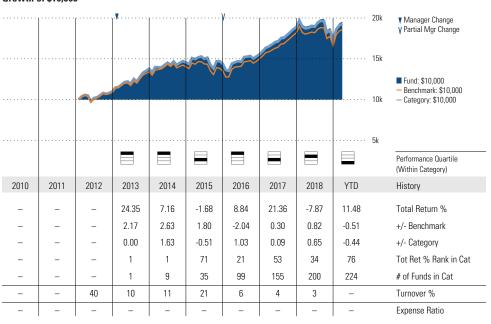
Management: The fund's management has been in place for 6.1 years.

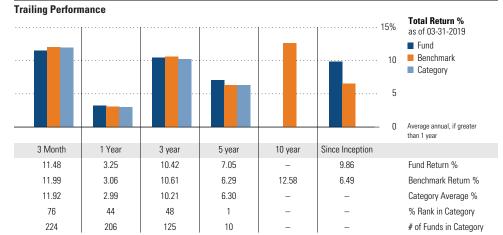
Q Net Expense: The fund's expense ratio of 0.15 is 81.93% lower than the Target-Date 2060+ category average.

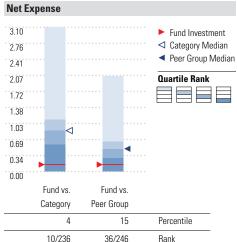
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







3-Year RISK Wietrics			
	Fund	Bmark	Cat
Alpha	0.08	_	-0.45
Beta	0.97	_	1.00
R-Squared	99.08	_	97.54
Standard Deviation	9.14	9.33	9.48
Sharpe Ratio	0.99	0.99	0.93
Tracking Error	0.91	_	1.52
Information Ratio	-0.21	-	-0.34
Up Capture Ratio	98.37	-	98.55
Down Capture Ratio	98.53	-	102.45

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.75	17.12	-
Price/Book Ratio	2.18	1.99	-
Avg Eff Duration	6.54	_	5.86



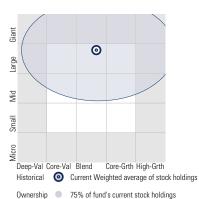
# Vanguard Target Retirement 2060 Inv VTTSX

**Morningstar Category** Target-Date 2060+

**Morningstar Index** Morningstar Lifetime Mod 2060 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity				Fixed	Income
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	Mod

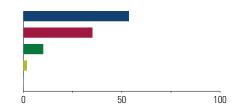
High MidLow Mod I td Duration

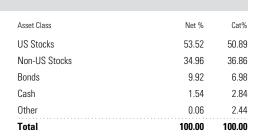
Quality

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019





		Fund	Bmark	Cat	Fund	ı t	Bench	mark	Categ	jory Ave	erage			_
<sub>Մ</sub>	Cyclical	38.58	42.29	39.57										'
å.	Basic Materials	5.07	5.55	4.92		<b>—</b> ['								
<b>A</b>	Consumer Cyclical	11.73	11.26	11.57		-								
<del>,</del>	Financial Services	17.87	17.10	16.76										
<b>fi</b>	Real Estate	3.91	8.38	6.32			•							
W	Sensitive	38.51	35.77	37.74								- 1	0	
	Communication Services	3.41	3.54	3.21		0								
ð	Energy	5.82	5.65	5.84										
Ф	Industrials	11.49	11.23	10.81										
	Technology	17.79	15.35	17.88				- '						
<b>→</b>	Defensive	22.92	21.93	22.70						0				
=	Consumer Defensive	7.84	7.90	7.78			(							
+	Healthcare	11.88	10.37	11.88										
•	Utilities	3.20	3.66	3.04		<b>n</b> ' i								

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	54.09	54.09	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	35.82	89.91	_	_
◆ Vanguard Total Bond Market II Idx Inv	-	7.18	97.09	_	_
	_	2.91	100.00	-	_
Cmt Market Liquidity Rate	_	0.00	100.00	_	_

### Total Holdings 5



## Vanguard Target Retirement 2065 Inv VLXVX

Morningstar Category Target-Date 2060+ Morningstar Index Morningstar Lifetime Mod 2060 TR USD

#### Portfolio Manager(s)

William Coleman since 07-2017 Walter Nejman since 07-2017

#### **Quantitative Screens**

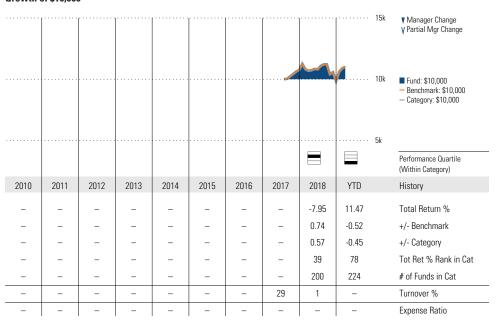
The Performance screen is not applicable for funds with less than three years of data.

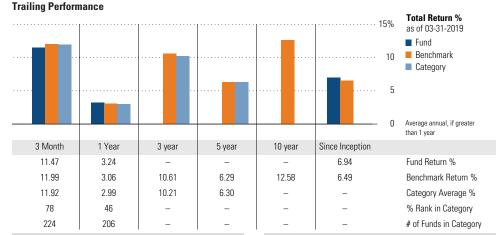
- × Management: The fund's management team has been in place for less than three years.
- Net Expense: The fund's expense ratio of 0.15 is 81.93% lower than the Target-Date 2060+ category average.

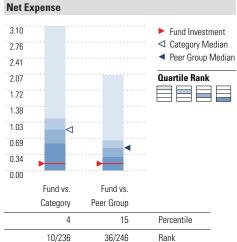
#### **Morningstar Investment Management LLC Analysis**

This fund fails our management tenure screen due to the inception of the new 2065 target date fund. This fund is managed by the same team as the full target date series, so we are comfortable with this screen failure.

### Growth of \$10,000







3-1 cai hisk menics			
	Fund	Bmark	Cat
Alpha	_	_	-0.45
Beta	_	_	1.00
R-Squared	_	_	97.54
Standard Deviation	_	9.33	9.48
Sharpe Ratio	_	0.99	0.93
Tracking Error	_	_	1.52
Information Ratio	_	_	-0.34
Up Capture Ratio	_	_	98.55
Down Capture Ratio	_	_	102.45

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	_	17.12	_
Price/Book Ratio	_	1.99	_
Avg Eff Duration	6.55	_	5.86



# Vanguard Target Retirement 2065 Inv VLXVX

Asset Allocation as of 03-31-2019

**Morningstar Category** Target-Date 2060+

**Morningstar Index** Morningstar Lifetime Mod 2060 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™

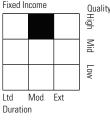




25 26 6 6 6

Large Mid 2 2 2

Growth



### Equity



end

Weight %

>50 25-50 10-25 0-10

j	50	100	Total	100.00	100.00
			Other	0.06	2.44
			Cash	1.54	2.84
			Bonds	9.77	6.98
			Non-US Stocks	35.02	36.86
			US Stocks	53.60	50.89
			Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund		Bench	mark	Cated	gory Ave	rane			
l.	Cyclical	38.57	42.29	39.57	Turic		Donon	inark	ll oato	301 y 7 W C	nago			1
	Basic Materials	5.07	5.55	4.92		<b>"</b>								
<b>£</b>	Consumer Cyclical	11.73	11.26	11.57										
	Financial Services	17.87	17.10	16.76		- :								
à	Real Estate	3.90	8.38	6.32			•							
JF.	Sensitive	38.53	35.77	37.74					- :	:	- :	- 1	0	
	Communication Services	3.41	3.54	3.21		0								
)	Energy	5.83	5.65	5.84										
<b>}</b>	Industrials	11.50	11.23	10.81										
3	Technology	17.79	15.35	17.88					0					
+	Defensive	22.91	21.93	22.70						0				
Ę	Consumer Defensive	7.84	7.90	7.78			0							
1	Healthcare	11.88	10.37	11.88										
1	Utilities	3.19	3.66	3.04		]								

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	54.17	54.17	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	35.88	90.05	_	_
⊕ Vanguard Total Bond Market II ldx Inv	_	7.05	97.10	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	2.90	100.00	_	_
○ Cmt Market Liquidity Rate	_	0.00	100.00	_	_

### Total Holdings 5



## Vanguard Target Retirement Income Inv VTINX

Morningstar Category
Target-Date Retirement

Morningstar Index Morningstar Lifetime Mod Incm TR USD

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### **Quantitative Screens**

Performance: The fund has finished in the Target-Date Retirement category's top three quartiles in 9 of the 10 years it's been in existence.

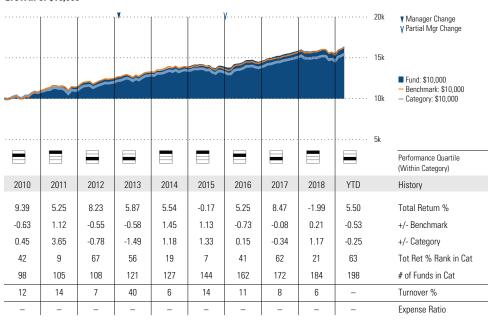
Management: The fund's management has been in place for 6.1 years.

Net Expense: The fund's expense ratio of 0.12 is
 84.62% lower than the Target-Date Retirement category average.

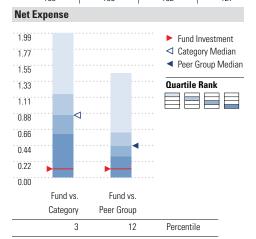
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







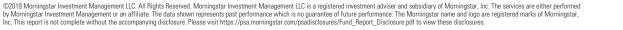
Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

27/226

7/200

3-1 car misk menics			
	Fund	Bmark	Cat
Alpha	0.33	-	-0.27
Beta	0.87	-	0.96
R-Squared	95.23	-	90.42
Standard Deviation	3.45	3.86	3.89
Sharpe Ratio	1.02	1.00	0.86
Tracking Error	0.90	-	1.30
Information Ratio	-0.37	-	-0.40
Up Capture Ratio	92.80	-	93.20
Down Capture Ratio	91.25	_	97.91

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	18.03	17.72
Price/Book Ratio	2.19	2.24	2.19
Avg Eff Duration	5.66	4.69	5.45



Rank



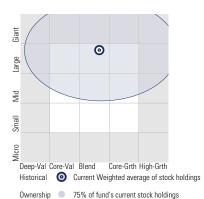
# Vanguard Target Retirement Income Inv VTINX

Morningstar Category
Target-Date Retirement

**Morningstar Index** Morningstar Lifetime Mod Incm TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

Lquity			
26	25	25	Large
6	6	6	Mid
2	2	2	Small

Value Blend Growth

Fixed Income

Quality

High

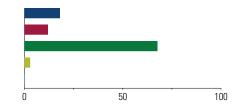
Mid

Ltd Mod Ext

Duration

Weight % >50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Asset Class Net % Cat% US Stocks 17.89 20.10 Non-US Stocks 11.73 10.78 Bonds 67.51 60.15 Cash 2.75 6.41 Other 2.55 0.13 Total 100.00 100.00

Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark   Category Average
<sub>Մ</sub>	Cyclical	38.58	41.05	39.11	
Å.	Basic Materials	5.08	4.56	4.61	
A	Consumer Cyclical	11.74	10.77	11.76	
æ	Financial Services	17.87	15.92	17.02	
<b>fi</b>	Real Estate	3.89	9.80	5.72	
W	Sensitive	38.52	35.92	37.89	
	Communication Services	3.42	3.80	3.20	
ð	Energy	5.82	5.44	5.55	
Ф	Industrials	11.51	10.94	10.94	
	Technology	17.77	15.74	18.20	
<b>→</b>	Defensive	22.91	23.04	23.00	
Ħ	Consumer Defensive	7.85	7.88	7.68	
+	Healthcare	11.88	11.42	12.12	
•	Utilities	3.18	3.74	3.20	
					0% 5 10 15 20 25 30 35 40 45

<b>Top 6 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Total Bond Market II Idx Inv	_	37.44	37.44	_	_
─ Vanguard Total Stock Mkt Idx Inv	_	18.08	55.52	_	-
⊕ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	_	16.63	72.15	_	-
⊕ Vanguard Total Intl Bd Idx Investor	_	15.80	87.95	_	-
○ Vanguard Total Intl Stock Index Inv	_	12.02	99.96	_	_
	_	0.04	100.00	_	_

### Total Holdings 6

