# American Funds American Balanced R6 RLBGX

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

Fauity

Morningstar Mod Tgt Risk TR USD

Turnover %

Expense Ratio

#### Portfolio Manager(s)

John Smet since 01-1997
Hilda Applbaum since 01-1999
Gregory Johnson since 03-2003
James Mulally since 03-2006
Alan Berro since 03-2006
Jeffrey Lager since 03-2011
Michael Kerr since 03-2014
Paul Benjamin since 07-2014
Alan Wilson since 01-2016
John Queen since 07-2016
Pramod Atluri since 03-2018

#### **Quantitative Screens**

Performance: The fund has finished in the Allocation--50% to 70% Equity 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 22.26 years.

 $\times$  *Style:* The fund has landed in its primary style box — Large Blend — 63.64 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.28 is
 74.31% lower than the Allocation--50% to 70% Equity category average.

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

This fund fails our current style screen. However, as an allocation fund it is not expected to adhere to a strict style discipline, so the screen failure does not concern us and we are still comfortable using this fund.





79

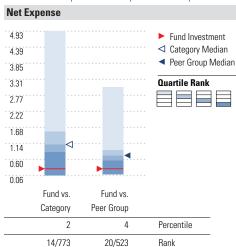
0.29

95

0.28

72

0.28



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	1.36	-	-1.16
Beta	0.97	-	1.07
R-Squared	93.30	-	89.99
Standard Deviation	6.16	6.11	6.95
Sharpe Ratio	1.26	1.08	0.88
Tracking Error	1.60	-	2.27
Information Ratio	0.77	-	-0.39
Up Capture Ratio	107.19	-	100.12
Down Capture Ratio	94.35	-	113.93

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.53	17.25	17.99
Price/Book Ratio	2.62	2.05	2.31
Avg Eff Duration	5.99	5.24	4.79



37

47

54

0.30

55

0.29

68

0.29

82

0.29



# American Funds American Balanced R6 RLBGX

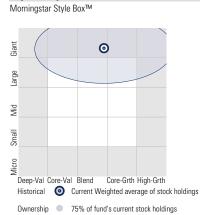
Morningstar Category Allocation--50% to 70%

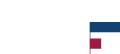
Morningstar Index

Morningstar Mod Tgt Risk TR USD

Equity

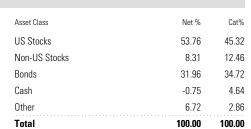
Style Analysis as of 03-31-2019





-50

Asset Allocation as of 03-31-2019



## Style Breakdown

Equity Large 28 Mid2 2 3 0 0 0



Weigh	nt %	

Value



Blend Growth

		Fund	Bmark	Cat	Fun	d '	Bench	mark	Cate	gory Ave	erage	
Դ	Cyclical	32.68	41.10	34.89								
A.	Basic Materials	5.14	5.06	3.76								
A	Consumer Cyclical	10.53	11.34	11.04								
	Financial Services	12.90	16.91	16.77		-						
命	Real Estate	4.11	7.79	3.32			•					
W	Sensitive	42.83	36.27	39.54								
	Communication Services	3.46	3.43	3.39		•						
ð	Energy	9.57	5.65	5.90								
Ф	Industrials	7.49	11.06	11.02								
	Technology	22.31	16.13	19.23						L.		
<b>—</b>	Defensive	24.48	22.63	25.59								
Ħ	Consumer Defensive	8.12	7.99	7.67			0					
+	Healthcare	15.35	10.89	14.55								
•	Utilities	1.01	3.75	3.37		[						

100

50

<b>Top 10 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	_	6.51	6.51	_	_
⊕ Microsoft Corp	_	4.09	10.61	16.57	Technology
⊕ UnitedHealth Group Inc	_	2.57	13.18	-0.39	Healthcare
⊕ The Home Depot Inc	_	2.07	15.25	12.47	Consumer Cyclical
⊖ Berkshire Hathaway Inc A	-	1.78	17.03	-1.56	Financial Services
→ Philip Morris International Inc	_	1.49	18.52	34.11	Consumer Defensive
⊕ Nike Inc B	_	1.46	19.98	13.88	Consumer Cyclical
⊕ Intel Corp	_	1.43	21.40	15.10	Technology
⇒ Broadcom Inc	_	1.35	22.76	19.30	Technology
⊕ DowDuPont Inc	_	1.33	24.09	0.39	Basic Materials

### **Total Holdings** 1675



# 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

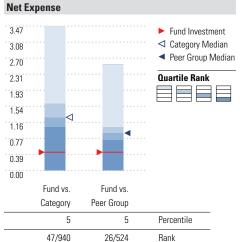
Turnover %

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

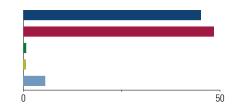
. ,			
26	34	34	Luigo
1	2	3	19110
0	0	0	OII GII

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10

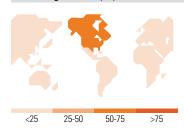
#### Asset Allocation as of 03-31-2019



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  $\ref{eq:property}$  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.

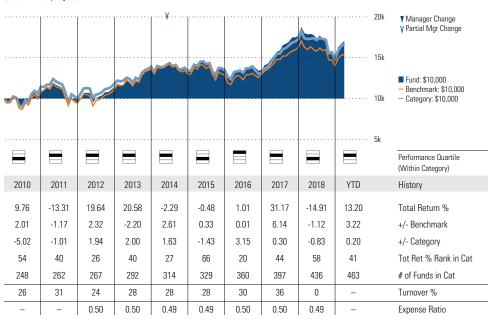
Style: The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three

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

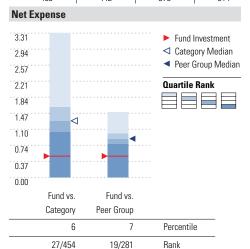
#### **Morningstar Investment Management LLC Analysis**

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



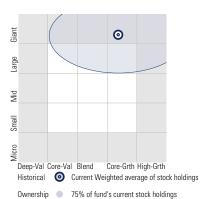
# American Funds Europacific Growth R6 RERGX

# Morningstar Category Foreign Large Growth

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

## Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

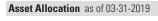
Equity

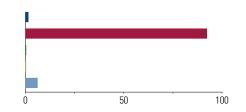
16	26	49	Large
2	2	6	Mid
0	0	0	Small

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10

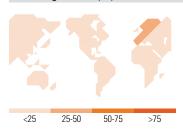




Total	100.00	100.00
Other	6.03	0.58
Cash	0.19	2.98
Bonds	0.22	0.06
Non-US Stocks	92.22	88.19
US Stocks	1.33	8.20
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund Benchmark Category Average
<b></b>	Cyclical	42.04	42.08	36.95	
æ.	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	
Ф	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

Americas	Fund % 11.50	Cat % 14.69	Greater Europe	Fund % 39.32	Cat % 52.88	Market Maturity	Fund %
North America	5.48	12.64	United Kingdom	10.09	13.24	Developed Markets	70.92
Central/Latin	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		

<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  $\ref{eq:property}$  New to Portfolio



# American Funds Invmt Co of Amer R6 RICGX

Morningstar Category

Large Blend

Morningstar Index S&P 500 TR USD

Expense Ratio

### Portfolio Manager(s)

James Lovelace since 03-1992
Donald O'Neal since 03-1992
Joyce Gordon since 01-2001
Christopher Buchbinder since 03-2007
Eric Richter since 03-2008
Barry Crosthwaite since 01-2013
Grant Cambridge since 03-2014
Martin Romo since 07-2018

#### **Quantitative Screens**

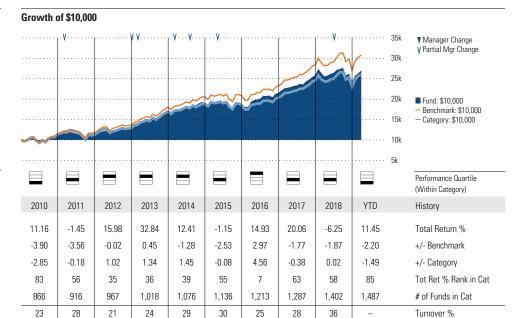
❷ Performance: The fund has finished in the Large Blend category's top three quartiles in 8 of the 9 years it's been in existence.

Management: The fund's management has been in place for 27.1 years.

Net Expense: The fund's expense ratio of 0.29 is 68.13% lower than the Large Blend 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.

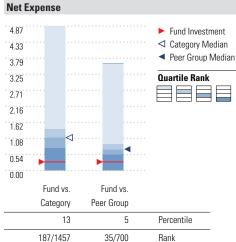




0.30

0.30

0.29



0.30

0.30

0.30

0.30

3-Year KISK Wellics			
	Fund	Bmark	Cat
Alpha	0.16	_	-1.27
Beta	0.87	_	0.97
R-Squared	90.90	_	91.55
Standard Deviation	9.75	10.73	10.83
Sharpe Ratio	1.06	1.12	0.96
Tracking Error	3.27	_	2.93
Information Ratio	-0.52	_	-1.32
Up Capture Ratio	91.60	_	90.88
Down Capture Ratio	97.23	_	97.96

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.89	18.71	17.87
Price/Book Ratio	2.99	2.74	2.65
Geom Avg Mkt Cap \$B	73.81	73.09	97.84
ROE	26.13	21.80	22.01



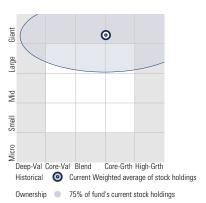
# American Funds Invmt Co of Amer R6 RICGX

Morningstar Category Morningstar Index

□ Large Blend S&P 500 TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

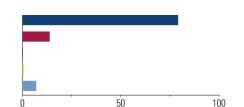
Equity

27	29	38	Large
1	4	1	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	6.84	1.08
Cash	0.32	-2.54
Bonds	0.08	4.19
Non-US Stocks	13.71	3.15
US Stocks	79.06	94.10
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund	,	Bench	mark	Categ	jory Ave	rage		
ŀ	Cyclical	23.53	32.26	37.60									
A	Basic Materials	4.17	2.46	2.78									
Д	Consumer Cyclical	11.92	11.90	11.68									
<b>_</b>	Financial Services	7.29	15.40	20.85				•					
ŧ	Real Estate	0.15	2.50	2.29	i [								
M	Sensitive	44.77	42.16	37.07									•
₫	Communication Services	2.10	3.56	3.37									
ð	Energy	10.37	5.43	5.15									
<b>Ģ</b>	Industrials	8.19	10.23	7.03									
	Technology	24.11	22.94	21.52									
<b>→</b>	Defensive	31.70	25.59	25.35									
-	Consumer Defensive	11.73	7.77	7.92			İ						
٠	Healthcare	17.93	14.49	14.68		÷							
•	Utilities	2.04	3.33	2.75									

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	6.80	6.80	_	_
Microsoft Corp	4.36	11.15	16.57	Technology
⊕ Facebook Inc A	4.24	15.39	27.16	Technology
AbbVie Inc	3.79	19.18	-11.42	Healthcare
Abbott Laboratories	2.81	21.99	10.96	Healthcare
⊕ Amazon.com Inc	2.20	24.19	18.56	Consumer Cyclical
⊕ Broadcom Inc	2.18	26.37	19.30	Technology
⊕ Exxon Mobil Corp	2.10	28.46	19.69	Energy
British American Tobacco PLC	2.08	30.55	29.79	Consumer Defensive
Philip Morris International Inc	2.08	32.62	34.11	Consumer Defensive
	2.05	34.68	12.63	Technology
→ Amgen Inc	1.91	36.58	-1.66	Healthcare
⇒ Alphabet Inc Class C	1.74	38.33	_	Technology
€ EOG Resources Inc	1.56	39.89	9.39	Energy
The Home Depot Inc     The Home Depo	1.50	41.39	12.47	Consumer Cyclical

**Total Holdings** 181



# American Funds New World R6 RNWGX

# Morningstar CategoryMorningstar IndexDiversified Emerging MktsMSCI EM NR USD

### Portfolio Manager(s)

Robert Lovelace since 06-1999
Carl Kawaja since 06-1999
Mark Denning since 06-1999
Wahid Butt since 01-2008
Nicholas Grace since 01-2009
Christopher Thomsen since 01-2009
Jonathan Knowles since 01-2016
Bradford Freer since 01-2017
Steven Backes since 01-2019

#### **Quantitative Screens**

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

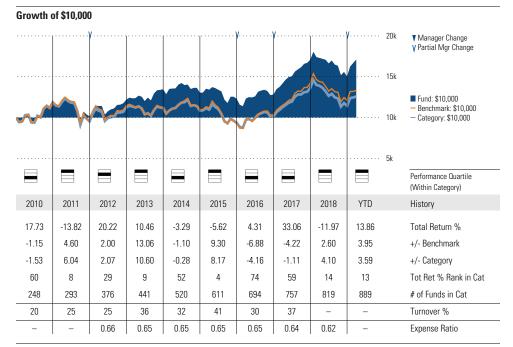
Management: The fund's management has been in place for 19.8 years.

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

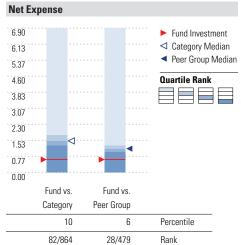
Q Net Expense: The fund's expense ratio of 0.62 is
 52.31% lower than the Diversified Emerging Mkts category average.

#### **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.







3-Year KISK Wietrics			
	Fund	Bmark	Cat
Alpha	3.33	_	-0.58
Beta	0.74	_	0.93
R-Squared	86.09	_	86.10
Standard Deviation	10.40	13.02	13.02
Sharpe Ratio	0.98	0.74	0.64
Tracking Error	5.14	_	4.84
Information Ratio	0.17	_	-0.31
Up Capture Ratio	84.10	_	92.48
Down Capture Ratio	66.40	-	97.54

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.36	12.62	13.55
Price/Book Ratio	2.31	1.49	1.87
Geom Avg Mkt Cap \$B	20.17	19.61	20.39
ROE	19.75	17.14	20.22

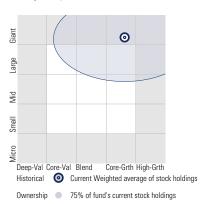


# American Funds New World R6 RNWGX

# Morningstar CategoryMorningstar IndexDiversified Emerging MktsMSCI EM NR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

Equity

14	22	52	Large
3	2	6	Mid
0	0	1	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10



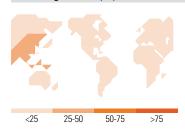
Asset Allocation as of 03-31-2019

Total	100.00	100.00
Other	7.67	0.53
Cash	0.89	-0.32
Bonds	4.02	1.02
Non-US Stocks	70.11	96.05
US Stocks	17.32	2.72
Asset Class	Net %	Cat%

_00	ctor Weighting as of 03-3				_				п -						
		Fund	Bmark	Cat	Fun	d	▼ Ben	chmark	Ca	ategory	Avera	ge			
Դ	Cyclical	40.09	46.59	46.79			_								
A	Basic Materials	8.35	7.59	6.26			i .								
A	Consumer Cyclical	13.74	11.57	12.64											
<del>, f</del>	Financial Services	16.75	24.14	25.38						1					
ŵ	Real Estate	1.25	3.29	2.51		1							- i		
W	Sensitive	39.56	41.79	39.12											
	Communication Services	0.96	4.57	3.91		0	_								
•	Energy	6.98	7.88	6.64			1								
Ф	Industrials	8.56	4.97	5.46											
	Technology	23.06	24.37	23.11						1					
<b>-</b>	Defensive	20.35	11.62	14.09											
Ħ	Consumer Defensive	7.56	6.64	9.26		,	I [								
+	Healthcare	9.73	2.50	2.86											
•	Utilities	3.06	2.48	1.97											
-					0%	5	10	15	20	25	30	35	40	45	50

100

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



Greater Asia	Fund % 44.72	Cat % 69.31	
Japan	5.33	0.08	
Australasia	1.24	0.02	
Asia-4 Tigers	9.58	23.14	
Asia-ex 4 Tigers	28.57	46.07	
Not Classified	0.00	0.00	

Americas	Fund % 32.71	Cat % 15.52	Greater Europe	Fund % 22.57	Cat % 15.19	Market Maturity	Fund %
North America	21.32	1.38	United Kingdom	4.24	0.69	Developed Markets	55.49
Central/Latin	11.39	14.14	W euro-ex UK	13.54	1.33	<b>Emerging Markets</b>	44.51
			Emrgng Europe	1.92	6.69	Not Available	0.00
			Africa	2.87	6.48		

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	7.55	7.55	_	_
Reliance Industries Ltd	2.04	9.59	21.58	Energy
Alibaba Group Holding Ltd ADR	1.77	11.35	_	Consumer Cyclical
AIA Group Ltd	1.60	12.96	20.23	Financial Services
Taiwan Semiconductor Manufacturing Co Ltd	1.56	14.52	8.87	Technology
○ Tencent Holdings Ltd	1.54	16.06	14.97	Technology
⊕ HDFC Bank Ltd	1.49	17.55	9.29	Financial Services
⊕ Microsoft Corp	1.30	18.85	16.57	Technology
	1.27	20.12	_	Technology
⊕ Kotak Mahindra Bank Ltd	1.21	21.33	6.21	Financial Services

### Total Holdings 582

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:property}$  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.

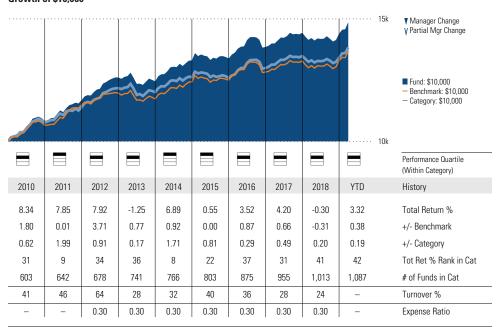
Style Consistency is not calculated for Fixed Income funds.

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

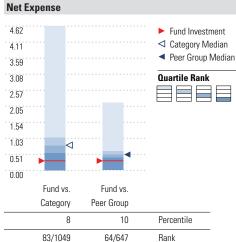
#### **Morningstar Investment Management LLC Analysis**

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

	3	3 3 3
<b>Style Analy</b>	<b>sis</b> as	of 03-31-2019
Style Breakd	own	
Fixed Income		Quality
		High
		Mid
		Low
Ltd Mod	Ext	

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>	1								
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
Numb	Watanty Bato	70 1401 10001	oumulativo /o	Tixou moonio occioi
⊕ 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	-
─ United States Treasury Bonds 3.5%	_	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



# **Baird Core Plus Bond Inst** BCOIX

Morningstar Category Morningstar Index
Intermediate Core-Plus Bond BBgBarc US Agg Bond TR USD

### Portfolio Manager(s)

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

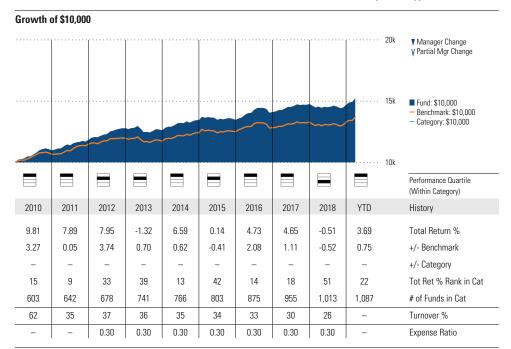
Management: The fund's management has been in place for 18.51 years.

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.





INC. LA	rhense		
10.00			► Fund Investme
8.89			Category Med
7.78			◆ Peer Group Me  Output  Description  Output  Description  Output  Description
6.67			Quartile Rank
5.56			
4.44			
3.33			
2.22			
1.11			
0.00			
	Fund vs.	Fund vs.	
	Category	Peer Group	
	8	10	Percentile
	83/1049	_	Rank
_			

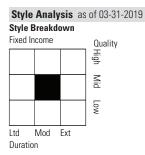
3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	1.19	_	0.96
Beta	0.95	_	0.86
R-Squared	95.26	_	84.77
Standard Deviation	2.88	2.97	2.79
Sharpe Ratio	0.64	0.26	0.52
Tracking Error	0.65	_	1.13
Information Ratio	1.71	_	0.58
Up Capture Ratio	111.79	_	99.31
Down Capture Ratio	82.19	_	75.10

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	5.67	4.43	_
Avg Eff Maturity	7.82	_	_



# **Baird Core Plus Bond Inst** BCOIX

Morningstar Category Morningstar Index
Intermediate Core-Plus Bond BBgBarc US Agg Bond TR USD



<b>Asset Allocation</b>	as of 03-31-2019		
1			
0	50	•	100

Total	100.00	100.00
Other	1.38	_
Cash	3.04	_
Bonds	95.58	_
Non-US Stocks	0.00	_
US Stocks	0.00	-
Asset Class	Net %	Cat%

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	44.20	3.53	_
AA	4.50	74.59	_
A	18.30	10.82	_
BBB	28.30	8.32	_
BB	2.60	0.28	_
В	0.50	0.00	_
Below B	1.20	0.00	_
Not Rated	0.40	2.46	_

Sector Weighting as of 03-3	31-2019													
	Fund	Bmark	Cat	Fund		▼ Ben	chmark	[] Ca	ategory	Avera	ge			
Government	13.85	44.03	-											
Treasury	13.49	34.51	-								•			
Inflation – Protected	0.00	0.00	-	Ĭ										
Agency/Quasi Agency	0.33	8.36	_			7								
Other Government Related	0.03	1.16	_	•										
Corporate	49.91	20.08	-											
Corporate Bond	48.77	19.42	_					T.						
Bank Loan	0.00	0.64	_	7										
Convertible	1.14	0.00	_	•										
Preferred	0.00	0.02	_	Ĭ										
Securitized	32.58	29.67	_											
Agency MBS Pass-Through	18.00	27.43	_							•				
Agency MBS ARM	0.00	0.19	_	ľ										
Agency MBS CMO	2.29	0.00	_											
Non-Agency Residential MBS	2.54	0.42	_	•										
Commercial MBS	5.10	1.61	_	•										
Asset-Backed	4.65	0.02	_	•										
Covered Bond	0.00	0.00	_	<u>'</u> _										
Municipal	0.63	0.76	-	ľ										
Cash & Equivalents	3.04	5.48	-		- [									
Other	0.00	0.00	-	ĺ										
				0%	5	10	15	20	25	30	35	40	45	50

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
Numb	Widthity Butc	70 NGT A3301	oumulative /o	Tixed income decidi
─ United States Treasury Bonds 2.88%	_	3.49	3.49	_
⊕ First American Government Obligs U	_	2.95	6.44	_
─ United States Treasury Bonds 3.5%	_	1.98	8.43	_
⊕ United States Treasury Notes 2.25%	11-2027	1.88	10.31	_
⊕ United States Treasury Notes 1.88%	03-2022	1.63	11.94	-
⊕ United States Treasury Bonds 2.5%	_	1.49	13.43	-
⊕ United States Treasury Notes 2.5%	05-2024	0.89	14.33	_
─ United States Treasury Notes 2%	11-2026	0.85	15.17	_
⊕ United States Treasury Notes 2.25%	11-2025	0.80	15.98	_
	_	0.66	16.64	_

⊕ Increase ⊖ Decrease 🛠 New to Portfolio

Total Holdings 1308



#### Portfolio Manager(s)

James Keenan since 12-2007 Derek Schoenhofen since 05-2009 Mitchell Garfin since 05-2009 David Delbos since 03-2014

#### **Quantitative Screens**

Q Performance: The fund has finished in the High Yield 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 11.25 years.

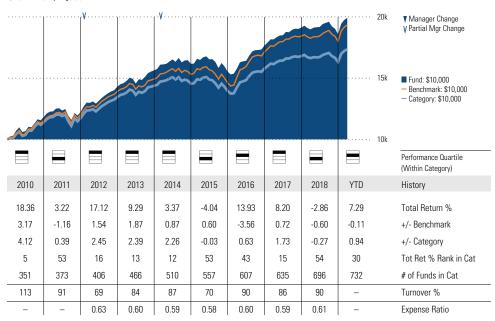
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.61 is 39.6% lower than the High Yield Bond category average.

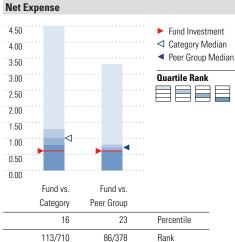
#### **Morningstar Investment Management LLC Analysis**

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







3- Tear hisk Wietrics			
	Fund	Bmark	Cat
Alpha	-0.23	-	-0.49
Beta	0.96	-	0.87
R-Squared	95.98	-	89.85
Standard Deviation	4.53	4.61	4.25
Sharpe Ratio	1.44	1.53	1.31
Tracking Error	0.92	_	1.53
Information Ratio	-0.64	_	-1.33
Up Capture Ratio	93.61	_	83.92
Down Capture Ratio	94.27	_	94.45

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	3.50	-	3.09
Avg Eff Maturity	6.87	_	5.10



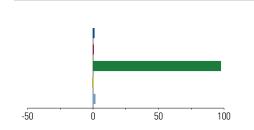
# BlackRock High Yield Bond Instl BHYIX

**Morningstar Category** High Yield Bond

**Morningstar Index** 

ICE BofAML US High Yield TR USD





Asset Allocation as of 03-31-2019

0.43 97.50 -0.47 1.57	0.03 94.58 2.87 1.86
97.50	94.58
0.43	0.03
0.96	0.65
Net %	Cat%

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	-0.41	_	2.81
AA	0.22	_	0.24
A	0.62	_	0.98
BBB	3.52	_	4.44
BB	34.56	-	33.12
В	45.51	-	40.07
Below B	15.13	-	16.57
Not Rated	0.85	_	1.77

Sector Weighting as of 03-	31-2019				
	Fund	Bmark	Cat	Fund	▼ Benchmark [] Category Average
Government	0.04	-	2.42		
Treasury	0.00	_	0.73	0	
Inflation - Protected	0.00	_	0.00		
Agency/Quasi Agency	0.04	_	0.05	0	
Other Government Related	0.00	_	1.64		
Corporate	94.92	-	89.65		
Corporate Bond	83.79	_	88.07		
Bank Loan	10.16	_	0.35		
Convertible	0.61	_	1.06	0	
Preferred	0.36	_	0.17		
Securitized	2.17	-	1.57		
Agency MBS Pass-Through	0.00	-	0.05		
Agency MBS ARM	0.00	_	0.00		
Agency MBS CMO	0.00	_	0.36		
Non-Agency Residential MBS	0.00	_	0.18		
Commercial MBS	0.00	_	0.18		
Asset-Backed	2.17	_	0.80	0	
Covered Bond	0.00	_	0.00		
Municipal	0.00	-	0.00	0	
Cash & Equivalents	2.86	-	4.83		
Other	0.00	_	1.51	10	
				00/ 5 10	45 00 05 00 05 40 45 50 55 00 05 70 75 00 05 00

0% 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 9095

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ Usd Cash(Committed)	_	2.72	2.72	_
• • •	_			
⊕ BlackRock Liquidity T-Fund Instl	_	2.44	5.17	_
⊕ TransDigm, Inc. 6.25%	03-2026	1.80	6.97	_
⇒ Refinitiv Us Hold/Thomson & Reuter TI-B	10-2025	0.91	7.88	_
⊕ Ally Financial Inc. 8%	11-2031	0.90	8.78	-
Blackstone CQP Holdco 6.5%	03-2021	0.83	9.61	_
⊕ Infor (US), Inc. 6.5%	05-2022	0.77	10.38	_
⊕ Solera, LLC / Solera Finance, Inc. 10.5%	03-2024	0.73	11.11	_
⊕ Centene Escrow I Corporation 5.38%	06-2026	0.68	11.79	_
€ Clear Channel Worldwide Holdings Inc. 9.25%	02-2024	0.68	12.47	_

Total Holdings 1410



# **BlackRock Inflation Protected Bond Instl** BPRIX

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

#### Portfolio Manager(s)

Christopher Allen since 02-2017 David Rogal since 03-2018

#### Quantitative Screens

Performance: The fund has finished in the Inflation-Protected Bond 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.

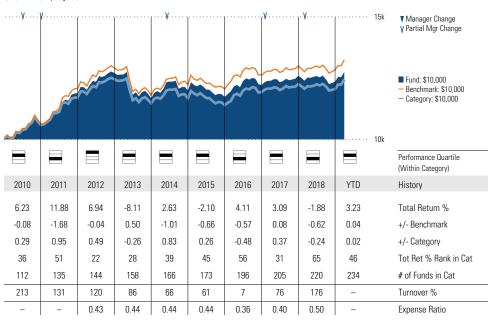
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.5 is 35.06% lower than the Inflation-Protected Bond category average.

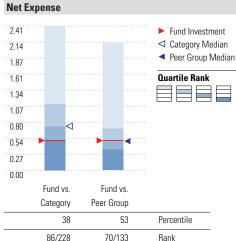
#### **Morningstar Investment Management LLC Analysis**

This fund went on watch earlier this year after portfolio manager Martin Hegarty left the firm. His departure followed other turnover on the team in 2017. However, we maintain confidence in the fund due to its solid process and talented underlying resources. Under current portfolio managers David Rogal and Chris Allen, the fund has performed as expected and we believe that they will continue to implement the solid process that has been in place for years.

# Growth of \$10,000

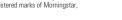






3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.06	_	0.18
Beta	0.98	_	0.82
R-Squared	98.20	_	83.66
Standard Deviation	2.99	3.04	2.80
Sharpe Ratio	0.11	0.15	0.10
Tracking Error	0.41	_	1.25
Information Ratio	-0.25	_	-0.48
Up Capture Ratio	96.65	_	82.46
Down Capture Ratio	98.00	-	77.43

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	7.31	4.52	6.19
Avg Eff Maturity	7.99	_	7.38

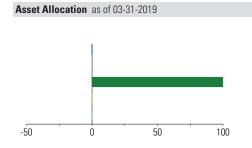




# **BlackRock Inflation Protected Bond Instl** BPRIX

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





Total	100.00	100.00
Other	0.01	0.36
Cash	0.23	0.35
Bonds	99.77	99.27
Non-US Stocks	0.00	0.01
US Stocks	-0.01	0.01
Asset Class	Net %	Cat%

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	98.73	0.00	91.95
AA	0.00	99.60	1.66
A	1.18	0.00	1.99
BBB	0.10	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	-0.01	0.40	0.24

	Fund	Bmark	Cat	Fund	▼ Benchn	nark	ll Ca	tegory	, Λνο	rano			
Government	97.21		85.26	runu	Delicili	IIII	ј Са	iegui	AVE	raye			
		99.20		7.						-		_	
Treasury	0.00	0.00	1.03	[]									
Inflation – Protected	97.06	99.20	76.92		: :								
Agency/Quasi Agency	0.00	0.00	0.11	į									
Other Government Related	0.15	0.00	7.20	<u>i</u> 101									
Corporate	0.00	0.00	2.62	[0]									
Corporate Bond	0.00	0.00	2.54										
Bank Loan	0.00	0.00	0.01	Í									
Convertible	0.00	0.00	0.07	Ĭ									
Preferred	0.00	0.00	0.00	Í									
Securitized	0.25	0.00	5.33										
Agency MBS Pass-Through	0.00	0.00	2.06										
Agency MBS ARM	0.00	0.00	0.01	Í									
Agency MBS CMO	0.15	0.00	0.78										
Non-Agency Residential MBS	0.00	0.00	0.23	Ĭ									
Commercial MBS	0.10	0.00	0.39										
Asset-Backed	0.00	0.00	1.84	70									
Covered Bond	0.00	0.00	0.02	[									
Municipal	0.00	0.00	0.00	Ī.									
Cash & Equivalents	2.47	0.80	5.98										
Other	0.09	0.00	0.80	i i									

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ United States Treasury Notes 0.12%	04-2020	4.56	4.56	_
United States Treasury Notes 0.12%	04-2021	3.85	8.41	_
United States Treasury Notes 0.12%	04-2022	3.75	12.16	_
	04-2023	3.74	15.90	_
⇒ United States Treasury Notes 0.62%	01-2024	3.71	19.61	-
	07-2023	3.69	23.31	_
⊕ United States Treasury Notes 0.12%	07-2022	3.68	26.98	_
⊕ United States Treasury Notes 0.12%	01-2023	3.67	30.65	_
⊕ United States Treasury Notes 0.38%	07-2025	3.61	34.27	_
United States Treasury Notes 0.25%	01-2025	3.58	37.85	_

Total Holdings 136



# MFS International Growth R4 MGRVX

Morningstar Category Foreign Large Growth Morningstar Index MSCI EAFE NR USD

### Portfolio Manager(s)

David Antonelli since 01-2010 Kevin Dwan since 01-2012 Matthew Barrett since 03-2015

#### **Quantitative Screens**

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

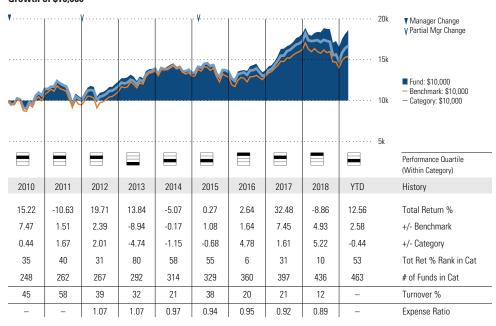
Management: The fund's management has been in place for 9.22 years.

◆ Net Expense: The fund's expense ratio of 0.89 is 21.24% lower than the Foreign Large Growth category average.

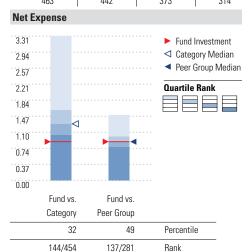
#### **Morningstar Investment Management LLC Analysis**

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.

### 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 KISK Wetrics			
	Fund	Bmark	Cat
Alpha	4.24	_	0.81
Beta	0.91	_	0.99
R-Squared	83.53	_	-
Standard Deviation	10.48	10.47	11.66
Sharpe Ratio	0.94	0.60	0.59
Tracking Error	4.35	-	5.26
Information Ratio	0.90	-	0.08
Up Capture Ratio	102.13	-	95.37
Down Capture Ratio	72.14	-	87.27

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.60	16.19	17.86
Price/Book Ratio	2.55	1.58	2.37
Geom Avg Mkt Cap \$B	29.09	35.93	31.37
ROE	19.70	15.50	19.30

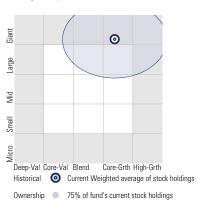


# MFS International Growth R4 MGRVX

# Morningstar CategoryMorningstar IndexForeign Large GrowthMSCI EAFE NR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

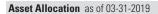
Equity

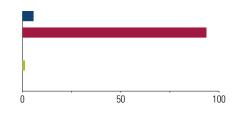
8	32	47	Large
5	2	7	Mid
0	0	0	Small

Value Blend Growth

#### Weight %

>50 25-50 10-25 0-10

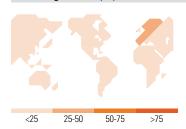




Asset Class	Net %	Cat%
US Stocks	5.49	8.20
Non-US Stocks	93.39	88.19
Bonds	0.00	0.06
Cash	1.13	2.98
Other	0.00	0.58
Total	100.00	100.00

		Fund	Bmark	Cat	Fund	t t	Bench	mark	Categ	jory Ave	erage			
<b>Դ</b>	Cyclical	31.86	42.08	36.95								- [		•
A.	Basic Materials	9.65	7.79	6.10										
<b>A</b>	Consumer Cyclical	10.12	11.50	13.23			<b>`</b>							
<del>,</del>	Financial Services	12.09	18.86	16.75					*					
<b>fi</b>	Real Estate	0.00	3.93	0.87	i []	•								
W	Sensitive	31.29	30.90	36.23								0		
	Communication Services	0.33	3.98	1.53	1 [	۲								
ð	Energy	1.77	5.95	3.32										
Ф	Industrials	12.02	13.21	13.43			,	İ						
	Technology	17.17	7.76	17.95			•		1					
<b>→</b>	Defensive	36.86	27.01	26.82										
=	Consumer Defensive	21.41	11.92	13.37			,							
+	Healthcare	14.94	11.35	12.40										
•	Utilities	0.51	3.74	1.05		7								
					0%	5	10	15	20	25	30	35	40	45

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



	Fund %	Cat %	
Greater Asia	29.82	32.42	
Japan	8.99	13.72	
Australasia	1.44	2.47	
Asia-4 Tigers	9.02	6.52	
Asia-ex 4 Tigers	10.37	9.71	
Not Classified	0.00	0.00	

Americas	Fund % 12.39	Cat % 14.69	Greater Europe	Fund % 57.79	Cat % 52.88	Market Maturity	Fund %
North America	9.85	12.64	United Kingdom	12.57	13.24	Developed Markets	86.80
Central/Latin	2.54	2.05	W euro-ex UK	44.17	38.40	Emerging Markets	13.20
			Emrgng Europe	0.29	0.35	Not Available	0.00
			Africa	0.76	0.89		

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Nestle SA	4.75	4.75	22.84	Consumer Defensive
Roche Holding AG Dividend Right Cert.	4.19	8.94	17.25	Healthcare
⊕ AIA Group Ltd	3.57	12.52	20.23	Financial Services
⊕ Taiwan Semiconductor Manufacturing Co Ltd ADR	3.24	15.76	10.97	Technology
⊕ SAP SE	3.23	18.99	18.02	Technology
⊕ LVMH Moet Hennessy Louis Vuitton SE	2.90	21.90	30.01	Consumer Cyclical
⊕ L'Oreal SA	2.72	24.61	20.92	Consumer Defensive
⊕ Canadian National Railway Co	2.39	27.00	21.28	Industrials
⊕ Novartis AG	2.39	29.39	18.97	Healthcare
⊕ Pernod Ricard SA	2.35	31.74	12.06	Consumer Defensive

### Total Holdings 84



# MFS Value R4 MEIJX

#### Portfolio Manager(s)

Steven Gorham since 01-2002 Nevin Chitkara since 05-2006

#### **Quantitative Screens**

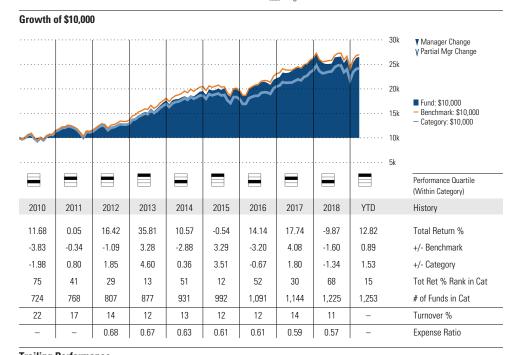
- Performance: The fund has finished in the Large Value category's top three quartiles in 10 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 17.2 years.
- Net Expense: The fund's expense ratio of 0.57 is 40.63% lower than the Large Value category average.

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

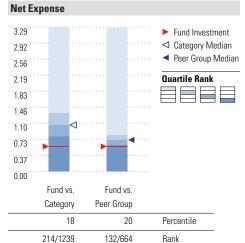
This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

# Morningstar Category Large Value

Morningstar Index Russell 1000 Value TR USD







3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	-0.47	_	-0.34
Beta	1.02	_	0.99
R-Squared	95.65	_	90.71
Standard Deviation	11.14	10.63	11.11
Sharpe Ratio	0.81	0.87	0.80
Tracking Error	2.34	_	3.38
Information Ratio	-0.12	_	-0.18
Up Capture Ratio	97.69	_	96.39
Down Capture Ratio	98.15	_	97.63

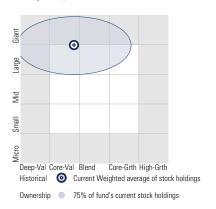
Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	16.05	16.59	16.45
Price/Book Ratio	2.22	1.83	2.17
Geom Avg Mkt Cap \$B	66.44	53.25	87.27
ROE	21.74	13.49	19.10



# MFS Value R4 MEIJX

## Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

Equity

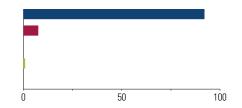
47	33	15	Large
3	2	0	Mid
0	0	0	Small

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	0.63
Cash	0.69	1.91
Bonds	0.00	0.15
Non-US Stocks	7.38	5.92
US Stocks	91.93	91.39
Asset Class	Net %	Cat%

Morningstar Index

Russell 1000 Value TR USD

**Morningstar Category** 

Large Value

-	ctor Weighting as of 03-		р .	0 .			D 1 1	По					
		Fund	Bmark	Cat	Fund		Benchmark	Ua	tegory A	Average			,
ŀ	Cyclical	33.73	37.04	36.61									
A	Basic Materials	2.91	3.69	3.24		0							
A	Consumer Cyclical	2.60	6.66	8.23									
Ę.	Financial Services	27.83	21.39	22.13									
俞	Real Estate	0.39	5.30	3.01	İ	0 .							
W	Sensitive	34.51	33.05	34.32									
	Communication Services	3.39	5.53	5.26			1						
•	Energy	4.45	9.78	9.59									
Ф	Industrials	19.60	8.11	7.69									
	Technology	7.07	9.63	11.78			<b>"</b> [				<u>:</u>		
<b>→</b>	Defensive	31.75	29.92	29.06									
Ħ	Consumer Defensive	9.80	8.44	9.62				1					
+	Healthcare	17.39	15.10	14.26				,					
•	Utilities	4.56	6.38	5.18		<b>—</b> []							
					0%	5	10	15	20	25	30	35	41

Top 15 Holdings as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
JPMorgan Chase & Co	4.28	4.28	4.52	Financial Services
Johnson & Johnson	3.70	7.98	9.02	Healthcare
Accenture PLC Class A	3.22	11.20	24.83	Technology
⊕ Comcast Corp Class A	2.84	14.04	17.42	Communication Svc
Medtronic PLC	2.67	16.71	0.68	Healthcare
→ Wells Fargo & Co	2.45	19.16	5.84	Financial Services
Pfizer Inc	2.44	21.60	-1.88	Healthcare
⊕ Aon PLC	2.19	23.78	17.71	Financial Services
US Bancorp	2.05	25.83	6.26	Financial Services
Honeywell International Inc	2.05	27.88	20.91	Industrials
The Travelers Companies Inc	2.04	29.92	15.18	Financial Services
Citigroup Inc	2.02	31.93	20.38	Financial Services
Chubb Ltd	2.00	33.93	9.00	Financial Services
Texas Instruments Inc	1.90	35.83	13.06	Technology
PPG Industries Inc	1.90	37.73	10.88	Basic Materials

### Total Holdings 90



# PIMCO Commodity Real Return Strat I2 PCRPX

**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**

Performance: The fund has finished in the Commodities Broad Basket 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 11.25 years.

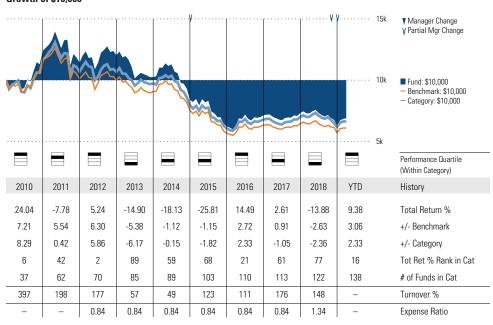
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 1.34 is 15.52% higher than the Commodities Broad Basket category average.

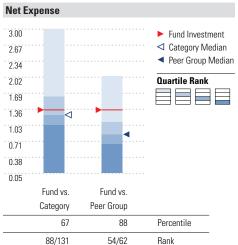
#### **Morningstar Investment Management LLC Analysis**

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







Peer group is a subset of the category and includes funds with the
same management style (active vs. passive) and similar share class $% \left( 1\right) =\left( 1\right) \left( 1\right) $
characteristics

Fund	Bmark	Cat
0.49	_	1.10
1.07	_	0.98
96.83	_	79.11
10.79	9.89	11.09
0.19	0.14	0.19
2.05	_	4.95
0.30	_	-0.01
113.52	_	109.09
110.55	_	102.78
	0.49 1.07 96.83 10.79 0.19 2.05 0.30 113.52	0.49 - 1.07 - 96.83 - 10.79 9.89 0.19 0.14 2.05 - 0.30 - 113.52 -

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

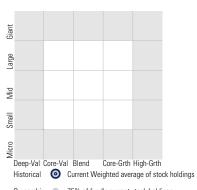


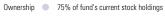
# PIMCO Commodity Real Return Strat I2 PCRPX

Morningstar Category Commodities Broad Basket Morningstar Index
Bloomberg Commodity TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™







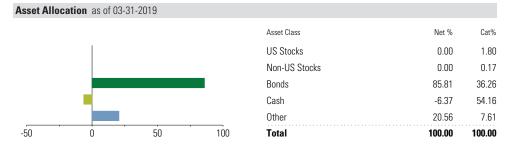
Equity



Value Blend Growth

Weight %

>50 25-50 10-25 0-10



		Fund	Bmark	Cat	Fund	•	Benchmark	[] (	Catego	ory Av	/erag	е		
<b>Ն</b>	Cyclical	64.28	-	-										
â.	Basic Materials	7.14	_	-										
<b>A</b>	Consumer Cyclical	7.14	_	-		ı İ								
÷	Financial Services	14.29	_	_										
ŧ	Real Estate	35.71	_	_										
M	Sensitive	28.57	-	-										
	Communication Services	7.14	_	_		r E								
ð	Energy	0.00	_	_										
Ф	Industrials	7.14	_	_										
	Technology	14.29	-	_										
<b>—</b>	Defensive	7.14	-	_										
	Consumer Defensive	7.14	-	_		ı į								
ŀ	Healthcare	0.00	-	_										
?	Utilities	0.00	_	_										

<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	_	_
① 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 International Bond (USD-Hdg) I-2 PFBPX

**Morningstar Category** World Bond-USD Hedged Morningstar Index

## BBgBarc US Agg Bond TR USD

#### Portfolio Manager(s)

Andrew Balls since 09-2014 Sachin Gupta since 09-2014 Lorenzo Pagani since 09-2014

#### **Quantitative Screens**

Performance: The fund has finished in the World 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 4.51 years.

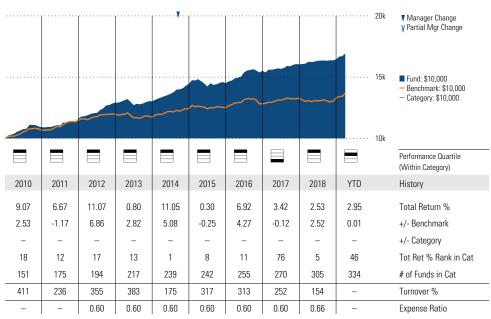
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.66 is 25.84% 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.







Net Ex	pense		
10.00			► Fund Investment  ✓ Category Median
8.89 7.78			◆ Peer Group Median
6.67			Quartile Rank
5.56			
4.44			
3.33			
2.22			
1.11			
0.00			
	Fund vs.	Fund vs.	
	Category	Peer Group	
	28	42	Percentile
	91/322	-	Rank

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	3.24	_	1.53
Beta	0.51	_	0.70
R-Squared	45.74	_	62.42
Standard Deviation	2.23	2.97	2.64
Sharpe Ratio	1.33	0.26	0.65
Tracking Error	2.20	_	1.95
Information Ratio	1.05	_	0.47
Up Capture Ratio	87.76	_	87.79
Down Capture Ratio	0.73	-	47.51

Portfolio Metrics									
	Fund	Bmark	Cat						
Avg Eff Duration	6.21	4.43	_						
Avg Eff Maturity	6.97	-	_						



# **PIMCO International Bond (USD-Hdg) I-2** PFBPX

Morningstar Category
World Bond-USD Hedged

Morningstar Index

BBgBarc US Agg Bond TR USD

Style Analysis	as of 03-31-2019
Style Breakdow	n
Fixed Income	Quality
	High
	Mid
	Low
Ltd Mod Ext Duration	

-50	0	50	100	150

Asset Allocation as of 03-31-2019

Asset Class	Net %	Cat%
US Stocks	0.00	_
Non-US Stocks	0.03	-
Bonds	108.33	-
Cash	-15.35	-
Other	6.98	-
Total	100.00	100.00

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	41.00	3.53	-
AA	24.00	74.59	-
A	8.00	10.82	-
BBB	20.00	8.32	-
BB	3.00	0.28	-
В	1.00	0.00	-
Below B	3.00	0.00	-
Not Rated	0.00	2.46	-

Sector Weighting as of 03-	31-2019												
	Fund	Bmark	Cat	Fund	,	Bench	mark	[] Cate	gory Ave	erage			
Government	43.45	44.03	-								Ţ.		
Treasury	3.20	34.51	_										
Inflation – Protected	0.56	0.00	-	i									
Agency/Quasi Agency	0.79	8.36	_			•							
Other Government Related	38.90	1.16	-	,				-					
Corporate	3.06	20.08	-										
Corporate Bond	2.54	19.42	_					*					
Bank Loan	0.16	0.64	_	<u>'</u>									
Convertible	0.36	0.00	-	į									
Preferred	0.00	0.02	-	ľ						1			
Securitized	5.13	29.67	-										
Agency MBS Pass-Through	2.35	27.43	_							1			
Agency MBS ARM	0.00	0.19	_	<u>[</u>									
Agency MBS CM0	0.04	0.00	_	Ĺ									
Non-Agency Residential MBS	0.37	0.42	-	i i									
Commercial MBS	0.16	1.61	-	į '									
Asset-Backed	1.07	0.02	-										
Covered Bond	1.14	0.00	_										
Municipal	0.03	0.76	-	Ţ,									
Cash & Equivalents	35.42	5.48	-										
Other	12.70	0.00	-										
				0%	5	10	15	20	25	30	35	40	45

Mana-	Maturity Data	0/ 11-+ 11+	0	Fired Income Control
Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
Irs Usd 3.20000 10/01/20-0y* Cme	04-2021	96.63	96.63	_
Irs Usd 3.20000 10/01/19-1y* (Red) Cme	04-2020	96.54	193.18	_
⊕ Irs Usd 3.20000 10/01/19-1y* (Red) Cme	04-2020	96.31	289.49	_
⊕ Irs Usd 3.20000 10/01/20-0y* Cme	04-2021	96.31	385.79	_
⊕ 90 Day Eurodollar Future Mar19	03-2019	74.85	460.64	-
⇒ 90 Day Eurodollar Future Mar20	03-2020	39.80	500.44	_
⊕ EUROPEAN MONETARY UNION EURO_Pay	01-2019	37.99	538.43	_
€ EUROPEAN MONETARY UNION EURO_Receive	01-2019	37.79	576.22	_
⊕ 90 Day Sterling Future Sept19	09-2019	30.25	606.47	_
⊕ 90 Day Sterling Future Sept20	09-2020	30.21	636.68	_

Total Holdings 1495



# PIMCO Short-Term I2 PTSPX

#### **Morningstar Category** Ultrashort Bond

## Morningstar Index

BBgBarc US Agg Bond TR USD

+/- Category

Tot Ret % Rank in Cat

# of Funds in Cat

Turnover %

Expense Ratio

#### Portfolio Manager(s)

Jerome Schneider since 01-2011 Andrew Wittkop since 04-2019 Nathan Chiaverini since 04-2019

#### **Quantitative Screens**

Performance: The fund has finished in the Ultrashort 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 8.25 years.

Style Consistency is not calculated for Fixed Income funds.

× Net Expense: The fund's expense ratio of 0.67 is 39.58% higher than the Ultrashort Bond category average.

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

This fund fails our expense screen with fees that are higher than the broad category average. Plan costs are sometimes wrapped into fund fees, but because costs are predictive of a fund's future relative performance, we would still like to see lower overall expenses here.



1.06

7

148

1,753

0.55

0.89

9

170

324

0.55

-0.21

76

185

156

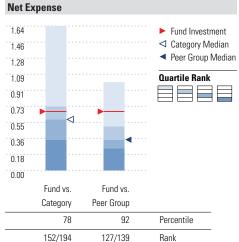
0.67

0.02

42

210





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 KISK Wietrics			
	Fund	Bmark	Cat
Alpha	2.77	-	1.69
Beta	-0.13	_	0.03
R-Squared	21.62	_	16.89
Standard Deviation	0.83	2.97	0.45
Sharpe Ratio	1.34	0.26	0.89
Tracking Error	3.44	_	2.91
Information Ratio	0.15	_	-0.10
Up Capture Ratio	20.47	_	23.48
Down Capture Ratio	-52.78	-	-21.26

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	0.17	4.43	0.83
Avg Eff Maturity	0.99	_	1.55



-0.44

41

69

446

44

75

182

1.34

13

93

307

0.55

0.25

23

111

180

0.55

0.52

12

126

252

0.55

1.10

1

141

283

0.55

# PIMCO Short-Term I2 PTSPX

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

Quality

Given the second of the secon

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	28.00	3.53	50.22
AA	9.00	74.59	10.73
A	29.00	10.82	19.78
BBB	25.00	8.32	14.86
BB	7.00	0.28	0.82
В	2.00	0.00	0.26
Below B	0.00	0.00	0.15
Not Rated	0.00	2.46	3.18

#### Asset Allocation as of 03-31-2019 Asset Class Cat% Net % US Stocks 0.00 0.01 Non-US Stocks 0.00 0.00 Bonds 114.67 71.17 Cash -24.67 27.58 Other 9.99 1.22 50 100 150 Total 100.00 100.00

Morningstar Category
Ultrashort Bond

Morningstar Index

BBgBarc US Agg Bond TR USD

	Fund	Bmark	Cat	Fund	▼ Benchmark	Cator	ory Avera	ao	
<b>.</b>				i uilu	Dentilliar	ц сакеу	JIY AVEID	ye :	7
Government -	29.87	44.03	13.34					•	
Treasury	0.00	34.51	3.23	,					
nflation – Protected	1.28	0.00	0.25	<u>]</u>					
Agency/Quasi Agency	0.62	8.36	2.52						
Other Government Related	27.97	1.16	7.34	<b>V</b>					
Corporate	14.48	20.08	31.35						
Corporate Bond	13.94	19.42	30.52			•			
Bank Loan	0.25	0.64	0.46	₫ :					
Convertible	0.29	0.00	0.37	ĺ					
Preferred	0.00	0.02	0.00	ĺ					
Securitized	6.34	29.67	26.11						
Agency MBS Pass-Through	2.00	27.43	0.97	10			1		
Agency MBS ARM	0.01	0.19	0.67	<u> </u>					
Agency MBS CMO	0.31	0.00	1.02	Ĭ					
Non-Agency Residential MBS	0.58	0.42	0.87	ď					
Commercial MBS	0.79	1.61	3.97	■ [					
Asset-Backed	2.65	0.02	18.58	<b>'</b>					
Covered Bond	0.00	0.00	0.03	ľ					
Municipal	0.17	0.76	1.73	ı [					
Cash & Equivalents	46.01	5.48	27.11						
		0.00	0.31	n .					

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ Irs Usd R 3ml/1ml+12.5 06/21/19-20 Cme	06-2020	52.19	52.19	_
Irs Usd R 3ml/1ml+12.5 06/21/19-20 Cme	06-2020	52.18	104.37	_
⊕ 90 Day Sterling Future Mar19	03-2019	49.55	153.92	_
⊕ 2 Year US Treasury Note Future Mar19	03-2019	40.50	194.42	_
☆ CashOffSet	-	28.11	222.53	-
⊕ US 5 Year Note (CBT) Mar19	03-2019	27.53	250.06	_
⊕ 90 Day Sterling Future Mar22	03-2022	25.50	275.57	_
⊕ 90 Day Sterling Future Mar20	03-2020	23.89	299.46	_
⊕ Ois Usd FedI01/2.795 01/04/19 Lch	09-2020	18.53	317.98	_
① Ois Usd FedI01/2.795 01/04/19 Lch	09-2020	18.39	336.38	_

Total Holdings 1571



# 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

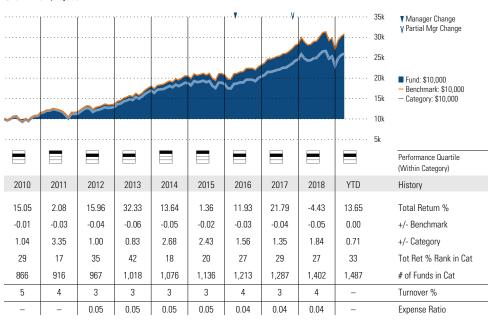
#### **Quantitative Screens**

- 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**

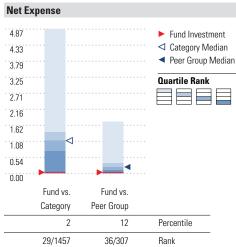
This fund fails our manager tenure screen; however, since it is an index fund, we are not overly concerned about the manager change.

#### 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



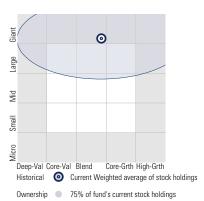
# Vanguard 500 Index Admiral VFIAX

### **Morningstar Category** Large Blend

Morningstar Index S&P 500 TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

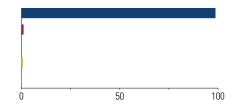
Equity

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	Categ	jory Ave	erage	_		
<b>Դ</b>	Cyclical	32.19	32.26	37.60										
A.	Basic Materials	2.40	2.46	2.78										
Д	Consumer Cyclical	11.90	11.90	11.68										
<del>,</del>	Financial Services	15.39	15.40	20.85			- 1		0					
<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 Growth Index Admiral VIGAX

Morningstar Category

Large Growth

Morningstar Index

Russell 1000 Growth TR USD

Turnover %

Expense Ratio

#### Portfolio Manager(s)

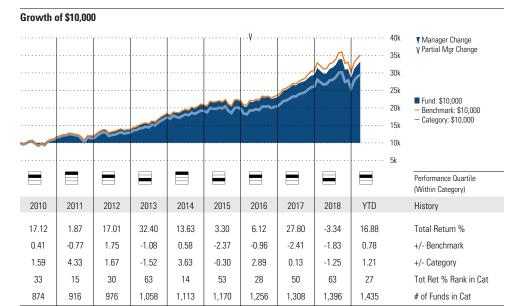
Gerard O'Reilly since 12-1994 Walter Nejman since 04-2016

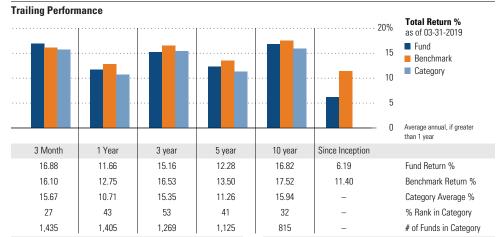
#### **Quantitative Screens**

- ❷ Performance: The fund has finished in the Large Growth 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 24.26 years.
- Net Expense: The fund's expense ratio of 0.05 is 95.19% 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.





11

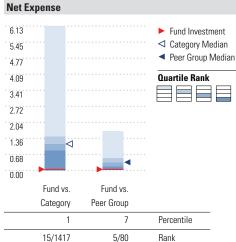
0.06

8

0.05

11

0.05



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	-1.11	_	-0.67
Beta	0.99	_	0.99
R-Squared	98.93	_	89.81
Standard Deviation	12.18	12.19	12.79
Sharpe Ratio	1.12	1.22	1.10
Tracking Error	1.26	_	4.11
Information Ratio	-1.09	_	-0.38
Up Capture Ratio	95.91	_	95.28
Down Capture Ratio	102.00	-	97.60

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	23.79	21.82	23.08
Price/Book Ratio	4.49	5.15	4.39
Geom Avg Mkt Cap \$B	52.79	55.71	72.96
ROE	23.06	27.80	23.94



26

23

21

0.10

32

0.09

9

0.09

9

0.08

# Vanguard Growth Index Admiral VIGAX

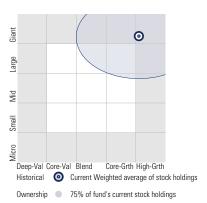
# Morningstar Category Large Growth

Morningstar Index

Russell 1000 Growth TR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

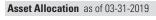
Equity

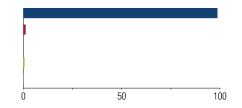
26		Large
4	6	Mid
0	0	Small
	4	4 6

Value Blend Growth

Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.11	0.73
Cash	0.41	1.81
Bonds	0.00	0.04
Non-US Stocks	0.96	5.33
US Stocks	98.53	92.09
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019														
		Fund	Bmark	Cat	Fund		▼ Be	nchma	rk [	Categ	ory Av	erage				
<u></u>	Cyclical	32.35	29.87	32.64												
A.	Basic Materials	2.05	1.66	1.79												
<b>A</b>	Consumer Cyclical	17.96	17.44	17.05												
<del>,</del>	Financial Services	8.42	9.04	12.75			•									
ŵ	Real Estate	3.92	1.73	1.05		Ė										
W	Sensitive	52.40	51.01	45.93												Ī
	Communication Services	2.98	1.26	2.28	<u> </u>											
ð	Energy	2.49	0.74	1.59												
Ф	Industrials	10.19	12.92	9.56				1								
	Technology	36.74	36.09	32.50												
<b>→</b>	Defensive	15.24	19.12	21.43					1							
Ħ	Consumer Defensive	4.33	6.12	5.03		• <u>(</u>										
٠	Healthcare	10.86	13.00	15.87												
•	Utilities	0.05	0.00	0.53	0											
-					0%	5	10	15	20	25	30	35	40	45	50	5

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Microsoft Corp	7.25	7.25	16.57	Technology
Apple Inc	6.46	13.70	20.88	Technology
	5.96	19.66	18.56	Consumer Cyclical
Facebook Inc A	3.19	22.85	27.16	Technology
	2.82	25.67	12.63	Technology
	2.79	28.46	_	Technology
→ Visa Inc Class A	2.19	30.65	18.57	Financial Services
The Home Depot Inc     The Home Depot Inc	1.74	32.38	12.47	Consumer Cyclical
	1.72	34.11	24.98	Financial Services
→ Boeing Co	1.64	35.74	18.91	Industrials
○ Comcast Corp Class A	1.45	37.19	17.42	Communication Svc
Netflix Inc     ■     Netflix Inc     Netflix Inc     ■     Netflix Inc     N	1.18	38.38	33.21	Consumer Cyclical
	1.17	39.55	7.60	Consumer Cyclical
→ Philip Morris International Inc	1.10	40.65	34.11	Consumer Defensive
Adobe Inc     Adobe I	1.04	41.69	17.79	Technology

Total Holdings 302



# 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.

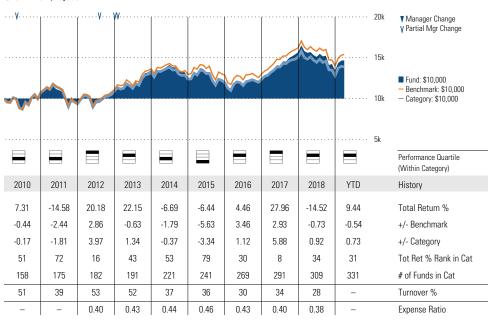
 $\times$  *Style:* The fund has landed in its primary style box — Large Value — 9.09 % of the time over the past three years.

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

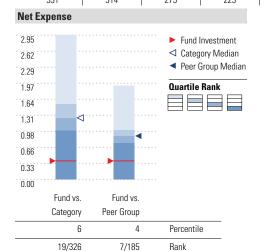
#### **Morningstar Investment Management LLC Analysis**

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



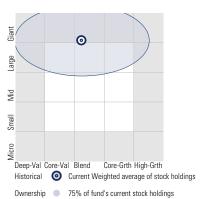
# Vanguard International Value Inv VTRIX

#### **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

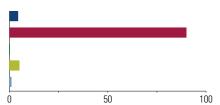
Value Blend Growth

Weight %

>50 25-50 10-25 0-10



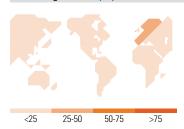
Asset Allocation as of 03-31-2019



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 ▼ Benchmark [] Category Average
<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	
<b>fi</b>	Real Estate	2.18	3.93	2.02	<b>1</b>
W	Sensitive	42.38	30.90	34.29	
	Communication Services	6.35	3.98	6.12	<b>T</b>
ð	Energy	8.72	5.95	9.36	
Ф	Industrials	9.93	13.21	11.42	
	Technology	17.38	7.76	7.39	
<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	
0	Utilities	2.01	3.74	3.37	

### 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
○ Cmt Market Liquidity Rate	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 Mid-Cap Growth Index Admiral VMGMX

Morningstar Category

Mid-Cap Growth

Morningstar Index Russell Mid Cap Growth TR USD

#### Portfolio Manager(s)

Donald Butler since 02-2013 Michael Johnson since 04-2016

#### **Quantitative Screens**

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

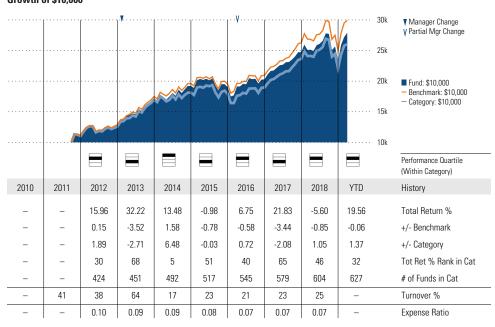
Management: The fund's management has been in place for 6.1 years.

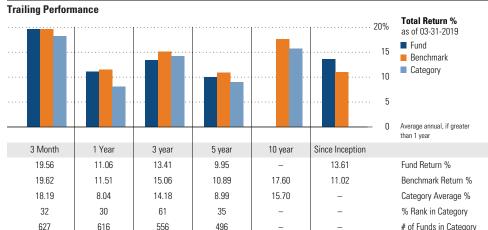
Net Expense: The fund's expense ratio of 0.07 is
 94.02% lower than the Mid-Cap Growth category average.

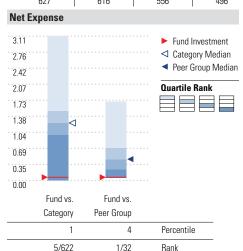
#### **Morningstar Investment Management LLC Analysis**

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.

## Growth of \$10,000







3-Year RISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.80	_	-0.08
Beta	0.95	_	1.00
R-Squared	98.07	-	90.20
Standard Deviation	12.77	13.29	14.00
Sharpe Ratio	0.95	1.03	0.97
Tracking Error	1.89	-	4.36
Information Ratio	-0.87	-	-0.22
Up Capture Ratio	93.29	-	98.22
Down Capture Ratio	98.67	-	98.37

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	26.62	24.43	24.72
Price/Book Ratio	4.00	4.75	4.01
Geom Avg Mkt Cap \$B	11.59	11.70	9.33
ROE	18.67	21.26	18.42





# Vanguard Mid-Cap Growth Index Admiral VMGMX

Morningstar Category

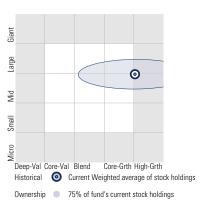
Mid-Cap Growth

Morningstar Index

Russell Mid Cap Growth TR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

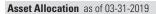
Equity

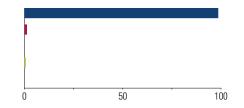
1. /			
0	10	37	Large
2	18	33	Mid
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10





Asset Class	Net %	Cat%
US Stocks	98.46	92.58
Non-US Stocks	1.07	3.84
Bonds	0.00	0.02
Cash	0.47	3.26
Other	0.00	0.30
Total	100.00	100.00

Sec	ctor Weighting as of 03-3	31-2019														
		Fund	Bmark	Cat	Fun	d	▼ Be	nchma	ırk	Categ	jory A	/erage				
ሁ	Cyclical	28.75	30.09	31.74							<b>=</b> [					
A.	Basic Materials	2.81	2.91	2.65												
A	Consumer Cyclical	10.12	17.68	15.41					Y :							
<b>F</b>	Financial Services	6.84	7.26	9.76												
<b>fi</b>	Real Estate	8.98	2.24	3.92												
W	Sensitive	53.62	51.68	47.14												
	Communication Services	1.04	0.85	1.34												
•	Energy	6.33	1.47	1.60												
Ф	Industrials	20.42	18.46	16.98												
	Technology	25.83	30.90	27.22							] [					
<b>→</b>	Defensive	17.62	18.24	21.13												
Ħ	Consumer Defensive	3.54	4.61	3.88												
+	Healthcare	13.81	13.63	16.48												
•	Utilities	0.27	0.00	0.77	1											
					0%	5	10	15	20	25	30	35	40	45	50	55

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Roper Technologies Inc	1.63	1.63	28.48	Industrials
⊕ Fiserv Inc	1.62	3.24	20.13	Industrials
⊕ Worldpay Inc Class A	1.57	4.82	48.50	Industrials
Xilinx Inc	1.47	6.29	49.29	Technology
→ Red Hat Inc	1.41	7.70	4.02	Technology
⊕ Moody's Corporation	1.36	9.06	29.67	Financial Services
⊕ ONEOK Inc	1.32	10.38	31.05	Energy
⊕ Amphenol Corp Class A	1.29	11.67	16.85	Technology
Ð Digital Realty Trust Inc	1.13	12.80	12.70	Real Estate
Ð IQVIA Holdings Inc	1.11	13.91	23.83	Healthcare
Twitter Inc	1.10	15.01	_	Technology
⊃ Dollar Tree Inc	1.09	16.10	16.30	Consumer Defensive
Waste Connections Inc	1.07	17.17	19.53	Industrials
Advanced Micro Devices Inc	1.06	18.23	38.24	Technology
SBA Communications Corp	1.04	19.27	23.33	Communication Svc

### **Total Holdings** 173



# 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.

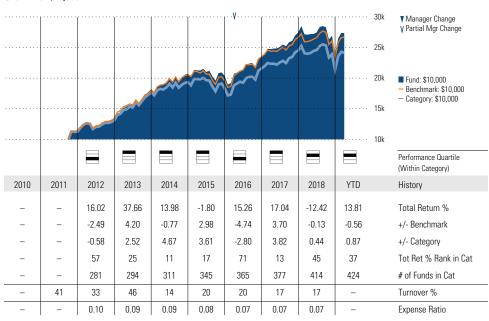
Management: The fund's management has been in place for 12.63 years.

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

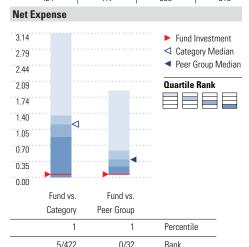
#### **Morningstar Investment Management LLC Analysis**

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

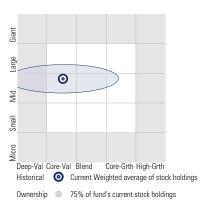
# Morningstar Category Mid-Cap Value

### Morningstar Index

Russell Mid Cap Value TR USD

# Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

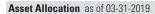
Equity

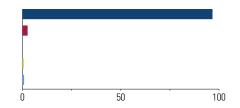
9	11	2	Large
45	29	4	Mid
0	0	0	Small

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										
3	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
⊕ Ameren Corp	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)

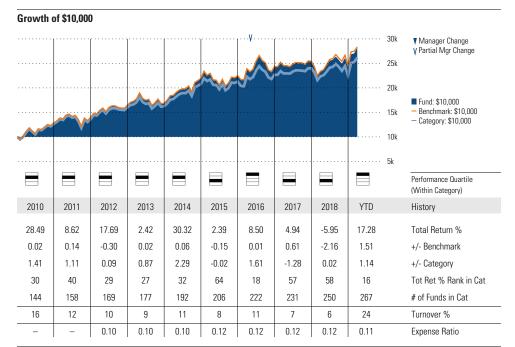
Gerard O'Reilly since 05-1996 Walter Nejman since 05-2016

#### **Quantitative Screens**

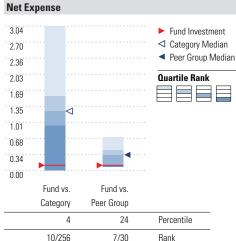
- Performance: The fund has finished in the Real Estate category's top three quartiles in 10 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 22.9 years.
- Net Expense: The fund's expense ratio of 0.11 is
   90.43% lower than the Real Estate category average.

#### **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



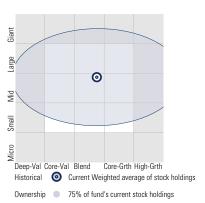
# Vanguard Real Estate Index Admiral VGSLX

**Morningstar Category** Morningstar Index Real Estate

S&P United States REIT TR USD

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

Morningstar Style Box™



### Style Breakdown

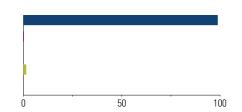
Equity

17	2	2 Small
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	▼ Benchm	ark	Cate	gory A	verage		
÷	Cyclical	89.63	99.13	94.62								
à.	Basic Materials	2.08	0.00	0.58	0							
<b>P</b>	Consumer Cyclical	0.00	0.13	0.84	Ö							
٥	Financial Services	0.00	0.00	0.10	Ď							
ŧ	Real Estate	87.55	99.00	93.10								] [
NF	Sensitive	10.37	0.87	5.29								
	Communication Services	9.47	0.00	4.45								
ð	Energy	0.00	0.00	0.02	<u> </u>							
<b>\$</b>	Industrials	0.90	0.87	0.50	ď							
	Technology	0.00	0.00	0.32	İ							
<b>→</b>	Defensive	0.00	0.00	0.08	Ó							
Ę	Consumer Defensive	0.00	0.00	0.00	ĺ							
٠	Healthcare	0.00	0.00	0.03								
2	Utilities	0.00	0.00	0.05	j							

<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	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
⊕ Ventas Inc	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 Small Cap Growth Index Inv VISGX

Morningstar Category

Small Growth

Morningstar Index

Russell 2000 Growth TR USD

Expense Ratio

### Portfolio Manager(s)

Gerard O'Reilly since 12-2004 William Coleman since 04-2016

#### **Quantitative Screens**

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

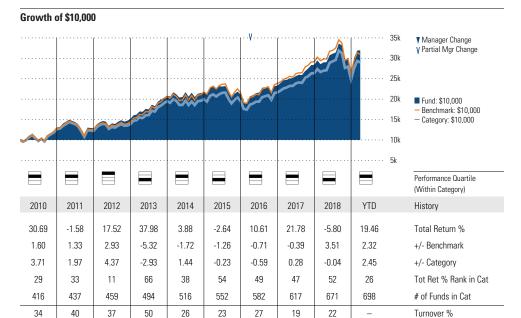
Management: The fund's management has been in place for 14.26 years.

 $\times$  *Style:* The fund has landed in its primary style box — Small Growth — 62.86 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.19 is 84.43% lower than the Small Growth category average.

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

This fund fails our style screen but its portfolio positioning remains consistent with the benchmark index it tracks.

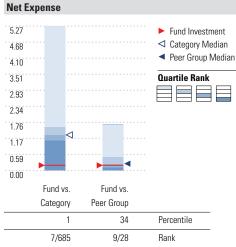




0.19

0.19

0.19



0.24

0.24

0.23

0.20

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	1.89	_	1.95
Beta	0.91	_	0.94
R-Squared	96.62	_	91.31
Standard Deviation	15.00	16.27	16.11
Sharpe Ratio	0.96	0.86	0.94
Tracking Error	3.15	_	4.79
Information Ratio	0.24	_	0.26
Up Capture Ratio	93.00	_	97.36
Down Capture Ratio	81.48	-	86.74

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	27.66	24.72	25.39
Price/Book Ratio	3.16	3.88	3.65
Geom Avg Mkt Cap \$B	2.95	1.66	2.80
ROE	10.39	10.22	9.63



# Vanguard Small Cap Growth Index Inv VISGX

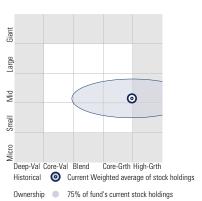
# Morningstar Category Small Growth

Morningstar Index

Russell 2000 Growth TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

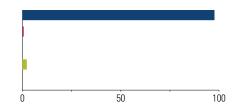
Lquity			
0	0	0	Large
3	17	47	Mid
2	10	20	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.00	0.40
Cash	2.03	2.22
Bonds	0.00	0.00
Non-US Stocks	0.43	3.37
US Stocks	97.54	94.01
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019													
		Fund	Bmark	Cat	Fun	b	▼ Ben	chmark	[] Ca	ategory	Avera	ge			
<u></u>	Cyclical	31.85	30.89	29.93											
Å.	Basic Materials	3.69	5.49	4.41		<b>[</b> ]									
Д	Consumer Cyclical	11.61	15.27	12.90				0							
æ	Financial Services	5.34	6.95	9.55		1	0								
<b>fi</b>	Real Estate	11.21	3.18	3.07											
W	Sensitive	45.11	40.52	45.56											
	Communication Services	1.52	1.50	0.95	ii)										
ð	Energy	3.20	1.77	1.90		ı İ									
Ф	Industrials	13.90	15.14	16.09			- :	<b>=</b> []							
	Technology	26.49	22.11	26.62											
<b>—</b>	Defensive	23.05	28.58	24.50							7				
=	Consumer Defensive	3.21	3.69	4.63		1 []									
+	Healthcare	19.14	24.37	18.94						7					
•	Utilities	0.70	0.52	0.93											
					0%	5	10	15	20	25	30	35	40	45	5

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
○ Cmt Market Liquidity Rate	2.01	2.01	_	_
⊕ Zebra Technologies Corp	0.68	2.69	31.59	Industrials
⊕ Exact Sciences Corp	0.65	3.35	37.27	Healthcare
⊕ Burlington Stores Inc	0.63	3.98	_	Consumer Defensive
⊕ Ionis Pharmaceuticals Inc	0.60	4.58	50.15	Healthcare
⊖ Lennox International Inc	0.60	5.19	21.10	Industrials
⊕ PTC Inc	0.59	5.78	11.19	Technology
The Ultimate Software Group Inc     ■ The Ultimate Software G	0.59	6.37	34.82	Technology
⊕ Sun Communities Inc	0.58	6.95	17.26	Real Estate
⊕ MarketAxess Holdings Inc	0.57	7.52	16.70	Financial Services
⊕ Equity Lifestyle Properties Inc	0.56	8.08	18.31	Real Estate
	0.55	8.63	_	Technology
⊕ Tableau Software Inc A	0.55	9.18	6.07	Technology
Paycom Software Inc	0.53	9.71	_	Technology
⊕ EPAM Systems Inc	0.52	10.23	45.79	Technology

Total Holdings 626



# Vanguard Small Cap Value Index Inv VISVX

Morningstar Category

Small Value

Morningstar Index Russell 2000 Value TR USD

#### Portfolio Manager(s)

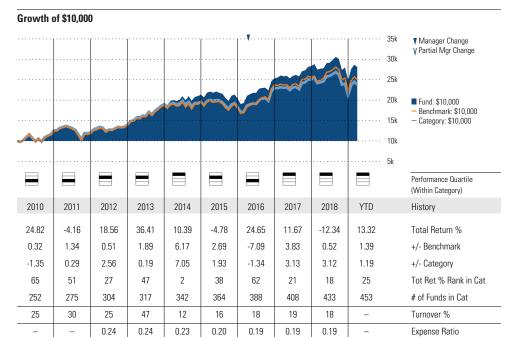
William Coleman since 04-2016 Gerard O'Reilly since 04-2016

#### **Quantitative Screens**

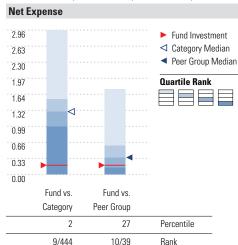
- Performance: The fund has finished in the Small Value category's top three quartiles in 10 of the 10 years it's been in existence.
- × *Management:* The fund's management team has been in place for less than three years.
- × Style: The fund has landed in its primary style box Small Value 62.86 % of the time over the past three years.
- Net Expense: The fund's expense ratio of 0.19 is 84.03% lower than the Small Value 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. This fund also fails our style screen but its portfolio positioning remains consistent with the benchmark index it tracks.







3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	0.56	_	-1.88
Beta	0.87	_	0.96
R-Squared	96.19	_	92.76
Standard Deviation	14.37	16.12	16.10
Sharpe Ratio	0.65	0.64	0.50
Tracking Error	3.46	-	4.31
Information Ratio	-0.21	-	-0.68
Up Capture Ratio	87.17	-	88.84
Down Capture Ratio	83.17	-	97.04

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.50	18.52	18.01
Price/Book Ratio	1.80	1.45	1.65
Geom Avg Mkt Cap \$B	2.79	1.34	2.55
ROE	11.48	6.22	9.71



# Vanguard Small Cap Value Index Inv VISVX

Morningstar Category

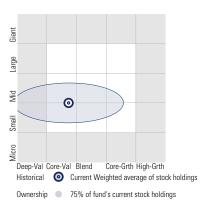
Small Value

Morningstar Index

Russell 2000 Value TR USD

# Style Analysis as of 03-31-2019

Morningstar Style Box™



# Style Breakdown

Equity

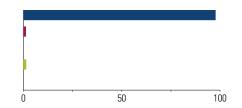
-quit,			
0	0	0	Large
26	22	6	Mid
24	17	5	Small

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	1.25	2.75
Bonds	0.00	-0.06
Non-US Stocks	1.13	2.51
US Stocks	97.62	94.77
Asset Class	Net %	Cat%

56	ctor Weighting as of 03-3	31-2019			_
		Fund	Bmark	Cat	Fund • Benchmark [] Category Average
b	Cyclical	54.03	55.33	55.67	
i.	Basic Materials	6.94	4.61	7.13	
4	Consumer Cyclical	13.31	9.92	13.38	
<b>,</b>	Financial Services	20.85	25.96	25.72	
b	Real Estate	12.93	14.84	9.44	
M	Sensitive	31.87	30.07	33.19	
d	Communication Services	0.60	1.15	0.59	
•	Energy	4.17	4.49	4.92	
\$	Industrials	17.21	12.46	16.01	
2	Technology	9.89	11.97	11.67	
<b>→</b>	Defensive	14.09	14.60	11.14	
Ę	Consumer Defensive	3.87	3.36	3.64	
ì	Healthcare	4.88	3.91	3.44	
?	Utilities	5.34	7.33	4.06	

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
	1.23	1.23	_	_
⊕ Atmos Energy Corp	0.66	1.89	11.58	Utilities
⊕ IDEX Corp	0.64	2.53	20.52	Industrials
⊕ PerkinElmer Inc	0.59	3.12	22.76	Healthcare
⊕ UGI Corp	0.53	3.64	4.37	Utilities
<ul> <li>Spirit AeroSystems Holdings Inc Class A</li> </ul>	0.53	4.17	27.13	Industrials
⊕ Leidos Holdings Inc	0.51	4.68	22.17	Technology
⊕ National Retail Properties Inc	0.49	5.17	15.21	Real Estate
→ Allegion PLC	0.47	5.64	14.14	Industrials
○ ON Semiconductor Corp	0.46	6.10	24.59	Technology
Sage Therapeutics Inc	0.44	6.53	_	Healthcare
⊕ Gaming and Leisure Properties Inc	0.43	6.96	_	Real Estate
⊕ Booz Allen Hamilton Holding Corp	0.42	7.39	29.51	Industrials
	0.42	7.81	-0.66	Basic Materials
⊕ US Foods Holding Corp	0.41	8.22	_	Consumer Defensive

**Total Holdings 847** 



# **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.

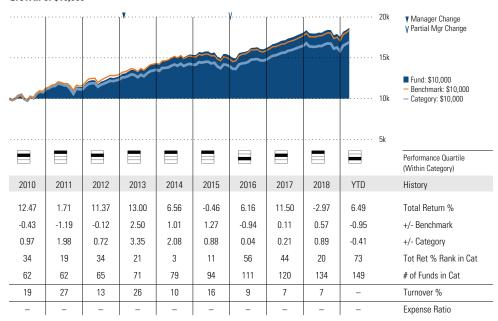
Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

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

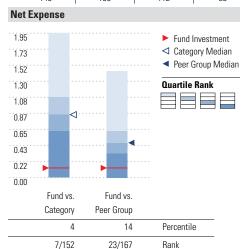
#### **Morningstar Investment Management LLC Analysis**

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- Teal hisk Wellics			
	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

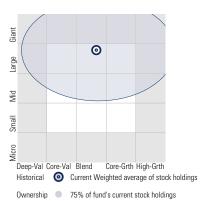


# Vanguard Target Retirement 2015 Inv VTXVX

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

# Style Analysis as of 03-31-2019

Morningstar Style Box™



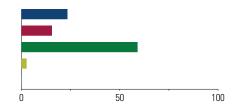
### Style Breakdown

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.

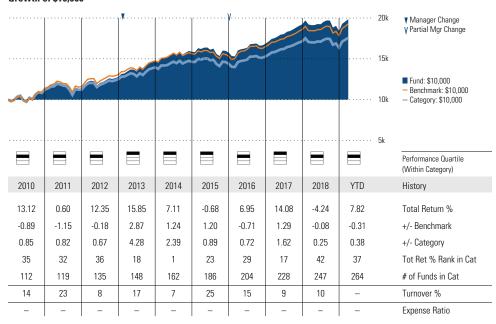
Management: The fund's management has been in place for 6.1 years.

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

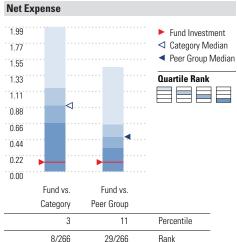
### **Morningstar Investment Management LLC Analysis**

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

Mod

Duration

**Morningstar Category** Target-Date 2020

Morningstar Index Morningstar Lifetime Mod 2020 TR USD

# Style Analysis as of 03-31-2019

Morningstar Style Box™



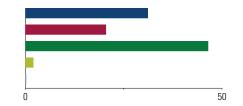


Equity				Fixed Ir	come
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Pland	Growth		Ltd	Mod

Value Blend Growth

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

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



Total	100.00	100.00
Other	0.12	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	
ė.	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.

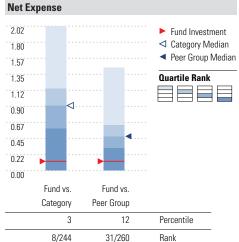
#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change 20k ■ Fund: \$10,000 - Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 13.84 -0.37 13.29 18.14 7.17 -0.85 7.48 15.94 -5.15 8.82 Total Return % -0.61 -0.38 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

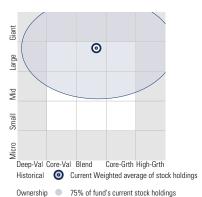
# Vanguard Target Retirement 2025 Inv VTTVX

Quality

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

Style Analysis as of 03-31-2019

Morningstar Style Box™

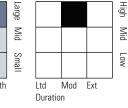




Equity 26



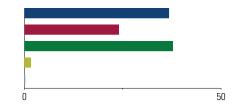
Value Blend Growth



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**

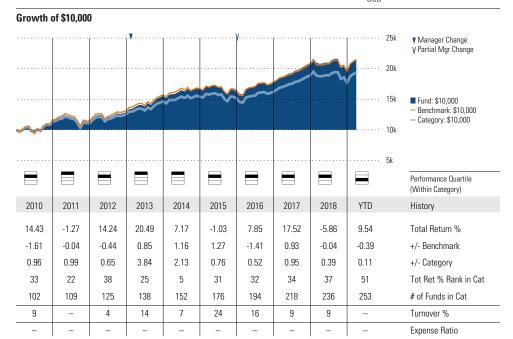
❷ Performance: The fund has finished in the Target-Date
2030 category's top three quartiles in 10 of the 10 years it's
been in existence.

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

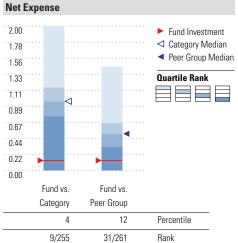
Net Expense: The fund's expense ratio of 0.14 is
 82.72% lower than the Target-Date 2030 category average.

### **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			



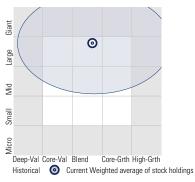
# Vanguard Target Retirement 2030 Inv VTHRX

**Morningstar Category** Target-Date 2030

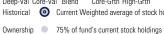
**Morningstar Index** Morningstar Lifetime Mod 2030 TR USD

# 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**

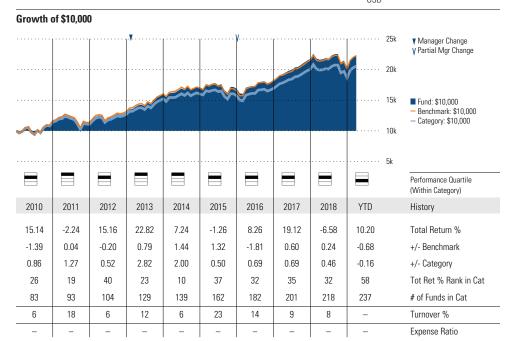
❷ Performance: The fund has finished in the Target-Date
2035 category's top three quartiles in 10 of the 10 years it's
been in existence.

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

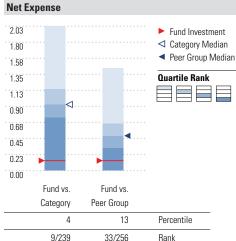
Net Expense: The fund's expense ratio of 0.14 is 82.05% lower than the Target-Date 2035 category average.

### **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 In	come
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
1/ 1	DI .	0 1		T. I	

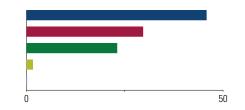
Value Blend Growth

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**

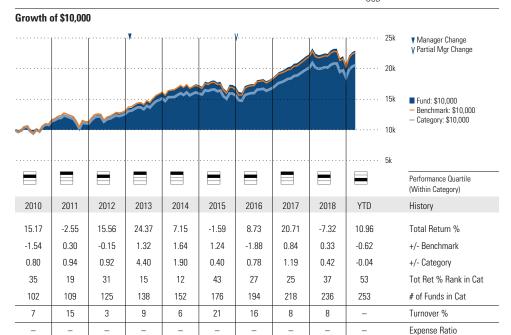
Q Performance: The fund has finished in the Target-Date 2040 category's top three quartiles in 9 of the 10 years it's been in existence.

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

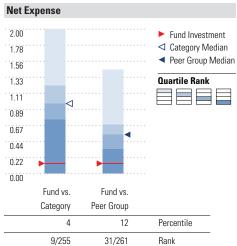
Net Expense: The fund's expense ratio of 0.14 is 82.93% lower than the Target-Date 2040 category average.

### **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

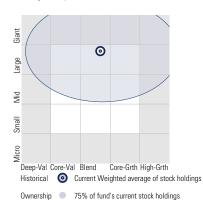
Duration

**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

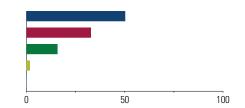
Equity				Fixed	Income
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	Mod

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 '	Bench	mark	Categ	ory Ave	rage			
Դ	Cyclical	38.57	41.30	40.24									<b>-</b> [	
A.	Basic Materials	5.07	5.25	4.46										
4	Consumer Cyclical	11.73	11.22	11.78										
£	Financial Services	17.87	16.85	17.07										
<b>fi</b>	Real Estate	3.90	7.98	6.93										
M	Sensitive	38.51	36.10	37.30										
	Communication Services	3.41	3.57	3.03		0								
ð	Energy	5.82	5.64	5.31										
Ф	Industrials	11.49	11.29	10.94			<b></b> )							
	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		[								
					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
⊕ 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 ldx 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.

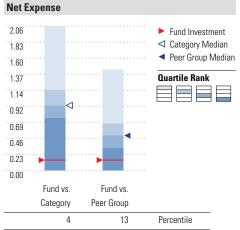
Net Expense: The fund's expense ratio of 0.15 is 81.01% lower than the Target-Date 2045 category average.

#### **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

Fund	Bmark	Cat
-0.09	_	-0.57
0.99	_	0.98
99.14	_	97.88
9.14	9.19	9.14
0.99	1.01	0.93
0.85	_	1.36
-0.25	_	-0.62
98.99	_	96.00
100.30	_	100.70
	-0.09 0.99 99.14 9.14 0.99 0.85 -0.25 98.99	-0.09 - 0.99 - 99.14 - 9.14 9.19 0.99 1.01 0.850.25 - 98.99 -

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 %

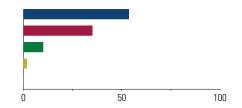
Lquity			
26	25	25	Large
6	6	6	Mid
2	2	2	Small

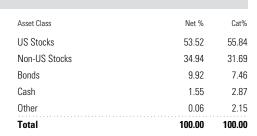


Value Blend Growth

>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
<sub>Մ</sub>	Cyclical	38.57	41.53	40.67	
A.	Basic Materials	5.07	5.33	4.27	
<b>A</b>	Consumer Cyclical	11.73	11.25	11.45	
<del>,</del>	Financial Services	17.86	16.94	16.27	
ıπ	Real Estate	3.91	8.01	8.68	
W	Sensitive	38.52	36.03	36.63	
	Communication Services	3.41	3.55	2.90	<b>⊨</b> 0' .
ð	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 Idx 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.

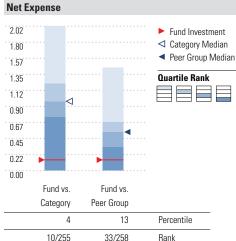
Net Expense: The fund's expense ratio of 0.15 is
 81.93% lower than the Target-Date 2050 category average.

#### **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

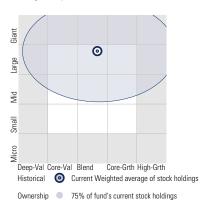
Mod

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										
ıπ	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			<b></b> (-							
	Technology	17.79	15.47	18.38				.,•	■[					
<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		1								
					0%	5	10	15	20	25	30	35	40	

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.

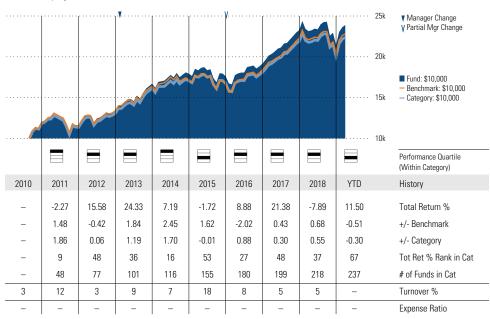
Management: The fund's management has been in place for 6.1 years.

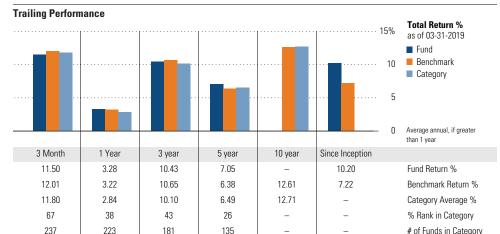
Net Expense: The fund's expense ratio of 0.15 is
 81.25% lower than the Target-Date 2055 category average.

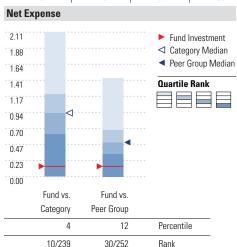
### **Morningstar Investment Management LLC Analysis**

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

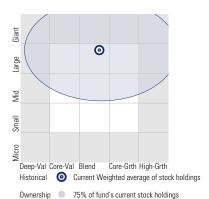
Quality High Mid

**Morningstar Category** Target-Date 2055

Morningstar Index Morningstar Lifetime Mod 2055 TR USD

# Style Analysis as of 03-31-2019

Morningstar Style Box™



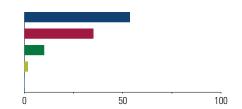
### Style Breakdown

	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.

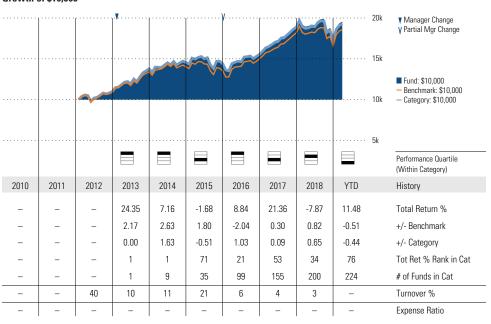
Management: The fund's management has been in place for 6.1 years.

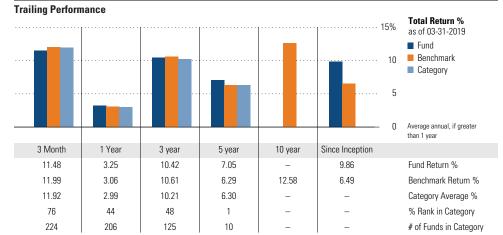
 Net Expense: The fund's expense ratio of 0.15 is 81.93% lower than the Target-Date 2060+ category average.

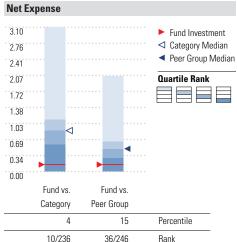
### **Morningstar Investment Management LLC Analysis**

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



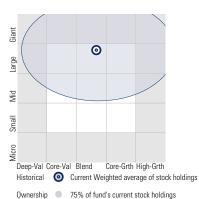
# Vanguard Target Retirement 2060 Inv VTTSX

**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

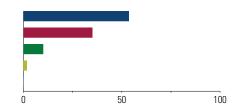
High MidLow Mod I td Duration

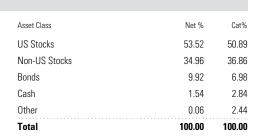
Quality

Weight %

>50 25-50 10-25 0-10

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





		Fund	Bmark	Cat	Fun	d t	Bench	mark	Categ	jory Ave	erage			
<sub>Մ</sub>	Cyclical	38.58	42.29	39.57										•
A.	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										
¢	Industrials	11.49	11.23	10.81										
	Technology	17.79	15.35	17.88				- '						
<b>—</b>	Defensive	22.92	21.93	22.70						0				
Ħ	Consumer Defensive	7.84	7.90	7.78			(							
+	Healthcare	11.88	10.37	11.88										
7	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	_	_
	-	35.82	89.91	_	_
◆ Vanguard Total Bond Market II Idx Inv	-	7.18	97.09	_	-
⊕ Vanguard Total Intl Bd Idx Investor	_	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**

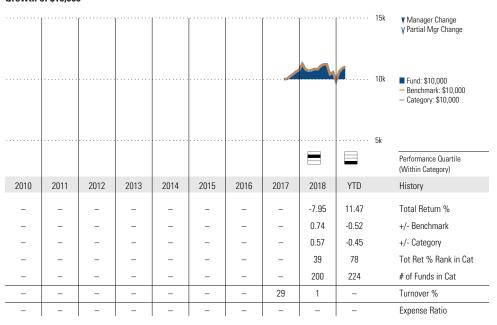
The Performance screen is not applicable for funds with less than three years of data.

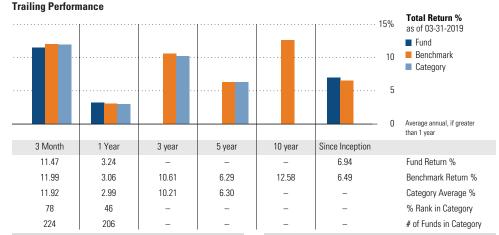
- × Management: The fund's management team has been in place for less than three years.
- Net Expense: The fund's expense ratio of 0.15 is 81.93% lower than the Target-Date 2060+ category average.

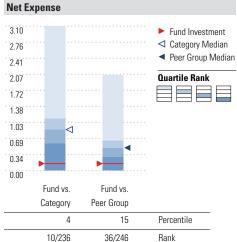
#### **Morningstar Investment Management LLC Analysis**

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 nisk inchics			
	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

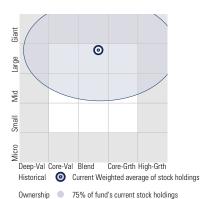
Asset Allocation as of 03-31-2019

**Morningstar Category** Target-Date 2060+

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

# Style Analysis as of 03-31-2019

Morningstar Style Box™

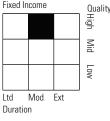




25 26 6 6 6

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	Func	٠ ,	Bench	mark	Cated	gory Ave	rane			
l.	Cyclical	38.57	42.29	39.57	Turic		Bonon	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				
Ţ	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.

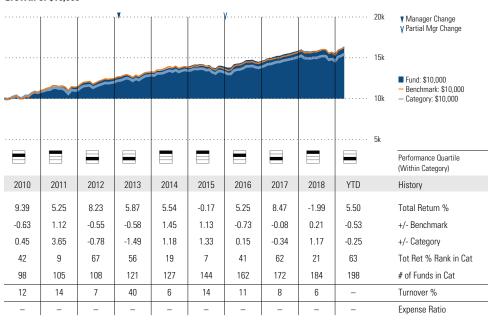
Management: The fund's management has been in place for 6.1 years.

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

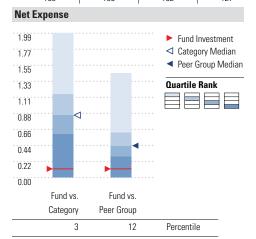
#### **Morningstar Investment Management LLC Analysis**

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







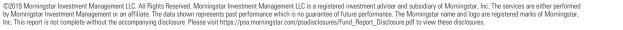
Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

27/226

7/200

3-1 cai nisk ivicuits			
	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

Asset Allocation as of 03-31-2019

**Morningstar Category** Target-Date Retirement **Morningstar Index** Morningstar Lifetime Mod Incm TR USD

Net %

17.89

11.73

67.51

2.75

0.13

100.00

Cat%

20.10

10.78

60.15

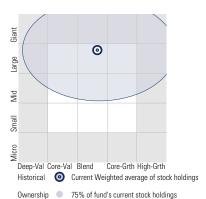
6.41

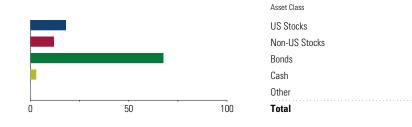
2.55

100.00

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

Morningstar Style Box™





### Style Breakdown

Equity					Fixed Income			
	26	25	25	Large				Quality High
	6	6	6	Mid				Mid
	2	2	2	Small				Low
1	Value	Blend	Growth		Ltd Duratio	Mod	Ext	•

Weight %

>50 25-50 10-25 0-10

Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund Benchmark Category Average
<b>Դ</b>	Cyclical	38.58	41.05	39.11	
A	Basic Materials	5.08	4.56	4.61	
A	Consumer Cyclical	11.74	10.77	11.76	
<b>P</b>	Financial Services	17.87	15.92	17.02	
ıπ	Real Estate	3.89	9.80	5.72	
W	Sensitive	38.52	35.92	37.89	
	Communication Services	3.42	3.80	3.20	
•	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	
٠	Healthcare	11.88	11.42	12.12	
•	Utilities	3.18	3.74	3.20	
					0% 5 10 15 20 25 30 35 40

<b>Top 6 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
① Vanguard Total Bond Market II ldx Inv	-	37.44	37.44	_	_
○ Vanguard Total Stock Mkt Idx Inv	-	18.08	55.52	_	-
① Vanguard Shrt-Term Infl-Prot Sec Idx Inv	-	16.63	72.15	_	_
① Vanguard Total Intl Bd Idx Investor	-	15.80	87.95	_	_
○ Vanguard Total Intl Stock Index Inv	-	12.02	99.96	-	-
Cmt Market Liquidity Rate	_	0.04	100.00	_	_

#### Total Holdings 6

