

# AB High Income Z AGDZX

**Morningstar Category**  
High Yield Bond

**Morningstar Index**  
ICE BofAML US High Yield TR USD

## Portfolio Manager(s)

Paul DeNoon since 08-2002  
Douglas Peebles since 08-2002  
Matthew Sheridan since 10-2005  
Gershon Distenfeld since 02-2008  
Shamaila Khan since 02-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the High Yield Bond category's top three quartiles in 4 of the 6 years it's been in existence.

✔ **Management:** The fund's management has been in place for 17.09 years.

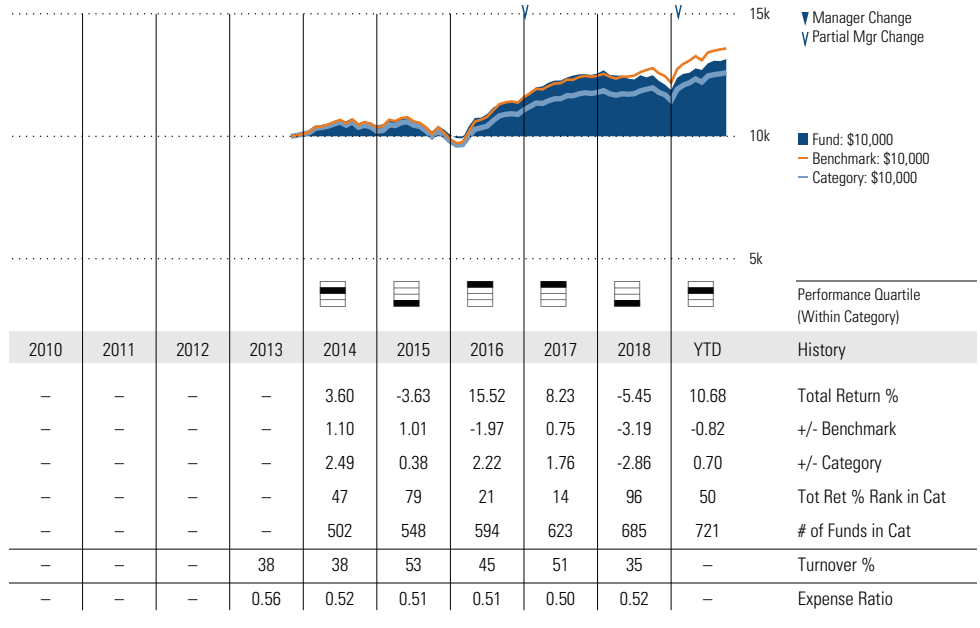
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.52 is 47.47% lower than the High Yield Bond category average.

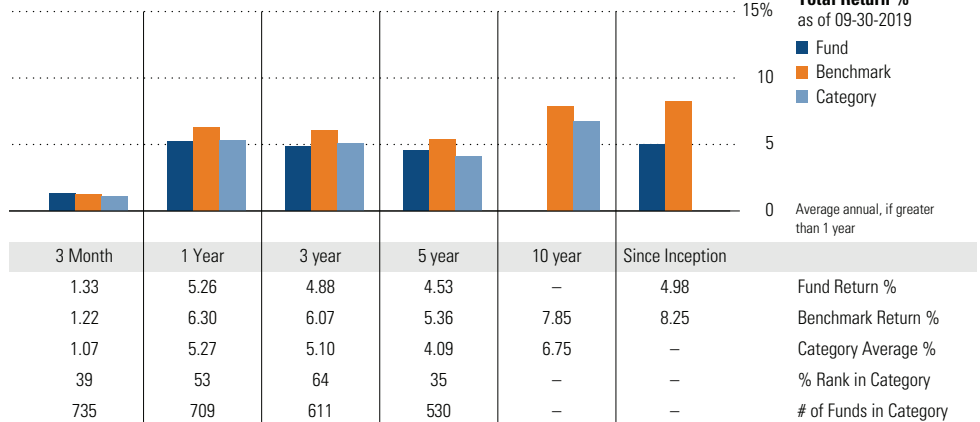
## Morningstar Investment Management LLC Analysis

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.

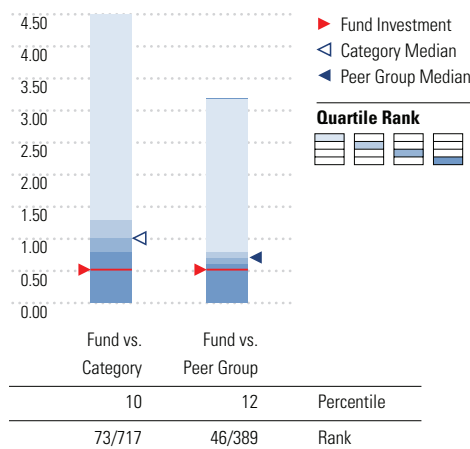
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	-0.77	-	-0.35
Beta	0.94	-	0.90
R-Squared	85.73	-	90.23
Standard Deviation	4.27	4.21	4.02
Sharpe Ratio	0.76	1.04	0.88
Tracking Error	1.63	-	1.37
Information Ratio	-0.73	-	-0.89
Up Capture Ratio	85.96	-	86.99
Down Capture Ratio	96.81	-	93.08

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Avg Eff Duration	3.84	-	2.83
Avg Eff Maturity	6.14	-	4.65

# AB High Income Z AGDZX

**Morningstar Category**  
High Yield Bond

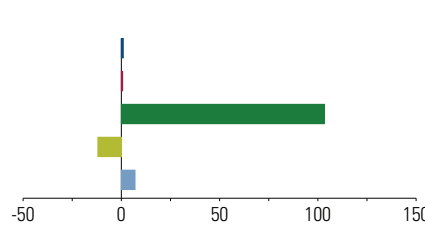
**Morningstar Index**  
ICE BofAML US High Yield TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

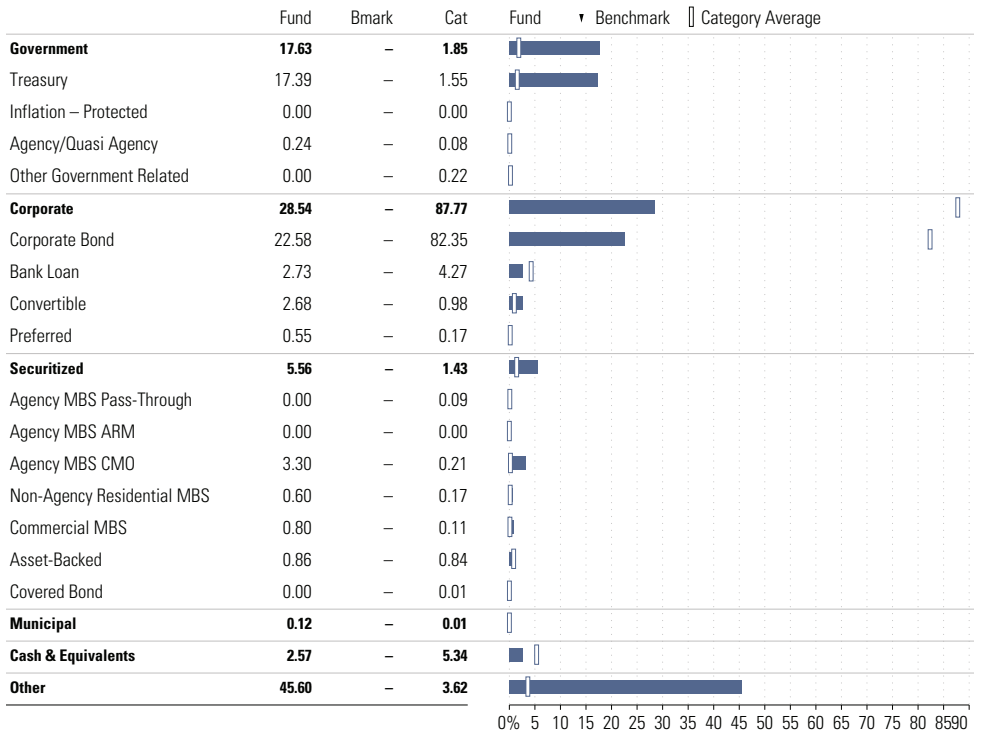


Asset Class	Net %	Cat%
US Stocks	0.99	0.70
Non-US Stocks	0.67	0.05
Bonds	103.34	94.03
Cash	-11.95	3.62
Other	6.95	1.60
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	12.39	-	3.36
AA	0.18	-	0.27
A	2.08	-	1.63
BBB	16.41	-	4.66
BB	27.72	-	29.89
B	26.58	-	40.54
Below B	5.06	-	18.23
Not Rated	9.58	-	1.42

## Sector Weighting as of 09-30-2019



## Top 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
* CashOffSet	-	16.53	16.53	-
+ Cdx-Nahys32v1-5y Cdss 499857 5% 20/06/2024	06-2024	10.89	27.42	-
United States Treasury Notes 2.38%	05-2029	9.03	36.45	-
- Itraxx-Xovers27v1-5y Cdsb 4491 5% 20/06/2022	06-2022	8.70	45.15	-
Eur Fwd Vs Usd 0% 10/10/2019	10-2019	8.24	53.40	-
Eur Fwd Vs Usd 0% 10/10/2019	10-2019	7.88	61.28	-
Twd Fwd Vs Usd 0% 11/09/2019	09-2019	4.77	66.05	-
+ Twd Fwd Vs Usd 0% 11/09/2019	09-2019	4.72	70.77	-
+ Twd Fwd Vs Usd 0% 11/09/2019	09-2019	4.71	75.49	-
Twd Fwd Vs Usd 0% 11/09/2019	09-2019	4.67	80.15	-

**Total Holdings 1072**

+ Increase - Decrease \* New to Portfolio

# American Funds American Balanced R6 RLBGX

**Morningstar Category**  
Allocation--50% to 70%  
Equity

**Morningstar Index**  
Morningstar Mod Tgt Risk TR USD

## Portfolio Manager(s)

Hilda Applbaum since 01-1999  
 Gregory Johnson since 03-2003  
 Alan Berro since 03-2006  
 James Mulally 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 10 of the 10 years it's been in existence.

✔ **Management:** The fund's management has been in place for 20.76 years.

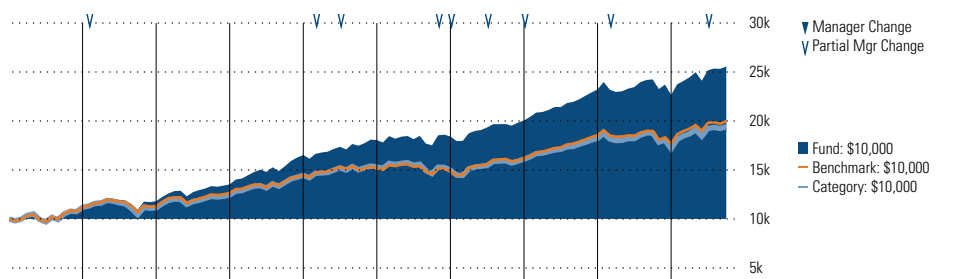
✘ **Style:** The fund has landed in its primary style box — Large Blend — 63.64 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.28 is 74.07% lower than the Allocation--50% to 70% Equity category average.

## Morningstar Investment Management LLC Analysis

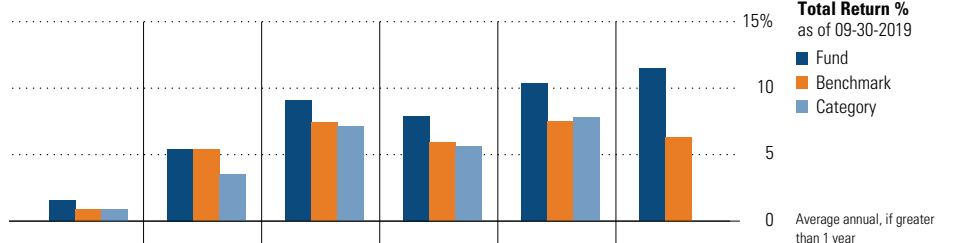
This fund fails our current style screen. However, as an allocation fund it is not expected to adhere to a strict style discipline, so the screen failure does not concern us and we are still comfortable using this fund.

## Growth of \$10,000



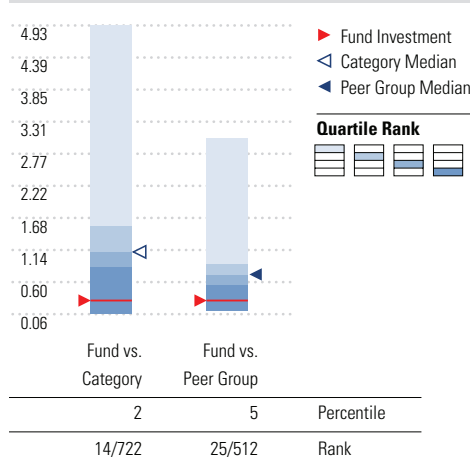
	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD	History
Performance Quartile (Within Category)	III	III	III	III	III	III	III	III	III	III	History
Total Return %	13.39	4.16	14.57	22.12	9.22	2.03	8.90	15.84	-2.42	12.80	Total Return %
+/- Benchmark	1.06	3.57	2.53	7.81	4.33	3.82	0.33	1.18	2.34	-0.31	+/- Benchmark
+/- Category	1.56	4.27	2.85	5.64	3.01	3.96	1.56	2.63	3.34	-0.62	+/- Category
Tot Ret % Rank in Cat	23	7	9	5	16	3	20	15	8	66	Tot Ret % Rank in Cat
# of Funds in Cat	434	454	481	547	561	585	641	662	706	718	# of Funds in Cat
Turnover %	37	47	54	55	68	82	79	95	72	-	Turnover %
Expense Ratio	-	-	0.30	0.29	0.29	0.29	0.29	0.28	0.28	-	Expense Ratio

## Trailing Performance



	3 Month	1 Year	3 year	5 year	10 year	Since Inception	
Fund Return %	1.54	5.43	9.09	7.91	10.37	11.50	Fund Return %
Benchmark Return %	0.92	5.41	7.43	5.91	7.51	6.32	Benchmark Return %
Category Average %	0.92	3.53	7.13	5.60	7.80	-	Category Average %
% Rank in Category	23	24	13	7	5	-	% Rank in Category
# of Funds in Category	731	716	659	582	427	-	# of Funds in Category

## Net Expense



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	1.55	-	-0.84
Beta	1.00	-	1.07
R-Squared	95.22	-	91.79
Standard Deviation	6.98	6.80	7.65
Sharpe Ratio	1.05	0.85	0.73
Tracking Error	1.53	-	2.29
Information Ratio	1.09	-	-0.21
Up Capture Ratio	109.21	-	102.61
Down Capture Ratio	94.19	-	111.49

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	19.74	16.75	18.72
Price/Book Ratio	2.81	1.98	2.51
Avg Eff Duration	6.00	-	4.83

# American Funds American Balanced R6 RLBGX

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

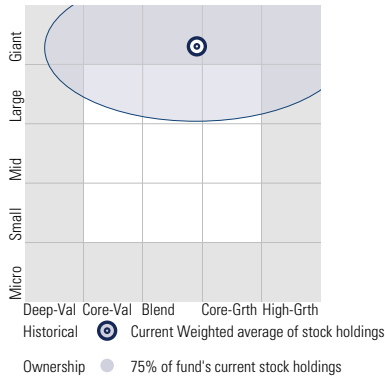
**Morningstar Index**

Morningstar Mod Tgt Risk TR USD

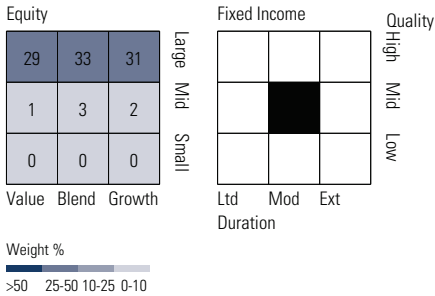
Equity

## Style Analysis as of 09-30-2019

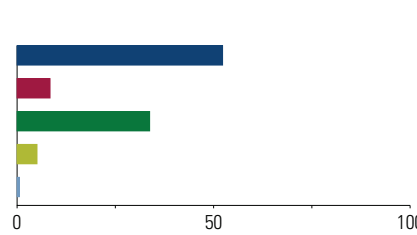
Morningstar Style Box™



## Style Breakdown

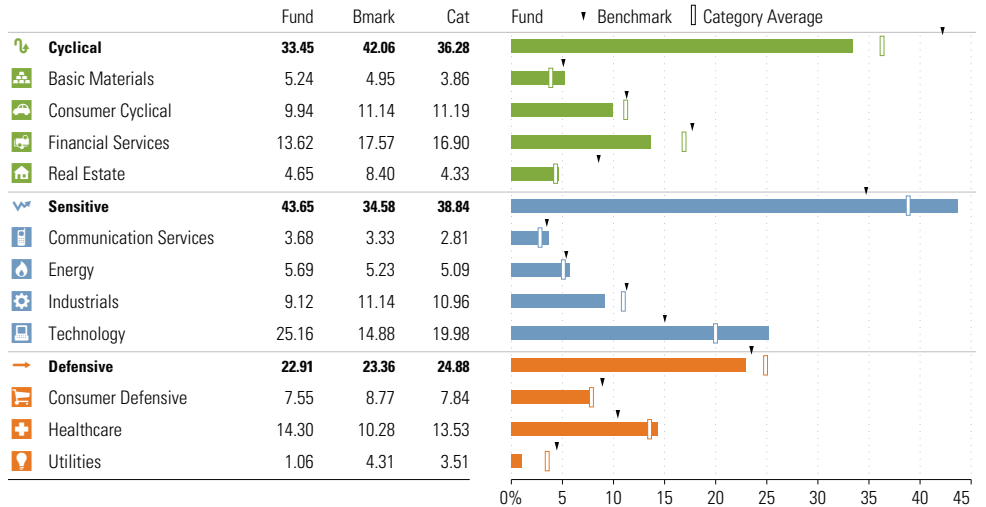


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	52.28	45.96
Non-US Stocks	8.38	12.50
Bonds	33.72	34.50
Cash	5.06	5.14
Other	0.56	1.91
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Capital Group Central Cash Fund	—	5.20	5.20	—	—
Microsoft Corp	—	4.40	9.60	38.24	Technology
The Home Depot Inc	—	2.39	11.99	37.41	Consumer Cyclical
UnitedHealth Group Inc	—	2.36	14.35	-11.54	Healthcare
Berkshire Hathaway Inc A	—	1.72	16.07	1.91	Financial Services
Taiwan Semiconductor Manufacturing Co Ltd ADR	—	1.54	17.60	30.25	Technology
Boeing Co	—	1.51	19.11	19.89	Industrials
Broadcom Inc	—	1.39	20.50	11.70	Technology
Philip Morris International Inc	—	1.37	21.87	18.90	Consumer Defensive
Intel Corp	—	1.32	23.19	11.82	Technology

**Total Holdings 1731**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# American Funds Europacific Growth R6 RERGX

**Morningstar Category**  
Foreign Large Growth

**Morningstar Index**  
MSCI EAFE NR USD

## Portfolio Manager(s)

- Carl Kawaja since 06-2001
- Sung Lee since 06-2002
- Nicholas Grace 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
- Lara Pellini since 10-2014

## Quantitative Screens

✔ **Performance:** The fund has finished in the Foreign 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 18.34 years.

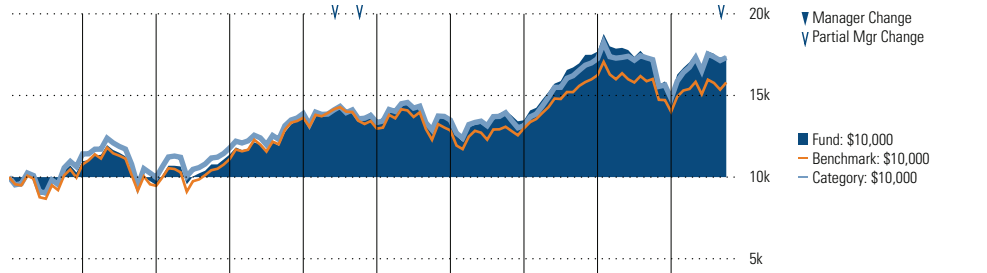
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

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

## Morningstar Investment Management LLC Analysis

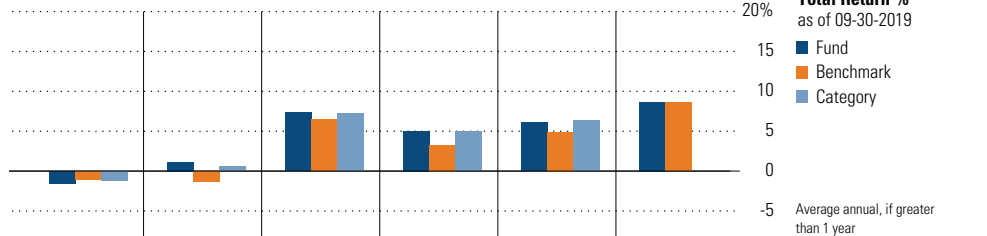
This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

## Growth of \$10,000



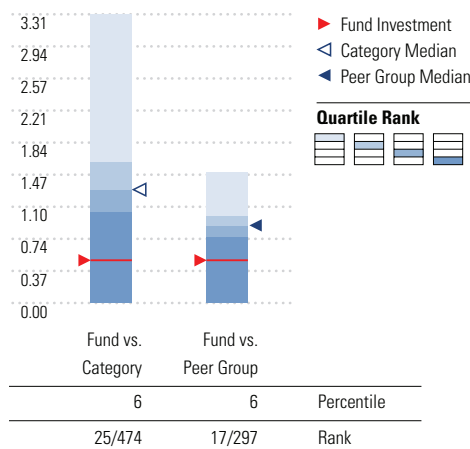
	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD	History
Performance Quartile (Within Category)	III	III	III	III	III	III	III	III	III	III	History
Total Return %	9.76	-13.31	19.64	20.58	-2.29	-0.48	1.01	31.17	-14.91	15.72	Total Return %
+/- Benchmark	2.01	-1.17	2.32	-2.20	2.61	0.33	0.01	6.14	-1.12	2.92	+/- Benchmark
+/- Category	-5.02	-1.01	1.94	2.00	1.63	-1.43	3.15	0.30	-0.83	-1.07	+/- Category
Tot Ret % Rank in Cat	54	40	26	40	27	66	20	44	58	66	Tot Ret % Rank in Cat
# of Funds in Cat	252	267	277	303	325	343	375	411	449	475	# of Funds in Cat
Turnover %	26	31	24	28	28	28	30	36	0	35	Turnover %
Expense Ratio	-	-	0.50	0.50	0.49	0.49	0.50	0.50	0.49	0.49	Expense Ratio

## Trailing Performance



	3 Month	1 Year	3 year	5 year	10 year	Since Inception	
Fund Return %	-1.59	1.14	7.38	5.02	6.07	8.66	Fund Return %
Benchmark Return %	-1.07	-1.34	6.48	3.27	4.90	8.55	Benchmark Return %
Category Average %	-1.24	0.61	7.18	4.94	6.29	-	Category Average %
% Rank in Category	62	41	39	44	56	-	% Rank in Category
# of Funds in Category	495	467	396	340	250	-	# of Funds in Category

## Net Expense



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	0.63	-	0.58
Beta	1.05	-	1.03
R-Squared	90.11	-	-
Standard Deviation	12.26	11.07	12.56
Sharpe Ratio	0.51	0.48	0.46
Tracking Error	3.90	-	5.20
Information Ratio	0.23	-	0.11
Up Capture Ratio	99.76	-	98.91
Down Capture Ratio	93.16	-	93.55

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	18.06	15.97	22.11
Price/Book Ratio	2.28	1.56	3.08
Geom Avg Mkt Cap \$B	44.15	35.74	39.99
ROE	17.63	16.29	20.08

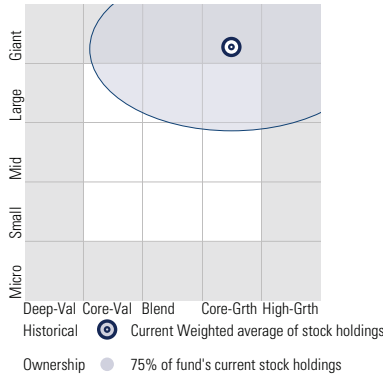
# American Funds Europacific Growth R6 RERGX

**Morningstar Category**  
Foreign Large Growth

**Morningstar Index**  
MSCI EAFE NR USD

## Style Analysis as of 09-30-2019

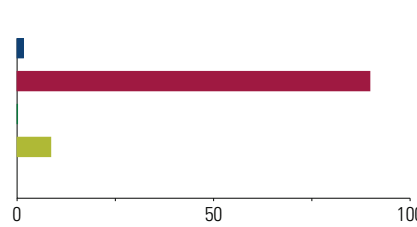
Morningstar Style Box™



## Style Breakdown

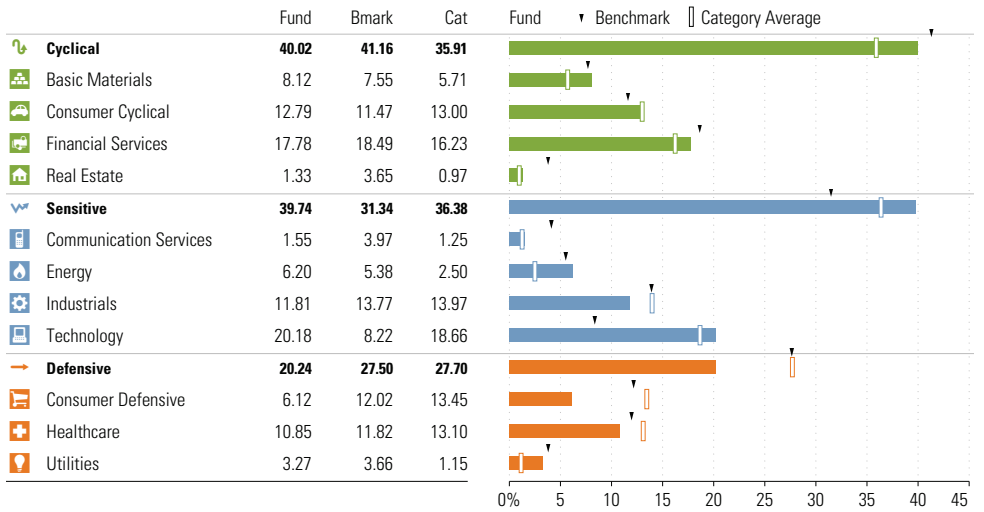


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	1.59	8.20
Non-US Stocks	89.75	88.19
Bonds	0.11	0.04
Cash	8.55	3.31
Other	0.00	0.27
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## World Regions % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Market Maturity	Fund %
Greater Asia	48.50	30.83	Americas	12.05	15.21	Greater Europe	39.44	53.95	Developed Markets	71.33
Japan	15.35	13.01	North America	5.32	13.02	United Kingdom	9.02	12.58	Emerging Markets	28.67
Australasia	1.19	2.16	Central/Latin	6.73	2.19	W euro-ex UK	28.66	40.14	Not Available	0.00
Asia-4 Tigers	11.36	6.39				Emrgng Europe	0.78	0.38		
Asia-ex 4 Tigers	20.60	9.27				Africa	0.98	0.85		
Not Classified	0.00	0.00								

## Top 10 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Capital Group Central Cash Fund	8.12	8.12	—	—
⊖ Airbus SE	2.61	10.73	43.94	Industrials
⊖ AIA Group Ltd	2.56	13.29	15.89	Financial Services
⊕ Nintendo Co Ltd	2.41	15.71	38.84	Technology
⊕ Reliance Industries Ltd	2.38	18.09	19.40	Energy
⊖ HDFC Bank Ltd	2.32	20.40	16.65	Financial Services
⊖ Alibaba Group Holding Ltd ADR	2.12	22.53	22.00	Consumer Cyclical
⊕ ASML Holding NV	1.95	24.47	67.21	Technology
⊖ Samsung Electronics Co Ltd	1.61	26.09	—	Technology
⊖ Daiichi Sankyo Co Ltd	1.56	27.64	95.78	Healthcare

**Total Holdings 322**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# American Funds New World R6 RNWGX

**Morningstar Category**  
Diversified Emerging Mkts

**Morningstar Index**  
MSCI EM NR USD

## Portfolio Manager(s)

Robert Lovelace since 06-1999  
 Carl Kawaja since 06-1999  
 Wahid Butt since 01-2008  
 Nicholas Grace since 01-2008  
 Christopher Thomsen since 01-2009  
 Winnie Kwan since 01-2009  
 Tomonori Tani since 10-2013  
 Jonathan Knowles since 01-2016  
 Bradford Freer since 01-2017  
 Steven Backes since 01-2019  
 Lisa Thompson since 10-2019

## Quantitative Screens

**Performance:** The fund has finished in the Diversified Emerging Mkts 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 20.3 years.

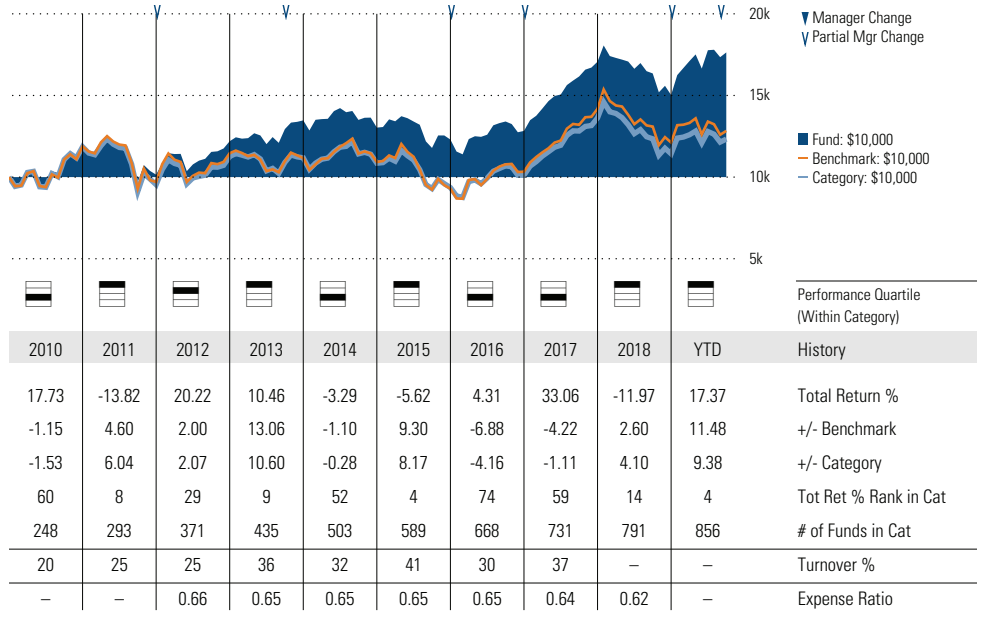
**Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

**Net Expense:** The fund's expense ratio of 0.62 is 51.94% lower than the Diversified Emerging Mkts category average.

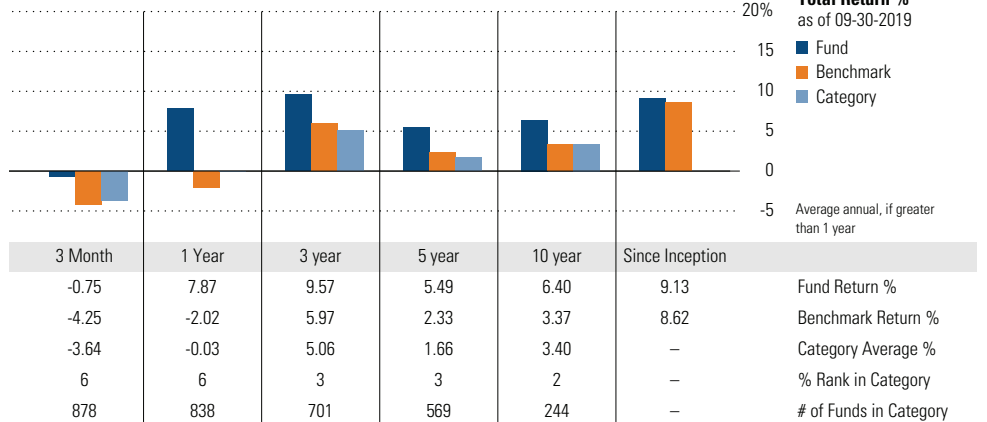
## Morningstar Investment Management LLC Analysis

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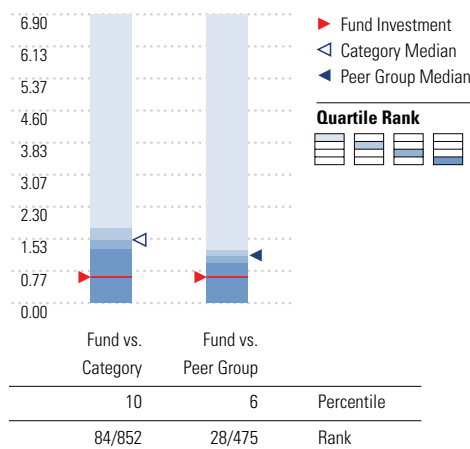
## Growth of \$10,000



## Trailing Performance



## Net Expense



## 3-Year Risk Metrics

Metric	Fund	Bmark	Cat
Alpha	4.54	-	-0.25
Beta	0.78	-	0.92
R-Squared	90.71	-	87.64
Standard Deviation	11.47	14.04	13.77
Sharpe Ratio	0.71	0.37	0.31
Tracking Error	4.68	-	4.83
Information Ratio	0.77	-	-0.18
Up Capture Ratio	90.90	-	92.55
Down Capture Ratio	67.68	-	94.88

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	19.76	12.83	13.52
Price/Book Ratio	2.61	1.54	1.92
Geom Avg Mkt Cap \$B	42.15	29.91	32.68
ROE	20.04	16.19	18.42

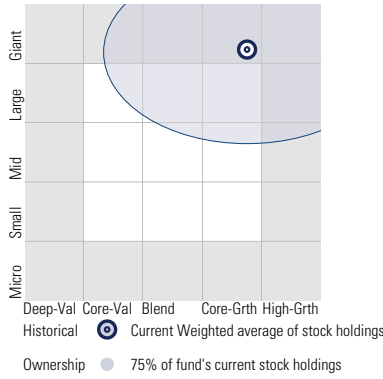
# American Funds New World R6 RNWGX

**Morningstar Category**  
Diversified Emerging Mkts

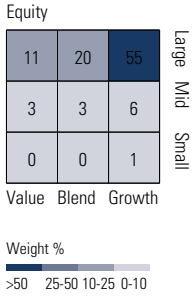
**Morningstar Index**  
MSCI EM NR USD

## Style Analysis as of 09-30-2019

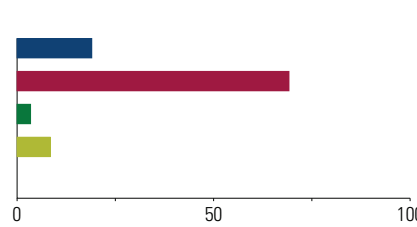
Morningstar Style Box™



## Style Breakdown

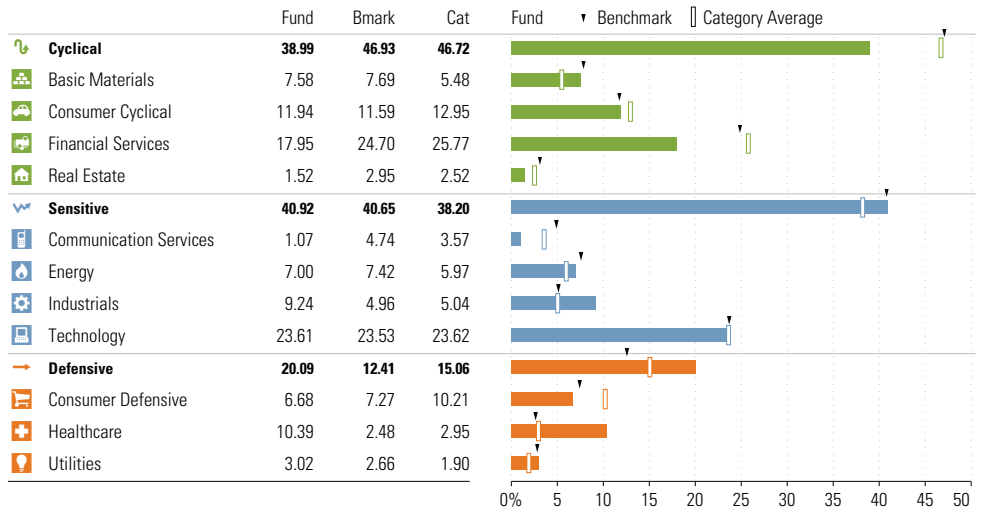


## Asset Allocation as of 09-30-2019

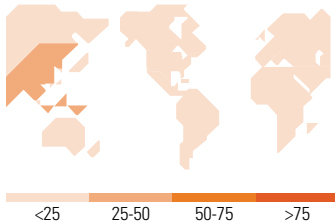


Asset Class	Net %	Cat%
US Stocks	18.99	2.32
Non-US Stocks	69.17	95.27
Bonds	3.42	0.46
Cash	8.41	1.63
Other	0.00	0.31
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## World Regions % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Market Maturity	Fund %
Greater Asia	41.80	68.54	Americas	34.62	15.61	Greater Europe	23.57	15.84	Developed Markets	57.37
Japan	5.60	0.11	North America	23.07	1.60	United Kingdom	4.13	0.91	Emerging Markets	42.63
Australasia	1.02	0.01	Central/Latin	11.55	14.01	W euro-ex UK	14.72	2.13	Not Available	0.00
Asia-4 Tigers	8.60	22.46				Emrgng Europe	2.35	6.36		
Asia-ex 4 Tigers	26.58	45.96				Africa	2.37	6.44		
Not Classified	0.00	0.00								

## Top 10 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Capital Group Central Cash Fund	7.55	7.55	—	—
⊕ Kotak Mahindra Bank Ltd	1.91	9.46	30.94	Financial Services
⊕ Reliance Industries Ltd	1.88	11.34	19.40	Energy
Taiwan Semiconductor Manufacturing Co Ltd	1.77	13.11	25.06	Technology
⊕ Microsoft Corp	1.76	14.88	38.24	Technology
⊖ Alibaba Group Holding Ltd ADR	1.60	16.48	22.00	Consumer Cyclical
⊕ AIA Group Ltd	1.54	18.03	15.89	Financial Services
⊖ HDFC Bank Ltd	1.44	19.47	16.65	Financial Services
⊖ Tencent Holdings Ltd	1.32	20.78	5.48	Technology
⊖ Mastercard Inc A	1.29	22.07	44.48	Financial Services

**Total Holdings 522**

⊕ Increase ⊖ Decrease ✱ New to Portfolio



# Baird Core Plus Bond Inst BCOIX

**Morningstar Category**  
Intermediate Core-Plus Bond

**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## Portfolio Manager(s)

Mary Stanek since 09-2000  
 Charles Groeschell since 09-2000  
 Daniel Tranchita since 09-2000  
 Gary Elfe since 09-2000  
 Warren Pierson since 09-2000  
 M. deGuzman since 09-2000  
 Meghan Dean since 05-2019  
 Jeffrey Schrom since 05-2019  
 Jay Schwister since 05-2019

## Quantitative Screens

**Performance:** The fund has finished in the Intermediate Core-Plus 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 19.01 years.

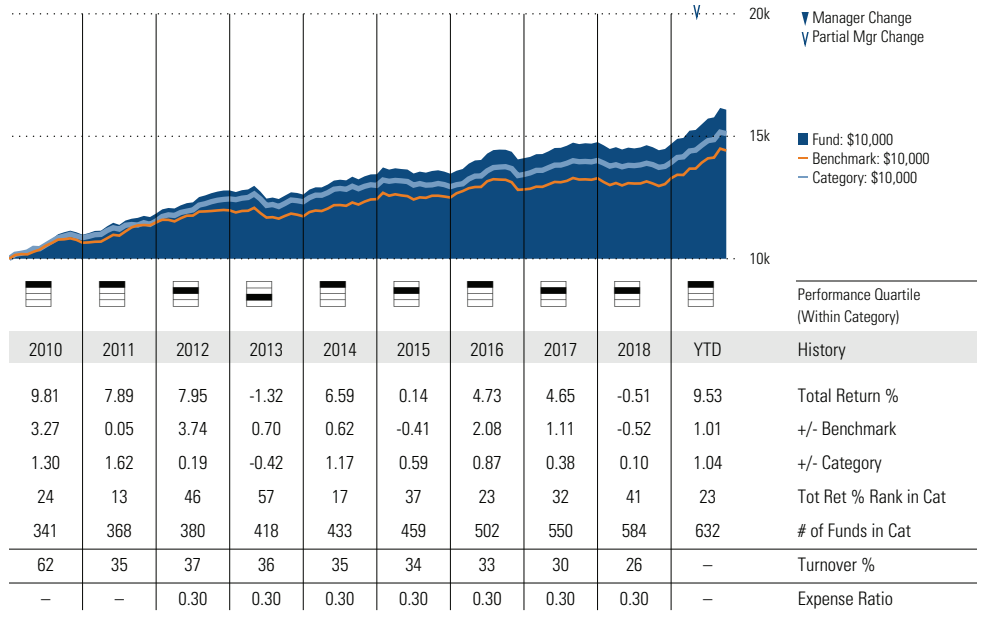
Style Consistency is not calculated for Fixed Income funds.

**Net Expense:** The fund's expense ratio of 0.3 is 62.5% lower than the Intermediate Core-Plus Bond category average.

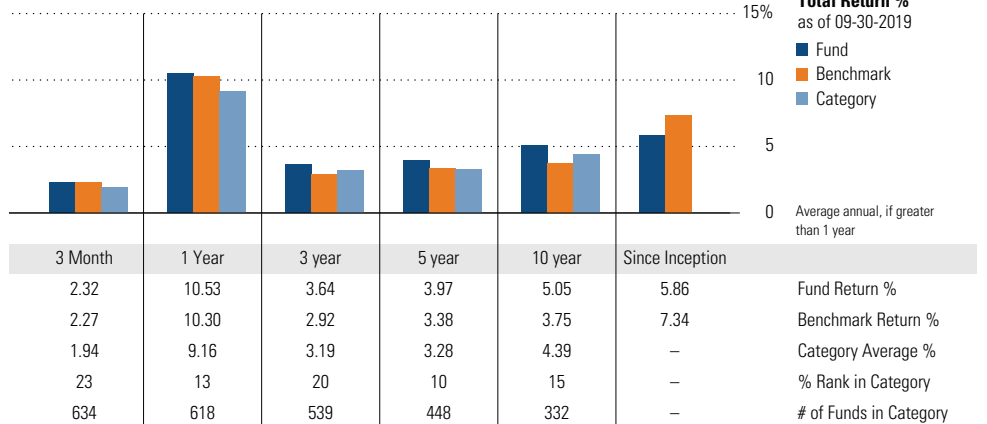
## Morningstar Investment Management LLC Analysis

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.

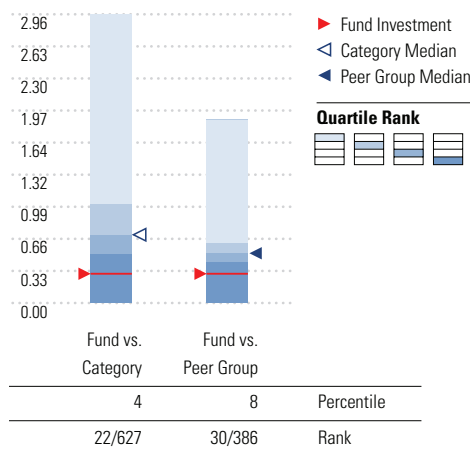
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.91	-	0.71
Beta	0.93	-	0.83
R-Squared	96.93	-	86.86
Standard Deviation	3.15	3.35	2.99
Sharpe Ratio	0.66	0.41	0.54
Tracking Error	0.60	-	1.15
Information Ratio	1.18	-	0.19
Up Capture Ratio	104.15	-	92.85
Down Capture Ratio	84.88	-	78.28

## Portfolio Metrics

	Fund	Bmark	Cat
Avg Eff Duration	5.61	4.43	-
Avg Eff Maturity	7.48	-	-

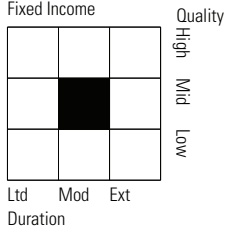
# Baird Core Plus Bond Inst BCOIX

**Morningstar Category**  
Intermediate Core-Plus Bond

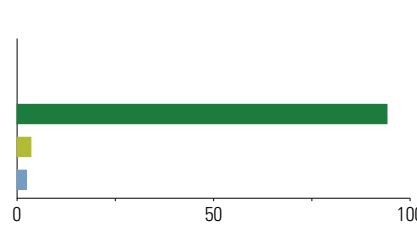
**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

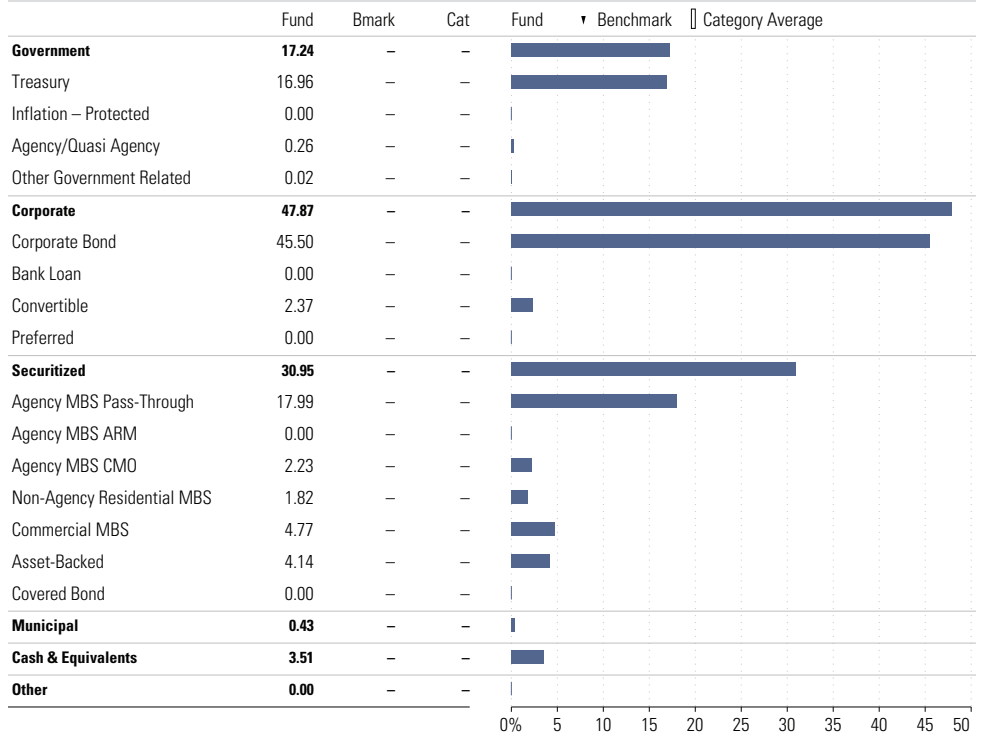


Asset Class	Net %	Cat%
US Stocks	0.00	—
Non-US Stocks	0.00	—
Bonds	94.12	—
Cash	3.51	—
Other	2.37	—
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	48.10	3.53	—
AA	3.50	74.59	—
A	17.60	10.82	—
BBB	27.40	8.32	—
BB	2.30	0.28	—
B	0.30	0.00	—
Below B	0.50	0.00	—
Not Rated	0.30	2.46	—

## Sector Weighting as of 09-30-2019



## Top 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ United States Treasury Notes 1.88%	03-2022	4.16	4.16	—
⊖ United States Treasury Bonds 2.88%	05-2043	3.21	7.37	—
⊖ First American Government Oblig U	02-2030	2.81	10.19	—
⊕ United States Treasury Bonds 2.5%	02-2045	2.66	12.85	—
⊕ United States Treasury Bonds 3.5%	02-2039	1.83	14.68	—
⊕ United States Treasury Notes 1.75%	03-2022	1.66	16.34	—
⊖ United States Treasury Notes 2.25%	11-2027	1.42	17.77	—
⊕ United States Treasury Notes 2%	11-2026	1.29	19.05	—
⊖ United States Treasury Notes 3.13%	11-2028	0.71	19.77	—
⊖ Federal National Mortgage Association 3.5%	07-2042	0.51	20.28	—

**Total Holdings 1380**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# BlackRock Total Return K MPHQX

**Morningstar Category**  
Intermediate Core-Plus Bond

**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## Portfolio Manager(s)

Rick Rieder since 08-2010  
Bob Miller since 10-2011  
David Rogal since 01-2017

## Quantitative Screens

✔ **Performance:** The fund has finished in the Intermediate Core-Plus 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 9.16 years.

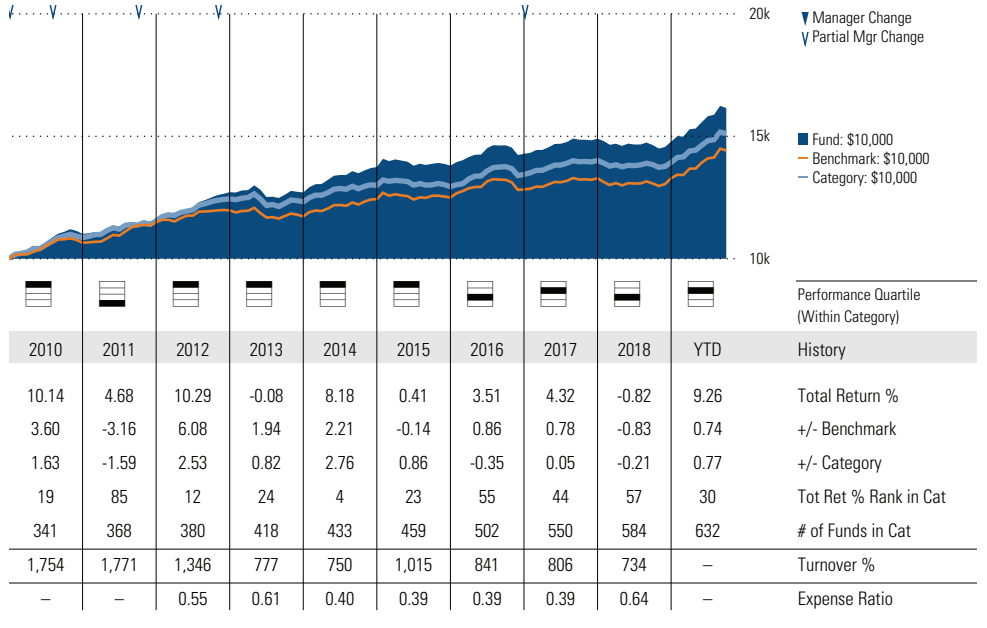
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.64 is 20% lower than the Intermediate Core-Plus Bond category average.

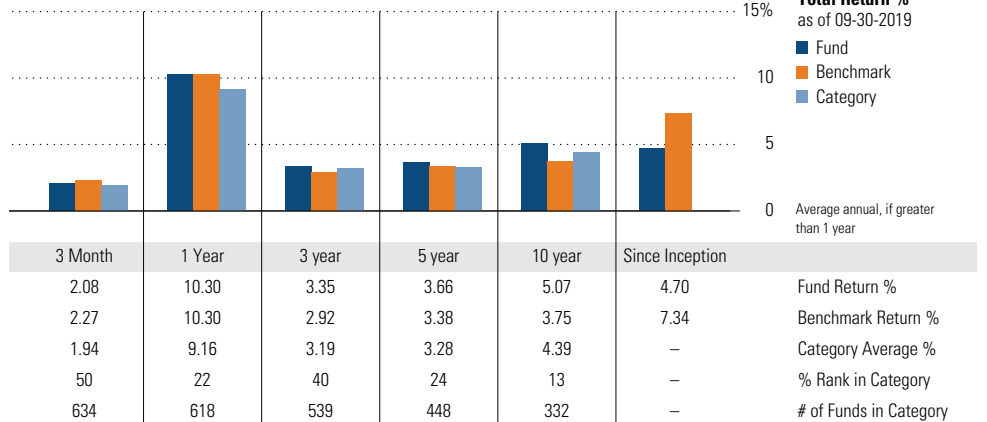
## Morningstar Investment Management LLC Analysis

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.

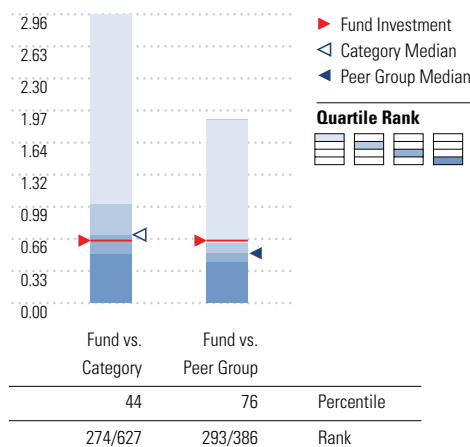
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.60	-	0.71
Beta	0.93	-	0.83
R-Squared	96.24	-	86.86
Standard Deviation	3.18	3.35	2.99
Sharpe Ratio	0.56	0.41	0.54
Tracking Error	0.66	-	1.15
Information Ratio	0.64	-	0.19
Up Capture Ratio	101.49	-	92.85
Down Capture Ratio	89.17	-	78.28

## Portfolio Metrics

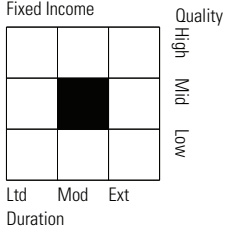
	Fund	Bmark	Cat
Avg Eff Duration	6.18	4.43	-
Avg Eff Maturity	8.81	-	-

# BlackRock Total Return K MPHQX

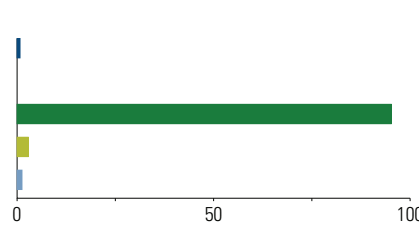
**Morningstar Category** Intermediate Core-Plus Bond  
**Morningstar Index** BBgBarc US Agg Bond TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	0.74	—
Non-US Stocks	0.00	—
Bonds	95.18	—
Cash	2.83	—
Other	1.24	—
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	46.35	3.53	—
AA	5.27	74.59	—
A	15.42	10.82	—
BBB	20.69	8.32	—
BB	2.86	0.28	—
B	1.86	0.00	—
Below B	2.42	0.00	—
Not Rated	5.12	2.46	—

## Sector Weighting as of 09-30-2019

	Fund	Bmark	Cat	Fund	Benchmark	Category Average
<b>Government</b>	<b>9.17</b>	—	—			
Treasury	9.07	—	—			
Inflation – Protected	0.00	—	—			
Agency/Quasi Agency	0.03	—	—			
Other Government Related	0.07	—	—			
<b>Corporate</b>	<b>28.22</b>	—	—			
Corporate Bond	24.34	—	—			
Bank Loan	3.05	—	—			
Convertible	0.56	—	—			
Preferred	0.27	—	—			
<b>Securitized</b>	<b>56.67</b>	—	—			
Agency MBS Pass-Through	47.20	—	—			
Agency MBS ARM	0.00	—	—			
Agency MBS CMO	0.00	—	—			
Non-Agency Residential MBS	2.83	—	—			
Commercial MBS	0.00	—	—			
Asset-Backed	6.64	—	—			
Covered Bond	0.00	—	—			
<b>Municipal</b>	<b>3.95</b>	—	—			
<b>Cash &amp; Equivalents</b>	<b>1.99</b>	—	—			
<b>Other</b>	<b>0.00</b>	—	—			

## Top 0 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
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**Total Holdings 0**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# DFA Global Equity I DGEIX

**Morningstar Category**  
World Large Stock

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

## Portfolio Manager(s)

David Plecha since 12-2003  
Jed Fogdall since 02-2012  
Joseph Kolerich since 02-2012  
Mary Phillips since 02-2017  
Allen Pu since 02-2017

## Quantitative Screens

✔ **Performance:** The fund has finished in the World Large Stock 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 15.78 years.

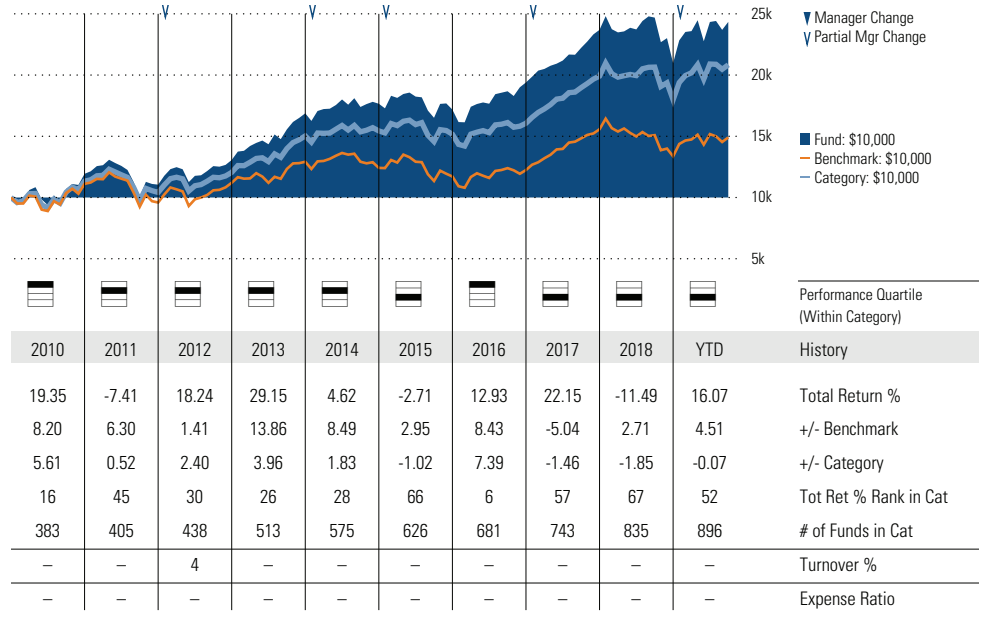
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.3 is 73.21% lower than the World Large Stock category average.

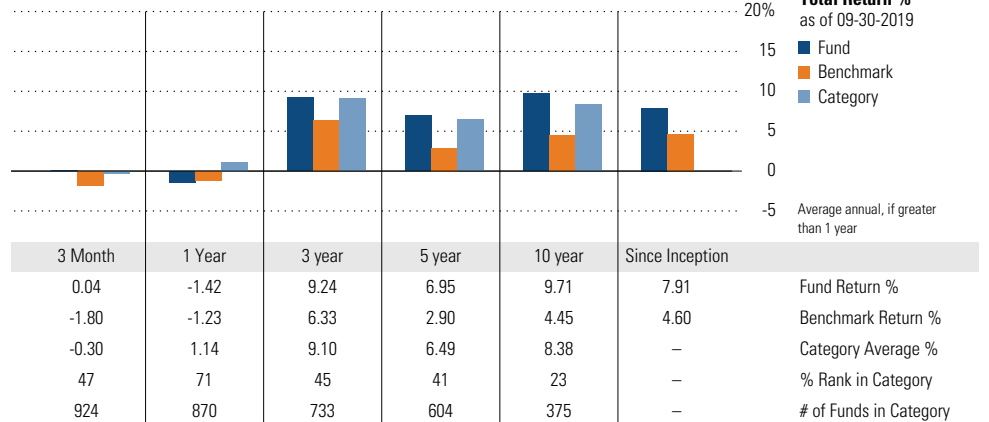
## Morningstar Investment Management LLC Analysis

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.

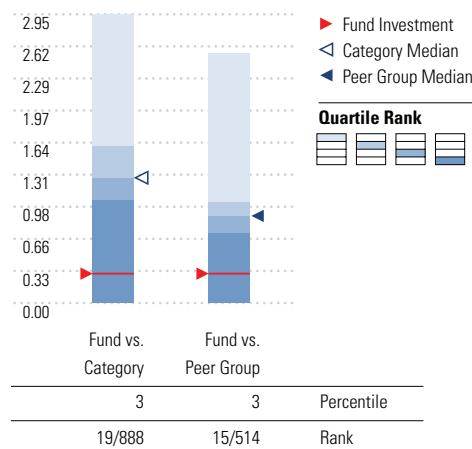
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	3.20	-	3.15
Beta	0.95	-	0.92
R-Squared	74.70	-	79.32
Standard Deviation	12.58	11.45	11.84
Sharpe Ratio	0.64	0.45	0.66
Tracking Error	6.35	-	5.63
Information Ratio	0.46	-	0.49
Up Capture Ratio	95.88	-	96.71
Down Capture Ratio	74.01	-	76.45

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	15.70	14.87	19.09
Price/Book Ratio	1.91	1.57	2.39
Geom Avg Mkt Cap \$B	20.27	33.84	72.37
ROE	19.77	16.14	21.82

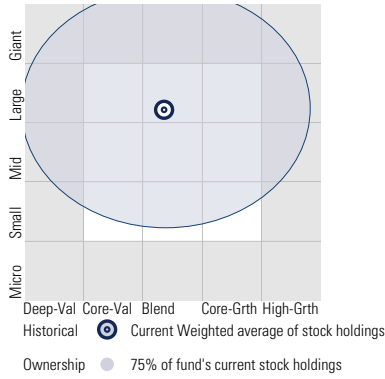
# DFA Global Equity I DGEIX

**Morningstar Category**  
World Large Stock

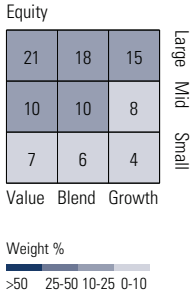
**Morningstar Index**  
MSCI ACWI Ex USA NR USD

## Style Analysis as of 09-30-2019

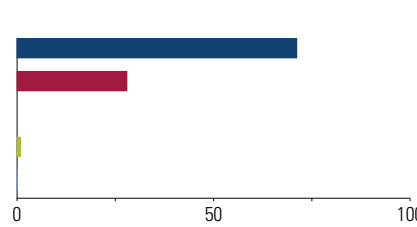
Morningstar Style Box™



## Style Breakdown

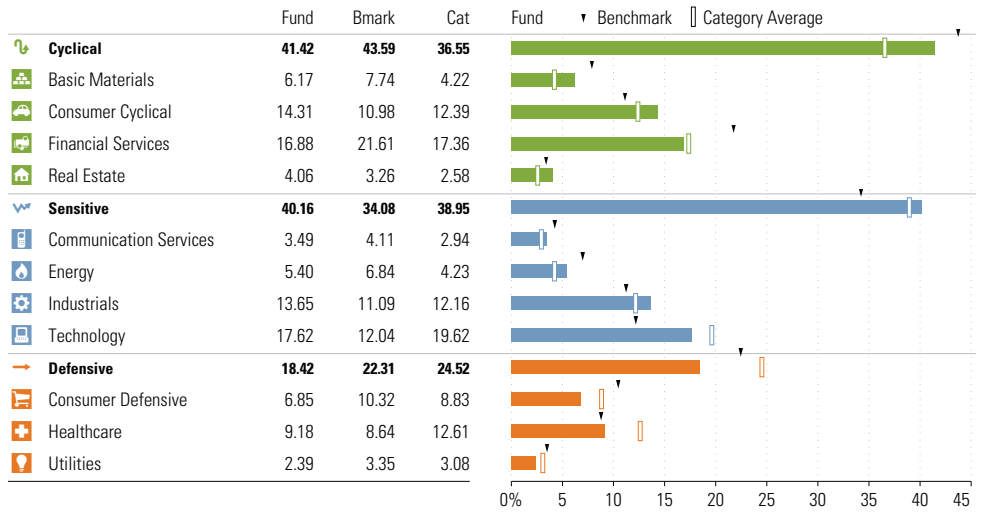


## Asset Allocation as of 09-30-2019

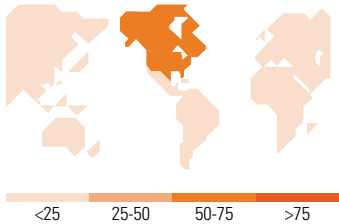


Asset Class	Net %	Cat%
US Stocks	71.15	54.02
Non-US Stocks	27.92	42.60
Bonds	0.00	0.26
Cash	0.88	2.39
Other	0.05	0.73
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## World Regions % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Market Maturity	Fund %
Greater Asia	12.62	15.65	Americas	74.69	59.15	Greater Europe	12.70	25.20	Developed Markets	94.90
Japan	4.88	5.80	North America	73.49	58.18	United Kingdom	3.37	6.77	Emerging Markets	5.10
Australasia	1.47	1.03	Central/Latin	1.20	0.97	W euro-ex UK	8.28	17.64	Not Available	0.00
Asia-4 Tigers	3.16	3.59				Emrgng Europe	0.35	0.29		
Asia-ex 4 Tigers	3.11	5.23				Africa	0.70	0.50		
Not Classified	0.00	0.00								

## Top 6 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ DFA US Core Equity 2 I	51.75	51.75	--	--
⊕ DFA International Core Equity I	20.99	72.74	--	--
⊖ DFA US Core Equity 1 I	17.26	90.00	--	--
⊕ DFA Emerging Markets Core Equity I	7.07	97.07	--	--
DFA Real Estate Securities I	2.93	100.00	--	--
⊕ Usd	0.00	100.00	--	--

## Total Holdings 6

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# DFA US Large Cap Value I DFLVX

**Morningstar Category**  
Large Value

**Morningstar Index**  
Russell 1000 Value TR USD

## Portfolio Manager(s)

Jed Fogdall since 02-2012  
Lukas Smart since 07-2015  
Joel Schneider since 02-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the 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 7.59 years.

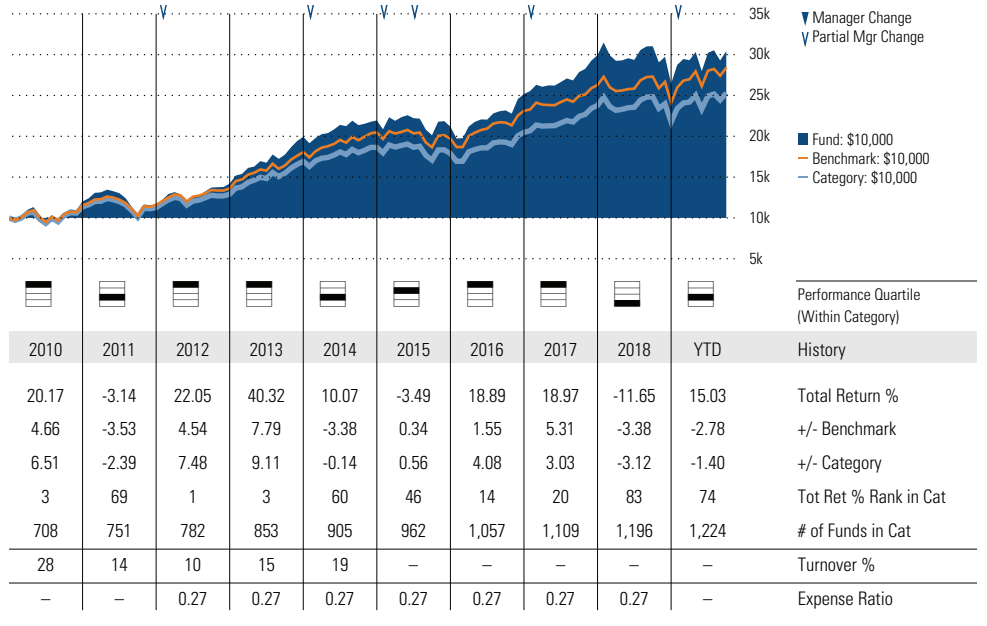
✔ **Style:** The fund has landed in its primary style box — Large Value — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.27 is 71.58% lower than the Large Value category average.

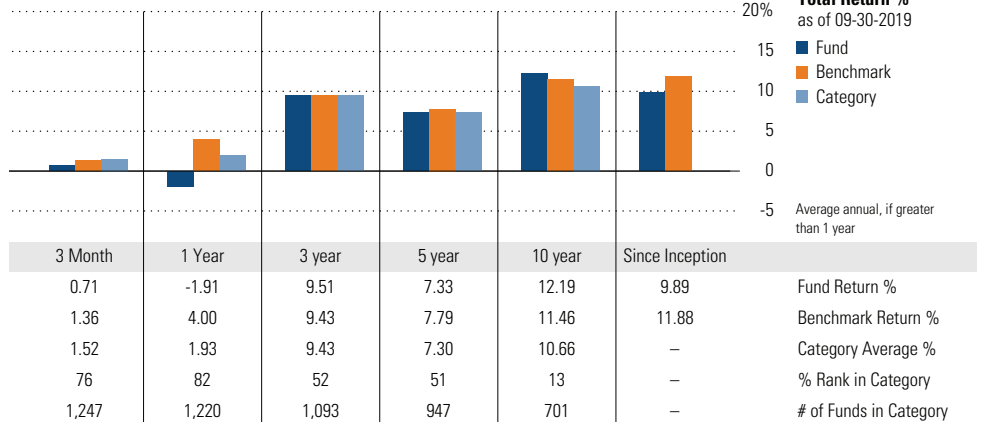
## Morningstar Investment Management LLC Analysis

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.

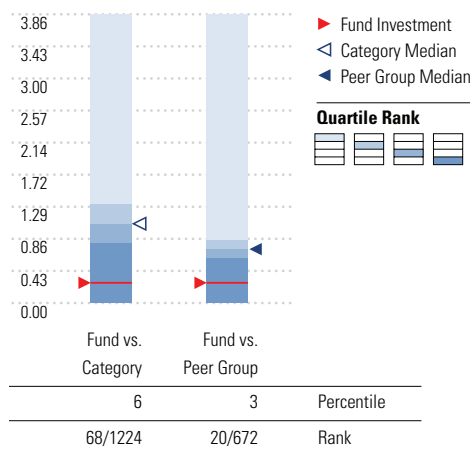
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-1.07	-	0.11
Beta	1.14	-	0.99
R-Squared	97.83	-	93.32
Standard Deviation	14.27	12.34	12.62
Sharpe Ratio	0.60	0.66	0.66
Tracking Error	2.75	-	3.38
Information Ratio	0.03	-	0.01
Up Capture Ratio	108.75	-	98.55
Down Capture Ratio	114.25	-	98.00

## Portfolio Metrics

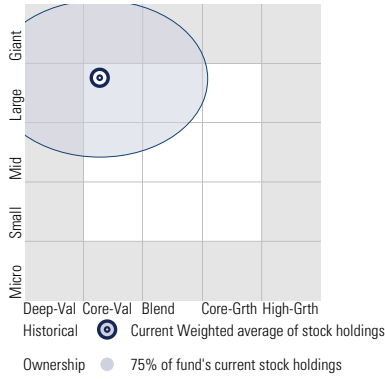
	Fund	Bmark	Cat
Price/Earnings Ratio	13.64	16.49	16.18
Price/Book Ratio	1.63	1.94	2.22
Geom Avg Mkt Cap \$B	60.43	58.19	107.83
ROE	12.77	14.48	20.08

# DFA US Large Cap Value I DFLVX

**Morningstar Category**  
Large Value

**Morningstar Index**  
Russell 1000 Value TR USD

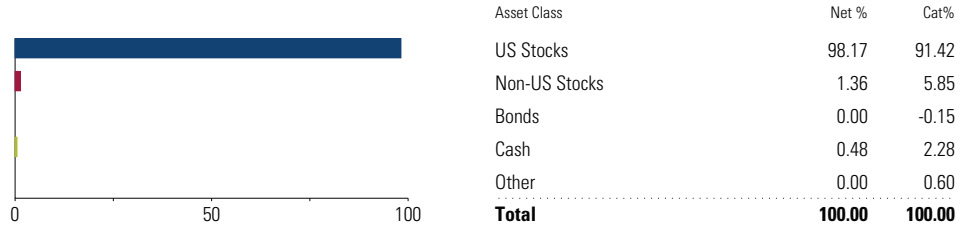
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



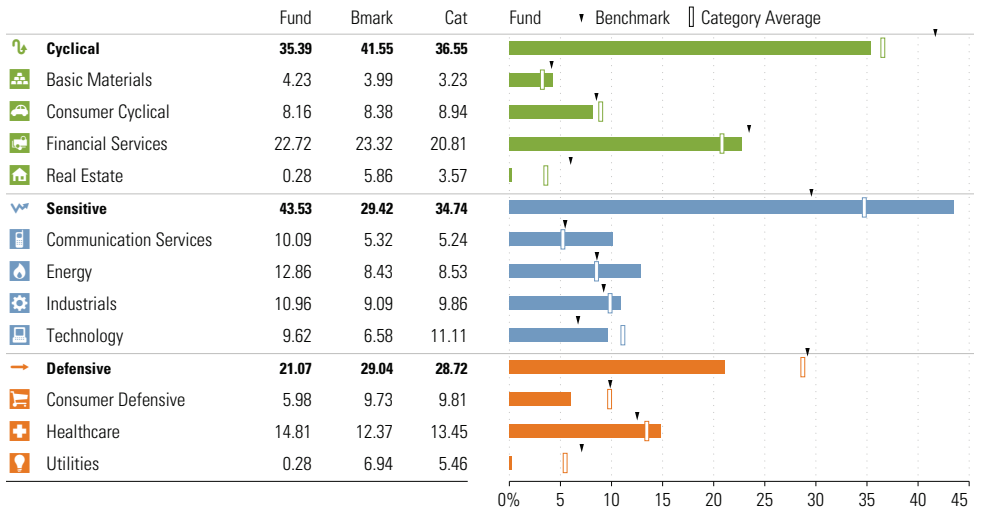
**Style Breakdown**



**Asset Allocation** as of 09-30-2019



**Sector Weighting** as of 09-30-2019



**Top 15 Holdings** as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊖ AT&T Inc	4.38	4.38	37.95	Communication Svc
⊖ Intel Corp	3.72	8.11	11.82	Technology
⊖ Chevron Corp	3.47	11.57	12.30	Energy
⊖ Comcast Corp Class A	3.40	14.98	33.63	Communication Svc
⊖ Exxon Mobil Corp	3.20	18.17	7.30	Energy
⊖ JPMorgan Chase & Co	3.07	21.24	23.02	Financial Services
⊖ Pfizer Inc	3.06	24.29	-15.21	Healthcare
⊕ Wells Fargo & Co	2.61	26.91	12.52	Financial Services
⊕ Berkshire Hathaway Inc B	2.12	29.03	1.88	Financial Services
⊕ Bank of America Corporation	1.85	30.88	20.33	Financial Services
⊖ Medtronic PLC	1.65	32.52	21.15	Healthcare
⊖ Citigroup Inc	1.61	34.13	35.40	Financial Services
⊖ Walmart Inc	1.57	35.70	29.11	Consumer Defensive
⊖ Charter Communications Inc A	1.35	37.05	44.62	Communication Svc
⊖ Anthem Inc	1.26	38.31	-7.66	Healthcare

**Total Holdings 326**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# JPMorgan US Equity R6 JUEMX

Morningstar Category  
Large Blend

Morningstar Index  
S&P 500 TR USD

## Portfolio Manager(s)

Susan Bao since 01-2001  
Scott Davis since 08-2014  
David Small since 07-2016

## Quantitative Screens

✔ **Performance:** The fund has finished in the Large Blend 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 18.76 years.

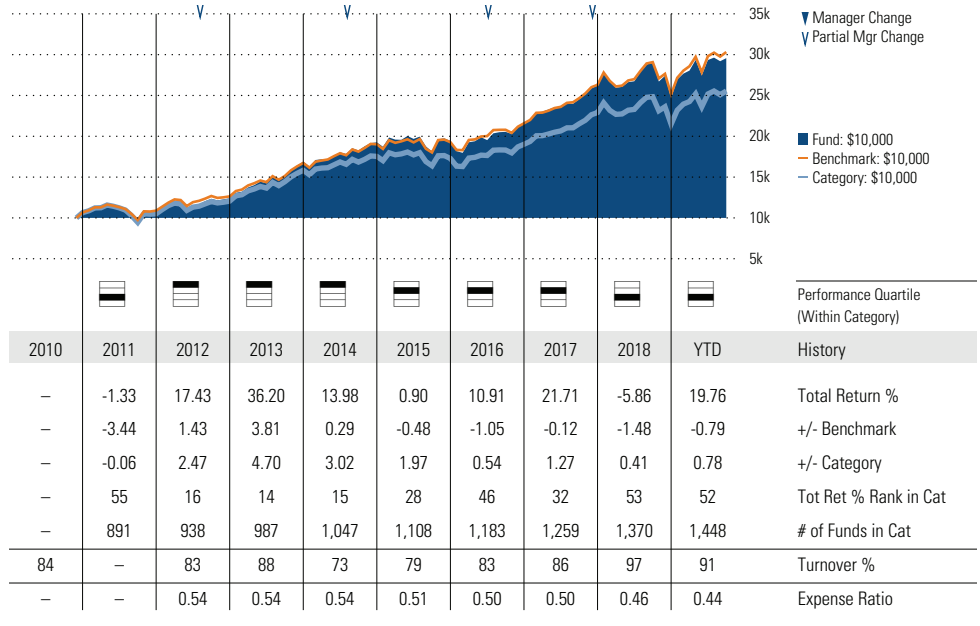
✘ **Style:** The fund has landed in its primary style box — Large Blend — 22.86 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.44 is 51.65% lower than the Large Blend category average.

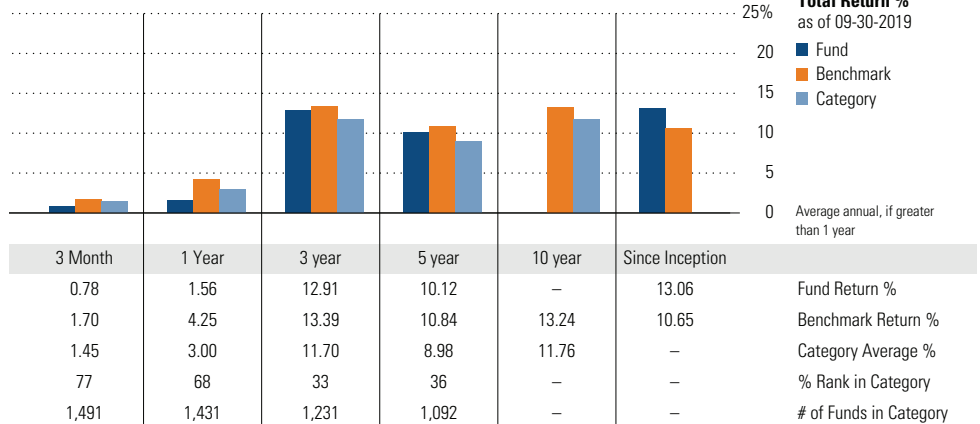
## Morningstar Investment Management LLC Analysis

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

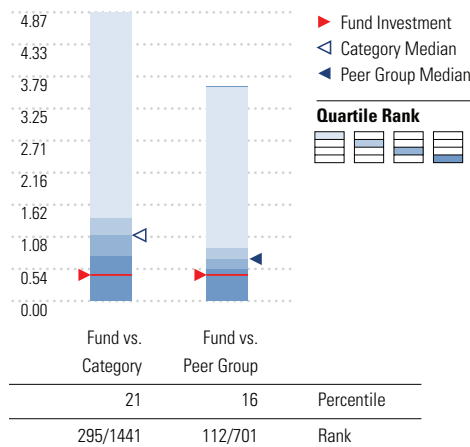
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	-1.33	-	-1.24
Beta	1.08	-	0.96
R-Squared	98.34	-	93.99
Standard Deviation	13.24	12.18	12.01
Sharpe Ratio	0.86	0.96	0.84
Tracking Error	1.95	-	2.98
Information Ratio	-0.25	-	-1.29
Up Capture Ratio	101.88	-	91.29
Down Capture Ratio	107.66	-	97.85

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	21.16	20.32	20.89
Price/Book Ratio	3.32	3.18	3.47
Geom Avg Mkt Cap \$B	102.80	111.20	178.81
ROE	24.61	26.31	28.46

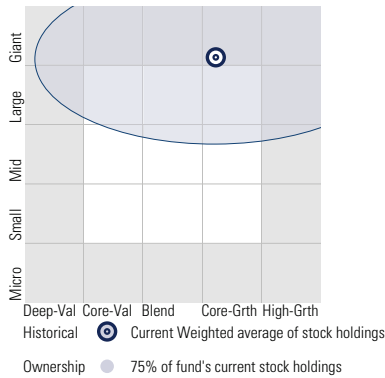
# JPMorgan US Equity R6 JUEMX

Morningstar Category  
Large Blend

Morningstar Index  
S&P 500 TR USD

## Style Analysis as of 09-30-2019

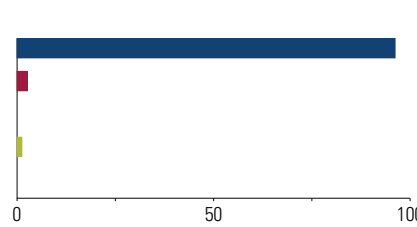
Morningstar Style Box™



## Style Breakdown

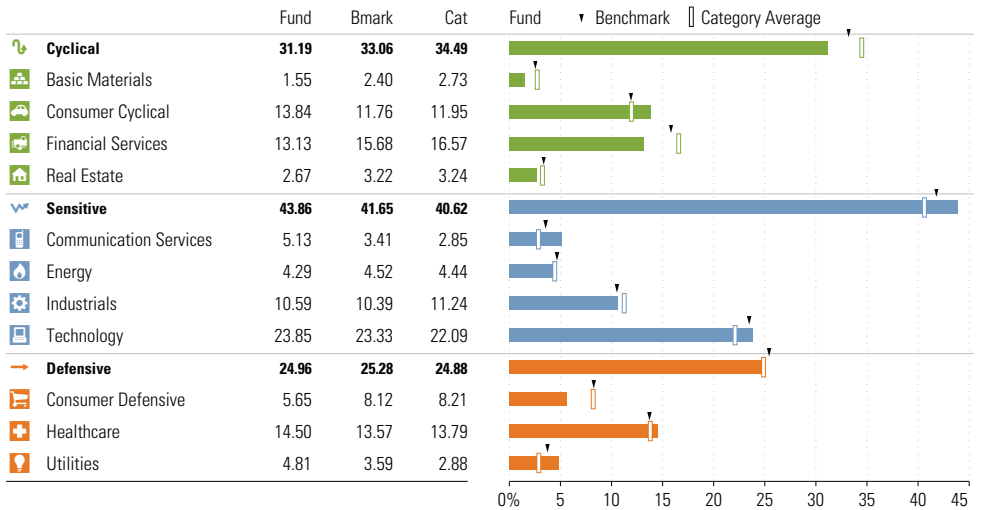


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	96.17	94.56
Non-US Stocks	2.61	2.95
Bonds	0.00	0.37
Cash	1.21	0.92
Other	0.00	1.18
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Microsoft Corp	5.68	5.68	38.24	Technology
Amazon.com Inc	4.31	9.99	15.58	Consumer Cyclical
Alphabet Inc A	3.70	13.69	16.86	Technology
Coca-Cola Co	2.84	16.53	17.51	Consumer Defensive
Mastercard Inc A	2.72	19.25	44.48	Financial Services
Verizon Communications Inc	2.31	21.55	10.58	Communication Svc
Apple Inc	2.24	23.80	43.43	Technology
Prologis Inc	2.21	26.00	47.84	Real Estate
Charter Communications Inc A	2.13	28.13	44.62	Communication Svc
Northrop Grumman Corp	1.99	30.11	54.61	Industrials
Salesforce.com Inc	1.98	32.09	8.37	Technology
Pfizer Inc	1.94	34.04	-15.21	Healthcare
UnitedHealth Group Inc	1.93	35.97	-11.54	Healthcare
General Dynamics Corp	1.93	37.91	18.12	Industrials
Constellation Brands Inc A	1.93	39.84	30.28	Consumer Defensive

Total Holdings 137

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# MFS Mid Cap Growth R6 OTCKX

**Morningstar Category**  
Mid-Cap Growth

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

## Portfolio Manager(s)

Eric Fischman since 11-2008

Paul Gordon since 05-2011

## Quantitative Screens

✔ **Performance:** The fund has finished in the Mid-Cap Growth category's top three quartiles in 6 of the 6 years it's been in existence.

✔ **Management:** The fund's management has been in place for 10.87 years.

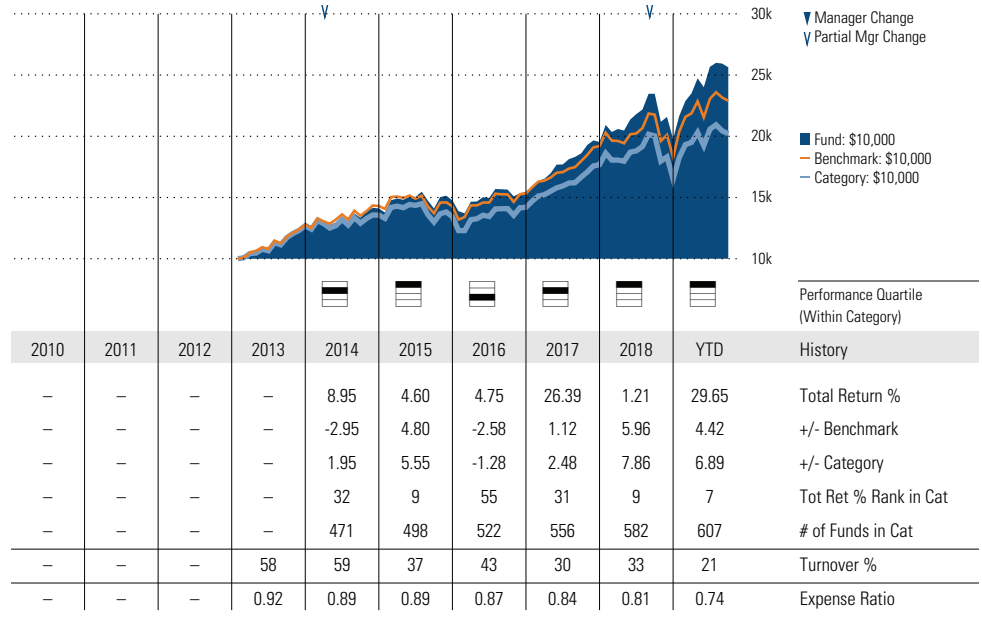
✔ **Style:** The fund has landed in its primary style box — Mid-Cap Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.81 is 29.57% lower than the Mid-Cap Growth category average.

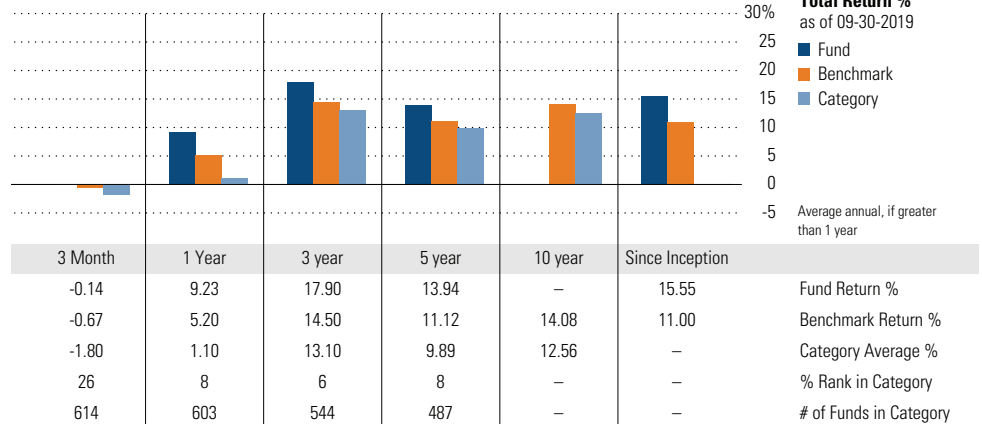
## Morningstar Investment Management LLC Analysis

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.

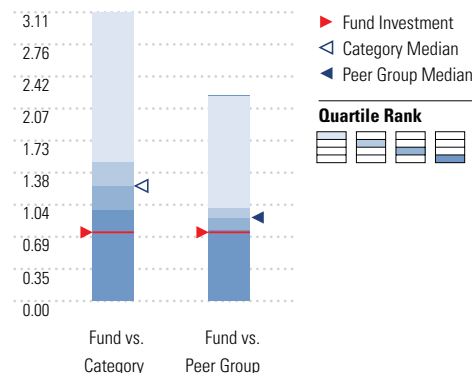
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	4.42	-	-0.54
Beta	0.89	-	0.99
R-Squared	92.68	-	90.62
Standard Deviation	13.30	14.38	15.09
Sharpe Ratio	1.19	0.91	0.83
Tracking Error	3.93	-	4.64
Information Ratio	0.87	-	-0.30
Up Capture Ratio	100.32	-	97.41
Down Capture Ratio	77.70	-	100.52

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	37.12	25.90	30.85
Price/Book Ratio	6.01	6.19	4.91
Geom Avg Mkt Cap \$B	17.42	15.25	13.31
ROE	20.55	24.20	16.48

# MFS Mid Cap Growth R6 OTCKX

Morningstar Category

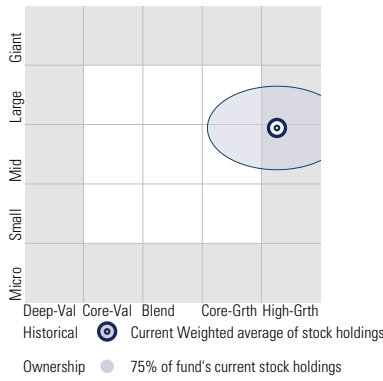
Mid-Cap Growth

Morningstar Index

Russell Mid Cap Growth TR USD

## Style Analysis as of 09-30-2019

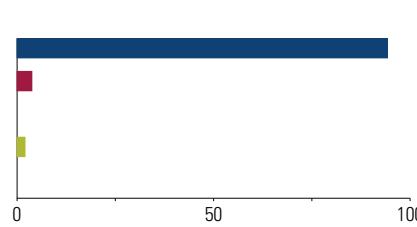
Morningstar Style Box™



## Style Breakdown

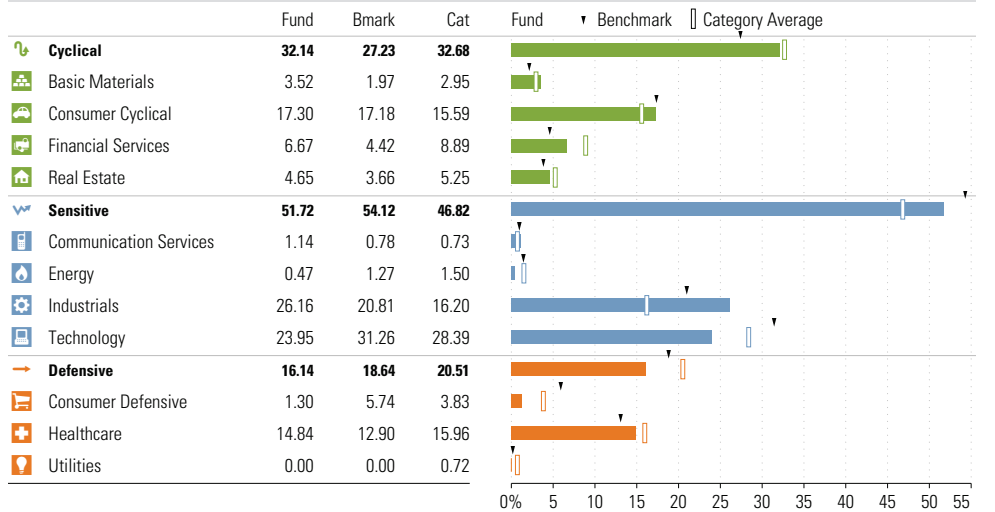


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	94.24	92.66
Non-US Stocks	3.75	4.06
Bonds	0.00	0.03
Cash	2.01	2.95
Other	0.00	0.30
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Global Payments Inc	4.33	4.33	54.20	Industrials
⊕ Bright Horizons Family Solutions Inc	3.76	8.08	36.83	Consumer Cyclical
⊕ Fidelity National Information Services Inc	2.74	10.82	30.48	Industrials
⊕ Verisk Analytics Inc	2.32	13.14	45.72	Industrials
⊕ PerkinElmer Inc	2.30	15.44	8.70	Healthcare
⊕ Copart Inc	2.22	17.66	68.12	Consumer Cyclical
⊕ AMETEK Inc	2.22	19.88	36.25	Industrials
⊕ Fiserv Inc	2.19	22.07	40.96	Industrials
⊕ Cadence Design Systems Inc	2.10	24.17	51.98	Technology
⊕ Steris PLC	2.06	26.23	36.21	Healthcare
⊕ Roper Technologies Inc	1.96	28.19	34.32	Industrials
⊕ IHS Markit Ltd	1.92	30.12	39.42	Industrials
⊕ Cash Cash	1.91	32.03	-	-
⊕ SBA Communications Corp	1.84	33.87	49.19	Real Estate
⊕ Vulcan Materials Co	1.80	35.67	54.02	Basic Materials

**Total Holdings 97**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# PIMCO Commodity Real Ret Strat Instl PCRIX

**Morningstar Category**  
Commodities Broad Basket

**Morningstar Index**  
Bloomberg Commodity TR USD

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **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 11.76 years.

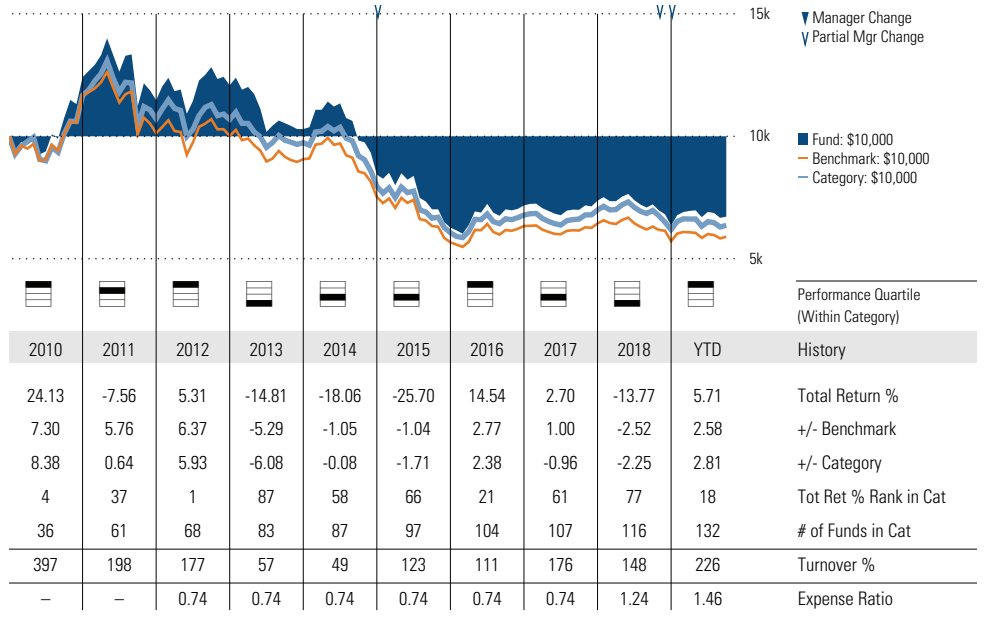
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 1.46 is 24.79% higher than the Commodities Broad Basket category average.

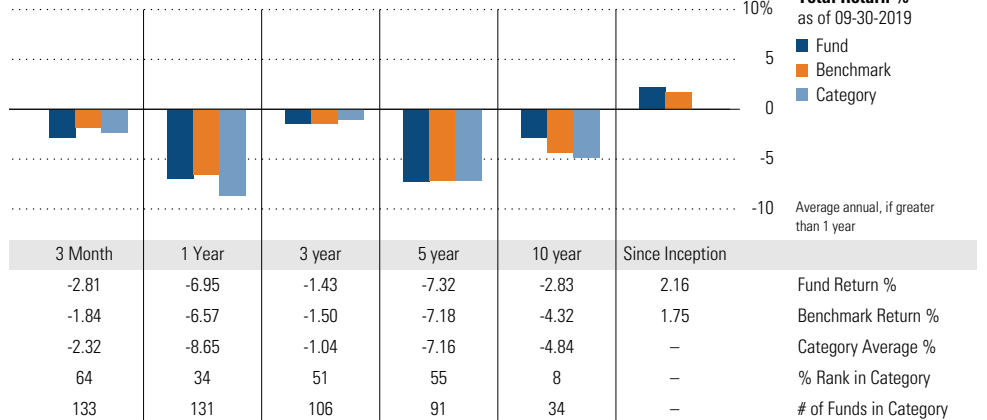
## Morningstar Investment Management LLC Analysis

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.

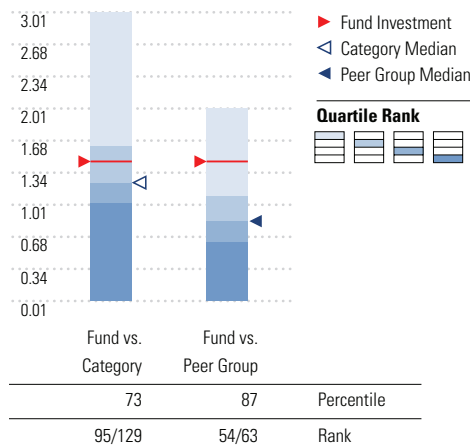
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	0.26	-	0.71
Beta	1.09	-	1.04
R-Squared	95.53	-	74.99
Standard Deviation	8.88	7.94	9.86
Sharpe Ratio	-0.30	-0.35	-0.27
Tracking Error	2.02	-	5.07
Information Ratio	0.03	-	-0.10
Up Capture Ratio	112.87	-	116.78
Down Capture Ratio	110.29	-	110.03

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	12.32	-	11.29
Price/Book Ratio	1.51	-	1.41
Geom Avg Mkt Cap \$B	20.09	-	23.90
ROE	16.78	-	20.51

# PIMCO Commodity Real Ret Strat Instl PCRIX

**Morningstar Category**  
Commodities Broad Basket

**Morningstar Index**  
Bloomberg Commodity TR USD

## Style Analysis as of 09-30-2019

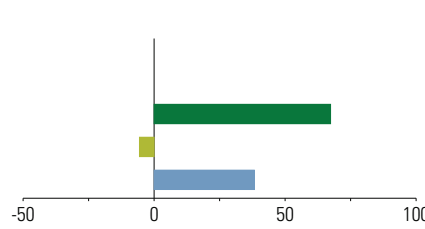
Morningstar Style Box™



## Style Breakdown

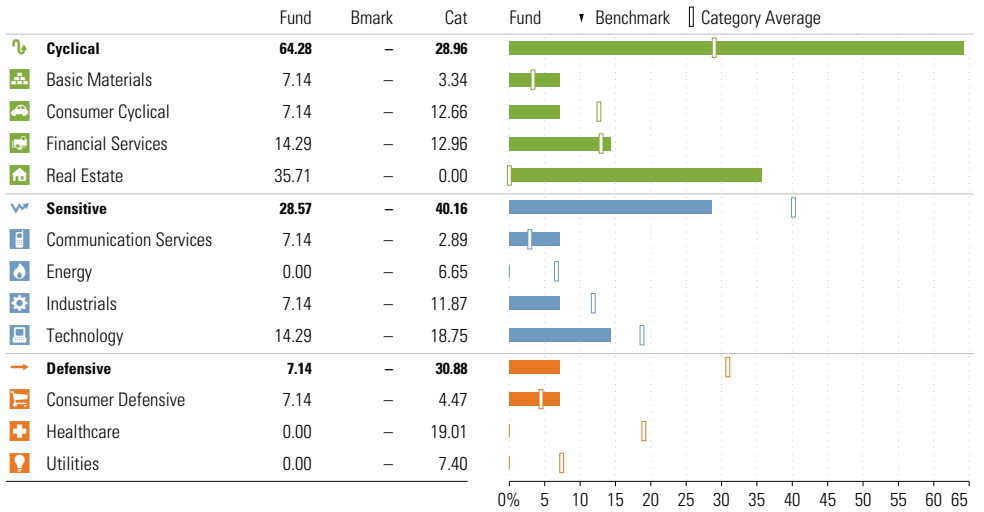


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	0.00	3.15
Non-US Stocks	0.00	1.88
Bonds	67.35	16.03
Cash	-5.58	63.84
Other	38.23	15.11
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Euro Schatz Sept19	28.32	28.32	-	-
✱ CashOffSet	24.76	53.08	-	-
Pimco Cayman Cmdty Fd Ltd Instl	23.48	76.57	-	-
⊕ Offset: Unsettled Trades	17.59	94.16	-	-
⊕ United States Treasury Notes 0.12%	17.53	111.69	-	-
⊕ Euro BUND Future Sept19	15.82	127.51	-	-
⊕ Federal National Mortgage Association 3.5%	11.84	139.35	-	-
⊕ Trs R 2.62/912828k33 Myc	7.83	147.19	-	-
⊕ Euro OAT Sept19	7.46	154.65	-	-
⊕ United States Treasury Bonds 2.38%	6.44	161.09	-	-
Irs Usd 2.25000 12/20/17-5y Cme	5.93	167.02	-	-
⊕ United States Treasury Notes 0.62%	5.89	172.92	-	-
Irs Usd 2.40000 03/16/21-5y Cme	5.88	178.79	-	-
⊕ Irs Usd 2.25000 12/20/17-5y Cme	5.83	184.62	-	-
⊕ Irs Usd 2.40000 03/16/21-5y Cme	5.72	190.34	-	-

**Total Holdings 949**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# PIMCO Short-Term Instl PTSHX

**Morningstar Category**  
Ultrashort Bond

**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## 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 10 of the 10 years it's been in existence.

✔ **Management:** The fund's management has been in place for 8.75 years.

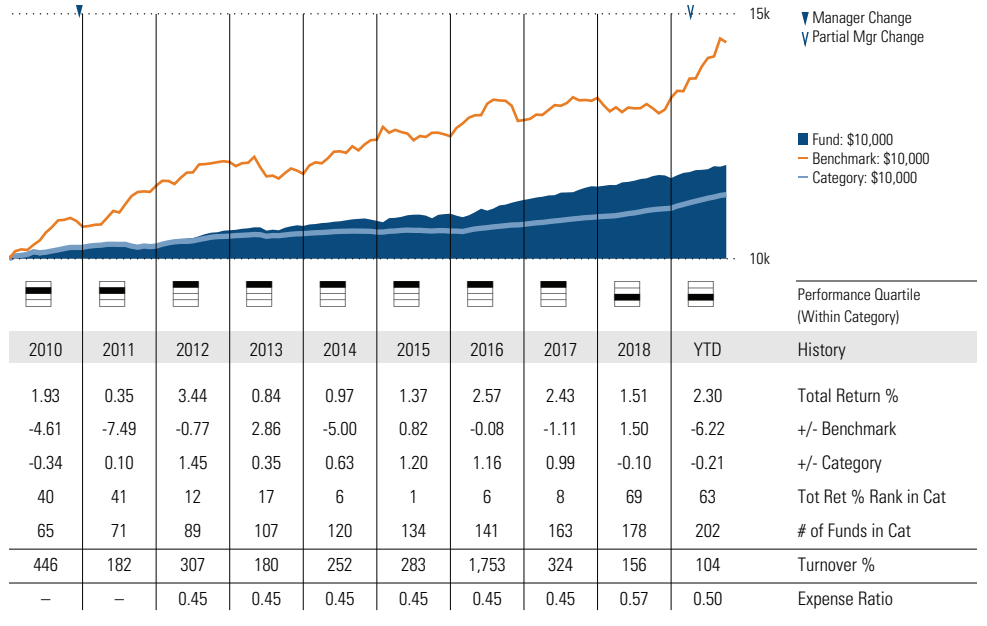
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.5 is 8.7% higher than the Ultrashort Bond category average.

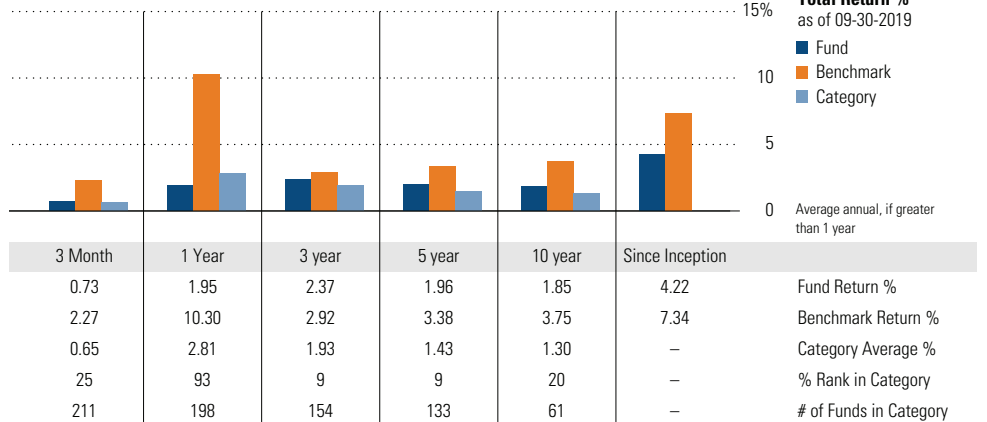
## Morningstar Investment Management LLC Analysis

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

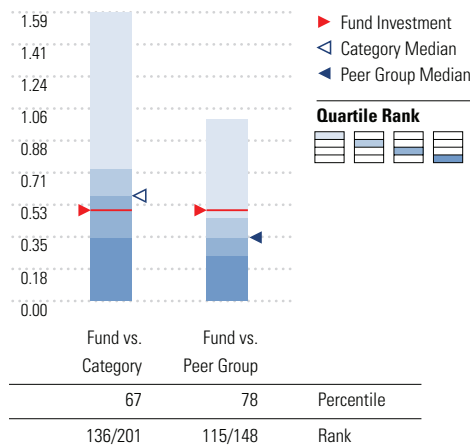
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	2.67	-	1.78
Beta	-0.11	-	0.04
R-Squared	26.76	-	22.18
Standard Deviation	0.70	3.35	0.43
Sharpe Ratio	0.99	0.41	0.72
Tracking Error	3.76	-	3.22
Information Ratio	-0.15	-	-0.31
Up Capture Ratio	16.15	-	22.90
Down Capture Ratio	-47.08	-	-18.90

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Avg Eff Duration	0.46	4.43	0.95
Avg Eff Maturity	1.20	-	1.94

# PIMCO Short-Term Instl PTSHX

**Morningstar Category**  
Ultrashort Bond

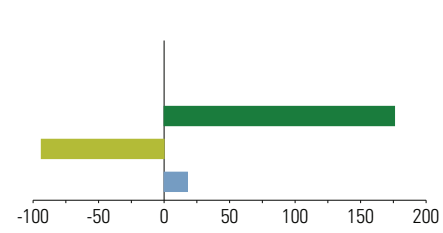
**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

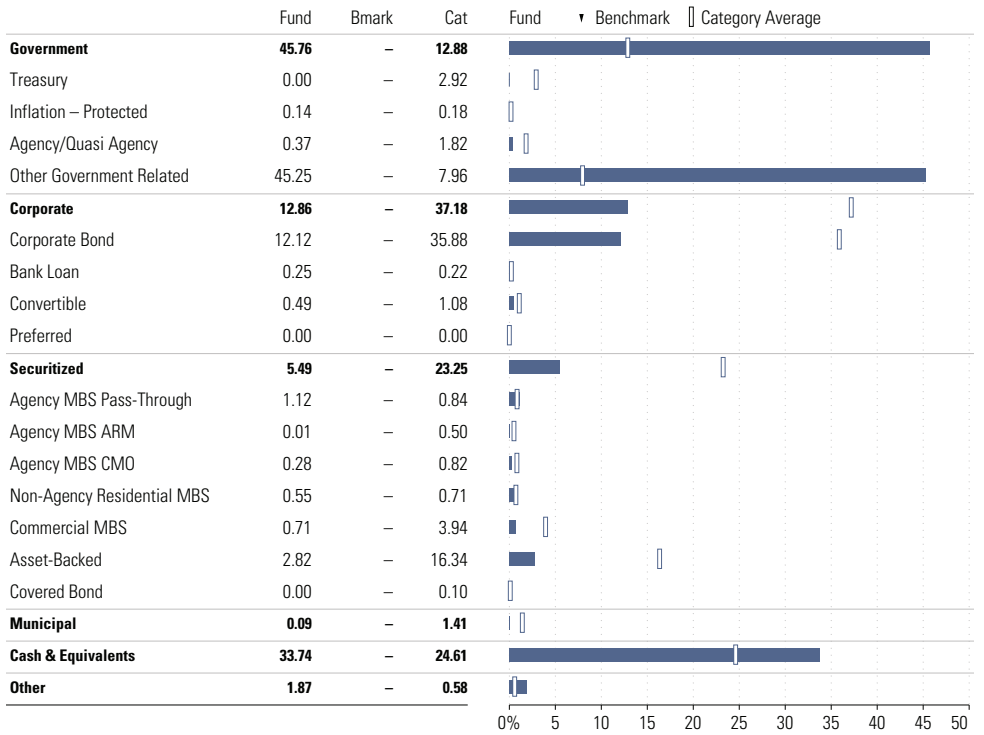


Asset Class	Net %	Cat%
US Stocks	0.00	0.01
Non-US Stocks	0.00	0.00
Bonds	175.91	77.26
Cash	-93.73	21.04
Other	17.82	1.69
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	28.00	3.53	34.16
AA	9.00	74.59	12.79
A	29.00	10.82	26.67
BBB	25.00	8.32	20.77
BB	7.00	0.28	1.54
B	2.00	0.00	0.42
Below B	0.00	0.00	0.32
Not Rated	0.00	2.46	3.32

## Sector Weighting as of 09-30-2019



## Top 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
Ois Usd Fedl01/2.336 12/18/19 Lch	03-2020	93.79	93.79	-
⊕ Ois Usd Fedl01/2.336 12/18/19 Lch	03-2020	93.62	187.41	-
⊕ 90 Day Eurodollar Future June20	06-2020	65.13	252.54	-
⊕ Irs Usd R 3ml/1ml+12.5 06/21/19-20 Cme	06-2020	59.55	312.10	-
⊕ Irs Usd R 3ml/1ml+12.5 06/21/19-20 Cme	06-2020	59.55	371.64	-
⊖ Ois Usd Fedl01/2.5 03/01/19 Lch	03-2020	50.07	421.71	-
⊕ Ois Usd Fedl01/2.5 03/01/19 Lch	03-2020	49.87	471.58	-
⊖ Ois Usd Fedl01/2.3 03/01/19 Lch	03-2022	37.12	508.69	-
⊕ Ois Usd Fedl01/2.3 03/01/19 Lch	03-2022	36.36	545.05	-
⊕ Fin Fut Euribor Ice (Grn) 03/14/22	03-2022	31.99	577.05	-

**Total Holdings 1487**

⊕ Increase ⊖ Decrease ✱ New to Portfolio



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

**Morningstar Category**  
Large Growth

**Morningstar Index**  
Russell 1000 Growth TR USD

## Portfolio Manager(s)

Management Team since 07-1999

## Quantitative Screens

✔ **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 20.35 years.

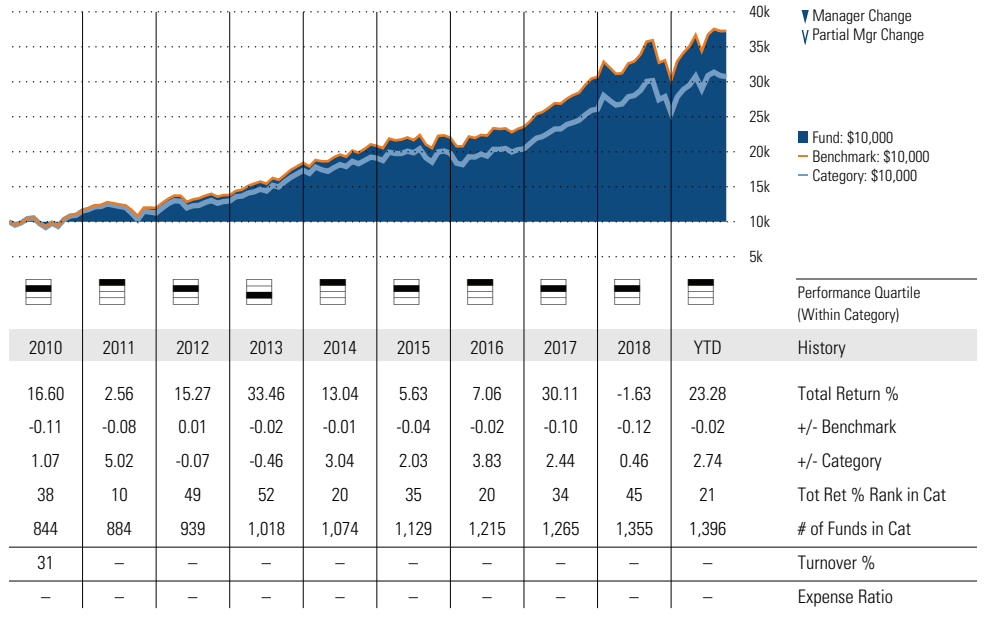
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

The Expense screen is not applicable for funds without data.

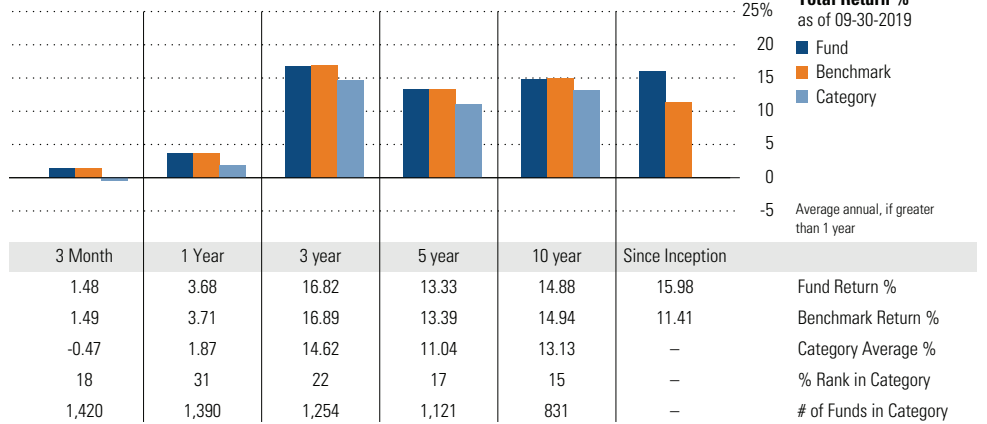
## Morningstar Investment Management LLC Analysis

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

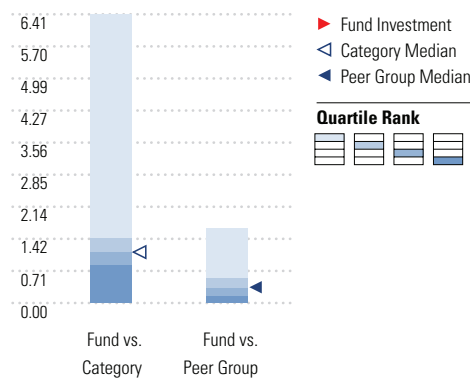
## Growth of \$10,000



## Trailing Performance



## Net Expense



## 3-Year Risk Metrics

	Fund	Bmark	Cat
Alpha	-0.06	-	-0.79
Beta	1.00	-	1.00
R-Squared	100.00	-	94.60
Standard Deviation	13.29	13.30	13.71
Sharpe Ratio	1.12	1.12	1.04
Tracking Error	0.03	-	3.01
Information Ratio	-2.24	-	-0.55
Up Capture Ratio	99.80	-	96.42
Down Capture Ratio	100.10	-	98.80

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	25.93	25.98	26.42
Price/Book Ratio	7.54	7.55	6.09
Geom Avg Mkt Cap \$B	125.18	125.13	169.04
ROE	34.88	34.85	29.93

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

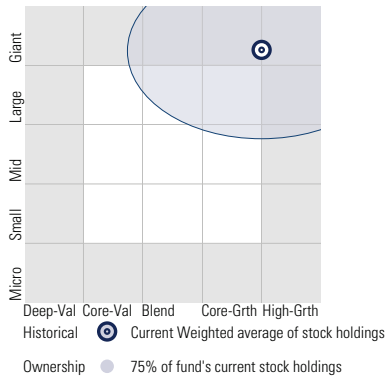
# State St Russell Lg Cap Gr® Indx NL CI C

**Morningstar Category**  
Large Growth

**Morningstar Index**  
Russell 1000 Growth TR USD

## Style Analysis as of 09-30-2019

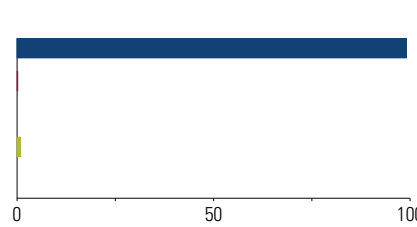
Morningstar Style Box™



## Style Breakdown

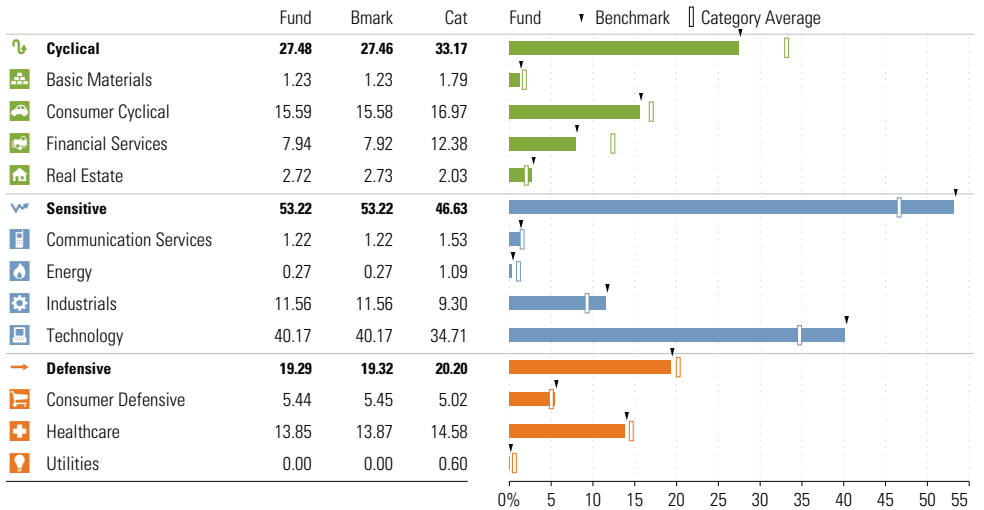


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	99.00	91.88
Non-US Stocks	0.16	5.58
Bonds	0.00	0.04
Cash	0.84	2.07
Other	0.00	0.45
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Microsoft Corp	7.40	7.40	38.24	Technology
⊖ Apple Inc	7.12	14.52	43.43	Technology
⊕ Amazon.com Inc	5.05	19.57	15.58	Consumer Cyclical
⊕ Facebook Inc A	2.99	22.56	35.85	Technology
⊕ Alphabet Inc Class C	2.61	25.17	17.71	Technology
Alphabet Inc A	2.57	27.73	16.86	Technology
⊕ Visa Inc Class A	2.11	29.84	30.94	Financial Services
⊕ Mastercard Inc A	1.72	31.56	44.48	Financial Services
⊖ Cisco Systems Inc	1.49	33.05	16.41	Technology
⊕ UnitedHealth Group Inc	1.44	34.49	-11.54	Healthcare
⊖ Merck & Co Inc	1.44	35.93	12.33	Healthcare
⊕ Boeing Co	1.42	37.35	19.89	Industrials
⊖ PepsiCo Inc	1.13	38.48	26.66	Consumer Defensive
⊖ The Home Depot Inc	1.02	39.51	37.41	Consumer Cyclical
Coca-Cola Co	1.00	40.51	17.51	Consumer Defensive

**Total Holdings 537**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

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

Morningstar Category  
Small Growth

Morningstar Index  
Russell 2000 Growth TR USD

## Portfolio Manager(s)

Management Team since 09-2009

## Quantitative Screens

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

✔ **Management:** The fund's management has been in place for 10.16 years.

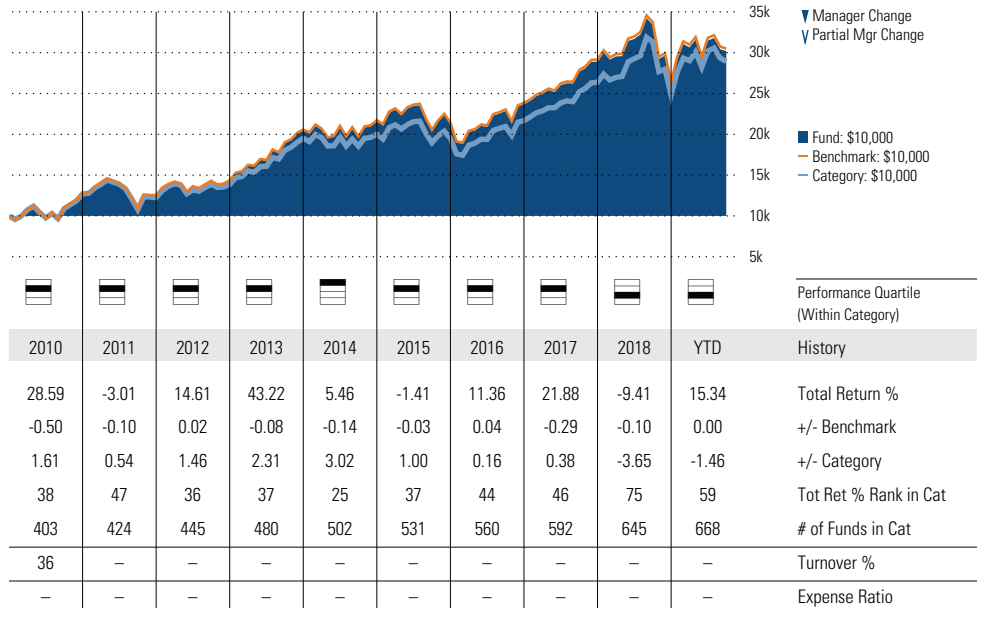
✔ **Style:** The fund has landed in its primary style box — Small Growth — 100 % of the time over the past three years.

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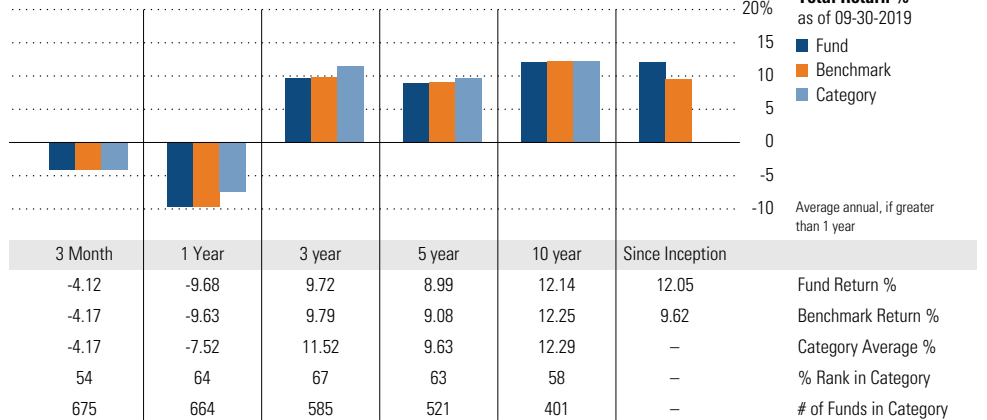
## Morningstar Investment Management LLC Analysis

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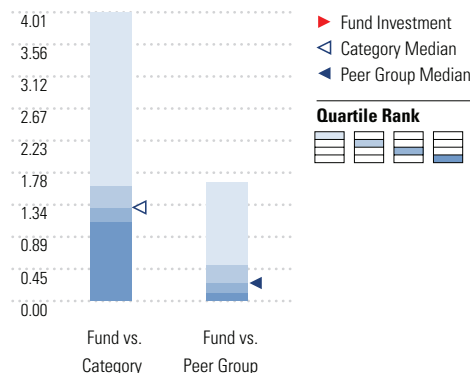
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-0.06	-	0.15
Beta	1.00	-	0.94
R-Squared	99.99	-	95.20
Standard Deviation	17.45	17.47	16.80
Sharpe Ratio	0.53	0.53	0.52
Tracking Error	0.13	-	3.24
Information Ratio	-0.56	-	-0.10
Up Capture Ratio	99.65	-	93.35
Down Capture Ratio	99.85	-	92.48

## Portfolio Metrics

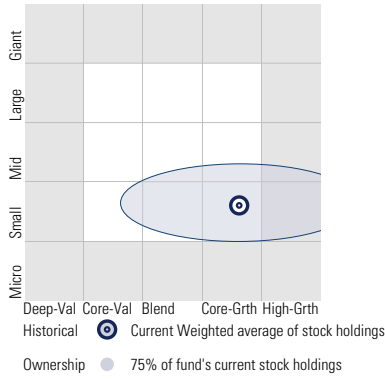
	Fund	Bmark	Cat
Price/Earnings Ratio	23.13	23.13	27.02
Price/Book Ratio	3.83	3.83	4.13
Geom Avg Mkt Cap \$B	2.03	2.03	3.72
ROE	6.12	6.01	7.16

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

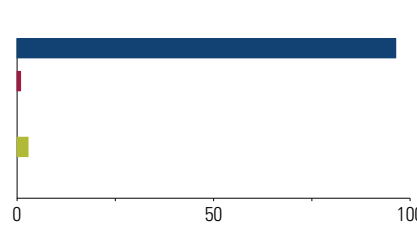
**Morningstar Category**  
Small Growth

**Morningstar Index**  
Russell 2000 Growth TR USD

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

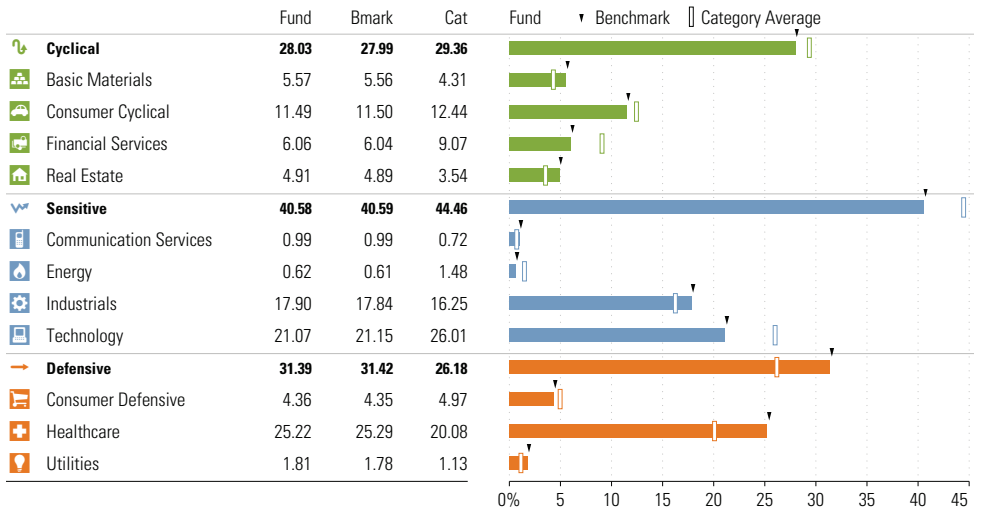


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	96.34	93.72
Non-US Stocks	0.88	3.23
Bonds	0.00	0.00
Cash	2.78	2.80
Other	0.00	0.25
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 15 Holdings** as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ State Street Corporation Short Term Investment Fund	2.58	2.58	-	-
⊕ E-Mini Russ 2000 Dec19 Xcme 20191220	2.44	5.02	-	-
⊖ Haemonetics Corp	0.63	5.65	26.08	Healthcare
NovoCure Ltd	0.63	6.28	123.36	Healthcare
⊖ Trex Co Inc	0.52	6.80	53.18	Basic Materials
Science Applications International Corp	0.51	7.30	38.78	Technology
Maximus Inc	0.48	7.79	19.85	Industrials
Teladoc Health Inc	0.47	8.26	36.61	Technology
Silicon Laboratories Inc	0.47	8.73	41.29	Technology
⊖ Generac Holdings Inc	0.47	9.19	57.63	Industrials
⊖ Performance Food Group Co	0.46	9.65	42.58	Consumer Defensive
⊖ Tetra Tech Inc	0.46	10.11	68.40	Industrials
⊕ EastGroup Properties Inc	0.45	10.57	38.68	Real Estate
⊖ Blackbaud Inc	0.43	10.99	44.20	Technology
⊖ Mercury Systems Inc	0.43	11.42	71.64	Industrials

**Total Holdings 1114**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Templeton Global Bond R6 FBNRX

**Morningstar Category**  
Nontraditional Bond

**Morningstar Index**  
BBgBarc US Govt/Credit 5-10 Yr TR USD

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **Performance:** The fund has finished in the Nontraditional Bond category's top three quartiles in 4 of the 6 years it's been in existence.

✔ **Management:** The fund's management has been in place for 17.76 years.

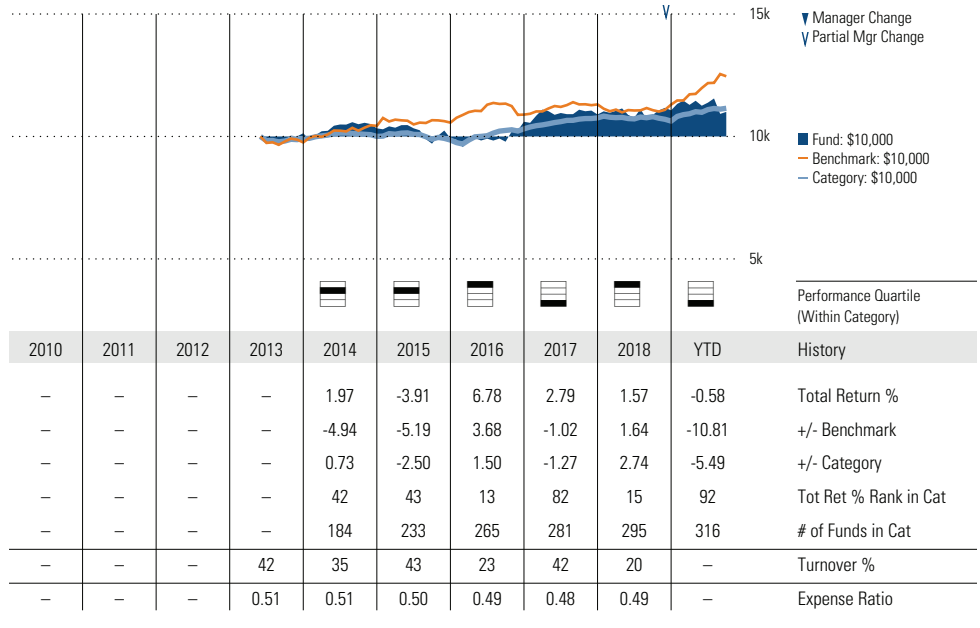
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.49 is 60.16% lower than the Nontraditional Bond category average.

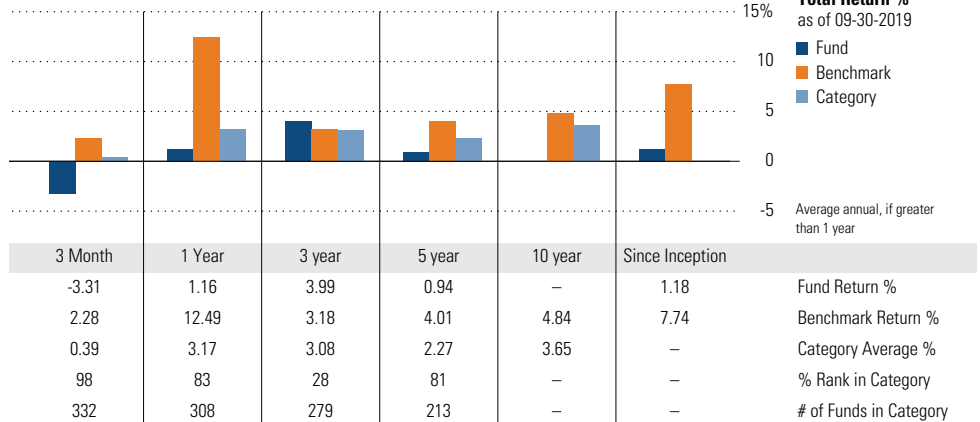
## Morningstar Investment Management LLC Analysis

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.

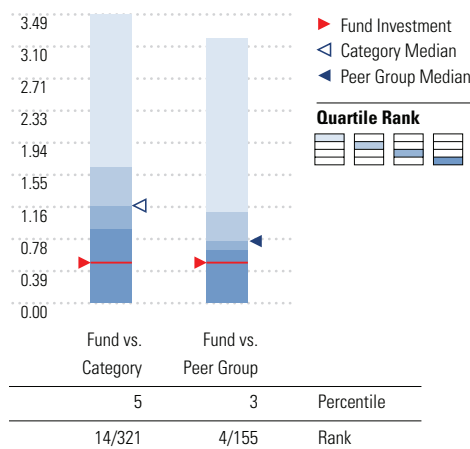
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	6.68	-	3.01
Beta	-0.79	-	0.01
R-Squared	21.78	-	12.88
Standard Deviation	6.85	4.06	2.99
Sharpe Ratio	0.37	0.40	0.65
Tracking Error	9.45	-	5.01
Information Ratio	0.09	-	-0.02
Up Capture Ratio	-5.71	-	33.41
Down Capture Ratio	-115.71	-	-18.02

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Avg Eff Duration	-2.82	6.37	1.74
Avg Eff Maturity	1.20	7.30	7.76

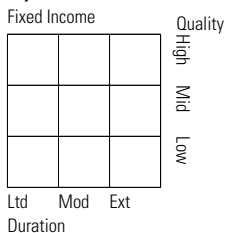
# Templeton Global Bond R6 FBNRX

**Morningstar Category**  
Nontraditional Bond

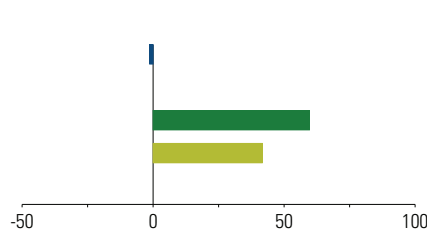
**Morningstar Index**  
BBgBarc US Govt/Credit 5-10 Yr TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

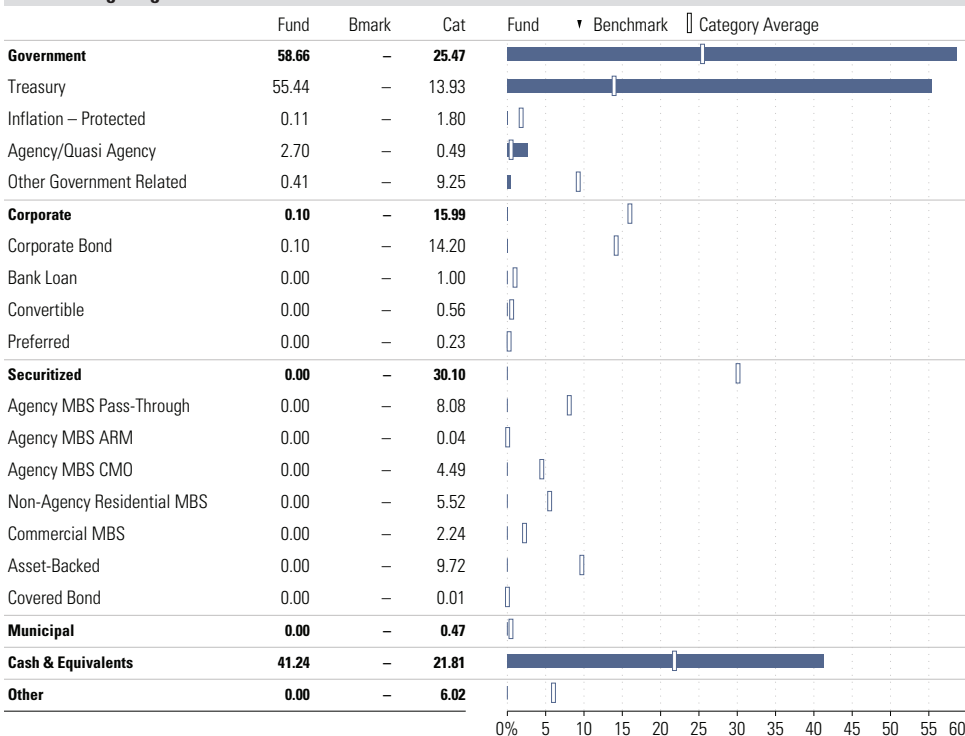


Asset Class	Net %	Cat%
US Stocks	-1.31	-0.01
Non-US Stocks	0.00	0.20
Bonds	59.67	77.24
Cash	41.65	21.43
Other	0.00	1.11
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	24.50	57.60	37.03
AA	6.54	6.60	6.75
A	18.45	17.44	12.43
BBB	26.22	18.36	16.58
BB	19.01	0.00	11.91
B	8.17	0.00	7.27
Below B	0.00	0.00	4.59
Not Rated	-2.88	0.00	3.43

## Sector Weighting as of 09-30-2019



## Top 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊖ Franklin IFT Money Market	-	20.98	20.98	-
Mexico (United Mexican States) 8%	06-2020	8.33	29.31	-
Mexico (United Mexican States) 6.5%	06-2021	4.34	33.65	-
⊕ Otc Securitized Margin Cash -	02-2049	4.13	37.78	-
Brazil (Federative Republic) 10%	01-2023	4.01	41.78	-
⊕ United States Treasury Bills 0%	09-2019	3.89	45.68	-
Brazil (Federative Republic) 10%	01-2021	3.00	48.67	-
⊕ United States Treasury Bills 0%	10-2019	2.80	51.48	-
Secretaria Tesouro Nacional 0%	07-2020	2.43	53.91	-
United States Treasury Bills 0%	09-2019	2.41	56.32	-

**Total Holdings 216**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# 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

✔ **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 has been in place for 3.43 years.

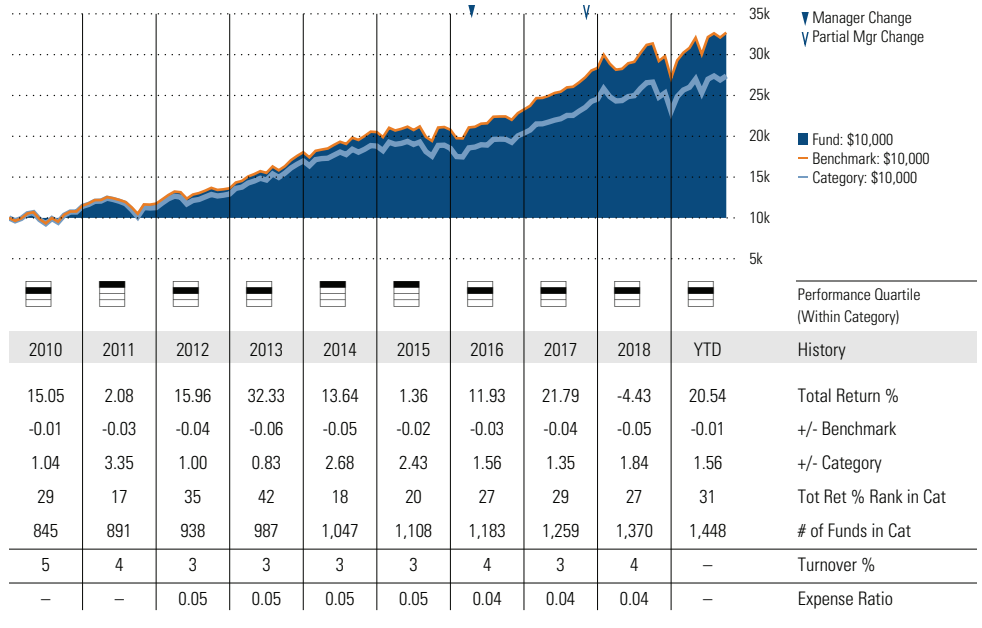
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.04 is 95.6% lower than the Large Blend category average.

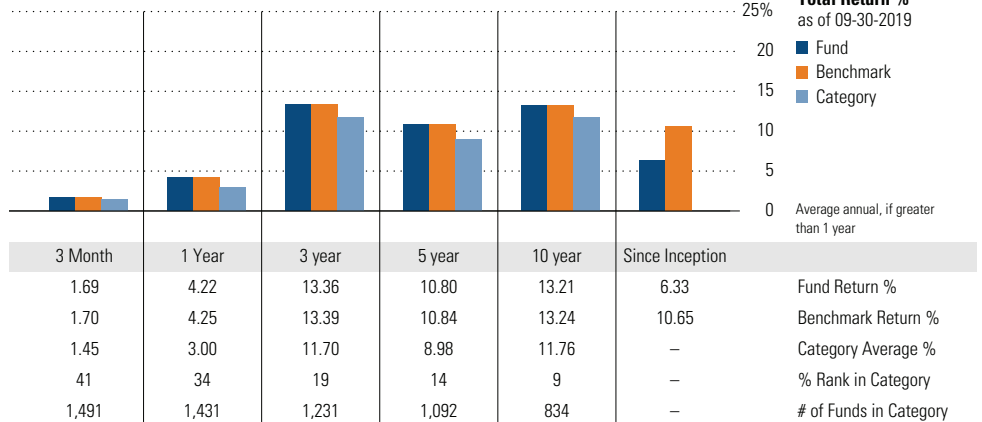
## Morningstar Investment Management LLC Analysis

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.

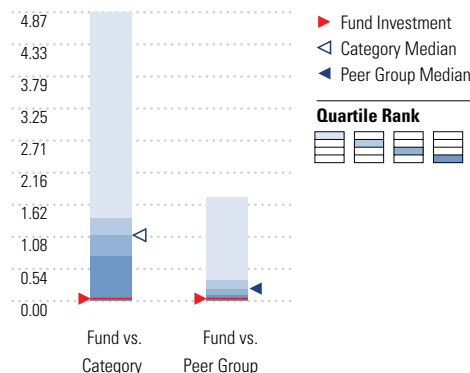
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-0.03	-	-1.24
Beta	1.00	-	0.96
R-Squared	100.00	-	93.99
Standard Deviation	12.18	12.18	12.01
Sharpe Ratio	0.96	0.96	0.84
Tracking Error	0.01	-	2.98
Information Ratio	-4.03	-	-1.29
Up Capture Ratio	99.88	-	91.29
Down Capture Ratio	100.05	-	97.85

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	20.32	20.32	20.89
Price/Book Ratio	3.18	3.18	3.47
Geom Avg Mkt Cap \$B	111.22	111.20	178.81
ROE	26.31	26.31	28.46

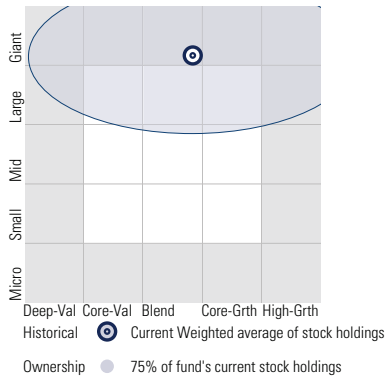
# Vanguard 500 Index Admiral VFIAX

**Morningstar Category**  
Large Blend

**Morningstar Index**  
S&P 500 TR USD

## Style Analysis as of 09-30-2019

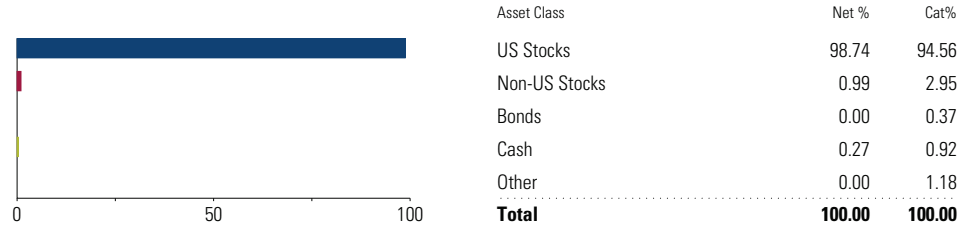
Morningstar Style Box™



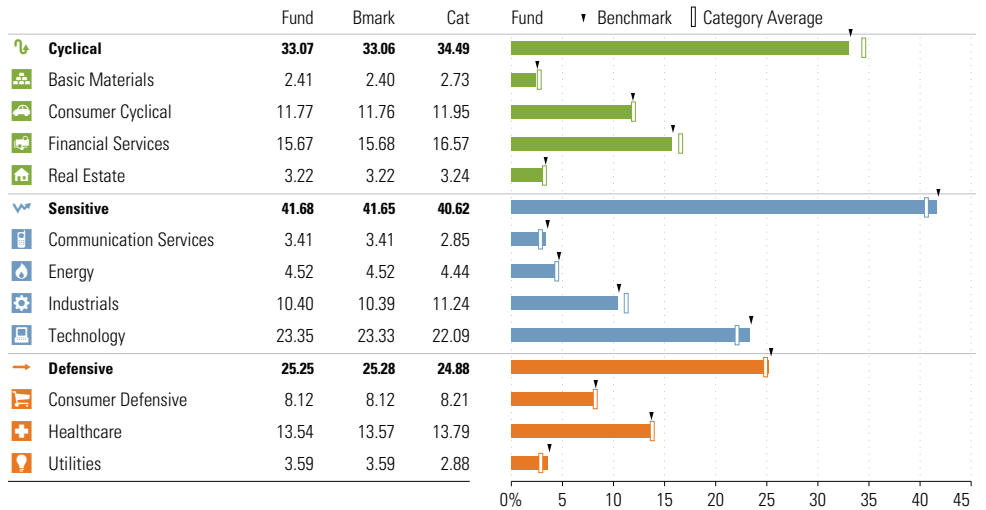
## Style Breakdown



## Asset Allocation as of 09-30-2019



## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Microsoft Corp	4.29	4.29	38.24	Technology
Apple Inc	3.84	8.13	43.43	Technology
Amazon.com Inc	2.91	11.04	15.58	Consumer Cyclical
Facebook Inc A	1.73	12.77	35.85	Technology
Berkshire Hathaway Inc B	1.60	14.37	1.88	Financial Services
JPMorgan Chase & Co	1.52	15.89	23.02	Financial Services
Alphabet Inc Class C	1.49	17.38	17.71	Technology
Alphabet Inc A	1.47	18.85	16.86	Technology
Johnson & Johnson	1.38	20.23	2.43	Healthcare
Procter & Gamble Co	1.26	21.49	37.72	Consumer Defensive
Exxon Mobil Corp	1.21	22.70	7.30	Energy
Visa Inc Class A	1.20	23.90	30.94	Financial Services
AT&T Inc	1.12	25.01	37.95	Communication Svc
The Home Depot Inc	1.03	26.04	37.41	Consumer Cyclical
Verizon Communications Inc	1.01	27.05	10.58	Communication Svc

**Total Holdings 516**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# Vanguard Inflation-Protected Secs Adm VAIPX

**Morningstar Category**  
Inflation-Protected Bond

**Morningstar Index**  
BBgBarc US Treasury US TIPS TR USD

## Portfolio Manager(s)

Gemma Wright-Casparius since 08-2011

## Quantitative Screens

✔ **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 has been in place for 8.12 years.

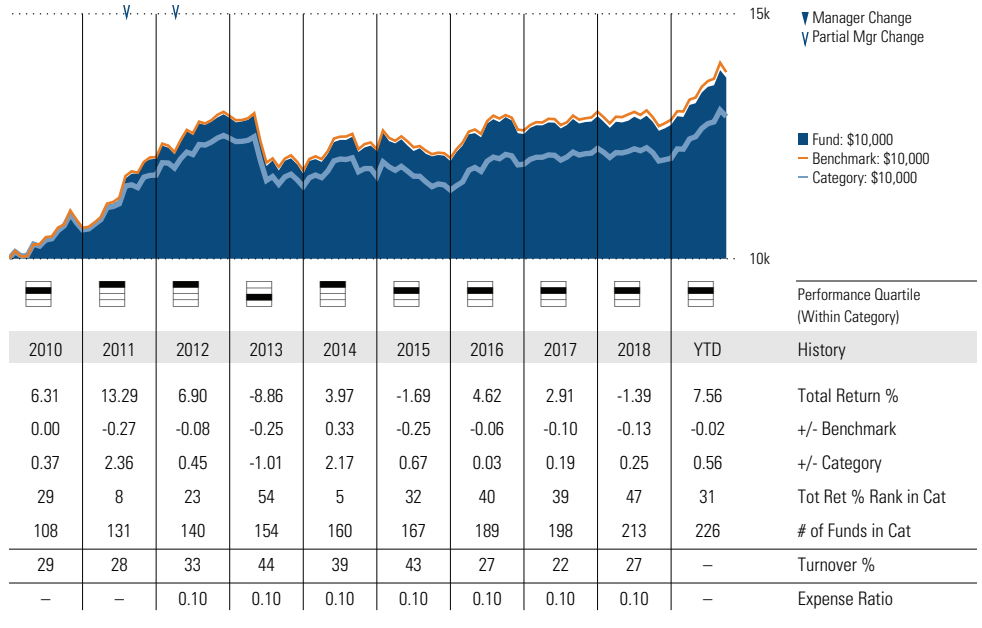
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.1 is 86.67% lower than the Inflation-Protected Bond category average.

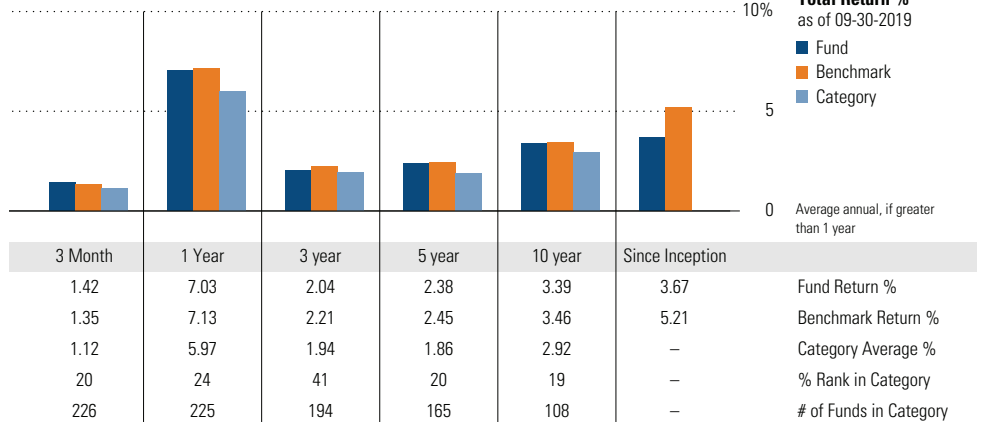
## Morningstar Investment Management LLC Analysis

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

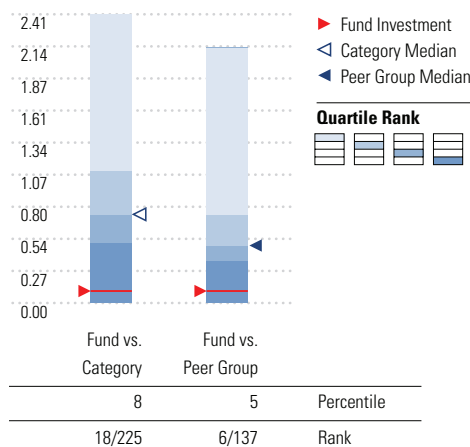
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-0.14	-	0.08
Beta	0.99	-	0.76
R-Squared	99.01	-	82.74
Standard Deviation	3.27	3.28	2.86
Sharpe Ratio	0.15	0.20	0.04
Tracking Error	0.33	-	1.46
Information Ratio	-0.52	-	-0.63
Up Capture Ratio	97.81	-	76.67
Down Capture Ratio	101.22	-	74.77

## Portfolio Metrics

	Fund	Bmark	Cat
Avg Eff Duration	7.93	4.52	7.65
Avg Eff Maturity	8.70	-	8.87

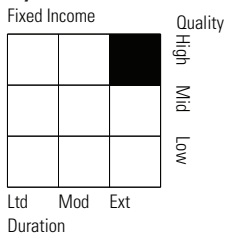
# Vanguard Inflation-Protected Secs Adm VAIPX

**Morningstar Category**  
Inflation-Protected Bond

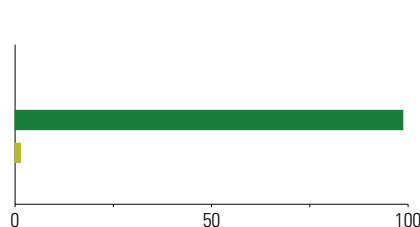
**Morningstar Index**  
BBgBarc US Treasury US TIPS TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

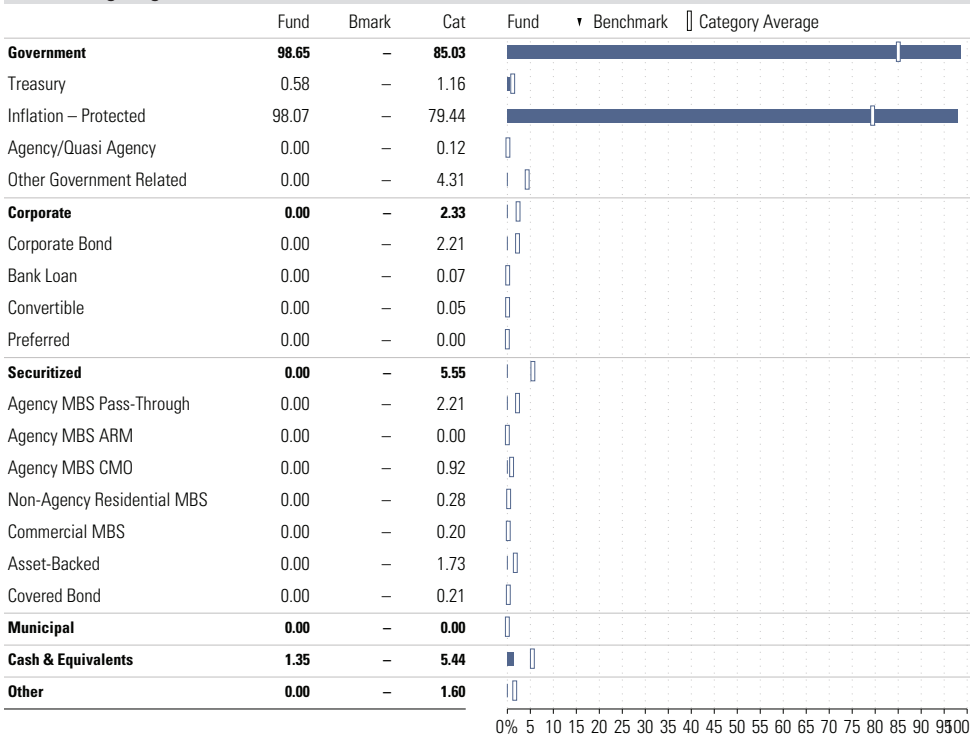


Asset Class	Net %	Cat%
US Stocks	0.00	0.01
Non-US Stocks	0.00	0.01
Bonds	98.65	97.96
Cash	1.35	1.81
Other	0.00	0.21
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	100.00	0.00	84.12
AA	0.00	99.60	10.37
A	0.00	0.00	0.00
BBB	0.00	0.00	5.26
BB	0.00	0.00	0.00
B	0.00	0.00	0.00
Below B	0.00	0.00	0.00
Not Rated	0.00	0.40	0.25

## Sector Weighting as of 09-30-2019



## Top 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
United States Treasury Notes 0.12%	04-2022	3.90	3.90	-
United States Treasury Notes 0.12%	01-2023	3.61	7.52	-
⊖ United States Treasury Notes 0.62%	01-2024	3.60	11.12	-
⊖ United States Treasury Notes 0.62%	04-2023	3.59	14.71	-
⊖ United States Treasury Notes 0.38%	07-2025	3.55	18.26	-
⊖ United States Treasury Notes 0.38%	07-2023	3.50	21.76	-
⊖ United States Treasury Notes 0.25%	01-2025	3.50	25.25	-
United States Treasury Notes 0.12%	01-2022	3.48	28.74	-
⊖ United States Treasury Notes 0.12%	07-2024	3.41	32.15	-
⊖ United States Treasury Notes 0.62%	01-2026	3.20	35.35	-

**Total Holdings 43**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# Vanguard International Growth Adm VWILX

**Morningstar Category**  
Foreign Large Growth

**Morningstar Index**  
MSCI EAFE NR USD

## Portfolio Manager(s)

James Anderson since 02-2003  
Simon Webber since 12-2009  
Thomas Coutts since 12-2016

## Quantitative Screens

✔ **Performance:** The fund has finished in the Foreign 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 16.66 years.

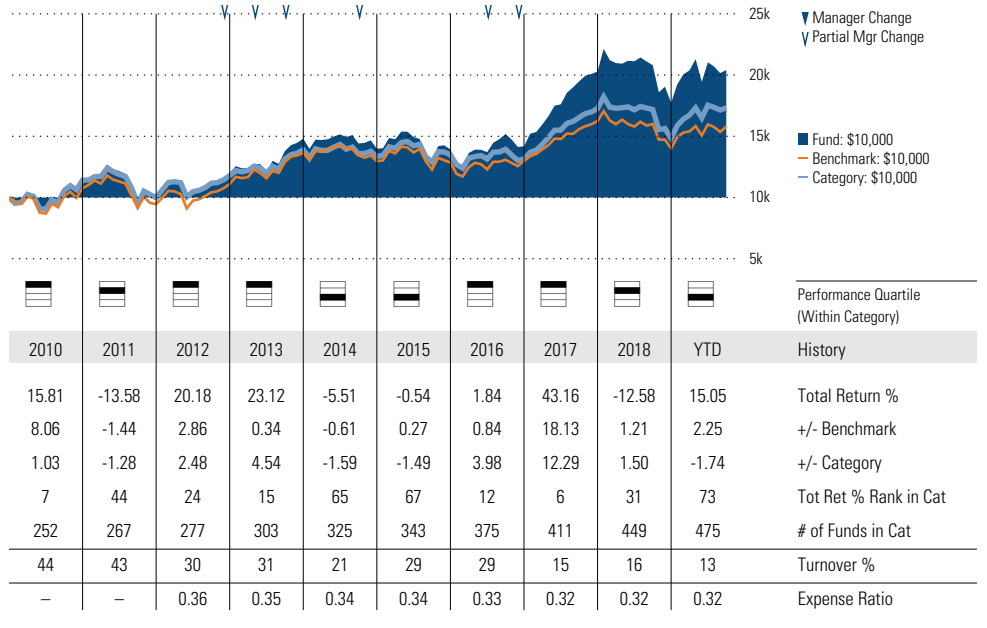
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.32 is 71.68% lower than the Foreign Large Growth category average.

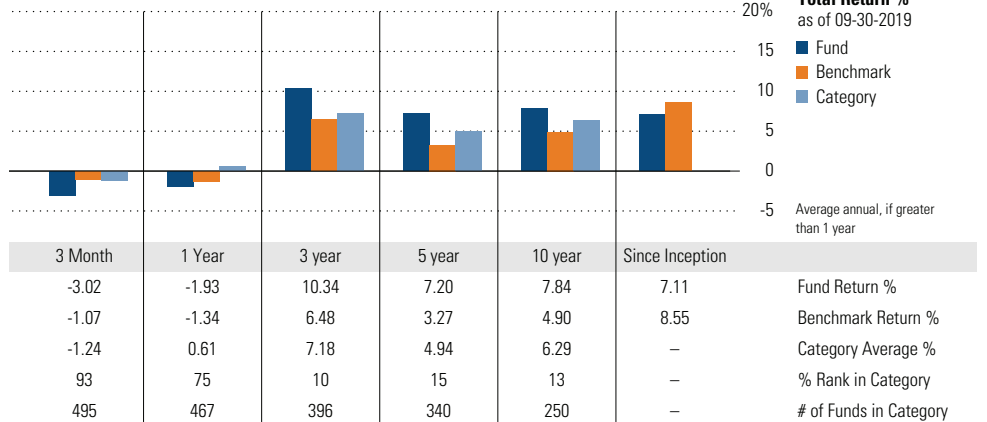
## Morningstar Investment Management LLC Analysis

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.

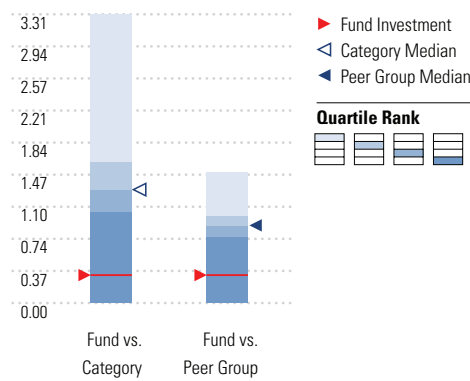
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	2.24	-	0.58
Beta	1.28	-	1.03
R-Squared	83.31	-	-
Standard Deviation	15.50	11.07	12.56
Sharpe Ratio	0.61	0.48	0.46
Tracking Error	7.04	-	5.20
Information Ratio	0.55	-	0.11
Up Capture Ratio	121.09	-	98.91
Down Capture Ratio	103.07	-	93.55

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	21.77	15.97	22.11
Price/Book Ratio	3.09	1.56	3.08
Geom Avg Mkt Cap \$B	57.12	35.74	39.99
ROE	17.97	16.29	20.08

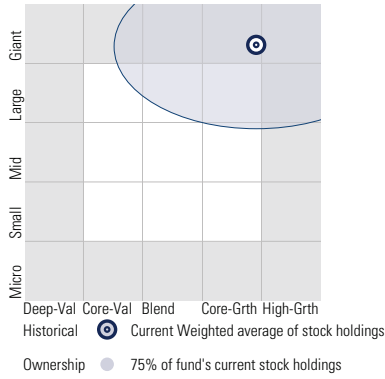
# Vanguard International Growth Adm VWILX

**Morningstar Category**  
Foreign Large Growth

**Morningstar Index**  
MSCI EAFE NR USD

## Style Analysis as of 09-30-2019

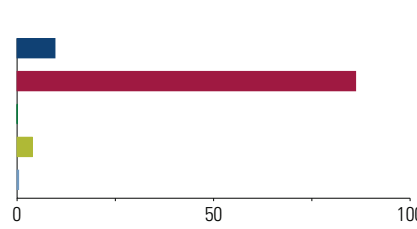
Morningstar Style Box™



## Style Breakdown

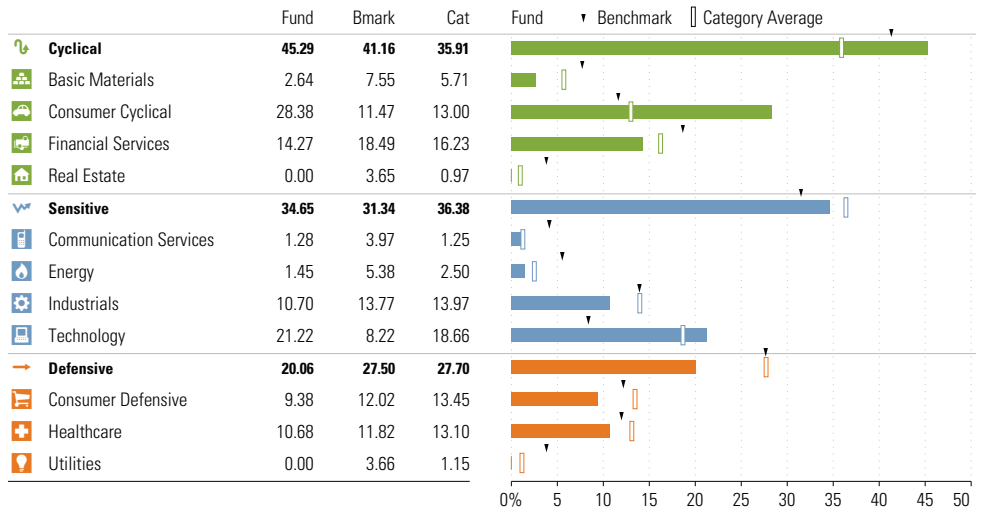


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	9.63	8.20
Non-US Stocks	86.13	88.19
Bonds	0.03	0.04
Cash	3.83	3.31
Other	0.38	0.27
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## World Regions % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Market Maturity	Fund %
Greater Asia	39.38	30.83	Americas	14.03	15.21	Greater Europe	46.60	53.95	Developed Markets	76.19
Japan	10.92	13.01	North America	10.71	13.02	United Kingdom	8.06	12.58	Emerging Markets	23.81
Australasia	0.42	2.16	Central/Latin	3.32	2.19	W euro-ex UK	38.36	40.14	Not Available	0.00
Asia-4 Tigers	7.72	6.39				Emrgng Europe	0.18	0.38		
Asia-ex 4 Tigers	20.32	9.27				Africa	0.00	0.85		
Not Classified	0.00	0.00								

## Top 10 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊖ Tencent Holdings Ltd	4.91	4.91	10.82	Technology
⊖ Alibaba Group Holding Ltd ADR	4.68	9.60	22.00	Consumer Cyclical
⊕ ASML Holding NV	4.28	13.88	68.63	Technology
⊖ Cmt Market Liquidity Rate	3.77	17.64	—	—
⊖ AIA Group Ltd	3.51	21.16	15.93	Financial Services
Amazon.com Inc	3.35	24.50	15.58	Consumer Cyclical
Illumina Inc	2.66	27.16	1.43	Healthcare
MercadoLibre Inc	2.54	29.70	88.23	Consumer Cyclical
Kering SA	2.13	31.84	21.32	Consumer Cyclical
Ferrari NV	2.03	33.87	65.23	Consumer Cyclical

**Total Holdings 132**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# 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  
Steven Morrow since 08-2012  
A. Krishna since 08-2012

## Quantitative Screens

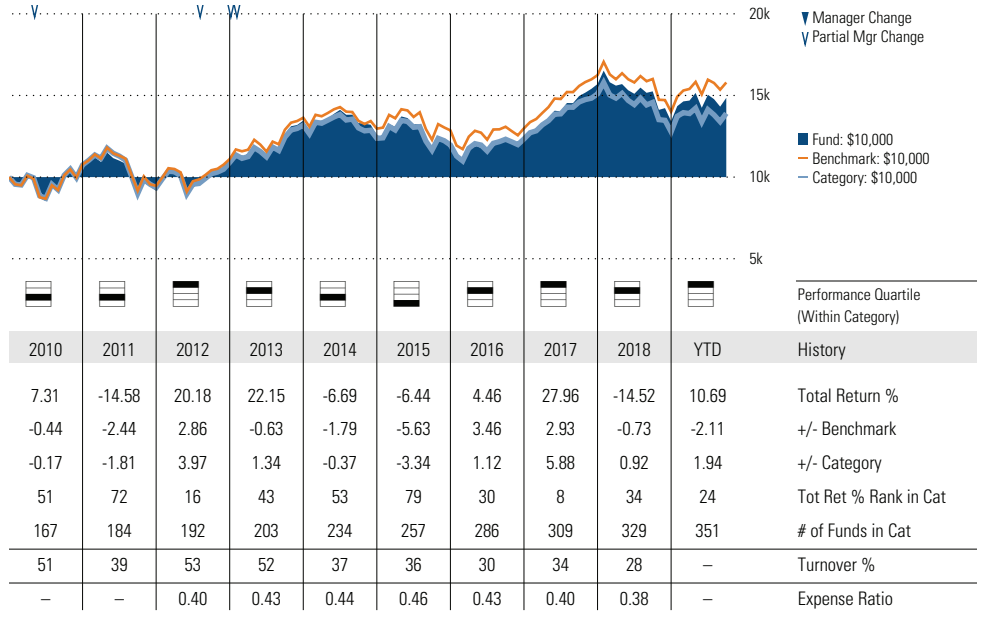
✔ **Performance:** The fund has finished in the Foreign Large Value category's top three quartiles in 9 of the 10 years it's been in existence.

✔ **Management:** The fund's management has been in place for 11.38 years.

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

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

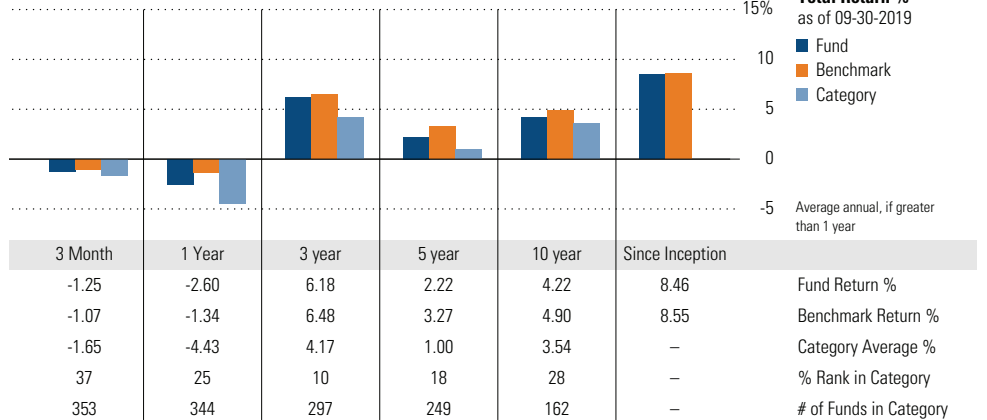
## Growth of \$10,000



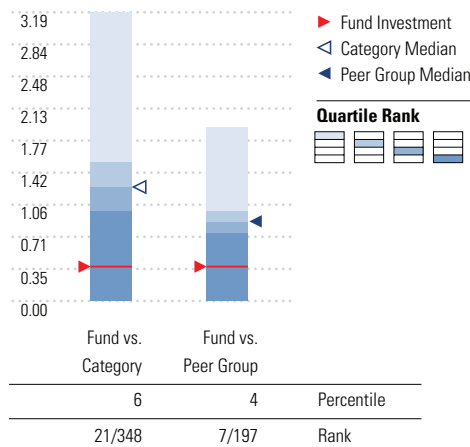
## Morningstar Investment Management LLC Analysis

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.

## Trailing Performance



## Net Expense



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	-0.31	-	-2.84
Beta	1.01	-	1.02
R-Squared	95.78	-	89.43
Standard Deviation	11.42	11.07	12.01
Sharpe Ratio	0.44	0.48	0.22
Tracking Error	2.35	-	3.87
Information Ratio	-0.13	-	-0.81
Up Capture Ratio	98.90	-	92.25
Down Capture Ratio	100.54	-	110.17

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	14.20	15.97	12.56
Price/Book Ratio	1.38	1.56	1.14
Geom Avg Mkt Cap \$B	38.31	35.74	29.23
ROE	14.88	16.29	13.76

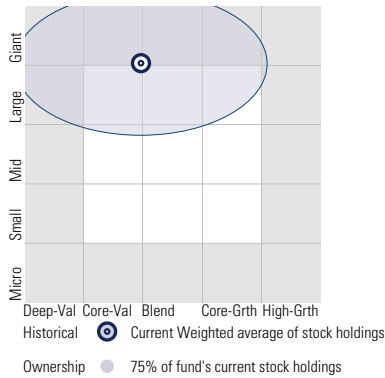
# Vanguard International Value Inv VTRIX

**Morningstar Category**  
Foreign Large Value

**Morningstar Index**  
MSCI EAFE NR USD

## Style Analysis as of 09-30-2019

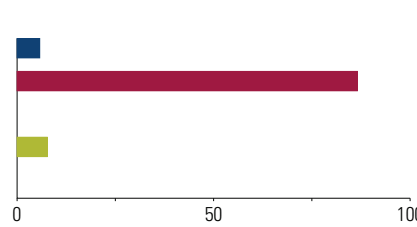
Morningstar Style Box™



## Style Breakdown

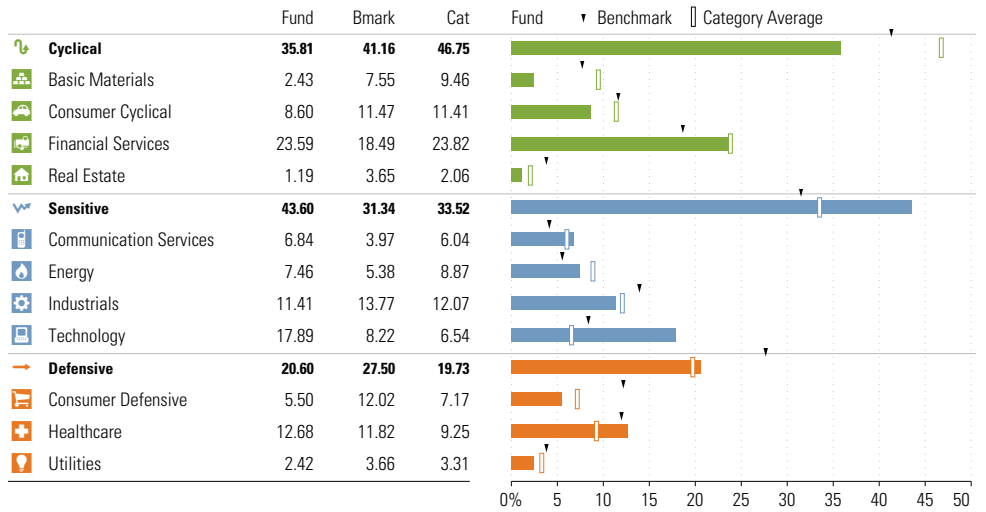


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	5.75	3.39
Non-US Stocks	86.58	94.74
Bonds	0.00	-0.07
Cash	7.67	1.88
Other	0.00	0.06
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## World Regions % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Market Maturity	Fund %
Greater Asia	35.20	32.27	Americas	8.73	7.72	Greater Europe	56.06	60.03	Developed Markets	88.27
Japan	16.46	17.75	North America	7.20	6.97	United Kingdom	15.42	20.15	Emerging Markets	11.73
Australasia	0.86	3.48	Central/Latin	1.53	0.75	W euro-ex UK	38.72	38.72	Not Available	0.00
Asia-4 Tigers	9.61	7.05				Emrgng Europe	0.46	0.64		
Asia-ex 4 Tigers	8.27	3.99				Africa	1.46	0.52		
Not Classified	0.00	0.00								

## Top 10 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Market Liquidity Inv	7.56	7.56	—	—
⊕ Novartis AG	2.35	9.91	11.61	Healthcare
⊕ Royal Dutch Shell PLC Class A	2.20	12.10	3.81	Energy
⊕ Sanofi SA	2.17	14.27	17.56	Healthcare
Roche Holding AG Dividend Right Cert.	1.74	16.01	22.90	Healthcare
⊕ Samsung Electronics Co Ltd	1.64	17.65	—	Technology
⊕ DBS Group Holdings Ltd	1.50	19.15	15.05	Financial Services
⊕ SAP SE	1.41	20.55	25.06	Technology
⊕ Sumitomo Mitsui Financial Group Inc	1.36	21.91	8.84	Financial Services
AstraZeneca PLC	1.32	23.23	32.30	Healthcare

**Total Holdings 152**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# 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

✔ **Performance:** The fund has finished in the Mid-Cap Value 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 13.13 years.

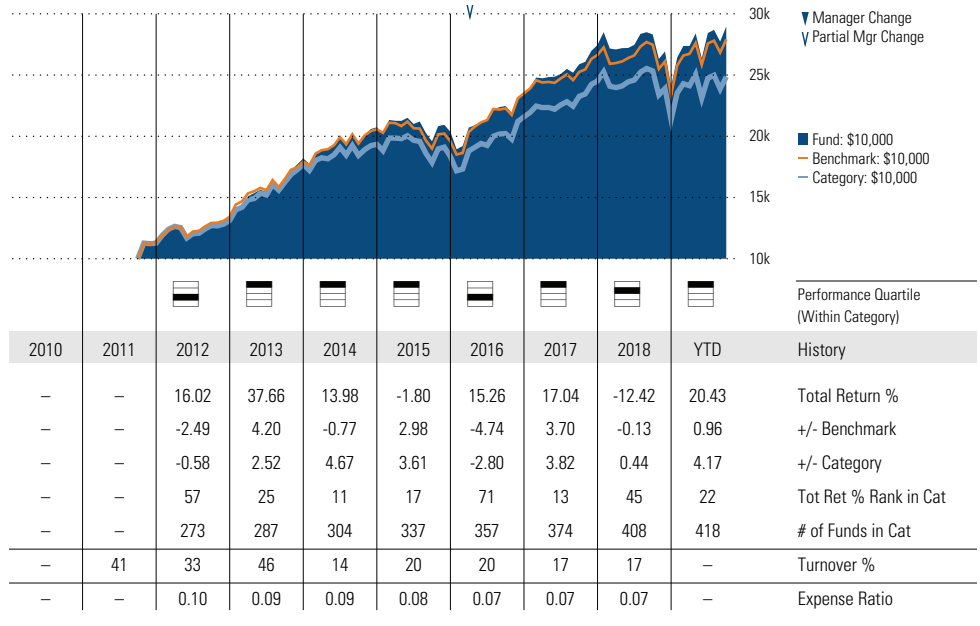
✔ **Style:** The fund has landed in its primary style box — Mid-Cap Value — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.07 is 93.33% lower than the Mid-Cap Value category average.

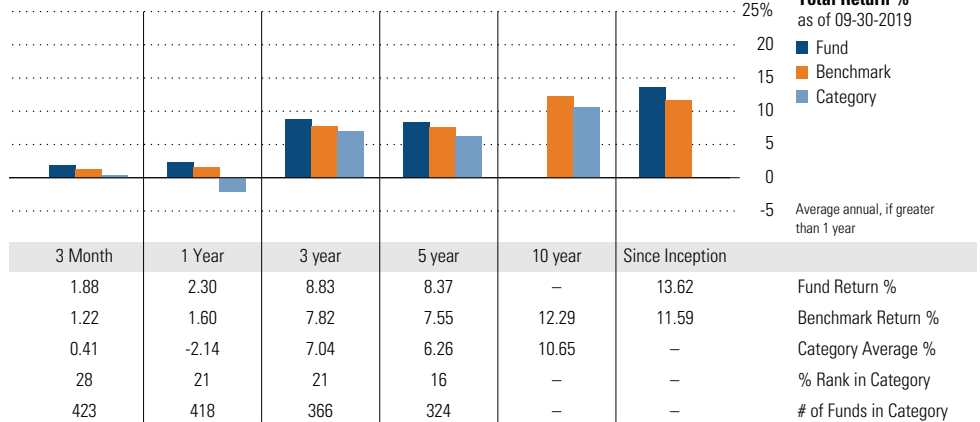
## Morningstar Investment Management LLC Analysis

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.

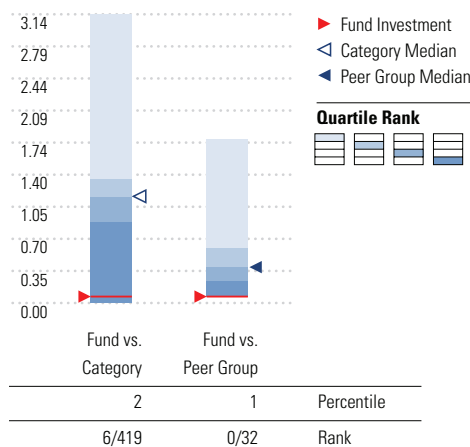
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	0.84	-	-1.01
Beta	1.02	-	1.07
R-Squared	98.20	-	94.09
Standard Deviation	13.75	13.39	14.85
Sharpe Ratio	0.57	0.51	0.44
Tracking Error	1.86	-	3.91
Information Ratio	0.55	-	-0.12
Up Capture Ratio	102.39	-	102.14
Down Capture Ratio	96.74	-	107.54

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	16.13	17.21	16.39
Price/Book Ratio	1.93	1.87	1.78
Geom Avg Mkt Cap \$B	14.39	12.50	10.74
ROE	14.82	11.14	12.18

# Vanguard Mid-Cap Value Index Admiral VMVAX

Morningstar Category

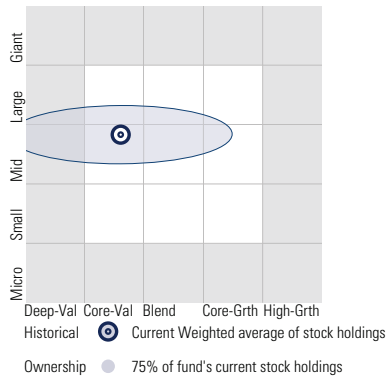
Mid-Cap Value

Morningstar Index

Russell Mid Cap Value TR USD

## Style Analysis as of 09-30-2019

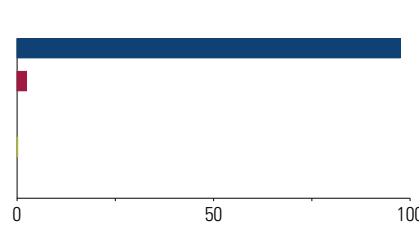
Morningstar Style Box™



## Style Breakdown

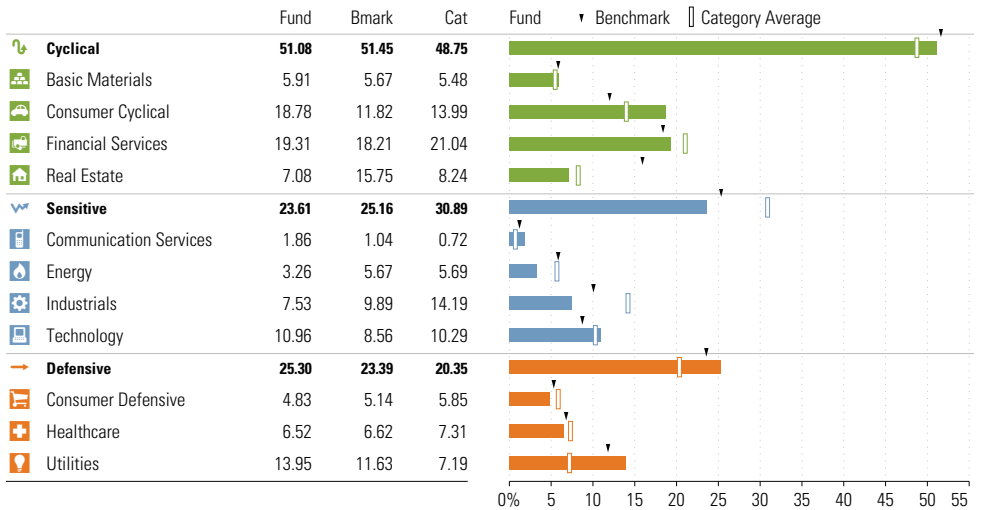


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	97.46	92.63
Non-US Stocks	2.38	4.52
Bonds	0.00	0.04
Cash	0.16	2.64
Other	0.00	0.17
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Newmont Goldcorp Corp	1.47	1.47	13.19	Basic Materials
⊕ WEC Energy Group Inc	1.42	2.90	39.86	Utilities
⊕ Motorola Solutions Inc	1.34	4.23	49.62	Technology
⊕ Eversource Energy	1.31	5.54	33.88	Utilities
⊕ FirstEnergy Corp	1.22	6.76	31.48	Utilities
⊕ Willis Towers Watson PLC	1.18	7.94	28.36	Financial Services
⊕ DTE Energy Co	1.16	9.10	23.11	Utilities
⊕ Entergy Corp	1.11	10.20	39.53	Utilities
⊕ American Water Works Co Inc	1.06	11.27	38.47	Utilities
⊕ The Hartford Financial Services Group Inc	1.04	12.31	38.38	Financial Services
⊕ Ameren Corp	0.96	13.27	24.90	Utilities
⊖ M&T Bank Corp	0.95	14.22	12.46	Financial Services
⊖ Clorox Co	0.91	15.12	0.46	Consumer Defensive
⊖ D.R. Horton Inc	0.88	16.00	53.38	Consumer Cyclical
⊕ Keysight Technologies Inc	0.86	16.87	56.65	Technology

Total Holdings 203

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# 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 23.4 years.

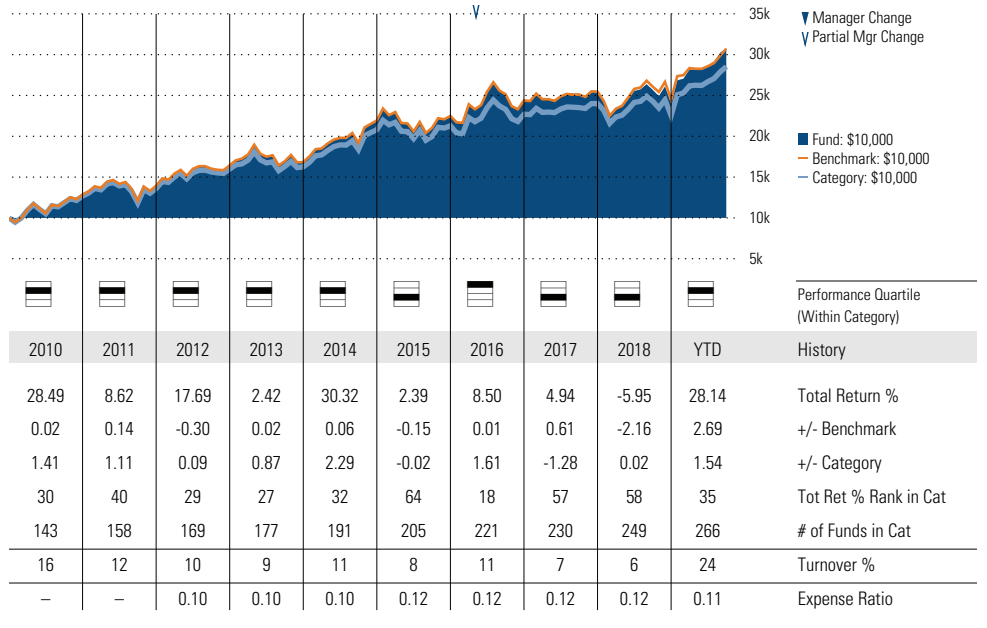
✔ **Style:** The fund has landed in its primary style box — Mid-Cap Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.11 is 90.35% lower than the Real Estate category average.

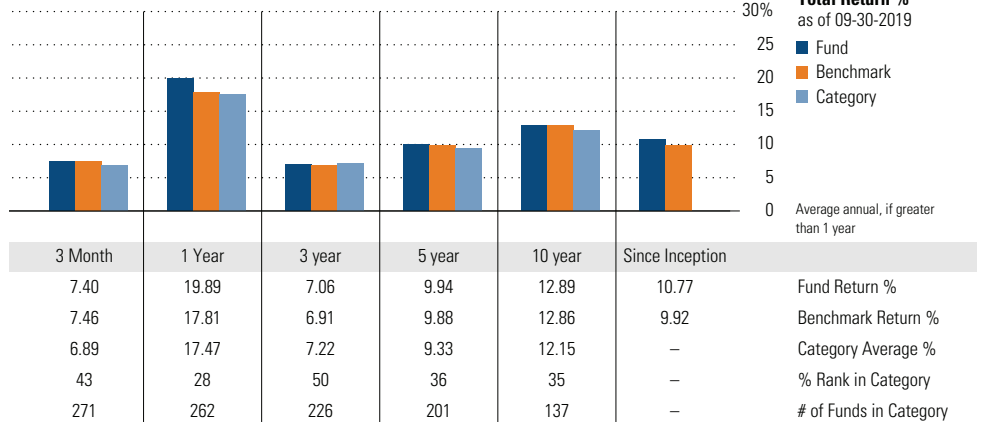
## Morningstar Investment Management LLC Analysis

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.

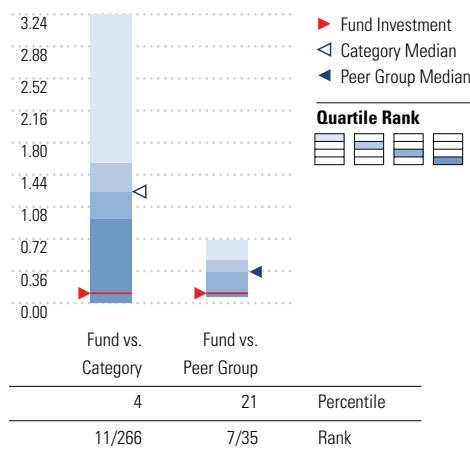
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	0.25	-	0.79
Beta	0.98	-	0.91
R-Squared	98.94	-	92.22
Standard Deviation	12.87	13.01	12.33
Sharpe Ratio	0.47	0.46	0.50
Tracking Error	1.34	-	3.34
Information Ratio	0.11	-	-0.03
Up Capture Ratio	98.74	-	90.64
Down Capture Ratio	97.09	-	85.00

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	31.16	38.46	29.22
Price/Book Ratio	2.75	2.42	2.79
Geom Avg Mkt Cap \$B	16.21	9.35	18.68
ROE	12.99	9.56	13.54

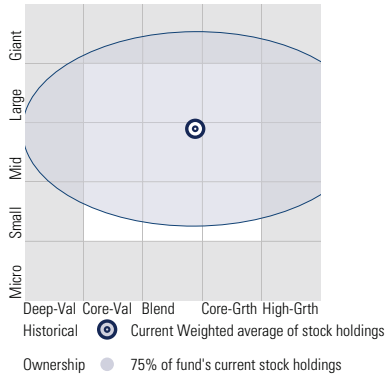
# Vanguard Real Estate Index Admiral VGSLX

**Morningstar Category**  
Real Estate

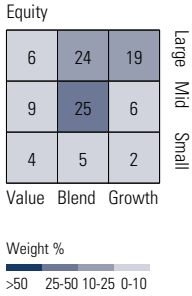
**Morningstar Index**  
S&P United States REIT TR USD

## Style Analysis as of 09-30-2019

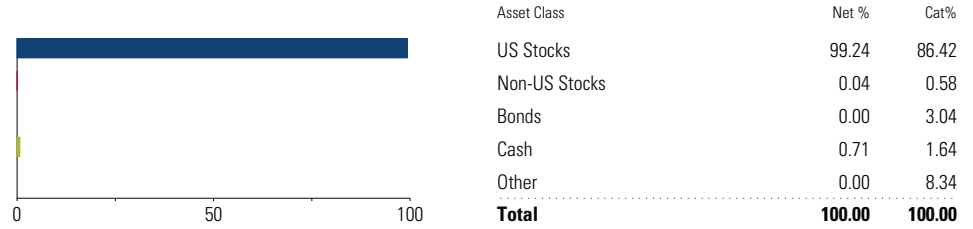
Morningstar Style Box™



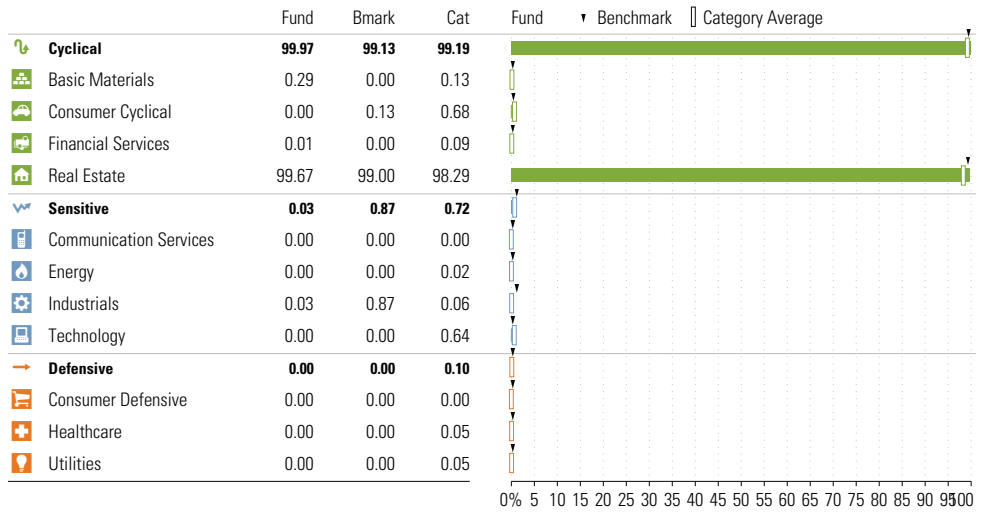
## Style Breakdown



## Asset Allocation as of 09-30-2019



## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Real Estate II Index	11.09	11.09	-	-
⊕ American Tower Corp	6.83	17.92	41.54	Real Estate
⊕ Crown Castle International Corp	4.04	21.96	31.07	Real Estate
⊕ Prologis Inc	3.76	25.72	47.84	Real Estate
⊕ Equinix Inc	3.39	29.11	65.70	Real Estate
⊕ Simon Property Group Inc	3.36	32.47	-3.65	Real Estate
⊕ Public Storage	2.69	35.16	24.14	Real Estate
⊕ Welltower Inc	2.57	37.73	34.36	Real Estate
⊕ Equity Residential	2.23	39.96	33.26	Real Estate
⊕ AvalonBay Communities Inc	2.10	42.06	26.34	Real Estate
⊕ SBA Communications Corp	1.91	43.97	49.19	Real Estate
⊕ Digital Realty Trust Inc	1.85	45.81	24.87	Real Estate
⊕ Ventas Inc	1.83	47.64	28.70	Real Estate
⊕ Realty Income Corp	1.70	49.34	24.87	Real Estate
⊕ Essex Property Trust Inc	1.50	50.84	35.60	Real Estate

**Total Holdings 185**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Small Cap Value Index Admiral VSIAX

**Morningstar Category**  
Small Value

**Morningstar Index**  
Russell 2000 Value TR USD

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **Performance:** The fund has finished in the Small Value 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 3.43 years.

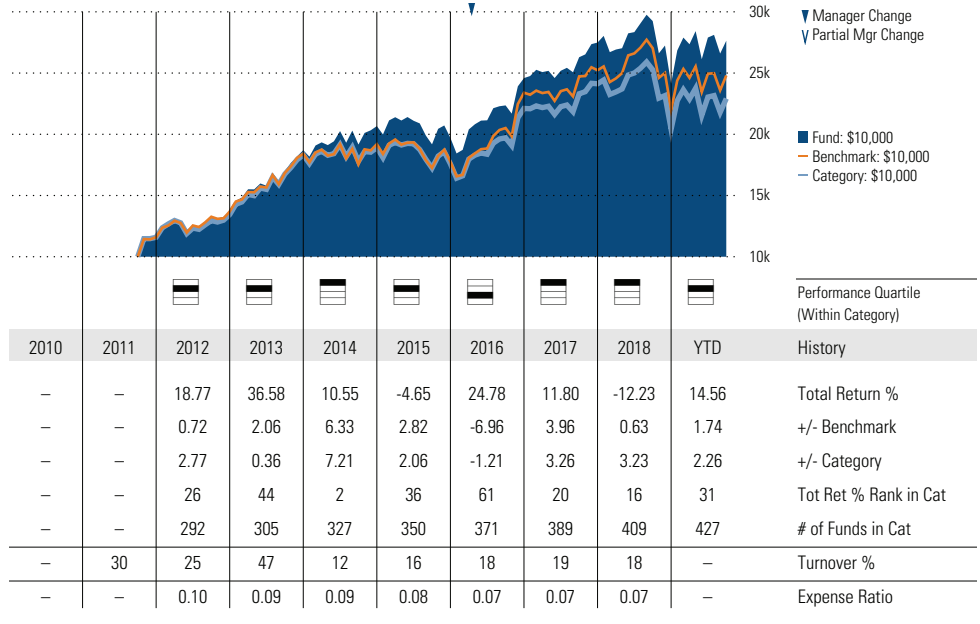
✘ **Style:** The fund has landed in its primary style box — Small Value — 57.14 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.07 is 94.12% lower than the Small Value category average.

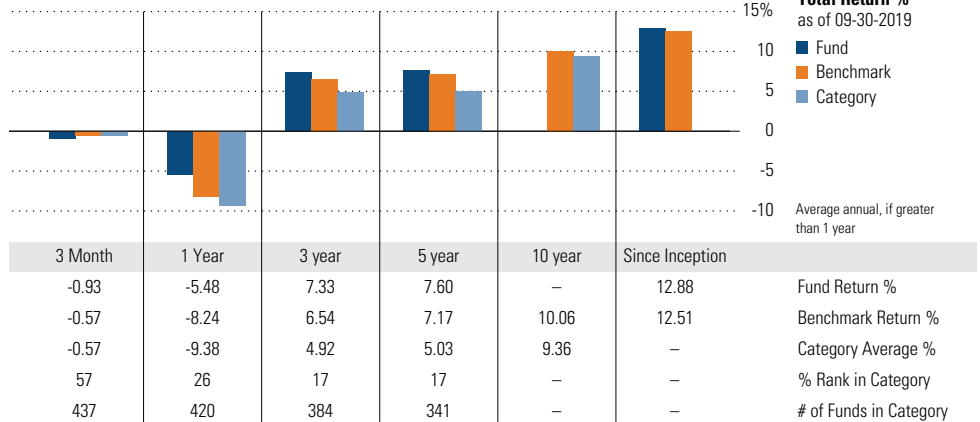
## Morningstar Investment Management LLC Analysis

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

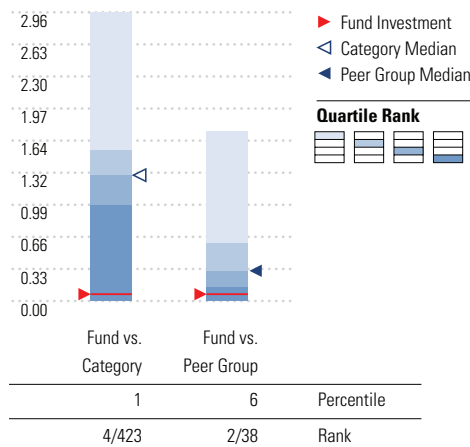
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	1.30	-	-0.99
Beta	0.90	-	0.99
R-Squared	96.92	-	94.06
Standard Deviation	16.12	17.67	17.95
Sharpe Ratio	0.42	0.35	0.29
Tracking Error	3.36	-	4.40
Information Ratio	0.23	-	-0.30
Up Capture Ratio	92.45	-	95.42
Down Capture Ratio	86.65	-	100.00

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	14.48	13.72	15.37
Price/Book Ratio	1.64	1.28	1.47
Geom Avg Mkt Cap \$B	3.68	1.55	2.70
ROE	13.15	6.79	9.76

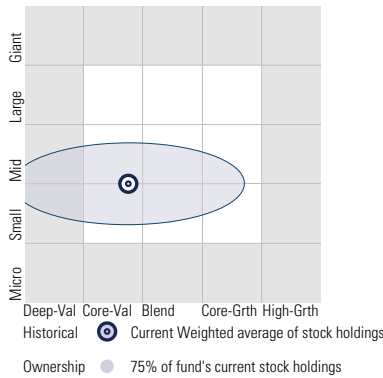
# Vanguard Small Cap Value Index Admiral VSIAX

**Morningstar Category**  
Small Value

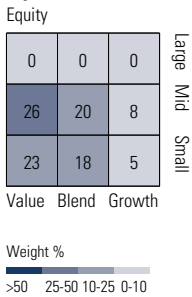
**Morningstar Index**  
Russell 2000 Value TR USD

## Style Analysis as of 09-30-2019

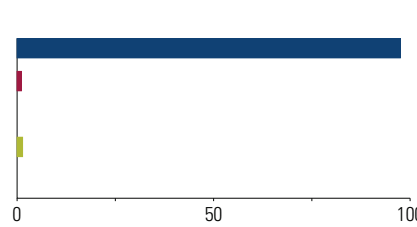
Morningstar Style Box™



## Style Breakdown

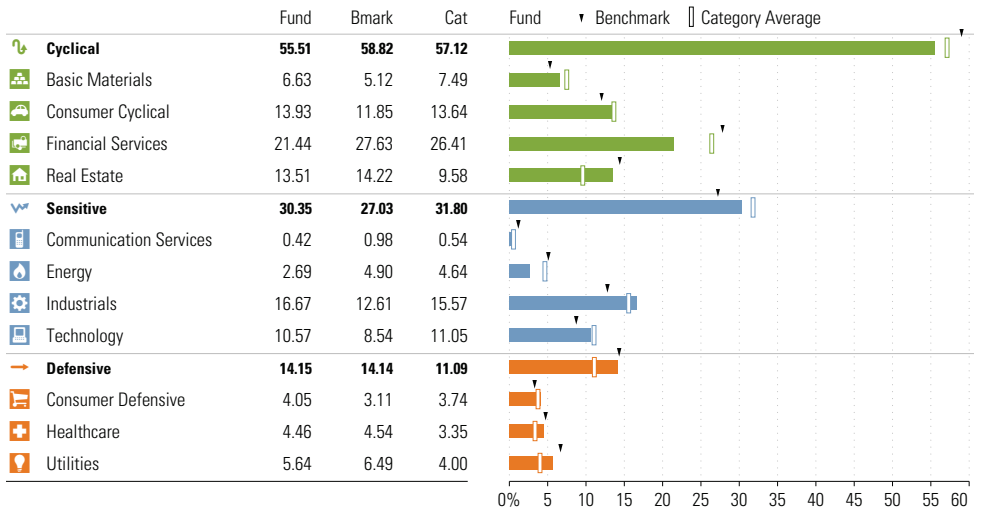


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	97.51	95.39
Non-US Stocks	1.10	2.10
Bonds	0.00	-0.03
Cash	1.39	2.43
Other	0.00	0.11
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Sector Weighting as of 09-30-2019



## Top 15 Holdings as of 09-30-2019

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊖ Cmt Market Liquidity Rate	1.36	1.36	-	-
⊖ Atmos Energy Corp	0.67	2.03	24.53	Utilities
⊖ IDEX Corp	0.62	2.66	30.93	Industrials
⊖ Leidos Holdings Inc	0.62	3.27	64.76	Technology
⊕ UGI Corp	0.53	3.80	-4.11	Utilities
⊕ Booz Allen Hamilton Holding Corp Class A	0.50	4.30	59.11	Industrials
⊖ Teradyne Inc	0.49	4.79	85.40	Technology
⊖ Allegion PLC	0.49	5.28	31.05	Industrials
⊖ Aqua America Inc	0.48	5.76	33.09	Utilities
⊕ National Retail Properties Inc	0.48	6.24	19.39	Real Estate
⊖ PerkinElmer Inc	0.47	6.72	8.70	Healthcare
⊖ US Foods Holding Corp	0.45	7.17	29.90	Consumer Defensive
⊕ VICI Properties Inc Ordinary Shares	0.45	7.62	25.25	Real Estate
⊖ RPM International Inc	0.45	8.07	18.85	Basic Materials
⊕ Medical Properties Trust Inc	0.44	8.50	26.37	Real Estate

**Total Holdings 862**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Target Retirement 2015 Inv VTXVX

**Morningstar Category**  
Target-Date 2015

**Morningstar Index**  
Morningstar Lifetime Mod 2015 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 2015 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 6.61 years.

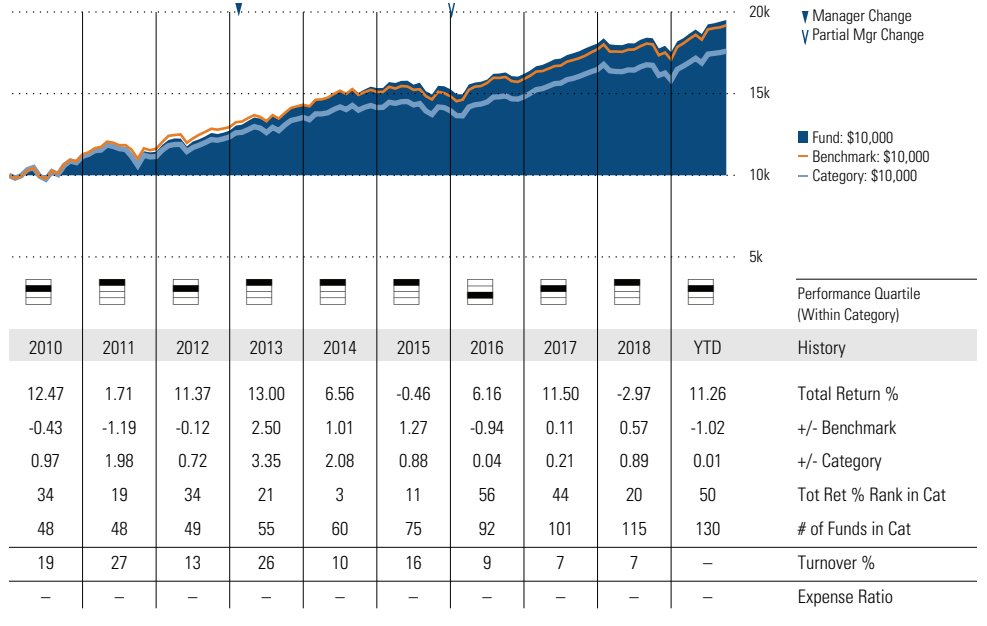
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.13 is 80.6% lower than the Target-Date 2015 category average.

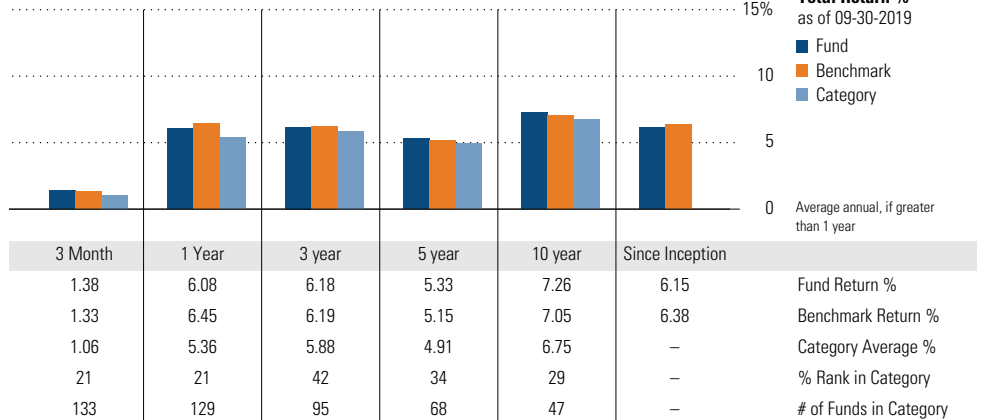
## Morningstar Investment Management LLC Analysis

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.

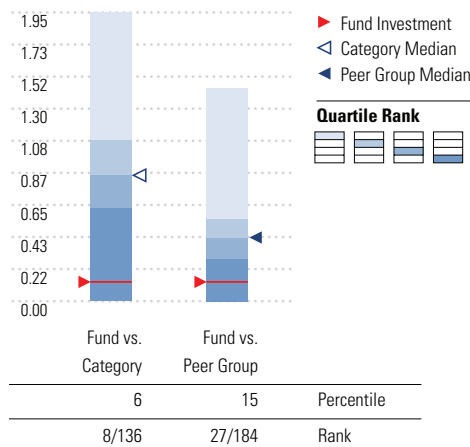
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.61	-	-0.19
Beta	0.90	-	0.97
R-Squared	98.91	-	95.51
Standard Deviation	4.71	5.23	5.21
Sharpe Ratio	0.96	0.87	0.80
Tracking Error	0.74	-	1.16
Information Ratio	-0.01	-	-0.27
Up Capture Ratio	94.83	-	95.13
Down Capture Ratio	87.78	-	96.58

## Portfolio Metrics

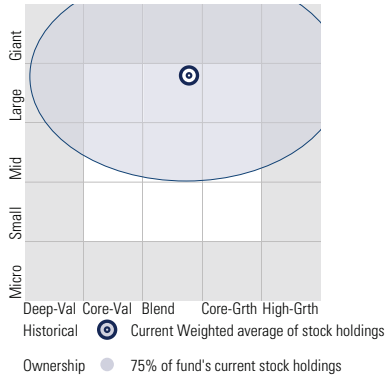
	Fund	Bmark	Cat
Price/Earnings Ratio	17.60	17.69	18.05
Price/Book Ratio	2.17	2.14	2.28
Avg Eff Duration	5.99	-	4.51

# Vanguard Target Retirement 2015 Inv VTXVX

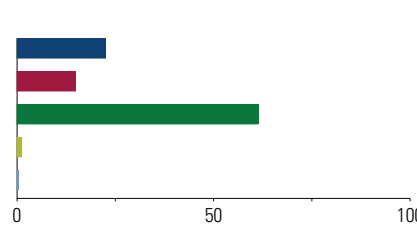
**Morningstar Category**  
Target-Date 2015

**Morningstar Index**  
Morningstar Lifetime Mod 2015 TR USD

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

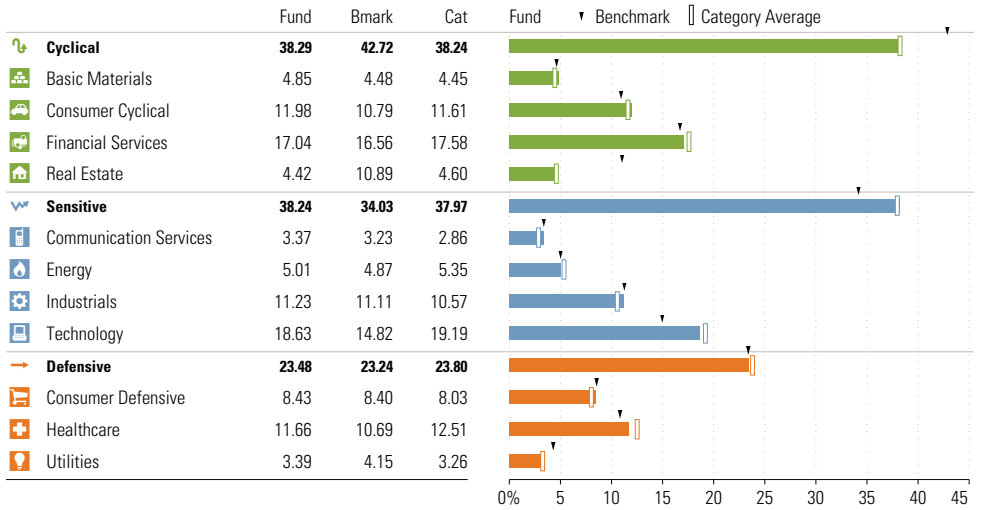


**Asset Allocation** as of 09-30-2019

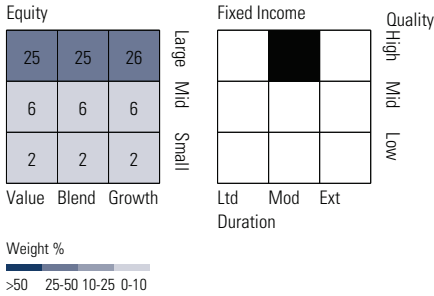


Asset Class	Net %	Cat%
US Stocks	22.47	25.80
Non-US Stocks	14.77	14.69
Bonds	61.33	51.70
Cash	1.14	5.95
Other	0.30	1.86
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 6 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Bond Market II Idx Inv	-	34.07	34.07	-	-
⊖ Vanguard Total Stock Mkt Idx Inv	-	22.67	56.74	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	15.16	71.90	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	15.05	86.95	-	-
⊕ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	-	13.05	100.00	-	-
⊖ Cmt Market Liquidity Rate	-	0.00	100.00	-	-

**Total Holdings 6**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# 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

✔ **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 6.61 years.

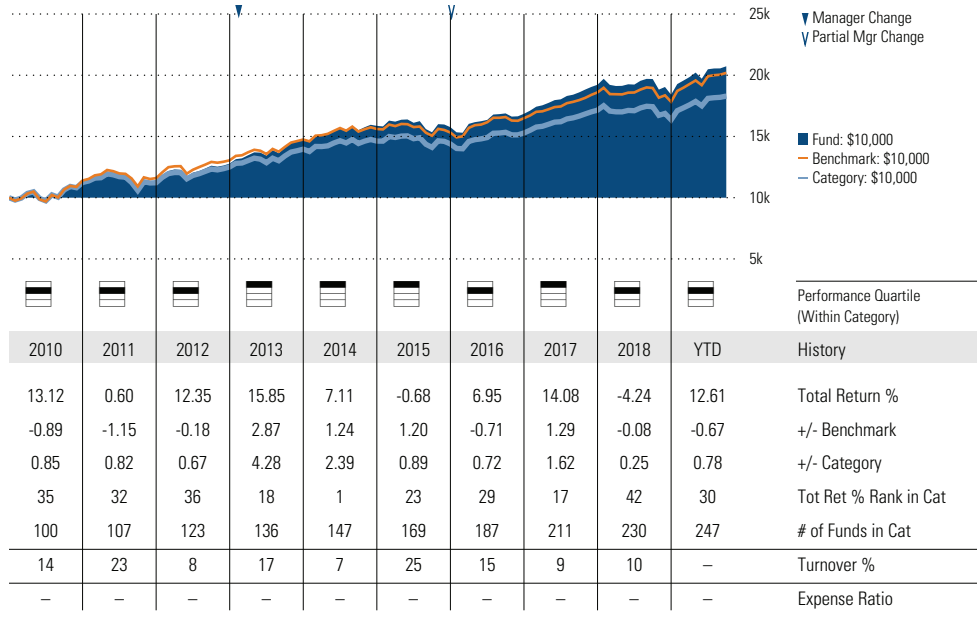
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.13 is 82.67% lower than the Target-Date 2020 category average.

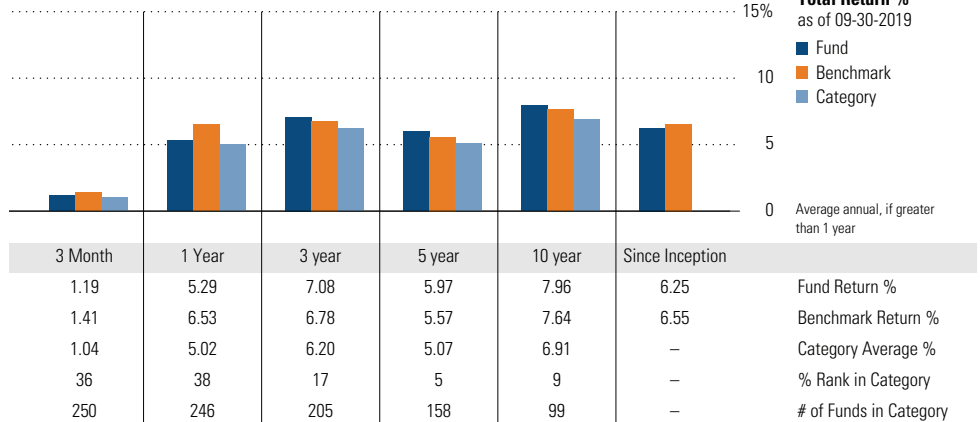
## Morningstar Investment Management LLC Analysis

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.

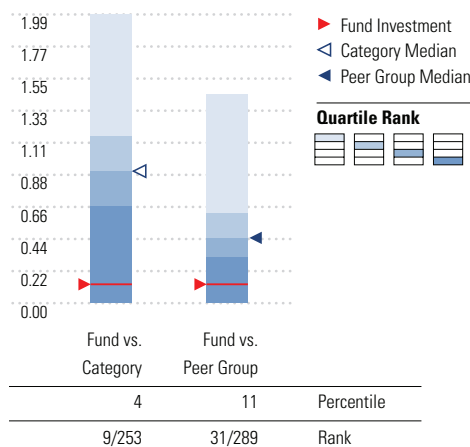
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.07	-	-0.25
Beta	1.03	-	0.92
R-Squared	98.23	-	93.65
Standard Deviation	6.10	5.85	5.53
Sharpe Ratio	0.89	0.88	0.78
Tracking Error	0.84	-	1.51
Information Ratio	0.36	-	-0.46
Up Capture Ratio	104.52	-	90.01
Down Capture Ratio	104.72	-	92.76

## Portfolio Metrics

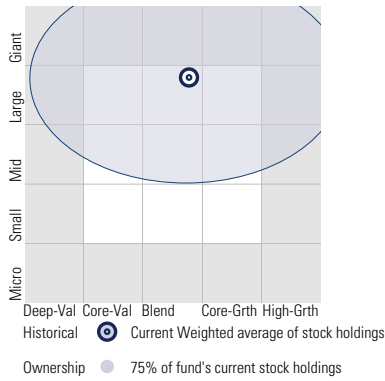
	Fund	Bmark	Cat
Price/Earnings Ratio	17.59	17.58	18.38
Price/Book Ratio	2.17	2.12	2.35
Avg Eff Duration	6.31	-	6.22

# Vanguard Target Retirement 2020 Inv VTWNX

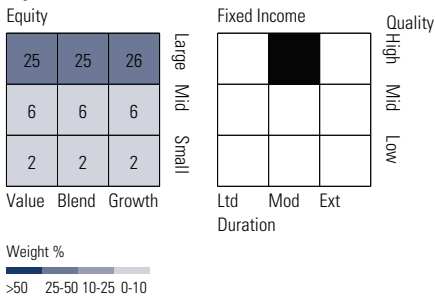
**Morningstar Category**  
Target-Date 2020

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

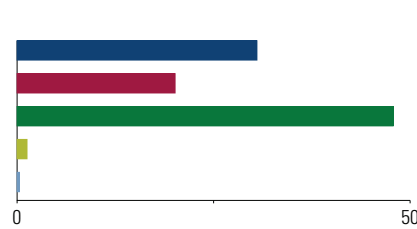
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

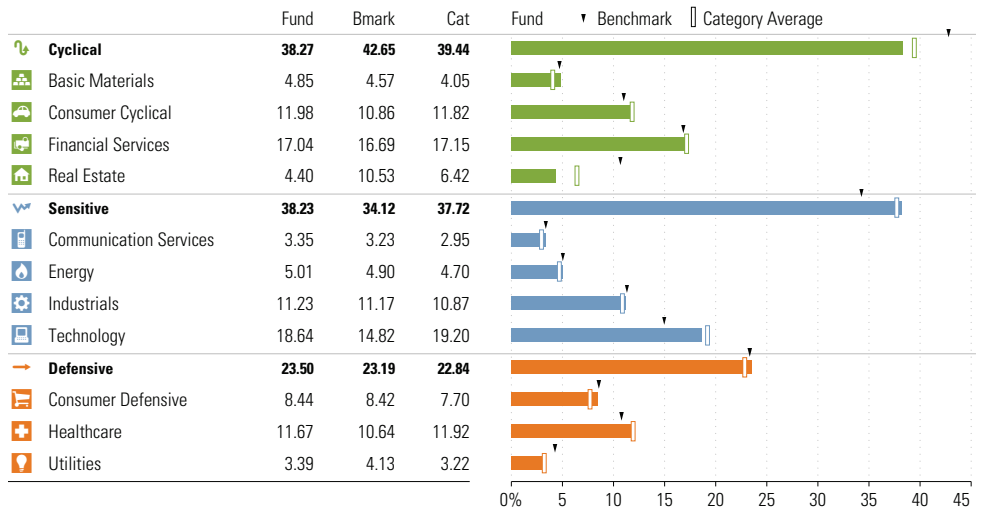


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	30.51	27.74
Non-US Stocks	20.10	12.68
Bonds	47.84	52.55
Cash	1.26	4.57
Other	0.29	2.47
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Top 6 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊖ Vanguard Total Stock Mkt Idx Inv	-	30.78	30.78	-	-
⊕ Vanguard Total Bond Market II Idx Inv	-	29.19	59.97	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	20.63	80.60	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	12.83	93.44	-	-
⊖ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	-	6.54	99.98	-	-
⊕ Cmt Market Liquidity Rate	-	0.02	100.00	-	-

**Total Holdings 6**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# Vanguard Target Retirement 2025 Inv VTTVX

**Morningstar Category**  
Target-Date 2025

**Morningstar Index**  
Morningstar Lifetime Mod 2025 TR USD

## Portfolio Manager(s)

William Coleman since 02-2013

Walter Nejman since 02-2013

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2025 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 6.61 years.

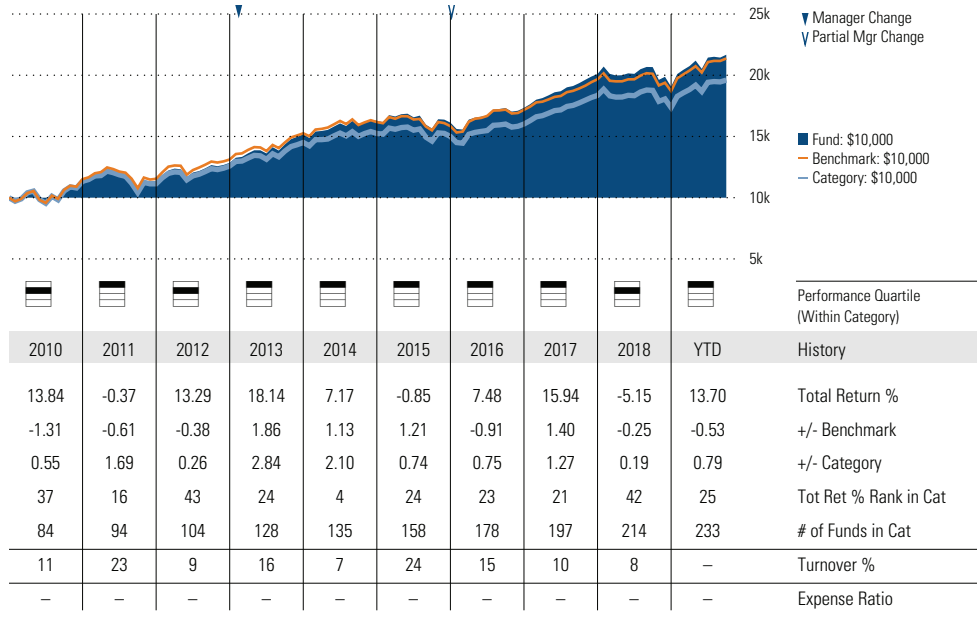
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.13 is 82.43% lower than the Target-Date 2025 category average.

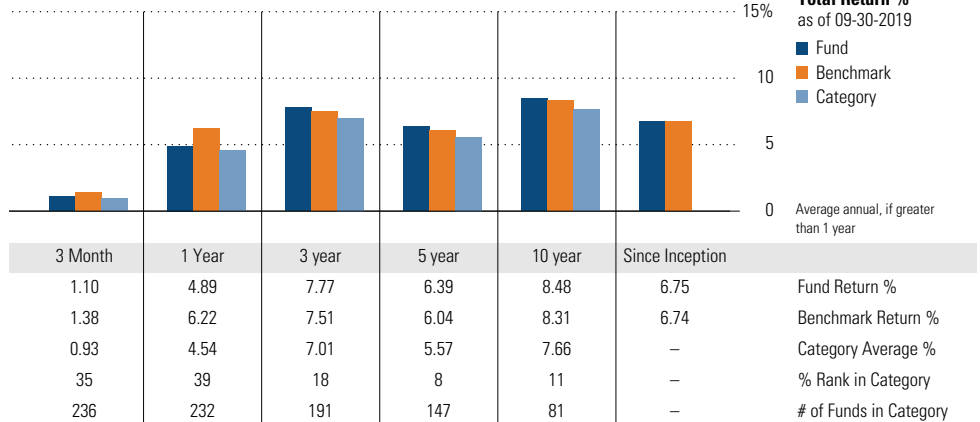
## Morningstar Investment Management LLC Analysis

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.

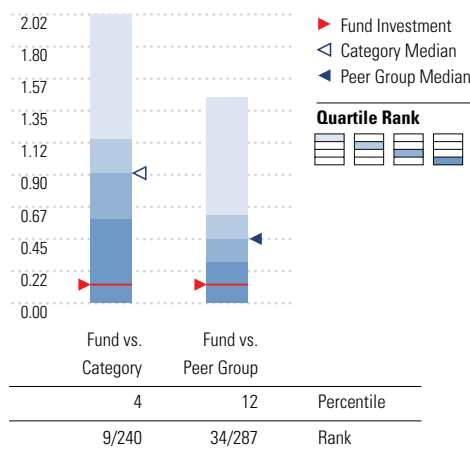
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-0.18	-	-0.47
Beta	1.06	-	0.99
R-Squared	98.59	-	96.65
Standard Deviation	7.13	6.67	6.69
Sharpe Ratio	0.86	0.88	0.79
Tracking Error	0.94	-	1.36
Information Ratio	0.27	-	-0.45
Up Capture Ratio	106.71	-	96.48
Down Capture Ratio	110.99	-	102.40

## Portfolio Metrics

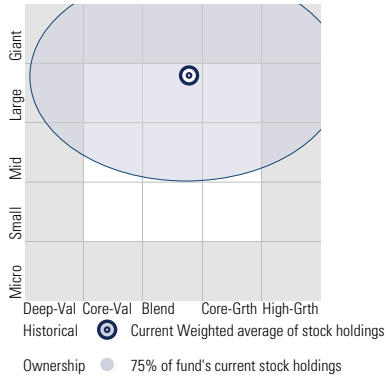
	Fund	Bmark	Cat
Price/Earnings Ratio	17.60	17.46	18.20
Price/Book Ratio	2.17	2.09	2.30
Avg Eff Duration	6.86	-	6.28

# Vanguard Target Retirement 2025 Inv VTTVX

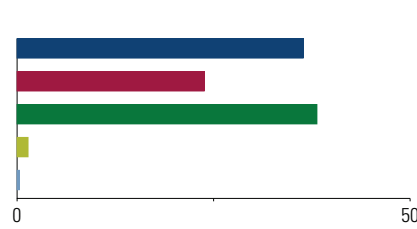
**Morningstar Category**  
Target-Date 2025

**Morningstar Index**  
Morningstar Lifetime Mod 2025 TR USD

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

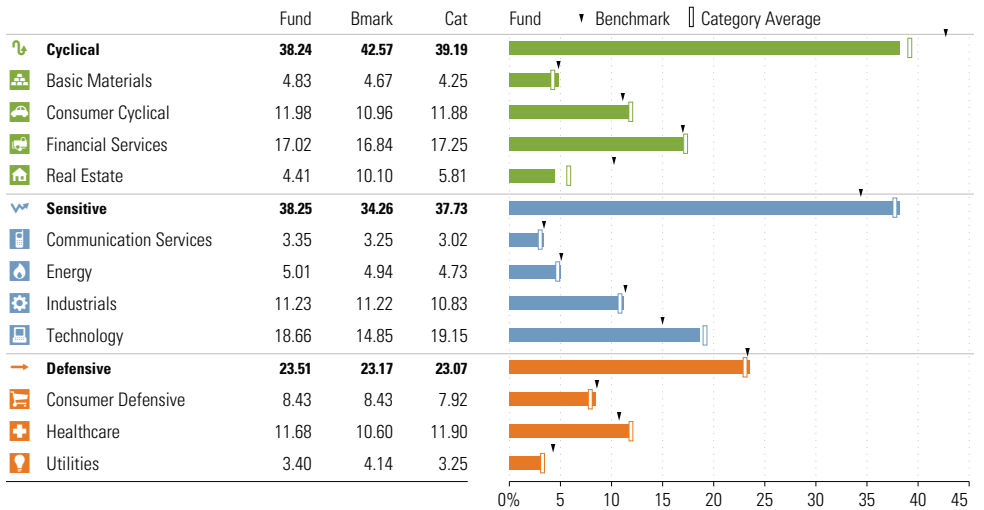


**Asset Allocation** as of 09-30-2019

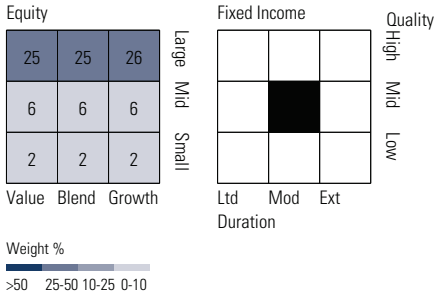


Asset Class	Net %	Cat%
US Stocks	36.39	34.59
Non-US Stocks	23.80	17.91
Bonds	38.14	40.17
Cash	1.39	3.56
Other	0.29	3.78
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊖ Vanguard Total Stock Mkt Idx Inv	-	36.71	36.71	-	-
⊕ Vanguard Total Bond Market II Idx Inv	-	27.25	63.96	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	24.43	88.39	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	11.56	99.95	-	-
⊕ Cmt Market Liquidity Rate	-	0.05	100.00	-	-

**Total Holdings** 5

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# 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 Nejman since 02-2013

## Quantitative Screens

✔ **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 6.61 years.

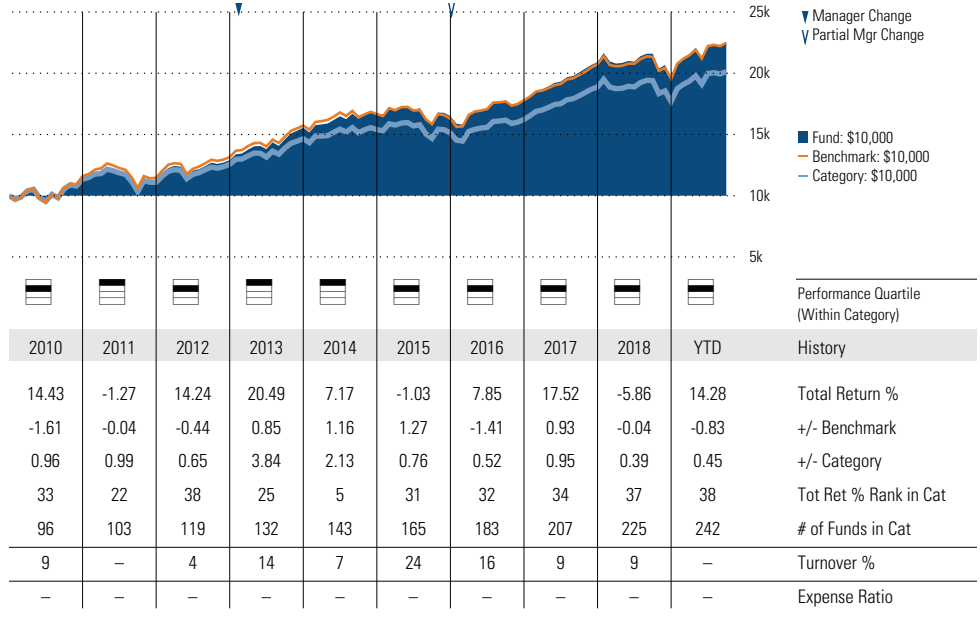
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.14 is 82.05% lower than the Target-Date 2030 category average.

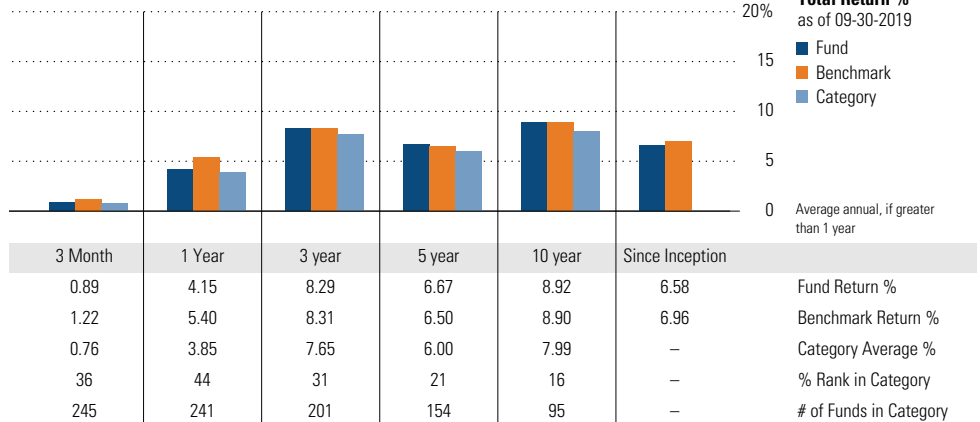
## Morningstar Investment Management LLC Analysis

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.

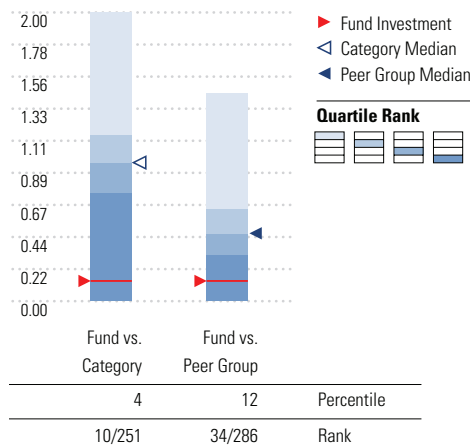
## Growth of \$10,000



## Trailing Performance



## Net Expense



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

Metric	Fund	Bmark	Cat
Alpha	-0.19	-	-0.62
Beta	1.02	-	0.98
R-Squared	99.08	-	96.14
Standard Deviation	7.98	7.77	7.78
Sharpe Ratio	0.84	0.86	0.76
Tracking Error	0.78	-	1.48
Information Ratio	-0.03	-	-0.50
Up Capture Ratio	102.41	-	95.88
Down Capture Ratio	105.51	-	102.42

## Portfolio Metrics

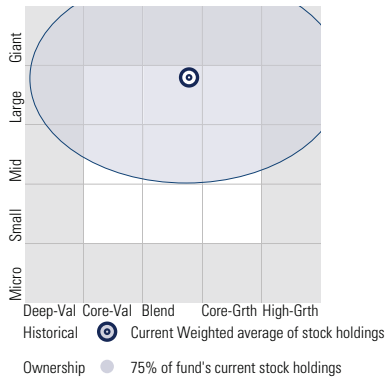
Metric	Fund	Bmark	Cat
Price/Earnings Ratio	17.61	17.33	18.10
Price/Book Ratio	2.17	2.07	2.27
Avg Eff Duration	6.86	-	6.38

# Vanguard Target Retirement 2030 Inv VTHR

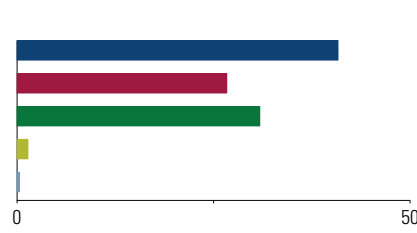
**Morningstar Category**  
Target-Date 2030

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

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

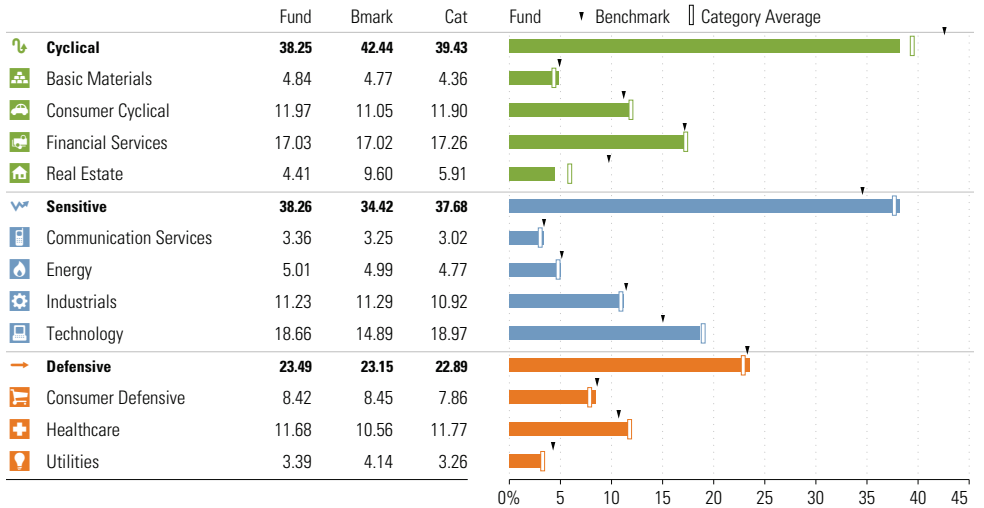


**Asset Allocation** as of 09-30-2019

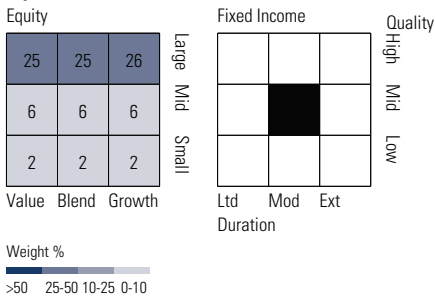


Asset Class	Net %	Cat%
US Stocks	40.82	41.63
Non-US Stocks	26.67	22.54
Bonds	30.87	29.51
Cash	1.37	2.98
Other	0.27	3.35
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊖ Vanguard Total Stock Mkt Idx Inv	-	41.19	41.19	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	27.37	68.56	-	-
⊕ Vanguard Total Bond Market II Idx Inv	-	22.07	90.63	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	9.35	99.98	-	-
⊖ Cmt Market Liquidity Rate	-	0.02	100.00	-	-

**Total Holdings 5**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Target Retirement 2035 Inv VTTHX

**Morningstar Category**  
Target-Date 2035

**Morningstar Index**  
Morningstar Lifetime Mod 2035 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 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 6.61 years.

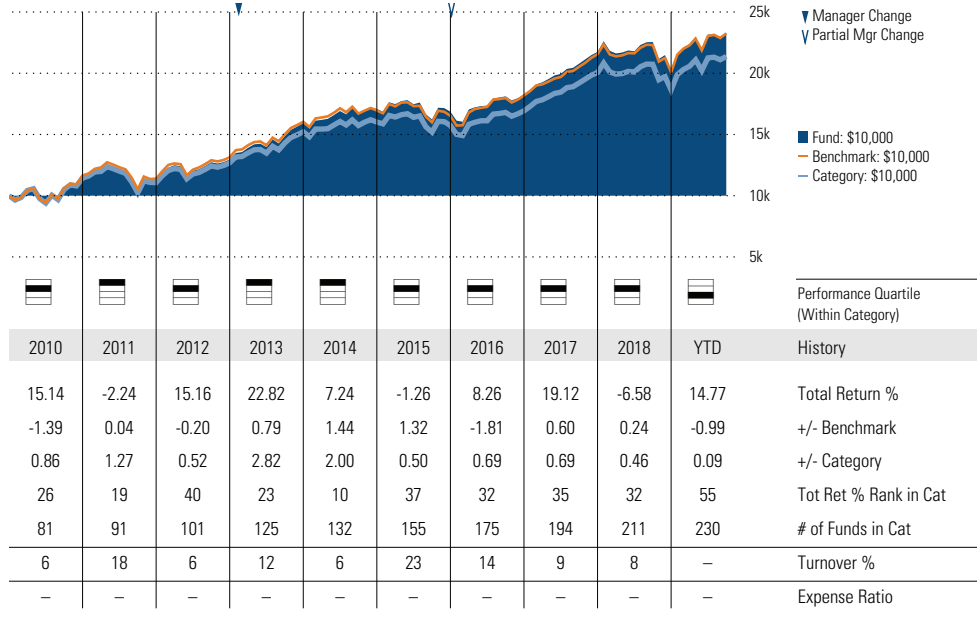
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.14 is 81.82% lower than the Target-Date 2035 category average.

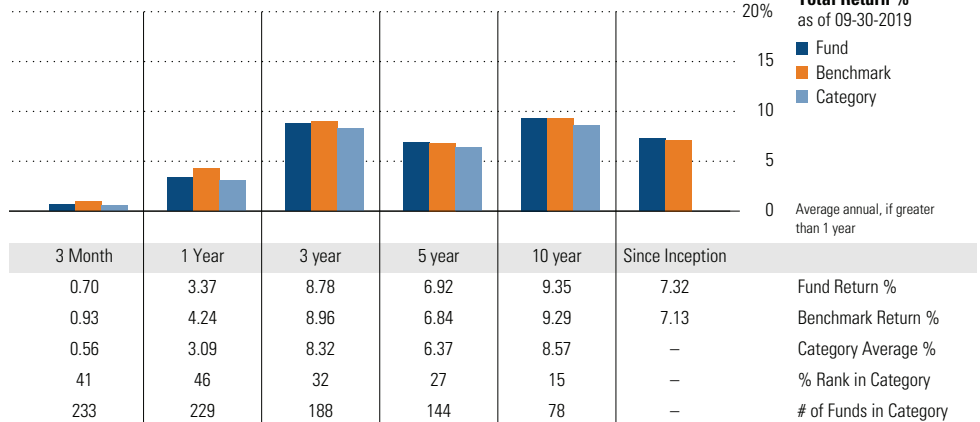
## Morningstar Investment Management LLC Analysis

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.

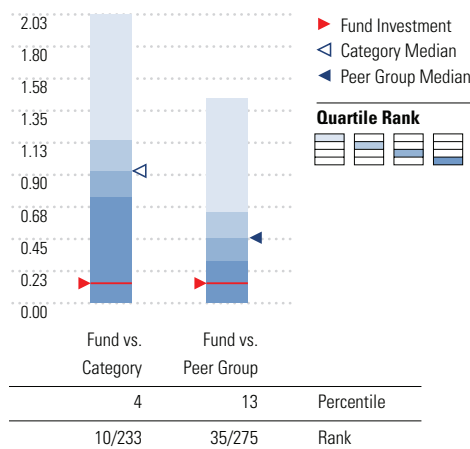
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-0.02	-	-0.52
Beta	0.98	-	0.99
R-Squared	99.30	-	98.11
Standard Deviation	8.83	8.95	8.90
Sharpe Ratio	0.82	0.82	0.76
Tracking Error	0.75	-	1.32
Information Ratio	-0.23	-	-0.53
Up Capture Ratio	98.84	-	96.38
Down Capture Ratio	99.63	-	100.63

## Portfolio Metrics

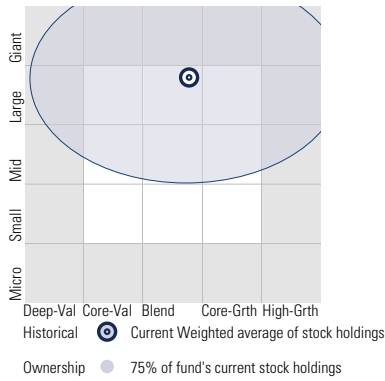
	Fund	Bmark	Cat
Price/Earnings Ratio	17.61	17.21	17.27
Price/Book Ratio	2.17	2.05	2.16
Avg Eff Duration	6.88	-	5.34

# Vanguard Target Retirement 2035 Inv VTTHX

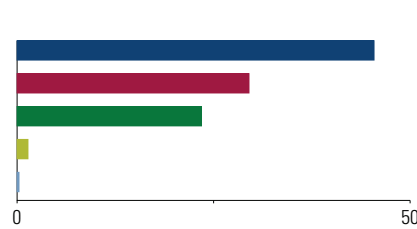
**Morningstar Category**  
Target-Date 2035

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

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

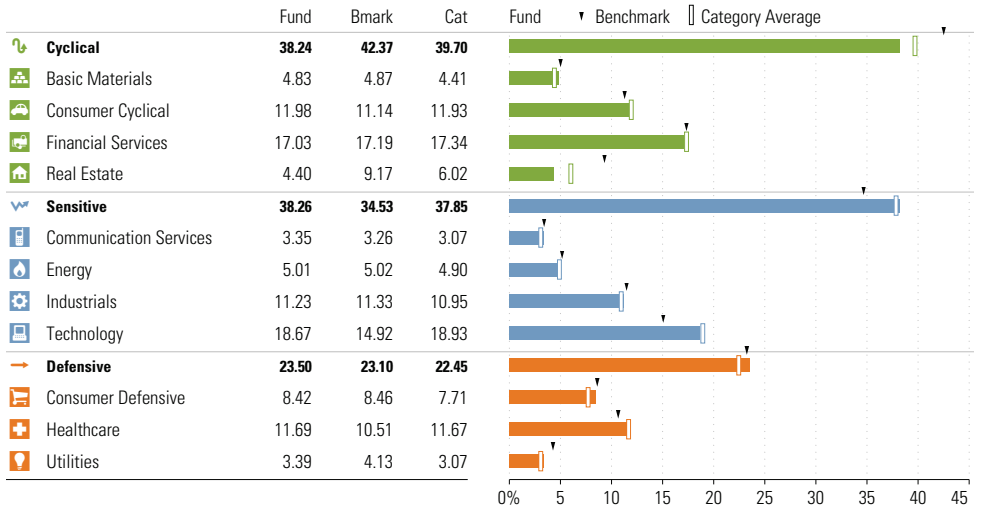


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	45.41	47.20
Non-US Stocks	29.50	26.19
Bonds	23.46	18.71
Cash	1.38	3.13
Other	0.24	4.77
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	-	45.82	45.82	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	30.28	76.10	-	-
⊕ Vanguard Total Bond Market II Idx Inv	-	16.63	92.73	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	7.25	99.97	-	-
⊖ Cmt Market Liquidity Rate	-	0.03	100.00	-	-

**Total Holdings 5**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Target Retirement 2040 Inv VFORX

**Morningstar Category**  
Target-Date 2040

**Morningstar Index**  
Morningstar Lifetime Mod 2040 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 2040 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 6.61 years.

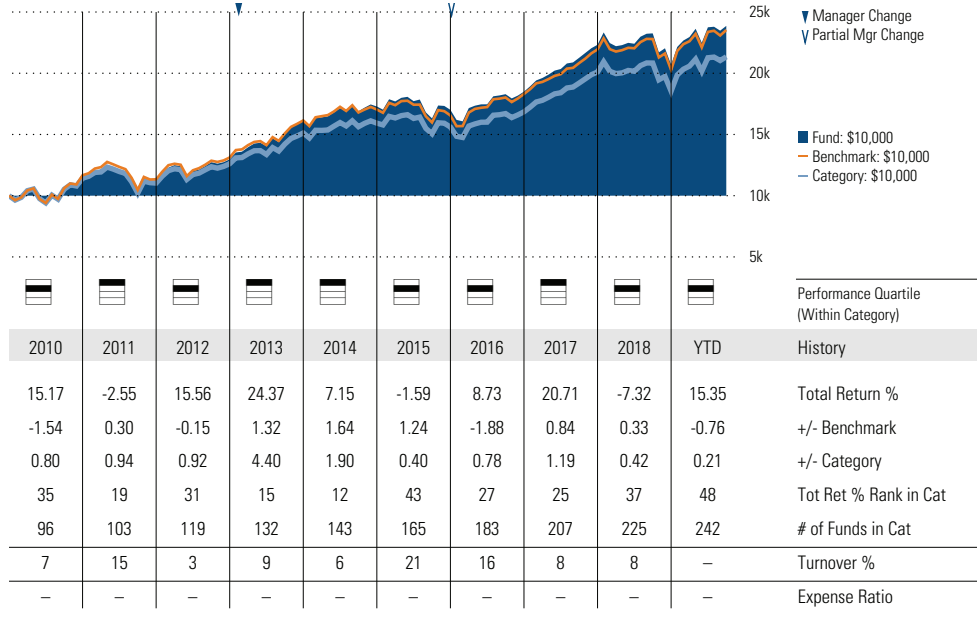
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.14 is 82.5% lower than the Target-Date 2040 category average.

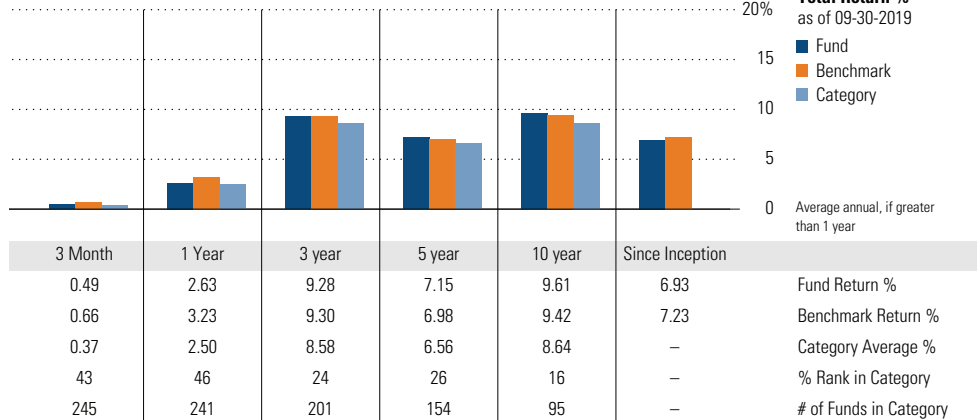
## Morningstar Investment Management LLC Analysis

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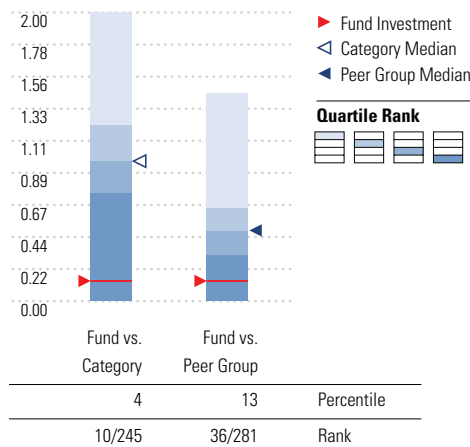
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.14	-	-0.43
Beta	0.98	-	0.96
R-Squared	99.33	-	96.58
Standard Deviation	9.71	9.87	9.57
Sharpe Ratio	0.80	0.79	0.72
Tracking Error	0.82	-	1.57
Information Ratio	-0.03	-	-0.53
Up Capture Ratio	99.13	-	93.86
Down Capture Ratio	98.54	-	97.01

## Portfolio Metrics

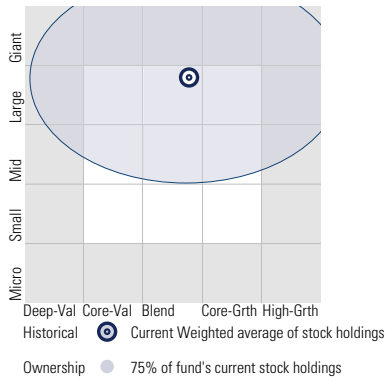
	Fund	Bmark	Cat
Price/Earnings Ratio	17.61	17.11	18.01
Price/Book Ratio	2.17	2.03	2.25
Avg Eff Duration	6.87	-	6.43

# Vanguard Target Retirement 2040 Inv VFORX

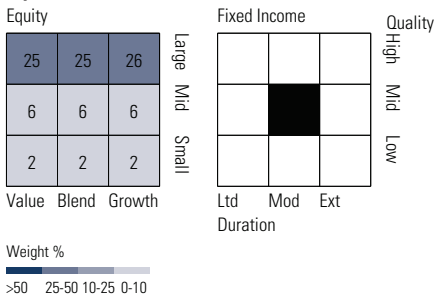
**Morningstar Category**  
Target-Date 2040

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

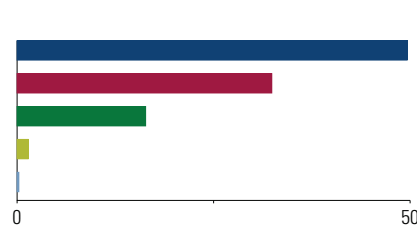
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

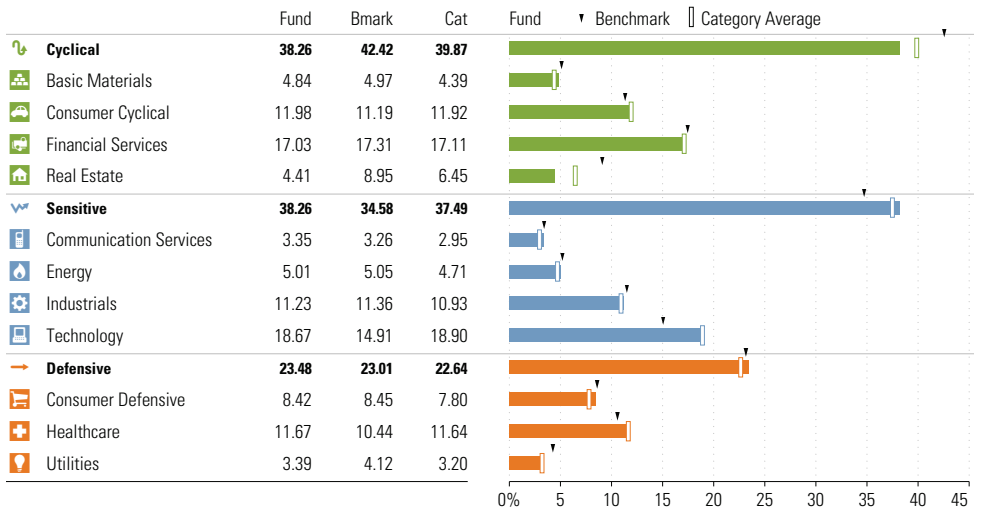


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	49.62	52.14
Non-US Stocks	32.40	29.49
Bonds	16.35	12.45
Cash	1.40	2.74
Other	0.22	3.17
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	-	50.06	50.06	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	33.26	83.32	-	-
⊕ Vanguard Total Bond Market II Idx Inv	-	11.68	95.00	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	4.97	99.97	-	-
⊕ Cmt Market Liquidity Rate	-	0.03	100.00	-	-

**Total Holdings 5**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# Vanguard Target Retirement 2045 Inv VTIVX

**Morningstar Category**  
Target-Date 2045

**Morningstar Index**  
Morningstar Lifetime Mod 2045 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 2045 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 6.61 years.

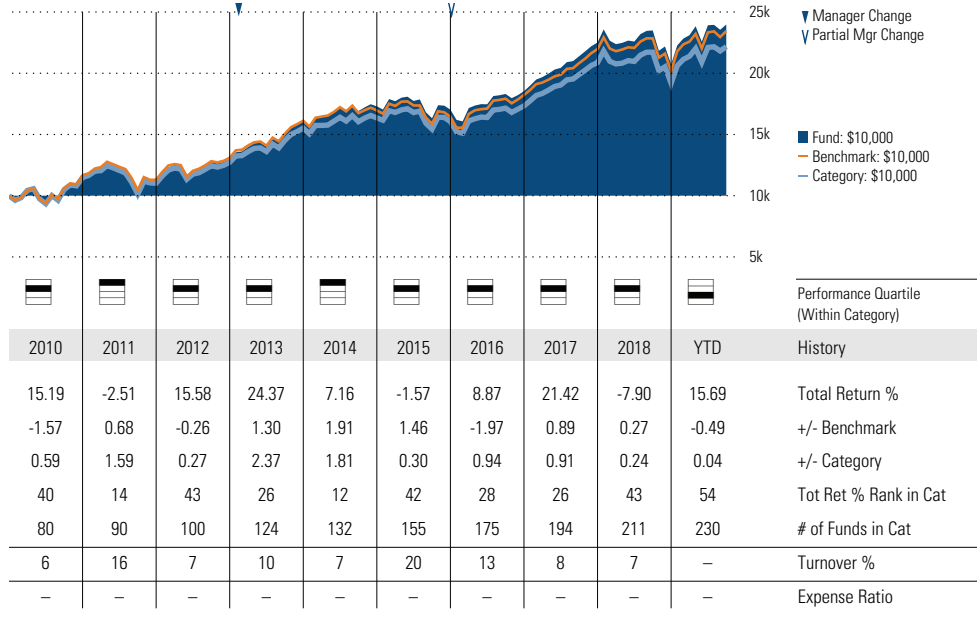
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.15 is 80.77% lower than the Target-Date 2045 category average.

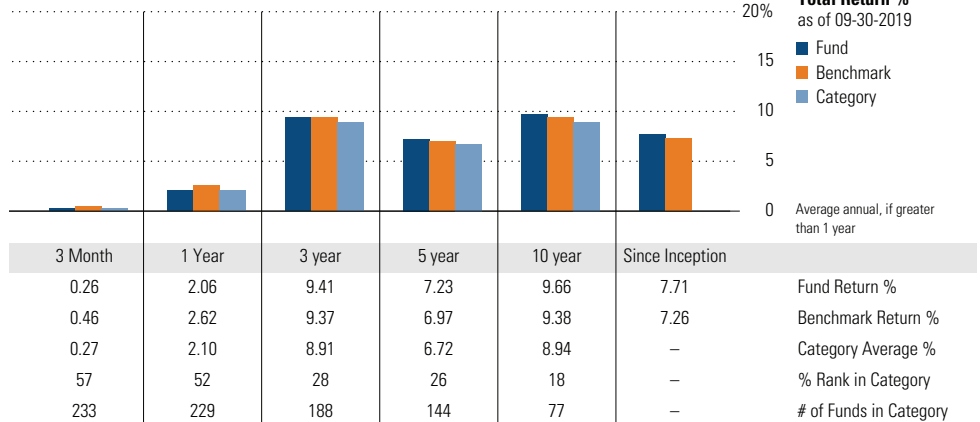
## Morningstar Investment Management LLC Analysis

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.

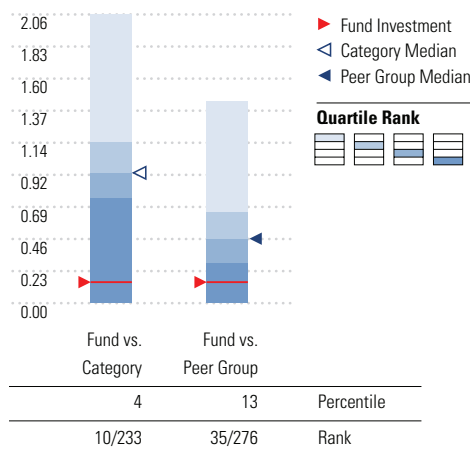
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.08	-	-0.33
Beta	1.00	-	0.98
R-Squared	99.37	-	98.35
Standard Deviation	10.31	10.33	10.19
Sharpe Ratio	0.77	0.76	0.72
Tracking Error	0.82	-	1.34
Information Ratio	0.05	-	-0.44
Up Capture Ratio	100.06	-	96.45
Down Capture Ratio	99.73	-	98.60

## Portfolio Metrics

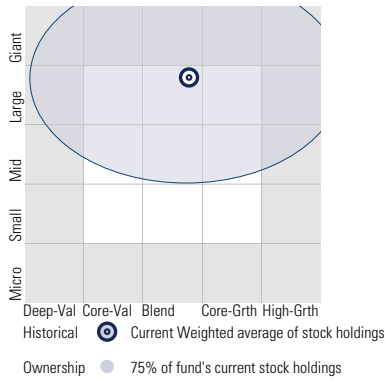
	Fund	Bmark	Cat
Price/Earnings Ratio	17.60	17.02	18.10
Price/Book Ratio	2.17	2.01	2.26
Avg Eff Duration	6.86	-	6.46

# Vanguard Target Retirement 2045 Inv VTIVX

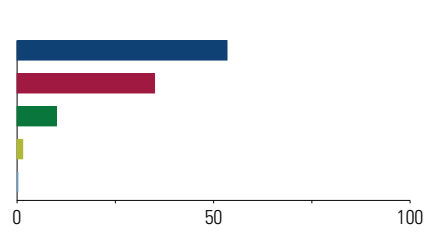
**Morningstar Category**  
Target-Date 2045

**Morningstar Index**  
Morningstar Lifetime Mod 2045 TR USD

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Asset Allocation** as of 09-30-2019

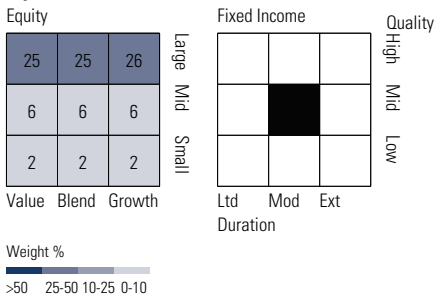


Asset Class	Net %	Cat%
US Stocks	53.41	56.09
Non-US Stocks	34.97	32.39
Bonds	9.99	6.94
Cash	1.42	2.43
Other	0.20	2.14
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019

	Fund	Bmark	Cat	Fund	Benchmark	Category Average
<b>Cyclical</b>	<b>38.25</b>	<b>42.58</b>	<b>39.58</b>			
Basic Materials	4.84	5.04	4.31			
Consumer Cyclical	11.98	11.24	11.84			
Financial Services	17.03	17.40	17.11			
Real Estate	4.40	8.90	6.32			
<b>Sensitive</b>	<b>38.25</b>	<b>34.56</b>	<b>37.38</b>			
Communication Services	3.35	3.25	2.79			
Energy	5.01	5.07	4.66			
Industrials	11.23	11.35	10.77			
Technology	18.66	14.89	19.16			
<b>Defensive</b>	<b>23.49</b>	<b>22.88</b>	<b>23.05</b>			
Consumer Defensive	8.43	8.43	7.86			
Healthcare	11.67	10.35	11.88			
Utilities	3.39	4.10	3.31			

**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	—	53.89	53.89	—	—
⊕ Vanguard Total Intl Stock Index Inv	—	35.90	89.79	—	—
⊕ Vanguard Total Bond Market II Idx Inv	—	7.14	96.93	—	—
⊕ Vanguard Total Intl Bd Idx Investor	—	3.02	99.95	—	—
⊕ Cmt Market Liquidity Rate	—	0.05	100.00	—	—

**Total Holdings** 5

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Target Retirement 2050 Inv VFIFX

**Morningstar Category**  
Target-Date 2050

**Morningstar Index**  
Morningstar Lifetime Mod 2050 TR USD

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2050 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 6.61 years.

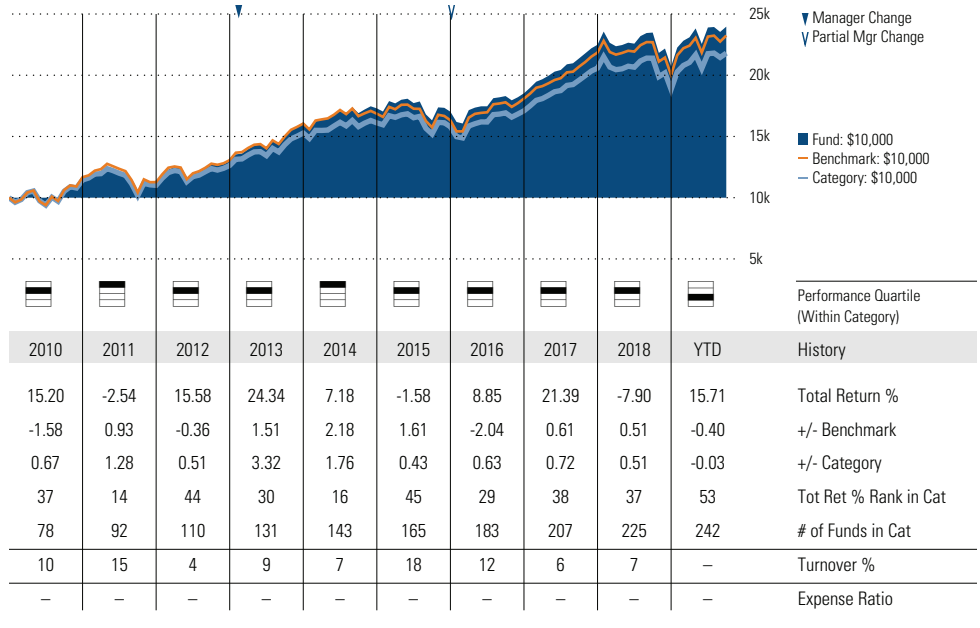
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.15 is 81.48% lower than the Target-Date 2050 category average.

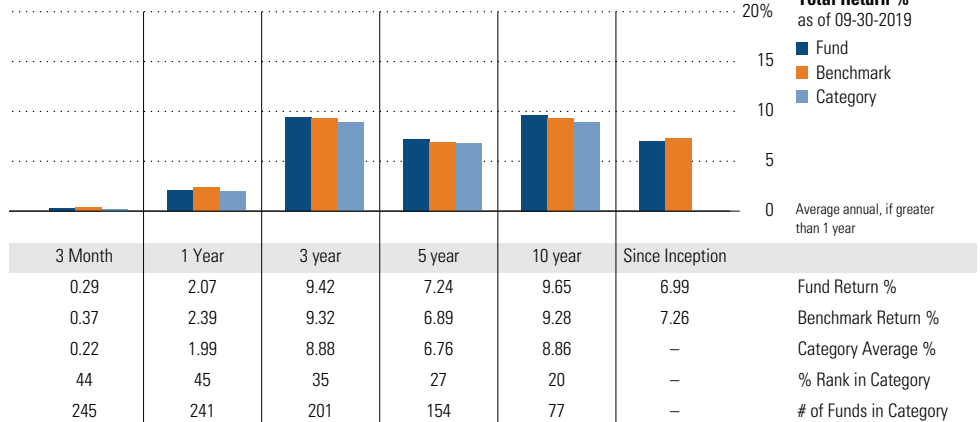
## Morningstar Investment Management LLC Analysis

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.

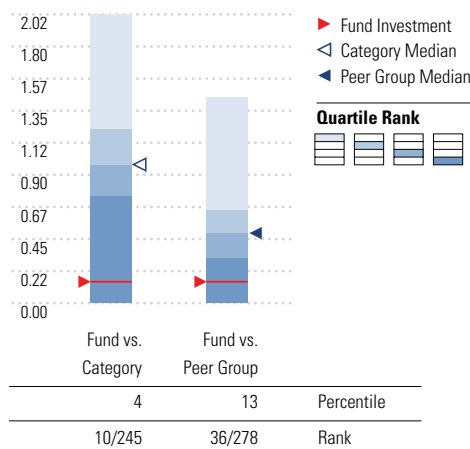
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.22	-	-0.28
Beta	0.99	-	0.97
R-Squared	99.34	-	96.67
Standard Deviation	10.34	10.45	10.28
Sharpe Ratio	0.77	0.75	0.70
Tracking Error	0.85	-	1.58
Information Ratio	0.11	-	-0.36
Up Capture Ratio	99.62	-	95.71
Down Capture Ratio	98.38	-	97.71

## Portfolio Metrics

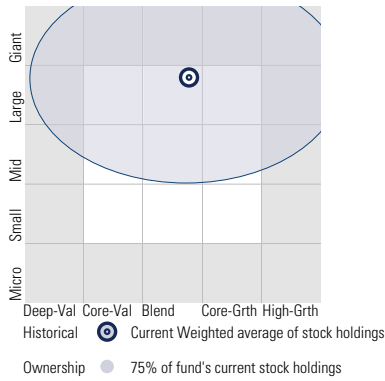
	Fund	Bmark	Cat
Price/Earnings Ratio	17.60	16.95	18.24
Price/Book Ratio	2.17	1.99	2.27
Avg Eff Duration	6.86	-	6.60

# Vanguard Target Retirement 2050 Inv VFIFX

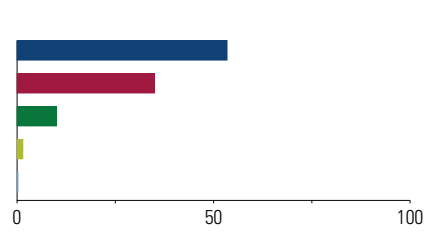
**Morningstar Category**  
Target-Date 2050

**Morningstar Index**  
Morningstar Lifetime Mod 2050 TR USD

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Asset Allocation** as of 09-30-2019

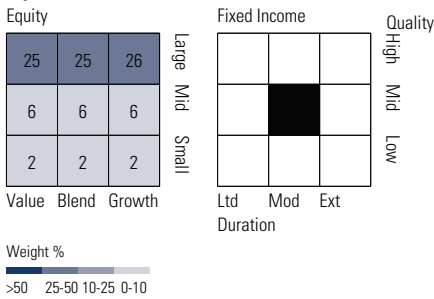


Asset Class	Net %	Cat%
US Stocks	53.41	55.91
Non-US Stocks	34.96	33.11
Bonds	9.98	6.09
Cash	1.44	2.77
Other	0.20	2.11
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019

	Fund	Bmark	Cat	Fund	Benchmark	Category Average
<b>Cyclical</b>	<b>38.25</b>	<b>42.82</b>	<b>39.29</b>			
Basic Materials	4.84	5.12	4.45			
Consumer Cyclical	11.98	11.25	11.82			
Financial Services	17.03	17.46	16.70			
Real Estate	4.40	8.99	6.32			
<b>Sensitive</b>	<b>38.24</b>	<b>34.49</b>	<b>37.69</b>			
Communication Services	3.35	3.24	2.80			
Energy	5.01	5.07	4.89			
Industrials	11.23	11.33	10.76			
Technology	18.65	14.85	19.24			
<b>Defensive</b>	<b>23.49</b>	<b>22.69</b>	<b>23.04</b>			
Consumer Defensive	8.43	8.40	7.76			
Healthcare	11.67	10.23	12.02			
Utilities	3.39	4.06	3.26			

**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	-	53.89	53.89	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	35.88	89.77	-	-
⊕ Vanguard Total Bond Market II Idx Inv	-	7.16	96.93	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	3.00	99.93	-	-
⊕ Cmt Market Liquidity Rate	-	0.07	100.00	-	-

**Total Holdings** 5

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# 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 Nejman since 02-2013

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2055 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 6.61 years.

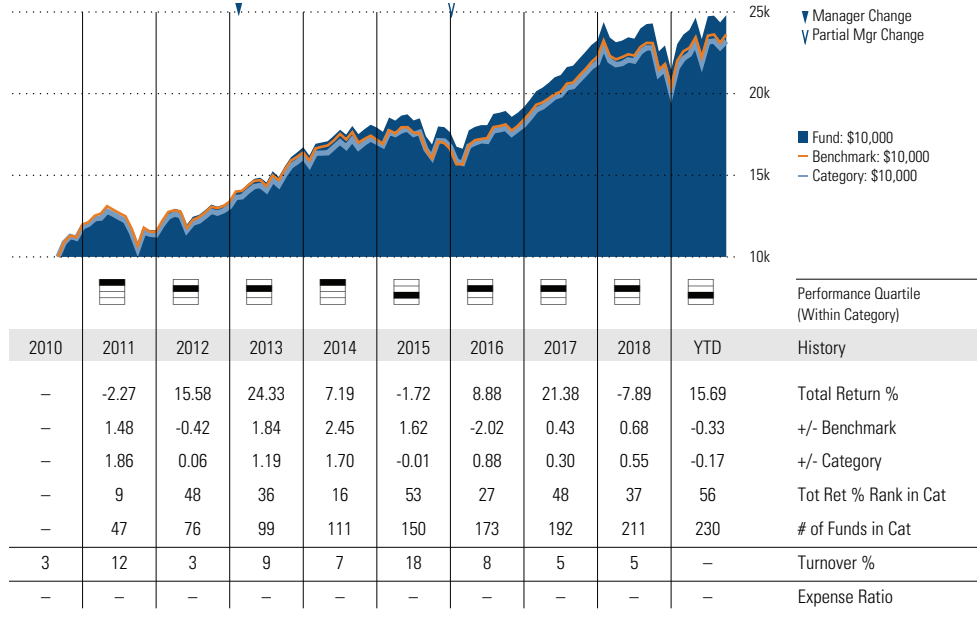
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.15 is 80.77% lower than the Target-Date 2055 category average.

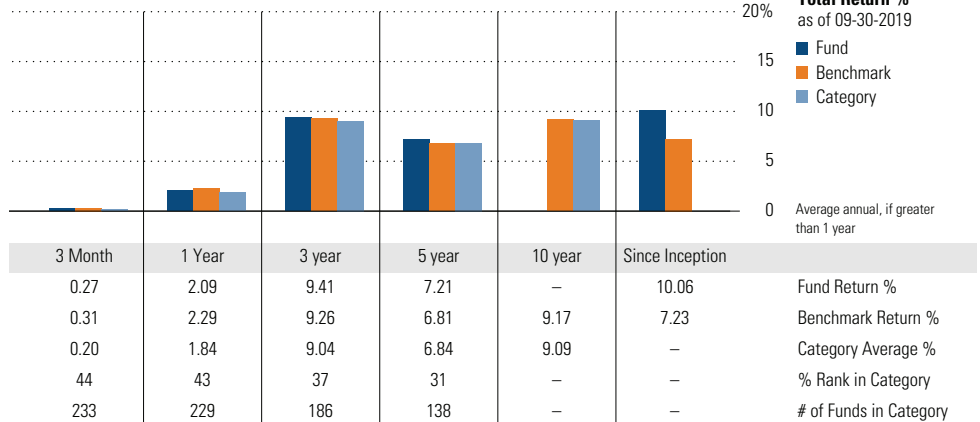
## Morningstar Investment Management LLC Analysis

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.

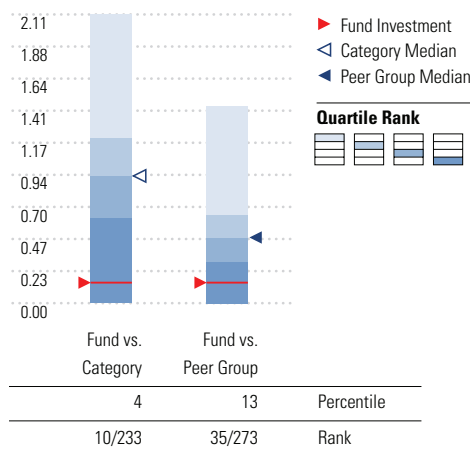
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.31	-	-0.19
Beta	0.98	-	0.99
R-Squared	99.37	-	98.37
Standard Deviation	10.31	10.49	10.46
Sharpe Ratio	0.77	0.74	0.72
Tracking Error	0.85	-	1.35
Information Ratio	0.18	-	-0.25
Up Capture Ratio	99.47	-	98.09
Down Capture Ratio	97.58	-	99.36

## Portfolio Metrics

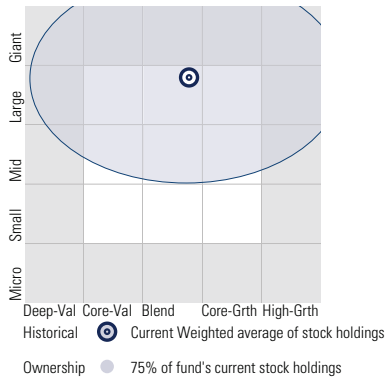
	Fund	Bmark	Cat
Price/Earnings Ratio	17.60	16.88	17.99
Price/Book Ratio	2.17	1.98	2.24
Avg Eff Duration	6.85	-	6.45

# Vanguard Target Retirement 2055 Inv VFFVX

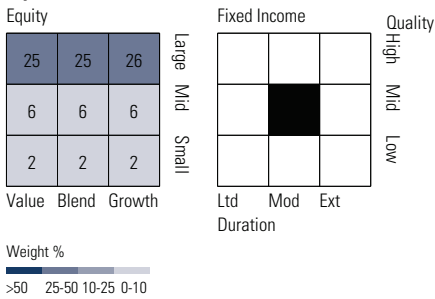
**Morningstar Category**  
Target-Date 2055

**Morningstar Index**  
Morningstar Lifetime Mod 2055 TR USD

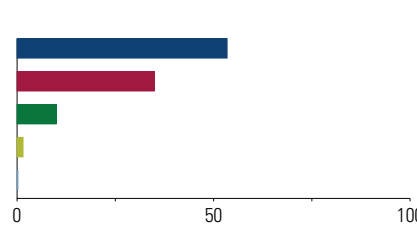
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

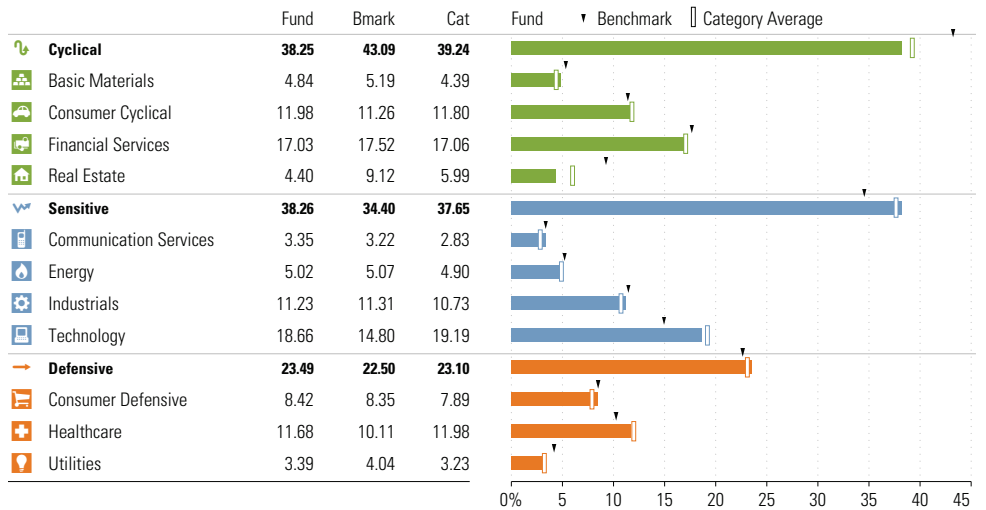


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	53.43	56.00
Non-US Stocks	34.91	34.03
Bonds	9.95	6.05
Cash	1.51	2.72
Other	0.20	1.19
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	—	53.91	53.91	—	—
⊕ Vanguard Total Intl Stock Index Inv	—	35.84	89.74	—	—
⊕ Vanguard Total Bond Market II Idx Inv	—	7.17	96.91	—	—
⊕ Vanguard Total Intl Bd Idx Investor	—	2.96	99.87	—	—
⊕ Cmt Market Liquidity Rate	—	0.13	100.00	—	—

**Total Holdings** 5

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Target Retirement 2060 Inv VTTSX

**Morningstar Category**  
Target-Date 2060+

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

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2060+ 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 6.61 years.

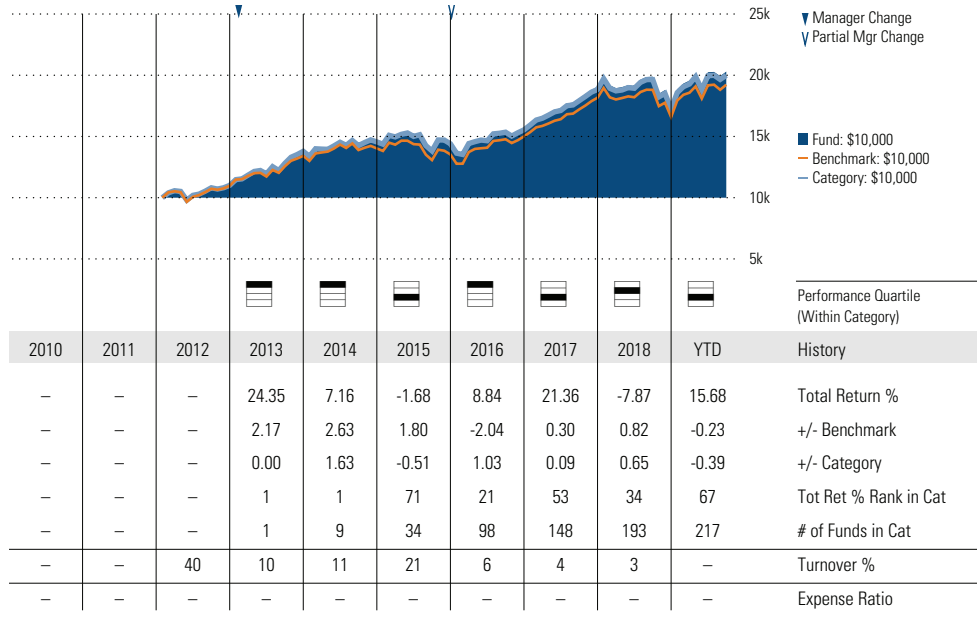
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.15 is 81.48% 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.

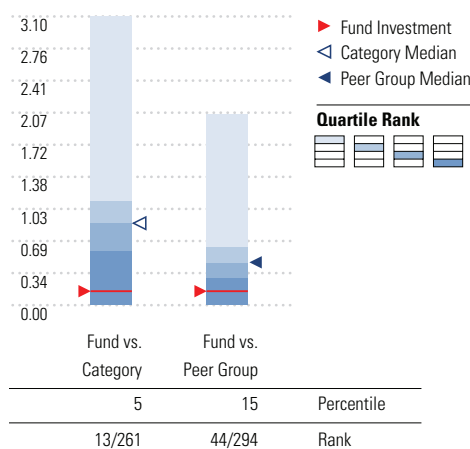
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.37	-	-0.02
Beta	0.98	-	1.00
R-Squared	99.32	-	98.24
Standard Deviation	10.33	10.48	10.53
Sharpe Ratio	0.77	0.74	0.73
Tracking Error	0.87	-	1.41
Information Ratio	0.26	-	-0.08
Up Capture Ratio	99.85	-	99.52
Down Capture Ratio	97.61	-	99.74

## Portfolio Metrics

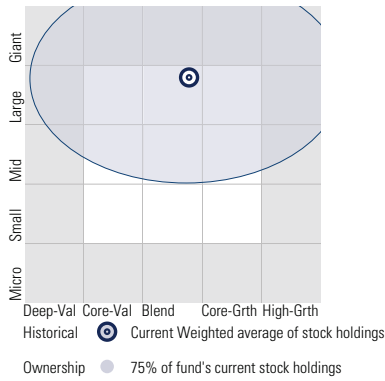
	Fund	Bmark	Cat
Price/Earnings Ratio	17.61	16.81	17.87
Price/Book Ratio	2.17	1.96	2.21
Avg Eff Duration	6.85	-	6.85

# Vanguard Target Retirement 2060 Inv VTTSX

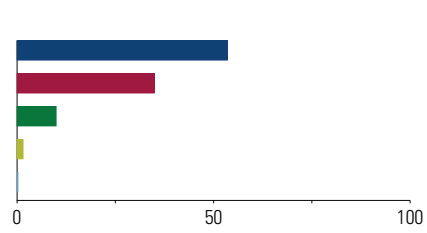
**Morningstar Category**  
Target-Date 2060+

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

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

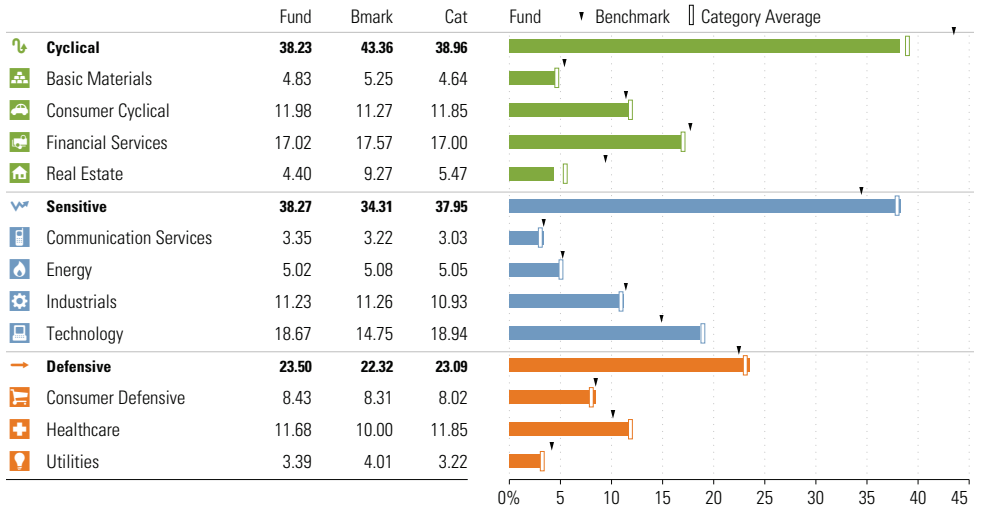


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	53.50	54.63
Non-US Stocks	34.87	34.04
Bonds	9.92	7.40
Cash	1.51	2.59
Other	0.20	1.33
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	—	53.98	53.98	—	—
⊕ Vanguard Total Intl Stock Index Inv	—	35.79	89.77	—	—
⊕ Vanguard Total Bond Market II Idx Inv	—	7.17	96.93	—	—
⊕ Vanguard Total Intl Bd Idx Investor	—	2.93	99.86	—	—
⊕ Cmt Market Liquidity Rate	—	0.14	100.00	—	—

**Total Holdings 5**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# 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.

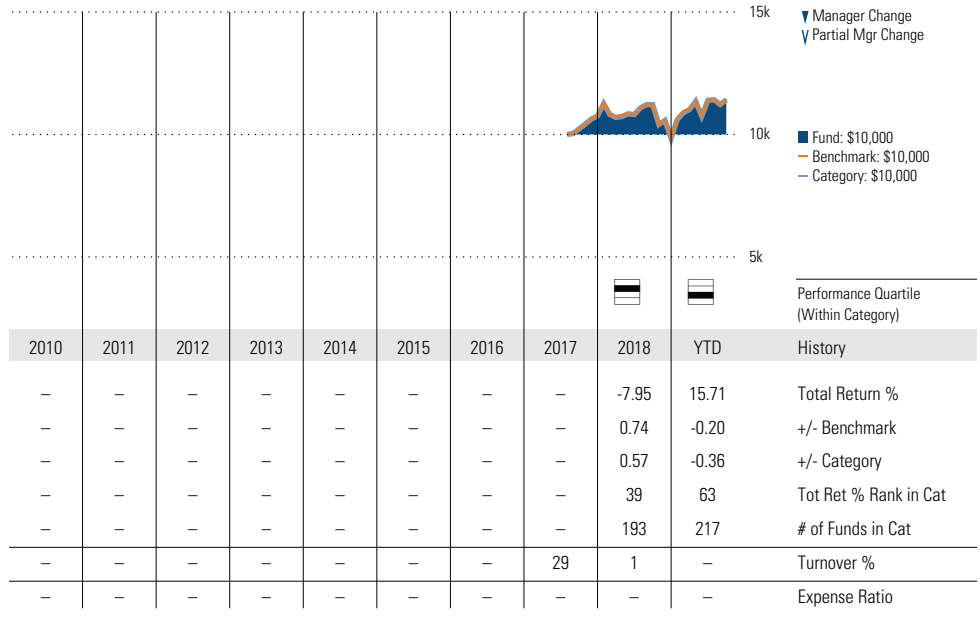
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.15 is 81.48% 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.

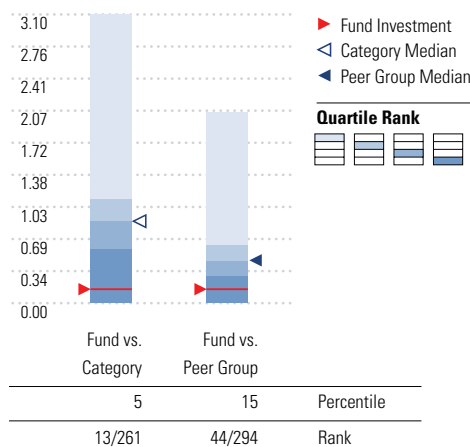
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	-	-	-0.02
Beta	-	-	1.00
R-Squared	-	-	98.24
Standard Deviation	-	10.48	10.53
Sharpe Ratio	-	0.74	0.73
Tracking Error	-	-	1.41
Information Ratio	-	-	-0.08
Up Capture Ratio	-	-	99.52
Down Capture Ratio	-	-	99.74

## Portfolio Metrics

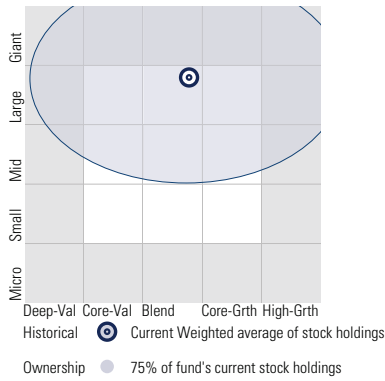
	Fund	Bmark	Cat
Price/Earnings Ratio	17.61	16.81	17.87
Price/Book Ratio	2.17	1.96	2.21
Avg Eff Duration	6.87	-	6.85

# Vanguard Target Retirement 2065 Inv VLXVX

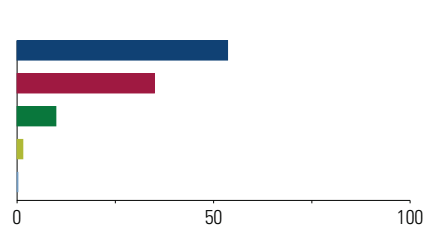
**Morningstar Category**  
Target-Date 2060+

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

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

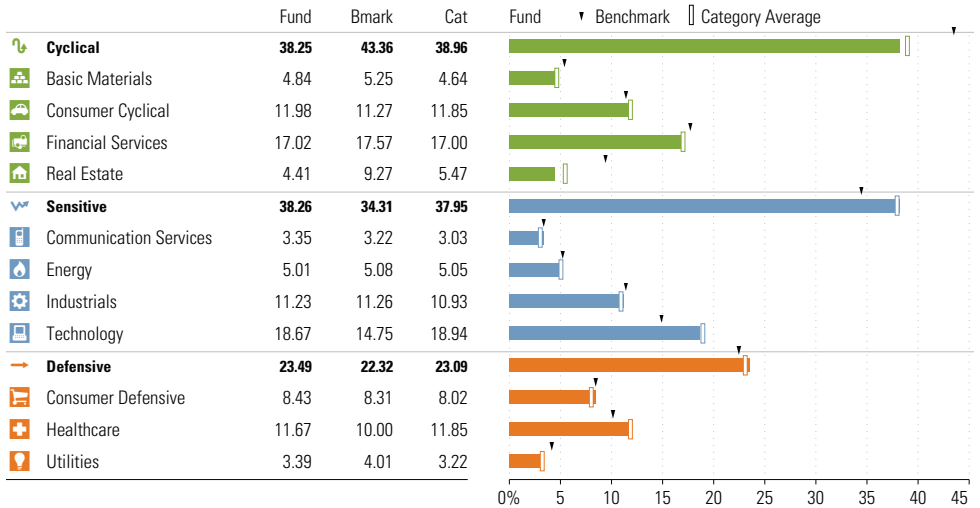


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	53.55	54.63
Non-US Stocks	34.93	34.04
Bonds	9.86	7.40
Cash	1.45	2.59
Other	0.20	1.33
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 5 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	—	54.03	54.03	—	—
⊕ Vanguard Total Intl Stock Index Inv	—	35.85	89.88	—	—
⊕ Vanguard Total Bond Market II Idx Inv	—	7.04	96.91	—	—
⊕ Vanguard Total Intl Bd Idx Investor	—	3.00	99.92	—	—
⊕ Cmt Market Liquidity Rate	—	0.08	100.00	—	—

**Total Holdings 5**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Vanguard Target Retirement Income Inv VTINX

**Morningstar Category**  
Target-Date Retirement

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

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date Retirement 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 6.61 years.

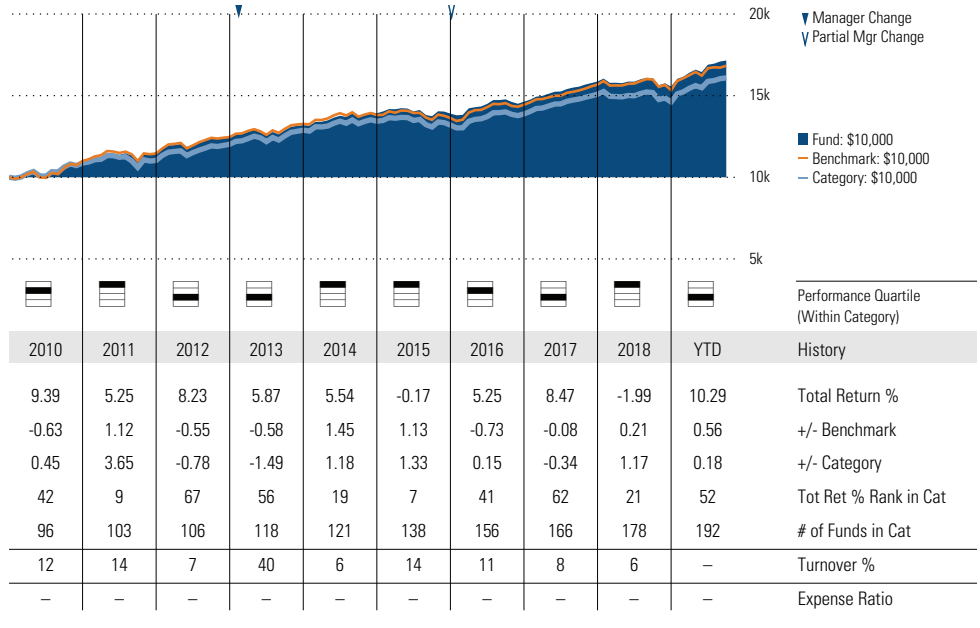
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.12 is 84.21% lower than the Target-Date Retirement category average.

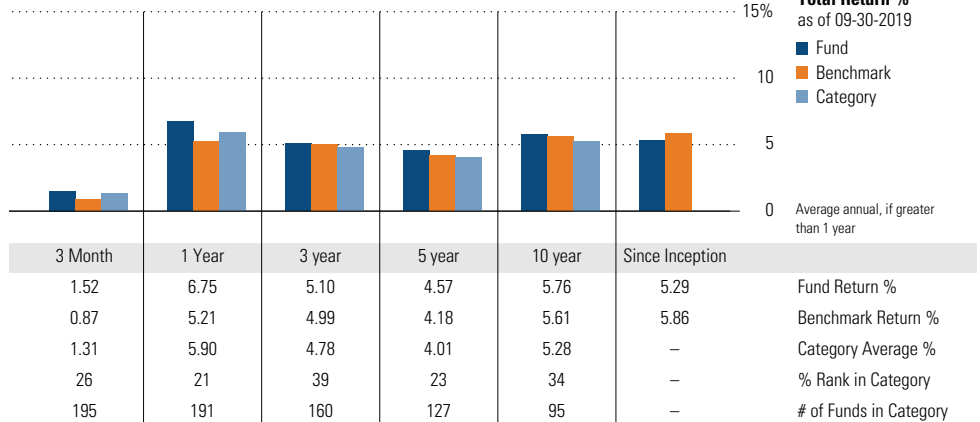
## Morningstar Investment Management LLC Analysis

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.

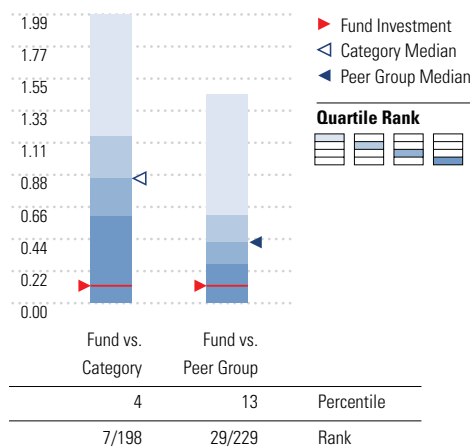
## Growth of \$10,000



## Trailing Performance



## Net Expense



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	0.77	-	-0.05
Beta	0.86	-	0.95
R-Squared	94.66	-	89.92
Standard Deviation	3.72	4.19	4.17
Sharpe Ratio	0.93	0.80	0.73
Tracking Error	1.03	-	1.44
Information Ratio	0.11	-	-0.14
Up Capture Ratio	92.94	-	92.28
Down Capture Ratio	79.51	-	90.00

## Portfolio Metrics

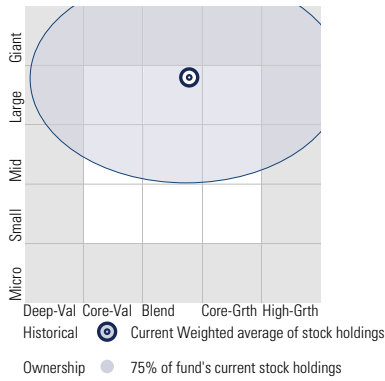
	Fund	Bmark	Cat
Price/Earnings Ratio	17.64	17.90	17.87
Price/Book Ratio	2.18	2.19	2.23
Avg Eff Duration	5.86	-	6.08

# Vanguard Target Retirement Income Inv VTINX

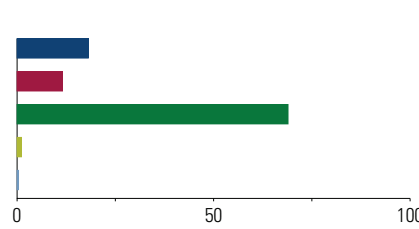
**Morningstar Category**  
Target-Date Retirement

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

**Style Analysis** as of 09-30-2019  
Morningstar Style Box™

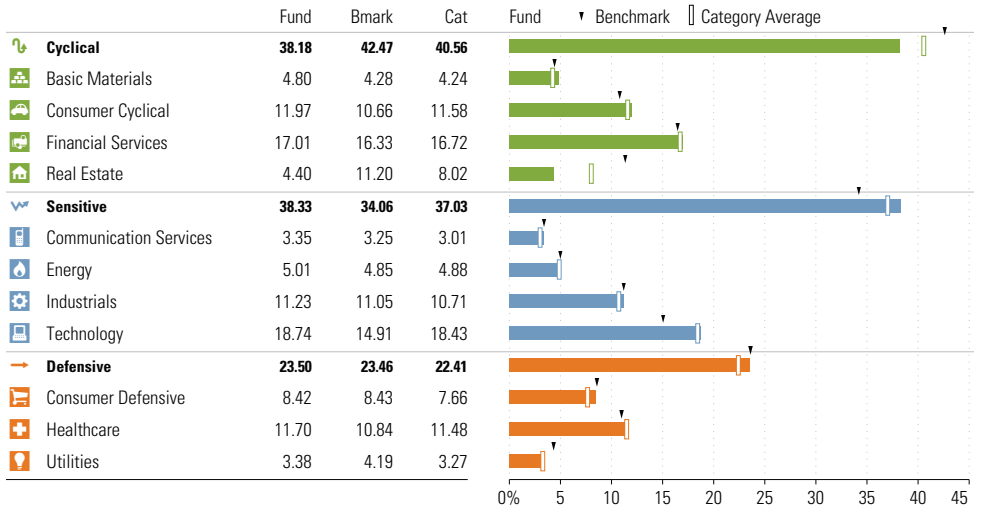


**Asset Allocation** as of 09-30-2019

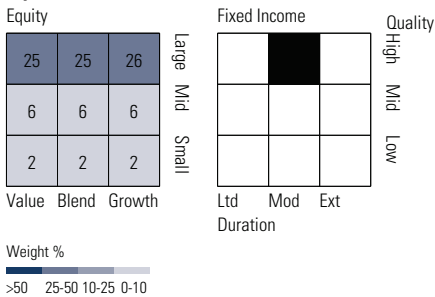


Asset Class	Net %	Cat%
US Stocks	18.11	20.78
Non-US Stocks	11.55	10.34
Bonds	68.93	59.39
Cash	1.11	6.30
Other	0.30	3.19
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Sector Weighting** as of 09-30-2019



**Style Breakdown**



**Top 6 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Bond Market II Idx Inv	-	37.11	37.11	-	-
⊖ Vanguard Total Stock Mkt Idx Inv	-	18.28	55.39	-	-
⊕ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	-	16.61	72.01	-	-
⊕ Vanguard Total Intl Bd Idx Investor	-	16.12	88.13	-	-
⊕ Vanguard Total Intl Stock Index Inv	-	11.85	99.98	-	-
⊖ Cmt Market Liquidity Rate	-	0.02	100.00	-	-

**Total Holdings 6**

⊕ Increase ⊖ Decrease ✨ New to Portfolio