

# 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.

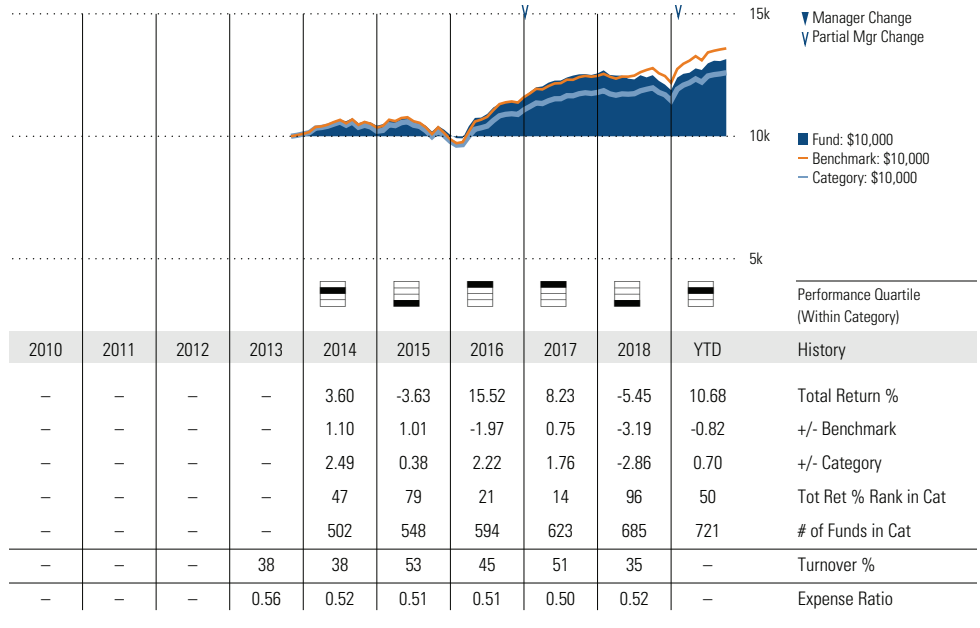
Style Consistency is not calculated for Fixed Income funds.

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

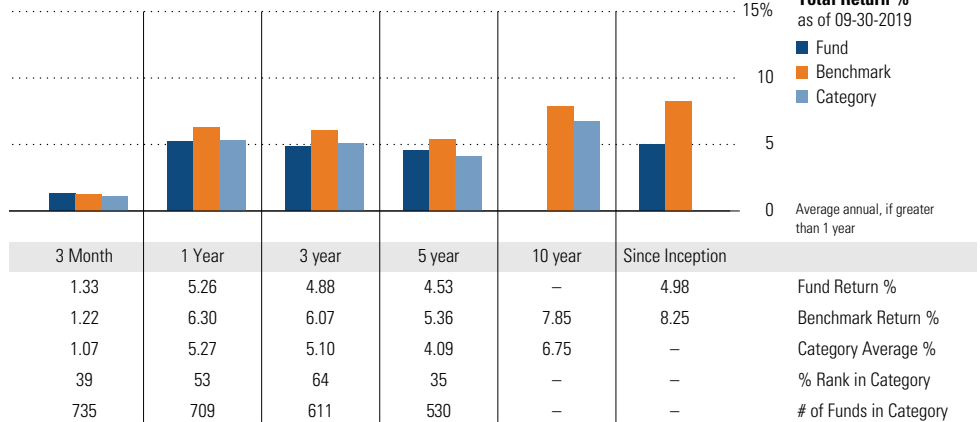
## Morningstar Investment Management LLC Analysis

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.

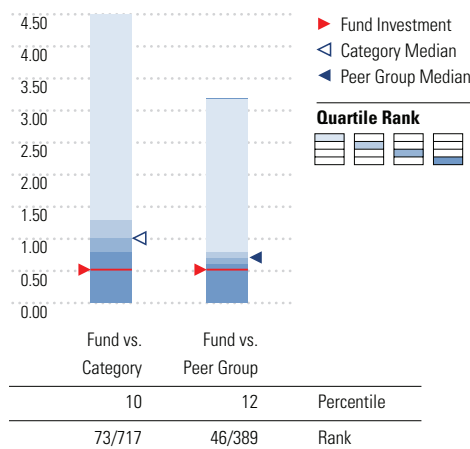
## Growth of \$10,000



## 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

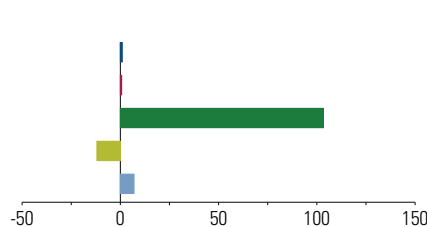
**Morningstar Index**  
ICE BofAML US High Yield TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

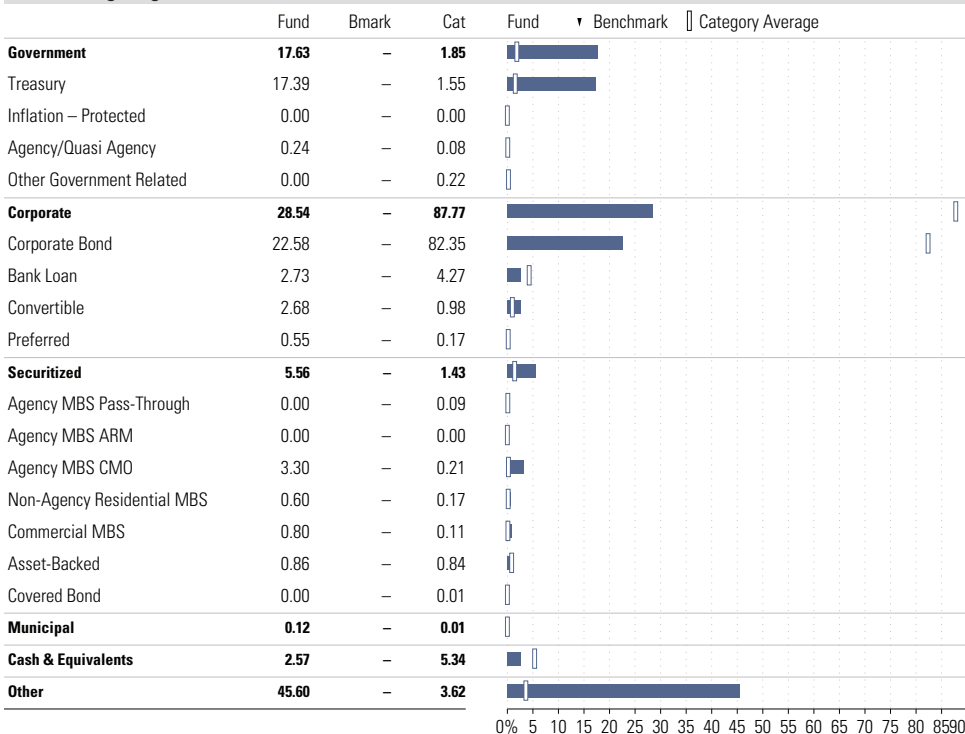


Asset Class	Net %	Cat%
US Stocks	0.99	0.70
Non-US Stocks	0.67	0.05
Bonds	103.34	94.03
Cash	-11.95	3.62
Other	6.95	1.60
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### 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 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.

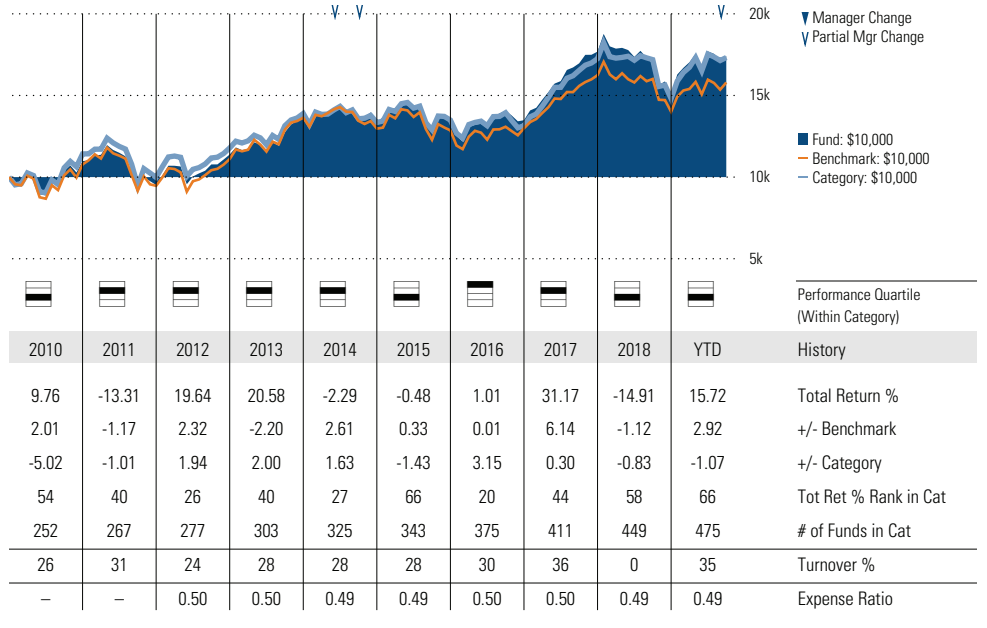
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

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

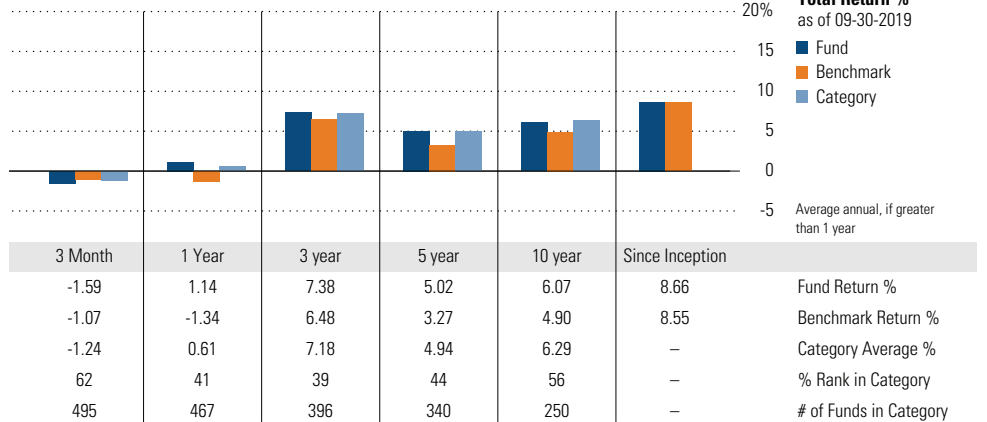
## Morningstar Investment Management LLC Analysis

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.

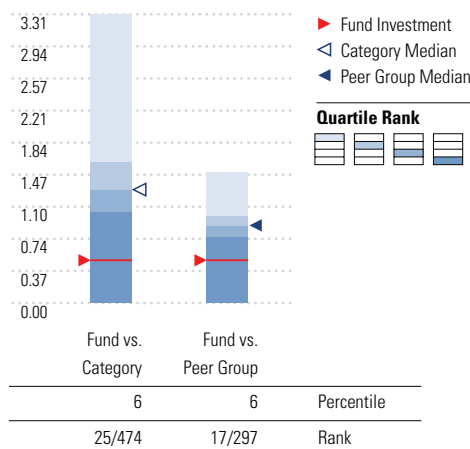
## Growth of \$10,000



## 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	0.63	-	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

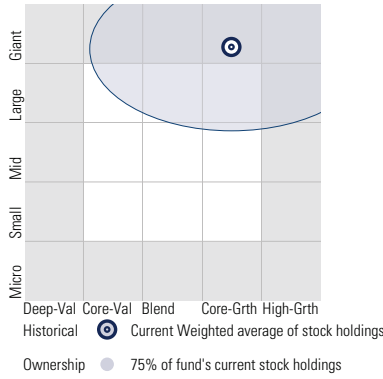
	Fund	Bmark	Cat
Price/Earnings Ratio	18.06	15.97	22.11
Price/Book Ratio	2.28	1.56	3.08
Geom Avg Mkt Cap \$B	44.15	35.74	39.99
ROE	17.63	16.29	20.08

# American Funds Europacific Growth R6 RERGX

**Morningstar Category**  
Foreign Large Growth

**Morningstar Index**  
MSCI EAFE NR USD

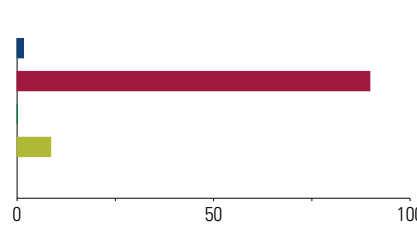
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**



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

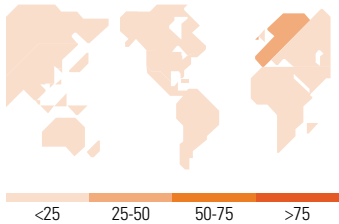


Asset Class	Net %	Cat%
US Stocks	1.59	8.20
Non-US Stocks	89.75	88.19
Bonds	0.11	0.04
Cash	8.55	3.31
Other	0.00	0.27
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

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

	Fund	Bmark	Cat	Fund	Benchmark	Category Average
<b>Cyclical</b>	<b>40.02</b>	<b>41.16</b>	<b>35.91</b>			
Basic Materials	8.12	7.55	5.71			
Consumer Cyclical	12.79	11.47	13.00			
Financial Services	17.78	18.49	16.23			
Real Estate	1.33	3.65	0.97			
<b>Sensitive</b>	<b>39.74</b>	<b>31.34</b>	<b>36.38</b>			
Communication Services	1.55	3.97	1.25			
Energy	6.20	5.38	2.50			
Industrials	11.81	13.77	13.97			
Technology	20.18	8.22	18.66			
<b>Defensive</b>	<b>20.24</b>	<b>27.50</b>	<b>27.70</b>			
Consumer Defensive	6.12	12.02	13.45			
Healthcare	10.85	11.82	13.10			
Utilities	3.27	3.66	1.15			

**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 Perspective R6 RNP GX

**Morningstar Category**  
World Large Stock

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

## Portfolio Manager(s)

Robert Lovelace since 12-2000  
Jonathan Knowles since 12-2004  
Jody Jonsson since 12-2005  
Steven Watson since 12-2005  
Brady Enright since 12-2005  
Noriko Chen since 04-2012  
Andraz Razen since 07-2015

## Quantitative Screens

✔ **Performance:** The fund has finished in the World Large Stock 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 18.84 years.

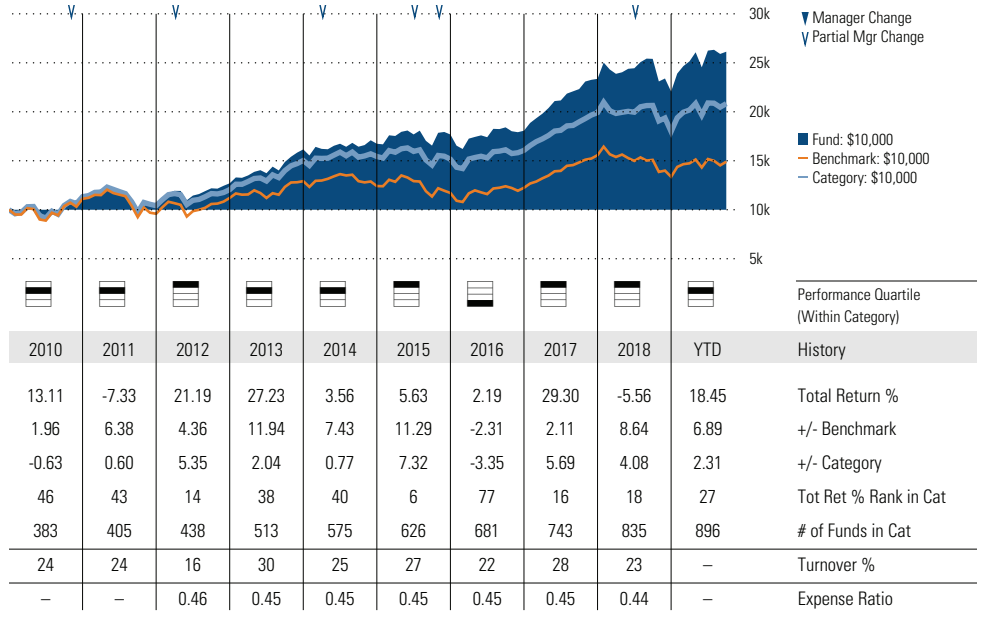
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.44 is 60.71% lower than the World Large Stock category average.

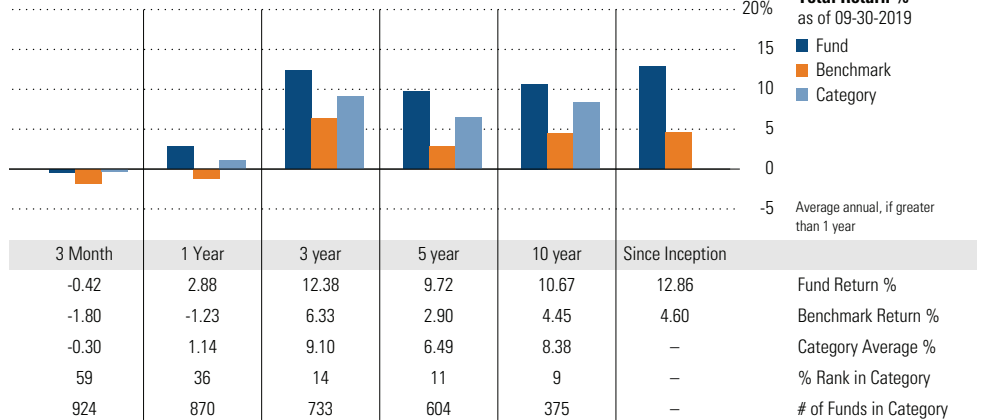
## Morningstar Investment Management LLC Analysis

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.

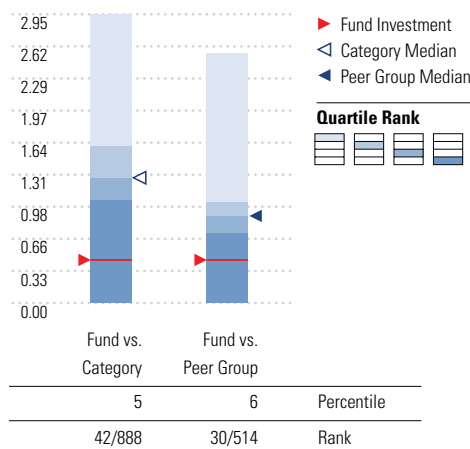
## Growth of \$10,000



## 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

Metric	Fund	Bmark	Cat
Alpha	5.87	-	3.15
Beta	0.97	-	0.92
R-Squared	85.19	-	79.32
Standard Deviation	11.98	11.45	11.84
Sharpe Ratio	0.90	0.45	0.66
Tracking Error	4.63	-	5.63
Information Ratio	1.31	-	0.49
Up Capture Ratio	106.85	-	96.71
Down Capture Ratio	68.45	-	76.45

## Portfolio Metrics

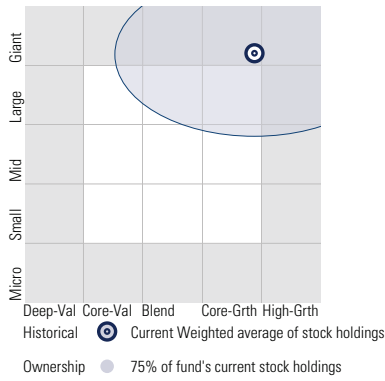
Metric	Fund	Bmark	Cat
Price/Earnings Ratio	23.03	14.87	19.09
Price/Book Ratio	3.38	1.57	2.39
Geom Avg Mkt Cap \$B	75.23	33.84	72.37
ROE	22.40	16.14	21.82

# American Funds New Perspective R6 RNPGX

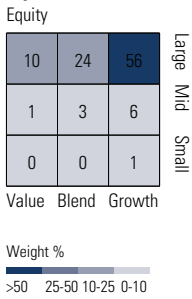
**Morningstar Category**  
World Large Stock

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

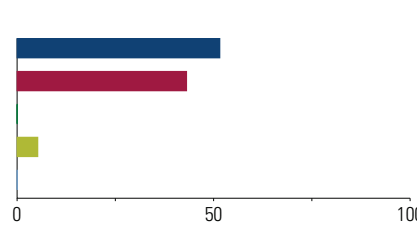
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

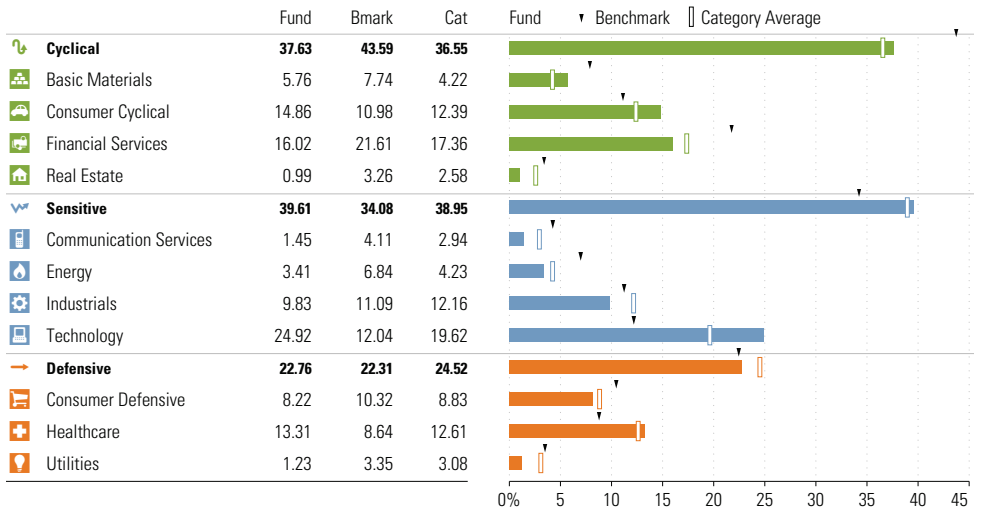


**Asset Allocation** as of 09-30-2019

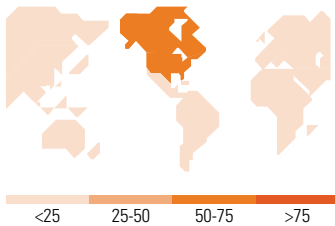


Asset Class	Net %	Cat%
US Stocks	51.58	54.02
Non-US Stocks	43.12	42.60
Bonds	0.01	0.26
Cash	5.26	2.39
Other	0.02	0.73
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

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



**World Regions** % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %
Greater Asia	13.72	15.65	Americas	57.63	59.15	Greater Europe	28.67	25.20	Market Maturity	Fund %
Japan	5.75	5.80	North America	55.81	58.18	United Kingdom	5.42	6.77	Developed Markets	94.98
Australasia	0.16	1.03	Central/Latin	1.82	0.97	W euro-ex UK	21.83	17.64	Emerging Markets	5.02
Asia-4 Tigers	5.92	3.59				Emrgng Europe	0.42	0.29	Not Available	0.00
Asia-ex 4 Tigers	1.89	5.23				Africa	1.00	0.50		
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	5.31	5.31	-	-
Amazon.com Inc	3.45	8.76	15.58	Consumer Cyclical
Facebook Inc A	2.72	11.48	35.85	Technology
Microsoft Corp	2.64	14.12	38.24	Technology
Mastercard Inc A	2.04	16.17	44.48	Financial Services
Taiwan Semiconductor Manufacturing Co Ltd	2.01	18.18	25.06	Technology
JPMorgan Chase & Co	1.70	19.88	23.02	Financial Services
Broadcom Inc	1.63	21.51	11.70	Technology
Visa Inc Class A	1.53	23.03	30.94	Financial Services
CME Group Inc Class A	1.52	24.55	13.54	Financial Services

**Total Holdings** 298

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# DFA US Core Equity 1 I DFEQX

**Morningstar Category**  
Large Blend

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

## Portfolio Manager(s)

Jed Fogdall since 02-2012  
Lukas Smart since 02-2017  
Joel Schneider since 02-2019

## 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 7.59 years.

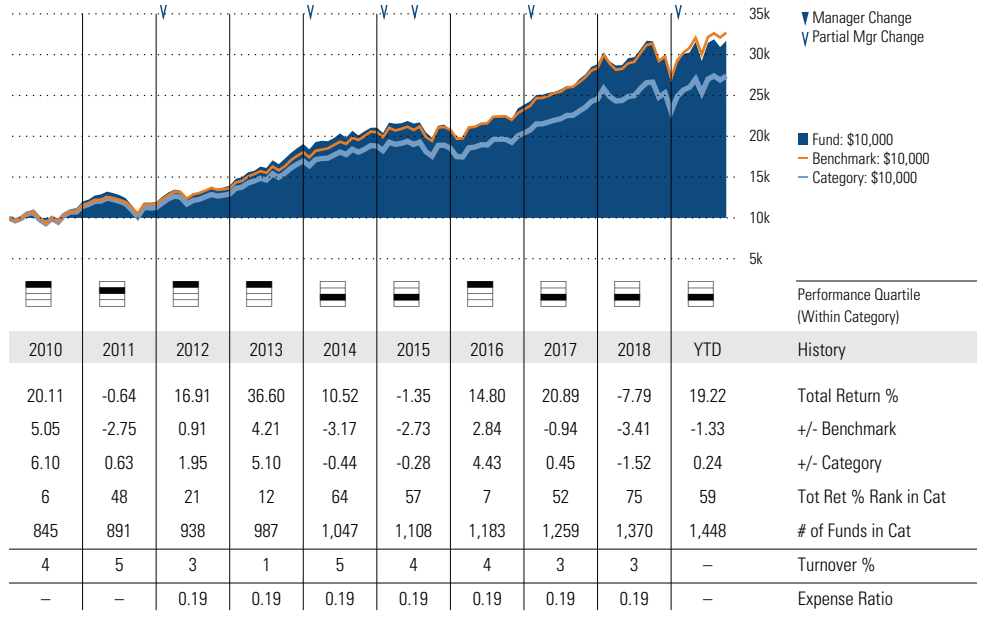
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.19 is 79.12% lower than the Large Blend category average.

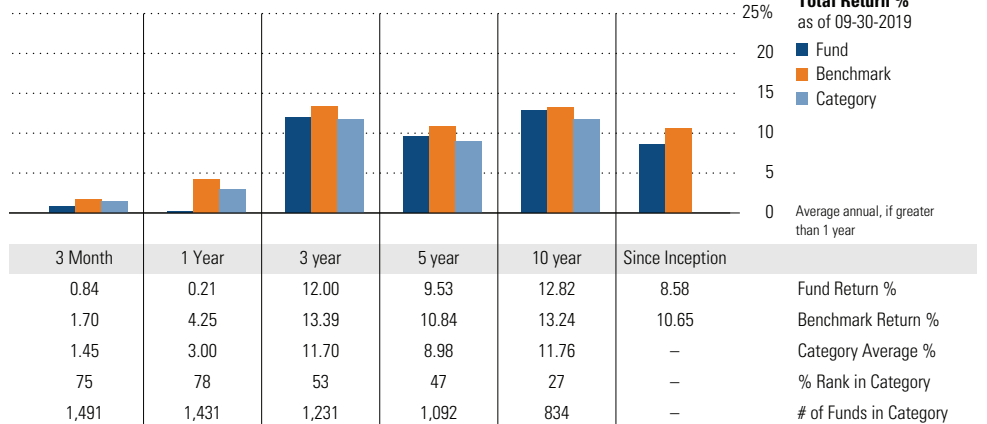
## Morningstar Investment Management LLC Analysis

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.

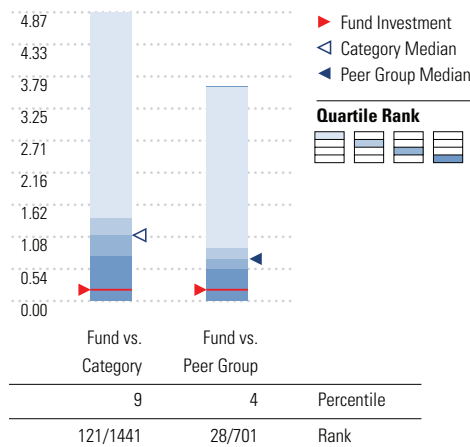
## Growth of \$10,000



## 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	-2.42	-	-1.24
Beta	1.10	-	0.96
R-Squared	96.86	-	93.99
Standard Deviation	13.63	12.18	12.01
Sharpe Ratio	0.78	0.96	0.84
Tracking Error	2.71	-	2.98
Information Ratio	-0.52	-	-1.29
Up Capture Ratio	101.32	-	91.29
Down Capture Ratio	113.74	-	97.85

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	17.66	20.32	20.89
Price/Book Ratio	2.55	3.18	3.47
Geom Avg Mkt Cap \$B	38.28	111.20	178.81
ROE	23.56	26.31	28.46

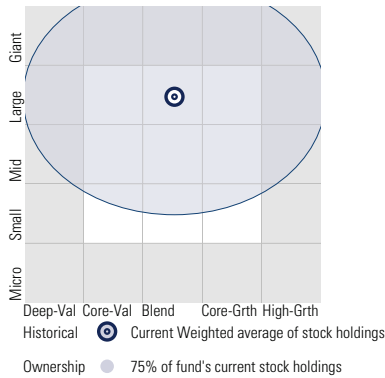
# DFA US Core Equity 1 I DFEQX

**Morningstar Category**  
Large Blend

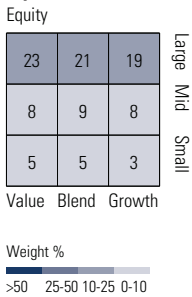
**Morningstar Index**  
S&P 500 TR USD

## Style Analysis as of 09-30-2019

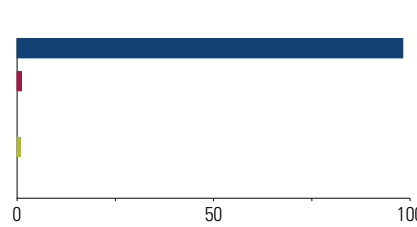
Morningstar Style Box™



## Style Breakdown

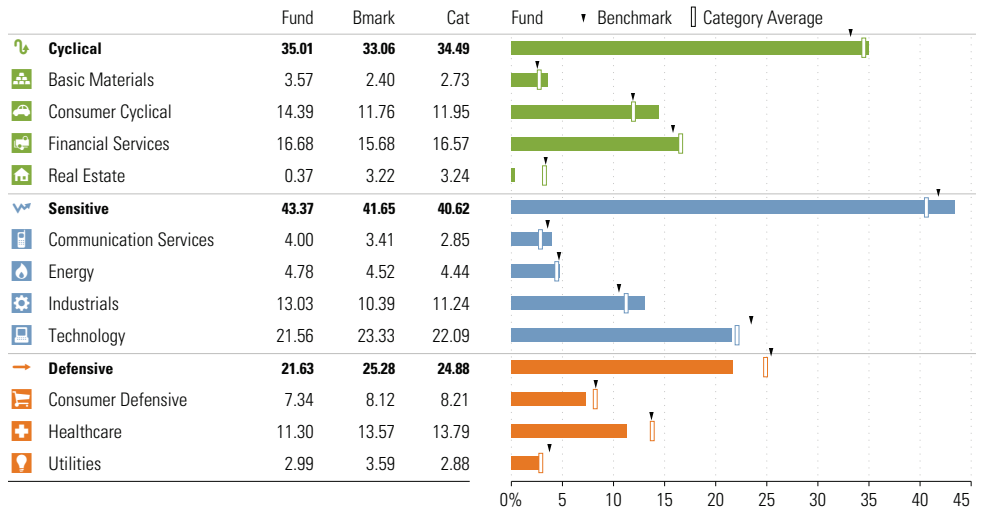


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	98.13	94.56
Non-US Stocks	1.04	2.95
Bonds	0.00	0.37
Cash	0.82	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
Apple Inc	3.65	3.65	43.43	Technology
Microsoft Corp	2.64	6.28	38.24	Technology
Amazon.com Inc	2.22	8.50	15.58	Consumer Cyclical
AT&T Inc	1.30	9.80	37.95	Communication Svc
JPMorgan Chase & Co	1.18	10.99	23.02	Financial Services
Facebook Inc A	1.13	12.12	35.85	Technology
Verizon Communications Inc	1.02	13.13	10.58	Communication Svc
Johnson & Johnson	0.96	14.09	2.43	Healthcare
Berkshire Hathaway Inc B	0.95	15.03	1.88	Financial Services
Exxon Mobil Corp	0.90	15.93	7.30	Energy
S+p500 Emini Fut Sep19 Xcme 20190920	0.85	16.78	-	-
Intel Corp	0.84	17.62	11.82	Technology
Ssc Government Mm Gvmxx	0.78	18.40	-	-
Mastercard Inc A	0.78	19.18	44.48	Financial Services
Visa Inc Class A	0.77	19.95	30.94	Financial Services

**Total Holdings 2802**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# Invesco Equity and Income R6 IEIFX

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

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

## Portfolio Manager(s)

Sergio Marcheli since 04-2003  
Thomas Bastian since 04-2003  
Charles Burge since 02-2010  
Brian Jurkash since 12-2015  
Matthew Titus since 01-2016

## Quantitative Screens

✔ **Performance:** The fund has finished in the Allocation--50% to 70% Equity category's top three quartiles in 5 of the 7 years it's been in existence.

✔ **Management:** The fund's management has been in place for 16.43 years.

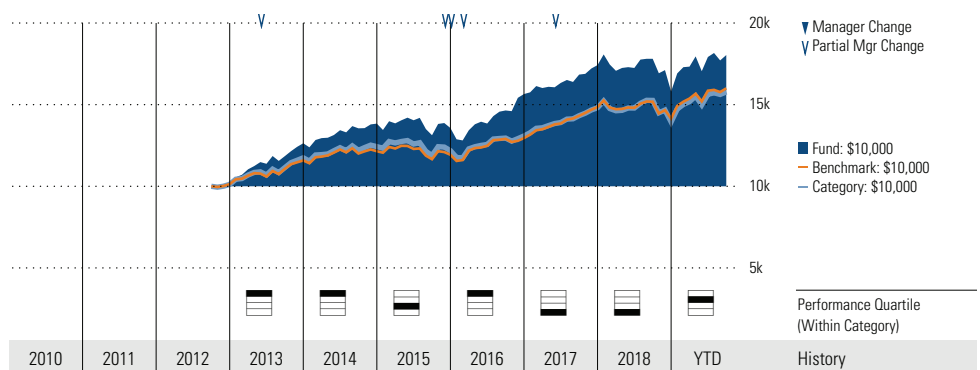
✔ **Style:** The fund has landed in its primary style box — Large Value — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.38 is 64.81% lower than the Allocation--50% to 70% Equity category average.

## Morningstar Investment Management LLC Analysis

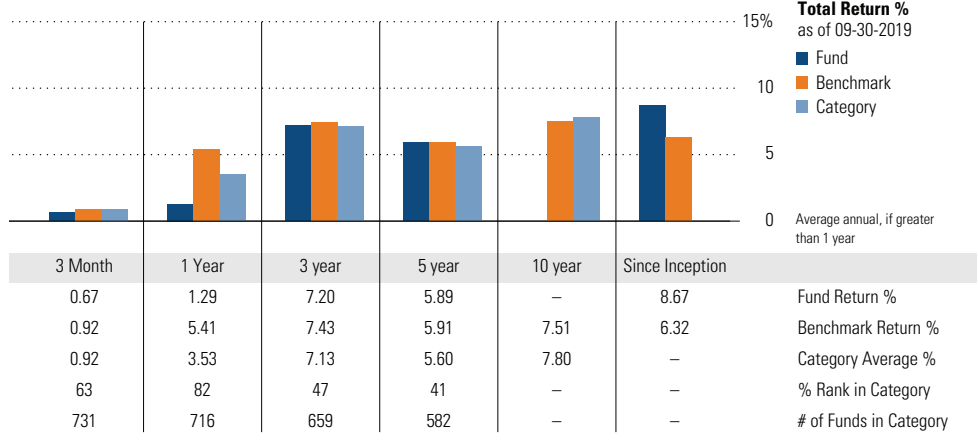
This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

## Growth of \$10,000

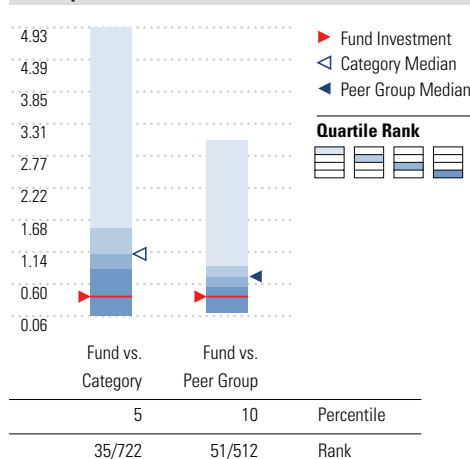


2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD	History
-	-	-	25.48	9.52	-1.93	15.32	11.34	-9.29	14.13	Total Return %
-	-	-	11.17	4.63	-0.14	6.75	-3.32	-4.53	1.02	+/- Benchmark
-	-	-	9.00	3.31	0.00	7.98	-1.87	-3.53	0.71	+/- Category
-	-	-	13	14	64	4	78	93	38	Tot Ret % Rank in Cat
-	-	-	547	561	585	641	662	706	718	# of Funds in Cat
-	-	21	26	60	69	93	94	129	138	Turnover %
-	-	-	0.37	0.39	0.37	0.37	0.38	0.38	0.38	Expense Ratio

## 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	-2.34	-	-0.84
Beta	1.32	-	1.07
R-Squared	78.69	-	91.79
Standard Deviation	10.14	6.80	7.65
Sharpe Ratio	0.58	0.85	0.73
Tracking Error	5.17	-	2.29
Information Ratio	-0.05	-	-0.21
Up Capture Ratio	122.68	-	102.61
Down Capture Ratio	152.82	-	111.49

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	14.09	16.75	18.72
Price/Book Ratio	1.53	1.98	2.51
Avg Eff Duration	5.61	-	4.83

# Invesco Equity and Income R6 IEIFX

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

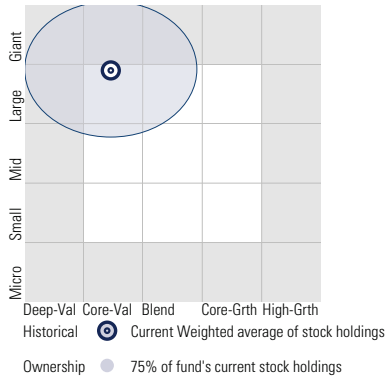
**Morningstar Index**

Morningstar Mod Tgt Risk TR USD

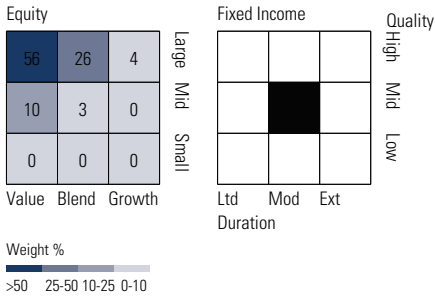
Equity

## Style Analysis as of 09-30-2019

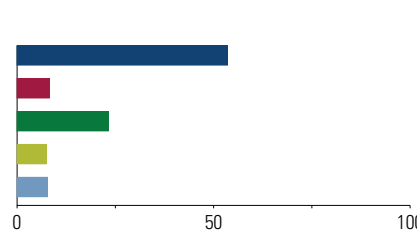
Morningstar Style Box™



## Style Breakdown

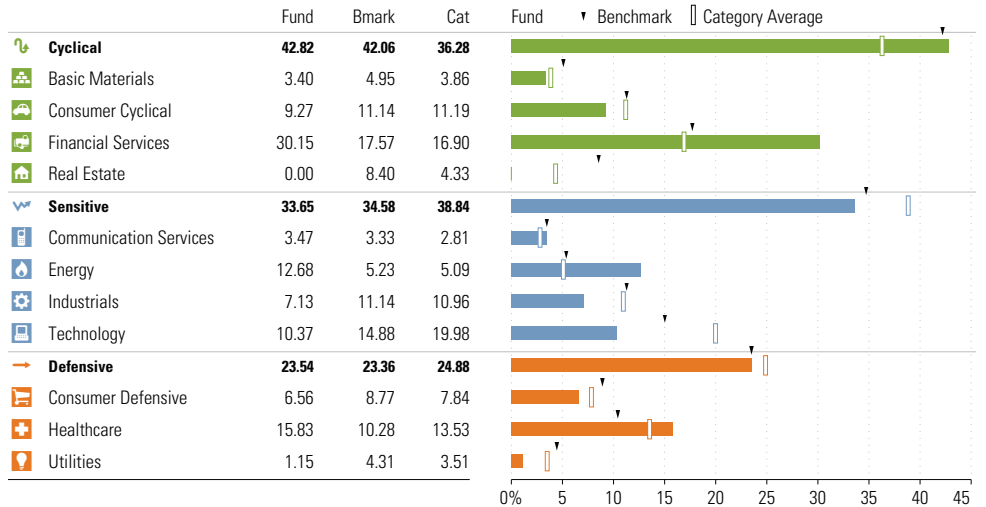


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	53.54	45.96
Non-US Stocks	8.19	12.50
Bonds	23.19	34.50
Cash	7.40	5.14
Other	7.68	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
⊕ United States Treasury Notes 2.12%	05-2021	3.83	3.83	-	-
⊕ Citigroup Inc	-	3.41	7.24	35.40	Financial Services
⊕ United States Treasury Notes 2%	05-2024	3.22	10.46	-	-
⊕ Bank of America Corporation	-	2.71	13.17	20.33	Financial Services
⊖ Invesco Shrt-Trm Inv Treasury Instl	-	2.40	15.56	-	-
⊕ Stsb_gl_fxgl	07-2019	2.25	17.81	-	-
⊕ Meln_gl_fxgl	07-2019	2.12	19.94	-	-
⊕ Johnson & Johnson	-	2.09	22.02	2.43	Healthcare
⊕ American International Group Inc	-	2.07	24.10	43.77	Financial Services
⊕ JPMorgan Chase & Co	-	1.99	26.09	23.02	Financial Services

**Total Holdings 390**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# Invesco Oppenheimer Developing Mkts R6 ODVIX

**Morningstar Category**  
Diversified Emerging Mkts

**Morningstar Index**  
MSCI EM NR USD

## Portfolio Manager(s)

Justin Leverenz since 05-2007

## Quantitative Screens

✔ **Performance:** The fund has finished in the Diversified Emerging Mkts category's top three quartiles in 8 of the 8 years it's been in existence.

✔ **Management:** The fund's management has been in place for 12.42 years.

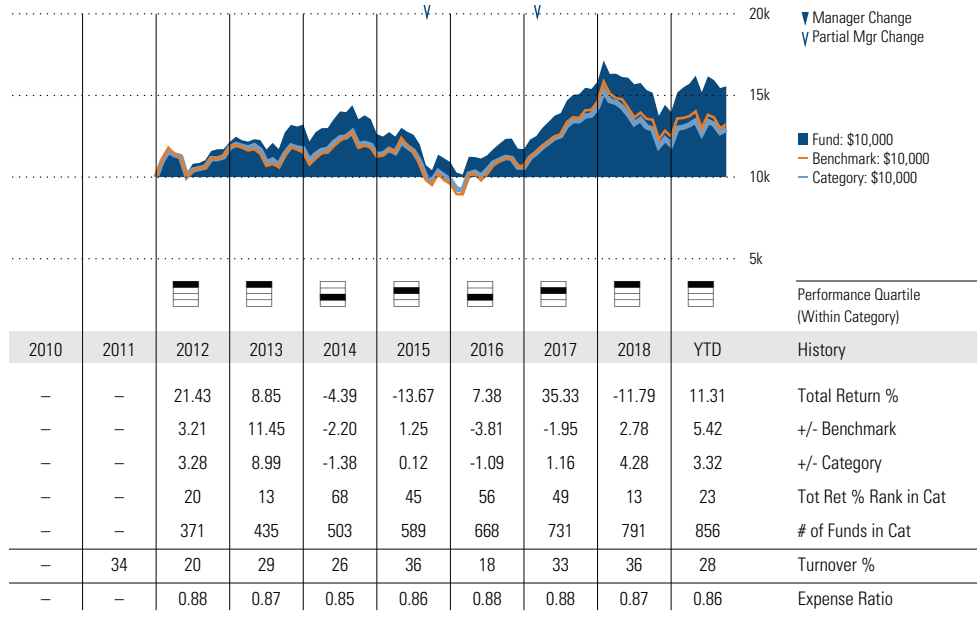
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.87 is 32.56% lower than the Diversified Emerging Mkts category average.

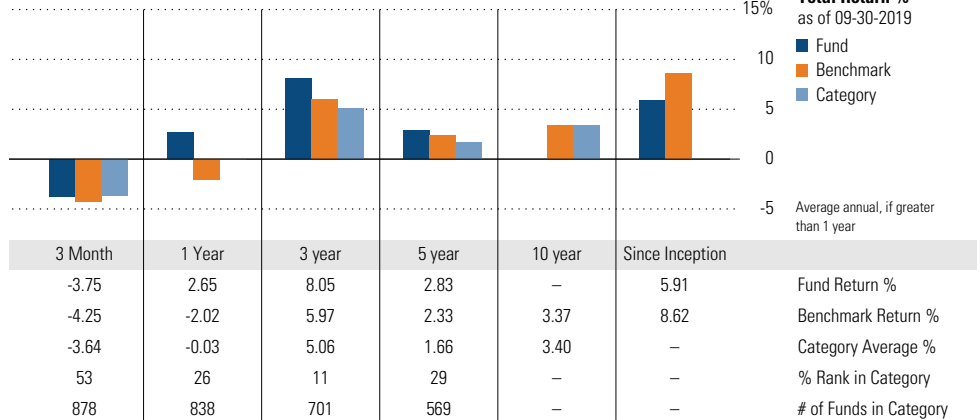
## Morningstar Investment Management LLC Analysis

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

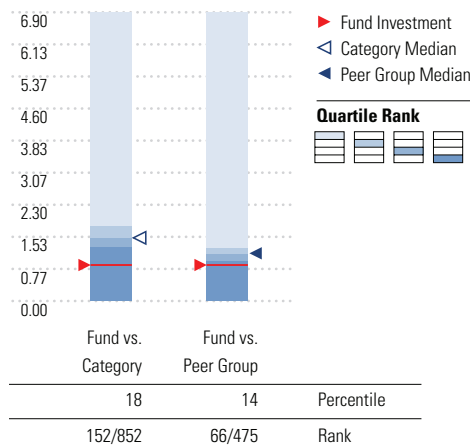
## Growth of \$10,000



## 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	2.37	-	-0.25
Beta	0.93	-	0.92
R-Squared	93.16	-	87.64
Standard Deviation	13.47	14.04	13.77
Sharpe Ratio	0.52	0.37	0.31
Tracking Error	3.67	-	4.83
Information Ratio	0.56	-	-0.18
Up Capture Ratio	97.87	-	92.55
Down Capture Ratio	85.47	-	94.88

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	18.80	12.83	13.52
Price/Book Ratio	2.88	1.54	1.92
Geom Avg Mkt Cap \$B	41.21	29.91	32.68
ROE	19.72	16.19	18.42

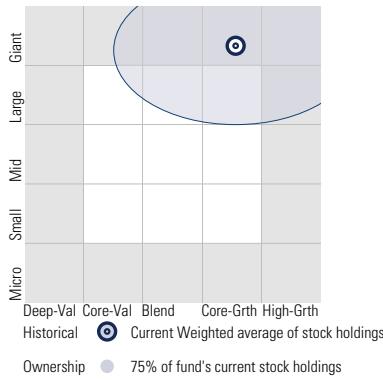
# Invesco Oppenheimer Developing Mkts R6 ODVIX

**Morningstar Category**  
Diversified Emerging Mkts

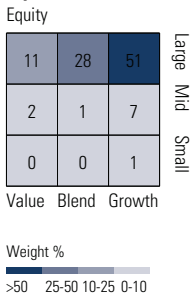
**Morningstar Index**  
MSCI EM NR USD

## Style Analysis as of 09-30-2019

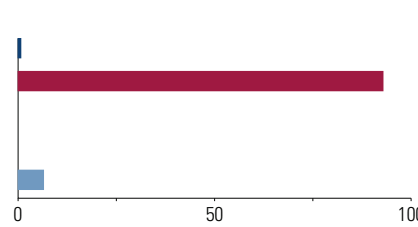
Morningstar Style Box™



## Style Breakdown



## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	0.69	2.32
Non-US Stocks	92.84	95.27
Bonds	0.00	0.46
Cash	0.00	1.63
Other	6.47	0.31
<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>61.69</b>	<b>46.93</b>	<b>46.72</b>			
Basic Materials	6.94	7.69	5.48			
Consumer Cyclical	26.91	11.59	12.95			
Financial Services	25.83	24.70	25.77			
Real Estate	2.01	2.95	2.52			
<b>Sensitive</b>	<b>24.09</b>	<b>40.65</b>	<b>38.20</b>			
Communication Services	0.00	4.74	3.57			
Energy	6.71	7.42	5.97			
Industrials	3.38	4.96	5.04			
Technology	14.00	23.53	23.62			
<b>Defensive</b>	<b>14.21</b>	<b>12.41</b>	<b>15.06</b>			
Consumer Defensive	10.12	7.27	10.21			
Healthcare	4.09	2.48	2.95			
Utilities	0.00	2.66	1.90			

## World Regions % Equity 09-30-2019



Region	Fund %	Cat %	Region	Fund %	Cat %	Region	Fund %	Cat %	Market Maturity	Fund %
Greater Asia	56.30	68.54	Americas	18.38	15.61	Greater Europe	25.32	15.84	Developed Markets	27.58
Japan	0.00	0.11	North America	0.74	1.60	United Kingdom	0.00	0.91	Emerging Markets	72.42
Australasia	0.00	0.01	Central/Latin	17.64	14.01	W euro-ex UK	10.49	2.13	Not Available	0.00
Asia-4 Tigers	15.91	22.46				Emrgng Europe	11.00	6.36		
Asia-ex 4 Tigers	40.39	45.96				Africa	3.83	6.44		
Not Classified	0.00	0.00								

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

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Alibaba Group Holding Ltd ADR	7.14	7.14	22.00	Consumer Cyclical
Master China Series 1	6.43	13.57	—	—
⊕ NOVATEK PJSC GDR	5.04	18.61	20.10	Energy
Taiwan Semiconductor Manufacturing Co Ltd	4.52	23.13	25.06	Technology
Kering SA	4.09	27.22	16.14	Consumer Cyclical
Housing Development Finance Corp Ltd	3.64	30.86	1.51	Financial Services
⊖ Kotak Mahindra Bank Ltd	3.48	34.34	30.94	Financial Services
⊕ Tencent Holdings Ltd	3.46	37.80	5.48	Technology
AIA Group Ltd	2.94	40.74	15.89	Financial Services
Yum China Holdings Inc	2.70	43.44	36.56	Consumer Cyclical

**Total Holdings 89**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# Invesco Oppenheimer International Gr R6 OIGIX

**Morningstar Category**  
Foreign Large Growth

**Morningstar Index**  
MSCI EAFE NR USD

## Portfolio Manager(s)

George Evans since 03-1996

Robert Dunphy since 03-2012

## Quantitative Screens

✗ **Performance:** The fund has finished in the Foreign Large Growth category's top three quartiles in 4 of the 7 years it's been in existence.

✔ **Management:** The fund's management has been in place for 23.53 years.

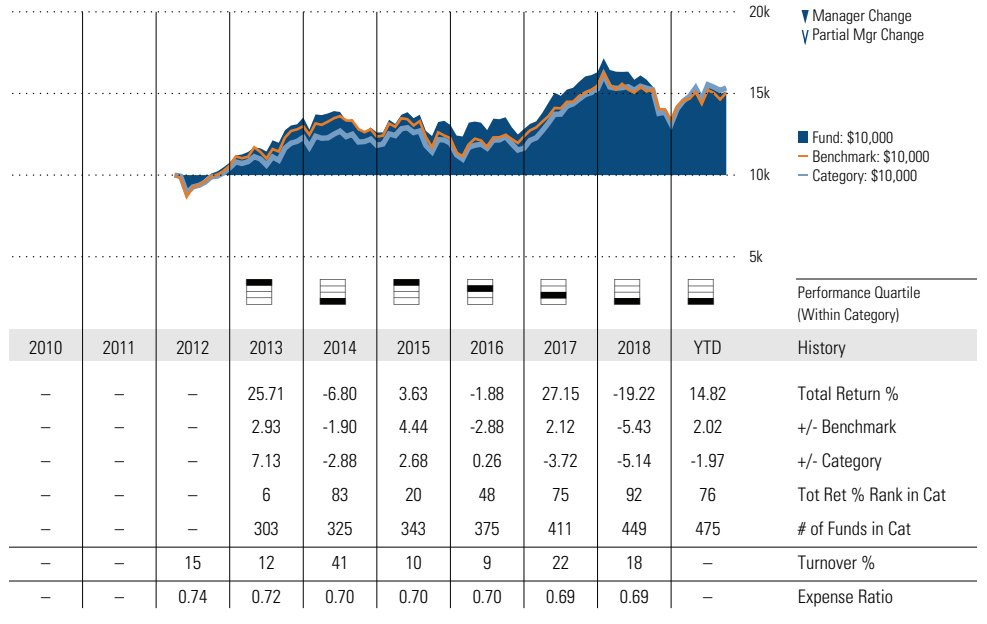
✔ **Style:** The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.69 is 38.94% lower than the Foreign Large Growth category average.

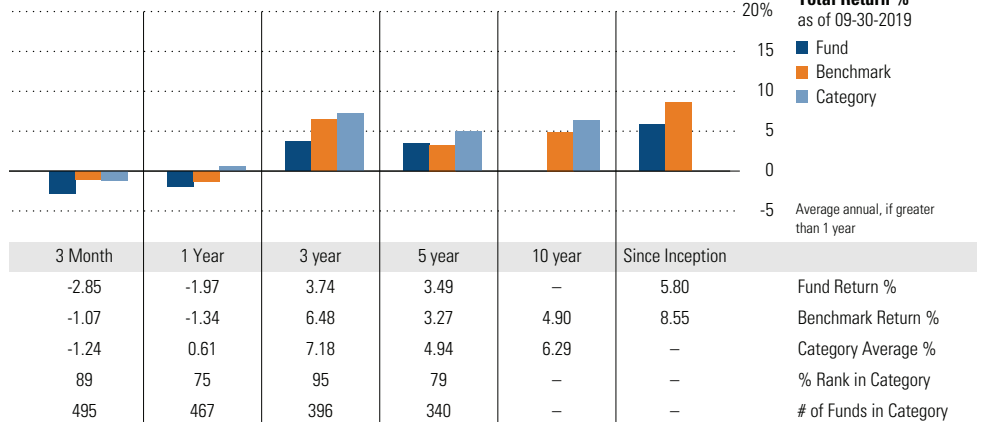
## Morningstar Investment Management LLC Analysis

We are placing Invesco Oppenheimer International Growth on watch for performance. This fund has struggled recently, most notably in 2018 when it fell further than its category peers and benchmark index. In the first half of 2019, the fund outpaced its prospectus benchmark and kept pace with its peers in the Foreign Large Growth Morningstar Category, but it could take some time for this fund to regain its standings in the category. There's reason for hope, as manager George Evans has led the effort here for over twenty years and long-term results are still competitive. We'll be watching for better relative performance in the coming quarters.

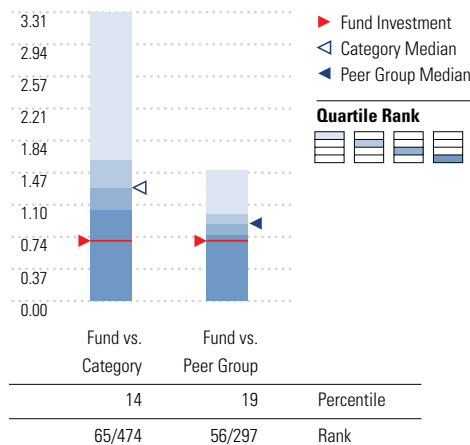
## Growth of \$10,000



## 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	-3.18	-	0.58
Beta	1.12	-	1.03
R-Squared	87.74	-	-
Standard Deviation	13.22	11.07	12.56
Sharpe Ratio	0.22	0.48	0.46
Tracking Error	4.81	-	5.20
Information Ratio	-0.57	-	0.11
Up Capture Ratio	97.71	-	98.91
Down Capture Ratio	116.75	-	93.55

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	24.91	15.97	22.11
Price/Book Ratio	3.42	1.56	3.08
Geom Avg Mkt Cap \$B	25.59	35.74	39.99
ROE	18.47	16.29	20.08

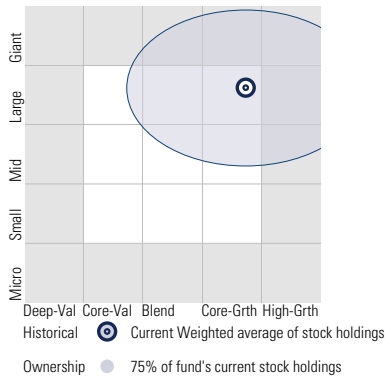
# Invesco Oppenheimer International Gr R6 OIGIX

**Morningstar Category**  
Foreign Large Growth

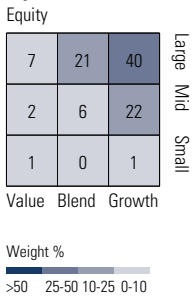
**Morningstar Index**  
MSCI EAFE NR USD

## Style Analysis as of 09-30-2019

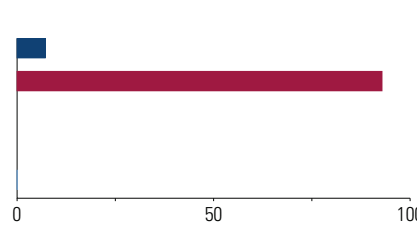
Morningstar Style Box™



## Style Breakdown

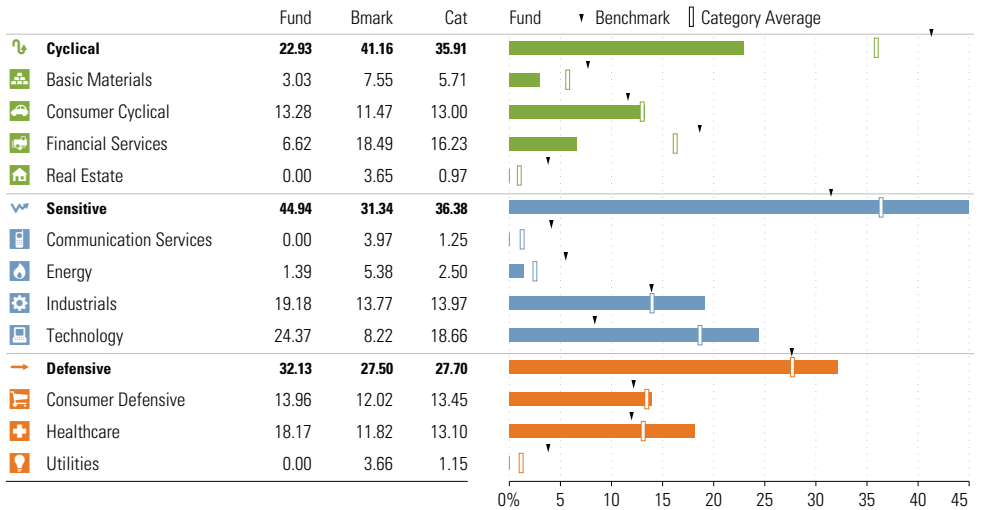


## Asset Allocation as of 09-30-2019

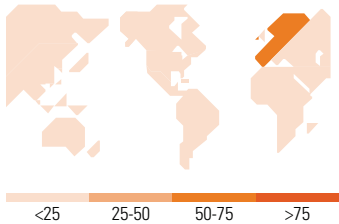


Asset Class	Net %	Cat%
US Stocks	7.15	8.20
Non-US Stocks	92.84	88.19
Bonds	0.00	0.04
Cash	0.00	3.31
Other	0.01	0.27
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## 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	24.22	30.83	Americas	13.11	15.21	Greater Europe	62.67	53.95	Developed Markets	94.26
Japan	12.48	13.01	North America	13.11	13.02	United Kingdom	6.90	12.58	Emerging Markets	5.74
Australasia	4.42	2.16	Central/Latin	0.00	2.19	W euro-ex UK	54.38	40.14	Not Available	0.00
Asia-4 Tigers	2.97	6.39				Emrgng Europe	1.39	0.38		
Asia-ex 4 Tigers	4.35	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
ASML Holding NV	2.98	2.98	67.21	Technology
Hitachi Ltd	2.70	5.67	38.75	Industrials
Hermes International SA	2.67	8.34	31.71	Consumer Cyclical
SAP SE	2.65	11.00	25.83	Technology
Hoya Corp	2.37	13.37	34.00	Healthcare
Edenred SA	2.30	15.67	42.99	Financial Services
Nokia Oyj	2.28	17.95	-5.57	Technology
Grifols SA A	2.19	20.14	18.71	Healthcare
Keyence Corp	2.09	22.23	20.51	Technology
ICICI Bank Ltd ADR	2.09	24.32	18.65	Financial Services

**Total Holdings 79**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# Invesco Real Estate R6 IARFX

**Morningstar Category**  
Real Estate

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

## Portfolio Manager(s)

Joe Rodriguez since 05-1995  
 Mark Blackburn since 04-2000  
 Ping-Ying Wang since 01-2006  
 Paul Curbo since 01-2007  
 Darin Turner since 12-2009  
 James Cowen since 06-2015  
 Grant Jackson since 06-2018

## Quantitative Screens

✔ **Performance:** The fund has finished in the Real Estate 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 24.43 years.

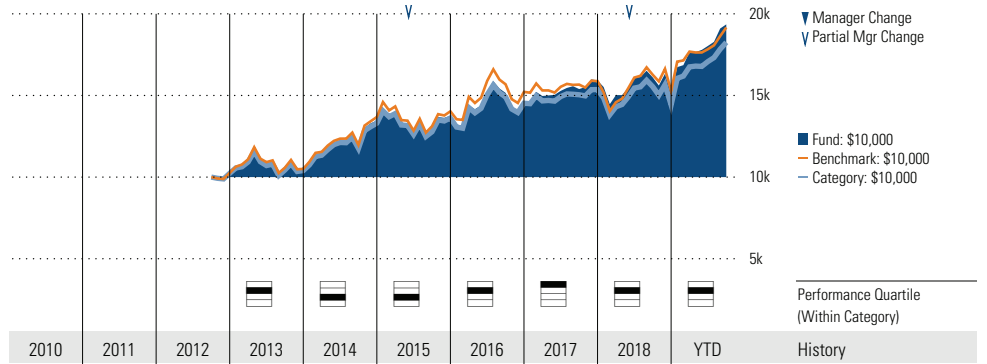
✘ **Style:** The fund has landed in its primary style box — Mid-Cap Blend — 45.45 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.8 is 29.82% lower than the Real Estate category average.

## Morningstar Investment Management LLC Analysis

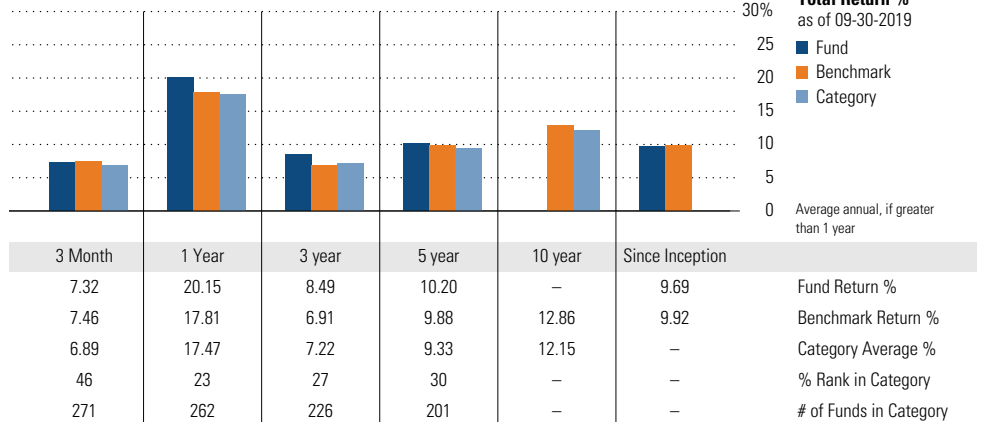
Although this fund fails the style screen, it continues to hold real estate securities and we do not regard the failure as significant.

## Growth of \$10,000

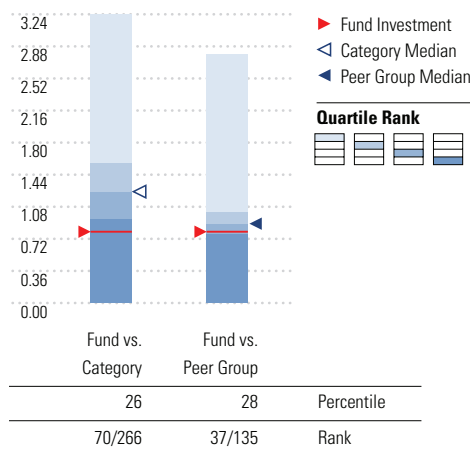


2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD	History
-	-	-	2.27	28.68	2.16	6.28	8.96	-5.20	28.24	Total Return %
-	-	-	-0.13	-1.58	-0.38	-2.21	4.63	-1.41	2.79	+/- Benchmark
-	-	-	0.72	0.65	-0.25	-0.61	2.74	0.77	1.64	+/- Category
-	-	-	31	63	68	48	14	48	32	Tot Ret % Rank in Cat
-	-	-	177	191	205	221	230	249	266	# of Funds in Cat
-	-	64	60	50	23	80	52	44	47	Turnover %
-	-	-	0.77	0.79	0.78	0.78	0.80	0.80	0.80	Expense Ratio

## 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	2.11	-	0.79
Beta	0.90	-	0.91
R-Squared	94.44	-	92.22
Standard Deviation	12.05	13.01	12.33
Sharpe Ratio	0.61	0.46	0.50
Tracking Error	3.13	-	3.34
Information Ratio	0.51	-	-0.03
Up Capture Ratio	92.96	-	90.64
Down Capture Ratio	78.63	-	85.00

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	35.10	38.46	29.22
Price/Book Ratio	2.85	2.42	2.79
Geom Avg Mkt Cap \$B	17.95	9.35	18.68
ROE	11.30	9.56	13.54

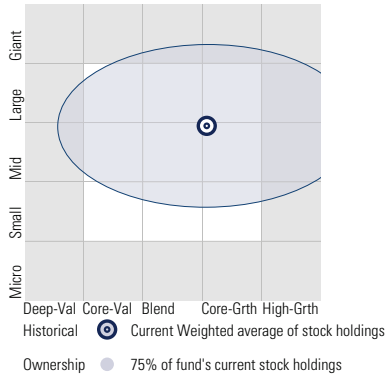
# Invesco Real Estate R6 IARFX

**Morningstar Category**  
Real Estate

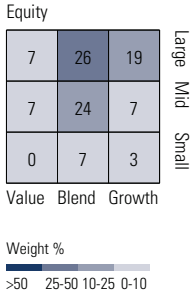
**Morningstar Index**  
S&P United States REIT TR USD

## Style Analysis as of 09-30-2019

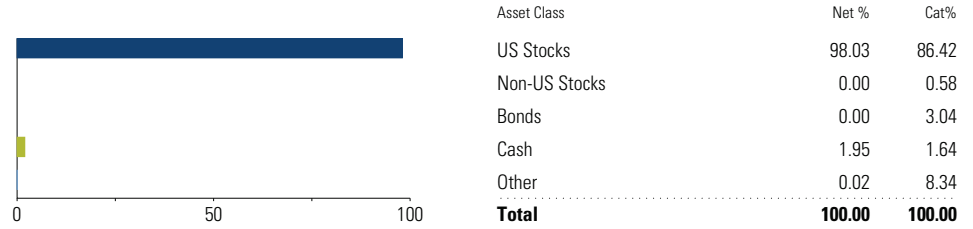
Morningstar Style Box™



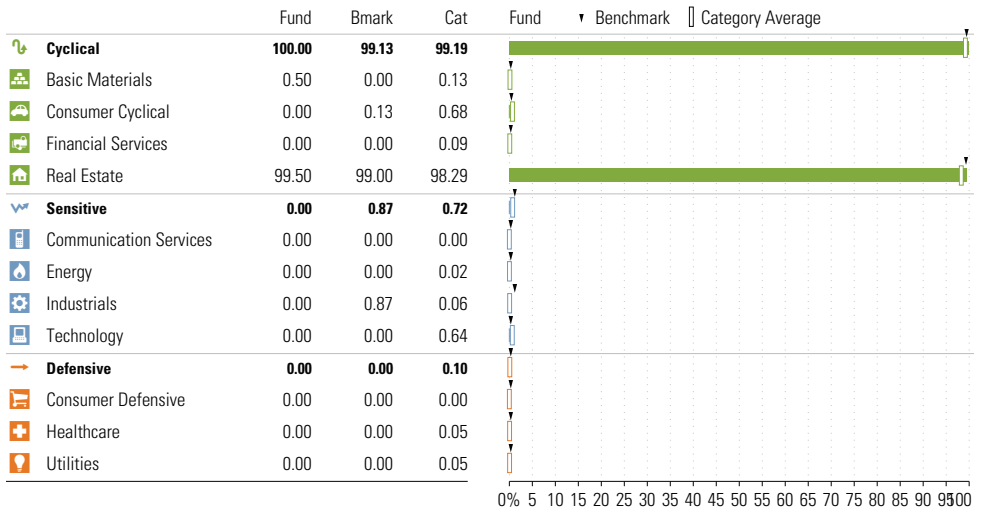
## Style Breakdown



## 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
⊕ American Tower Corp	8.71	8.71	41.54	Real Estate
⊕ Crown Castle International Corp	6.16	14.88	31.07	Real Estate
⊕ AvalonBay Communities Inc	4.46	19.34	26.34	Real Estate
⊕ Prologis Inc	4.42	23.76	47.84	Real Estate
⊕ Boston Properties Inc	4.31	28.07	17.73	Real Estate
⊕ Ventas Inc	4.17	32.24	28.70	Real Estate
⊕ Equinix Inc	4.16	36.40	65.70	Real Estate
⊕ Essex Property Trust Inc	2.75	39.16	35.60	Real Estate
⊕ HCP Inc	2.73	41.89	31.54	Real Estate
⊕ Simon Property Group Inc	2.61	44.50	-3.65	Real Estate
⊕ Hudson Pacific Properties Inc	2.04	46.54	17.72	Real Estate
⊕ Sun Communities Inc	2.04	48.58	48.17	Real Estate
⊕ Invitation Homes Inc	2.04	50.62	49.40	Real Estate
⊕ Equity Lifestyle Properties Inc	1.96	52.58	39.44	Real Estate
⊕ Regency Centers Corp	1.86	54.44	21.41	Real Estate

**Total Holdings 65**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# JPMorgan Equity Income R6 OIEJX

**Morningstar Category**  
Large Value

**Morningstar Index**  
Russell 1000 Value TR USD

## Portfolio Manager(s)

Clare Hart since 08-2004  
David Silberman since 11-2019  
Andrew Brandon since 11-2019

## Quantitative Screens

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

✔ **Management:** The fund's management has been in place for 15.17 years.

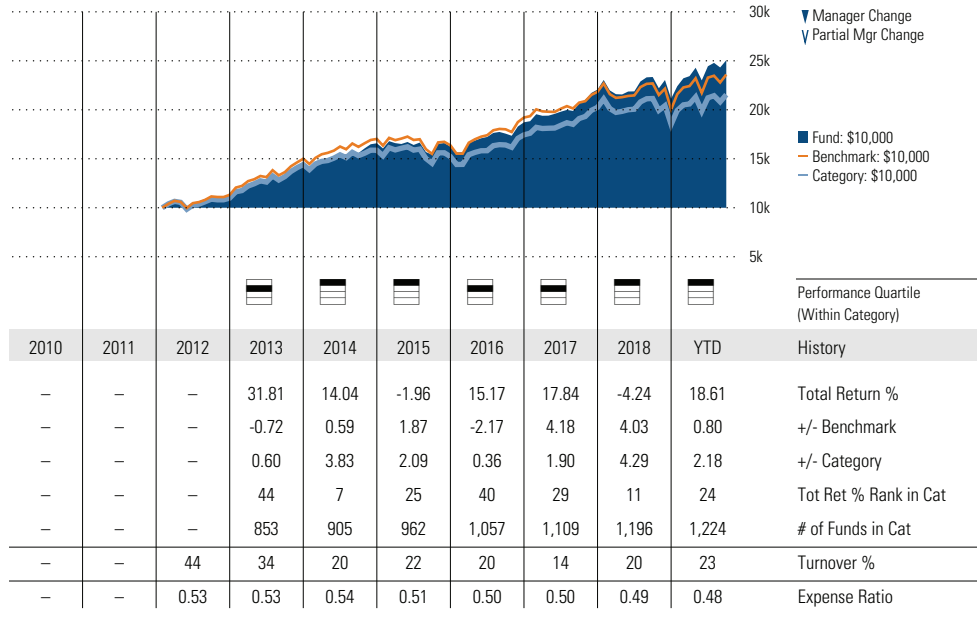
✔ **Style:** The fund has landed in its primary style box — Large Value — 76.47 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.48 is 49.47% lower than the Large Value category average.

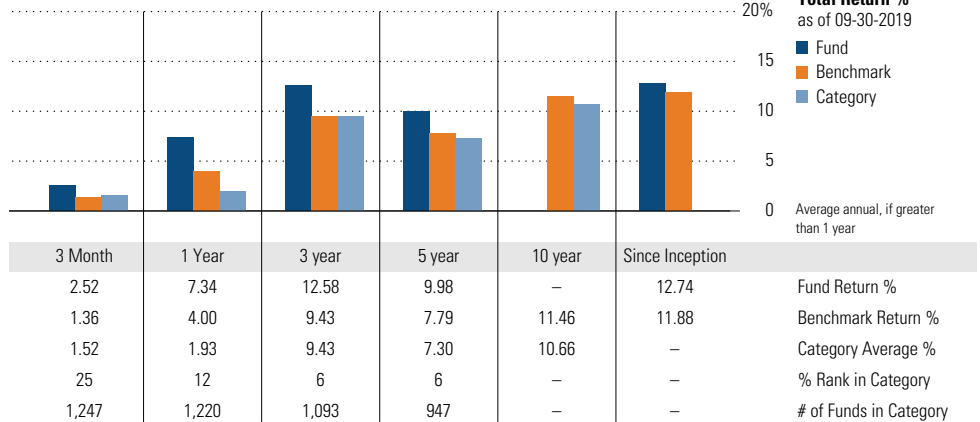
## Morningstar Investment Management LLC Analysis

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.

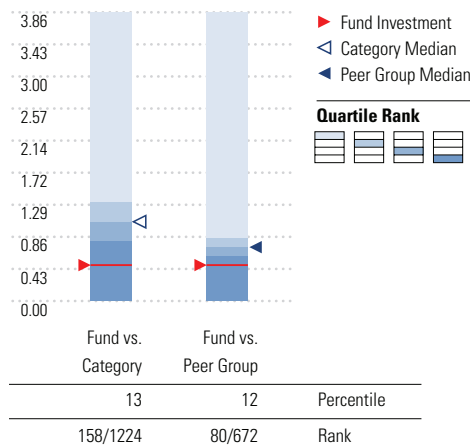
## Growth of \$10,000



## 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	3.70	-	0.11
Beta	0.90	-	0.99
R-Squared	97.41	-	93.32
Standard Deviation	11.28	12.34	12.62
Sharpe Ratio	0.97	0.66	0.66
Tracking Error	2.18	-	3.38
Information Ratio	1.44	-	0.01
Up Capture Ratio	103.01	-	98.55
Down Capture Ratio	81.67	-	98.00

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	18.00	16.49	16.18
Price/Book Ratio	2.54	1.94	2.22
Geom Avg Mkt Cap \$B	81.40	58.19	107.83
ROE	22.63	14.48	20.08

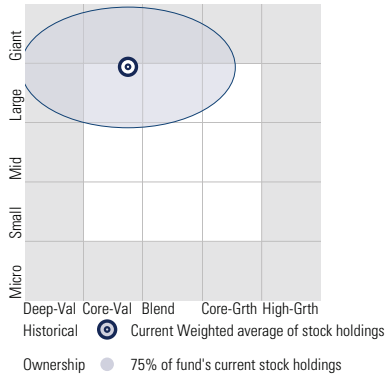
# JPMorgan Equity Income R6 OIEJX

**Morningstar Category**  
Large Value

**Morningstar Index**  
Russell 1000 Value TR USD

## Style Analysis as of 09-30-2019

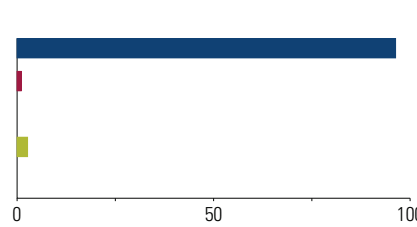
Morningstar Style Box™



## Style Breakdown

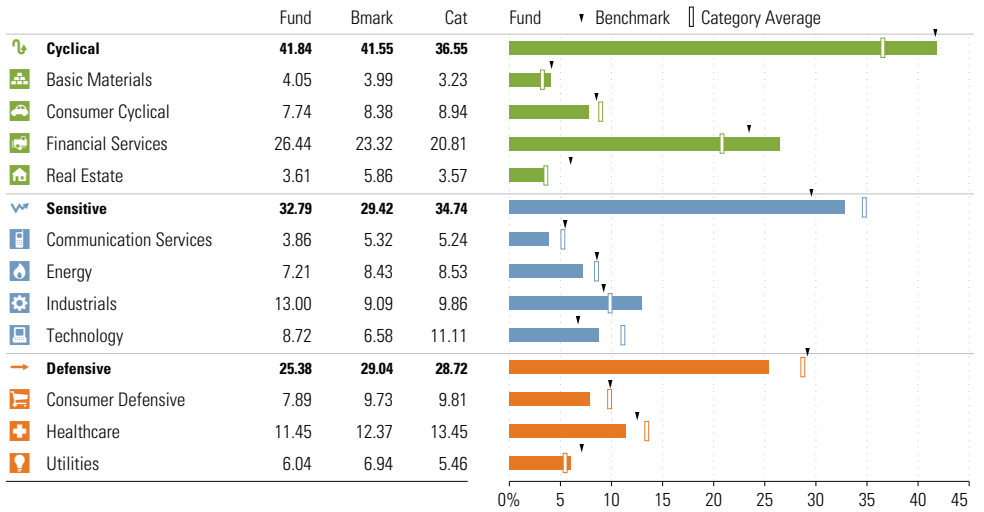


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	96.30	91.42
Non-US Stocks	1.04	5.85
Bonds	0.00	-0.15
Cash	2.66	2.28
Other	0.00	0.60
<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
⊕ Chevron Corp	2.99	2.99	12.30	Energy
⊕ Bank of America Corporation	2.91	5.91	20.33	Financial Services
⊕ JPMorgan Prime Money Market IM	2.66	8.57	-	-
⊖ CME Group Inc Class A	2.57	11.14	13.54	Financial Services
⊖ Microsoft Corp	2.46	13.59	38.24	Technology
⊕ PNC Financial Services Group Inc	2.21	15.80	22.50	Financial Services
⊕ Texas Instruments Inc	2.06	17.85	39.21	Technology
⊕ Comcast Corp Class A	2.04	19.89	33.63	Communication Svc
⊕ BlackRock Inc	1.97	21.87	15.97	Financial Services
⊕ Bristol-Myers Squibb Company	1.95	23.82	-0.08	Healthcare
⊕ ConocoPhillips	1.93	25.75	-7.15	Energy
⊕ Wells Fargo & Co	1.80	27.55	12.52	Financial Services
⊕ McDonald's Corp	1.79	29.33	22.88	Consumer Cyclical
⊕ Analog Devices Inc	1.78	31.11	32.06	Technology
⊕ Merck & Co Inc	1.77	32.89	12.33	Healthcare

## Total Holdings 89

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Neuberger Berman Mid Cap Growth R6 NRMGX

**Morningstar Category**  
Mid-Cap Growth

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

## Portfolio Manager(s)

Kenneth Turek since 01-2003

## 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 16.67 years.

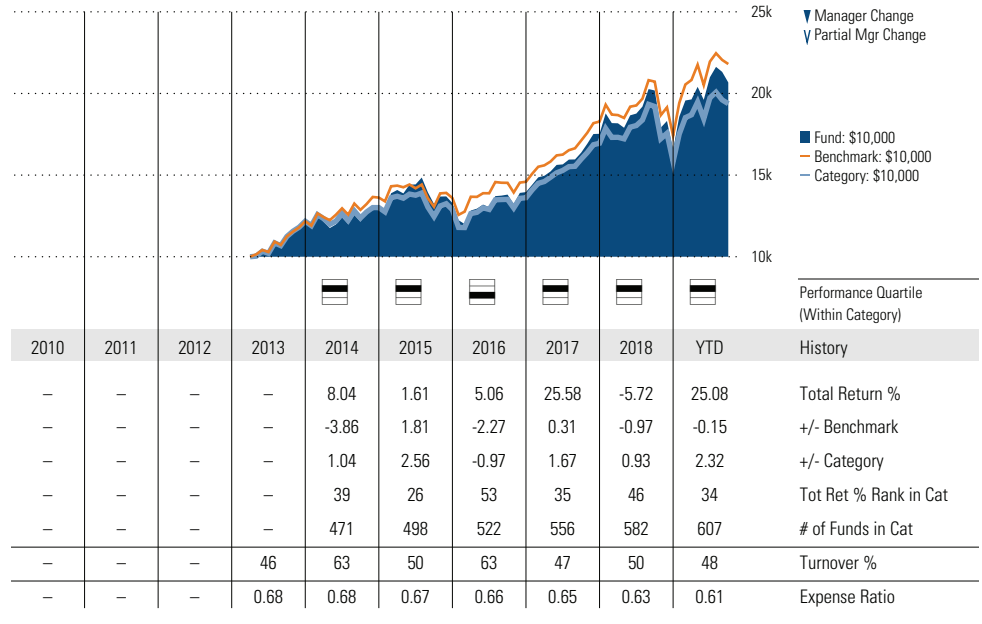
✔ **Style:** The fund has landed in its primary style box — Mid-Cap Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.63 is 45.22% lower than the Mid-Cap Growth category average.

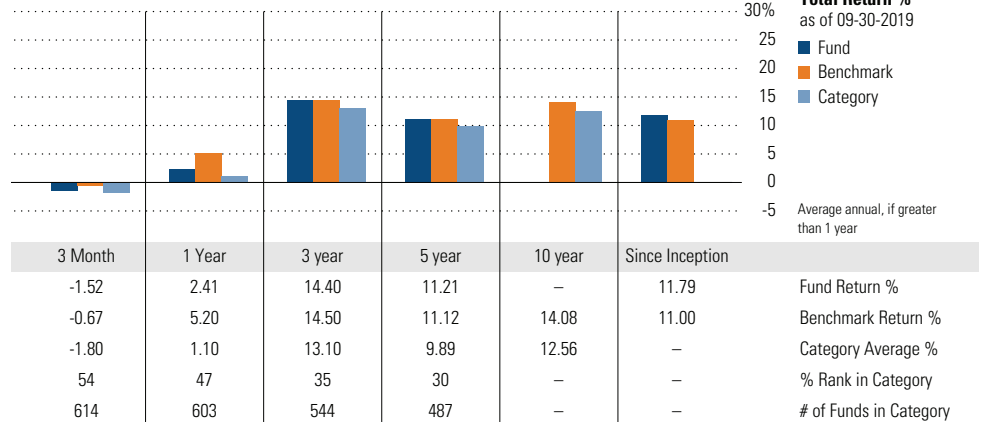
## Morningstar Investment Management LLC Analysis

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.

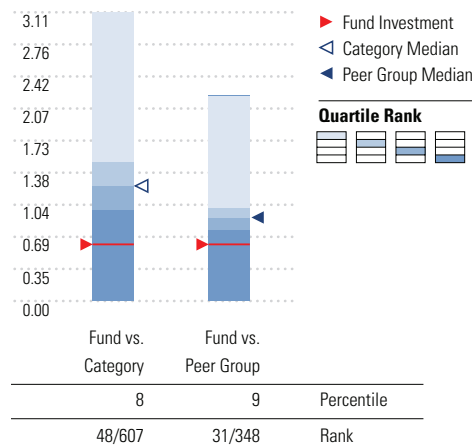
## Growth of \$10,000



## 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	-0.73	-	-0.54
Beta	1.05	-	0.99
R-Squared	97.69	-	90.62
Standard Deviation	15.33	14.38	15.09
Sharpe Ratio	0.85	0.91	0.83
Tracking Error	2.46	-	4.64
Information Ratio	-0.04	-	-0.30
Up Capture Ratio	103.07	-	97.41
Down Capture Ratio	106.79	-	100.52

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	29.42	25.90	30.85
Price/Book Ratio	5.90	6.19	4.91
Geom Avg Mkt Cap \$B	14.02	15.25	13.31
ROE	16.62	24.20	16.48

# Neuberger Berman Mid Cap Growth R6 NRMGX

Morningstar Category

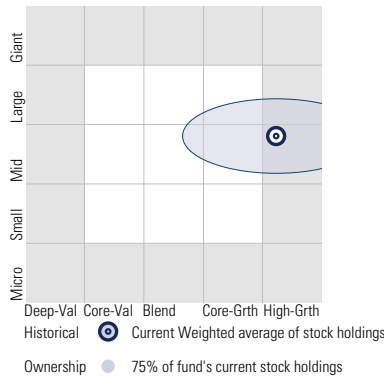
Mid-Cap Growth

Morningstar Index

Russell Mid Cap Growth TR USD

## Style Analysis as of 09-30-2019

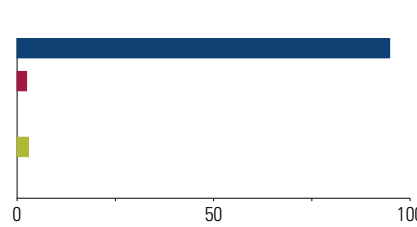
Morningstar Style Box™



## Style Breakdown

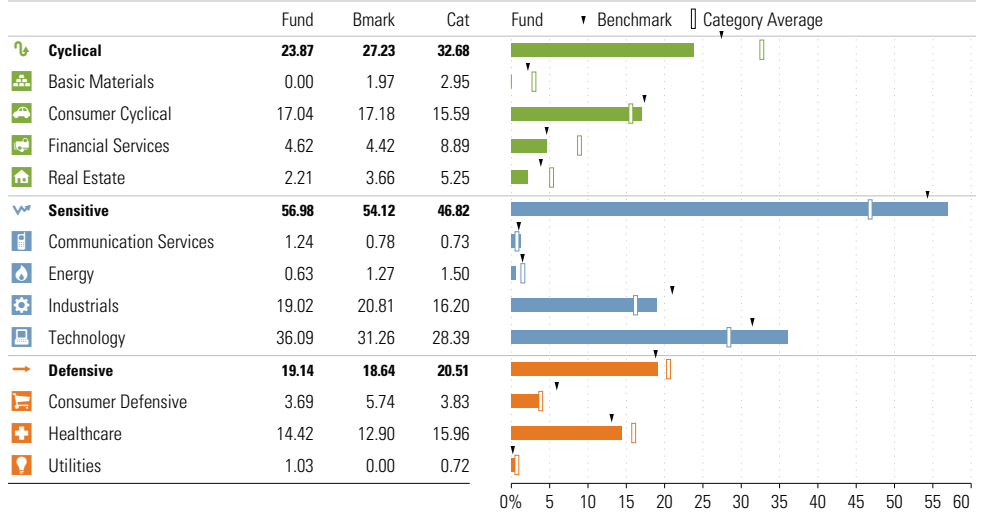


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	94.80	92.66
Non-US Stocks	2.41	4.06
Bonds	0.00	0.03
Cash	2.80	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
⊕ Ssc Government Mm Gvmxx	2.80	2.80	—	—
CoStar Group Inc	2.14	4.93	75.85	Real Estate
⊕ Advanced Micro Devices Inc	2.08	7.01	57.04	Technology
CDW Corp	1.99	9.00	53.15	Technology
Motorola Solutions Inc	1.89	10.88	49.62	Technology
⊖ RingCentral Inc Class A	1.86	12.75	52.43	Technology
Bright Horizons Family Solutions Inc	1.86	14.61	36.83	Consumer Cyclical
Cintas Corp	1.83	16.44	59.59	Industrials
Roper Technologies Inc	1.73	18.18	34.32	Industrials
Veeva Systems Inc Class A	1.73	19.91	70.95	Technology
Bio-Rad Laboratories Inc	1.70	21.61	43.29	Healthcare
L3Harris Technologies Inc	1.65	23.26	56.52	Industrials
⊖ Burlington Stores Inc	1.55	24.81	22.84	Consumer Defensive
⊕ Twilio Inc A	1.52	26.33	23.14	Technology
Heico Corp	1.51	27.84	61.36	Industrials

**Total Holdings 100**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# Neuberger Berman Sustainable Eq R6 NRSRX

Morningstar Category  
Large Blend

Morningstar Index  
S&P 500 TR USD

## Portfolio Manager(s)

Sajjad Ladiwala since 12-2003  
Ingrid Dyott since 12-2003

## Quantitative Screens

✗ **Performance:** The fund has finished in the Large Blend category's top three quartiles in 3 of the 6 years it's been in existence.

✔ **Management:** The fund's management has been in place for 15.79 years.

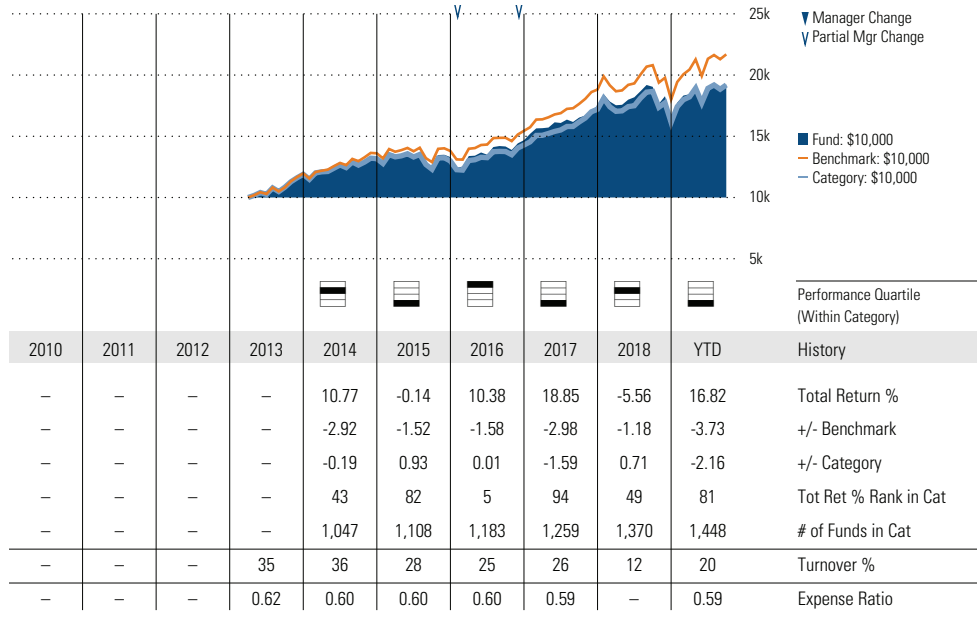
✗ **Style:** The fund has landed in its primary style box — Large Blend — 62.86 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.59 is 35.16% lower than the Large Blend category average.

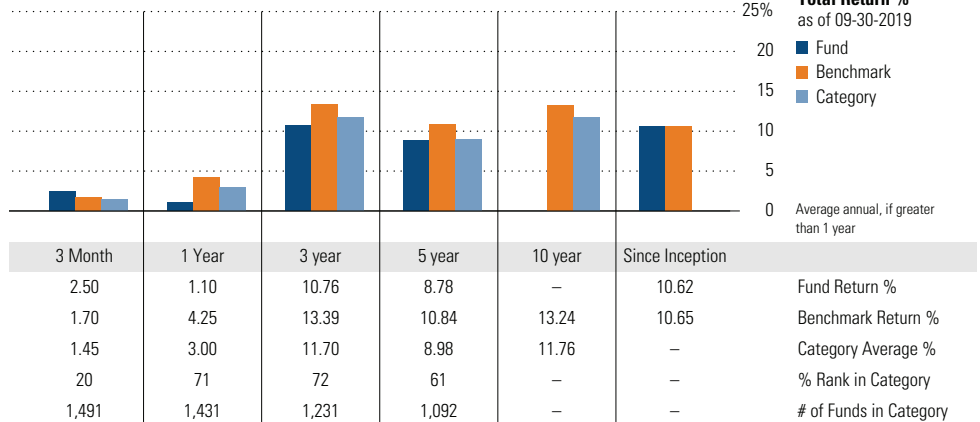
## Morningstar Investment Management LLC Analysis

We are placing Neuberger Berman Sustainable Equity on watch due to performance issues. The fund has lagged since Ingrid Dyott and Sajjad Ladiwala took over for longtime lead manager Arthur Moretti in early 2016. While Dyott and Sajjad are both experienced investors who supported Moretti prior to his retirement, they have not yet replicated his success. While 15-year returns for the fund remain solid, returns over shorter trailing periods lag both the large-growth category and the large-blend category, to which the fund was moved in 2018. While the fund is on watch, we will monitor the portfolio and performance characteristics closely.

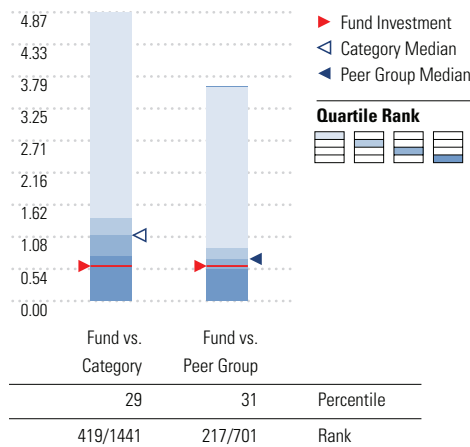
## Growth of \$10,000



## 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	-2.18	-	-1.24
Beta	0.99	-	0.96
R-Squared	94.64	-	93.99
Standard Deviation	12.37	12.18	12.01
Sharpe Ratio	0.76	0.96	0.84
Tracking Error	2.87	-	2.98
Information Ratio	-0.92	-	-1.29
Up Capture Ratio	91.80	-	91.29
Down Capture Ratio	103.95	-	97.85

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	20.26	20.32	20.89
Price/Book Ratio	3.09	3.18	3.47
Geom Avg Mkt Cap \$B	54.05	111.20	178.81
ROE	26.26	26.31	28.46

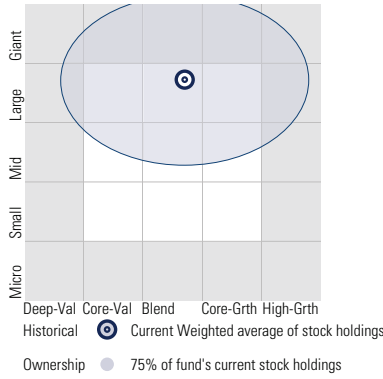
# Neuberger Berman Sustainable Eq R6 NRSRX

Morningstar Category  
Large Blend

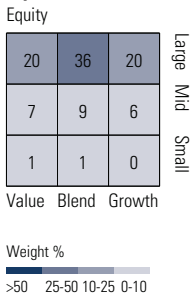
Morningstar Index  
S&P 500 TR USD

## Style Analysis as of 09-30-2019

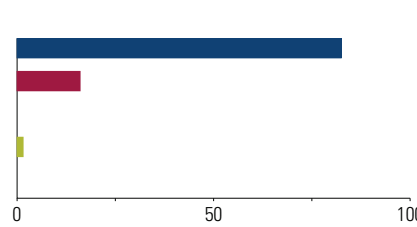
Morningstar Style Box™



## Style Breakdown

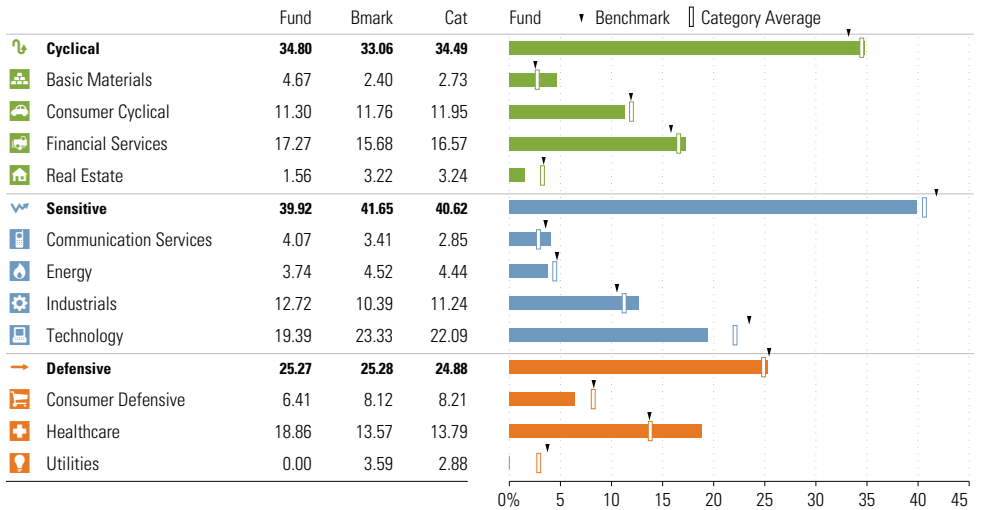


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	82.46	94.56
Non-US Stocks	16.02	2.95
Bonds	0.00	0.37
Cash	1.52	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
⊖ Texas Instruments Inc	4.28	4.28	39.21	Technology
⊖ Intercontinental Exchange Inc	4.16	8.44	23.58	Financial Services
⊖ Comcast Corp Class A	4.01	12.45	33.63	Communication Svc
⊖ Advance Auto Parts Inc	3.47	15.92	5.16	Consumer Cyclical
⊖ Unilever NV ADR	3.46	19.38	14.12	Consumer Defensive
⊖ Becton, Dickinson and Co	3.38	22.76	13.29	Healthcare
⊖ Medtronic PLC	3.38	26.15	21.15	Healthcare
⊖ Microsoft Corp	3.36	29.50	38.24	Technology
⊖ Alphabet Inc A	3.35	32.85	16.86	Technology
⊖ Stanley Black & Decker Inc	3.35	36.20	22.28	Industrials
⊖ Danaher Corp	3.25	39.45	40.55	Healthcare
⊖ Aptiv PLC	3.24	42.69	43.06	Consumer Cyclical
⊖ JPMorgan Chase & Co	3.14	45.83	23.02	Financial Services
⊖ AmerisourceBergen Corp	2.94	48.77	12.27	Healthcare
⊖ Cigna Corp	2.91	51.68	-20.06	Healthcare

Total Holdings 47

⊕ 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.

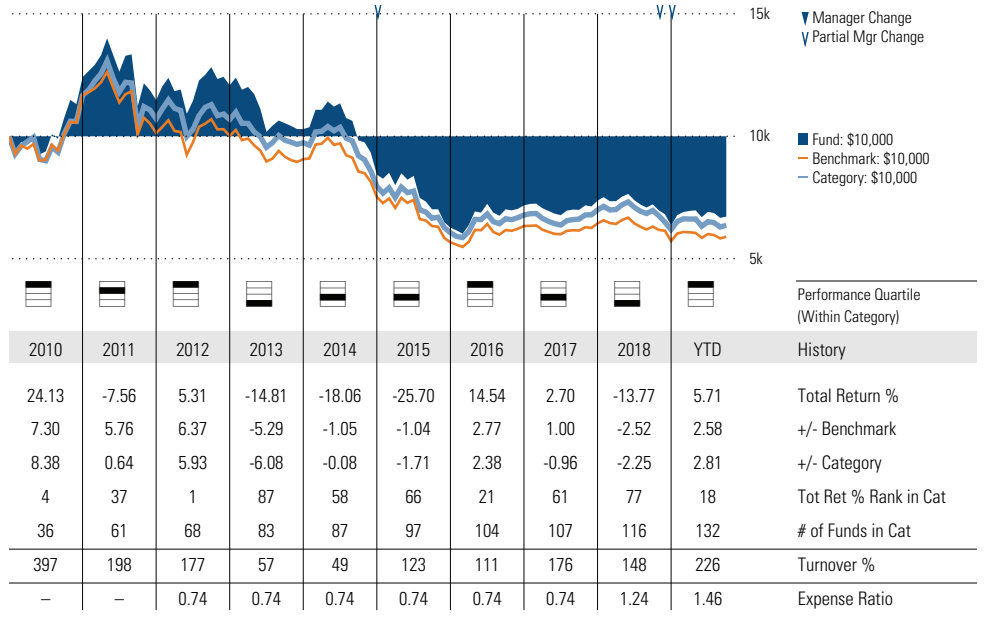
Style Consistency is not calculated for Fixed Income funds.

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

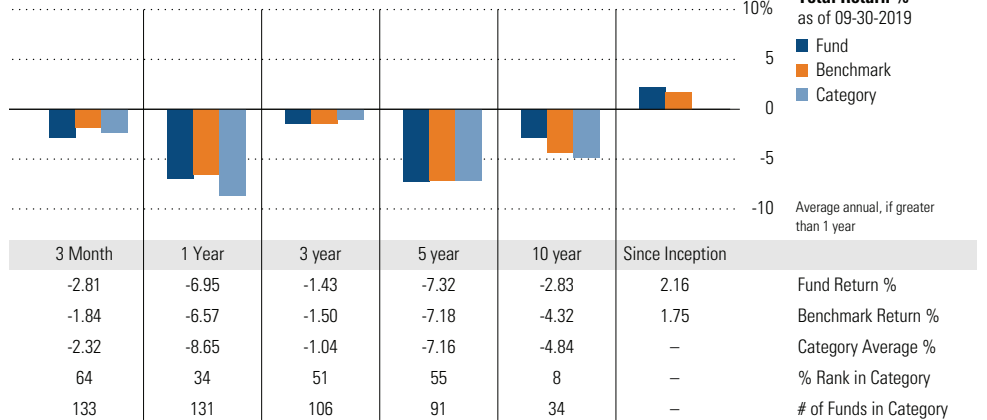
## Morningstar Investment Management LLC Analysis

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.

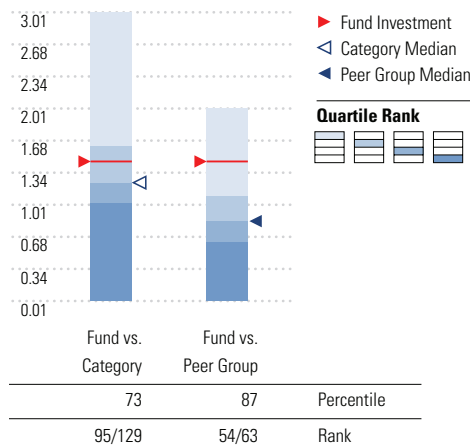
## Growth of \$10,000



## 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

	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

	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

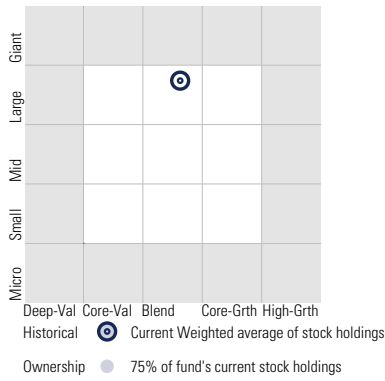
# PIMCO Commodity Real Ret Strat Instl PCRIX

**Morningstar Category**  
Commodities Broad Basket

**Morningstar Index**  
Bloomberg Commodity TR USD

## Style Analysis as of 09-30-2019

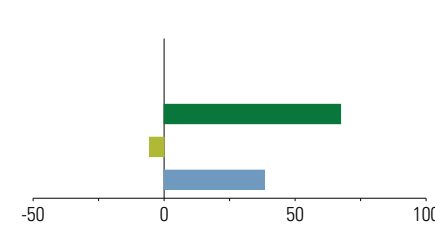
Morningstar Style Box™



## Style Breakdown

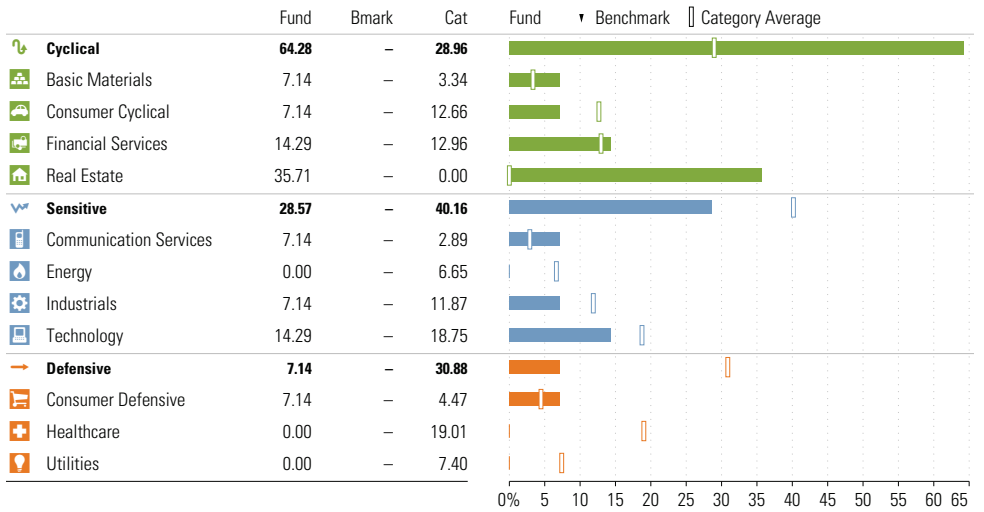


## Asset Allocation as of 09-30-2019



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 Income Instl PIMIX

**Morningstar Category**  
Multisector Bond

**Morningstar Index**  
BBgBarc US Universal TR USD

## Portfolio Manager(s)

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

## Quantitative Screens

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

✔ **Management:** The fund's management has been in place for 12.51 years.

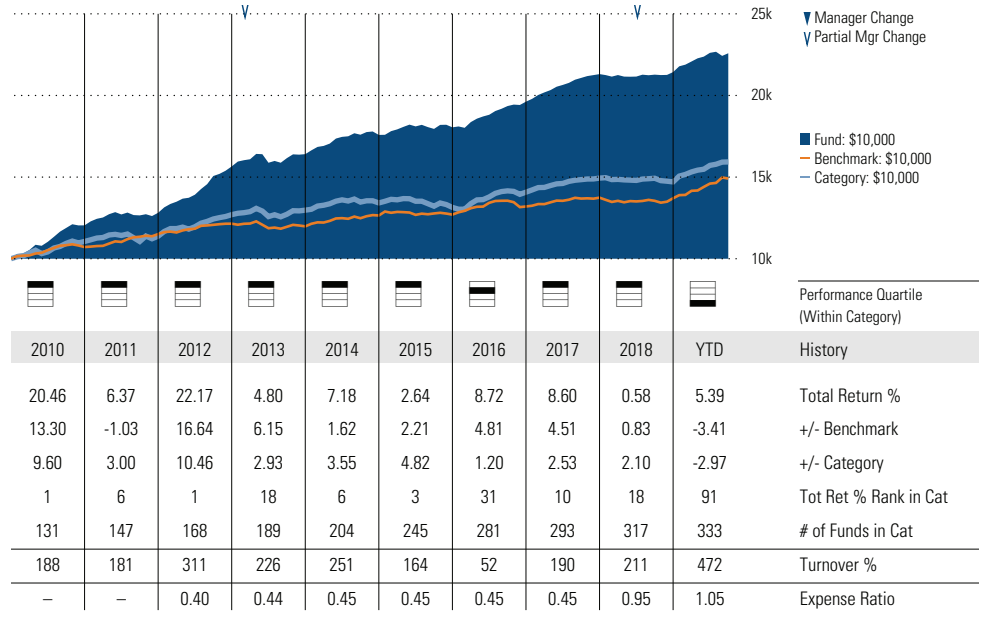
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 1.05 is 1.87% lower than the Multisector Bond category average.

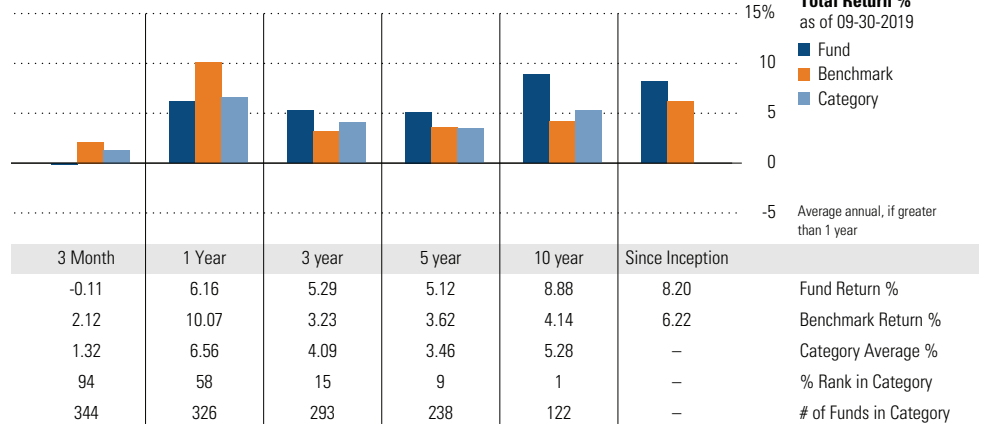
## Morningstar Investment Management LLC Analysis

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

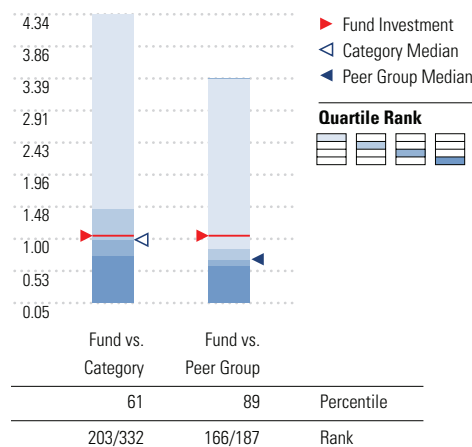
## Growth of \$10,000



## 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	4.52	-	2.50
Beta	0.21	-	0.50
R-Squared	11.12	-	32.11
Standard Deviation	1.90	3.09	3.00
Sharpe Ratio	1.84	0.54	0.93
Tracking Error	3.04	-	2.99
Information Ratio	0.67	-	0.31
Up Capture Ratio	76.06	-	82.75
Down Capture Ratio	-26.30	-	29.96

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Avg Eff Duration	0.44	4.55	3.99
Avg Eff Maturity	3.30	7.69	6.39

# PIMCO Income Instl PIMIX

**Morningstar Category**  
Multisector Bond

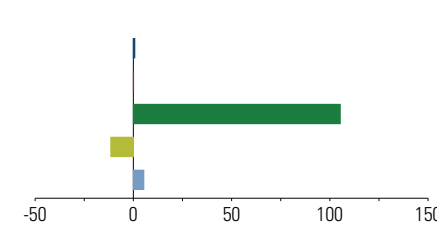
**Morningstar Index**  
BBgBarc US Universal TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	0.74	1.35
Non-US Stocks	0.11	0.40
Bonds	105.30	88.12
Cash	-11.48	6.96
Other	5.33	3.17
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	56.00	67.64	15.27
AA	7.00	3.23	10.34
A	4.00	10.03	13.36
BBB	14.00	10.89	20.77
BB	6.00	3.19	19.62
B	7.00	3.64	12.71
Below B	6.00	1.38	2.29
Not Rated	0.00	0.00	5.64

## Sector Weighting as of 09-30-2019

	Fund	Bmark	Cat	Fund	Benchmark	Category Average
<b>Government</b>	<b>26.45</b>	-	<b>14.56</b>			
Treasury	4.53	-	9.30			
Inflation - Protected	0.70	-	1.53			
Agency/Quasi Agency	0.16	-	0.89			
Other Government Related	21.06	-	2.84			
<b>Corporate</b>	<b>8.05</b>	-	<b>29.04</b>			
Corporate Bond	5.21	-	24.92			
Bank Loan	1.32	-	2.09			
Convertible	1.51	-	1.64			
Preferred	0.01	-	0.39			
<b>Securitized</b>	<b>25.81</b>	-	<b>30.54</b>			
Agency MBS Pass-Through	11.44	-	8.18			
Agency MBS ARM	0.00	-	0.03			
Agency MBS CMO	0.66	-	5.18			
Non-Agency Residential MBS	3.85	-	5.43			
Commercial MBS	0.36	-	1.35			
Asset-Backed	9.49	-	10.32			
Covered Bond	0.01	-	0.05			
<b>Municipal</b>	<b>0.05</b>	-	<b>0.79</b>			
<b>Cash &amp; Equivalents</b>	<b>24.39</b>	-	<b>23.85</b>			
<b>Other</b>	<b>13.42</b>	-	<b>0.79</b>			

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

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ Irs Usd 3.00000 06/19/19-5y Cme	06-2024	14.34	14.34	-
Irs Jpy 0.45000 03/20/19-10y Lch	03-2029	14.26	28.60	-
⊕ Irs Jpy 0.45000 03/20/19-10y Lch	03-2029	13.67	42.26	-
⊕ Irs Usd 3.00000 06/19/19-5y Cme	06-2024	13.54	55.80	-
Irs Eur 0.00000 08/19/19-2y Lch	08-2021	13.10	68.90	-
⊕ Irs Eur 0.00000 08/19/19-2y Lch	08-2021	13.00	81.90	-
⊕ US 5 Year Note (CBT) Sept19	09-2019	9.56	91.46	-
Cirs Usd 4y Mat 3.85/2.00% M 7/2020 Dub	07-2022	7.92	99.38	-
Cirs Usd 4y Mat 3.82/2.00% M 7/2020 Glm	07-2022	7.92	107.30	-
Cirs Usd 4y Mat 3.82/2.00% M 6/2020 Myc	06-2022	7.91	115.21	-

**Total Holdings 7621**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# PIMCO International Bond (USD-Hdg) Instl PFORX

**Morningstar Category**  
World Bond-USD Hedged

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

## Portfolio Manager(s)

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

## Quantitative Screens

✔ **Performance:** The fund has finished in the World Bond-USD Hedged 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 5.01 years.

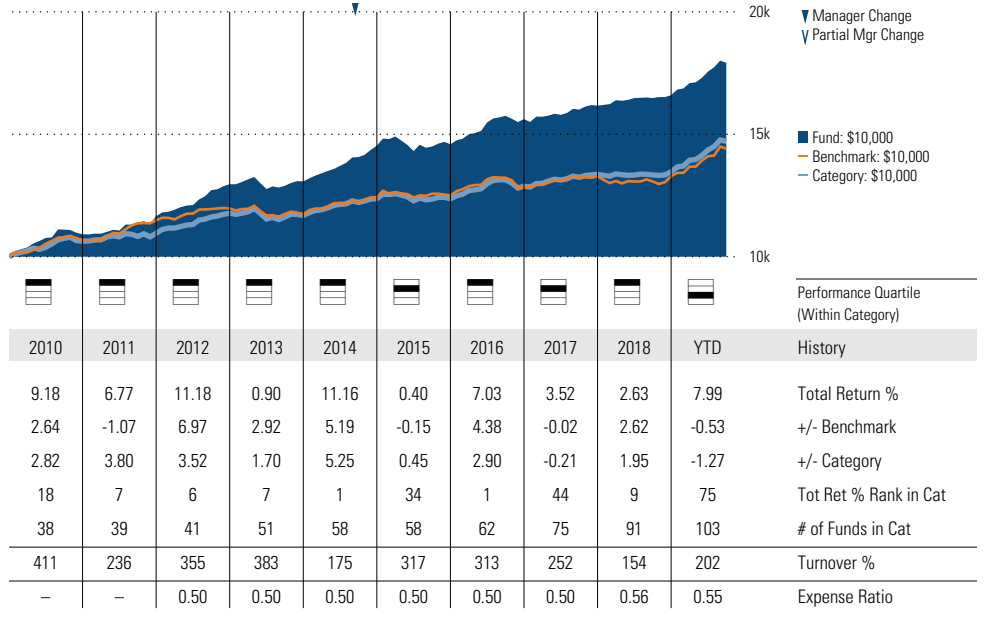
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.55 is 30.38% lower than the World Bond-USD Hedged category average.

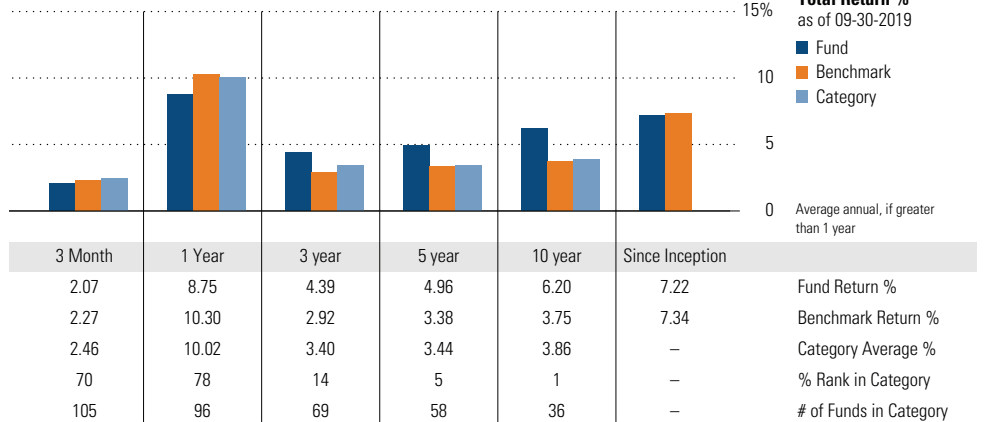
## Morningstar Investment Management LLC Analysis

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.

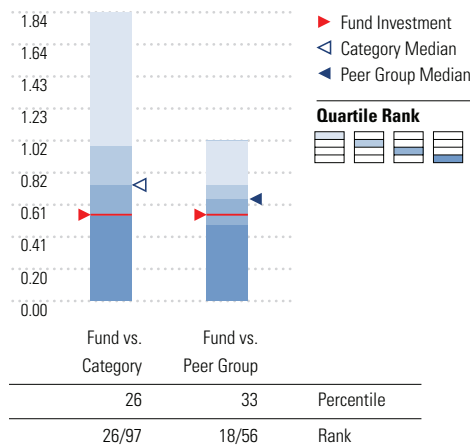
## Growth of \$10,000



## 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	2.94	-	1.46
Beta	0.47	-	0.68
R-Squared	50.35	-	66.43
Standard Deviation	2.23	3.35	2.80
Sharpe Ratio	1.25	0.41	0.68
Tracking Error	2.36	-	2.04
Information Ratio	0.62	-	0.28
Up Capture Ratio	79.57	-	85.26
Down Capture Ratio	12.45	-	53.20

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Avg Eff Duration	8.07	4.43	-
Avg Eff Maturity	10.41	-	-

# PIMCO International Bond (USD-Hdg) Instl PFORX

**Morningstar Category**  
World Bond-USD Hedged

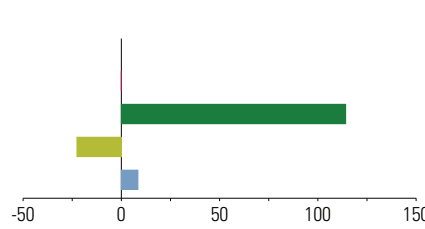
**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## 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	0.03	-
Bonds	114.14	-
Cash	-22.59	-
Other	8.42	-
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## Credit Rating Breakdown

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

## Sector Weighting as of 09-30-2019

	Fund	Bmark	Cat	Fund	Benchmark	Category Average
<b>Government</b>	<b>38.88</b>	-	-			
Treasury	8.73	-	-			
Inflation – Protected	1.63	-	-			
Agency/Quasi Agency	2.06	-	-			
Other Government Related	26.46	-	-			
<b>Corporate</b>	<b>4.96</b>	-	-			
Corporate Bond	4.02	-	-			
Bank Loan	0.16	-	-			
Convertible	0.78	-	-			
Preferred	0.00	-	-			
<b>Securitized</b>	<b>8.97</b>	-	-			
Agency MBS Pass-Through	4.41	-	-			
Agency MBS ARM	0.00	-	-			
Agency MBS CMO	0.05	-	-			
Non-Agency Residential MBS	0.55	-	-			
Commercial MBS	0.04	-	-			
Asset-Backed	1.88	-	-			
Covered Bond	2.04	-	-			
<b>Municipal</b>	<b>0.03</b>	-	-			
<b>Cash &amp; Equivalents</b>	<b>29.29</b>	-	-			
<b>Other</b>	<b>17.05</b>	-	-			

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

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ Irs Usd R 3ml/1ml+9.125 03/18/21-22 Cme	03-2022	27.05	27.05	-
⊕ Irs Usd R 3ml/1ml+9.125 03/18/21-22 Cme	03-2022	27.05	54.10	-
✱ CashOffSet	-	22.54	76.64	-
⊖ Fin Fut Uk 90day Ice (Red) 09/16/20	09-2020	20.60	97.24	-
⊖ Fin Fut Uk 90day Ice (Wht) 09/18/19	09-2019	20.59	117.83	-
⊕ EUROPEAN MONETARY UNION EURO_Pay	08-2019	17.56	135.39	-
⊕ EUROPEAN MONETARY UNION EURO_Receive	08-2019	17.55	152.94	-
⊕ Offset: Unsettled Trades	-	16.01	168.95	-
Irs Eur 0.25000 09/18/19-5y Lch	09-2024	13.81	182.76	-
⊕ Irs Eur 0.25000 09/18/19-5y Lch	09-2024	13.49	196.25	-

**Total Holdings 1621**

⊕ Increase ⊖ Decrease ✱ New to Portfolio

# PIMCO Real Return Instl PRRIX

**Morningstar Category**  
Inflation-Protected Bond

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

## Portfolio Manager(s)

Mihir Worah since 12-2007  
Stephen Rodosky since 01-2019

## 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 11.76 years.

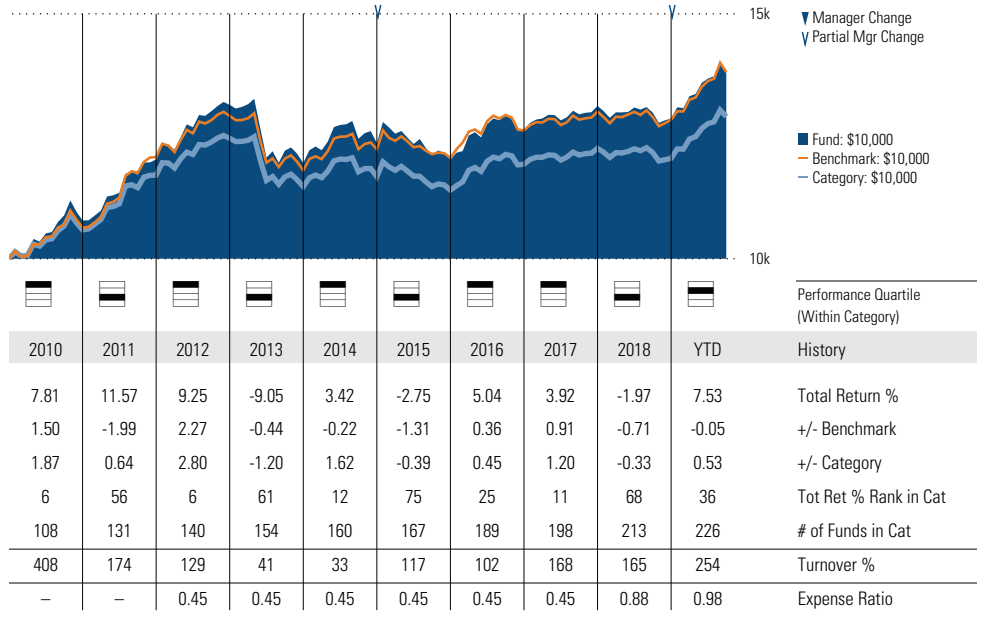
Style Consistency is not calculated for Fixed Income funds.

✘ **Net Expense:** The fund's expense ratio of 0.98 is 30.67% higher than the Inflation-Protected Bond category average.

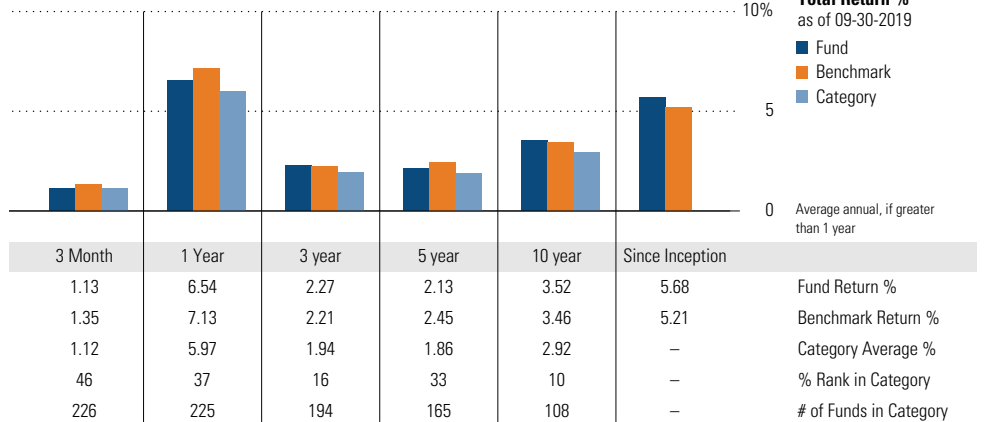
## Morningstar Investment Management LLC Analysis

This fund fails our expense screen. However, that is due to reporting requirements concerning costs that are incurred by executing the strategy and are already reflected in the fund's pre-expense returns. Based on previous calculation rules, the fund's expenses are comparable with other offerings in its share class.

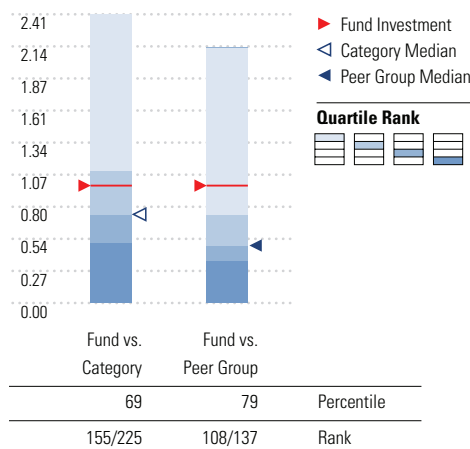
## Growth of \$10,000



## 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	-	0.08
Beta	0.94	-	0.76
R-Squared	95.34	-	82.74
Standard Deviation	3.17	3.28	2.86
Sharpe Ratio	0.22	0.20	0.04
Tracking Error	0.71	-	1.46
Information Ratio	0.08	-	-0.63
Up Capture Ratio	95.42	-	76.67
Down Capture Ratio	90.89	-	74.77

## Portfolio Metrics

	Fund	Bmark	Cat
Avg Eff Duration	7.59	4.52	7.65
Avg Eff Maturity	8.16	-	8.87

# PIMCO Real Return Instl PRRIX

**Morningstar Category**  
Inflation-Protected Bond

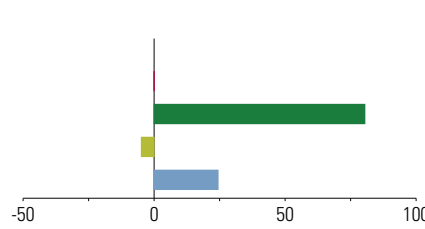
**Morningstar Index**  
BBgBarc US Treasury US TIPS TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

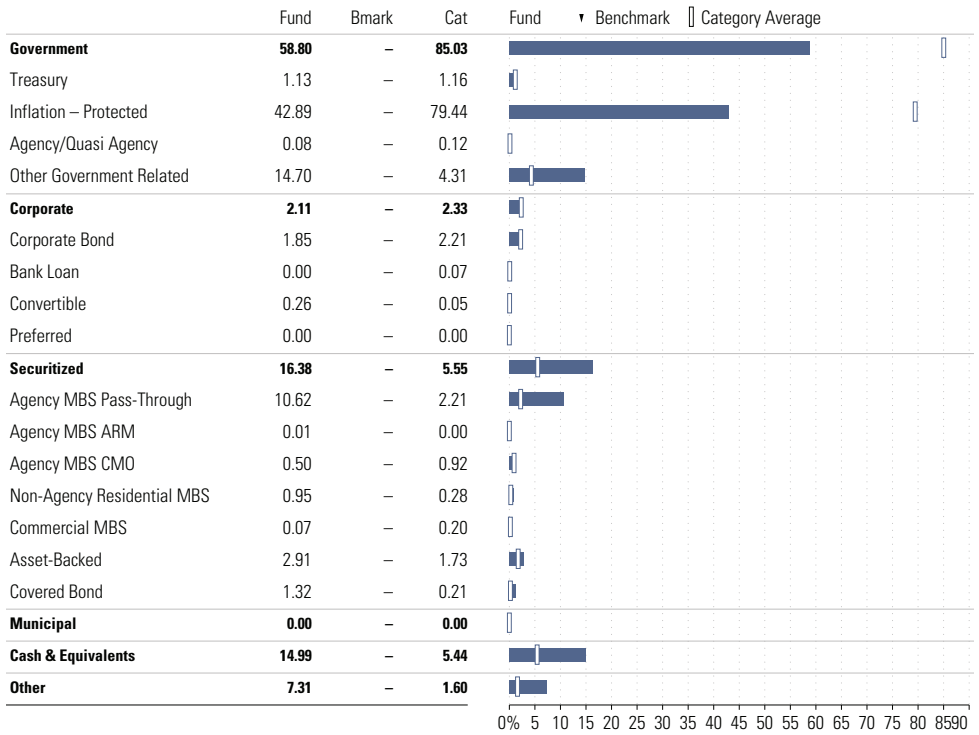


Asset Class	Net %	Cat%
US Stocks	0.00	0.01
Non-US Stocks	0.03	0.01
Bonds	80.43	97.96
Cash	-4.87	1.81
Other	24.41	0.21
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	49.00	0.00	84.12
AA	32.00	99.60	10.37
A	9.00	0.00	0.00
BBB	7.00	0.00	5.26
BB	1.00	0.00	0.00
B	1.00	0.00	0.00
Below B	1.00	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
⊕ Euro Schatz Sept19	09-2019	27.97	27.97	-
⊕ Offset: Unsettled Trades	-	18.30	46.27	-
⊕ Euro BUND Future Sept19	09-2019	15.59	61.86	-
⊕ Federal National Mortgage Association 3.5%	08-2049	7.97	69.83	-
⊖ United States Treasury Bonds 3.62%	04-2028	7.62	77.45	-
⊖ United States Treasury Notes 0.62%	01-2026	7.51	84.96	-
⊕ US 10 Year Note (CBT) Sept19	09-2019	7.23	92.20	-
⊕ Euro OAT Sept19	09-2019	7.09	99.29	-
⊕ United States Treasury Bonds 2.38%	01-2025	6.43	105.72	-
⊖ United States Treasury Bonds 3.88%	04-2029	5.85	111.57	-

**Total Holdings 1085**

⊕ 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.

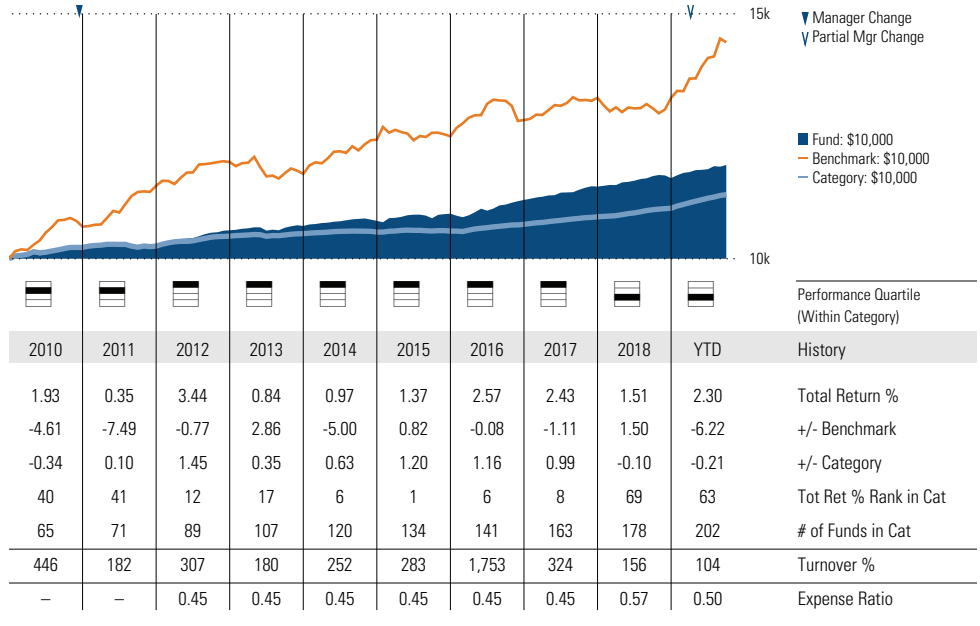
Style Consistency is not calculated for Fixed Income funds.

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

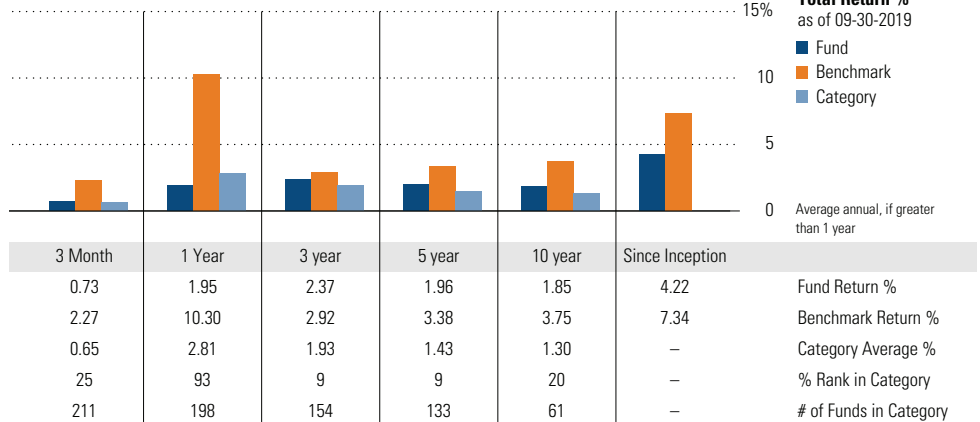
## Morningstar Investment Management LLC Analysis

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.

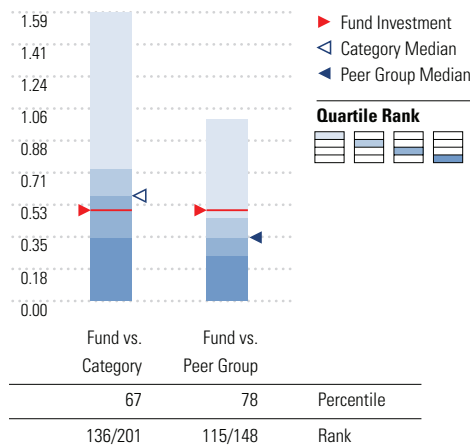
## Growth of \$10,000



## 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

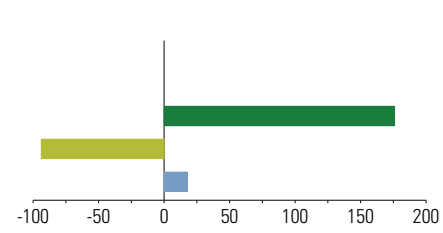
**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

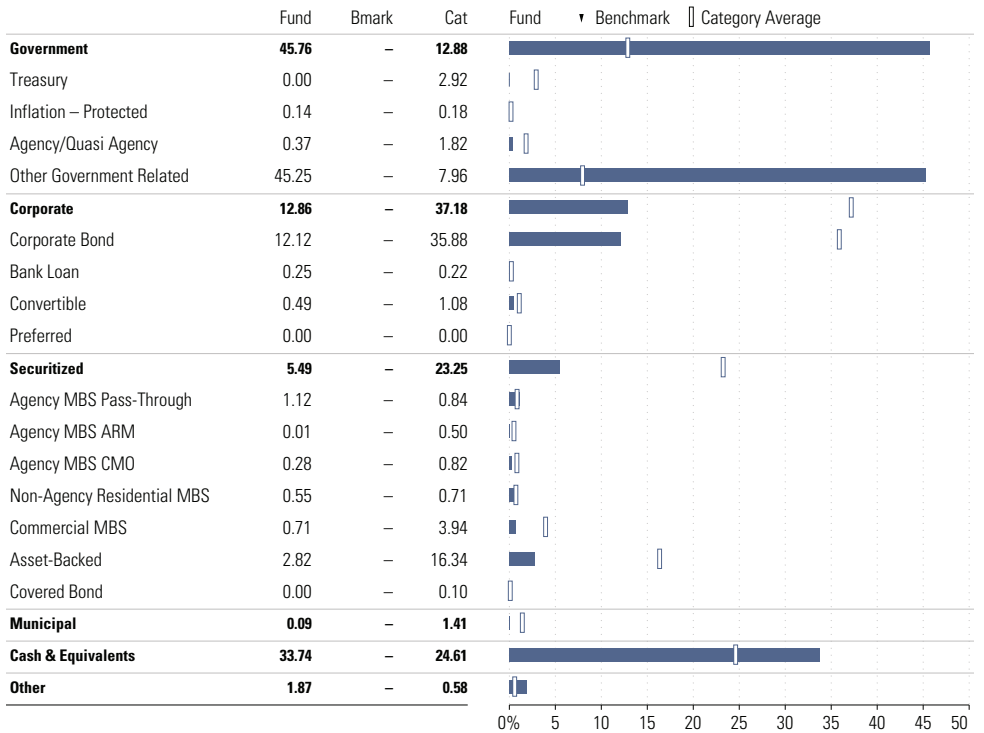


Asset Class	Net %	Cat%
US Stocks	0.00	0.01
Non-US Stocks	0.00	0.00
Bonds	175.91	77.26
Cash	-93.73	21.04
Other	17.82	1.69
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

## 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



# T. Rowe Price Retirement I 2010 I TRPAX

**Morningstar Category**  
Target-Date 2000-2010

**Morningstar Index**  
Morningstar Lifetime Mod 2010 TR USD

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2000-2010 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

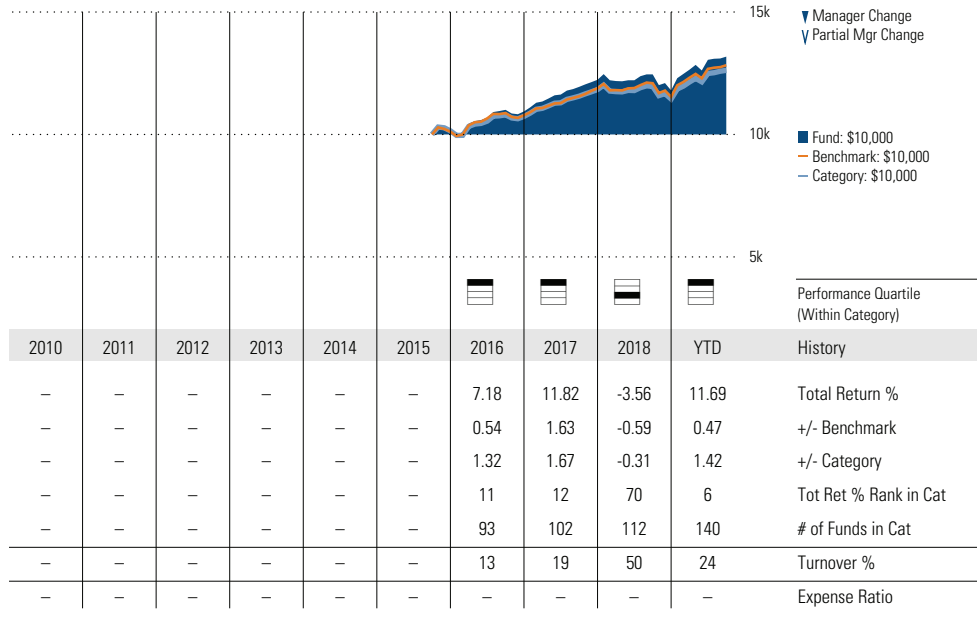
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.4 is 37.5% lower than the Target-Date 2000-2010 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.

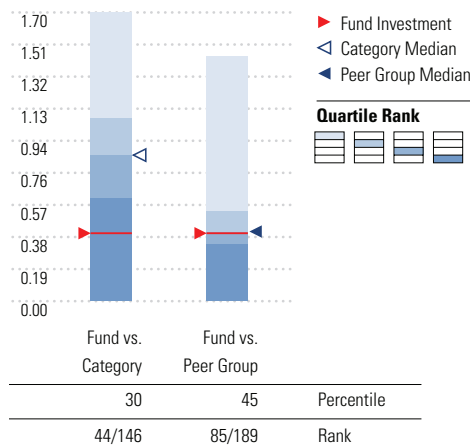
## Growth of \$10,000



## 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	-	0.06
Beta	1.06	-	0.93
R-Squared	97.94	-	95.06
Standard Deviation	5.07	4.74	4.49
Sharpe Ratio	0.89	0.85	0.82
Tracking Error	0.78	-	1.07
Information Ratio	0.68	-	-0.27
Up Capture Ratio	106.27	-	92.53
Down Capture Ratio	102.04	-	90.99

## Portfolio Metrics

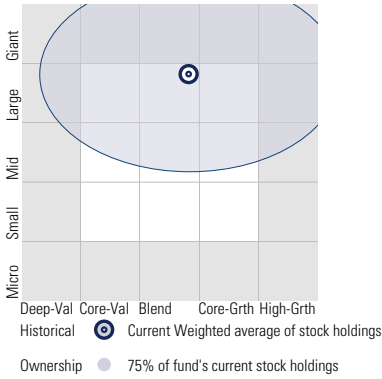
	Fund	Bmark	Cat
Price/Earnings Ratio	18.67	17.79	18.00
Price/Book Ratio	2.35	2.16	2.29
Avg Eff Duration	5.02	-	6.45

# T. Rowe Price Retirement I 2010 I TRPAX

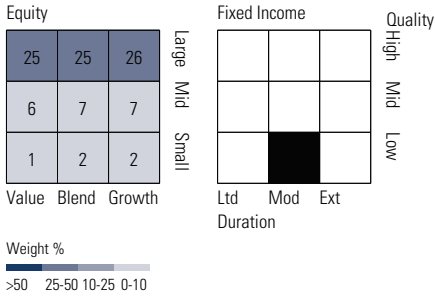
**Morningstar Category**  
Target-Date 2000-2010

**Morningstar Index**  
Morningstar Lifetime Mod 2010 TR USD

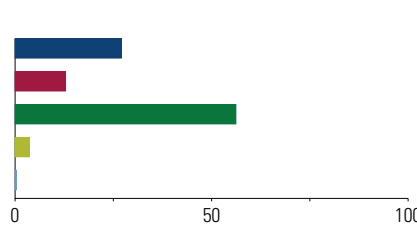
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

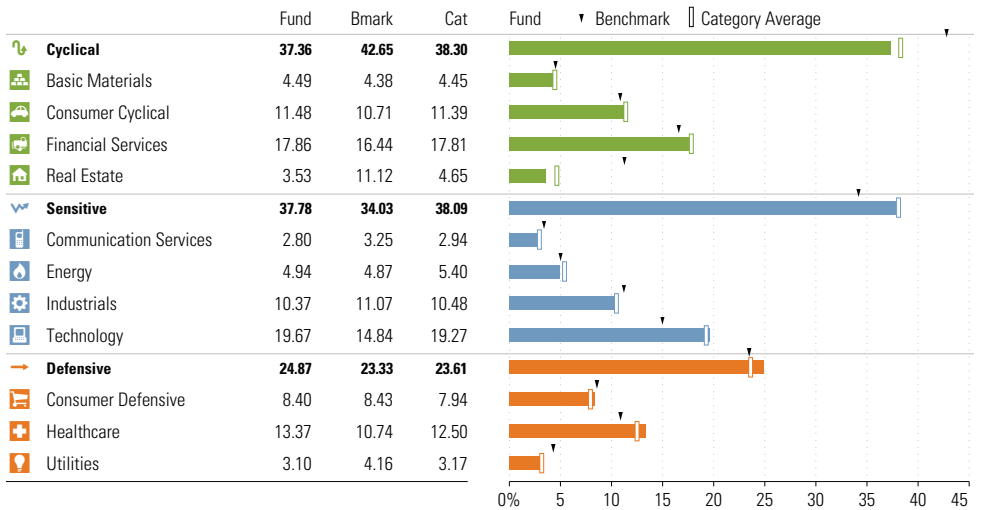


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	27.01	22.68
Non-US Stocks	12.84	12.46
Bonds	56.17	55.88
Cash	3.63	8.06
Other	0.35	0.92
<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
⊕ T. Rowe Price Equity Index 500 I	-	20.59	20.59	-	-
⊕ T. Rowe Price New Income I	-	18.57	39.15	-	-
⊕ T. Rowe Price Ltd Dur Infl Focus Bd I	-	16.58	55.74	-	-
⊕ T. Rowe Price Intl Bd (USD Hdgd) I	-	6.29	62.02	-	-
⊕ T. Rowe Price Emerging Markets Bond I	-	4.86	66.89	-	-
⊕ T. Rowe Price Dynamic Global Bond I	-	4.01	70.90	-	-
⊖ T. Rowe Price US Treasury Long-Term I	-	3.81	74.71	-	-
⊕ T. Rowe Price High Yield I	-	3.76	78.47	-	-
⊕ T. Rowe Price Overseas Stock I	-	3.55	82.02	-	-
⊕ T. Rowe Price International Stock I	-	3.51	85.54	-	-

**Total Holdings** 20

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2015 I TRFGX

**Morningstar Category**  
Target-Date 2015

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

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2015 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

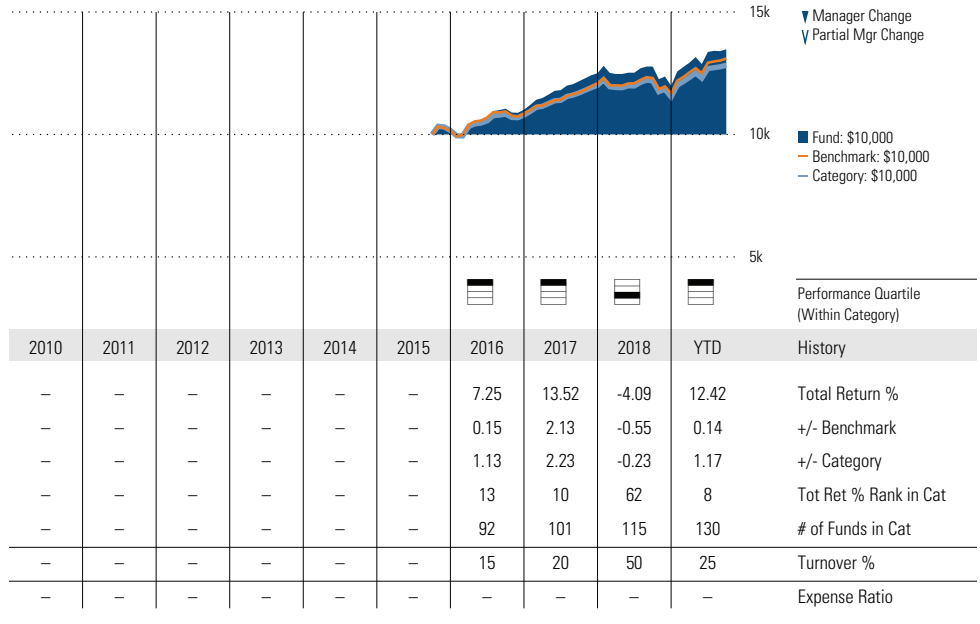
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.43 is 35.82% lower than the Target-Date 2015 category average.

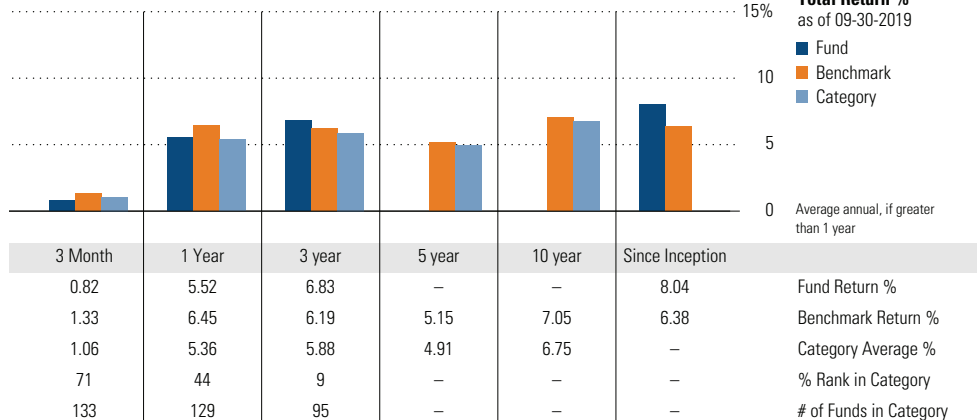
## Morningstar Investment Management LLC Analysis

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.

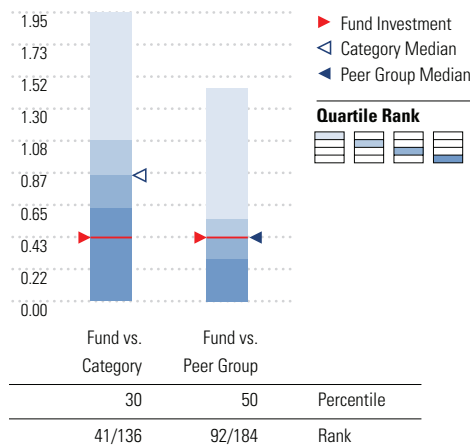
## Growth of \$10,000



## 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	0.05	-	-0.19
Beta	1.10	-	0.97
R-Squared	97.19	-	95.51
Standard Deviation	5.82	5.23	5.21
Sharpe Ratio	0.89	0.87	0.80
Tracking Error	1.10	-	1.16
Information Ratio	0.59	-	-0.27
Up Capture Ratio	107.90	-	95.13
Down Capture Ratio	104.60	-	96.58

## Portfolio Metrics

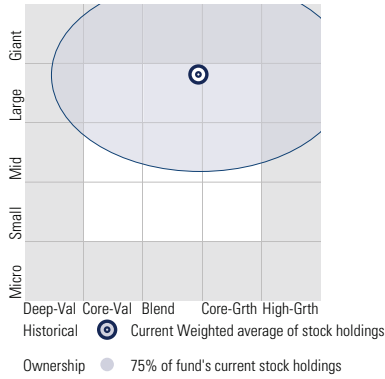
	Fund	Bmark	Cat
Price/Earnings Ratio	18.97	17.69	18.05
Price/Book Ratio	2.36	2.14	2.28
Avg Eff Duration	5.18	-	4.51

# T. Rowe Price Retirement I 2015 I TRFGX

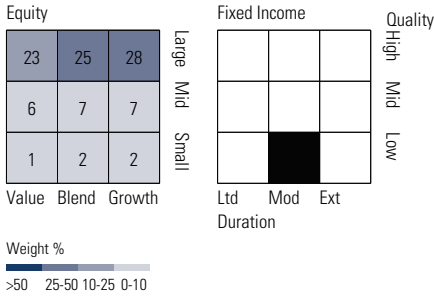
**Morningstar Category**  
Target-Date 2015

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

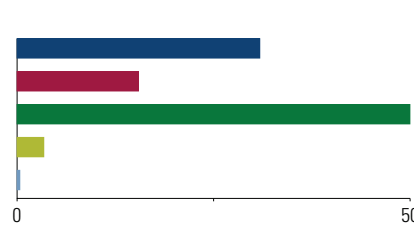
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

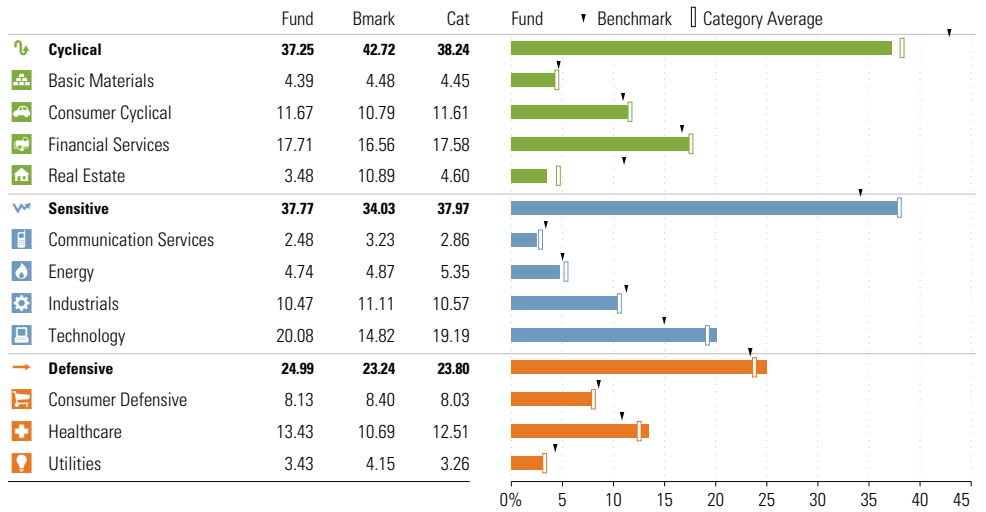


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	30.87	25.80
Non-US Stocks	15.44	14.69
Bonds	49.97	51.70
Cash	3.39	5.95
Other	0.34	1.86
<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
⊕ T. Rowe Price Equity Index 500 I	-	17.93	17.93	-	-
⊕ T. Rowe Price New Income I	-	16.96	34.90	-	-
⊕ T. Rowe Price Ltd Dur Infl Focus Bd I	-	13.65	48.55	-	-
⊕ T. Rowe Price Intl Bd (USD Hdgd) I	-	5.78	54.33	-	-
⊕ T. Rowe Price Emerging Markets Bond I	-	4.34	58.66	-	-
⊕ T. Rowe Price Overseas Stock I	-	4.13	62.79	-	-
⊕ T. Rowe Price International Stock I	-	4.10	66.89	-	-
⊖ T. Rowe Price US Treasury Long-Term I	-	3.74	70.63	-	-
⊕ T. Rowe Price Dynamic Global Bond I	-	3.71	74.34	-	-
⊕ T. Rowe Price International Value Eq I	-	3.54	77.88	-	-

**Total Holdings 22**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2020 I TRBRX

**Morningstar Category**  
Target-Date 2020

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

## Portfolio Manager(s)

Wyatt Lee since 09-2015  
Jerome Clark since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2020 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

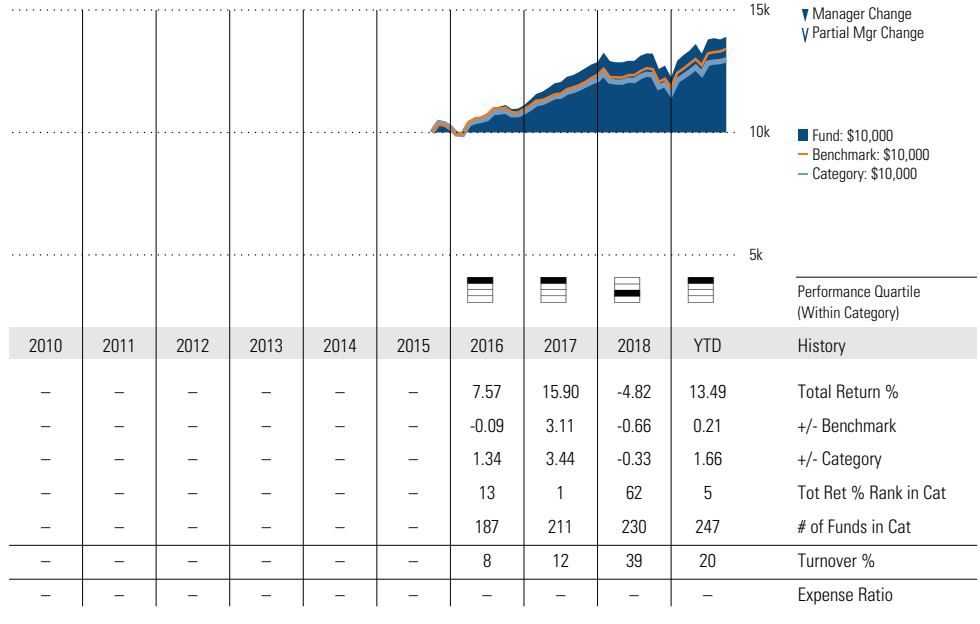
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.46 is 38.67% lower than the Target-Date 2020 category average.

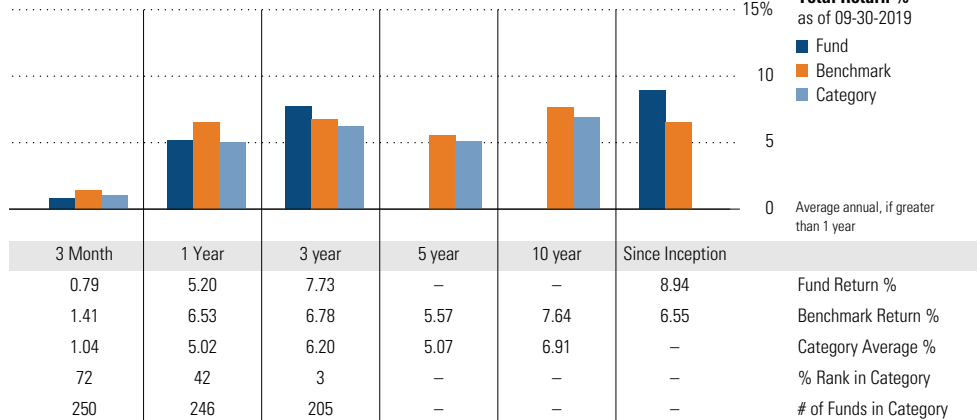
## Morningstar Investment Management LLC Analysis

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.

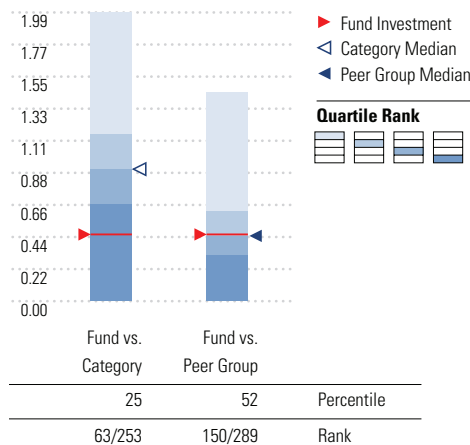
## Growth of \$10,000



## 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	-0.05	-	-0.25
Beta	1.15	-	0.92
R-Squared	96.98	-	93.65
Standard Deviation	6.81	5.85	5.53
Sharpe Ratio	0.89	0.88	0.78
Tracking Error	1.46	-	1.51
Information Ratio	0.65	-	-0.46
Up Capture Ratio	113.48	-	90.01
Down Capture Ratio	113.24	-	92.76

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	19.12	17.58	18.38
Price/Book Ratio	2.36	2.12	2.35
Avg Eff Duration	5.56	-	6.22

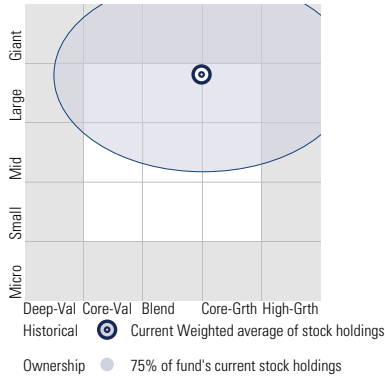
# T. Rowe Price Retirement I 2020 I TRBRX

**Morningstar Category**  
Target-Date 2020

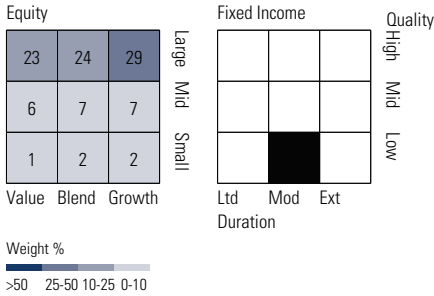
**Morningstar Index**  
Morningstar Lifetime Mod 2020 TR USD

## Style Analysis as of 09-30-2019

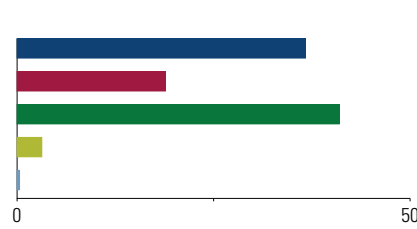
Morningstar Style Box™



## Style Breakdown

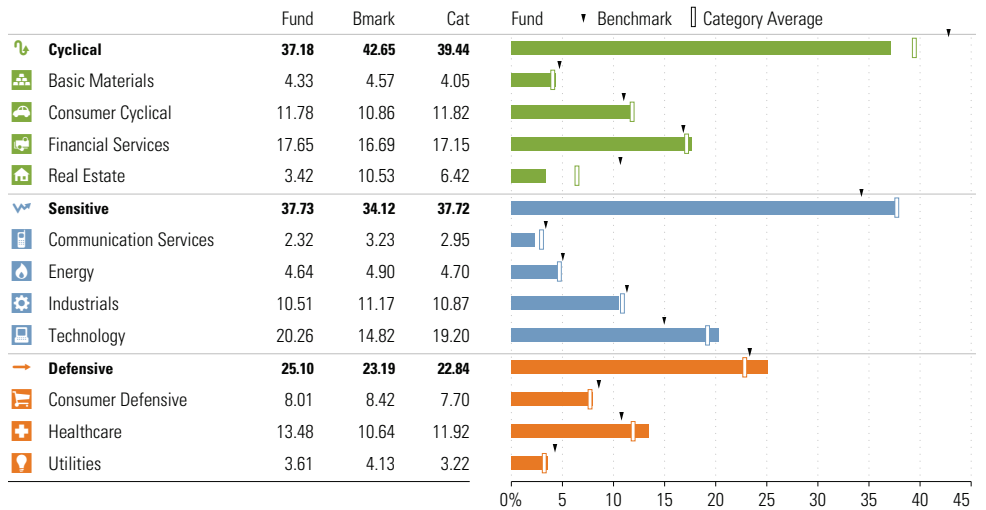


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	36.69	27.74
Non-US Stocks	18.87	12.68
Bonds	40.99	52.55
Cash	3.14	4.57
Other	0.31	2.47
<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
⊕ T. Rowe Price Equity Index 500 I	-	18.00	18.00	-	-
⊕ T. Rowe Price New Income I	-	15.05	33.05	-	-
⊕ T. Rowe Price Ltd Dur Infl Focus Bd I	-	8.68	41.73	-	-
⊕ T. Rowe Price Value I	-	5.37	47.09	-	-
⊖ T. Rowe Price Growth Stock I	-	5.23	52.32	-	-
⊕ T. Rowe Price Intl Bd (USD Hdgd) I	-	5.12	57.44	-	-
⊕ T. Rowe Price Overseas Stock I	-	4.98	62.41	-	-
⊕ T. Rowe Price International Stock I	-	4.91	67.33	-	-
⊕ T. Rowe Price International Value Eq I	-	4.26	71.59	-	-
⊕ T. Rowe Price Emerging Markets Bond I	-	3.67	75.26	-	-

## Total Holdings 22

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2025 I TRPHX

**Morningstar Category**  
Target-Date 2025

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

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2025 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

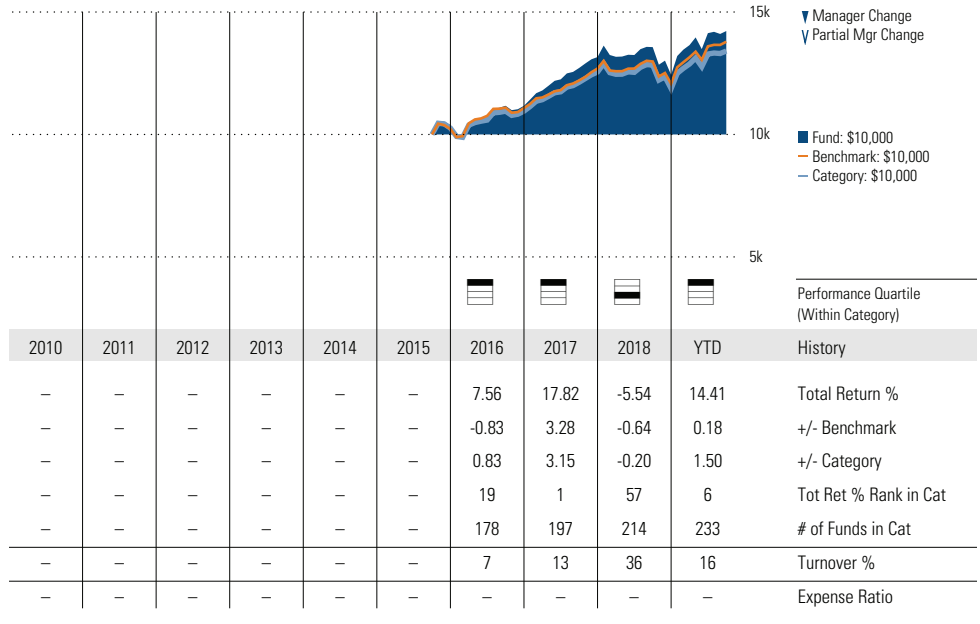
✔ **Style:** The fund has landed in its primary style box — Large Blend — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.5 is 32.43% lower than the Target-Date 2025 category average.

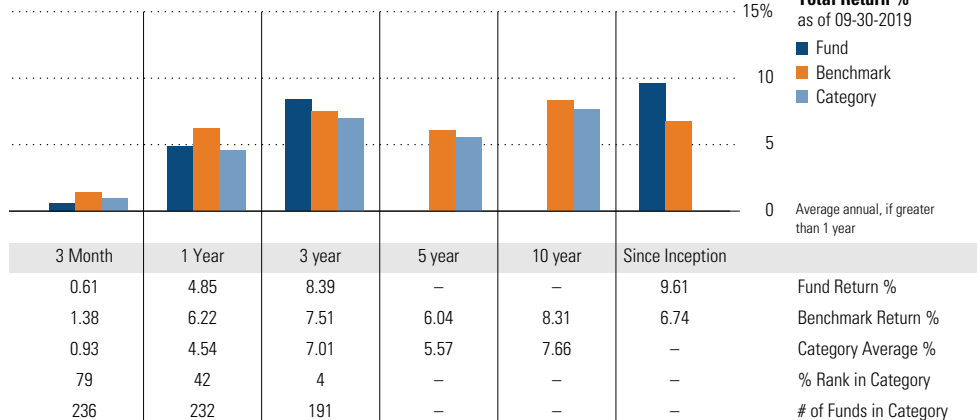
## Morningstar Investment Management LLC Analysis

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.

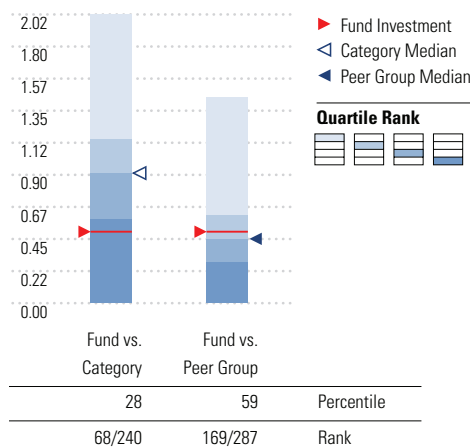
## Growth of \$10,000



## 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

Metric	Fund	Bmark	Cat
Alpha	-0.18	-	-0.47
Beta	1.14	-	0.99
R-Squared	97.24	-	96.65
Standard Deviation	7.73	6.67	6.69
Sharpe Ratio	0.87	0.88	0.79
Tracking Error	1.60	-	1.36
Information Ratio	0.55	-	-0.45
Up Capture Ratio	114.00	-	96.48
Down Capture Ratio	117.29	-	102.40

## Portfolio Metrics

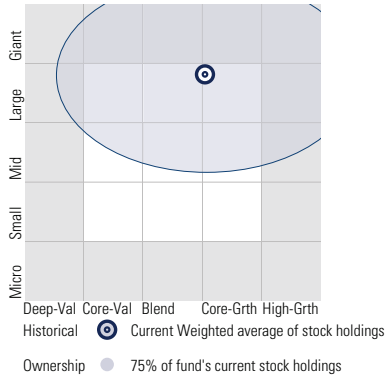
Metric	Fund	Bmark	Cat
Price/Earnings Ratio	19.34	17.46	18.20
Price/Book Ratio	2.37	2.09	2.30
Avg Eff Duration	6.03	-	6.28

# T. Rowe Price Retirement I 2025 I TRPHX

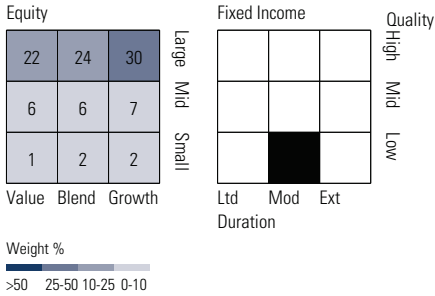
**Morningstar Category**  
Target-Date 2025

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

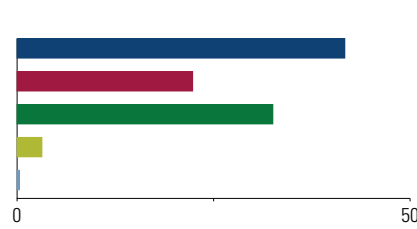
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

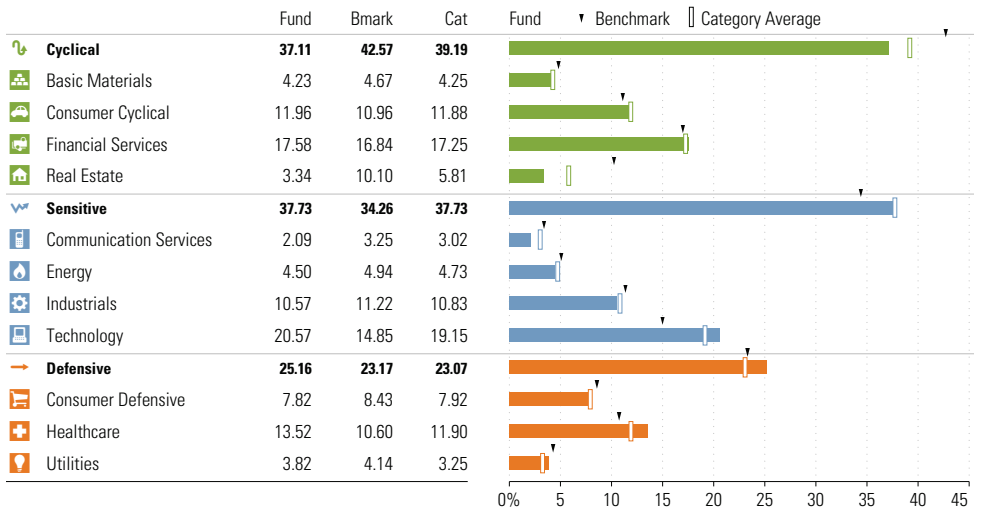


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	41.69	34.59
Non-US Stocks	22.33	17.91
Bonds	32.53	40.17
Cash	3.15	3.56
Other	0.30	3.78
<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
⊕ T. Rowe Price Equity Index 500 I	—	15.15	15.15	—	—
⊕ T. Rowe Price New Income I	—	12.89	28.05	—	—
⊕ T. Rowe Price Growth Stock I	—	8.92	36.96	—	—
⊕ T. Rowe Price Value I	—	8.90	45.87	—	—
⊕ T. Rowe Price Overseas Stock I	—	5.79	51.65	—	—
⊕ T. Rowe Price International Stock I	—	5.71	57.36	—	—
⊕ T. Rowe Price International Value Eq I	—	4.95	62.31	—	—
⊕ T. Rowe Price Ltd Dur Infl Focus Bd I	—	4.72	67.03	—	—
⊕ T. Rowe Price Intl Bd (USD Hdgd) I	—	4.41	71.43	—	—
⊕ T. Rowe Price US Treasury Long-Term I	—	3.52	74.95	—	—

**Total Holdings** 22

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# T. Rowe Price Retirement I 2030 I TRPCX

**Morningstar Category**  
Target-Date 2030

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

## Portfolio Manager(s)

Wyatt Lee since 09-2015  
Jerome Clark since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2030 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

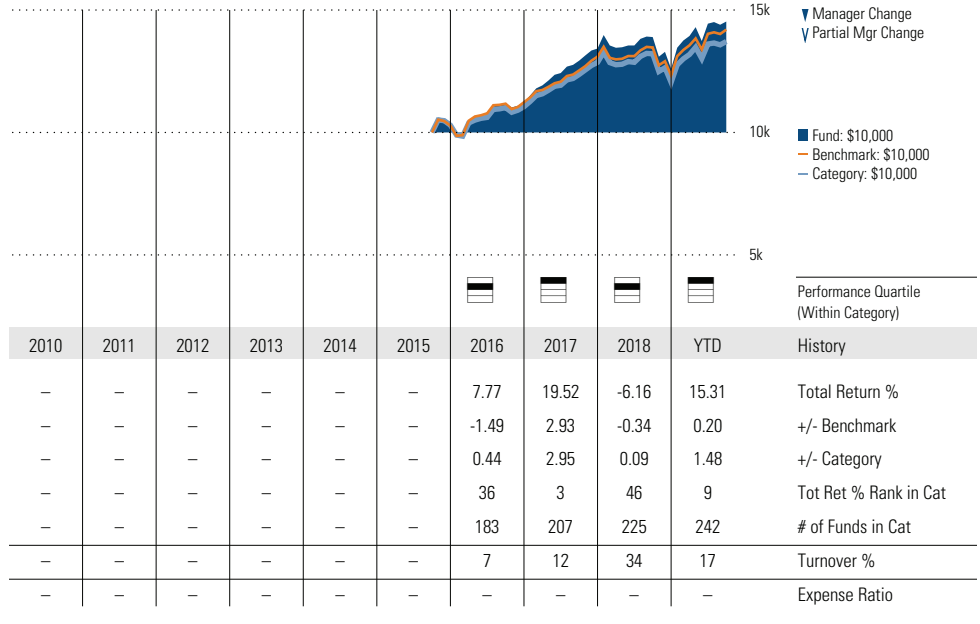
✘ **Style:** The fund has landed in its primary style box — Large Growth — 54.55 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.53 is 32.05% lower than the Target-Date 2030 category average.

## Morningstar Investment Management LLC Analysis

This fund fails our current style screen. Because this is a target-date fund, this screen failure does not concern us and we are still comfortable using this fund.

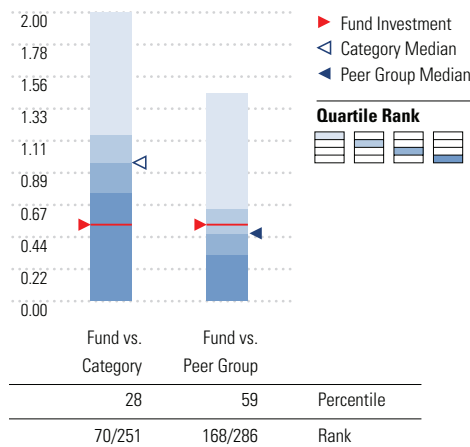
## Growth of \$10,000



## 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	0.01	-	-0.62
Beta	1.09	-	0.98
R-Squared	97.75	-	96.14
Standard Deviation	8.57	7.77	7.78
Sharpe Ratio	0.87	0.86	0.76
Tracking Error	1.47	-	1.48
Information Ratio	0.51	-	-0.50
Up Capture Ratio	108.58	-	95.88
Down Capture Ratio	108.20	-	102.42

## Portfolio Metrics

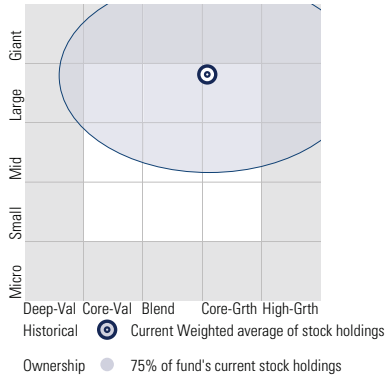
	Fund	Bmark	Cat
Price/Earnings Ratio	19.51	17.33	18.10
Price/Book Ratio	2.38	2.07	2.27
Avg Eff Duration	6.47	-	6.38

# T. Rowe Price Retirement I 2030 I TRPCX

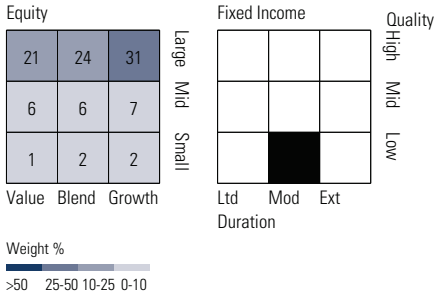
**Morningstar Category**  
Target-Date 2030

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

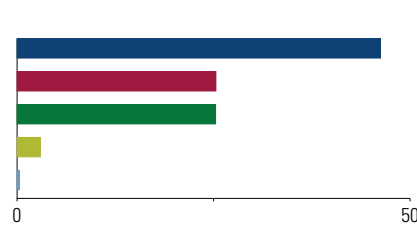
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

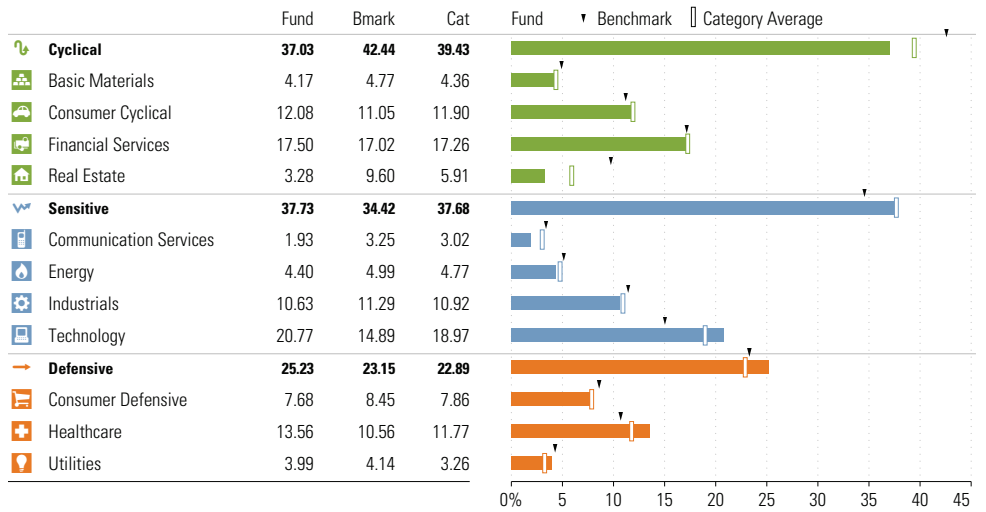


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	46.22	41.63
Non-US Stocks	25.29	22.54
Bonds	25.25	29.51
Cash	2.97	2.98
Other	0.28	3.35
<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
⊕ T. Rowe Price Equity Index 500 I	-	12.47	12.47	-	-
⊕ T. Rowe Price Growth Stock I	-	12.24	24.71	-	-
⊕ T. Rowe Price Value I	-	12.15	36.86	-	-
⊕ T. Rowe Price New Income I	-	10.62	47.48	-	-
⊕ T. Rowe Price Overseas Stock I	-	6.49	53.97	-	-
⊕ T. Rowe Price International Stock I	-	6.32	60.29	-	-
⊕ T. Rowe Price International Value Eq I	-	5.54	65.83	-	-
⊕ T. Rowe Price Emerging Markets Stock I	-	3.78	69.61	-	-
⊕ T. Rowe Price Intl Bd (USD Hdgd) I	-	3.69	73.29	-	-
⊕ T. Rowe Price Mid-Cap Growth I	-	3.25	76.54	-	-

**Total Holdings 22**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2035 I TRPJX

**Morningstar Category**  
Target-Date 2035

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

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2035 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

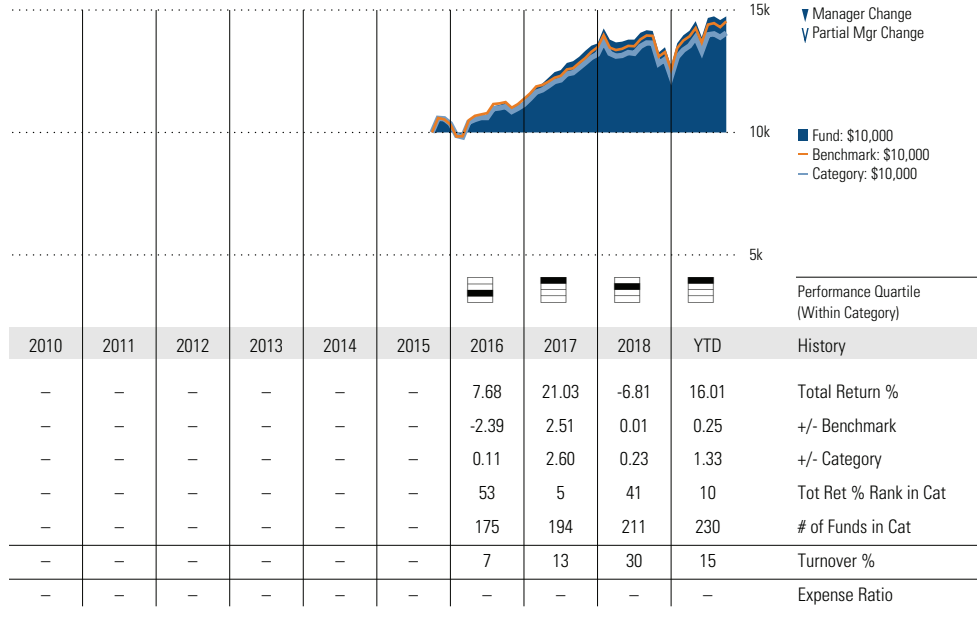
✔ **Style:** The fund has landed in its primary style box — Large Growth — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.57 is 25.97% 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.

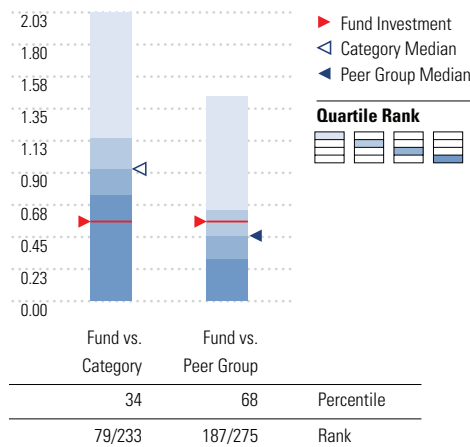
## Growth of \$10,000



## 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	0.31	-	-0.52
Beta	1.03	-	0.99
R-Squared	97.93	-	98.11
Standard Deviation	9.31	8.95	8.90
Sharpe Ratio	0.85	0.82	0.76
Tracking Error	1.36	-	1.32
Information Ratio	0.42	-	-0.53
Up Capture Ratio	103.18	-	96.38
Down Capture Ratio	99.91	-	100.63

## Portfolio Metrics

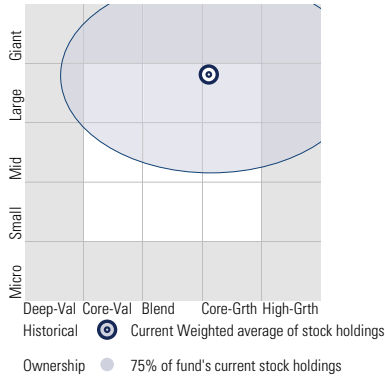
	Fund	Bmark	Cat
Price/Earnings Ratio	19.63	17.21	17.27
Price/Book Ratio	2.38	2.05	2.16
Avg Eff Duration	7.14	-	5.34

# T. Rowe Price Retirement I 2035 I TRPJX

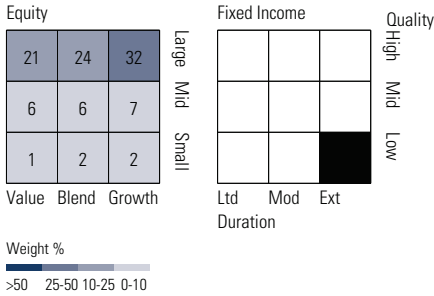
**Morningstar Category**  
Target-Date 2035

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

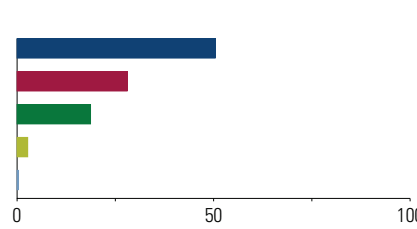
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

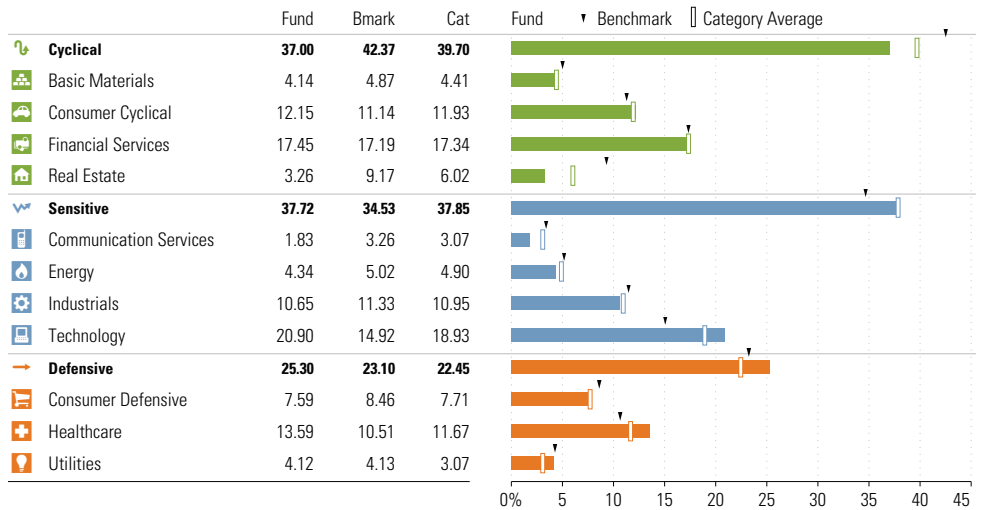


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	50.39	47.20
Non-US Stocks	27.99	26.19
Bonds	18.68	18.71
Cash	2.69	3.13
Other	0.26	4.77
<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
⊕ T. Rowe Price Growth Stock I	-	15.13	15.13	-	-
⊕ T. Rowe Price Value I	-	15.01	30.14	-	-
⊕ T. Rowe Price Equity Index 500 I	-	10.29	40.43	-	-
⊕ T. Rowe Price New Income I	-	8.56	48.99	-	-
⊕ T. Rowe Price Overseas Stock I	-	7.10	56.10	-	-
⊕ T. Rowe Price International Stock I	-	6.92	63.02	-	-
⊕ T. Rowe Price International Value Eq I	-	6.06	69.08	-	-
⊕ T. Rowe Price Emerging Markets Stock I	-	4.13	73.21	-	-
⊕ T. Rowe Price Mid-Cap Growth I	-	3.54	76.76	-	-
⊕ T. Rowe Price Mid-Cap Value I	-	3.31	80.07	-	-

**Total Holdings 21**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2040 I TRPDX

**Morningstar Category**  
Target-Date 2040

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

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2040 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

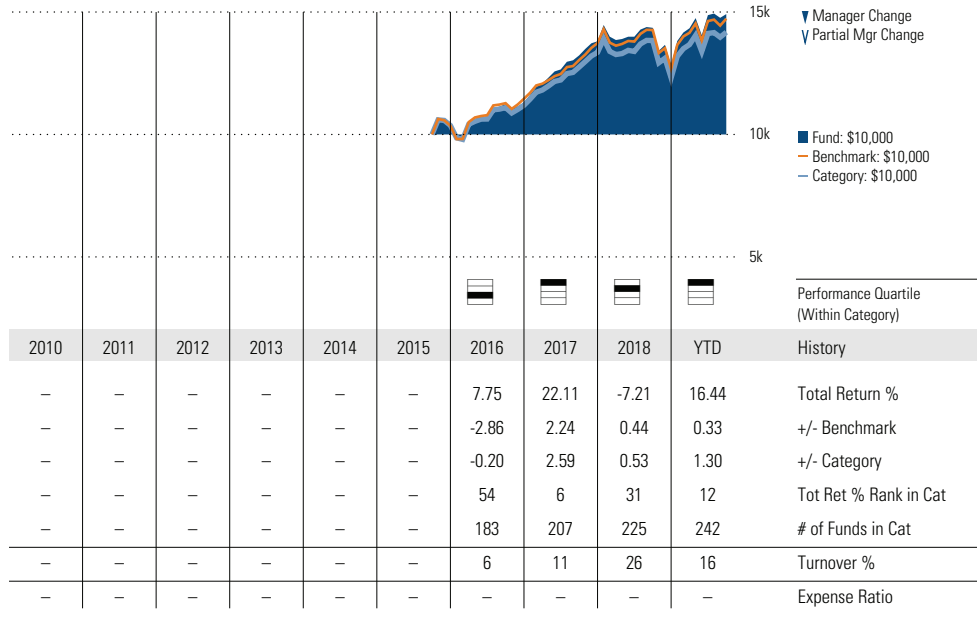
✔ **Style:** The fund has landed in its primary style box — Large Growth — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.58 is 27.5% lower than the Target-Date 2040 category average.

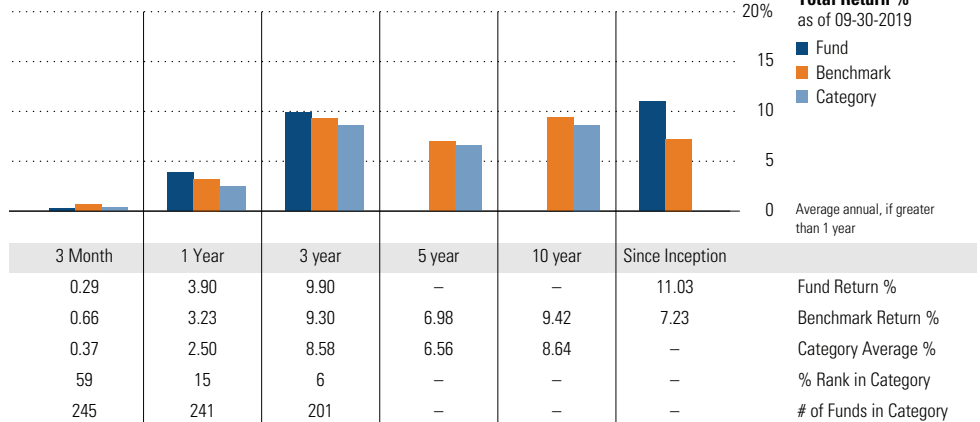
## Morningstar Investment Management LLC Analysis

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

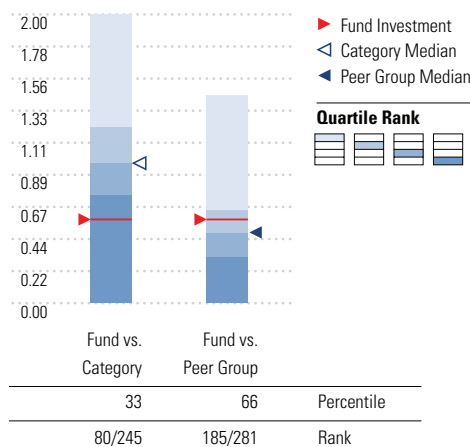
## Growth of \$10,000



## 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	0.65	-	-0.43
Beta	0.99	-	0.96
R-Squared	97.74	-	96.58
Standard Deviation	9.87	9.87	9.57
Sharpe Ratio	0.84	0.79	0.72
Tracking Error	1.49	-	1.57
Information Ratio	0.40	-	-0.53
Up Capture Ratio	100.26	-	93.86
Down Capture Ratio	94.54	-	97.01

## Portfolio Metrics

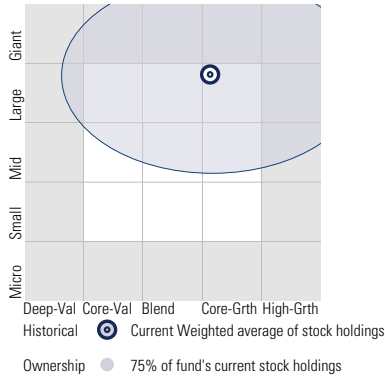
	Fund	Bmark	Cat
Price/Earnings Ratio	19.73	17.11	18.01
Price/Book Ratio	2.38	2.03	2.25
Avg Eff Duration	7.47	-	6.43

# T. Rowe Price Retirement I 2040 I TRPDX

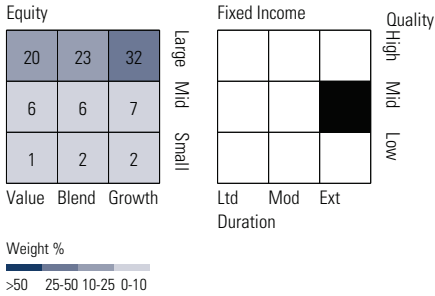
**Morningstar Category**  
Target-Date 2040

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

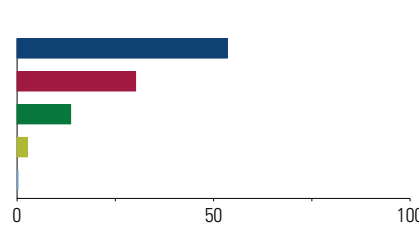
**Style Analysis** as of 09-30-2019  
Morningstar Style Box™



**Style Breakdown**

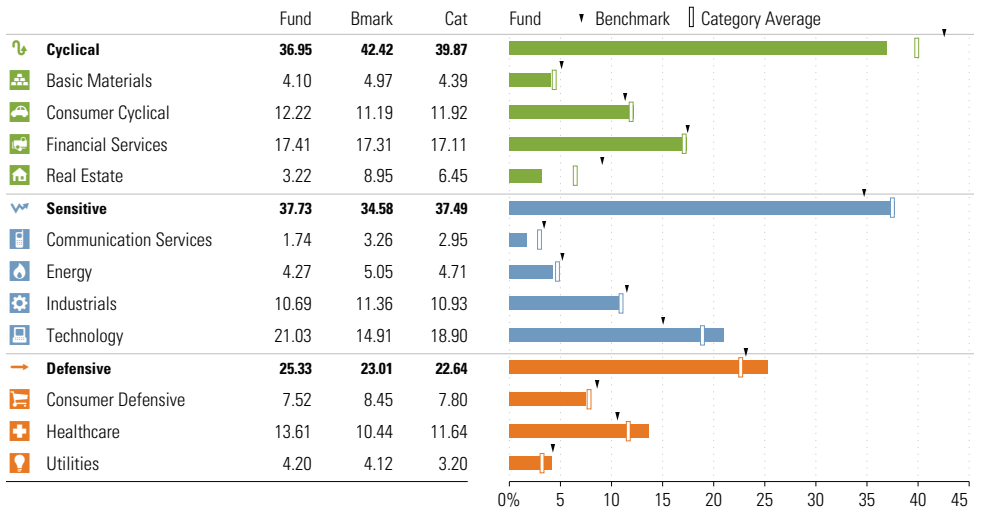


**Asset Allocation** as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	53.47	52.14
Non-US Stocks	30.15	29.49
Bonds	13.62	12.45
Cash	2.55	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 10 Holdings** as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ T. Rowe Price Growth Stock I	-	17.61	17.61	-	-
⊕ T. Rowe Price Value I	-	17.47	35.08	-	-
⊕ T. Rowe Price Equity Index 500 I	-	8.06	43.15	-	-
⊕ T. Rowe Price Overseas Stock I	-	7.59	50.74	-	-
⊕ T. Rowe Price International Stock I	-	7.39	58.13	-	-
⊕ T. Rowe Price International Value Eq I	-	6.47	64.60	-	-
⊕ T. Rowe Price New Income I	-	6.26	70.86	-	-
⊕ T. Rowe Price Emerging Markets Stock I	-	4.44	75.30	-	-
⊕ T. Rowe Price Mid-Cap Growth I	-	3.79	79.08	-	-
⊕ T. Rowe Price Mid-Cap Value I	-	3.48	82.57	-	-

**Total Holdings 21**

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2045 I TRPKX

**Morningstar Category**  
Target-Date 2045

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

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2045 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

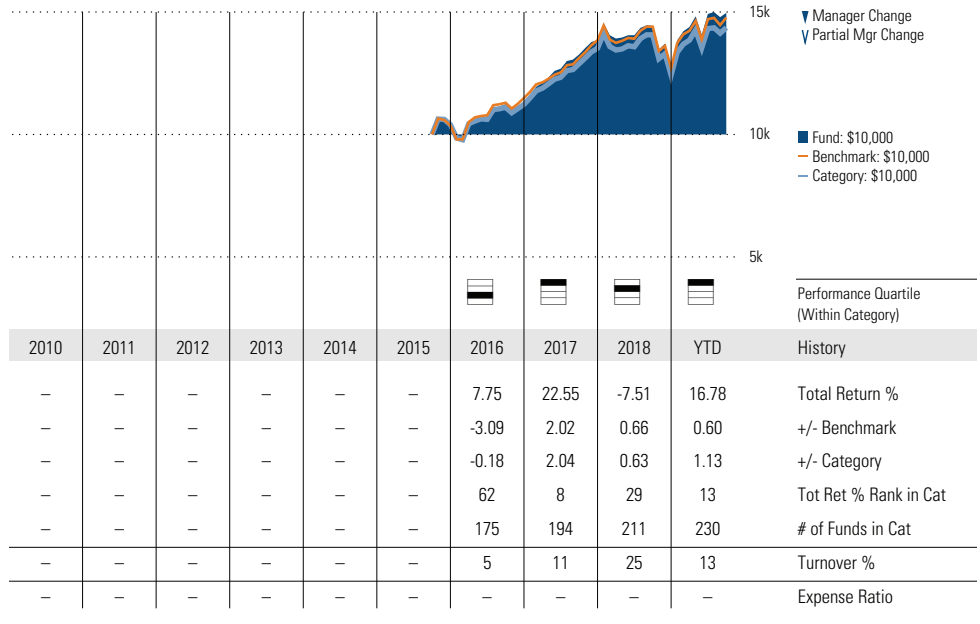
✔ **Style:** The fund has landed in its primary style box — Large Growth — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.59 is 24.36% lower than the Target-Date 2045 category average.

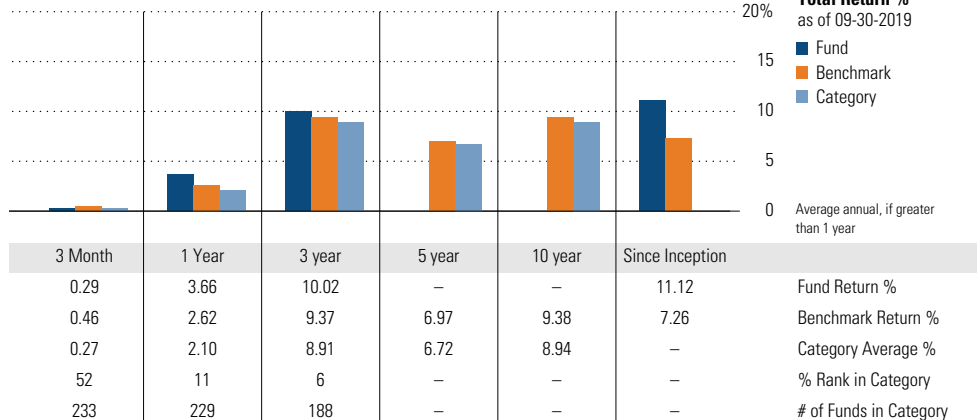
## Morningstar Investment Management LLC Analysis

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.

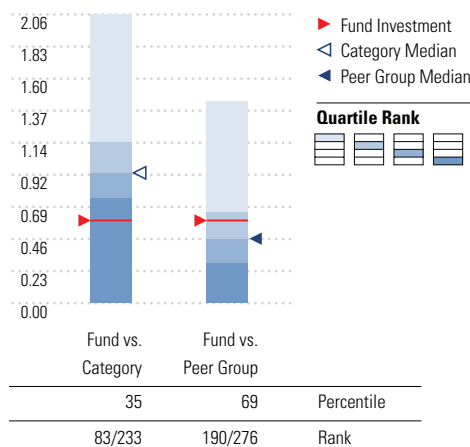
## Growth of \$10,000



## 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	0.77	-	-0.33
Beta	0.98	-	0.98
R-Squared	97.77	-	98.35
Standard Deviation	10.24	10.33	10.19
Sharpe Ratio	0.83	0.76	0.72
Tracking Error	1.54	-	1.34
Information Ratio	0.42	-	-0.44
Up Capture Ratio	99.69	-	96.45
Down Capture Ratio	93.30	-	98.60

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	19.78	17.02	18.10
Price/Book Ratio	2.38	2.01	2.26
Avg Eff Duration	7.79	-	6.46

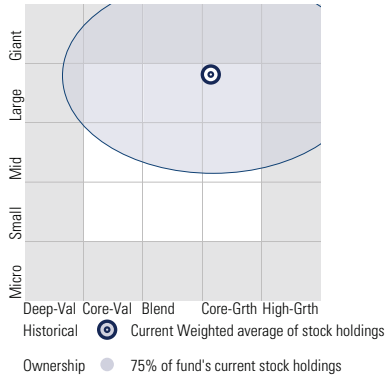
# T. Rowe Price Retirement I 2045 I TRPKX

**Morningstar Category**  
Target-Date 2045

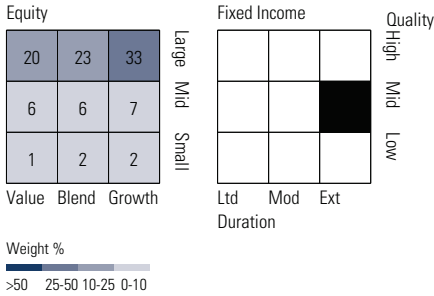
**Morningstar Index**  
Morningstar Lifetime Mod 2045 TR USD

## Style Analysis as of 09-30-2019

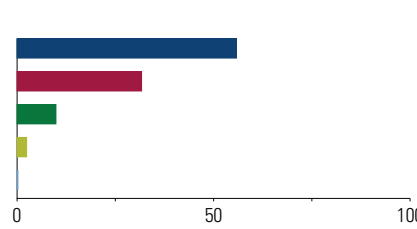
Morningstar Style Box™



## Style Breakdown

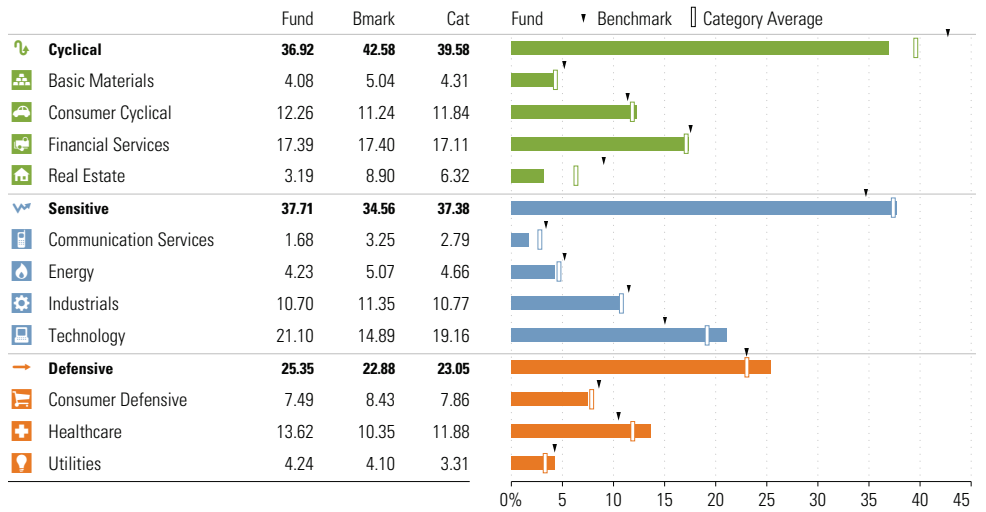


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	55.82	56.09
Non-US Stocks	31.67	32.39
Bonds	9.88	6.94
Cash	2.42	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



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

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ T. Rowe Price Growth Stock I	-	19.28	19.28	-	-
⊕ T. Rowe Price Value I	-	19.02	38.30	-	-
⊕ T. Rowe Price Overseas Stock I	-	7.95	46.25	-	-
⊕ T. Rowe Price International Stock I	-	7.74	53.99	-	-
⊕ T. Rowe Price Equity Index 500 I	-	6.85	60.85	-	-
⊕ T. Rowe Price International Value Eq I	-	6.77	67.62	-	-
⊕ T. Rowe Price Emerging Markets Stock I	-	4.63	72.25	-	-
⊕ T. Rowe Price New Income I	-	4.49	76.74	-	-
⊕ T. Rowe Price Mid-Cap Growth I	-	3.97	80.71	-	-
⊕ T. Rowe Price Mid-Cap Value I	-	3.68	84.39	-	-

## Total Holdings 21

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# T. Rowe Price Retirement I 2050 I TRPMX

**Morningstar Category**  
Target-Date 2050

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

## Portfolio Manager(s)

Wyatt Lee since 09-2015  
Jerome Clark since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2050 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

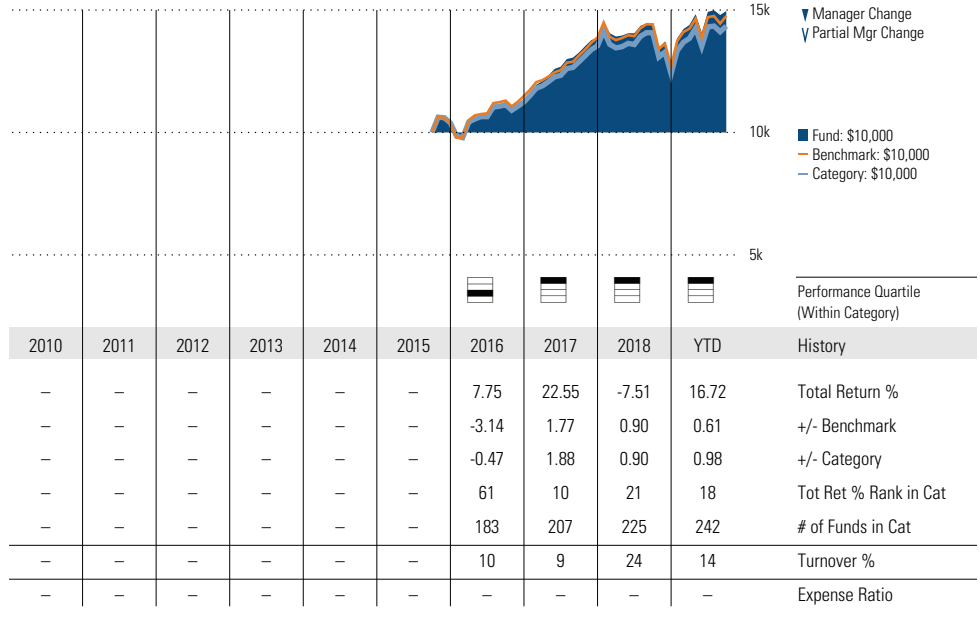
✔ **Style:** The fund has landed in its primary style box — Large Growth — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.59 is 27.16% lower than the Target-Date 2050 category average.

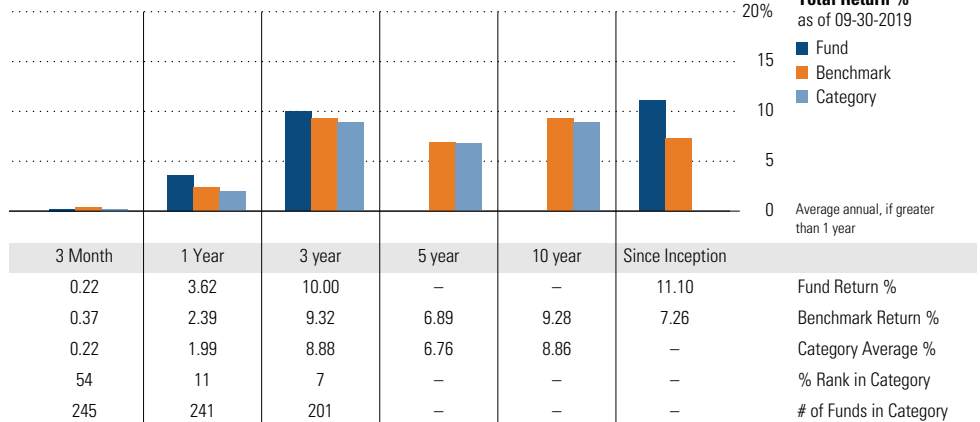
## Morningstar Investment Management LLC Analysis

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.

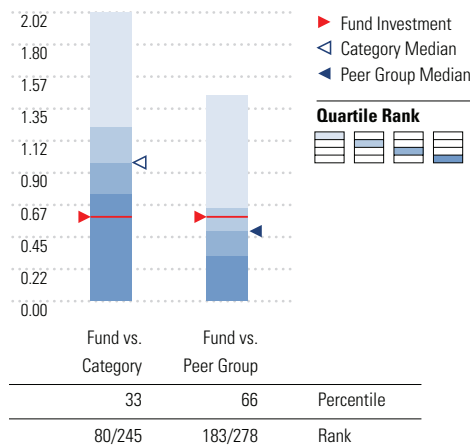
## Growth of \$10,000



## 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	0.92	-	-0.28
Beta	0.97	-	0.97
R-Squared	97.68	-	96.67
Standard Deviation	10.23	10.45	10.28
Sharpe Ratio	0.83	0.75	0.70
Tracking Error	1.59	-	1.58
Information Ratio	0.43	-	-0.36
Up Capture Ratio	98.74	-	95.71
Down Capture Ratio	91.29	-	97.71

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	19.78	16.95	18.24
Price/Book Ratio	2.38	1.99	2.27
Avg Eff Duration	7.80	-	6.60

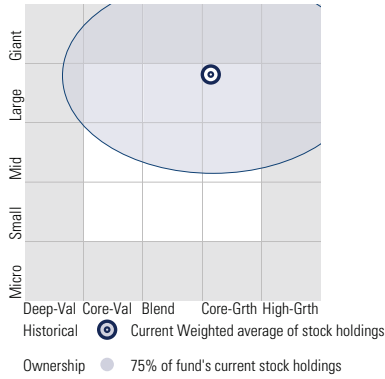
# T. Rowe Price Retirement I 2050 I TRPMX

**Morningstar Category**  
Target-Date 2050

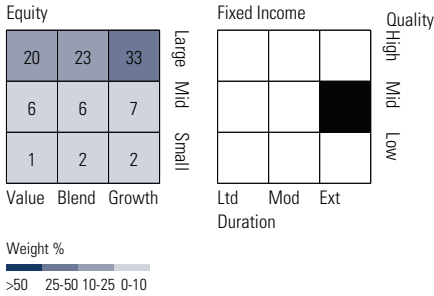
**Morningstar Index**  
Morningstar Lifetime Mod 2050 TR USD

## Style Analysis as of 09-30-2019

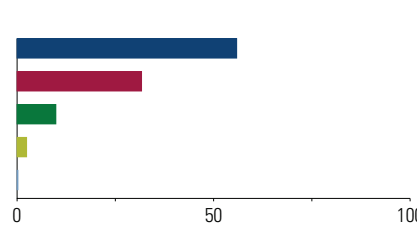
Morningstar Style Box™



## Style Breakdown

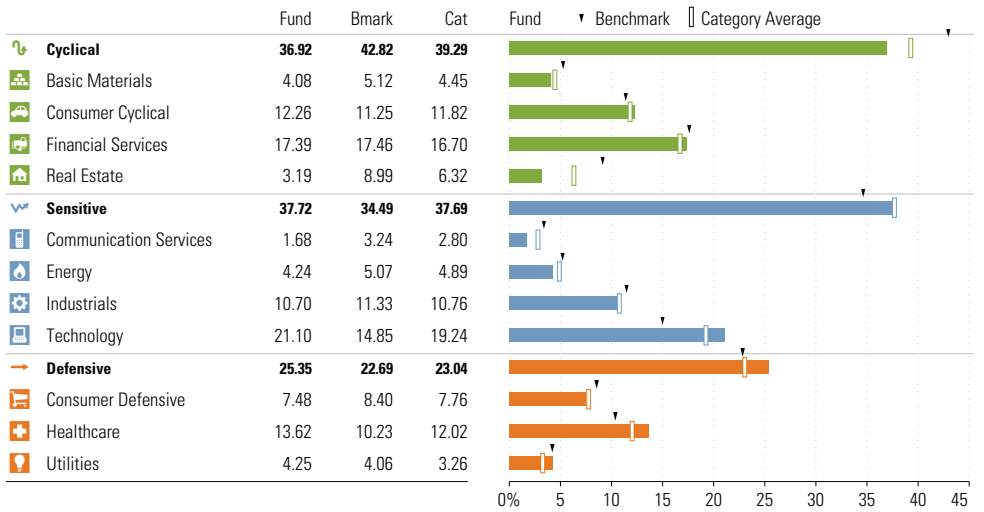


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	55.86	55.91
Non-US Stocks	31.66	33.11
Bonds	9.85	6.09
Cash	2.41	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



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

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ T. Rowe Price Growth Stock I	-	19.28	19.28	-	-
⊕ T. Rowe Price Value I	-	19.06	38.33	-	-
⊕ T. Rowe Price Overseas Stock I	-	7.94	46.28	-	-
⊕ T. Rowe Price International Stock I	-	7.73	54.01	-	-
⊕ T. Rowe Price Equity Index 500 I	-	6.86	60.88	-	-
⊕ T. Rowe Price International Value Eq I	-	6.77	67.65	-	-
⊕ T. Rowe Price Emerging Markets Stock I	-	4.62	72.27	-	-
⊕ T. Rowe Price New Income I	-	4.49	76.76	-	-
⊕ T. Rowe Price Mid-Cap Growth I	-	3.97	80.73	-	-
⊕ T. Rowe Price Mid-Cap Value I	-	3.67	84.40	-	-

## Total Holdings 21

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2055 I TRPNX

**Morningstar Category**  
Target-Date 2055

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

## Portfolio Manager(s)

Wyatt Lee since 09-2015  
Jerome Clark since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2055 category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

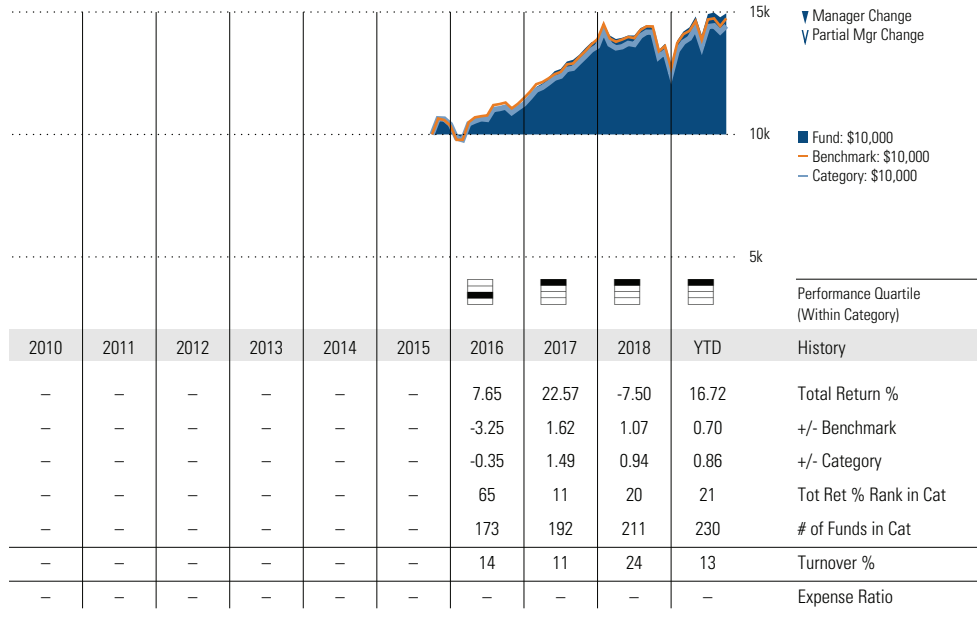
✔ **Style:** The fund has landed in its primary style box — Large Growth — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.59 is 24.36% lower than the Target-Date 2055 category average.

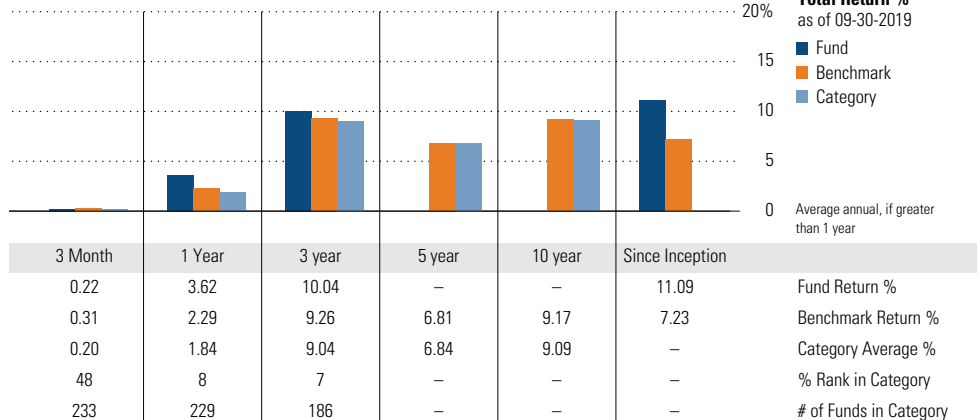
## Morningstar Investment Management LLC Analysis

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.

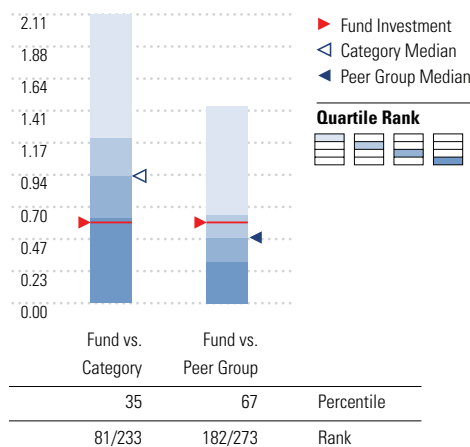
## Growth of \$10,000



## 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	1.04	-	-0.19
Beta	0.96	-	0.99
R-Squared	97.66	-	98.37
Standard Deviation	10.23	10.49	10.46
Sharpe Ratio	0.83	0.74	0.72
Tracking Error	1.61	-	1.35
Information Ratio	0.49	-	-0.25
Up Capture Ratio	99.11	-	98.09
Down Capture Ratio	91.11	-	99.36

## Portfolio Metrics

	Fund	Bmark	Cat
Price/Earnings Ratio	19.77	16.88	17.99
Price/Book Ratio	2.38	1.98	2.24
Avg Eff Duration	7.78	-	6.45

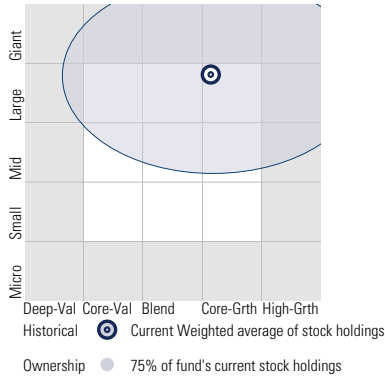
# T. Rowe Price Retirement I 2055 I TRPNX

**Morningstar Category**  
Target-Date 2055

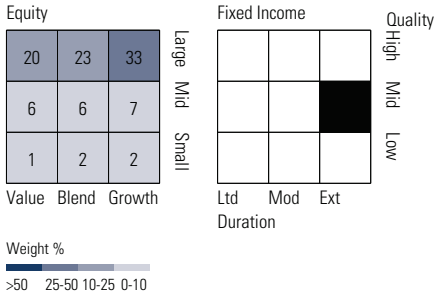
**Morningstar Index**  
Morningstar Lifetime Mod 2055 TR USD

## Style Analysis as of 09-30-2019

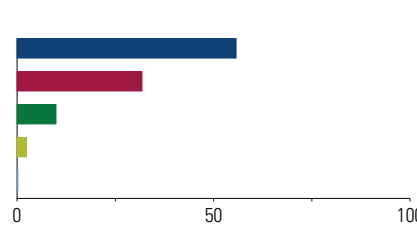
Morningstar Style Box™



## Style Breakdown

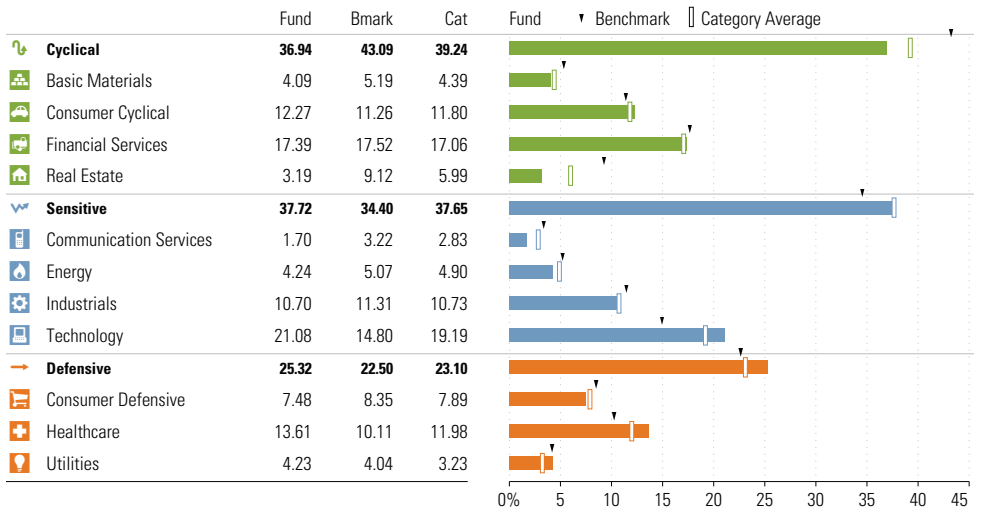


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	55.72	56.00
Non-US Stocks	31.77	34.03
Bonds	9.89	6.05
Cash	2.40	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 10 Holdings as of 09-30-2019

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ T. Rowe Price Growth Stock I	—	19.26	19.26	—	—
⊕ T. Rowe Price Value I	—	18.89	38.15	—	—
⊕ T. Rowe Price Overseas Stock I	—	7.99	46.14	—	—
⊕ T. Rowe Price International Stock I	—	7.84	53.97	—	—
⊕ T. Rowe Price Equity Index 500 I	—	6.85	60.82	—	—
⊕ T. Rowe Price International Value Eq I	—	6.77	67.60	—	—
⊕ T. Rowe Price Emerging Markets Stock I	—	4.60	72.20	—	—
⊕ T. Rowe Price New Income I	—	4.50	76.70	—	—
⊕ T. Rowe Price Mid-Cap Growth I	—	3.97	80.66	—	—
⊕ T. Rowe Price Mid-Cap Value I	—	3.72	84.38	—	—

## Total Holdings 21

⊕ Increase ⊖ Decrease ✨ New to Portfolio

# T. Rowe Price Retirement I 2060 I TRPLX

**Morningstar Category**  
Target-Date 2060+

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

## Portfolio Manager(s)

Jerome Clark since 09-2015  
Wyatt Lee since 09-2015  
Kim DeDominicis since 10-2019

## Quantitative Screens

✔ **Performance:** The fund has finished in the Target-Date 2060+ category's top three quartiles in 4 of the 4 years it's been in existence.

✔ **Management:** The fund's management has been in place for 4.01 years.

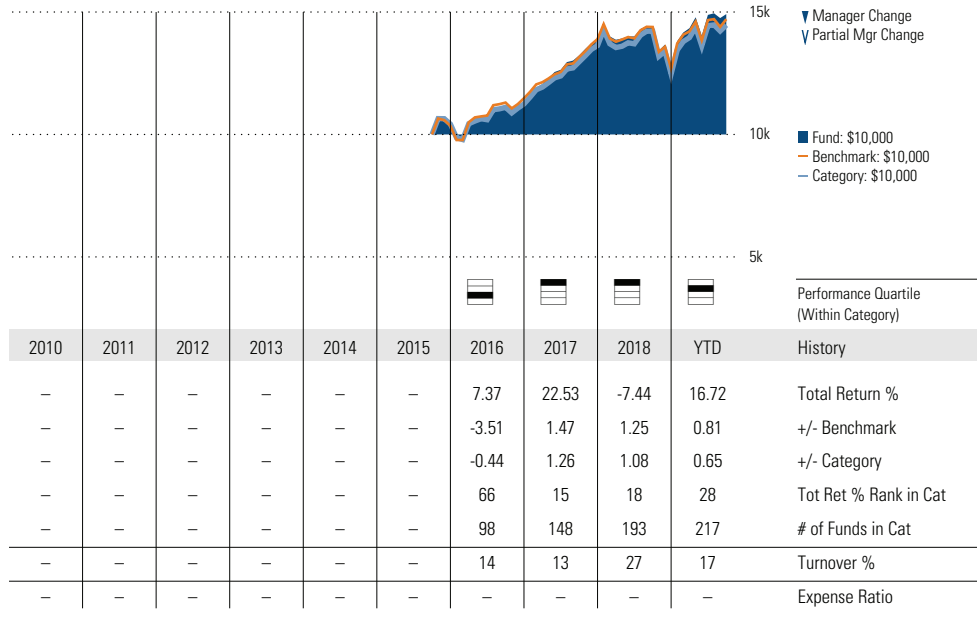
✔ **Style:** The fund has landed in its primary style box — Large Growth — 72.73 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.59 is 27.16% lower than the Target-Date 2060+ category average.

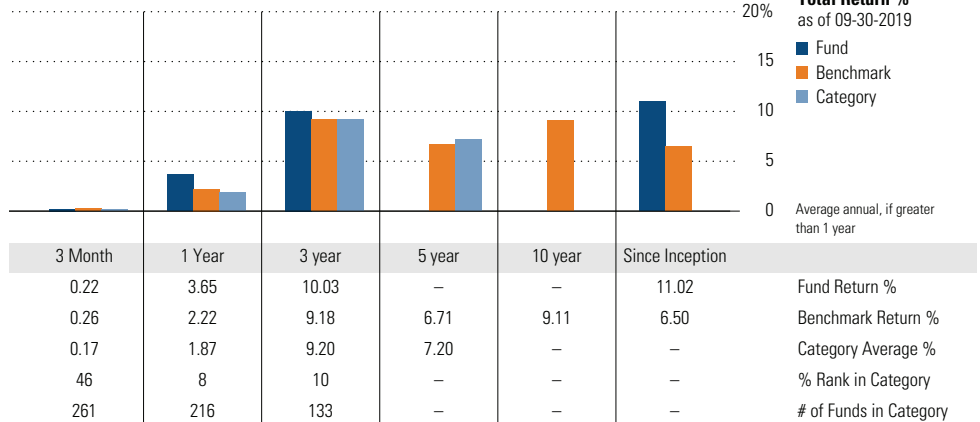
## Morningstar Investment Management LLC Analysis

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.

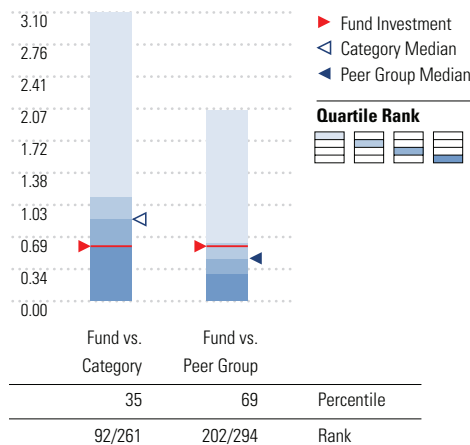
## Growth of \$10,000



## 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

Metric	Fund	Bmark	Cat
Alpha	1.08	-	-0.02
Beta	0.97	-	1.00
R-Squared	97.75	-	98.24
Standard Deviation	10.24	10.48	10.53
Sharpe Ratio	0.83	0.74	0.73
Tracking Error	1.58	-	1.41
Information Ratio	0.54	-	-0.08
Up Capture Ratio	99.38	-	99.52
Down Capture Ratio	91.04	-	99.74

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	19.79	16.81	17.87
Price/Book Ratio	2.39	1.96	2.21
Avg Eff Duration	7.80	-	6.85

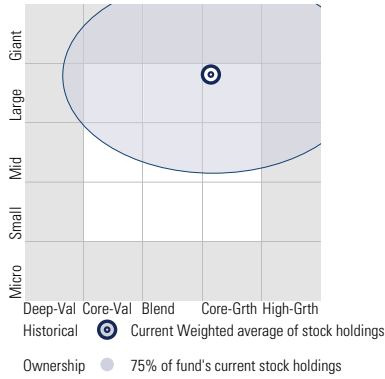
# T. Rowe Price Retirement I 2060 I TRPLX

**Morningstar Category**  
Target-Date 2060+

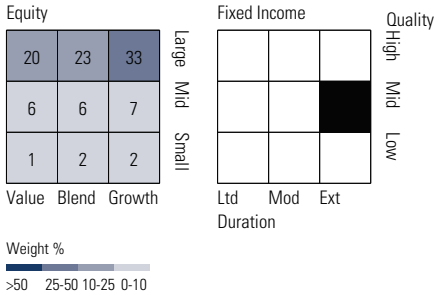
**Morningstar Index**  
Morningstar Lifetime Mod 2060 TR USD

## Style Analysis as of 09-30-2019

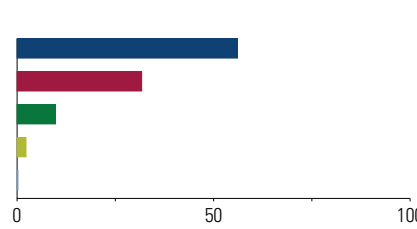
Morningstar Style Box™



## Style Breakdown

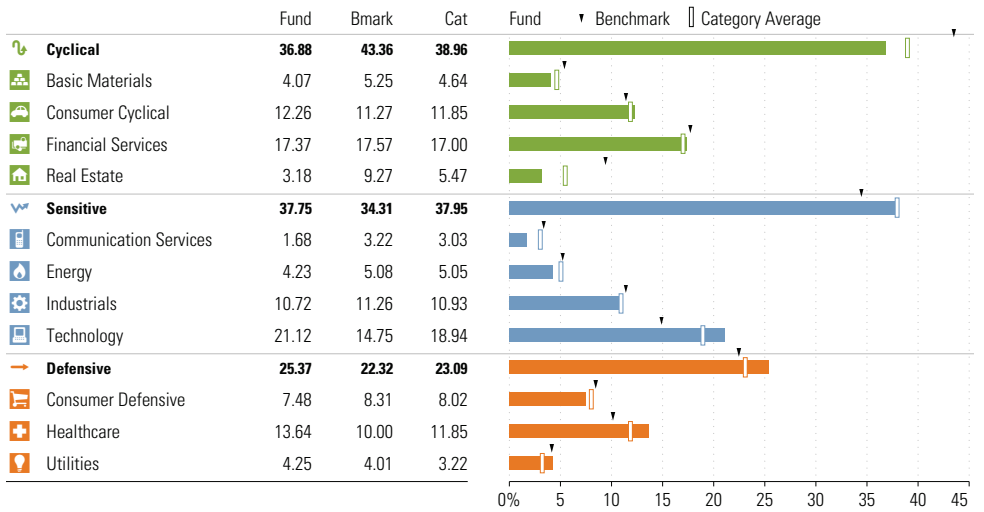


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	56.08	54.63
Non-US Stocks	31.69	34.04
Bonds	9.76	7.40
Cash	2.26	2.59
Other	0.21	1.33
<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
⊕ T. Rowe Price Growth Stock I	-	19.27	19.27	-	-
⊕ T. Rowe Price Value I	-	19.22	38.49	-	-
⊕ T. Rowe Price Overseas Stock I	-	7.90	46.39	-	-
⊕ T. Rowe Price International Stock I	-	7.74	54.13	-	-
⊕ T. Rowe Price Equity Index 500 I	-	6.83	60.97	-	-
⊕ T. Rowe Price International Value Eq I	-	6.76	67.73	-	-
⊕ T. Rowe Price Emerging Markets Stock I	-	4.68	72.41	-	-
⊕ T. Rowe Price New Income I	-	4.47	76.88	-	-
⊕ T. Rowe Price Mid-Cap Growth I	-	4.11	80.99	-	-
⊕ T. Rowe Price Mid-Cap Value I	-	3.62	84.60	-	-

## Total Holdings 21

⊕ 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.

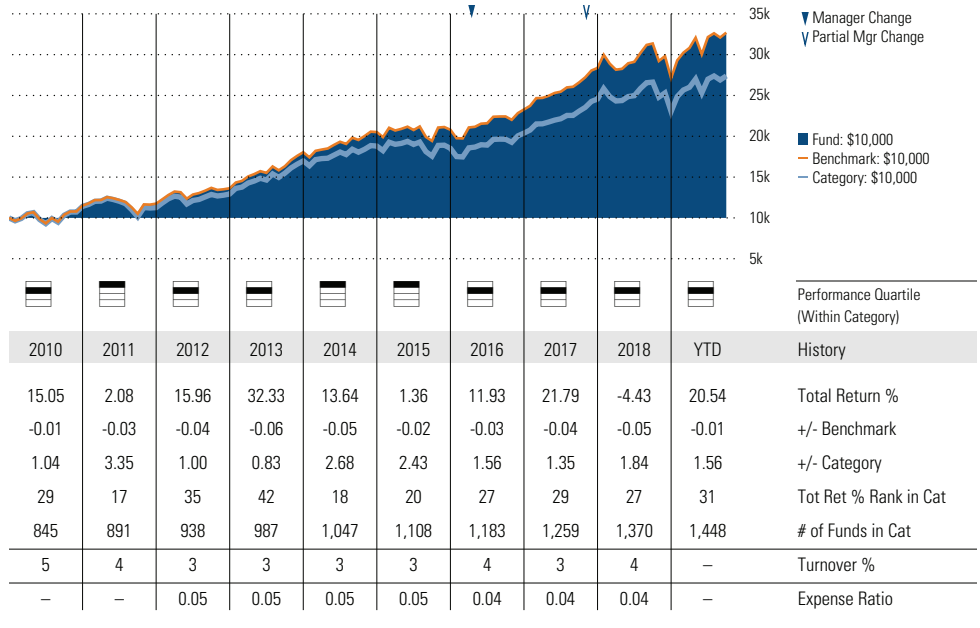
✔ **Style:** The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

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

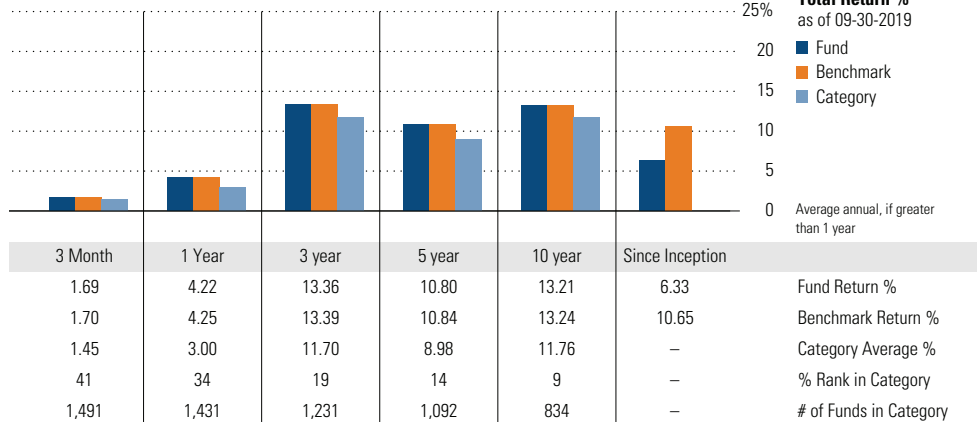
## Morningstar Investment Management LLC Analysis

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

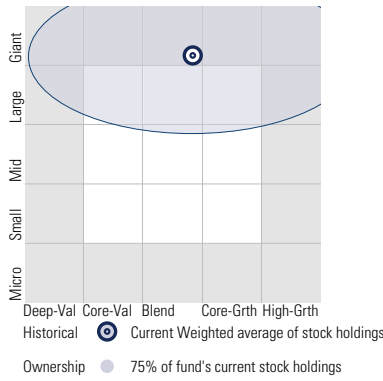
# Vanguard 500 Index Admiral VFIAX

**Morningstar Category**  
Large Blend

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

## Style Analysis as of 09-30-2019

Morningstar Style Box™



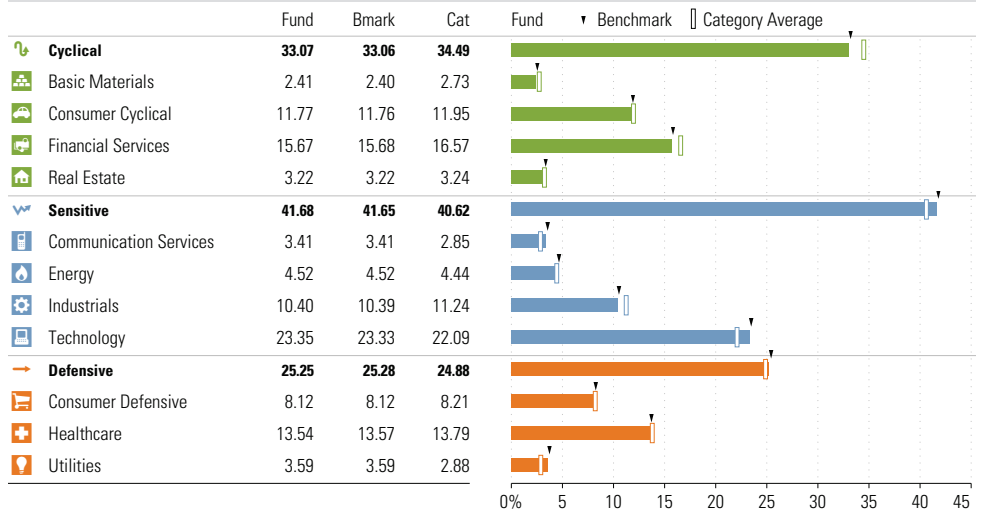
## Style Breakdown



## 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 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.

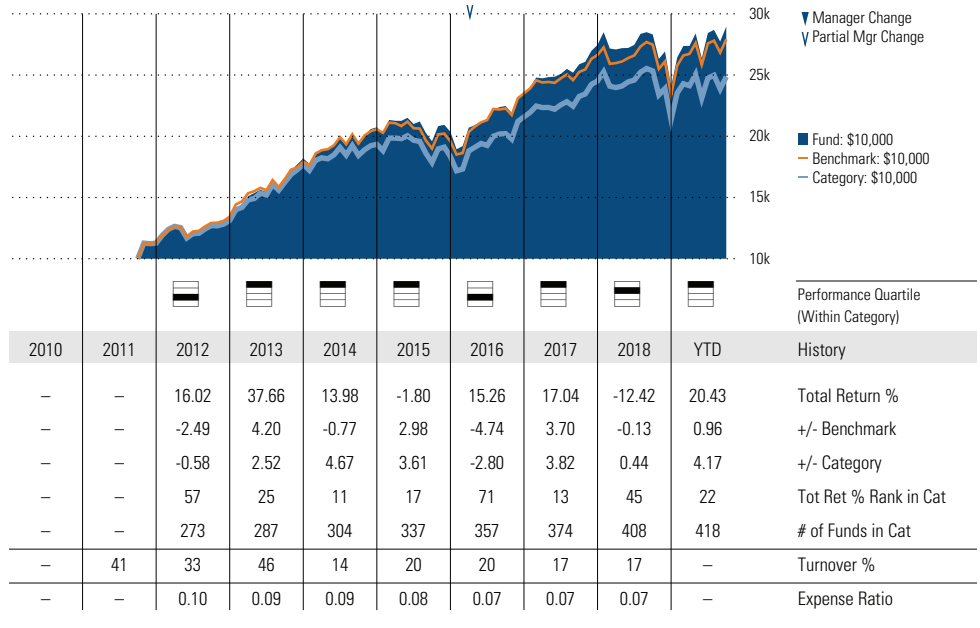
**Style:** The fund has landed in its primary style box — Mid-Cap Value — 100 % of the time over the past three years.

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

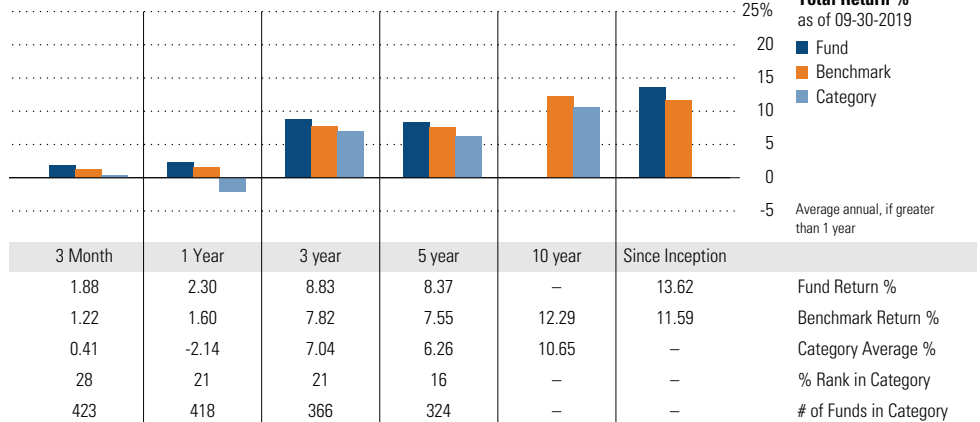
## Morningstar Investment Management LLC Analysis

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.

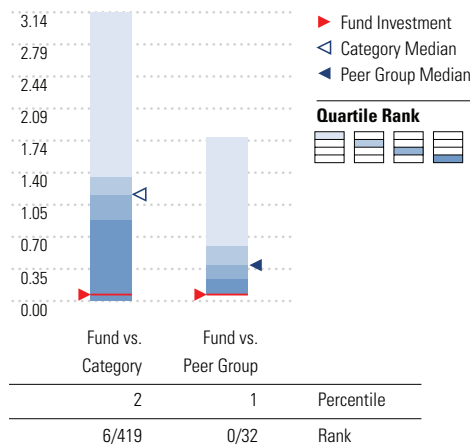
## Growth of \$10,000



## 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

	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

	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

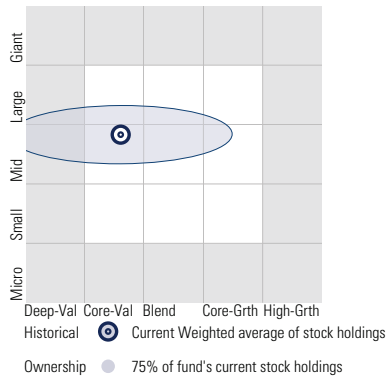
Mid-Cap Value

Morningstar Index

Russell Mid Cap Value TR USD

## Style Analysis as of 09-30-2019

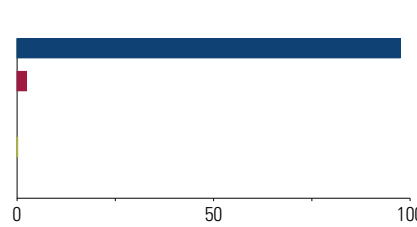
Morningstar Style Box™



## Style Breakdown

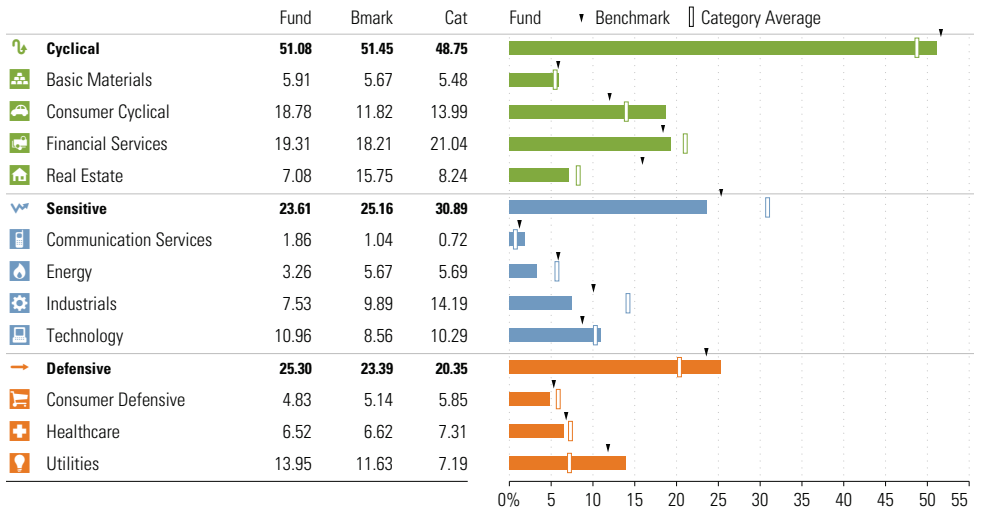


## Asset Allocation as of 09-30-2019



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 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.

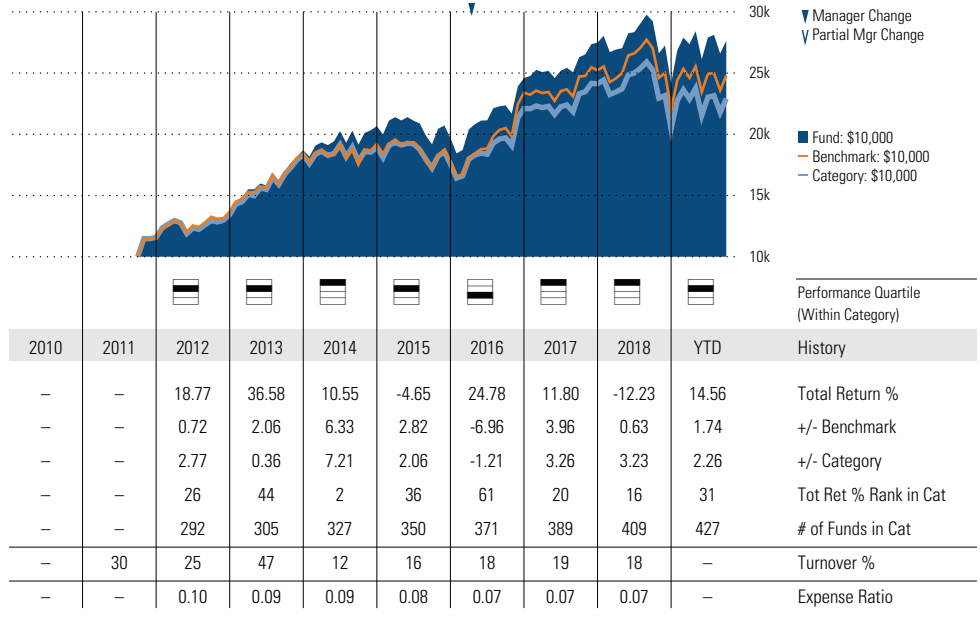
✘ **Style:** The fund has landed in its primary style box — Small Value — 57.14 % of the time over the past three years.

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

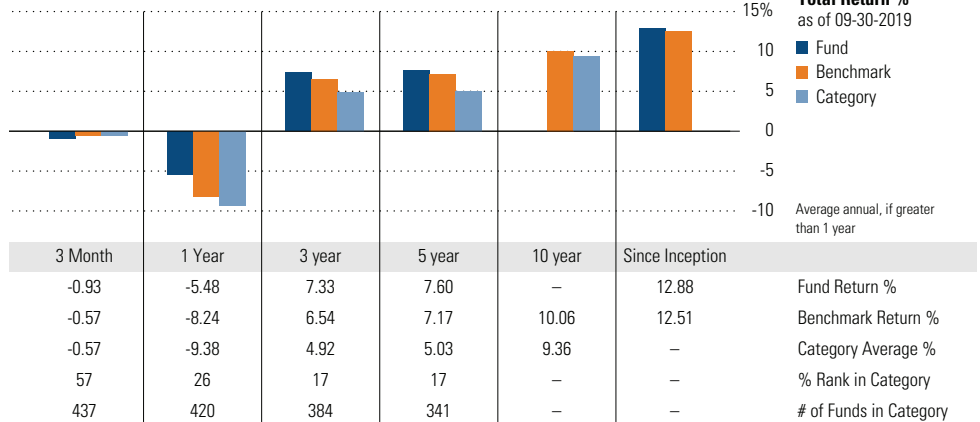
## Morningstar Investment Management LLC Analysis

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

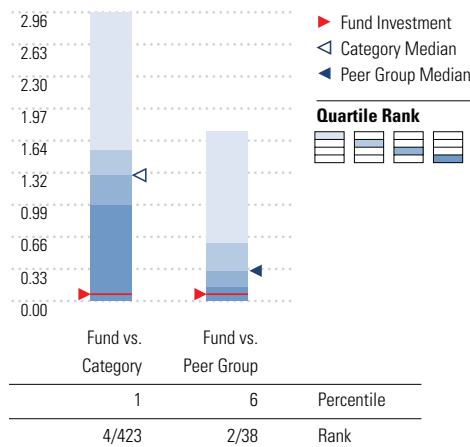
## Growth of \$10,000



## 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

Metric	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

Metric	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

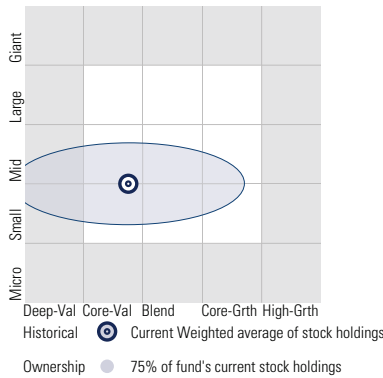
# Vanguard Small Cap Value Index Admiral VSIAX

**Morningstar Category**  
Small Value

**Morningstar Index**  
Russell 2000 Value TR USD

## Style Analysis as of 09-30-2019

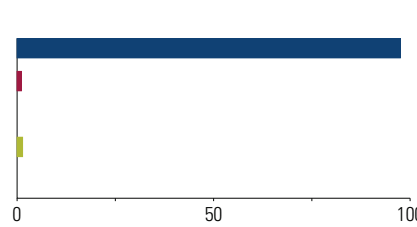
Morningstar Style Box™



## Style Breakdown

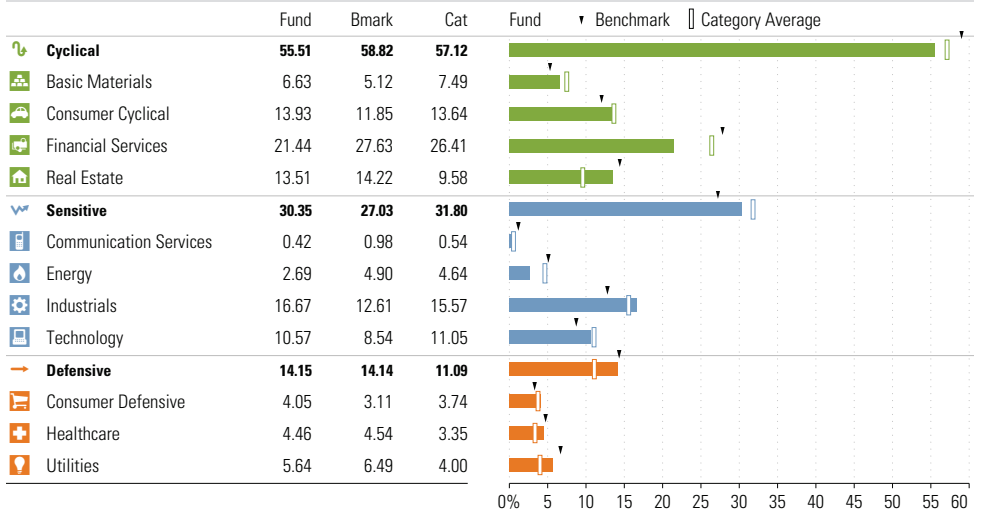


## Asset Allocation as of 09-30-2019



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

# Wells Fargo Small Company Growth R6 WSCRX

**Morningstar Category**  
Small Growth

**Morningstar Index**  
Russell 2000 Growth TR USD

## Portfolio Manager(s)

Paul von Kuster since 11-1994  
Daniel Hagen since 02-2003  
William Grierson since 04-2005

## Quantitative Screens

✔ **Performance:** The fund has finished in the Small Growth category's top three quartiles in 5 of the 5 years it's been in existence.

✔ **Management:** The fund's management has been in place for 24.9 years.

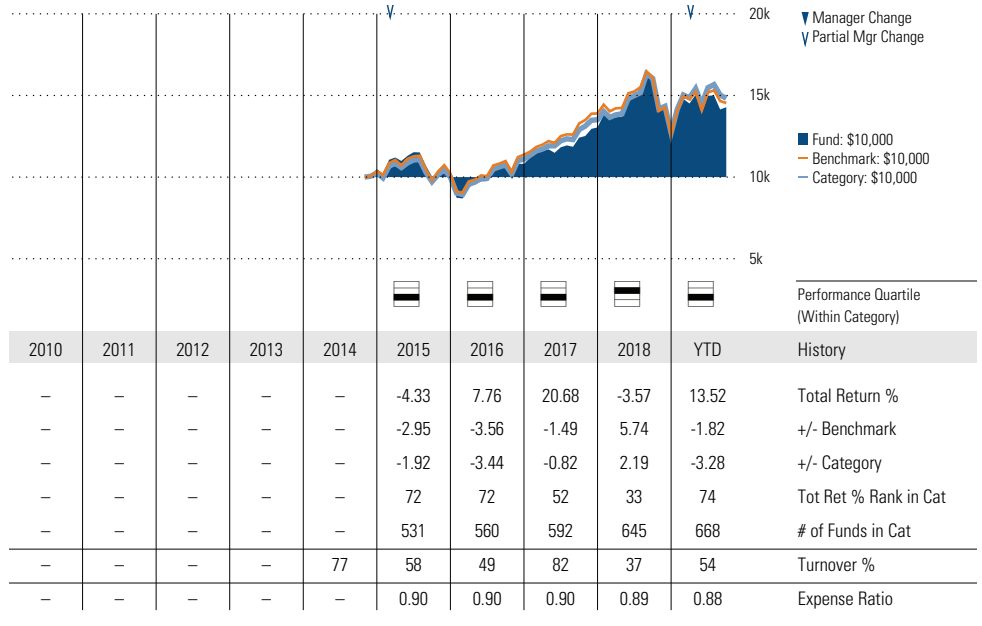
✔ **Style:** The fund has landed in its primary style box — Small Growth — 100 % of the time over the past three years.

✔ **Net Expense:** The fund's expense ratio of 0.88 is 27.87% lower than the Small Growth category average.

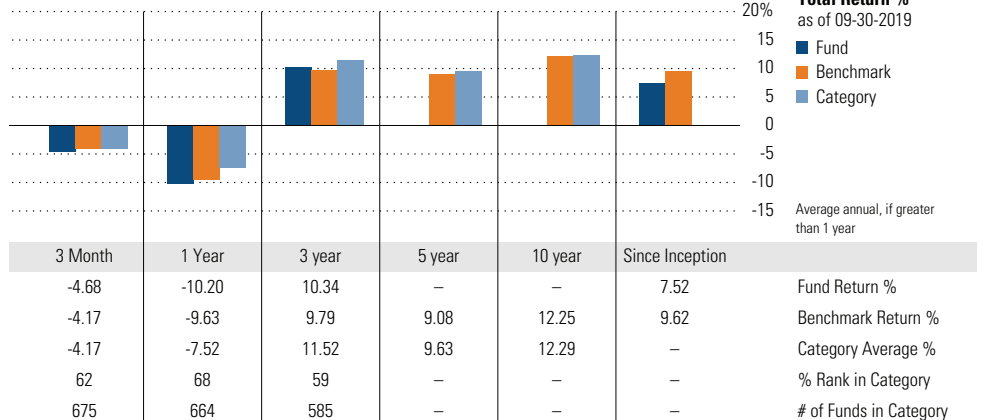
## Morningstar Investment Management LLC Analysis

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.

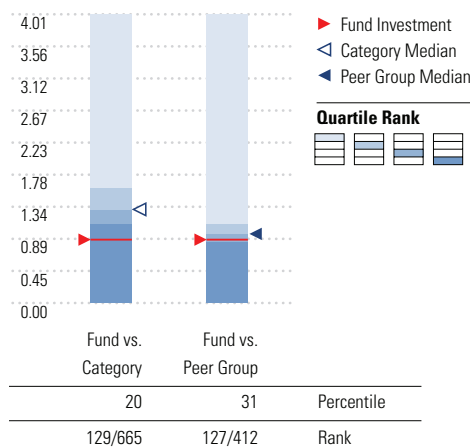
## Growth of \$10,000



## 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	0.53	-	2.42
Beta	1.00	-	0.94
R-Squared	96.05	-	91.43
Standard Deviation	17.88	17.47	17.30
Sharpe Ratio	0.55	0.53	0.64
Tracking Error	3.56	-	5.10
Information Ratio	0.15	-	0.38
Up Capture Ratio	100.60	-	99.42
Down Capture Ratio	98.16	-	88.96

## Portfolio Metrics

Metric	Fund	Bmark	Cat
Price/Earnings Ratio	19.69	23.13	27.02
Price/Book Ratio	2.74	3.83	4.13
Geom Avg Mkt Cap \$B	2.97	2.03	3.72
ROE	6.05	6.01	7.16

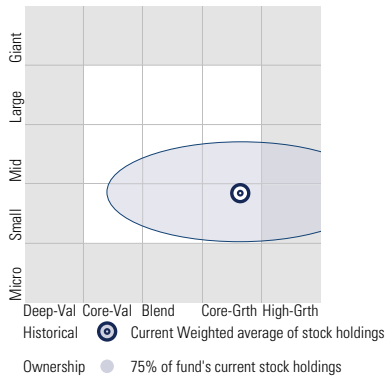
# Wells Fargo Small Company Growth R6 WSCRX

**Morningstar Category**  
Small Growth

**Morningstar Index**  
Russell 2000 Growth TR USD

## Style Analysis as of 09-30-2019

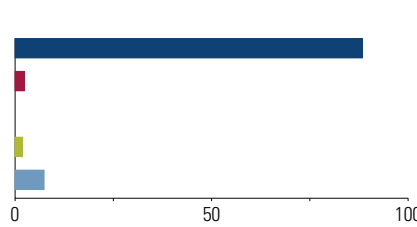
Morningstar Style Box™



## Style Breakdown

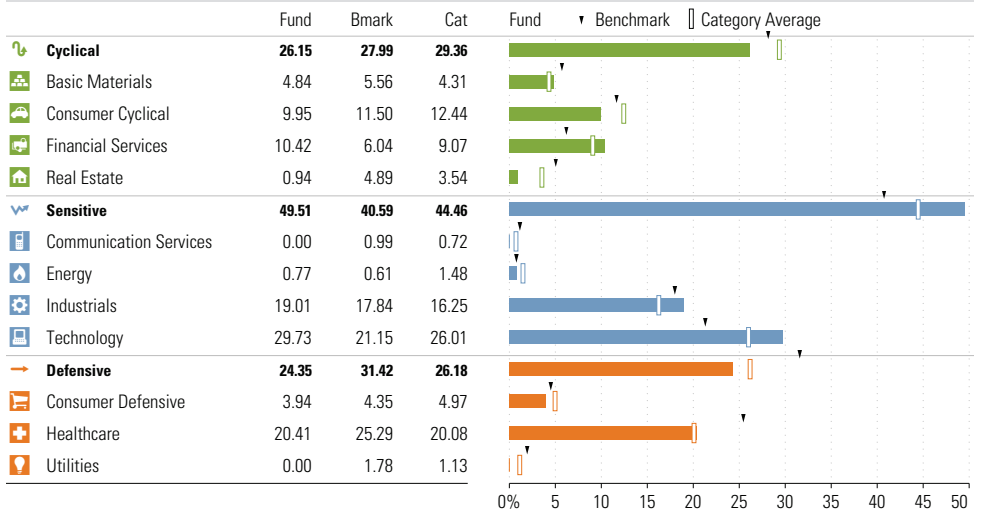


## Asset Allocation as of 09-30-2019



Asset Class	Net %	Cat%
US Stocks	88.36	93.72
Non-US Stocks	2.39	3.23
Bonds	0.00	0.00
Cash	1.88	2.80
Other	7.37	0.25
<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
⊖ Wf Sec Lending Cash Invst Llc Wbbs	7.37	7.37	-	-
⊖ Wells Fargo Government MMkt Select	1.88	9.25	-	-
⊕ RealPage Inc	1.54	10.80	30.44	Technology
⊕ Essent Group Ltd	1.49	12.28	39.91	Financial Services
⊕ Icon PLC	1.48	13.76	14.03	Healthcare
⊕ Syneos Health Inc A	1.38	15.15	35.22	Healthcare
⊖ Performance Food Group Co	1.34	16.48	42.58	Consumer Defensive
⊕ SS&C Technologies Holdings Inc	1.33	17.82	14.99	Technology
⊕ Evercore Inc A	1.33	19.15	14.25	Financial Services
⊕ Ciena Corp	1.28	20.42	15.69	Technology
⊕ ASGN Inc	1.25	21.68	15.34	Industrials
⊖ SPX Corp	1.25	22.93	42.84	Industrials
⊕ Lumentum Holdings Inc	1.23	24.15	27.49	Technology
⊕ WEX Inc	1.19	25.34	44.27	Technology
⊖ DexCom Inc	1.16	26.50	24.57	Healthcare

**Total Holdings 122**

⊕ Increase ⊖ Decrease ✨ New to Portfolio



# Western Asset Core Bond IS WACSX

**Morningstar Category**  
Intermediate Core Bond

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

## Portfolio Manager(s)

Mark Lindbloom since 12-2006  
S. Leech since 08-2013  
Julien Scholnick since 05-2016  
Frederick Marki since 05-2018  
John Bellows since 05-2018

## Quantitative Screens

✔ **Performance:** The fund has finished in the Intermediate Core 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 12.76 years.

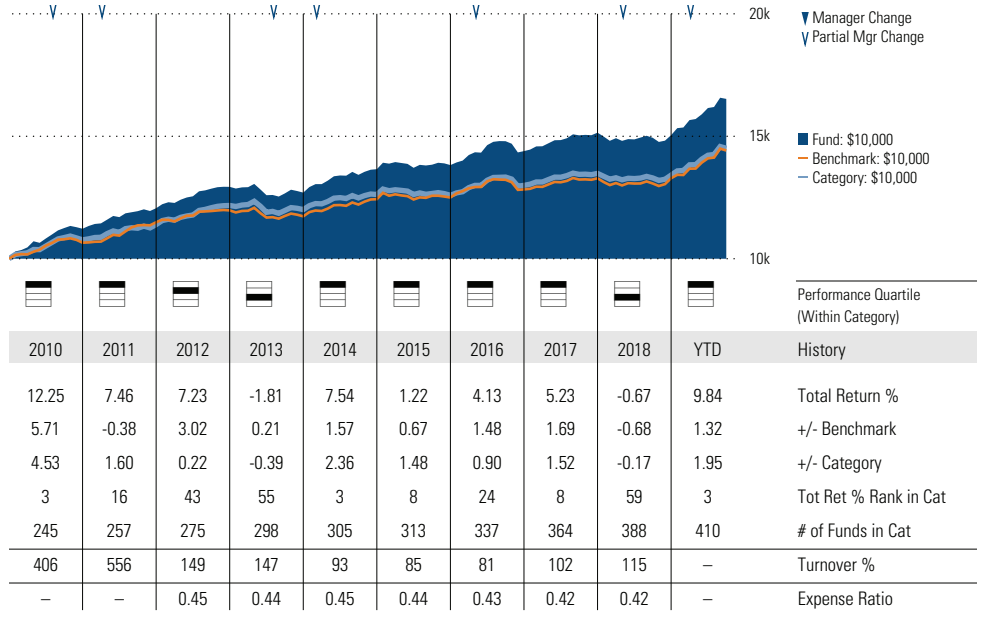
Style Consistency is not calculated for Fixed Income funds.

✔ **Net Expense:** The fund's expense ratio of 0.42 is 36.36% lower than the Intermediate Core Bond category average.

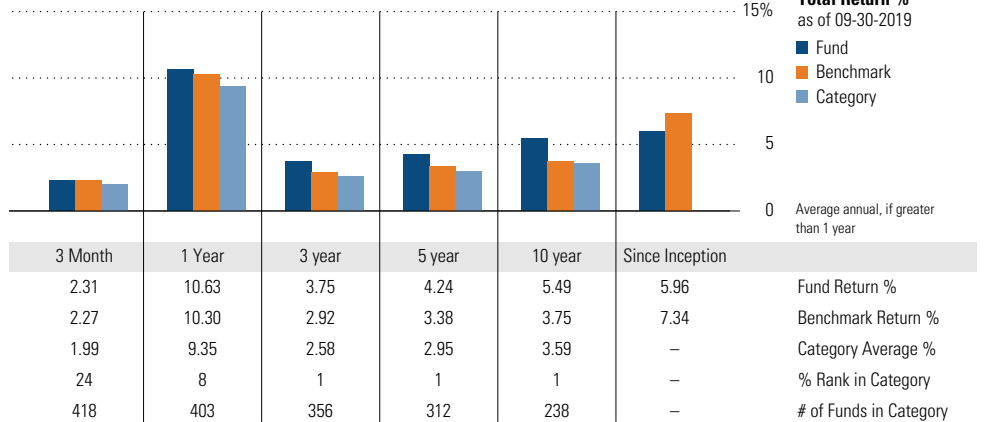
## Morningstar Investment Management LLC Analysis

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.

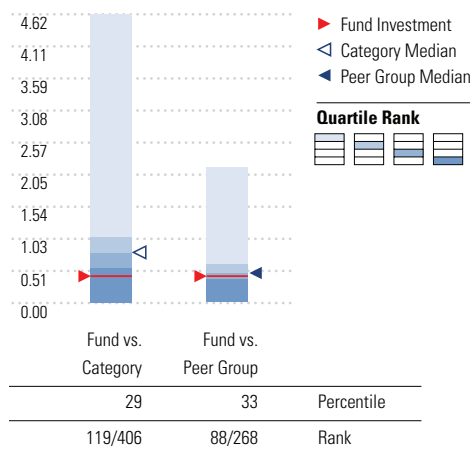
## Growth of \$10,000



## 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	0.89	-	-0.10
Beta	0.97	-	0.92
R-Squared	93.38	-	95.86
Standard Deviation	3.36	3.35	3.12
Sharpe Ratio	0.65	0.41	0.31
Tracking Error	0.87	-	0.66
Information Ratio	0.95	-	-0.69
Up Capture Ratio	109.89	-	90.62
Down Capture Ratio	92.63	-	93.22

## Portfolio Metrics

	Fund	Bmark	Cat
Avg Eff Duration	4.98	4.43	5.41
Avg Eff Maturity	10.92	-	7.00

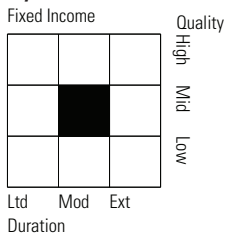
# Western Asset Core Bond IS WACSX

**Morningstar Category**  
Intermediate Core Bond

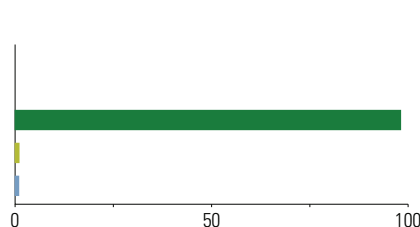
**Morningstar Index**  
BBgBarc US Agg Bond TR USD

## Style Analysis as of 09-30-2019

### Style Breakdown



## Asset Allocation as of 09-30-2019

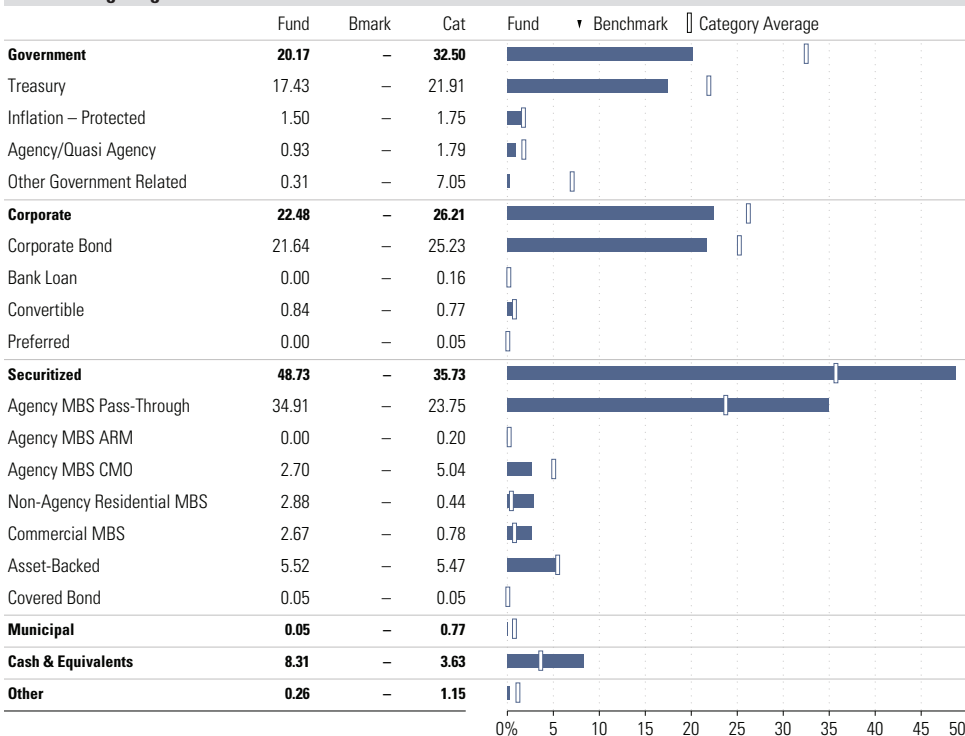


Asset Class	Net %	Cat%
US Stocks	0.00	-0.15
Non-US Stocks	0.00	0.00
Bonds	98.09	100.71
Cash	1.00	-2.35
Other	0.92	1.79
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

### Credit Rating Breakdown

	Fund	Bmark	Cat
AAA	64.41	3.53	41.28
AA	5.33	74.59	12.11
A	14.59	10.82	25.80
BBB	14.57	8.32	15.44
BB	0.13	0.28	3.70
B	0.00	0.00	0.74
Below B	0.15	0.00	0.35
Not Rated	0.82	2.46	0.58

## Sector Weighting as of 09-30-2019



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

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊖ Trade Date Cash	-	8.06	8.06	-
⊕ Wa Govnt Cash Mgmt Porto	-	6.29	14.35	-
⊕ Federal National Mortgage Association 3%	-	2.01	16.36	-
⊕ United States Treasury Notes 1.38%	08-2026	1.83	18.18	-
⊕ Government National Mortgage Association 3.5%	-	1.55	19.73	-
⊕ United States Treasury Notes 1.62%	09-2026	1.51	21.25	-
⊖ United States Treasury Bonds 3%	-	1.32	22.57	-
⊕ United States Treasury Bonds 3.12%	-	1.18	23.74	-
⊕ United States Treasury Notes 1.62%	08-2029	1.11	24.85	-
⊖ United States Treasury Bonds 2.88%	-	0.99	25.85	-

### Total Holdings 1993

⊕ Increase ⊖ Decrease ✱ New to Portfolio