

National ABLE Alliance

Q2 2017 Quarterly Investment Review
September 29, 2017

Presented by:

Steve Dombrower, CFA

SVP | Investment Management & Advisor Sales

W. David Malone, CFA, CIMA

Director | Investment Management

Paul Souppa, ChFC

Analyst | Investment Management

For Institutional Investor Use Only –
Prepared at the request of the National
ABLE Alliance



Agenda – Quarterly Investment Review

1. Overview of Ascensus Investment Advisors

- Investment Team
- Philosophy
- Services

2. Quarterly Market Commentary

- Markets
- Economy
- Outlook

3. Performance Review and Evaluations

- Portfolio Performance
- Underlying Fund Performance
- Integrated Checking/Debit Option

4. Asset Allocation of Risk Based Portfolios

The background image shows three people in an office environment. A woman with curly hair is in the center, looking down. To her left, a man is smiling and looking towards her. To her right, another man is looking down. The entire image is covered with a semi-transparent blue filter.

Overview

Ascensus Investment Advisors, LLC

“Our culture is simply the reflection of Ascensus’ Core Values:
People Matter Quality First Integrity Always®

This is what we strive to deliver to our clients every day ”

Overview

Ascensus Investment Advisors, LLC



Steve Dombrower, CFA, SVP Investment Management and Advisor Strategy

Previously Steve served as VP & Director of College Savings for Oppenheimer Funds. Steve has over 20 years of experience in Financial Services and Investment Management. Steve earned an M.B.A. in Corporate Finance & Investments from Adelphi University and a B.S. in Finance from the State University of New York at Albany. He is a Chartered Financial Analyst charter holder and a member of the CFA Institute, the New York Society of Securities Analysts, and the Financial Planning Association. Steve also holds the FINRA Series 7, 24, 50, and 63 licenses.



W. David Malone, CFA, CIMA®, Director Investment Management

Previously Dave served as President of Advocacy Investments, LLC. Dave has over 25 years of Portfolio Management and Securities Analysis experience. Dave earned a M.S. Finance from Boston College and a B.S. in Management from Tulane University. He is a Chartered Financial Analyst charter holder a member of the CFA Institute, Investment Management Consultants Association and CFA Boston Society. Dave also holds the Certified Investment Management Analyst designation, and has passed the Certified Public Accountant exam. Dave also holds a FINRA Series 65 license.



Paul Souppa, ChFC, Analyst, Investment Management

Previously Paul served as Investment Specialist at Voya Financial. Paul has over 18 years of experience in Investment Management Services. He earned his M.B.A. from Bentley University and a B.A. in Finance from University of Massachusetts – Amherst. Paul is a Chartered Financial Consultant and holds the FINRA Series 6 license.

Overview

Ascensus Investment Advisors, LLC

Investment Philosophy

- Grounded in Modern Portfolio Theory
- Built on 90 years of Historical Data
- Mean Variance Optimization
- No Forecasting of Interest Rates nor Capital Markets

100% Open Architecture “Go Anywhere, Anytime”

- No Proprietary Products

Multi-Structure

- Mutual Funds
- ETFs
- Separate Accounts
- Stable Value & FDIC Insured Products
- Insurance Products

Active and Passive Objectives

- Best of Breed at a Reasonable Cost for Active
- Best in Class Expenses for Passive

Overview

Ascensus Investment Advisors, LLC

Investment Services

1. Manager Search & Selection

- Ascensus designed PROVE evaluation process
 - **P**erformance, **R**isk, **O**perations, **V**olatility, **E**xpense

2. Portfolio Construction

- Age Based/Year of Enrollment, Target Risk, & Individual Fund Portfolios

3. Monitoring & Due Diligence

- Monthly monitoring utilizing a Stop Light methodology
- Quarterly Ascensus Investment Committee meetings
- Due Diligence meetings with all product managers
- On-Going Due Diligence Questionnaire completed by Ascensus Compliance team
- Comprehensive Investment Reviews

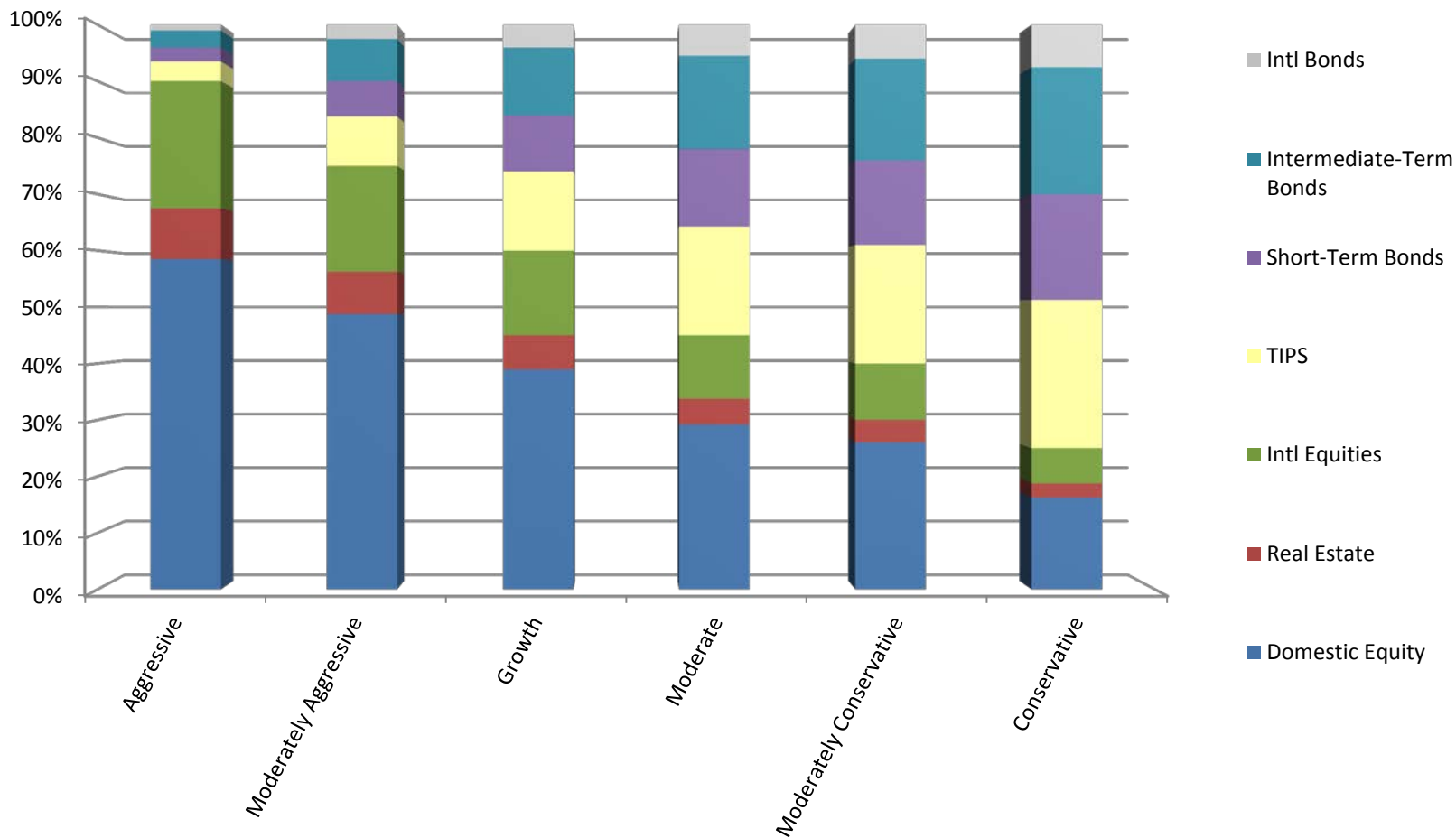


Asset Allocation of Risk Based Portfolios

Asset Allocation Review - Current Target Allocations

Asset Class	Underlying Investment	Ticker	Underlying Expense	National ABL Alliance Target Asset Allocation					
				Aggressive	Moderately Aggressive	Growth	Moderate	Moderately Conservative	Conservative
U.S. Large Cap	Vanguard Institutional Index Fund - Institutional Plus	VIIIX	0.02%	31.50%	26.25%	21.00%	15.75%	10.50%	3.50%
U.S. Small & Mid Cap	Vanguard Extended Market Index Fund - Instl Plus Shares	VEMPX	0.05%	27.00%	22.50%	18.00%	13.50%	9.00%	3.00%
Non - U.S. Multi Cap	iShares Core MSCI EAFE ETF	IEFA	0.08%	16.20%	13.50%	10.80%	8.10%	5.40%	1.80%
Emerging Markets	Schwab Emerging Markets Equity ETF	SCHE	0.13%	6.30%	5.25%	4.20%	3.15%	2.10%	0.70%
REITs	Schwab U.S. REIT ETF	SCHH	0.07%	9.00%	7.50%	6.00%	4.50%	3.00%	1.00%
U.S. Core Bond	Vanguard Total Bond Market Index Fund - Institutional Plus Shares	VBMPX	0.03%	3.00%	7.50%	12.00%	16.50%	13.50%	9.00%
Short - Term Inv Grade	Vanguard Short-Term Bond Index Fund - Institutional Plus Shares	VBIPX	0.04%	2.50%	6.25%	10.00%	13.75%	11.25%	7.50%
Short - Term TIPS	Vanguard Short-Term Inflation-Protected Securities Index Fund - Admiral	VTAPX	0.07%	3.50%	8.75%	14.00%	19.25%	15.75%	10.50%
International Bond	iShares® Core International Aggregate Bond ETF	IAGG	0.09%	1.00%	2.50%	4.00%	5.50%	4.50%	3.00%
Cash	Sallie Mae High Yield FDIC		0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	60.00%
Equity Allocation				90.00%	75.00%	60.00%	45.00%	30.00%	10.00%
Fixed Income Allocation				10.00%	25.00%	40.00%	55.00%	45.00%	30.00%
Cash Equivalent Allocation				0.00%	0.00%	0.00%	0.00%	25.00%	60.00%
Total Allocation				100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Underlying Expense				0.05%	0.05%	0.05%	0.05%	0.04%	0.02%

National ABLA Alliance – Asset Allocation of Risk Based Portfolios



A hand holding a smartphone over a laptop keyboard, with a blue overlay and white text.

Quarterly Investment Review Market Review

National ABLE Alliance – Market Review

1. Domestic Equity
2. International Equity
3. Fixed Income
4. Economic Review
 - Inflation
 - GDP
 - Consumer Confidence

National ABL Alliance – Domestic Equity

Past Performance is not indicative of future results

Index Total Returns

Sluggish fundamentals challenged equity returns until the final months of 2016; since then, markets have uniformly favored the growth style over value.

Index	Jun-17	YTD	2016	2015	2014	2013	2012	2011	2010	2009	1 year	3 years	5 years	10 years
Broad Market														
Dow Industrial	1.7	9.3	16.5	0.2	10.0	29.7	10.2	8.4	14.1	22.7	22.0	11.0	13.5	7.6
S&P 500	0.6	9.3	12.0	1.4	13.7	32.4	16.0	2.1	15.1	26.5	17.6	9.6	14.6	7.2
S&P 100 (OEX)	0.6	8.9	11.4	2.6	12.7	30.4	16.1	3.2	12.5	22.3	17.5	9.7	13.9	6.9
Nasdaq Composite	-0.9	14.7	8.9	7.0	14.7	40.2	17.7	-0.8	18.0	45.3	27.9	13.1	17.5	10.2
Large-Cap														
Russell 1000	0.7	9.3	12.1	0.9	13.2	33.1	16.4	1.5	16.1	28.4	17.8	9.3	14.7	7.3
Russell 1000 Value	1.6	4.7	17.3	-3.8	13.5	32.5	17.5	0.4	15.5	19.7	15.4	7.4	13.9	5.6
Russell 1000 Growth	-0.3	14.0	7.1	5.7	13.0	33.5	15.3	2.6	16.7	37.2	20.0	11.1	15.3	8.9
Mid-Cap														
Russell Mid-Cap	1.0	8.0	13.8	-2.4	13.2	34.8	17.3	-1.5	25.5	40.5	16.1	7.7	14.7	7.7
Russell Mid-Cap Value	1.5	5.2	20.0	-4.8	14.7	33.5	18.5	-1.4	24.8	34.2	15.6	7.5	15.1	7.2
Russell Mid-Cap Growth	0.3	11.4	7.3	-0.2	11.9	35.7	15.8	-1.7	26.4	46.3	16.7	7.8	14.2	7.9
Small-Cap														
Russell 2000	3.5	5.0	21.3	-4.4	4.9	38.8	16.3	-4.2	26.9	27.2	24.1	7.4	13.7	6.9
Russell 2000 Value	3.5	0.5	31.7	-7.5	4.2	34.5	18.1	-5.5	24.5	20.6	24.4	7.0	13.4	5.9
Russell 2000 Growth	3.4	10.0	11.3	-1.4	5.6	43.3	14.6	-2.9	29.1	34.5	23.8	7.6	14.0	7.8

National ABLE Alliance – International Equity

Past Performance is not indicative of future results

Global Returns — Local and USD

World markets have posted uneven — but positive — returns despite geopolitical and slow growth concerns.

Index	Currency	Jun-17	YTD	2016	2015	2014	2013	2012	2011	2010	2009	2008	1 year	3 year	5 years	10 years
Global Markets																
International	USD	-0.1	14.2	1.5	-0.4	-4.5	23.3	17.9	-11.7	8.2	32.5	-43.1	20.8	1.6	9.2	1.5
	local	-0.7	7.9	5.9	5.8	6.4	27.5	17.9	-11.7	5.3	25.4	-39.9	22.7	7.5	13.0	2.5
Emerging Mkt	USD	1.1	18.6	11.6	-14.6	-1.8	-2.3	18.6	-18.2	19.2	79.0	-53.2	24.2	1.4	4.3	2.2
	local	1.7	15.0	10.1	-5.4	5.6	3.8	17.4	-12.5	14.4	62.8	-45.7	22.2	6.5	8.0	4.7
Regions																
Euro x-UK	USD	-0.7	18.3	0.3	0.1	-5.8	28.7	22.5	-14.5	2.4	33.9	-45.0	25.3	1.7	11.4	1.6
	local	-2.1	10.0	3.2	9.1	7.4	24.2	20.0	-12.1	5.1	29.0	-42.7	22.5	7.5	13.6	2.6
UK	USD	-1.9	10.0	0.0	-7.5	-5.4	20.7	15.3	-2.5	8.8	43.4	-48.3	13.4	-2.9	5.3	0.3
	local	-2.5	4.7	19.2	-2.2	0.5	18.5	10.2	-1.8	12.2	27.7	-28.5	16.7	6.4	9.4	4.8
Pac x-Japan	USD	2.1	13.6	8.0	-8.4	-0.3	5.6	24.7	-12.7	17.1	73.0	-50.0	19.6	1.4	6.9	3.8
	local	0.3	9.2	8.5	-0.8	5.8	16.5	22.6	-12.8	6.1	45.8	-41.6	17.9	6.3	11.0	4.3
Japan	USD	1.1	10.1	2.7	9.9	-3.7	27.3	8.4	-14.2	15.6	6.4	-29.1	19.6	5.9	9.9	1.4
	local	2.7	6.1	-0.4	10.3	9.8	54.8	21.8	-18.6	0.7	9.3	-42.5	31.0	9.6	17.6	0.5
China	USD	2.4	25.0	1.1	-7.6	8.3	4.0	23.1	-18.2	4.8	62.6	-50.8	32.3	8.3	9.2	4.2
	local	2.5	25.6	1.2	-7.7	8.3	4.0	22.9	-18.3	5.1	62.7	-51.1	33.0	8.5	9.3	4.2
S&P 500		0.6	9.3	12.0	1.4	13.7	32.4	16.0	2.1	15.1	26.5	-37.0	17.9	9.6	14.6	7.2

National ABLE Alliance – Fixed Income

Past Performance is not indicative of future results

Bond and Loan Returns

Long-term U.S. Treasuries have been winners in periods of uncertainty but bonds of all kinds have been valuable in providing stability to a portfolio.

Example of
interest rate
risk and
duration

Index	Spread	Jun-17	YTD	2016	2015	2014	2013	2012	2011	2010	1 year	3 years	5 years	10 years
U.S. Investment Grade														
Treasury	0	-0.2	1.9	1.0	0.8	5.1	-2.7	2.0	9.8	5.9	-2.3	2.0	1.3	4.1
Treasury (1-3YR)	0	-0.1	0.5	0.9	0.6	0.6	0.4	0.4	1.6	2.4	-0.1	0.7	0.6	2.0
Treasury (20+YR)	0	0.5	5.7	1.4	-1.6	27.5	-13.9	3.4	33.8	9.4	-7.5	5.9	2.8	7.5
Government Related	61	0.0	2.7	2.7	-0.4	6.1	-2.7	4.9	6.7	5.0	-0.2	2.2	2.1	4.6
Corporate	109	0.3	3.8	6.1	-0.7	7.5	-1.5	9.8	8.1	9.0	2.3	3.6	4.0	5.8
Fixed rate MBS	33	-0.4	1.4	1.7	1.5	6.1	-1.5	2.6	6.3	5.5	-0.1	2.2	2.0	4.4
ABS	46	-0.1	1.1	2.0	1.2	1.9	-0.3	3.7	5.1	5.9	0.6	1.7	1.5	3.0
CMBS	73	-0.3	2.2	3.4	1.0	3.9	-0.1	8.6	6.2	18.5	-0.4	2.6	2.9	5.0
U.S. Agg Agencies - Hybrid ARMs	0	0.0	1.2	1.8	0.9	2.2	0.1	2.4	3.6	2.5	0.5	1.5	1.4	3.2
Bloomberg Barclays Aggregate	43	-0.1	2.3	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	-0.3	2.5	2.2	4.5
High Yield and Global														
High Yield	360	0.1	4.9	17.1	-4.5	2.5	7.4	15.8	5.0	15.1	12.7	4.5	6.9	7.7
Global Aggregate	40	-0.1	4.4	2.1	-3.2	0.6	-2.6	4.3	5.6	5.5	-2.2	-0.4	0.8	3.7
Emerging Markets	266	-0.2	5.1	9.9	1.3	4.8	-4.1	17.9	7.0	12.8	5.6	4.5	5.3	7.1
Senior Loans	385	0.0	1.5	8.7	1.4	1.7	6.5	10.1	1.3	10.8	6.3	3.9	5.2	5.0

National ABL Alliance – Correlations

Past Performance is not indicative of future results

Long-Run Correlation (since 1995)

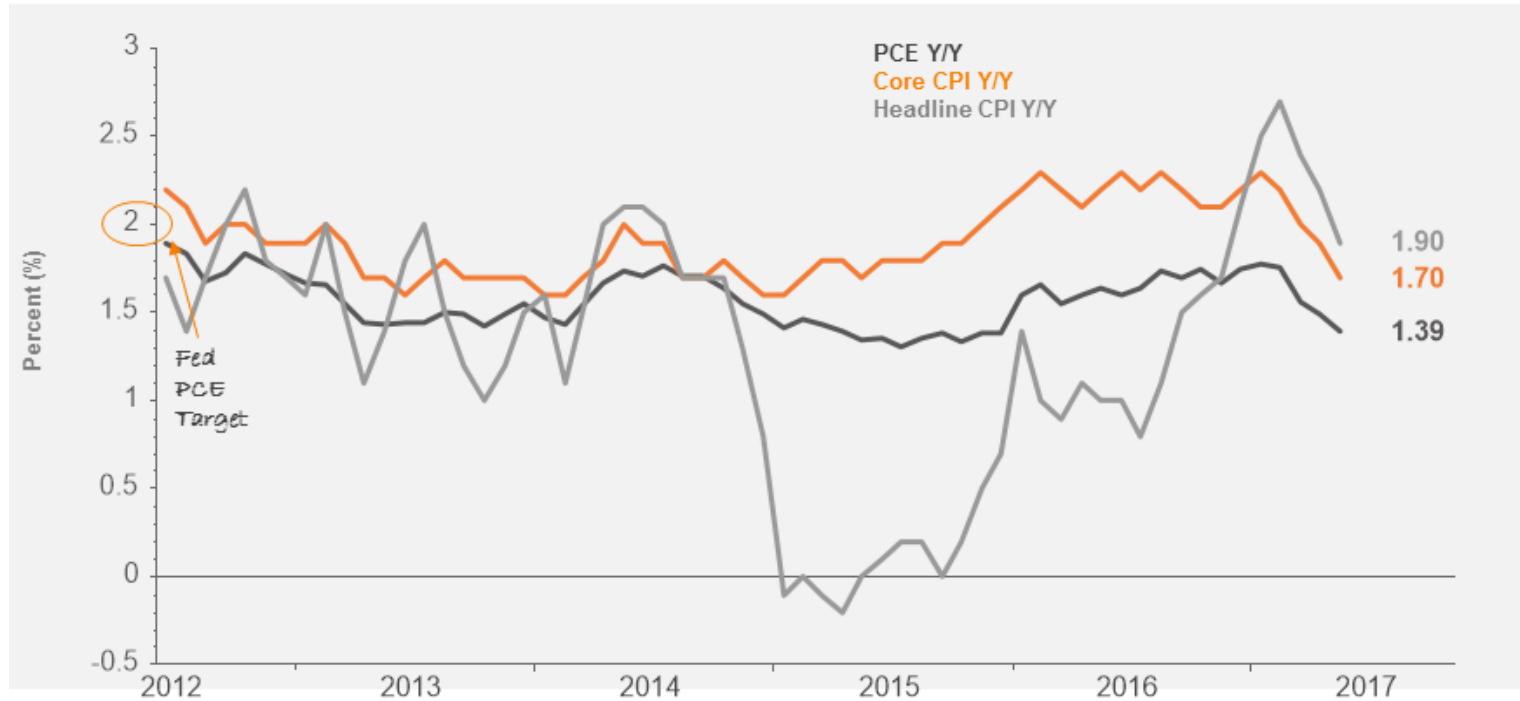
Return correlations below 1.0 indicate ways to combine investments and reduce overall risk; negative or near zero correlations offer the best diversification benefits.

	S&P 500	Midcap	Small cap	Global REIT	EAFE	EMEq	Corp Bonds	Treas 20+	Global Agg Bonds	High Yield Bonds	Hedge Funds	Gold	Sr. Loans
S&P 500	1.00	0.90	0.81	0.60	0.83	0.74	0.23	-0.23	0.14	0.62	0.01	0.02	0.57
Midcap		1.00	0.93	0.66	0.80	0.76	0.22	-0.25	0.12	0.65	0.03	0.08	0.64
Smallcap			1.00	0.64	0.74	0.71	0.16	-0.26	0.09	0.62	0.01	0.08	0.56
Global REIT				1.00	0.68	0.62	0.41	-0.09	0.36	0.65	0.07	0.18	0.61
EAFE					1.00	0.82	0.29	-0.24	0.33	0.65	0.03	0.17	0.59
EM Eq						1.00	0.25	-0.24	0.20	0.65	-0.01	0.24	0.60
Corp Bonds							1.00	0.58	0.65	0.53	-0.07	0.27	0.38
Treas 20+								1.00	0.47	-0.16	-0.16	0.14	-0.39
Global Agg Bonds									1.00	0.25	-0.08	0.44	0.09
High Yield Bonds										1.00	0.13	0.13	0.86
Hedge Funds											1.00	-0.08	0.33
Gold												1.00	0.03
Sr. Loans													1.00

National ABLA Alliance – Inflation

Inflation — CPI

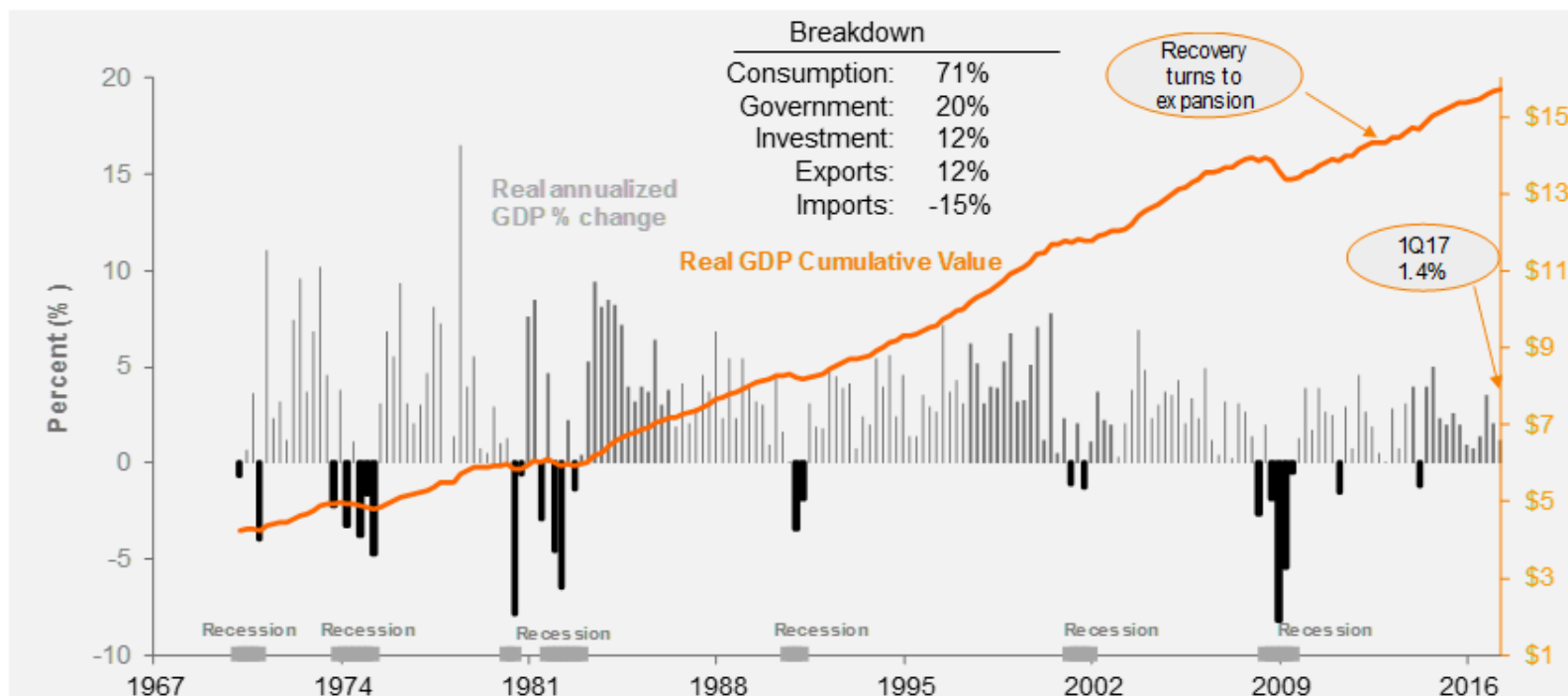
Core and headline inflation remain subdued with the Fed's preferred measure of inflation, Core PCE, remaining slightly below target.



National ABLE Alliance – Gross Domestic Product (GDP)

Real GDP (Q/Q)

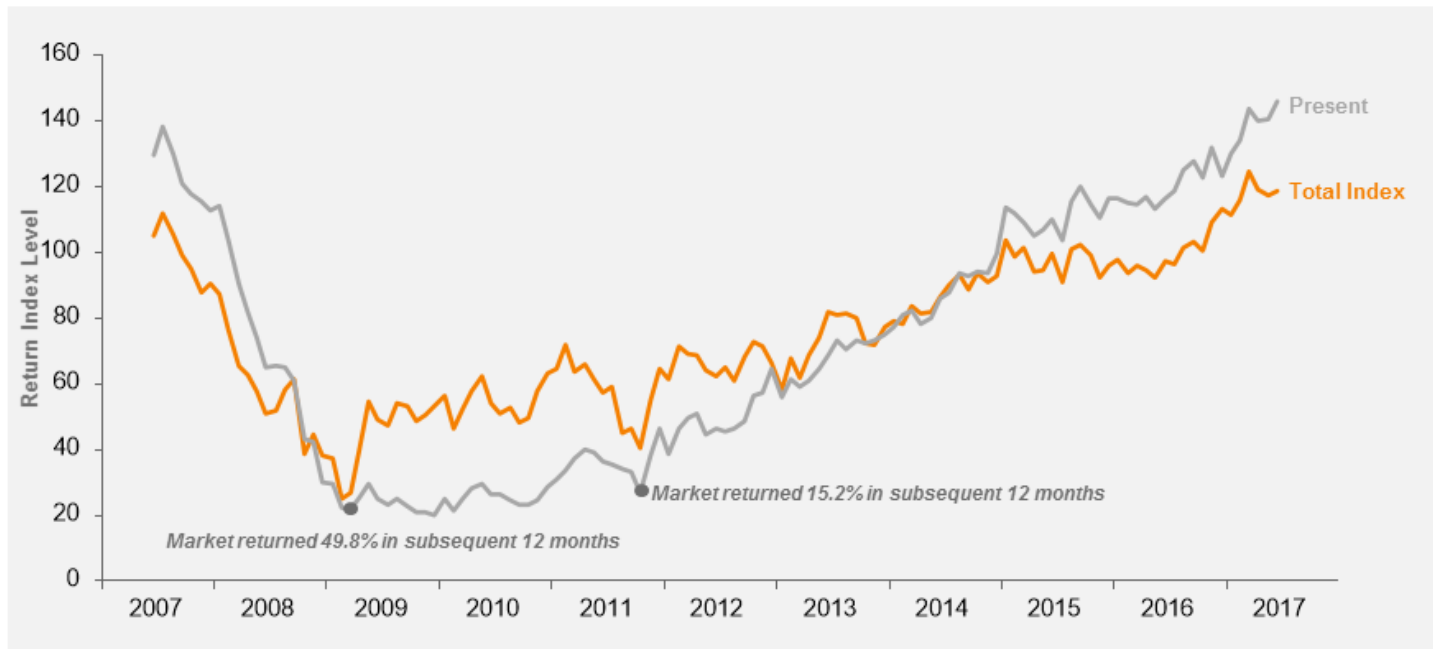
The U.S. has slowly recovered the output level lost in the Great Recession and has reached new highs. Expansions historically last about five years.



National ABLÉ Alliance – Consumer Confidence

Consumer Confidence

U.S. consumer confidence hit a 30 year high on hope for pro-growth economic policy. Consumer confidence is typically a lagging indicator.



Note: Subsequent 12-month market returns are based on the S&P 500 Index total return.

Source: The Conference Board, FactSet

A blue-tinted background image showing two business professionals, a woman and a man, in an office setting. The woman is on the left, wearing glasses and smiling, looking towards the man. The man is on the right, also smiling, looking at a laptop. They are both dressed in business attire. The background is slightly blurred, showing office shelves and equipment.

Annual Investment Review Plan Review

National ABLE Alliance – Plan Review

As of June 30, 2017

Past Performance is not indicative of future results

<u>Fund Name</u>	<u>Market Value</u>	<u>% of Plan</u>	<u>1 Month</u>	<u>3 Months</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Inception</u>	<u>Inception Date</u>
Aggressive Option	\$370,914	12.48%	1.03	3.06	8.01					7.90	12/15/16
ABLE Aggressive Custom Benchmark			1.02	3.18	8.34						
Variance			0.01	(0.12)	(0.33)						
Moderately Aggressive Option	\$478,194	16.09%	0.94	2.69	6.90					6.90	12/15/16
ABLE Moderately Aggressive Custom Benchmark			0.81	2.72	7.11						
Variance			0.13	(0.03)	(0.21)						
Growth Option	\$507,749	17.08%	0.57	2.13	5.49					5.70	12/15/16
ABLE Growth Custom Benchmark			0.60	2.27	5.89						
Variance			(0.03)	(0.14)	(0.40)						
Moderate Option	\$331,179	11.14%	0.38	1.65	4.49					4.80	12/15/16
ABLE Moderate Custom Benchmark			0.39	1.82	4.69						
Variance			(0.01)	(0.17)	(0.20)						
Moderately Conservative Option	\$239,558	8.06%	0.29	1.17	3.09					3.40	12/15/16
ABLE Moderately Conservative Custom Benchmark			0.25	1.30	3.28						
Variance			0.04	(0.13)	(0.19)						
Conservative Option	\$400,681	13.48%	0.10	0.59	1.40					1.60	12/15/16
ABLE Conservative Custom Benchmark			0.08	0.60	1.41						
Variance			0.02	(0.01)	(0.01)						
Checking Option	\$643,880	21.66%									03/30/17
Plan Total	\$2,972,154	100.00%									

Portfolio Benchmark Allocation Review

ABLE Consortium Custom Benchmarks

	Aggressive Custom Benchmark	Moderately Aggressive Custom Benchmark	Growth Custom Benchmark	Moderate Custom Benchmark	Moderately Conservative Custom Benchmark	Conservative Custom Benchmark
S&P 500 TR USD	31.50%	26.25%	21.00%	15.75%	10.50%	3.50%
S&P Completion TR USD	27.00%	22.50%	18.00%	13.50%	9.00%	3.00%
MSCI EAFE IMI NR USD	16.20%	13.50%	10.80%	8.10%	5.40%	1.80%
FTSE Emerging NR USD	6.30%	5.25%	4.20%	3.15%	2.10%	0.70%
DJ US Select REIT TR USD	9.00%	7.50%	6.00%	4.50%	3.00%	1.00%
BBgBarc US Agg Float Adj TR USD	3.00%	7.50%	12.00%	16.50%	13.50%	9.00%
BBgBarc US 1-5Y GovCredit FIAdj TR USD	2.50%	6.25%	10.00%	13.75%	11.25%	7.50%
BBgBarc U.S. Treasury TIPS 0-5Y TR USD	3.50%	8.75%	14.00%	19.25%	15.75%	10.50%
BBgBarc Gbl Agg xUSD 10% IC TR Hdg USD	1.00%	2.50%	4.00%	5.50%	4.50%	3.00%
Citi Treasury Bill 3 Mon USD	0.00%	0.00%	0.00%	0.00%	25.00%	60.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

A blue-tinted photograph of a family walking through a grassy field at dusk. A man is on the left, a woman on the right, and a small child is in the center. They are all walking towards the right. In the background, there is a body of water and some trees. The overall mood is peaceful and serene.

Underlying Investment Product Review

Underlying Product Investment Review

As of June 30,2017

Underlying Fund Name	Total Ret 1 Mo	Total Ret 3 Mo	Total Ret YTD	Total Ret 1 Yr	Total Ret Annlzd 3 Yr	Total Ret Annlzd 5 Yr	Total Ret Annlzd 10 Yr
Vanguard Institutional Index Instl PI	0.62	3.08	9.33	17.88	9.61	14.62	7.21
S&P 500 TR USD	0.62	3.09	9.34	17.90	9.61	14.63	7.18
Variance	0.00	-0.01	-0.01	-0.02	0.00	-0.01	0.03
Vanguard Extended Market Index InstlPlus	2.33	2.67	7.36	21.64	6.95	14.39	7.69
S&P Completion TR USD	2.32	2.64	7.33	21.49	6.80	14.24	7.61
Variance	0.01	0.03	0.03	0.15	0.15	0.14	0.08
iShares Core MSCI EAFE ETF	-0.12	6.53	14.43	20.94	1.88		
MSCI EAFE IMI NR USD	-0.15	6.40	14.21	20.67	1.73		
Variance	0.03	0.13	0.22	0.27	0.15		
Schwab Emerging Markets Equity ETF™	0.41	3.90	14.62	19.98	0.95	3.80	
FTSE Emerging NR USD	0.49	4.00	14.59	20.19	1.07	3.94	
Variance	-0.08	-0.10	0.03	-0.21	-0.12	-0.14	
Schwab US REIT ETF™	2.43	1.58	1.30	-2.66	7.88	8.86	
DJ US Select REIT TR USD	2.45	1.64	1.36	-2.43	8.04	9.00	
Variance	-0.02	-0.06	-0.06	-0.23	-0.16	-0.14	

Past Performance is not indicative of future results

Underlying Product Investment Review

As of June 30,2017

Underlying Fund Name	Total Ret 1 Mo	Total Ret 3 Mo	Total Ret YTD	Total Ret 1 Yr	Total Ret Annlzd 3 Yr	Total Ret Annlzd 5 Yr	Total Ret Annlzd 10 Yr
Vanguard Total Bond Market Idx InstIPs	0.02	1.48	2.41	-0.42	2.45	2.16	4.45
BBgBarc US Agg Float Adj TR USD	-0.07	1.49	2.35	-0.33	2.49	2.23	N/A
Variance	0.09	-0.01	0.06	-0.09	-0.04	-0.07	N/A
Vanguard Short-Term Bond Idx InstIPs	-0.05	0.61	1.10	0.07	1.30	1.23	2.90
BBgBarc US 1-5Y GovCredit FIAdj TR USD	-0.11	0.56	1.14	0.11	1.35	1.30	N/A
Variance	0.05	0.04	-0.03	-0.04	-0.05	-0.07	N/A
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	-0.44	-0.52	0.16	0.19	-0.07		
BBgBarc U.S. Treasury TIPS 0-5Y TR USD	-0.43	-0.50	0.19	0.32	0.01		
Variance	-0.01	-0.02	-0.03	-0.13	-0.08		
iShares Core International Aggt Bd ETF	-0.44	0.66	0.67	-0.32			
BBgBarc Gbl Agg xUSD 10% IC TR Hdg USD	-0.52	0.63	0.71	-0.24			
Variance	0.08	0.03	-0.04	-0.08			

Past Performance is not indicative of future results

Questions?

National ABLE Alliance

A blue-tinted photograph of a family walking through a grassy field. A man is on the left, a woman on the right, and a small child in the center. In the background, there is a calm lake and a line of trees under a clear sky.

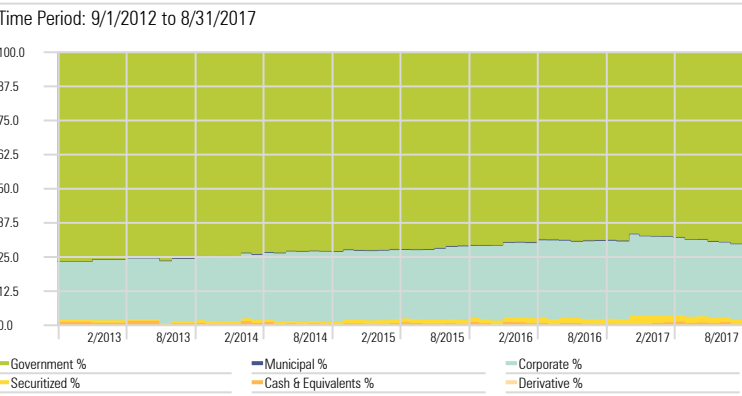
Appendix A

Underlying Funds Fact Sheets

Vanguard Short-Term Bond Idx InstlPIs - Snapshot

Ticker	VBIPX
Morningstar Category	US Fund Short-Term Bond
Global Broad Category Group	Fixed Income
Primary Prospectus Benchmark	BBgBarc US 1-5Y GovCredit FIAAdj TR USD
Prospectus Net Expense Ratio	0.04
Manager Name	Multiple
Manager Tenure (Longest)	4.58
Turnover Ratio %	51.00
Morningstar Rating Overall	★★★
Inception Date	9/29/2011

Vanguard Short-Term Bond Idx InstlPIs - Fixed-Inc Super Sectors (Morningsta

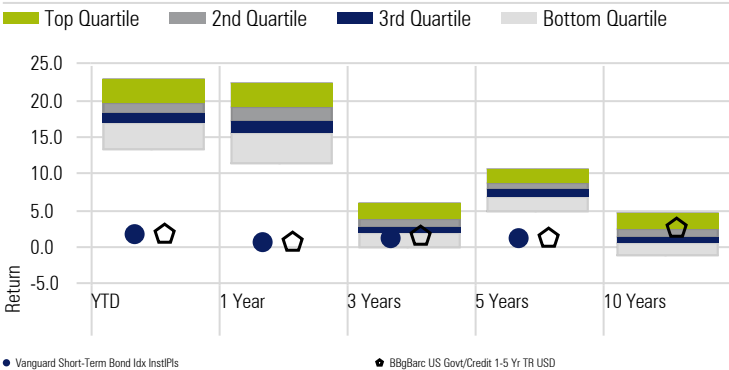


Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Vanguard Short-Term Bond Idx InstlPIs	6/30/2017	0.07	1.30	1.23	—	-0.18	0.06	0.23	—
BBgBarc US Govt/Credit 1-5 Yr TR USD	6/30/2017	0.11	1.35	1.29	2.97	—	—	—	—

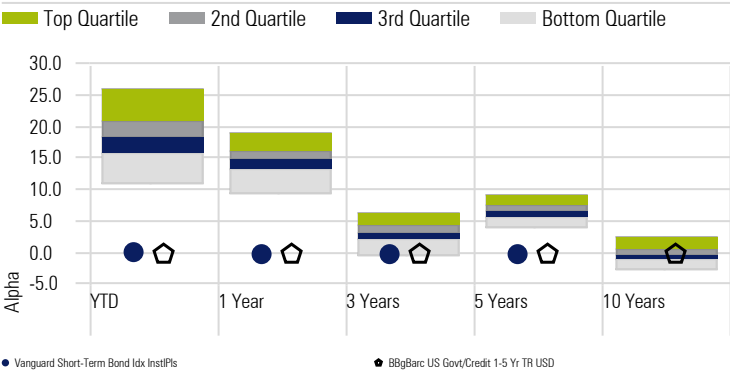
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Govt/Credit 1-5 Yr TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Govt/Credit 1-5 Yr TR USD

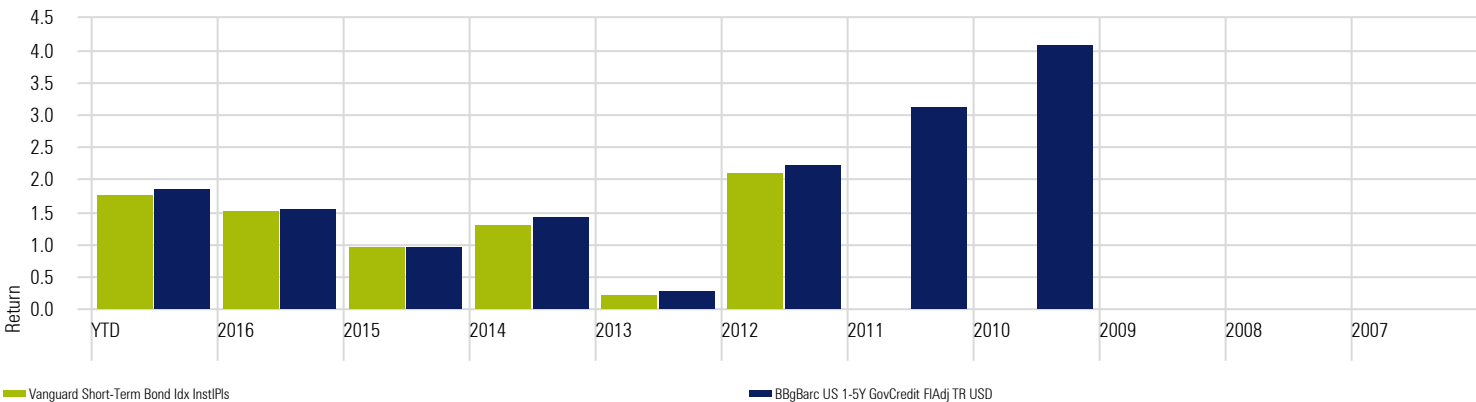


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Vanguard Short-Term Bond Idx InstlPIs	6/30/2017	1.52	0.97	1.31	0.22	2.10	—	—	—	—	—
BBgBarc US Govt/Credit 1-5 Yr TR USD	6/30/2017	1.56	0.97	1.42	0.28	2.24	3.14	4.08	4.62	5.13	7.27

Returns

Calculation Benchmark: BBgBarc US 1-5Y GovCredit FIAAdj TR USD



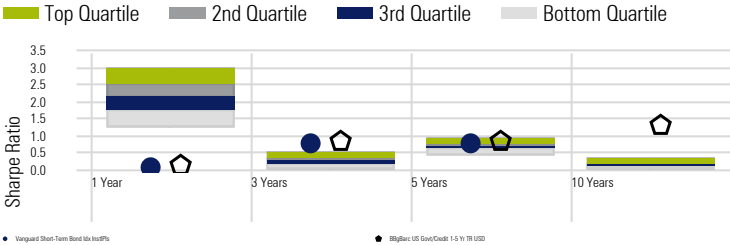
Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Vanguard Short-Term Bond Idx InstlPIs	6/30/2017	-0.42	0.75	0.83	—	0.20	-0.68	-0.55	—
BBgBarc US Govt/Credit 1-5 Yr TR USD	6/30/2017	-0.38	0.81	0.90	1.39	—	—	—	—

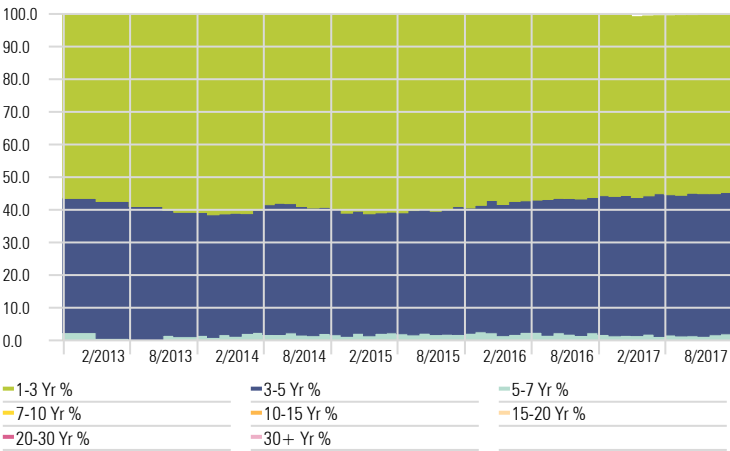
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Govt/Credit 1-5 Yr TR USD



Vanguard Short-Term Bond Idx InstlPIs - Fixed-Income Maturity

Time Period: 9/1/2012 to 8/31/2017

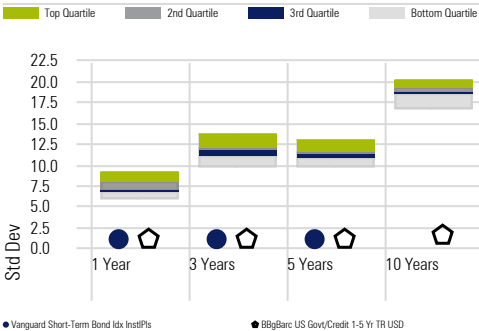


Morningstar Category Performance

	Return Date (Qtr-End)	Credit Qual AAA %	Credit Qual Below B %	Average Eff Duration	Average Eff Maturity	Yield to Maturity
Vanguard Short-Term Bond Idx InstlPIs	6/30/2017	70.65	0.00	2.77	2.90	1.66
BBgBarc US Govt/Credit 1-5 Yr TR USD	6/30/2017	—	—	—	—	—

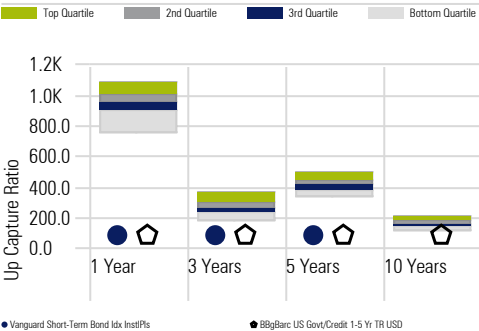
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Govt/Credit 1-5 Yr TR USD



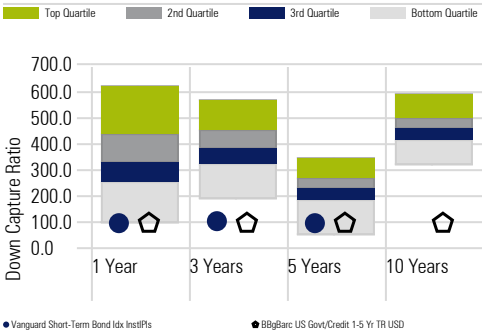
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Govt/Credit 1-5 Yr TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Govt/Credit 1-5 Yr TR USD

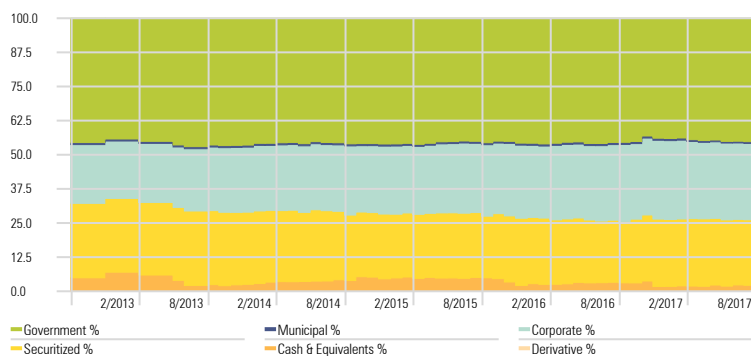


Vanguard Total Bond Market Idx InstlPIs - Snapshot

Ticker	VBMPX
Morningstar Category	US Fund Intermediate-Term Bond
Global Broad Category Group	Fixed Income
Primary Prospectus Benchmark	BBgBarc US Agg Float Adj TR USD
Prospectus Net Expense Ratio	0.03
Manager Name	Joshua C. Barrickman
Manager Tenure (Longest)	4.58
Turnover Ratio %	61.00
Morningstar Rating Overall	★★★
Inception Date	2/5/2010

Vanguard Total Bond Market Idx InstlPIs - Fixed-Inc Super Sectors (Mornings

Time Period: 9/1/2012 to 8/31/2017

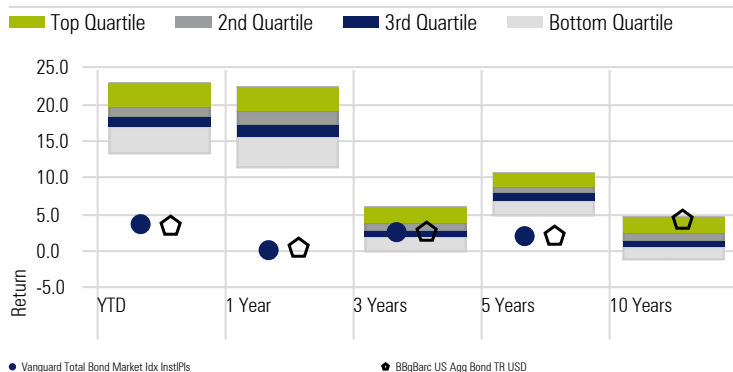


Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Vanguard Total Bond Market Idx InstlPIs	6/30/2017	-0.42	2.45	2.16	—	-0.03	-0.17	-0.14	—
BBgBarc US Agg Bond TR USD	6/30/2017	-0.31	2.48	2.21	4.48	—	—	—	—

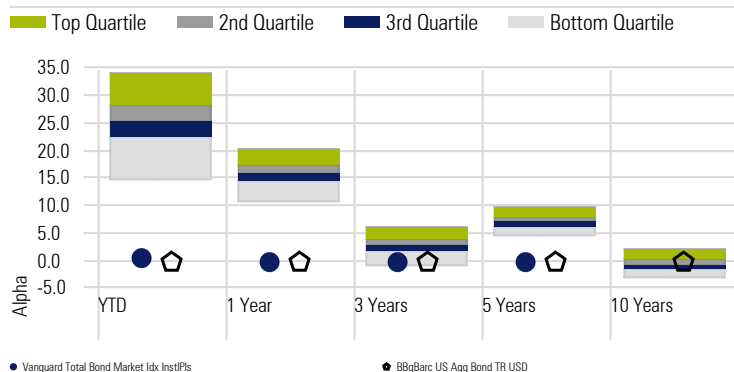
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Agg Bond TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Agg Bond TR USD

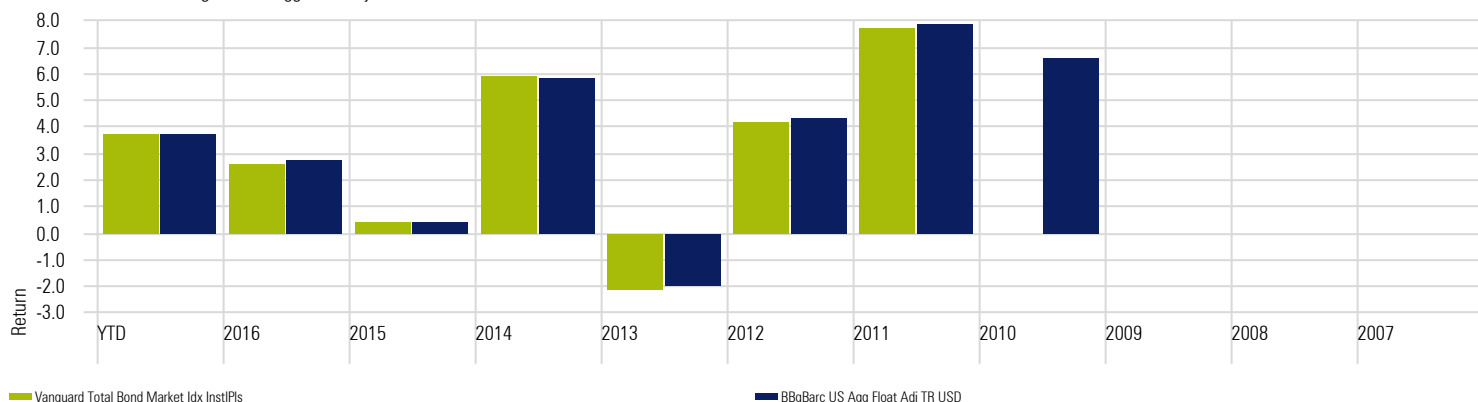


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Vanguard Total Bond Market Idx InstlPIs	6/30/2017	2.62	0.42	5.92	-2.12	4.20	7.74	—	—	—	—
BBgBarc US Agg Bond TR USD	6/30/2017	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97

Returns

Calculation Benchmark: BBgBarc US Agg Float Adj TR USD



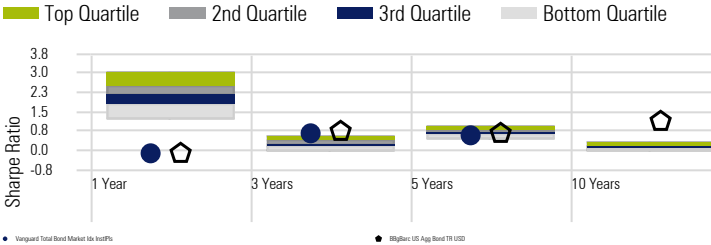
Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Vanguard Total Bond Market Idx InstlPIs	6/30/2017	-0.29	0.71	0.67	—	-0.29	-0.08	-0.19	—
BBgBarc US Agg Bond TR USD	6/30/2017	-0.29	0.77	0.72	1.21	—	—	—	—

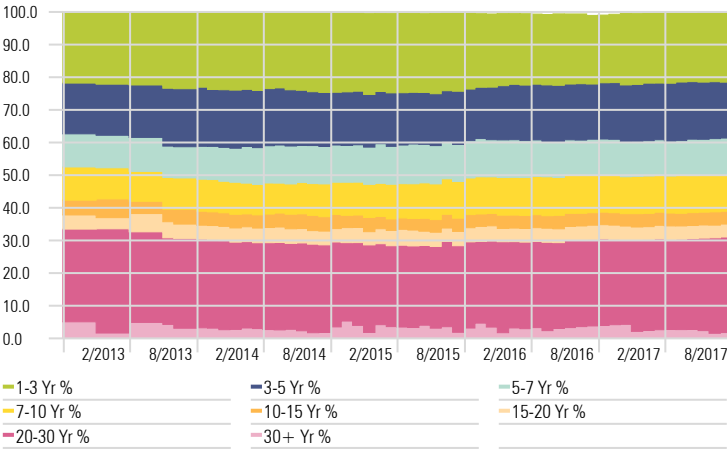
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Agg Bond TR USD



Vanguard Total Bond Market Idx InstlPIs - Fixed-Income Maturity

Time Period: 9/1/2012 to 8/31/2017

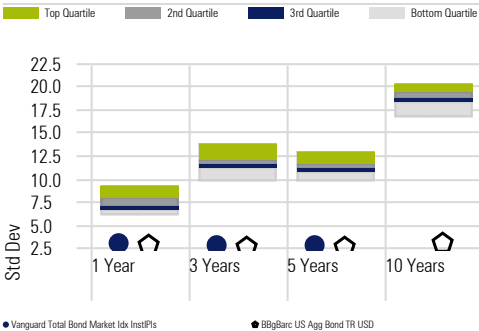


Morningstar Category Performance

	Return Date (Qtr-End)	Credit Qual AAA %	Credit Qual Below B %	Average Eff Duration	Average Eff Maturity	Yield to Maturity
Vanguard Total Bond Market Idx InstlPIs	6/30/2017	69.34	0.00	6.11	8.30	2.53
BBgBarc US Agg Bond TR USD	6/30/2017	—	—	—	—	2.43

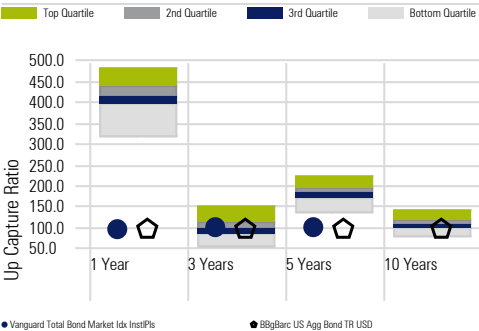
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Agg Bond TR USD



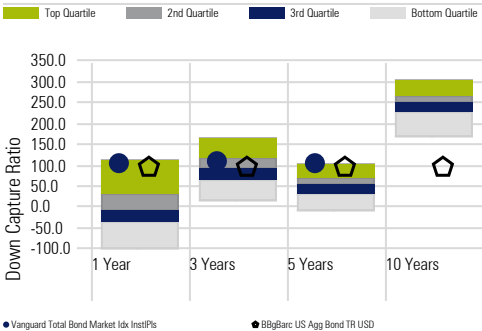
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Agg Bond TR USD



Performance Relative to Peer Group

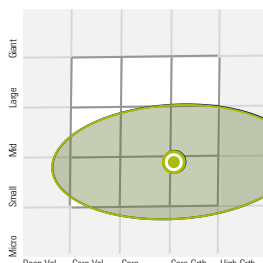
Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Agg Bond TR USD



Vanguard Extended Market Index InstlPlus - Snapshot

Ticker	VEMPX
Morningstar Category	US Fund Mid-Cap Blend
Global Broad Category Group	Equity
Primary Prospectus Benchmark	S&P Completion TR USD
Prospectus Net Expense Ratio	0.05
Manager Name	Multiple
Manager Tenure (Longest)	19.75
Turnover Ratio %	12.00
Morningstar Rating Overall	★★★
Inception Date	1/14/2011

Holdings-Based Style Map



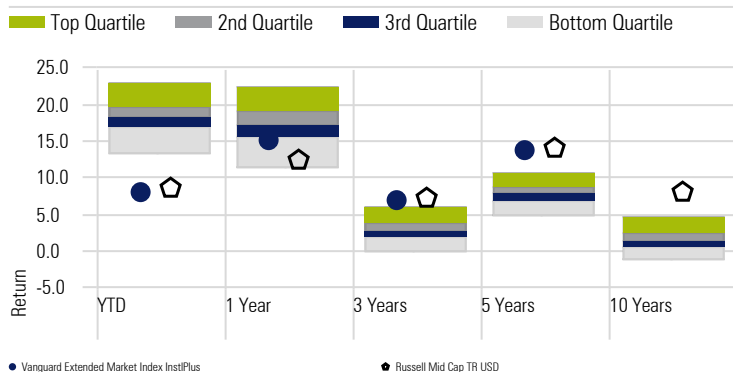
● Vanguard Extended Market Index InstlPlus 8/31/2017
● S&P Completion TR USD 8/31/2017

Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Vanguard Extended Market Index InstlPlus	6/30/2017	21.64	6.95	14.39	—	-2.71	-3.21	-1.43	—
Russell Mid Cap TR USD	6/30/2017	16.48	7.69	14.72	7.67	—	—	—	—

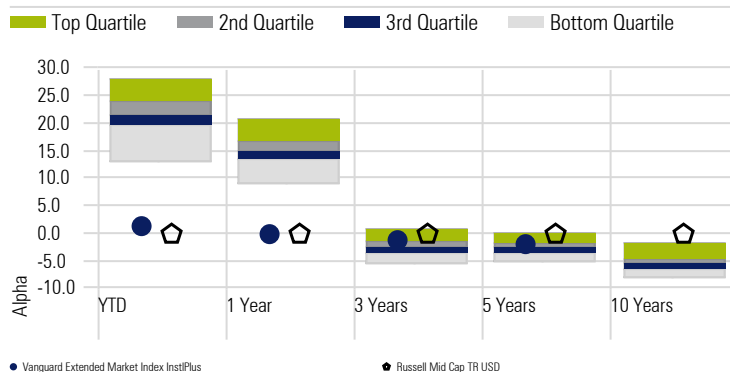
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Russell Mid Cap TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Russell Mid Cap TR USD

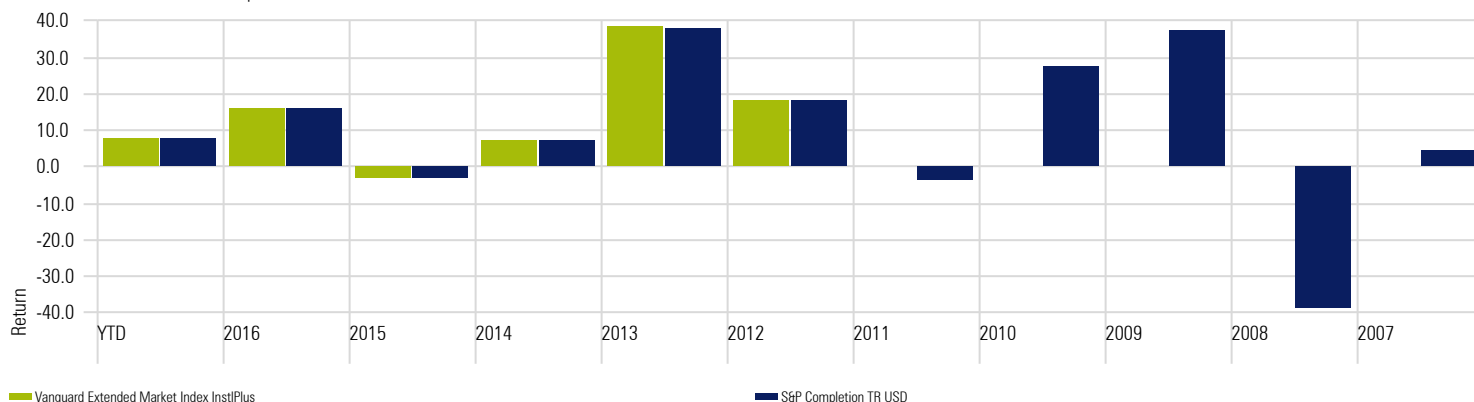


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Vanguard Extended Market Index InstlPlus	6/30/2017	16.18	-3.23	7.60	38.43	18.52	—	—	—	—	—
Russell Mid Cap TR USD	6/30/2017	13.80	-2.44	13.22	34.76	17.28	-1.55	25.48	40.48	-41.46	5.60

Returns

Calculation Benchmark: S&P Completion TR USD



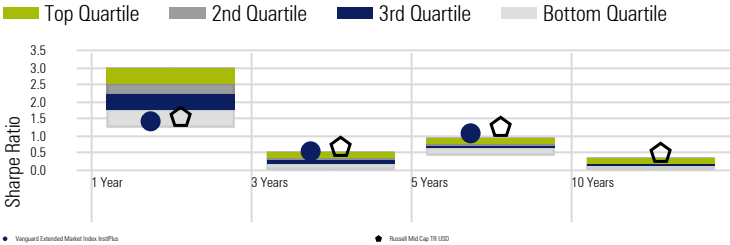
Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Vanguard Extended Market Index InstlPlus	6/30/2017	1.93	0.55	1.15	—	0.61	-0.40	-0.04	—
Russell Mid Cap TR USD	6/30/2017	1.90	0.70	1.36	0.48	—	—	—	—

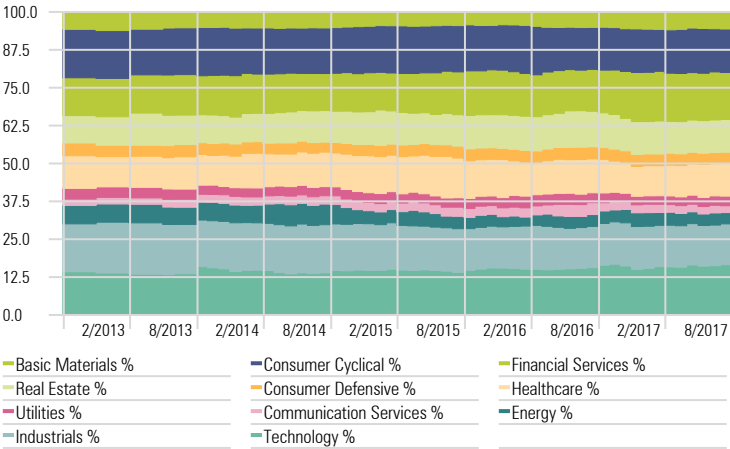
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Russell Mid Cap TR USD



Vanguard Extended Market Index InstlPlus - Equity Sectors (Morningstar)

Time Period: 9/1/2012 to 8/31/2017

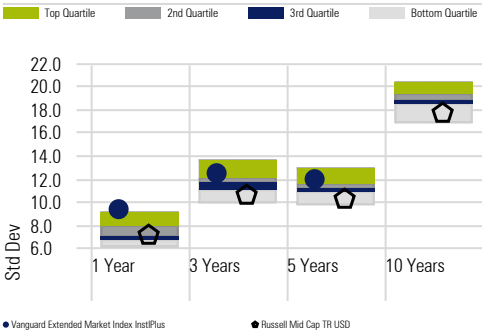


Morningstar Category Performance

	Std Dev 1 Yr (Qtr-End)	Std Dev 3 Yr (Qtr-End)	Std Dev 5 Yr (Qtr-End)	Std Dev 10 Yr (Qtr-End)	Upside Capture Ratio 1 Yr (Qtr-End)	Upside Capture Ratio 3 Yr (Qtr-End)	Upside Capture Ratio 5 Yr (Qtr-End)	Upside Capture Ratio 10 Yr (Qtr-End)	Downside Capture Ratio 1 Yr (Qtr-End)	Downside Capture Ratio 3 Yr (Qtr-End)	Downside Capture Ratio 5 Yr (Qtr-End)	Downside Capture Ratio 10 Yr (Qtr-End)
Vanguard Extended Market Index InstlPlus	10.18	13.24	12.18	—	128.89	106.49	106.91	—	212.08	139.61	122.08	—
Russell Mid Cap TR USD	7.91	11.16	10.40	17.89	—	—	—	—	—	—	—	—

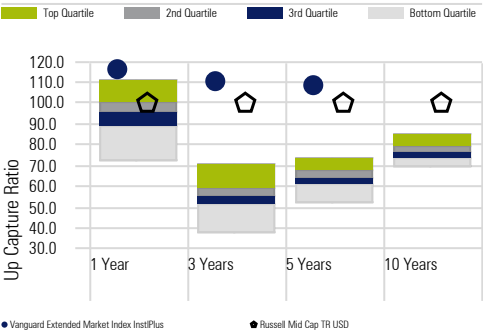
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Russell Mid Cap TR USD



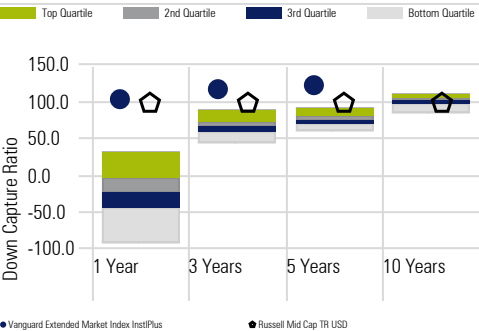
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Russell Mid Cap TR USD



Performance Relative to Peer Group

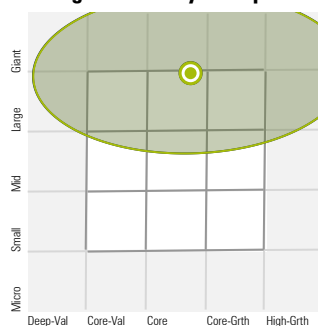
Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Russell Mid Cap TR USD



Vanguard Institutional Index Instl PI - Snapshot

Ticker	VIIIX
Morningstar Category	US Fund Large Blend
Global Broad Category Group	Equity
Primary Prospectus Benchmark	S&P 500 TR USD
Prospectus Net Expense Ratio	0.02
Manager Name	Multiple
Manager Tenure (Longest)	16.58
Turnover Ratio %	5.00
Morningstar Rating Overall	★★★★
Inception Date	7/7/1997

Holdings-Based Style Map



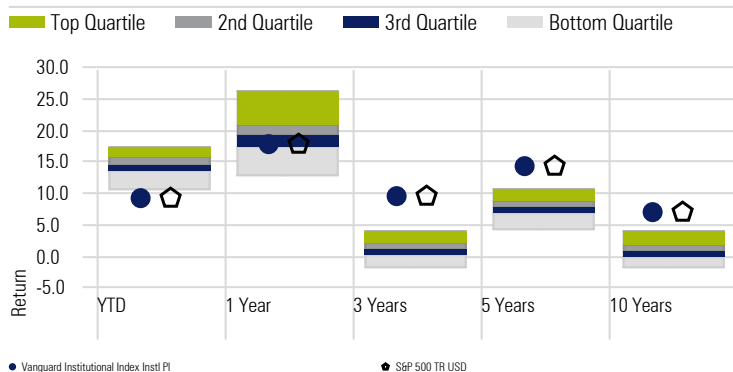
● Vanguard Institutional Index Instl PI 6/30/2017
● S&P 500 TR USD 6/30/2017

Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Vanguard Institutional Index Instl PI	6/30/2017	17.88	9.61	14.62	7.21	-0.01	0.00	-0.01	0.03
S&P 500 TR USD	6/30/2017	17.90	9.61	14.63	7.18	—	—	—	—

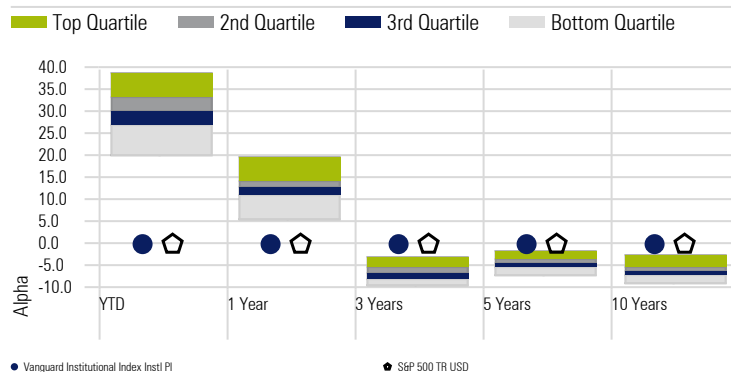
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD

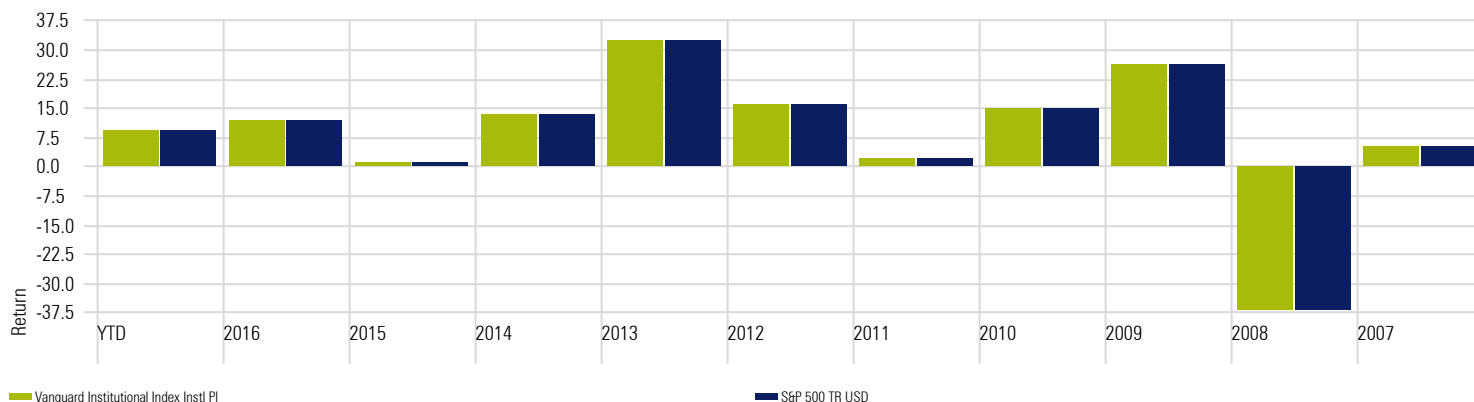


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Vanguard Institutional Index Instl PI	6/30/2017	11.95	1.39	13.68	32.37	16.00	2.12	15.07	26.66	-36.94	5.50
S&P 500 TR USD	6/30/2017	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46	-37.00	5.49

Returns

Calculation Benchmark: S&P 500 TR USD



Source: Morningstar Direct

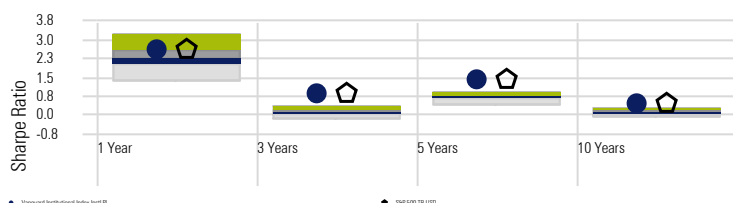
Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Vanguard Institutional Index Instl PI	6/30/2017	2.65	0.92	1.46	0.50	-1.93	-0.35	-0.56	0.93
S&P 500 TR USD	6/30/2017	2.65	0.92	1.46	0.50	—	—	—	—

Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD

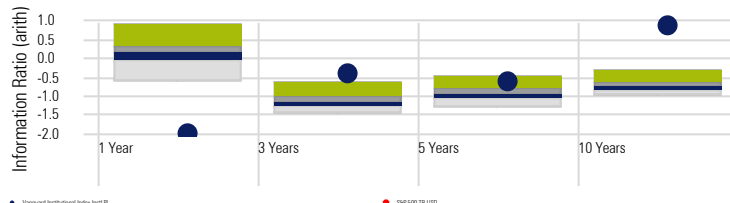
Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



Performance Relative to Peer Group

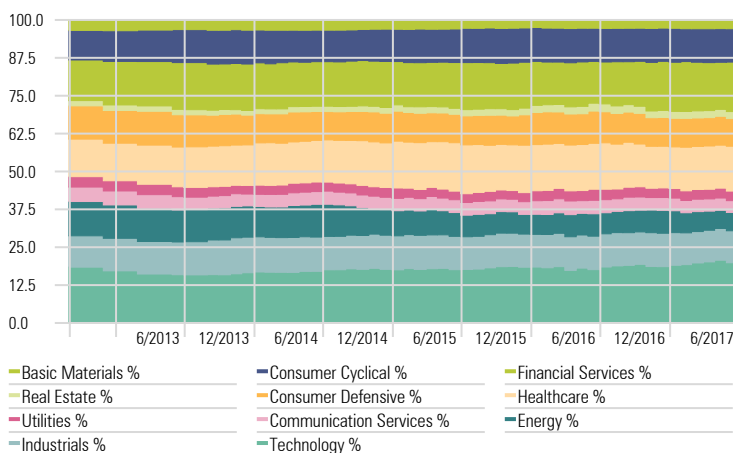
Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD

Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



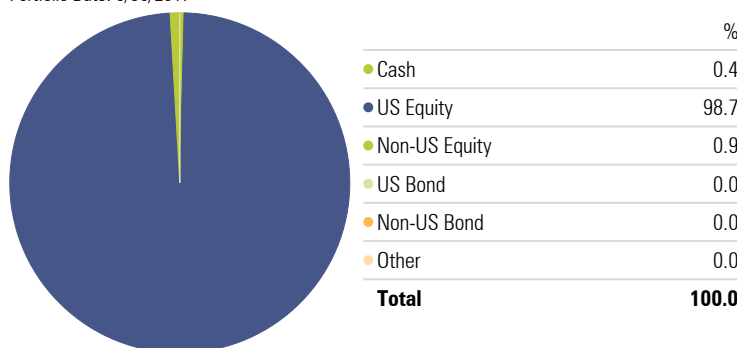
Vanguard Institutional Index Instl PI - Equity Sectors (Morningstar)

Time Period: 9/1/2012 to 6/30/2017



Vanguard Institutional Index Instl PI - Asset Allocation (US)

Portfolio Date: 6/30/2017



Morningstar Category Performance

	Std Dev 1 Yr (Qtr-End)	Std Dev 3 Yr (Qtr-End)	Std Dev 5 Yr (Qtr-End)	Std Dev 10 Yr (Qtr-End)	Upside Capture Ratio 1 Yr (Qtr-End)	Upside Capture Ratio 3 Yr (Qtr-End)	Upside Capture Ratio 5 Yr (Qtr-End)	Upside Capture Ratio 10 Yr (Qtr-End)	Downside Capture Ratio 1 Yr (Qtr-End)	Downside Capture Ratio 3 Yr (Qtr-End)	Downside Capture Ratio 5 Yr (Qtr-End)	Downside Capture Ratio 10 Yr (Qtr-End)
Vanguard Institutional Index Instl PI	6.09	10.35	9.56	15.20	99.91	99.98	99.97	100.05	99.90	100.00	100.00	99.92
S&P 500 TR USD	6.09	10.35	9.56	15.21	—	—	—	—	—	—	—	—

Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD

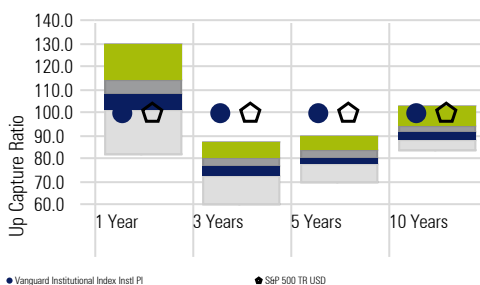
Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD

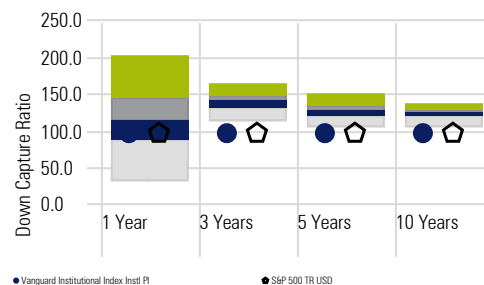
Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P 500 TR USD

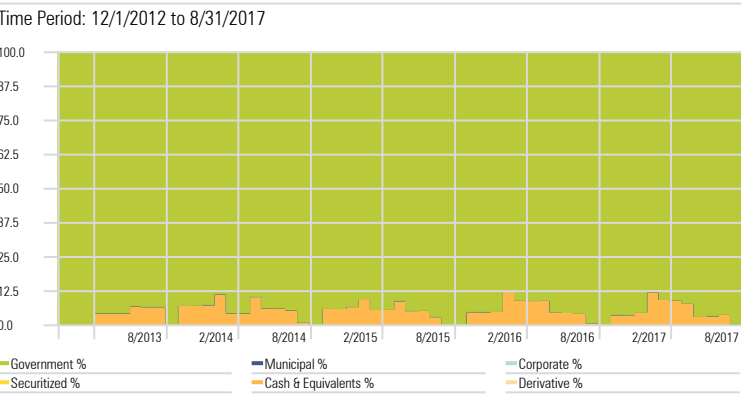
Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



Vanguard Shrt-Term Infl-Prot Sec Idx Adm - Snapshot

Ticker	VTAPX
Morningstar Category	US Fund Inflation-Protected Bond
Global Broad Category Group	Fixed Income
Primary Prospectus Benchmark	BBgBarc U.S. Treasury TIPS 0-5Y TR USD
Prospectus Net Expense Ratio	0.07
Manager Name	Joshua C. Barrickman
Manager Tenure (Longest)	4.92
Turnover Ratio %	28.00
Morningstar Rating Overall	★★★
Inception Date	10/16/2012

Vanguard Shrt-Term Infl-Prot Sec Idx Adm - Fixed-Inc Super Sectors (Morning

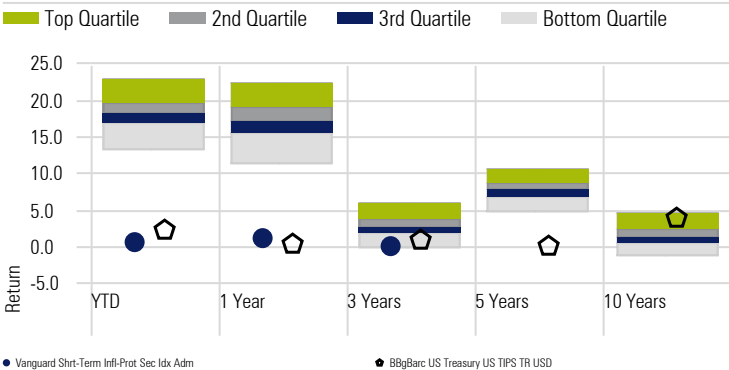


Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	6/30/2017	0.19	-0.07	—	—	-0.25	-0.94	—	—
BBgBarc US Treasury US TIPS TR USD	6/30/2017	-0.63	0.63	0.27	4.27	—	—	—	—

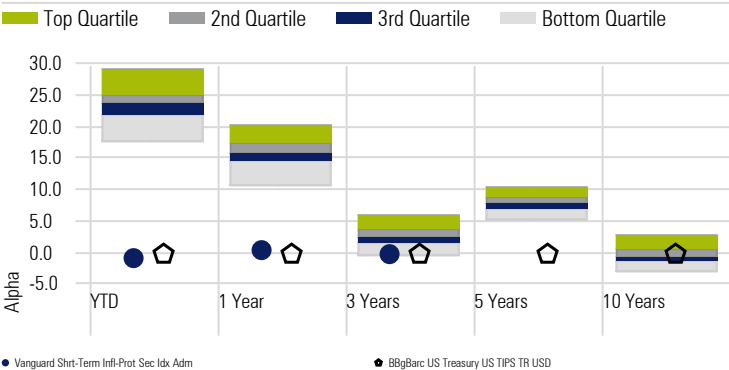
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Treasury US TIPS TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Treasury US TIPS TR USD

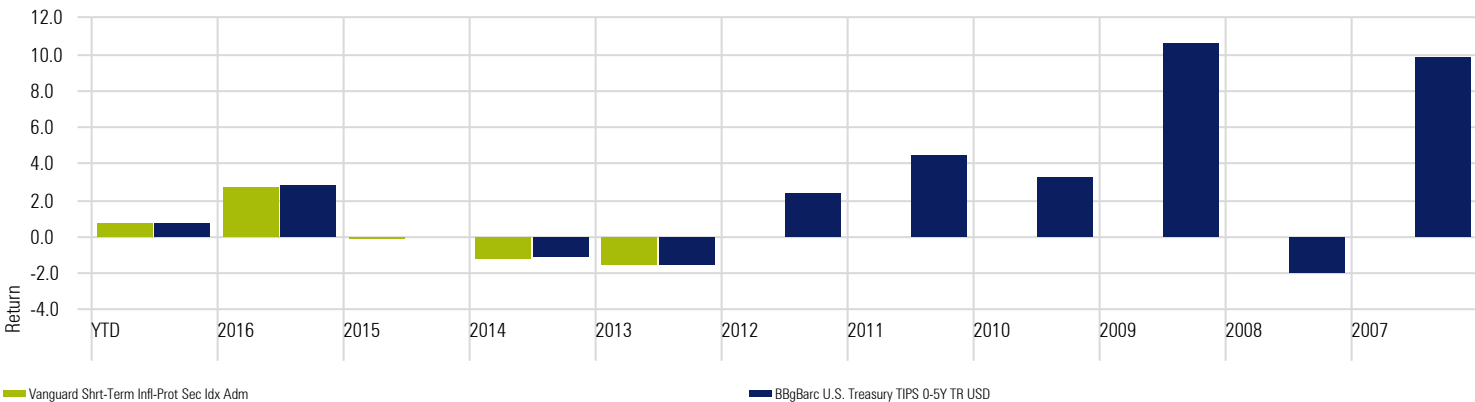


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	6/30/2017	2.72	-0.17	-1.18	-1.54	—	—	—	—	—	—
BBgBarc US Treasury US TIPS TR USD	6/30/2017	4.68	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.64

Returns

Calculation Benchmark: BBgBarc U.S. Treasury TIPS 0-5Y TR USD



Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	6/30/2017	-0.30	-0.19	—	—	0.18	-1.00	—	—
BBgBarc US Treasury US TIPS TR USD	6/30/2017	-0.42	0.11	0.04	0.63	—	—	—	—

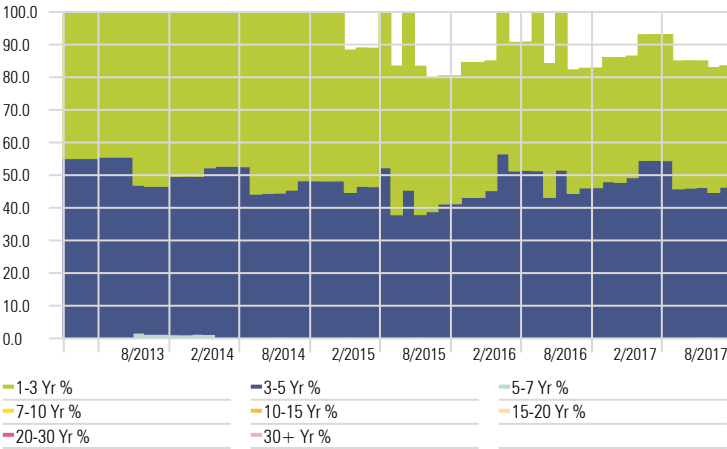
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Treasury US TIPS TR USD



Vanguard Shrt-Term Infl-Prot Sec Idx Adm - Fixed-Income Maturity

Time Period: 12/1/2012 to 8/31/2017

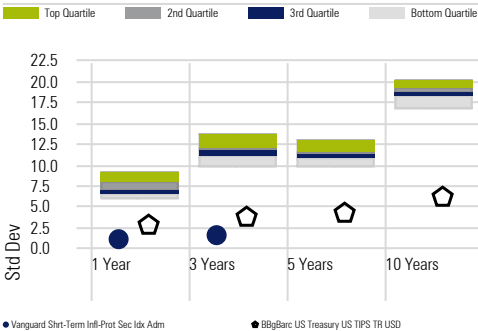


Morningstar Category Performance

	Return Date (Qtr-End)	Credit Qual AAA %	Credit Qual Below B %	Average Eff Duration	Average Eff Maturity	Yield to Maturity
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	6/30/2017	100.00	0.00	2.81	2.80	—
BBgBarc US Treasury US TIPS TR USD	6/30/2017	—	—	—	—	—

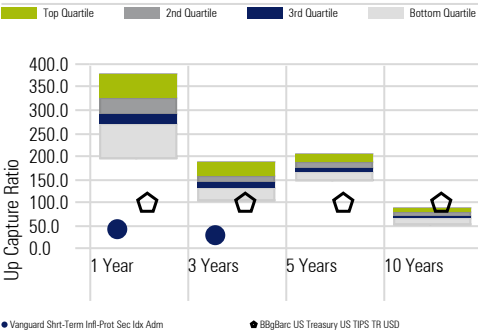
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Treasury US TIPS TR USD



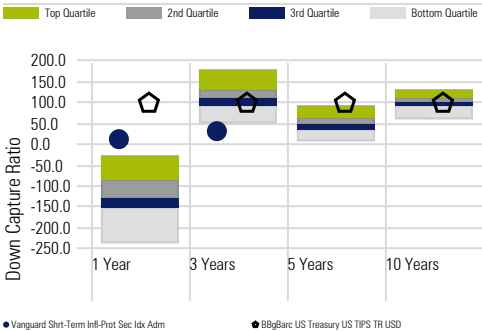
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Treasury US TIPS TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: BBgBarc US Treasury US TIPS TR USD



iShares Core International Aggt Bd ETF - Snapshot

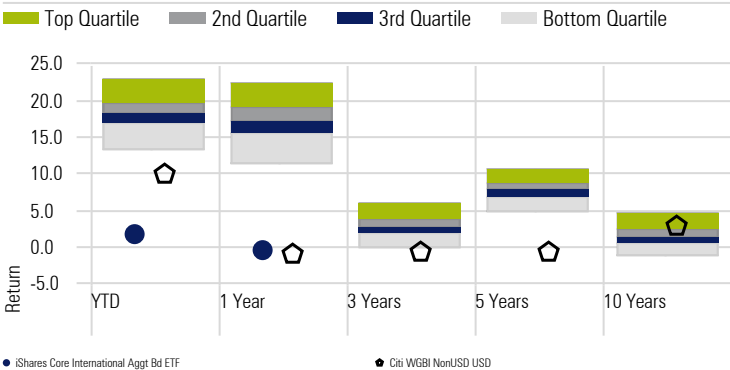
Ticker	IAGG
Morningstar Category	US Fund World Bond
Global Broad Category Group	Fixed Income
Primary Prospectus Benchmark	BBgBarc Gbl Agg xUSD 10% IC TR Hdg USD
Prospectus Net Expense Ratio	0.09
Manager Name	Multiple
Manager Tenure (Longest)	1.83
Turnover Ratio %	110.00
Morningstar Rating Overall	—
Inception Date	11/10/2015

Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
iShares Core International Aggt Bd ETF	6/30/2017	-0.32	—	—	—	-0.23	—	—	—
Citi WGBI NonUSD USD	6/30/2017	-5.01	-2.20	-0.80	3.21	—	—	—	—

Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Citi WGBI NonUSD USD

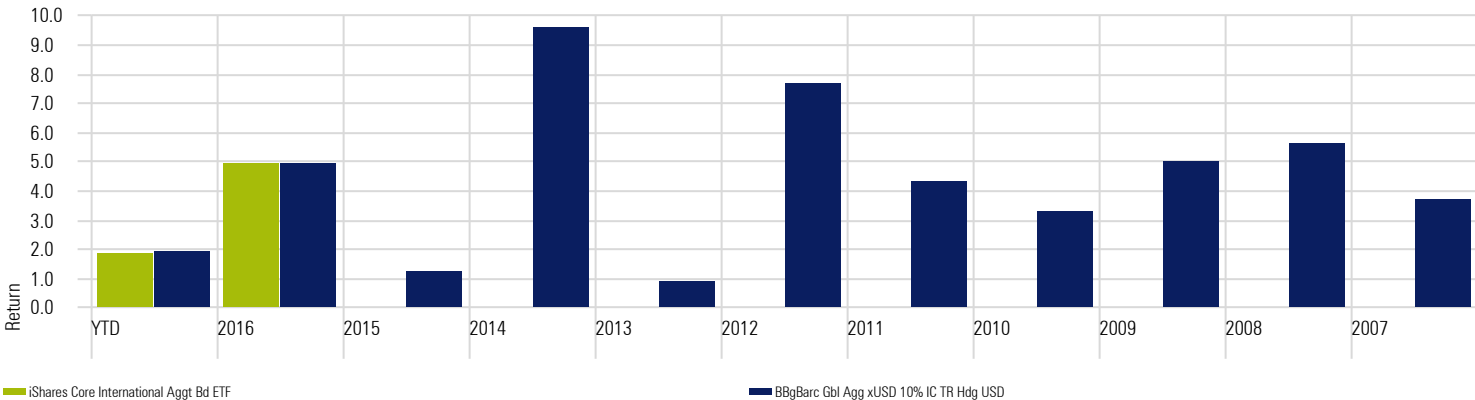


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
iShares Core International Aggt Bd ETF	6/30/2017	4.98	—	—	—	—	—	—	—	—	—
Citi WGBI NonUSD USD	6/30/2017	1.81	-5.54	-2.68	-4.56	1.51	5.17	5.21	4.39	10.11	11.45

Returns

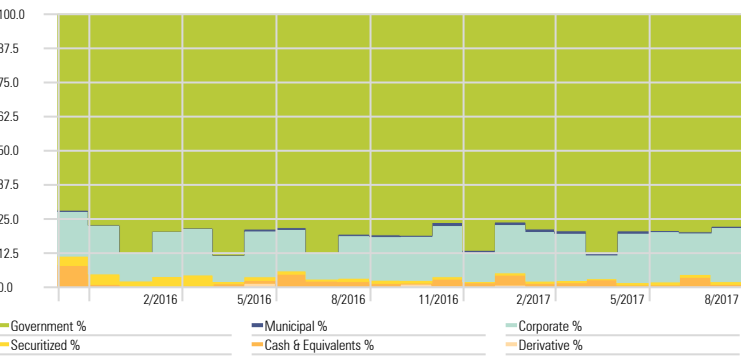
Calculation Benchmark: BBgBarc Gbl Agg xUSD 10% IC TR Hdg USD



Source: Morningstar Direct

iShares Core International Aggt Bd ETF - Fixed-Inc Super Sectors (Morningstar)

Time Period: 11/1/2015 to 8/31/2017



Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
iShares Core International Aggt Bd ETF	6/30/2017	-0.29	—	—	—	0.00	—	—	—
Citi WGBI NonUSD USD	6/30/2017	-0.64	-0.28	-0.11	0.36	—	—	—	—

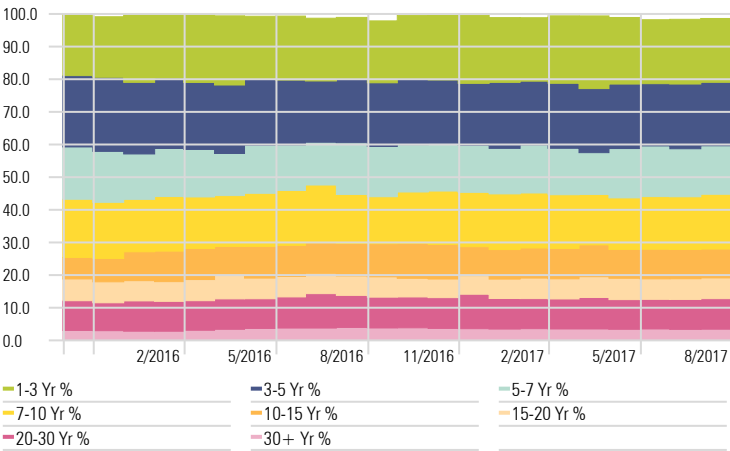
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Citi WGBI NonUSD USD



iShares Core International Aggt Bd ETF - Fixed-Income Maturity

Time Period: 11/1/2015 to 8/31/2017



Morningstar Category Performance

	Return Date (Qtr-End)	Credit Qual AAA %	Credit Qual Below B %	Average Eff Duration	Average Eff Maturity	Yield to Maturity
iShares Core International Aggt Bd ETF	6/30/2017	24.71	0.00	7.27	8.92	0.98
Citi WGBI NonUSD USD	6/30/2017	—	—	—	—	—

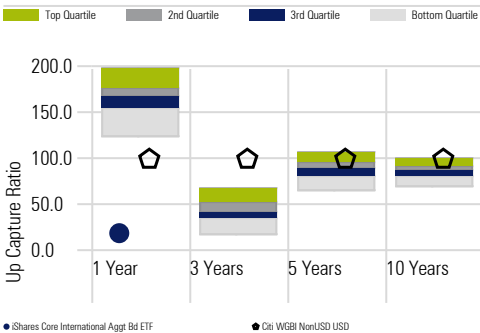
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Citi WGBI NonUSD USD



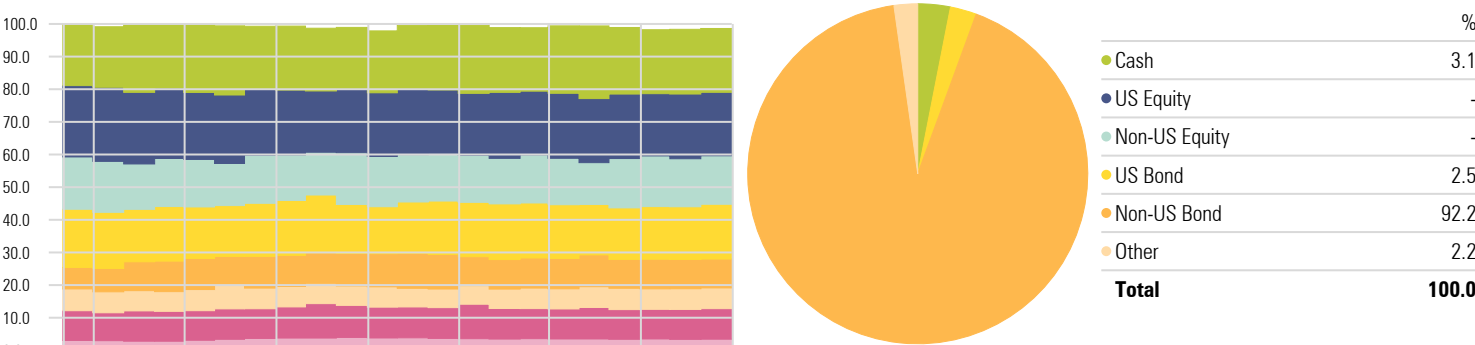
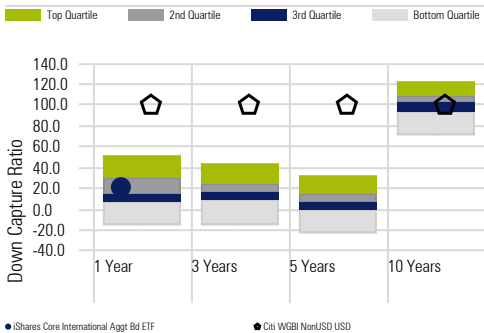
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Citi WGBI NonUSD USD



Performance Relative to Peer Group

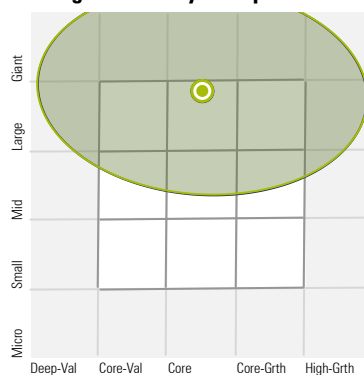
Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: Citi WGBI NonUSD USD



iShares Core MSCI EAFE ETF - Snapshot

Ticker	IEFA
Morningstar Category	US Fund Foreign Large Blend
Global Broad Category Group	Equity
Primary Prospectus Benchmark	MSCI EAFE IMI NR USD
Prospectus Net Expense Ratio	0.08
Manager Name	Multiple
Manager Tenure (Longest)	4.92
Turnover Ratio %	2.00
Morningstar Rating Overall	★★★
Inception Date	10/18/2012

Holdings-Based Style Map



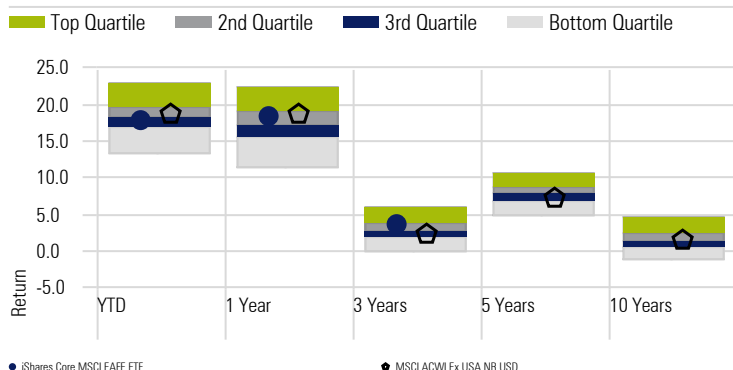
● iShares Core MSCI EAFE ETF 9/18/2017
● MSCI EAFE IMI NR USD 8/31/2017

Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
iShares Core MSCI EAFE ETF	6/30/2017	20.94	1.88	—	—	-1.29	1.10	—	—
MSCI ACWI Ex USA NR USD	6/30/2017	20.45	0.80	7.22	1.13	—	—	—	—

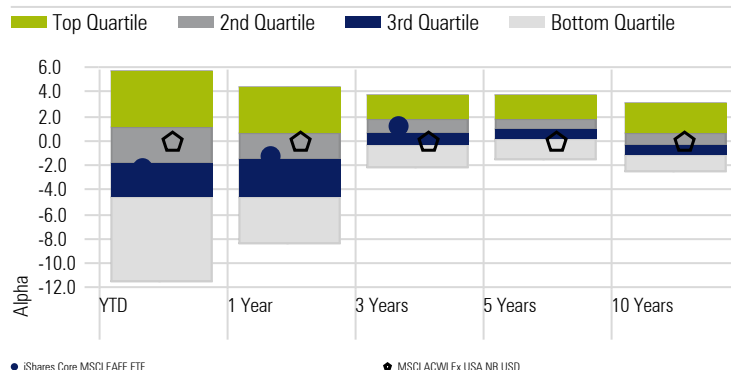
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD

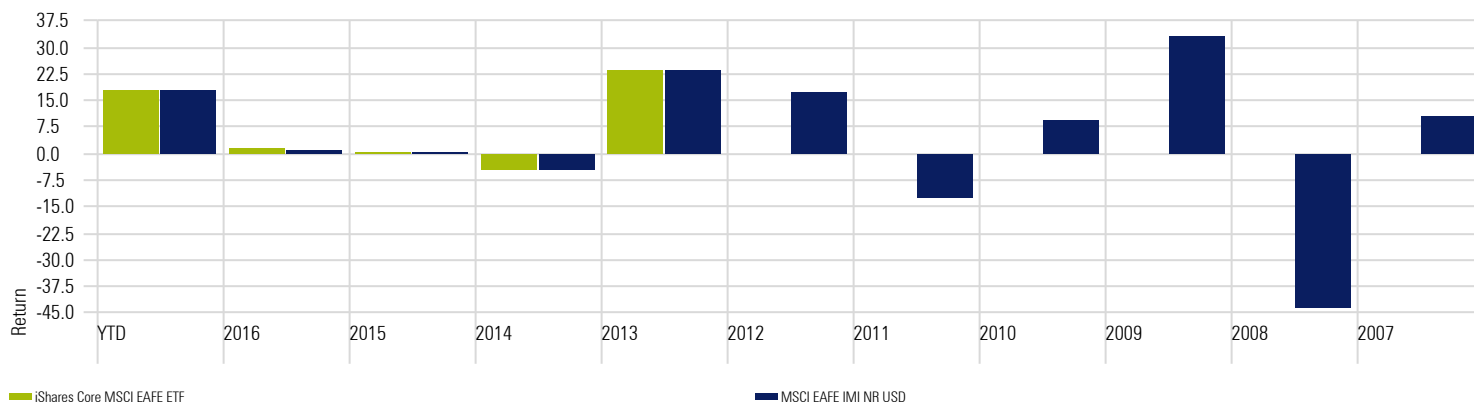


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
iShares Core MSCI EAFE ETF	6/30/2017	1.36	0.53	-4.82	23.73	—	—	—	—	—	—
MSCI ACWI Ex USA NR USD	6/30/2017	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65

Returns

Calculation Benchmark: MSCI EAFE IMI NR USD



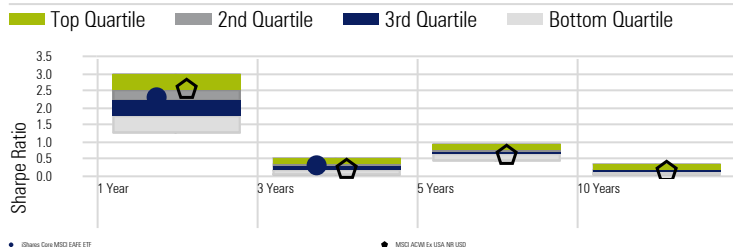
Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
iShares Core MSCI EAFE ETF	6/30/2017	2.36	0.19	—	—	0.27	0.38	—	—
MSCI ACWI Ex USA NR USD	6/30/2017	2.57	0.10	0.65	0.13	—	—	—	—

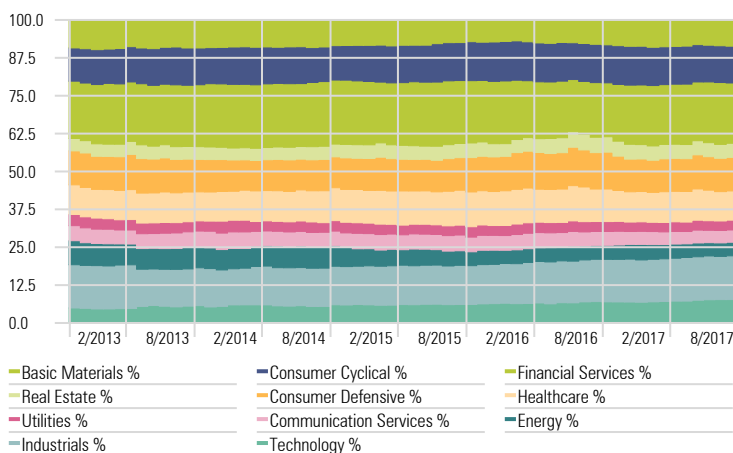
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD



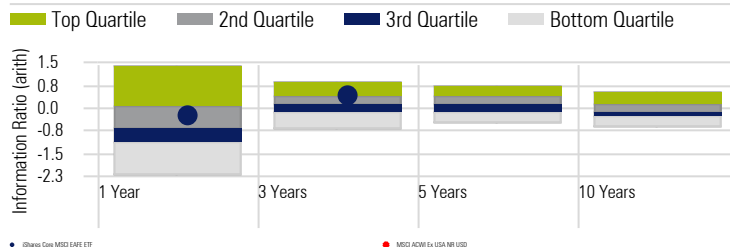
iShares Core MSCI EAFE ETF - Equity Sectors (Morningstar)

Time Period: 10/1/2012 to 8/31/2017



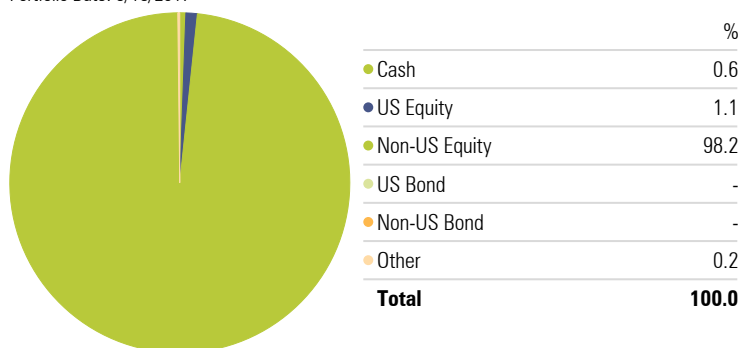
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD



iShares Core MSCI EAFE ETF - Asset Allocation (US)

Portfolio Date: 9/18/2017

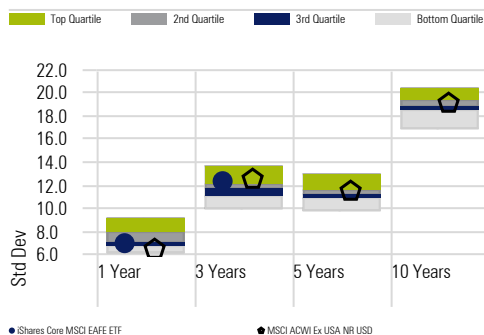


Morningstar Category Performance

	Std Dev 1 Yr (Qtr-End)	Std Dev 3 Yr (Qtr-End)	Std Dev 5 Yr (Qtr-End)	Std Dev 10 Yr (Qtr-End)	Upside Capture Ratio 1 Yr (Qtr-End)	Upside Capture Ratio 3 Yr (Qtr-End)	Upside Capture Ratio 5 Yr (Qtr-End)	Upside Capture Ratio 10 Yr (Qtr-End)	Downside Capture Ratio 1 Yr (Qtr-End)	Downside Capture Ratio 3 Yr (Qtr-End)	Downside Capture Ratio 5 Yr (Qtr-End)	Downside Capture Ratio 10 Yr (Qtr-End)
iShares Core MSCI EAFE ETF	8.03	12.36	—	—	104.20	99.18	—	—	113.70	92.75	—	—
MSCI ACWI Ex USA NR USD	7.16	12.45	11.56	19.14	—	—	—	—	—	—	—	—

Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD



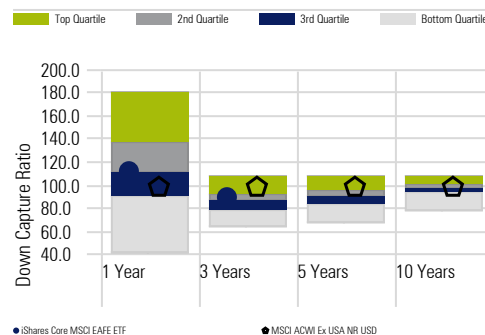
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD



Performance Relative to Peer Group

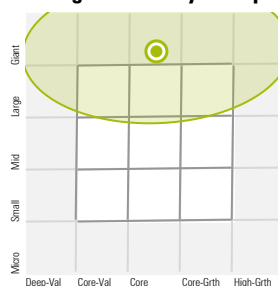
Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI ACWI Ex USA NR USD



Schwab Emerging Markets Equity ETF™ - Snapshot

Ticker	SCHE
Morningstar Category	US Fund Diversified Emerging Mkts
Global Broad Category Group	Equity
Primary Prospectus Benchmark	FTSE Emerging NR USD
Prospectus Net Expense Ratio	0.13
Manager Name	Multiple
Manager Tenure (Longest)	4.75
Turnover Ratio %	10.00
Morningstar Rating Overall	★★★
Inception Date	1/14/2010

Holdings-Based Style Map



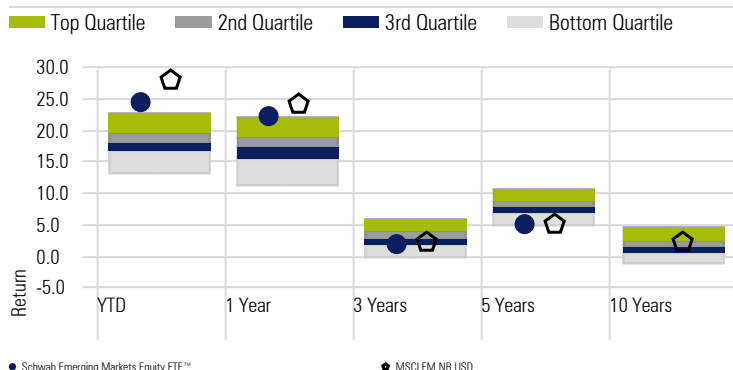
● Schwab Emerging Markets Equity ETF™ 9/19/2017
● FTSE Emerging NR USD 8/31/2017

Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Schwab Emerging Markets Equity ETF™	6/30/2017	19.98	0.95	3.80	—	0.75	0.49	-3.46	—
MSCI EM NR USD	6/30/2017	23.75	1.07	3.96	1.91	—	—	—	—

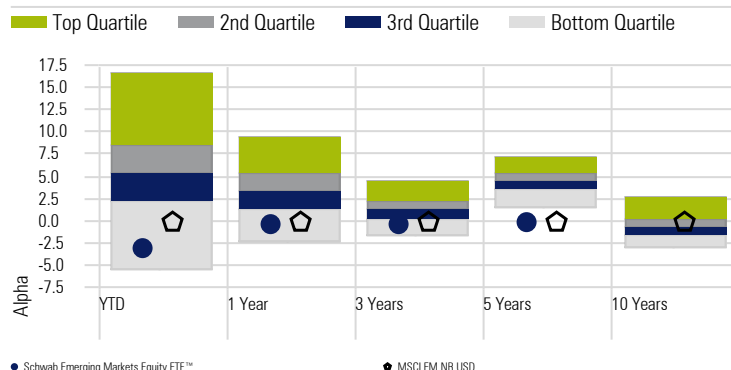
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD

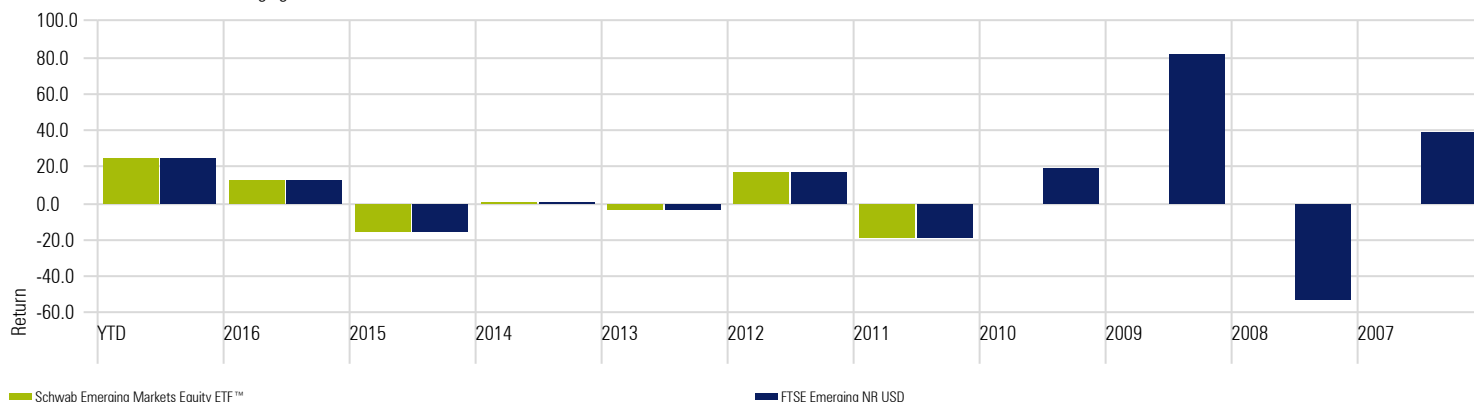


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Schwab Emerging Markets Equity ETF™	6/30/2017	12.91	-15.80	1.10	-3.83	16.95	-19.28	—	—	—	—
MSCI EM NR USD	6/30/2017	11.19	-14.92	-2.19	-2.60	18.22	-18.42	18.88	78.51	-53.33	39.42

Returns

Calculation Benchmark: FTSE Emerging NR USD



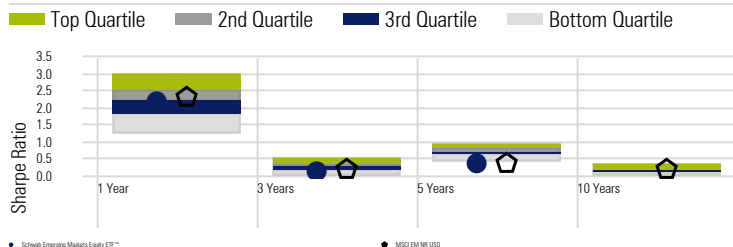
Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Schwab Emerging Markets Equity ETF™	6/30/2017	2.12	0.12	0.32	—	-0.09	0.02	-0.45	—
MSCI EM NR USD	6/30/2017	2.36	0.13	0.33	0.18	—	—	—	—

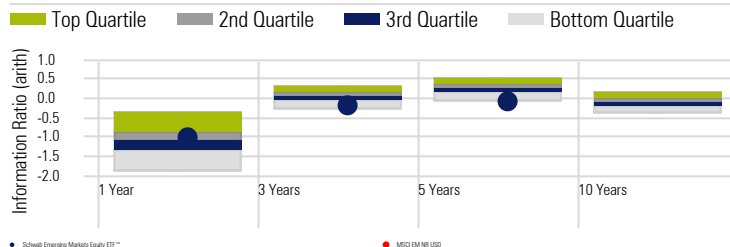
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD



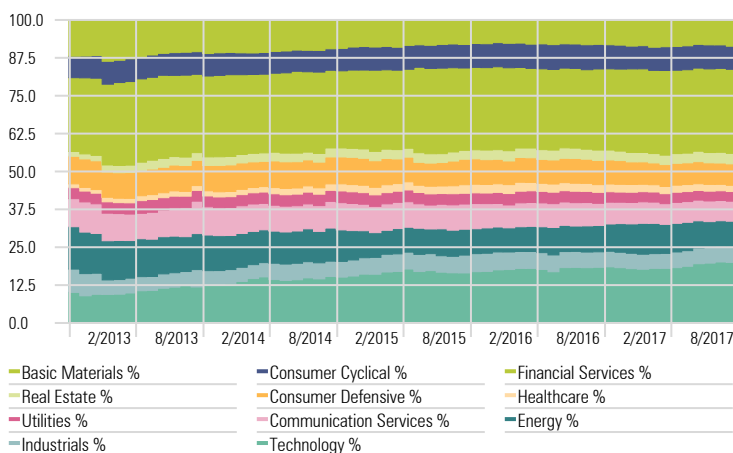
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD



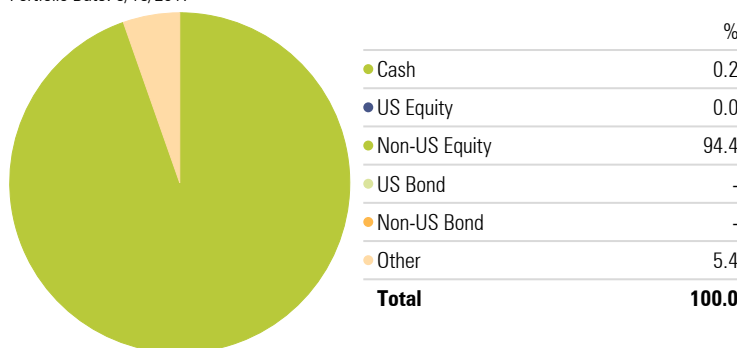
Schwab Emerging Markets Equity ETF™ - Equity Sectors (Morningstar)

Time Period: 9/1/2012 to 8/31/2017



Schwab Emerging Markets Equity ETF™ - Asset Allocation (US)

Portfolio Date: 9/19/2017

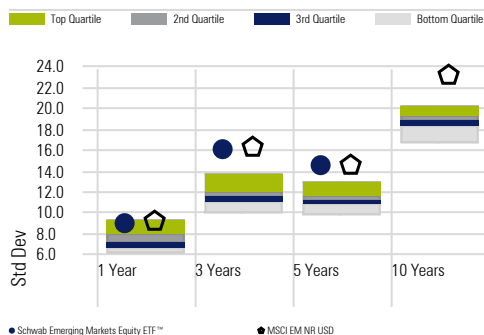


Morningstar Category Performance

	Std Dev 1 Yr (Qtr-End)	Std Dev 3 Yr (Qtr-End)	Std Dev 5 Yr (Qtr-End)	Std Dev 10 Yr (Qtr-End)	Upside Capture Ratio 1 Yr (Qtr-End)	Upside Capture Ratio 3 Yr (Qtr-End)	Upside Capture Ratio 5 Yr (Qtr-End)	Upside Capture Ratio 10 Yr (Qtr-End)	Downside Capture Ratio 1 Yr (Qtr-End)	Downside Capture Ratio 3 Yr (Qtr-End)	Downside Capture Ratio 5 Yr (Qtr-End)	Downside Capture Ratio 10 Yr (Qtr-End)
Schwab Emerging Markets Equity ETF™	8.53	15.89	14.56	—	97.45	105.58	94.31	—	95.52	104.83	116.82	—
MSCI EM NR USD	9.04	16.06	14.40	23.39	—	—	—	—	—	—	—	—

Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD



Performance Relative to Peer Group

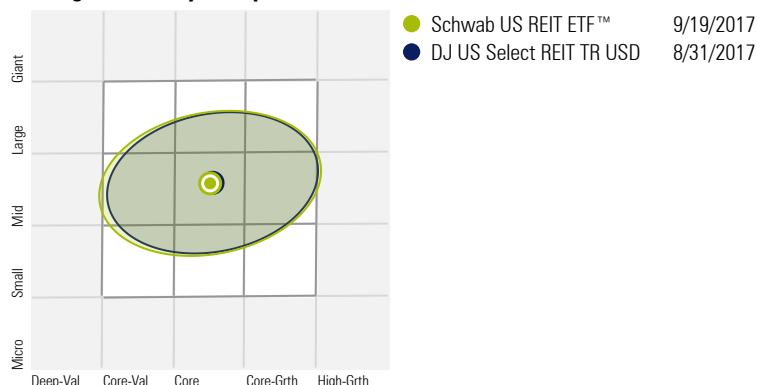
Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: MSCI EM NR USD



Schwab US REIT ETF™ - Snapshot

Ticker	SCHH
Morningstar Category	US Fund Real Estate
Global Broad Category Group	Equity
Primary Prospectus Benchmark	DJ US Select REIT TR USD
Prospectus Net Expense Ratio	0.07
Manager Name	Multiple
Manager Tenure (Longest)	6.67
Turnover Ratio %	14.00
Morningstar Rating Overall	★★★
Inception Date	1/13/2011

Holdings-Based Style Map

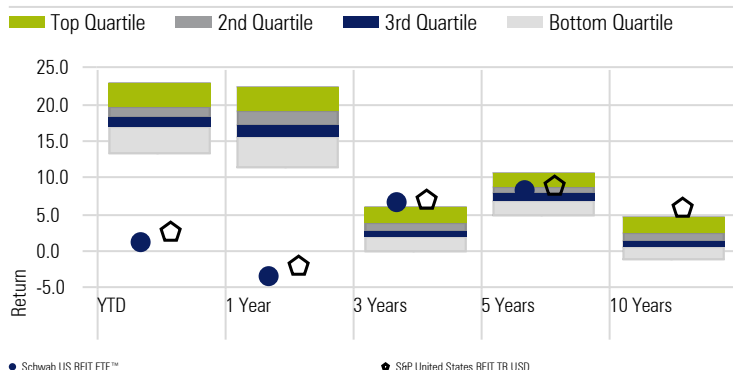


Morningstar Category Performance

	Return Date (Qtr-End)	Total Ret 1 Yr (Qtr-End)	Total Ret Annlzd 3 Yr (Qtr-End)	Total Ret Annlzd 5 Yr (Qtr-End)	Total Ret Annlzd 10 Yr (Qtr-End)	Alpha 1 Yr (Qtr-End)	Alpha 3 Yr (Qtr-End)	Alpha 5 Yr (Qtr-End)	Alpha 10 Yr (Qtr-End)
Schwab US REIT ETF™	6/30/2017	-2.66	7.88	8.86	—	-29.33	5.66	3.49	—
S&P United States REIT TR USD	6/30/2017	-2.25	7.93	9.23	5.78	—	—	—	—

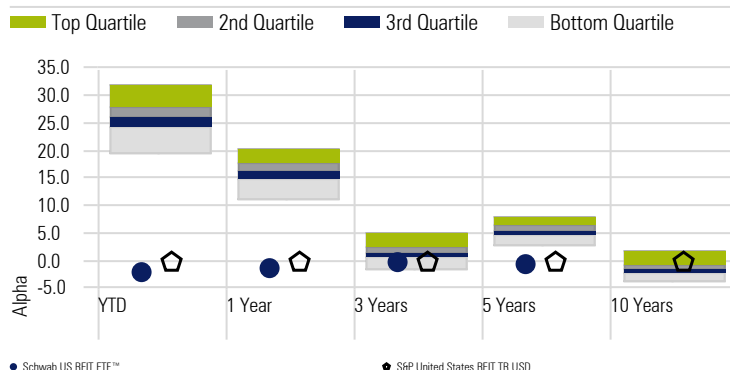
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD

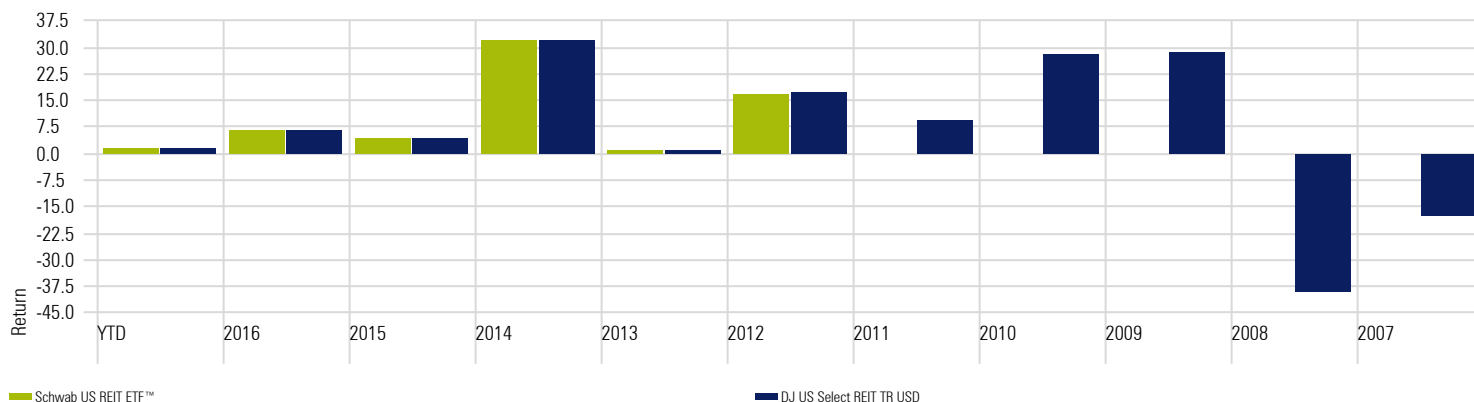


Morningstar Category Performance

	Return Date (Qtr-End)	Annual Ret 2016	Annual Ret 2015	Annual Ret 2014	Annual Ret 2013	Annual Ret 2012	Annual Ret 2011	Annual Ret 2010	Annual Ret 2009	Annual Ret 2008	Annual Ret 2007
Schwab US REIT ETF™	6/30/2017	6.42	4.35	31.93	1.11	16.90	—	—	—	—	—
S&P United States REIT TR USD	6/30/2017	8.49	2.54	30.26	2.40	17.99	8.48	28.47	28.60	-38.33	-16.70

Returns

Calculation Benchmark: DJ US Select REIT TR USD



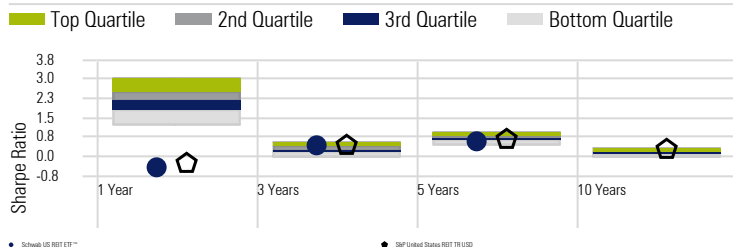
Source: Morningstar Direct

Morningstar Category Performance

	Return Date (Qtr-End)	Sharpe Ratio 1 Yr (Qtr-End)	Sharpe Ratio 3 Yr (Qtr-End)	Sharpe Ratio 5 Yr (Qtr-End)	Sharpe Ratio 10 Yr (Qtr-End)	Information Ratio 1 Yr (Qtr-End)	Information Ratio 3 Yr (Qtr-End)	Information Ratio 5 Yr (Qtr-End)	Information Ratio 10 Yr (Qtr-End)
Schwab US REIT ETF™	6/30/2017	-0.24	0.56	0.67	—	-2.65	0.21	-0.13	—
S&P United States REIT TR USD	6/30/2017	-0.19	0.56	0.69	0.33	—	—	—	—

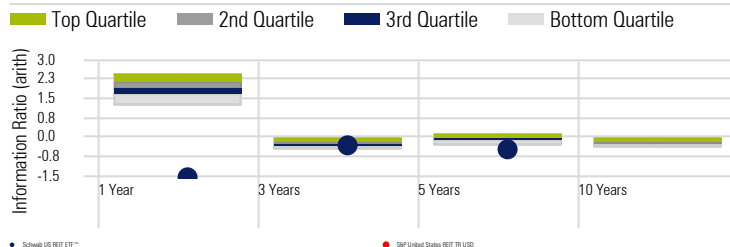
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD



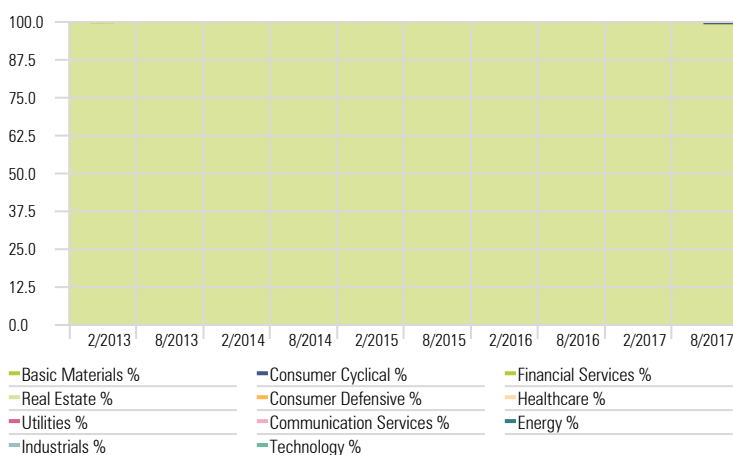
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD



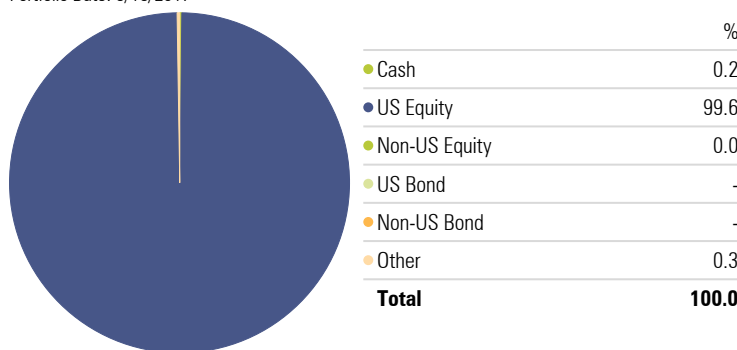
Schwab US REIT ETF™ - Equity Sectors (Morningstar)

Time Period: 9/1/2012 to 8/31/2017



Schwab US REIT ETF™ - Asset Allocation (US)

Portfolio Date: 9/19/2017

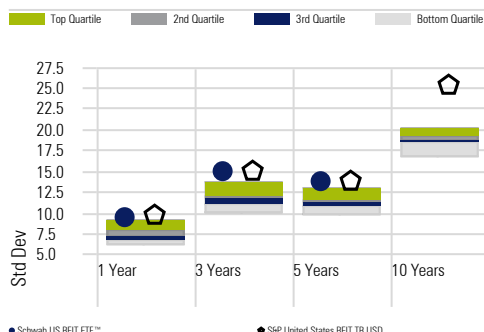


Morningstar Category Performance

	Std Dev 1 Yr (Qtr-End)	Std Dev 3 Yr (Qtr-End)	Std Dev 5 Yr (Qtr-End)	Std Dev 10 Yr (Qtr-End)	Upside Capture Ratio 1 Yr (Qtr-End)	Upside Capture Ratio 3 Yr (Qtr-End)	Upside Capture Ratio 5 Yr (Qtr-End)	Upside Capture Ratio 10 Yr (Qtr-End)	Downside Capture Ratio 1 Yr (Qtr-End)	Downside Capture Ratio 3 Yr (Qtr-End)	Downside Capture Ratio 5 Yr (Qtr-End)	Downside Capture Ratio 10 Yr (Qtr-End)
Schwab US REIT ETF™	11.28	15.20	13.91	—	16.11	58.44	62.42	—	330.24	17.31	38.44	—
S&P United States REIT TR USD	11.58	15.12	13.85	25.71	—	—	—	—	—	—	—	—

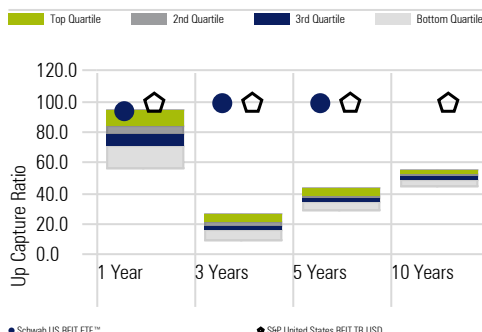
Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD



Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend Calculation Benchmark: S&P United States REIT TR USD

