

# VERMONT STATE RETIREMENT SYSTEM

4<sup>th</sup> Quarter Report



# Agenda:

## VERMONT STATE RETIREMENT SYSTEM: Strategic Discussion

- I. [Plan Summary](#)
- II. [Market Overview](#)
- III. [Investment Spectrum](#)
- IV. [Investment Analysis](#)
- V. [Plan / Participant Review](#)
- VI. [Appendix](#)

Presented by:  
Robert Roy, INVESTMENT CONSULTANT

# Plan Summary



# Executive Summary

As of 12/31/2016

STATE OF VERMONT – 37566

## Plan / Participant Statistics

### Plan participants / assets

• Assets \$M	\$59.35
• Avg Age <sup>1</sup>	51
• Median Balance <sup>2</sup> (\$K)	\$49.5
• Median Balance <sup>2</sup> Parts 55 and older (\$K)	\$149.7

### Return / Risk (Annualized)

• 3 Yr Participant Return <sup>2,3</sup> /	4.7% /
• 3 Yr S&P 500 Return	8.87%
• 3 Yr Participant Risk <sup>2,3</sup> /	9.4% /
• 3 Yr S&P 500 Risk	10.74%

## Investment Performance

### Performance for Review

• % of Assets / Number of Products Underperforming Primary Benchmark & Mstar Cat (3 & 5 Yr)	10.1% / 4
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## Asset Allocation & Investment Design

### Asset Allocation

• Participants Inside Age-Based Equity Band*	66%
• 100% Equity Exposure	8.3%
• 0% Equity Exposure	2.4%

### Investment Design

• Investment options utilized <sup>1*</sup>	21
• Lifecycle Default <sup>1</sup>	Yes
• Managed accounts	No
• SDB utilized <sup>1</sup>	No
• Roth offered	No
• Number of Index options utilized <sup>1</sup>	5

Please see Fund Diagnostics Summary pages for performance and expense information.

\* The Age-Based equity band represents an interval of plus or minus ten percentage points around the Fidelity target date strategy equity glide path, not to exceed 95% equity. Participants whose actual equity allocations fall within this age-based interval are said to be "inside" the equity band. The Fidelity equity band is not intended as a benchmark for individual investors; rather, it represents a range of equity allocations that may be appropriate for many investors saving for retirement.

<sup>3</sup>Past performance is no guarantee of future results. Please see Important Additional Information page for details of Return / Risk calculation

Indices are for comparison purposes only and do not represent plan benchmark. Indices are unmanaged and you cannot invest directly in an index.

Risk is represented by standard deviation.

Note: For underperformance data displayed above, products must underperform for both 3 & 5 year timeframes.

Asset Allocation & Investment Design and Plan / Participant Statistics (with the exception of Assets) is as of 12/31/2016

As of date for Assets and all other data points is noted above.

# Important Additional Information

<sup>1</sup>Plan weighted   <sup>2</sup>Participant weighted   <sup>4</sup>Asset weighted   ♦ Lifecycle=1, Self Directed Brokerage=1

For SDB (Self Directed Brokerage) utilized, at least one participant must be participating. For Median number of Index options utilized, the data represents if utilized excl. Lifecycle.

Participant Returns are annualized. Participant Risk is annualized standard deviation of monthly returns.

Fund expense rating is a Morningstar data point and is calculated by comparing the fund's net expense ratio to the net expense ratio of all of the other funds within its Morningstar Category grouping.

Data in this report is based on Fidelity internal systems and analysis.

A **Self Directed Brokerage** account may entail greater risk and is not appropriate for everyone. Additional fees apply to a Self Directed Brokerage account.

**Hybrid/ Balanced** consists of mutual funds, commingled pools, and separate accounts composed of at least two asset classes - one being an equity option and the other either a fixed-income or money market option. Included in this category are lifecycle (target-date) options, lifestyle (target-risk) options, balanced options, and "strategies" (i.e., funds of funds, pools, and separate accounts) meeting the above conditions. Most of the assets and default fund usage within this asset class are Lifecycle (target-date) options.

**Specialty** consists of real estate, REITs, natural resources, precious metals, healthcare, energy, sector-specific funds (e.g., Fidelity's Select funds), as well as convertible securities.

**Returns** shown represent past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated.

Participant returns are annualized for the period indicated and are based on a time-weighted investment return formula that eliminates the effect of participants' cash flows during the entire return period. The formula is intended to reflect the performance of the managers of the underlying investments rather than the actual returns of investors who may have bought and sold the investments at different times over the return period. Returns that take into account the effect of participant cash flows during the return period (i.e., dollar weighted returns) could be significantly different from these time-weighted returns. The longer the return period, the larger the cash flows and the more volatile the investment, the greater the potential difference between the two types of returns. Plan returns were calculated based on aggregate plan assets, not individual participant returns. All returns are historical and include change in share value and reinvestment of dividends and capital gains, if any.

Peer Grouping categories consist of all Plans which met the client criteria at the specified point in time. The makeup of the peer group changes from period to period.

# Markets Overview



# 2016 Q4 Market Summary (as of 12/31/2016)

## Global summary: Stabilization continues, deflationary pressures recede

- The global economy remains slow and many advanced economies are in maturing phases of the cycle, but cyclical traction continues and global deflationary pressures are abating.
- Improvement has been led by emerging markets and Asian economies closely tied to China, as inventory-to-shipment ratios in South Korea and Taiwan have begun to move toward more benign territory.
- Commodity-exporting countries, such as Canada and Australia, are also benefiting from the recovery in global trade and commodity prices, and show marginal improvements.

## United States: Late-cycle indicators elevated, recession odds remain low

- Favorable employment conditions have helped soak up a significant amount of excess slack in the labor markets. Tighter labor markets and rising income expectations suggest the U.S. consumer is providing a solid foundation for continued U.S. expansion.
- The pace of hiring in the U.S. remained solid in 2016, and labor markets tightened further as the unemployment rate fell below 5%. Higher oil prices and continued wage growth are primed to generate a more meaningful rise in inflation.
- With core inflation firm and oil prices poised to rise above early-2016 trough levels, headline inflation could approach 3% by the end of the first quarter of 2017.<sup>1</sup>

## Emerging Markets: Improved cyclical trends after a long dry spell

- China's uncertain outlook is key to whether emerging markets can sustain momentum. Emerging markets, particularly commodity exporters and Asian economies closely tied to China, reaped the greatest benefits of the 2016 recovery in China's growth and in commodity prices.
- After a steep plunge during the past two years, commodity prices inflected higher in 2016. Raw industrial commodity prices are experiencing their first sustained increase since 2011, rising 25% year to date.<sup>2</sup>

## Politics and policy: Wide range of potential outcomes

- U.S. elections sparked abrupt change in economic policy expectations. Hopes for business-friendly, pro-growth tilt.
- The last several weeks of 2016 provided a clue about how the markets had re-priced expectations for future policy changes, but there remains tremendous uncertainty about how the complex array of potential policy actions will actually come to fruition in 2017.
- Global monetary policy still accommodative but incrementally less easing. Fed hiked for second time in 2016 while ECB tapered but extended.

<sup>1</sup> Dirk Hofschire et al., "Fidelity Leadership Series / Business Cycle Update, November 2016".

<sup>2</sup> Dirk Hofschire et al., "Fidelity Leadership Series / Business Cycle Update, December 2016".

### Investment Risks:

Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign investments, especially those in emerging markets, involve greater risk and may offer greater potential returns than U.S. investments. This risk includes political and economic uncertainties of foreign countries, as well as the risk of currency fluctuation.

In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Past performance is no guarantee of future results.

# Q4 Rally Pushed U.S. Stocks to Top of 2016 Leader Board

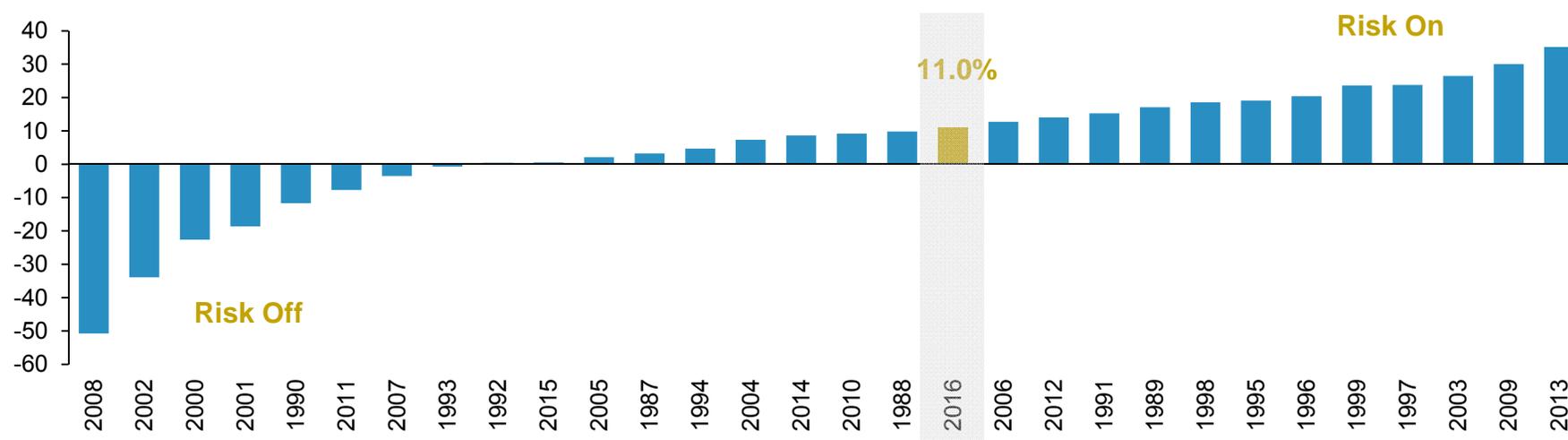
Sharp post-election market moves scrambled the 2016 asset results, with U.S. stocks—especially small caps—surging while a strengthening dollar pushed non-U.S. stocks down. An upward move in bond yields weighed on investment-grade bond returns in Q4, though they remained positive for the year. Overall, 2016 performance was solid across most asset categories and finished the year in “risk-on” territory.

## I. Asset Class Performance

	2016 (%)	Q4 2016 (%)		2016 (%)	Q4 2016 (%)
U.S. Small-Cap Stocks	21.3	8.8	Real Estate Stocks	8.6	-3.3
High-Yield Bonds	17.5	1.9	Gold	8.1	-13.4
U.S. Mid-Cap Stocks	13.8	3.2	Long Government & Credit Bonds	6.7	-7.8
U.S. Large-Cap Stocks	12.0	3.8	U.S. Corporate Bonds	5.6	-3.0
Emerging-Market Stocks	11.6	-4.1	Non-U.S. Small-Cap Stocks	2.6	-2.8
Commodities	11.4	2.5	Investment-Grade Bonds	2.6	-3.0
Emerging-Market Bonds	10.2	-4.2	Non-U.S. Developed-Country Stocks	1.5	-0.7

## II. Risk Meter: U.S. Large-Cap Stock minus Intermediate Treasury Bond Returns, 1987–2016

Calendar Year Return Difference (%)



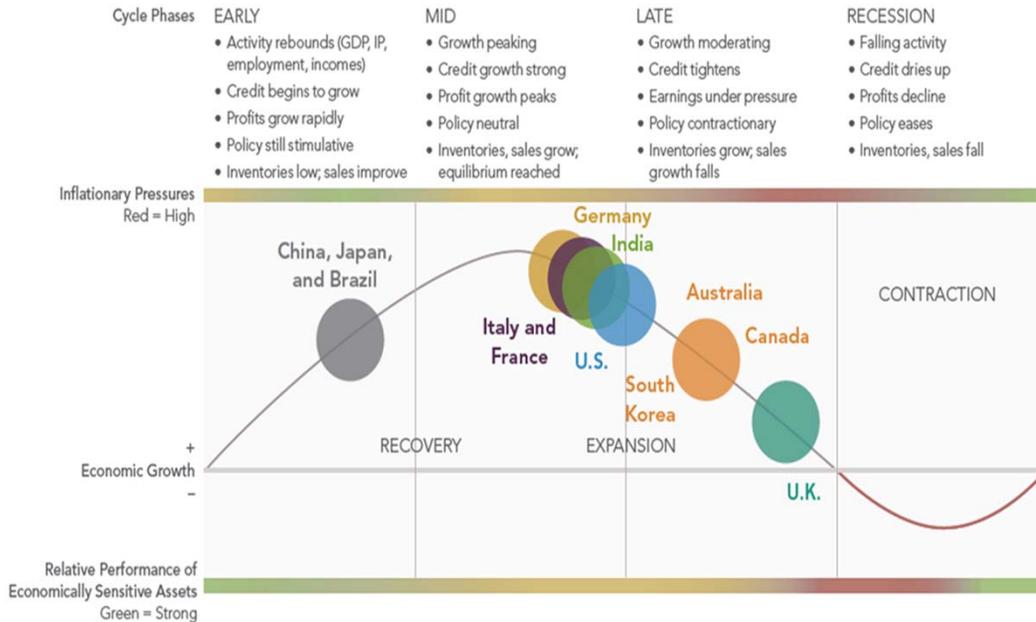
The risk meter is a simple way of summarizing whether investors were in “risk on” mode (preferring equities) or “risk off” mode (preferring safer Treasury bonds).

Past performance is no guarantee of future results. It is not possible to invest directly in an index. See appendix for important index information. Assets represented by: Commodities – Bloomberg Commodity Index; Emerging-Market Bonds – JP Morgan EMBI Global Index; Emerging-Market Stocks – MSCI EM Index; Gold – Gold Bullion, LBMA PM Fix; High Yield Bonds – Bank of America Merrill Lynch (BofA ML) High Yield Bond Index; Investment-Grade Bonds – Bloomberg Barclays U.S. Aggregate Bond Index; Non-U.S. Developed-Country Stocks – MSCI EAFE Index; Non-U.S. Small-Cap Stocks – MSCI EAFE Small Cap Index; Real Estate Stocks – FTSE NAREIT Equity Index; U.S. Corporate Bonds – Bloomberg Barclays U.S. Credit Index; U.S. Large-Cap Stocks – S&P 500 Index; U.S. Mid-Cap Stocks – Russell Midcap Index; U.S. Small-Cap Stocks – Russell 2000 Index; U.S. Treasury Bonds – Bloomberg Barclays U.S. Treasury Index. Sources: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 12/31/16.



# U.S. Economy in Slow Roll Toward Full Late-Cycle Phase

## I. Business Cycle Update



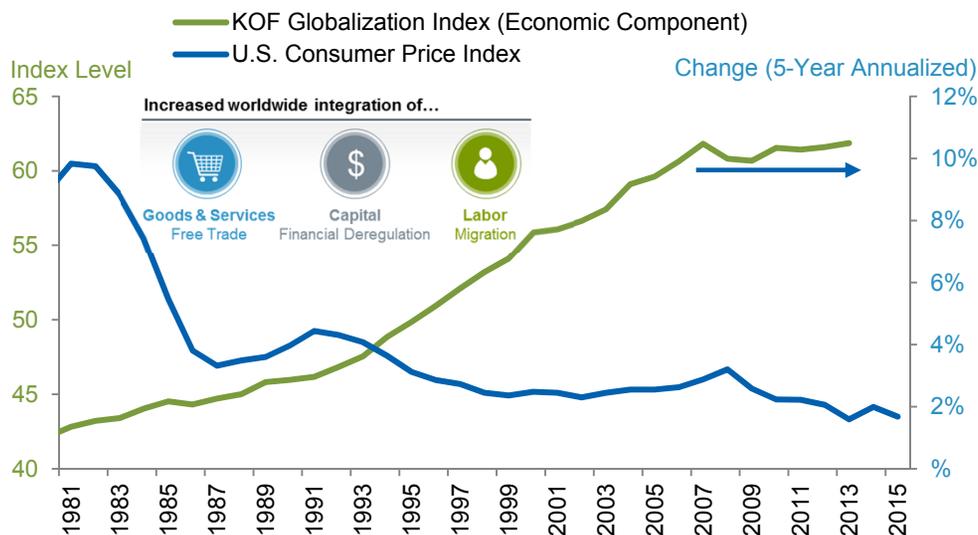
Source: Fidelity Investments(Asset Allocation Research Team) as of 12/31/16.

- ▶ The low magnitude of growth and inflation has prolonged this U.S. cycle, but similarities in the direction of the cycle resemble historical late cycle transitions.
- ▶ Late cycles historically have had the most mixed performance of any business cycle phase, with more limited overall upside than mid-cycle phases. Historically, perhaps the single most important characteristic of the late cycle has been a pickup in inflationary pressures.
- ▶ Higher oil prices and continued wage growth are primed to generate a more meaningful rise in inflation.
- ▶ At this point in the cycle, asset allocation tilts should be smaller, and inflation-resistant assets may provide portfolio diversification in an environment of upward pressure on interest rates.

Note: Diagram I is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one.

\* A growth recession is a significant decline in activity relative to a country's long-term economic potential. We have adopted the "growth cycle" definition for most developing economies, such as China, because they tend to exhibit strong trend performance driven by rapid factor accumulation and increases in productivity, and the deviation from the trend tends to matter the most for asset returns. We use the classic definition of recession, involving an outright contraction in economic activity, for developed economies. Source: Fidelity Investments (AART).

## II. Globalization and Inflation



- ▶ During the past few decades, the increase in trade and commercial integration allowed multinational companies to build global supply chains and access cheaper labor around the world. This rapid increase in globalization provided a secular disinflationary trend to U.S. prices.
- ▶ With core inflation in the U.S. already firm, a continued stabilization in energy prices will begin to push headline inflation higher on a year-over-year basis during Q1.
- ▶ In 2016, the pace of hiring in the U.S. slowed but remained solid, labor market slack continued to fade, and wage inflation accelerated meaningfully.

KOF= KOF Swiss Economic Institute. Source: KOF, International Monetary Fund (IMF), World Bank, Haver Analytics, Fidelity Investments (AART), as of 12/31/15.  
For Educational Purposes only

# Secular Positives for EMs: Valuations and Growth Outlook

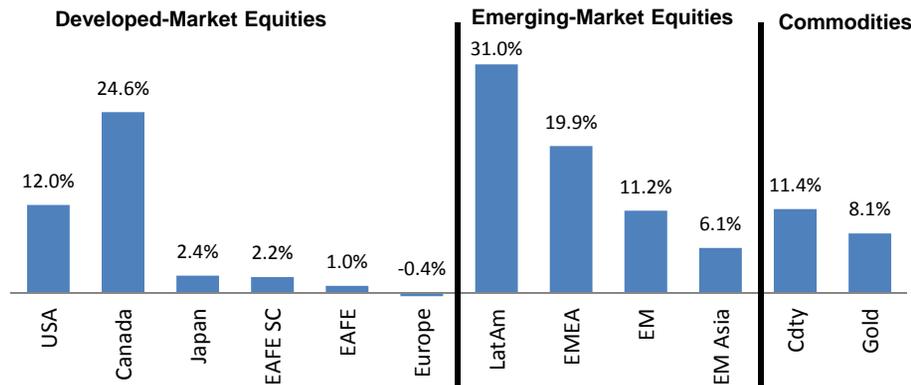
## I. Cyclical P/Es



- ▶ Historically, EM equities perform well on a relative basis during the U.S. late cycle, partially due to commodity-exporters benefiting from a pickup in inflation and rising commodity prices.
- ▶ Price-to-earnings multiples in most EM countries' equity markets remain at the lower end of their 20-year averages, making them relatively attractive from a valuation perspective.
- ▶ Moreover, we expect growth of emerging countries to outpace that of developed markets over the long term. Both factors should provide a favorable long-term backdrop for EM equity returns

Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Price-to-earnings (P/E) ratio (or multiple): stock price divided by earnings per share, which indicates how much investors are paying for a company's earnings power. Five-year peak earnings are adjusted for inflation. Sources: FactSet, countries' statistical organizations, Haver Analytics, Fidelity Investments (AART), as of 12/31/16

## II. 2016 Total Return



- ▶ The U.K. and European Union have thus far been able to shrug off post-Brexit headwinds, as improving manufacturing and global trade have helped reduce the probability of recession. However, the European expansion remains slow as unemployment remains high and political risks weigh on business sentiment.
- ▶ Outside Europe, countries remain in various phases of the business cycle. Late-cycle commodity exporters, such as Canada and Australia, have benefited from higher commodity prices but their housing sectors are vulnerable to rising interest rates.
- ▶ Meanwhile, Japan is experiencing early-cycle dynamics, helped by increased export demand.
- ▶ Emerging markets, particularly commodity exporters and Asian economies closely tied to China, reaped the greatest benefits of the 2016 recovery in China's growth and in commodity prices. For example, Brazil exited a painful recession and entered the early-cycle phase.

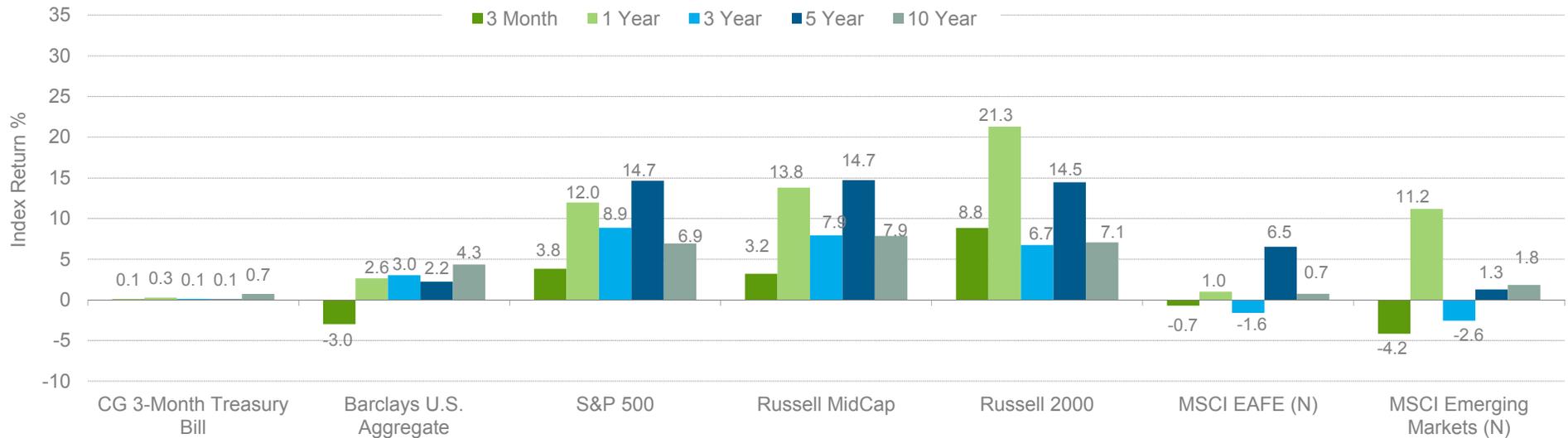
2016 LC	12.0%	20.3%	-0.7%	5.9%	5.3%	7.2%	24.3%	12.2%	9.7%	6.9%	-	-
4Q16 USD	3.8%	3.3%	-0.2%	-2.9%	-0.7%	-0.4%	-0.9%	1.8%	-4.2%	-6.1%	2.5%	-13.4%

EM: emerging markets. LC: local currency. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Index returns represented by: Canada – MSCI Canada Index; Commodities – S&P GSCI Commodities Index; EAFE – MSCI Europe, Australasia, Far East Index; EAFE Small Cap – MSCI EAFE Small Cap Index; EM Asia – MSCI Emerging Markets Asia Index; EMEA (Europe, Middle East, and Africa) – MSCI EM EMEA Index; Emerging Markets (EM) – MSCI EM Index; Europe – MSCI Europe Index; Gold – Gold Bullion Price, LBMA PM Fix; Japan – MSCI Japan Index; Latin America – MSCI EM Latin America Index. Sources: FactSet, Fidelity Investments (AART), as of 12/31/16.

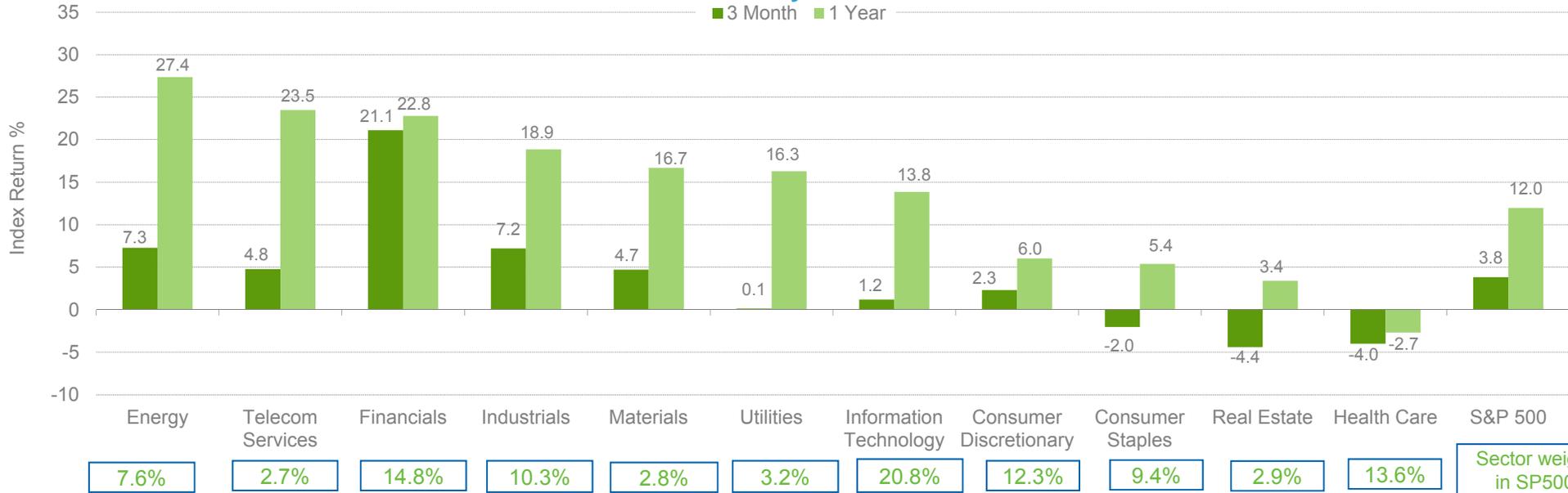


# Financial Market Returns as of December 31, 2016

## Financial Markets



## S&P 500 by Sector



Source: Morningstar as of 12/31/16. 3, 5 and 10 year performance numbers are annualized total returns as of 12/31/16.

The S&P 500 Sector Indices are constructed using the Global Industry Classification Standard (GICS), a widely accepted industry analysis framework for investment research, portfolio management and asset allocation jointly developed and maintained by MSCI and Standard & Poor's.

Please refer to the Market Perspective Notes for risk disclosures.

Past performance is no guarantee of future results.



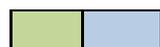
# Domestic Equity Style (% Change)

As of 12/31/2016

		As of 12/31/2016		
		Value	Blend	Growth
<b>Large</b>	Q3	6.68	3.83	1.01
	YTD	17.34	12.05	7.08
	1YR	17.34	12.05	7.08
	3YR	8.59	8.59	8.55
<b>Mid</b>	Q3	5.52	3.21	0.46
	YTD	20.00	13.80	7.33
	1YR	20.00	13.80	7.33
	3YR	9.45	7.92	6.23
<b>Small</b>	Q3	14.07	8.83	3.57
	YTD	31.74	21.31	11.32
	1YR	31.74	21.31	11.32
	3YR	8.31	6.74	5.05

Look Back as of 12/31/2011

		Look Back as of 12/31/2011		
		Value	Blend	Growth
<b>Large</b>	Q3	13.11	11.84	10.61
	YTD	0.39	1.50	2.64
	1YR	0.39	1.50	2.64
	3YR	11.55	14.81	18.02
<b>Mid</b>	Q3	13.37	12.31	11.24
	YTD	-1.38	-1.55	-1.65
	1YR	-1.38	-1.55	-1.65
	3YR	18.19	20.17	22.06
<b>Small</b>	Q3	15.97	15.47	14.99
	YTD	-5.50	-4.18	-2.91
	1YR	-5.50	-4.18	-2.91
	3YR	12.36	15.63	19.00



Signifies top performing index for each timeframe

The above styles are represented by: Large Value = Russell® 1000 Value, Large Blend = Russell® 1000, Large Growth = Russell® 1000 Growth.  
 Mid Value = Russell® Mid Cap Value, Mid Blend = Russell® Mid Cap, Mid Growth = Russell® Mid Cap Growth.  
 Small Value = Russell® 2000 Value, Small Blend = Russell® 2000, Small Growth = Russell® 2000 Growth.

Source: Morningstar as of 12/31/2016.

3 year performance numbers are average annual total returns as of 12/31/16 and 12/31/2011.

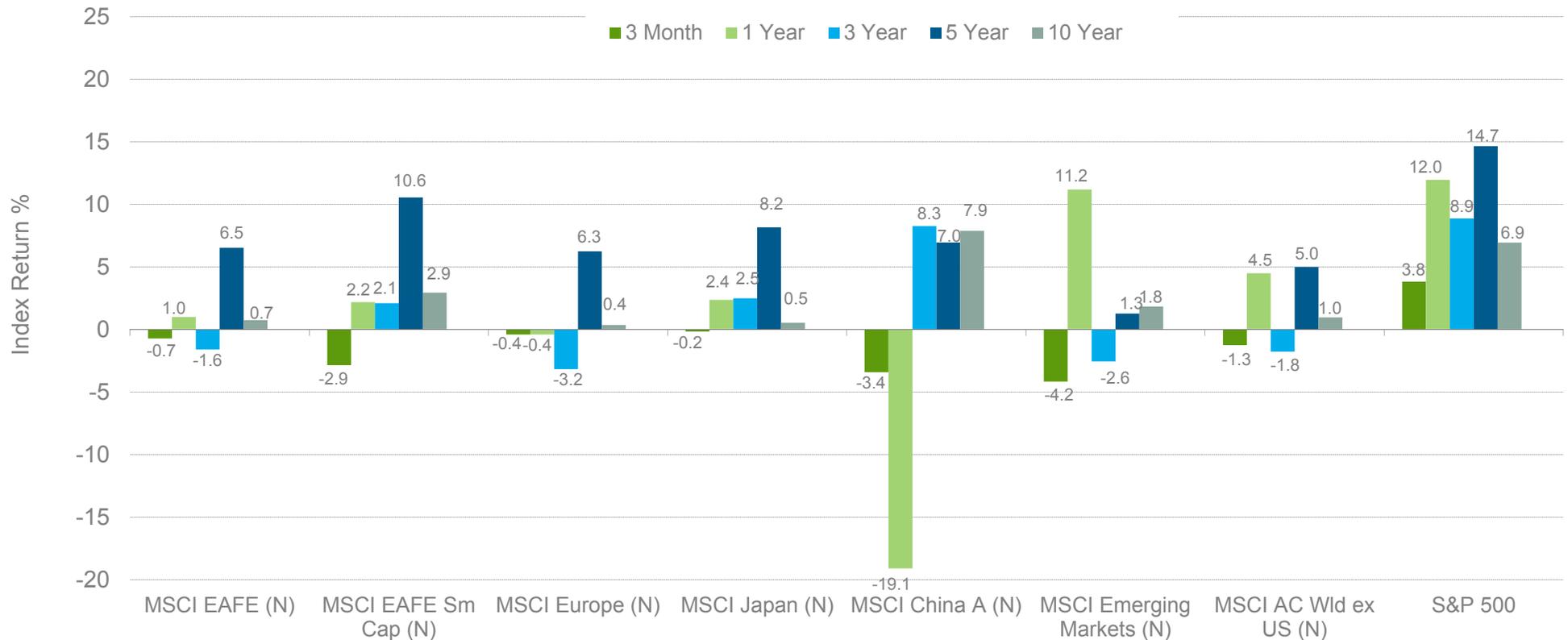
Investments in smaller companies may involve greater risks than those in larger, more well known companies.

Past performance is no guarantee of future results.



# International Equity Markets as of December 31, 2016

## International Equity Market Returns



Q4 2016 Local  
Currency  
Return

7.1%

5.5%

5.4%

15.0%

0.7%

-1.4%

4.9%

3.8%

Local Currency (LC) returns refers to the return in local currency ( i.e. does not include any impact due to currency exposure). Note: Emerging Market represented a 16.5% weight in ACWI ex-US as of 12/31/16.

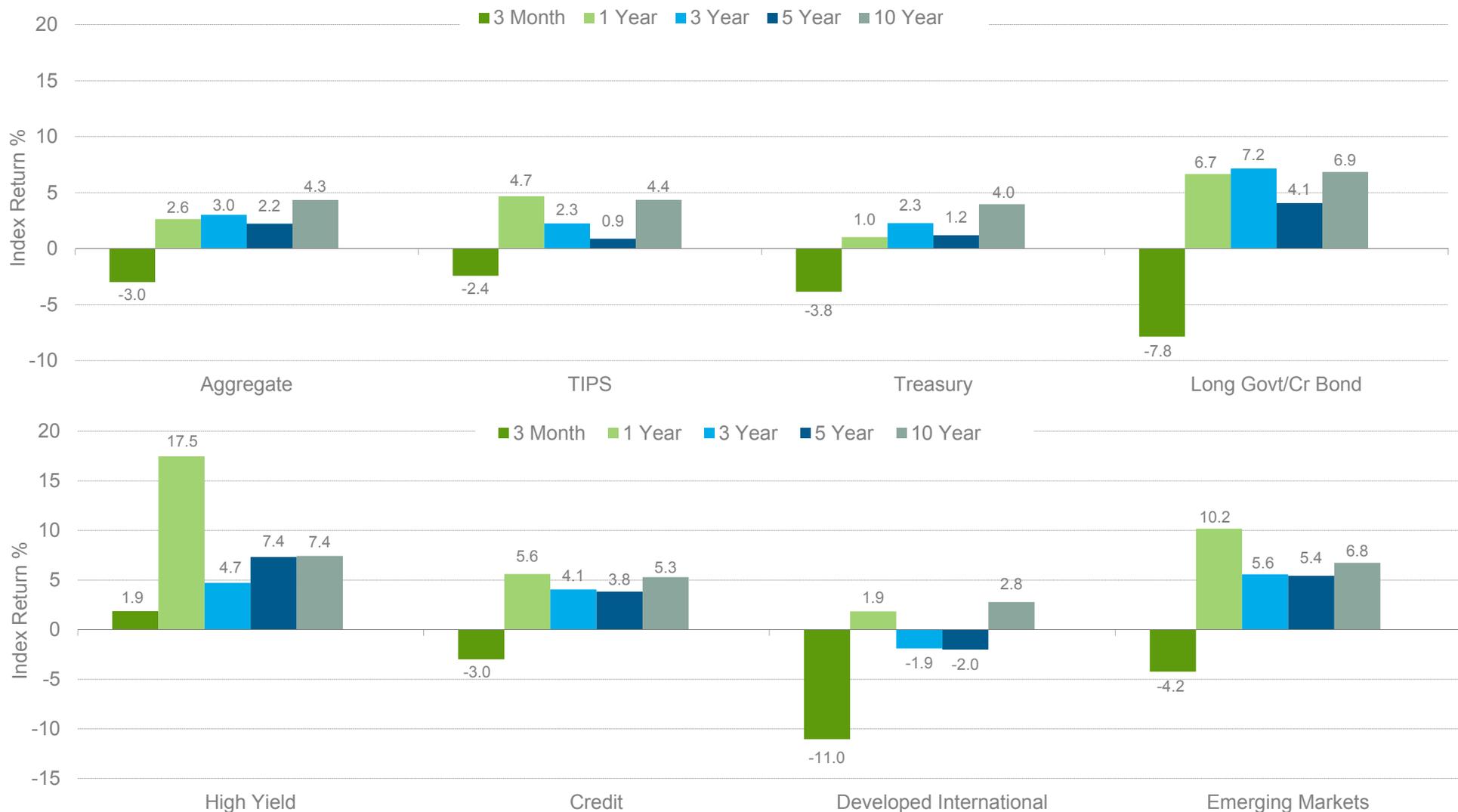
Source: Factset, Morningstar as of 12/31/16. 3, 5 and 10 year performance numbers are annualized total returns as of 12/31/16.

Foreign investments, especially those in emerging markets, involve greater risk and may offer greater potential returns than U.S. investments. This risk includes political and economic uncertainties of foreign countries, as well as the risk of currency fluctuation.

Past performance is no guarantee of future results.



# Fixed Income Market Returns as of December 31, 2016



Source: Morningstar as of 12/31/16. 3, 5 and 10 year performance numbers are annualized total returns as of 12/31/16.

In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. The value of inflation-protected debt securities tends to change less due to changes in inflation than other types of bonds but may decrease with decreases in inflation or, as with other debt securities, with increases in interest rates.

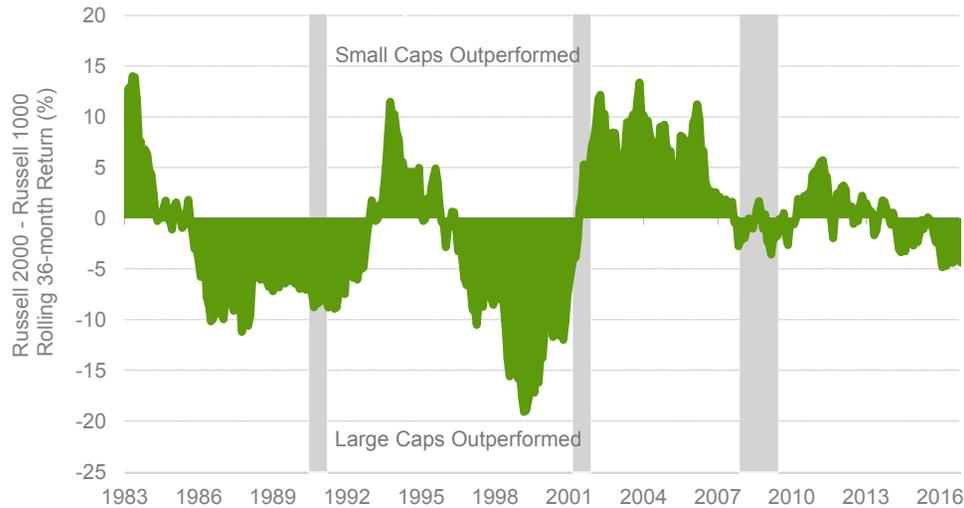
The above sectors are represented by the following indexes: Aggregate – Bloomberg Barclays Aggregate Bond Index; Agency – Bloomberg Barclays US Agency Index; TIPS – Bloomberg Barclays US TIPS Index; Treasury – Bloomberg Barclays Treasury Index; Long Govt/Cr Bond – Bloomberg Barclays US Long Government/Credit Bond Index; High Yield – BofA ML US HY Master II Constrained Index; Credit – Bloomberg Barclays Credit Bond Index; Developed International: JPM GBI Ex USA Unhedged; Emerging Markets: JPM EMBI Global.

Past performance is no guarantee of future results.



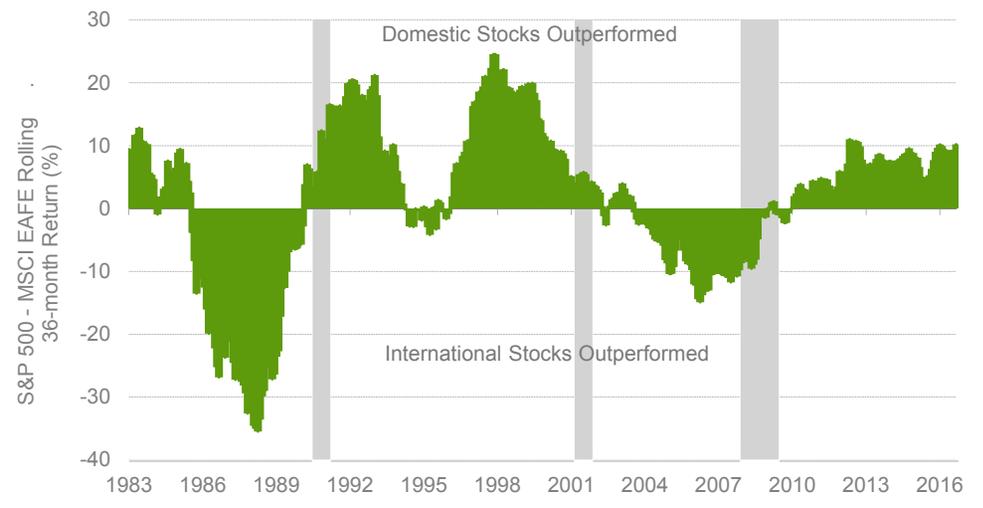
# Historical Relative Index Performance

## I. Small vs. Large Cap (January 1983 to December 2016)



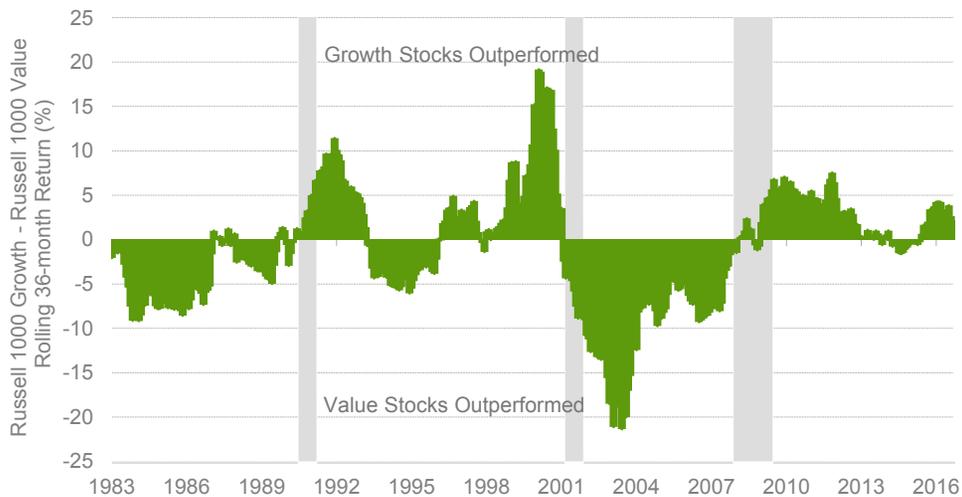
Source: Russell Investment Group, Morningstar as of 12/31/2016.

## II. U.S. vs. International (January 1983 to December 2016)



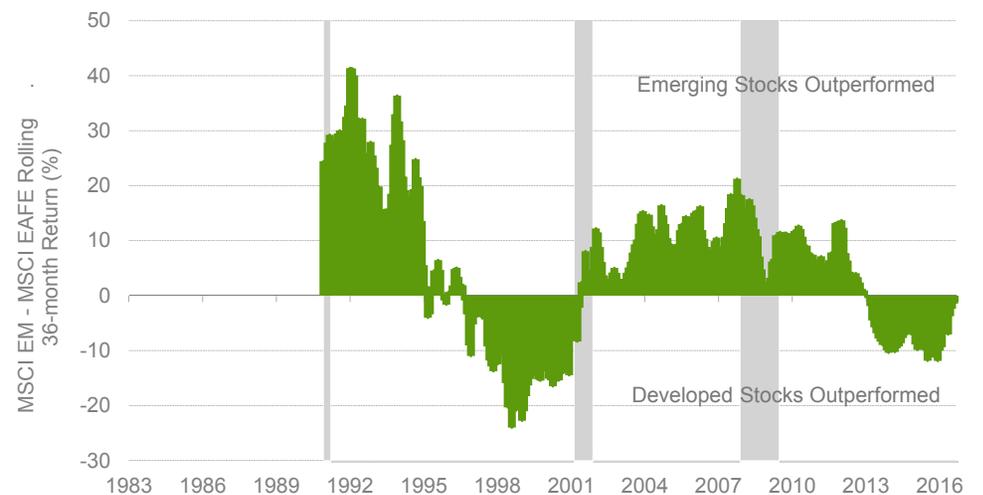
Source: Russell Investment Group, Morningstar as of 12/31/2016.

## III. Growth vs. Value (January 1983 to December 2016)



Source: Russell Investment Group, Morningstar as of 12/31/2016.

## IV. Non-US: Emerging vs. Developed (December 1990 to December 2016)



Source: Russell Investment Group, Morningstar as of 12/31/2016.

# Benefits Of Diversification

## Calendar Year Total Returns by Various Asset Classes (%)

*Diversification does not guarantee a profit or guarantee against loss*

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Lg Growth 38.7	Emg Mkt 66.4	Cmdty 49.7	Sm Value 14.0	Cmdty 32.1	Emg Mkt 55.8	REIT 31.5	Emg Mkt 34.0	REIT 34.2	Emg Mkt 39.8	Bonds 5.2	Emg Mkt 78.5	Sm Growth 29.1	TIPS 13.6	Emg Mkt 18.2	Sm Growth 43.3	REIT 28.8	Lg Growth 5.7	Sm Value 31.7
Large Cap 28.6	Sm Growth 43.1	REIT 26.8	REIT 12.8	TIPS 16.6	Sm Growth 48.5	Emg Mkt 25.6	Cmdty 25.6	Emg Mkt 32.2	Cmdty 32.7	Cash 1.8	High Yield 57.5	REIT 27.0	Bonds 7.8	Sm Value 18.1	Sm Value 34.5	Large Cap 13.7	Large Cap 1.4	High Yield 17.5
EAFE 20.0	Cmdty 40.9	Sm Value 22.8	Bonds 8.4	Bonds 10.3	Sm Value 46.0	Sm Value 22.3	EAFE 13.5	EAFE 26.3	Lg Growth 11.8	TIPS -2.4	Lg Growth 37.2	Sm Value 24.5	REIT 7.5	Lg Value 17.5	Lg Growth 33.5	Lg Value 13.5	REIT 1.3	Lg Value 17.3
Lg Value 15.6	Lg Growth 33.2	TIPS 13.2	TIPS 7.9	REIT 3.6	EAFE 38.6	EAFE 20.3	REIT 12.1	Sm Value 23.5	TIPS 11.6	Balanced 19.4	Sm Growth 34.5	Emg Mkt 18.9	High Yield 4.4	EAFE 17.3	Large Cap 32.4	Lg Growth 13.1	Bonds 0.6	Large Cap 12.0
Balanced 14.9	EAFE 27.0	Bonds 11.6	High Yield 4.5	Cash 1.7	REIT 36.7	Cmdty 17.3	Lg Value 7.1	Lg Value 22.3	EAFE 11.2	High Yield -26.4	EAFE 31.8	Lg Growth 16.7	Lg Growth 2.6	REIT 16.5	Lg Value 32.5	Balanced 6.0	Balanced 0.5	Cmdty 11.4
Bonds 8.7	Large Cap 21.0	Lg Value 7.0	Cash 4.1	High Yield -1.9	Lg Value 30.0	Lg Value 16.5	Balanced 5.7	Large Cap 15.8	Balanced 7.1	Sm Value -28.9	Large Cap 26.5	Lg Value 15.5	Large Cap 2.1	Large Cap 16.0	EAFE 22.8	Bonds 6.0	Cash 0.0	Sm Growth 11.3
Cash 5.1	Balanced 9.6	Cash 6.0	Emg Mkt -2.6	Balanced -5.8	Lg Growth 29.8	Sm Growth 14.3	Lg Growth 5.3	Sm Growth 13.4	Sm Growth 7.1	Lg Value -36.9	REIT 26.3	High Yield 15.2	Balanced 2.0	High Yield 15.6	Balanced 13.5	Sm Growth 5.6	EAFE -0.8	Emg Mkt 11.2
TIPS 4.0	Lg Value 7.4	Balanced 1.5	Balanced -3.3	Emg Mkt -6.2	Large Cap 28.7	Large Cap 10.9	Large Cap 4.9	High Yield 11.8	Bonds 7.0	Large Cap -37.0	Sm Value 20.6	Large Cap 15.1	Lg Value 0.4	Lg Growth 15.3	High Yield 7.4	Sm Value 4.2	Sm Growth -1.4	REIT 7.1
High Yield 3.0	Cash 4.7	High Yield -5.1	Lg Value -5.6	Sm Value -11.4	High Yield 28.2	High Yield 10.9	Sm Value 4.7	Balanced 11.6	Large Cap 5.5	Lg Growth -38.4	Lg Value 19.7	Balanced 10.5	Cash 0.1	Sm Growth 14.6	REIT 1.3	TIPS 3.6	TIPS -1.44	Lg Growth 7.1
Sm Growth 1.2	High Yield 2.5	Large Cap -9.1	Sm Growth -9.23	Lg Value -15.5	Cmdty 20.7	Balanced 9.3	Sm Growth 4.2	Lg Growth 9.1	Cash 4.7	Sm Growth -38.5	Balanced 17.3	Cmdty 9.0	Cmdty -1.18	Balanced 10.2	Cash 0.1	High Yield 2.5	Lg Value -3.8	Balanced 5.8
Sm Value -6.5	TIPS 2.4	EAFE -14.2	Large Cap -11.9	EAFE -15.9	Balanced 18.0	TIPS 8.5	Cash 3.0	Cash 4.8	High Yield 2.2	REIT -39.1	Cmdty 13.5	EAFE 7.8	Sm Growth -2.9	TIPS 7.0	Cmdty -1.2	Cash 0.0	High Yield -4.6	TIPS 4.7
REIT -16.9	Bonds 0.8	Lg Growth -22.4	Lg Growth -20.4	Large Cap -22.1	TIPS 8.4	Lg Growth 6.3	TIPS 2.8	Bonds 4.3	Lg Value -0.2	EAFE -43.4	TIPS 11.4	Bonds 6.5	Sm Value -5.5	Bonds 4.2	Bonds -2.0	Emg Mkt -2.2	Sm Value -7.5	Bonds 2.6
Emg Mkt -25.3	Sm Value -1.5	Sm Growth -22.4	EAFE -21.4	Lg Growth -27.9	Bonds 4.1	Bonds 4.3	High Yield 2.7	TIPS 0.4	Sm Value -9.8	Cmdty -46.5	Bonds 5.9	TIPS 6.3	EAFE -12.1	Cash 0.1	Emg Mkt -2.6	EAFE -4.9	Emg Mkt -14.9	EAFE 1.0
Cmdty -35.8	REIT -4.6	Emg Mkt -30.8	Cmdty -31.9	Sm Growth -30.3	Cash 1.1	Cash 1.2	Bonds 2.4	Cmdty -15.1	REIT -17.8	Emg Mkt -53.3	Cash 0.2	Cash 0.1	Emg Mkt -18.4	Cmdty 0.1	TIPS -8.6	Cmdty -33.1	Cmdty -32.7	Cash 0.3

### Mutual Fund Flows by Asset Class (\$ billions)

Morningstar Category	3 Month	1 Year	3 Year	Net Assets
Total Equity	15.3	(14.5)	436.0	8,775
Total Bond	4.5	209.0	395.4	3,833
Money Market	161.8	788.0	874.7	2,238
US Equity	14.2	(22.3)	59.9	6,452
International Equity	1.1	7.7	376.1	2,323
Diversified EM	(0.1)	18.0	31.6	379

Morningstar Category	3 Month	1 Year	3 Year	Net Assets
Taxable Bond	13.2	155.0	301.7	3,185
Municipal Bond	(8.7)	53.9	93.7	649
High Yield Bond	(8.1)	(2.1)	(16.9)	305
Target Date	18.7	68.7	164.2	757
Allocation	(9.3)	(54.2)	(8.9)	1,211
Commodities	(3.9)	16.7	5.8	91

*Morningstar's estimated net flow in/out of US open-end mutual funds (excludes Exchange Traded Funds). Data represents all distribution channels (retail and institutional). Source: Morningstar as of 11/30/16.*

Large Cap – S&P 500 Index; Large Growth – Russell 1000 Growth Index; Large Value – Russell 1000 Value Index; Small Growth – Russell 2000 Growth Index; Small Value – Russell 2000 Value Index; EAFE – MSCI EAFE Index; Emerging Markets – MSCI Emerging Markets Index; High Yield – Merrill Lynch U.S. High Yield Master II Index; Bonds – Bloomberg Barclays Aggregate Bond Index; TIPS – Bloomberg Barclays US Treasury Inflation Protected Notes (TIPS) Index; Commodities – S&P GS Commodity Index; REIT - MSCI US REIT Index; Cash – Citigroup 3 month T-Bill. The “Balanced” portfolio is re-balanced monthly and assumes the following weights: 35% DJ US Total Stock Market, 15% MSCI EAFE, 40% US Bloomberg Barclays Aggregate Bond and 10% Bloomberg Barclays 3-Month T-Bill.

Source: Morningstar as of 12/31/16. Indices are unmanaged and you cannot invest directly in an index.

Please refer to the Market Perspective Notes for risk disclosures. Past performance is no guarantee of future results.



# Market Perspective Notes

Third-party marks are the property of their respective owners; all other marks are the property of FMR LLC.

References to specific security, sector or investment strategy should not be construed as recommendations or investment advice. The statements and opinions are expressed as of December 31, 2016 and subject to change at any time, based on market and other conditions.

Past performance is no guarantee of future results.

Indices are unmanaged and you cannot invest directly in an index.

**Keep in mind that investing involves risk. The value of your investment will fluctuate over time and you may gain or lose money.**

## **Investment Risks:**

Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments.

The securities of smaller, less well-known companies can be more volatile than those of larger companies.

Foreign investments, especially those in emerging markets, involve greater risk and may offer greater potential returns than U.S. investments. This risk includes political and economic uncertainties of foreign countries, as well as the risk of currency fluctuation. Investments in smaller companies may involve greater risks than those in larger, more well known companies.

In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible.

*Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.*

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Fidelity Investments Institutional Services Company, Inc., 500 Salem Street, Smithfield, RI 02917

# Investment Spectrum



# Important Information About Investment Risks and Risk Spectrums

**Placement of investment options within each risk spectrum is only in relation to the investment options within that specific spectrum. Placement does not reflect risk relative to the investment options shown in the other risk spectrums.**

**Risk Spectrum for Lifecycle Investment Options:** Lifecycle investment options are represented on a separate spectrum because they are generally designed for investors expecting to retire around the year indicated in each investment's name. The investments are managed to gradually become more conservative over time. The investment risks of each lifecycle investment change over time as its asset allocation changes. They are subject to the volatility of the financial markets, including equity and fixed income investments in the U.S. and abroad and may be subject to risks associated with investing in high yield, small cap and foreign securities. Principal investment is not guaranteed at any time, including at or after their target dates.

**Risk Spectrum for General Investment Options:** This spectrum, with the exception of the Domestic Equity category, is based on Fidelity's analysis of the characteristics of the general investment categories and not on the actual investment options and their holdings, which can change frequently. Investment options in the Domestic Equity category are based on the options' Morningstar categories as of the date indicated. Morningstar categories are based on a fund's style as measured by its underlying portfolio holdings over the past three years and may change at any time. These style calculations do not represent the investment options' objectives and do not predict the investment options' future styles. Investment options are listed in alphabetical order within each investment category. Risk associated with the investment options can vary significantly within each particular investment category and the relative risk of categories may change under certain economic conditions. For a more complete discussion of risk associated with the mutual fund options, please read the prospectuses before making your investment decisions. The spectrum does not represent actual or implied performance.

Any product indicated as being on a watch list has been previously placed in this status by the plan sponsor. This may indicate that a product is subject to additional due diligence by the plan sponsor. This does not indicate a product that is being recommended to be placed on a watch list.

## **Investment Risks:**

Unless specifically stated otherwise in their detailed descriptions, principal invested in any of the Plan's investment options is not guaranteed at any time, including near or during retirement.

The investment risks of each lifecycle fund changes over time as its asset allocation changes. They are subject to the volatility of the financial markets, including equity and fixed income investments in the U.S. and abroad and may be subject to risks associated with investing in high yield, small cap and foreign securities.

Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments.

Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which are magnified in emerging markets. These risks are particularly significant for funds that focus on a single country or region.

In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible.

Investments in lower-quality debt securities generally offer higher yields, but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

Investments in smaller companies may involve greater risks than those in larger, more well known companies.

Because of their narrow focus, sector funds may be more volatile than funds that diversify across many sectors.

Investments in mortgage securities are subject to the risk that principal will be repaid prior to maturity. As a result, when interest rates decline, gains may be reduced, and when interest rates rise, losses may be greater.

(If applicable) Your company stock investment option is neither a mutual fund nor a diversified or managed investment option.

***Please see Fund Diagnostics Summary section for important information on Money Market Mutual Funds.***



# Investment Analysis



# Fund Diagnostics Summary – as of 12/31/2016

**Understanding investment performance: As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit [www.401k.com](http://www.401k.com) (log in, choose plan, select “Investment Choices & Research”, and then pick investment option.)**

% Rank in Category is the fund's total-return percentile rank relative to all funds that have the same Morningstar Category. The highest (or most favorable) percentile rank is one and the lowest (or least favorable) percentile rank is 100. The top-performing fund in a category will always receive a rank of one. The number in parentheses represents the number of funds in the category. % Rank in Category is based on total returns, which include reinvested dividends and capital gains, if any, and exclude sales charges.

Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Cumulative total returns are reported as of the period indicated. Life of Fund figures are reported as of the inception date to the period indicated. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower.

Pre-inception returns: The analysis on these pages may be based, in part, on historical returns for periods prior to the class's actual inception. Generally, these calculated returns reflect the historical performance of an older share class of the investment, which may be adjusted to reflect the fees and expenses of the newer share class. Pre-inception returns are not actual returns and return calculation methodologies utilized by Morningstar, other entities and the investment option may differ. Pre-inception returns generally will be replaced by the actual returns of the newer share class over time. Please click on dedicated web page or refer to the fund prospectus or plan information for specific information regarding fees, expenses and returns.

If Morningstar category performance, count and expense information is displayed for a non SEC registered product, please note this information is for comparison purposes only as non SEC registered products are not included within the respective Morningstar category.

Non SEC registered products in the variable annuity universe will display with Morningstar category performance, count, expense and rank information. These products are included within the Morningstar category for the variable annuity universe; thus, they are ranked within the category.

**NOTE: Please see page(s) at the end of the Investment Analysis section for additional information regarding fund performance, fees, and expenses.**

# Important Information About Money Market Mutual Funds

**Fidelity Government Mutual Fund Money Market:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Fidelity Investments and its affiliates, the fund's sponsor, have no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.*

Fidelity's government and U.S. Treasury money market funds will not impose a fee upon the sale of your shares, nor temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors.

**Non-Fidelity Government Mutual Fund Money Market:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.*

*The fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors. Any applicable funds will be detailed at the end of the Investment Analysis section. Please see Important Additional Information / Other Information.*

**Fidelity Institutional Mutual Fund Money Market:** *You could lose money by investing in a money market fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Fidelity Investments and its affiliates, the fund's sponsor, have no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.*

**Non-Fidelity Institutional Mutual Fund Money Market:** *You could lose money by investing in a money market fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.*

**Fidelity Retail Mutual Fund Money Market:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Fidelity Investments and its affiliates, the fund's sponsor, have no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.*

**Non-Fidelity Retail Mutual Fund Money Market:** *You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund and you should not expect that the sponsor will provide financial support to the fund at any time.*

# Fund Diagnostics Summary – as of 12/31/2016

STATE OF VERMONT - 37566

+ Non SEC Registered Product Indicator

SEC Registered Product

% Rank in Category

% Rank is less than or equal to 50%

% Rank is greater than or equal to 75%

SEC Registered Product

Expense Ratio

Expense Ratio Aft Red is greater than Cat Avg

Product Name Benchmark(s) Morningstar Category	YTD Cum Ret %	QE Cum Ret %	1 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	3 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	5 Yr Avg Ann Tot Ret	% Rank in Cat/ (Count)	10 Yr/LOF Avg Ann Tot Ret %	% Rank in Cat/ (Count)	Incept Date	Gross Expense Ratio	Expense Ratio Aft Red	ST Trade Fee (%/days)
<b>Asset Class: Managed Income (or Stable Value)</b>														
+ MIP CL 1	1.25	0.31	1.25	-	1.13	-	1.13	-	1.80	-	9/7/89	0.77		
7-Day Yield* % as of 12/31/2016:1.2														
BBgBarc 3M t-bill	0.35	0.09	0.35		0.16		0.14		0.84					
<b>Asset Class: Bond</b>														
<b>Diversified</b>														
PIM TOT RTN ESG INST	2.96	-2.30	2.96	50%	2.62	59%	3.03	30%	5.38	7%	5/1/91	0.55	0.5	
BBgBarc U.S. Agg Bond	2.65	-2.98	2.65		3.03		2.23		4.34					
Morningstar: Intermediate-Term Bond (Count)	3.23	-2.54	3.23	(985)	2.73	(869)	2.61	(759)	4.1	(541)		1.18	0.8	
PIM TOTAL RT INST	2.60	-2.46	2.60	63%	2.66	57%	3.21	23%	5.62	4%	5/11/87	0.47	0.46	
BBgBarc U.S. Agg Bond	2.65	-2.98	2.65		3.03		2.23		4.34					
Morningstar: Intermediate-Term Bond (Count)	3.23	-2.54	3.23	(985)	2.73	(869)	2.61	(759)	4.1	(541)		1.18	0.8	
VANG TOT BD MKT ADM	2.60	-3.17	2.60	63%	2.94	40%	2.14	69%	4.29	47%	12/11/86	0.06	0.06	
BBgBarc Agg Float Adj	2.75	-3.05	2.75		2.99		2.24							
Vanguard Spliced Barclays U.S. Aggregate Float Adjusted Index	2.75	-3.05	2.75		2.99		2.24		4.36					
Morningstar: Intermediate-Term Bond (Count)	3.23	-2.54	3.23	(985)	2.73	(869)	2.61	(759)	4.1	(541)		1.18	0.8	
<b>Asset Class: Balanced/Hybrid</b>														
AMERICAN BALANCED R4	8.50	1.75	8.50	26%	6.29	7%	10.77	5%	6.48	10%	7/25/75	0.63	0.63	
S&P 500	11.96	3.82	11.96		8.87		14.66		6.95					
BBgBarc U.S. Agg Bond	2.65	-2.98	2.65		3.03		2.23		4.34					
Morningstar: Allocation--50% to 70% Equity (Count)	7.34	0.99	7.34	(810)	3.87	(710)	8.04	(606)	4.8	(419)		1.42	1.19	
FID PURITAN K	5.20	0.38	5.20	82%	5.90	11%	10.27	9%	6.00	16%	4/16/47	0.46	0.46	
S&P 500	11.96	3.82	11.96		8.87		14.66		6.95					
Fid Puritan Composite Idx	8.31	1.10	8.31		6.66		9.69		5.71					
Morningstar: Allocation--50% to 70% Equity (Count)	7.34	0.99	7.34	(810)	3.87	(710)	8.04	(606)	4.8	(419)		1.42	1.19	
VANG BAL INDEX ADM	8.77	1.14	8.77	22%	6.34	6%	9.62	17%	6.40	11%	11/9/92	0.08	0.08	
Balanced Composite	8.80	1.24	8.80		6.37		9.68							
MSCI US Broad Mkt (G)	12.67	4.12	12.67		8.48		14.71		7.26					
Morningstar: Allocation--50% to 70% Equity (Count)	7.34	0.99	7.34	(810)	3.87	(710)	8.04	(606)	4.8	(419)		1.42	1.19	

\*The current yield of the fund listed above reflects the current earnings of the fund, while the total return refers to a specific past holding period.

# Fund Diagnostics Summary – as of 12/31/2016

STATE OF VERMONT - 37566

+ Non SEC Registered Product Indicator

SEC Registered Product

% Rank in Category

% Rank is less than or equal to 50%

% Rank is greater than or equal to 75%

SEC Registered Product

Expense Ratio

Expense Ratio Aft Red is greater than Cat Avg

Product Name Benchmark(s) Morningstar Category	YTD Cum Ret %	QE Cum Ret %	1 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	3 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	5 Yr Avg Ann Tot Ret	% Rank in Cat/ (Count)	10 Yr/LOF Avg Ann Tot Ret %	% Rank in Cat/ (Count)	Incept Date	Gross Expense Ratio	Expense Ratio Aft Red	ST Trade Fee (%/days)
<b>Asset Class: Domestic Equities</b>														
<b>Large Value</b>														
<a href="#">TRP EQUITY INCOME</a>	19.28	7.32	19.28	12%	6.17	70%	12.73	60%	5.67	45%	10/31/85	0.66	0.66	
S&P 500	11.96	3.82	11.96		8.87		14.66		6.95					
Morningstar: Large Value (Count)	14.81	6.34	14.81	(1,268)	6.84	(1,088)	12.97	(934)	5.38	(680)		1.52	1.08	
<b>Large Blend</b>														
<a href="#">DOMINI IMPACT EQ R</a>	11.55	4.06	11.55	35%	5.86	76%	12.06	78%	5.82	61%	6/3/91	0.82	0.82	2.00/30
S&P 500	11.96	3.82	11.96		8.87		14.66		6.95					
Morningstar: Large Blend (Count)	10.37	3.86	10.37	(1,409)	6.80	(1,255)	13.18	(1,106)	6.07	(814)		1.25	1.01	
<a href="#">FID 500 INDEX PR</a>	11.92	3.81	11.92	27%	8.83	6%	14.62	15%	6.92	22%	2/17/88	0.045	0.045	
S&P 500	11.96	3.82	11.96		8.87		14.66		6.95					
Morningstar: Large Blend (Count)	10.37	3.86	10.37	(1,409)	6.80	(1,255)	13.18	(1,106)	6.07	(814)		1.25	1.01	
<a href="#">FID DIVIDEND GR K</a>	8.19	3.34	8.19	78%	6.43	68%	13.56	52%	6.27	48%	4/27/93	0.5	0.5	
S&P 500	11.96	3.82	11.96		8.87		14.66		6.95					
Morningstar: Large Blend (Count)	10.37	3.86	10.37	(1,409)	6.80	(1,255)	13.18	(1,106)	6.07	(814)		1.25	1.01	
<b>Large Growth</b>														
<a href="#">FID BLUE CHIP GR K</a>	1.71	-1.56	1.71	62%	7.48	21%	15.45	7%	9.11	6%	12/31/87	0.7	0.7	
Russell 1000 Growth	7.08	1.01	7.08		8.55		14.50		8.33					
Morningstar: Large Growth (Count)	3.23	-0.27	3.23	(1,463)	5.70	(1,315)	12.94	(1,154)	6.91	(809)		1.55	1.16	
<b>Mid Value</b>														
<a href="#">FID LOW PRICED STK K</a>	8.88	3.34	8.88	97%	5.31	82%	13.26	66%	7.54	25%	12/27/89	0.78	0.78	
Russell 2000	21.31	8.83	21.31		6.74		14.46		7.07					
Morningstar: Mid-Cap Value (Count)	18.06	6.80	18.06	(399)	6.84	(337)	13.81	(301)	6.76	(207)		1.6	1.19	
<b>Mid Blend</b>														
<a href="#">FID EXT MKT IDX PR</a>	16.10	5.65	16.10	39%	6.53	46%	14.56	34%	8.04	26%	11/5/97	0.07	0.07	
DJ US Completion TSM	15.75	5.54	15.75		6.36		14.38		7.91					
Morningstar: Mid-Cap Blend (Count)	14.14	5.31	14.14	(427)	5.89	(371)	13.32	(332)	6.75	(219)		2.24	1.13	

\*The current yield of the fund listed above reflects the current earnings of the fund, while the total return refers to a specific past holding period.

# Fund Diagnostics Summary – as of 12/31/2016

STATE OF VERMONT - 37566

+ Non SEC Registered Product Indicator

SEC Registered Product

% Rank in Category

% Rank is less than or equal to 50%

% Rank is greater than or equal to 75%

SEC Registered Product

Expense Ratio

Expense Ratio Aft Red is greater than Cat Avg

Product Name Benchmark(s) Morningstar Category	YTD Cum Ret %	QE Cum Ret %	1 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	3 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	5 Yr Avg Ann Tot Ret	% Rank in Cat/ (Count)	10 Yr/LOF Avg Ann Tot Ret %	% Rank in Cat/ (Count)	Incept Date	Gross Expense Ratio	Expense Ratio Aft Red	ST Trade Fee (%/days)
<b>Small Blend</b>														
<b>FID SM CAP DISCOVERY</b>	20.29	9.78	20.29	55%	6.49	48%	15.67	17%	11.32	1%	9/26/00	1.01	1.01	1.50/90
<i>Russell 2000</i>	21.31	8.83	21.31		6.74		14.46		7.07					
Morningstar: Small Blend (Count)	20.78	9.49	20.78	(750)	5.89	(626)	13.52	(534)	6.79	(360)		2.27	1.22	
<b>Small Growth</b>														
<b>JANUS TRITON I</b>	10.59	1.00	10.59	49%	7.09	11%	14.36	15%	11.07	1%	2/25/05	0.77	0.77	
<i>Russell 2500 Growth</i>	9.73	2.60	9.73		5.45		13.88		8.24					
<i>Russell 2000 Growth</i>	11.32	3.57	11.32		5.05		13.74		7.76					
Morningstar: Small Growth (Count)	11.20	3.34	11.20	(669)	3.55	(599)	12.33	(531)	7.08	(389)		2.05	1.32	
<b>Asset Class: International/Global Diversified</b>														
<b>COL/ACORN INTL Z</b>	-2.28	-8.54	-2.28	44%	-2.64	75%	6.55	87%	3.33	41%	9/23/92	0.99	0.99	
<i>MSCI ACW SMID ex US</i>	3.96	-3.37	3.96		0.65		7.39		2.56					
Morningstar: Foreign Small/Mid Growth (Count)	-2.98	-6.51	-2.98	(118)	-0.63	(107)	8.87	(97)	3.12	(55)		2.79	1.5	
<b>FID INTL DISCOVERY K</b>	-5.62	-5.52	-5.62	81%	-2.17	59%	7.44	19%	1.58	50%	12/31/86	0.86	0.86	
<i>MSCI EAFE (Net MA)</i>	1.21	-0.69	1.21		-1.44		6.69		0.90					
Morningstar: Foreign Large Growth (Count)	-2.14	-5.67	-2.14	(363)	-1.83	(312)	6.15	(260)	1.43	(182)		1.76	1.26	
<b>PAX GLB ENV MKT IS</b>	10.91	-2.04	10.91	10%	2.22	46%	11.05	17%	4.72	-	3/27/08	1.06	0.98	
<i>MSCI World (N)</i>	7.51	1.86	7.51		3.80		10.41		4.42					
Morningstar: World Stock (Count)	5.54	-0.37	5.54	(1,015)	2.10	(848)	9.24	(669)		(372)		2.26	1.32	
<b>VANG TOT INTL STK AD</b>	4.67	-1.93	4.67	12%	-1.34	30%	5.50	59%	0.91	32%	4/29/96	0.12	0.12	
<i>FTSE Global All Cap x US</i>	5.04	-1.24	5.04		-0.78		5.95		1.81					
<i>MSCI ACWI ex US IMI (N)</i>	4.41	-1.57	4.41		-1.44		5.35		1.22					
Morningstar: Foreign Large Blend (Count)	0.79	-2.22	0.79	(762)	-2.10	(606)	5.75	(542)	0.54	(329)		2.08	1.15	

\*The current yield of the fund listed above reflects the current earnings of the fund, while the total return refers to a specific past holding period.

# Fund Diagnostics Summary – as of 12/31/2016

STATE OF VERMONT - 37566

+ Non SEC Registered Product Indicator

SEC Registered Product

% Rank in Category

% Rank is less than or equal to 50%

% Rank is greater than or equal to 75%

SEC Registered Product

Expense Ratio

Expense Ratio Aft Red is greater than Cat Avg

Product Name Benchmark(s) Morningstar Category	YTD Cum Ret %	QE Cum Ret %	1 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	3 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	5 Yr Avg Ann Tot Ret	% Rank in Cat/ (Count)	10 Yr/LOF Avg Ann Tot Ret %	% Rank in Cat/ (Count)	Incept Date	Gross Expense Ratio	Expense Ratio Aft Red	ST Trade Fee (%/days)
<b>Asset Class: Lifecycle Funds</b>														
<b>FID FREEDOM K INCOME</b>	5.18	-0.79	5.18	47%	2.92	33%	3.93	66%	5.25	-	7/2/09	0.44	0.44	
<i>BBgBarc U.S. Agg Bond</i>	2.65	-2.98	2.65		3.03		2.23		3.87					
<i>FID FF Income Comp Idx</i>	3.85	-0.74	3.85		2.82		3.69		4.57					
Morningstar: Target-Date Retirement (Count)	5.10	-0.88	5.10	(171)	2.59	(133)	4.31	(113)		(58)		2.21	0.83	
<b>FID FREEDOM K 2005</b>	5.94	-0.47	5.94	50%	3.41	29%	5.40	73%	7.12	-	7/2/09	0.49	0.49	
<i>BBgBarc U.S. Agg Bond</i>	2.65	-2.98	2.65		3.03		2.23		3.87					
<i>FID FF 2005 Comp Idx</i>	4.92	-0.33	4.92		3.40		5.40		6.88					
Morningstar: Target-Date 2000-2010 (Count)	5.86	-0.57	5.86	(111)	3.04	(84)	5.77	(69)		(40)		1.24	0.76	
<b>FID FREEDOM K 2010</b>	6.57	-0.25	6.57	26%	3.72	11%	6.52	24%	8.07	-	7/2/09	0.53	0.53	
<i>BBgBarc U.S. Agg Bond</i>	2.65	-2.98	2.65		3.03		2.23		3.87					
<i>FID FF 2010 Comp Idx</i>	5.73	-0.01	5.73		3.77		6.74		8.09					
Morningstar: Target-Date 2000-2010 (Count)	5.86	-0.57	5.86	(111)	3.04	(84)	5.77	(69)		(40)		1.24	0.76	
<b>FID FREEDOM K 2015</b>	7.10	0.01	7.10	20%	3.99	15%	6.89	39%	8.41	-	7/2/09	0.56	0.56	
<i>S&amp;P 500</i>	11.96	3.82	11.96		8.87		14.66		15.39					
<i>FID FF 2015 Comp Idx</i>	6.54	0.32	6.54		4.11		7.18		8.48					
Morningstar: Target-Date 2015 (Count)	6.12	-0.40	6.12	(131)	3.10	(91)	6.53	(70)		(24)		1.44	0.79	
<b>FID FREEDOM K 2020</b>	7.40	0.20	7.40	15%	4.17	7%	7.46	30%	9.15	-	7/2/09	0.58	0.58	
<i>S&amp;P 500</i>	11.96	3.82	11.96		8.87		14.66		15.39					
<i>FID FF 2020 Comp Idx</i>	7.06	0.54	7.06		4.34		7.79		9.37					
Morningstar: Target-Date 2020 (Count)	6.23	-0.35	6.23	(221)	3.13	(176)	6.48	(146)		(67)		1.4	0.86	
<b>FID FREEDOM K 2025</b>	7.59	0.37	7.59	19%	4.34	7%	8.46	27%	9.89	-	7/2/09	0.61	0.61	
<i>S&amp;P 500</i>	11.96	3.82	11.96		8.87		14.66		15.39					
<i>FID FF 2025 Comp Idx</i>	7.58	0.76	7.58		4.62		9.01		10.39					
Morningstar: Target-Date 2025 (Count)	6.73	0.02	6.73	(195)	3.38	(149)	7.66	(113)		(34)		1.51	0.84	
<b>FID FREEDOM K 2030</b>	8.25	0.79	8.25	19%	4.60	6%	8.98	28%	10.36	-	7/2/09	0.65	0.65	
<i>S&amp;P 500</i>	11.96	3.82	11.96		8.87		14.66		15.39					
<i>FID FF 2030 Comp Idx</i>	8.73	1.41	8.73		4.95		9.59		10.99					
Morningstar: Target-Date 2030 (Count)	7.33	0.34	7.33	(221)	3.53	(176)	8.06	(146)		(67)		1.58	0.9	

\*The current yield of the fund listed above reflects the current earnings of the fund, while the total return refers to a specific past holding period.

# Fund Diagnostics Summary – as of 12/31/2016

STATE OF VERMONT - 37566

+ Non SEC Registered Product Indicator

SEC Registered Product

% Rank in Category

% Rank is less than or equal to 50%

% Rank is greater than or equal to 75%

SEC Registered Product

Expense Ratio

Expense Ratio Aft Red is greater than Cat Avg

Product Name Benchmark(s) Morningstar Category	YTD Cum Ret %	QE Cum Ret %	1 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	3 Yr Avg Ann Tot Ret %	% Rank in Cat/ (Count)	5 Yr Avg Ann Tot Ret	% Rank in Cat/ (Count)	10 Yr/LOF Avg Ann Tot Ret %	% Rank in Cat/ (Count)	Incept Date	Gross Expense Ratio	Expense Ratio Aft Red	ST Trade Fee (%/days)
<b>FID FREEDOM K 2035</b>	8.72	1.31	8.72	17%	4.76	6%	9.75	30%	10.82	-	7/2/09	0.67	0.67	
S&P 500	11.96	3.82	11.96		8.87		14.66		15.39					
FID FF 2035 Comp Idx	9.53	1.98	9.53		5.15		10.57		11.70					
Morningstar: Target-Date 2035 (Count)	7.57	0.75	7.57	(195)	3.64	(149)	8.94	(113)		(34)		1.57	0.87	
<b>FID FREEDOM K 2040</b>	8.72	1.31	8.72	30%	4.76	11%	9.82	32%	10.94	-	7/2/09	0.67	0.67	
S&P 500	11.96	3.82	11.96		8.87		14.66		15.39					
FID FF 2040 Comp Idx	9.54	1.99	9.54		5.16		10.69		11.84					
Morningstar: Target-Date 2040 (Count)	7.95	0.86	7.95	(221)	3.74	(176)	8.99	(146)		(67)		1.71	0.91	
<b>FID FREEDOM K 2045</b>	8.79	1.36	8.79	30%	4.78	11%	10.02	39%	11.08	-	7/2/09	0.67	0.67	
S&P 500	11.96	3.82	11.96		8.87		14.66		15.39					
FID FF 2045 Comp Idx	9.54	1.99	9.54		5.16		10.85		11.97					
Morningstar: Target-Date 2045 (Count)	7.93	1.08	7.93	(195)	3.78	(149)	9.61	(109)		(33)		1.7	0.88	
<b>FID FREEDOM K 2050</b>	8.71	1.29	8.71	34%	4.78	18%	10.10	32%	11.12	-	7/2/09	0.67	0.67	
S&P 500	11.96	3.82	11.96		8.87		14.66		15.39					
FID FF 2050 Comp Idx	9.54	1.99	9.54		5.16		10.96		12.13					
Morningstar: Target-Date 2050 (Count)	8.22	0.99	8.22	(213)	3.87	(168)	9.34	(129)		(23)		2.13	0.92	

\*The current yield of the fund listed above reflects the current earnings of the fund, while the total return refers to a specific past holding period.

# Fidelity Freedom<sup>®</sup> K Funds Performance Summary— Average Annual Total Returns as of 12/31/2016

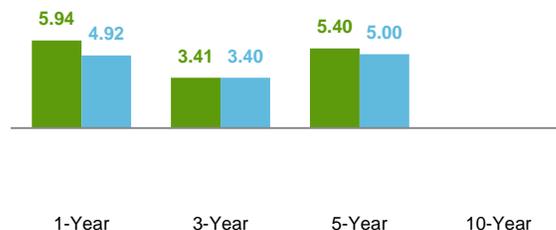
Understanding investment performance: As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit [www.401k.com](http://www.401k.com) (log in, choose plan, select “Investment Choices & Research”, then pick investment option.).

■ Freedom K Fund | ■ EAC Linked Composite Benchmark

### FREEDOM K INCOME FUND



### FREEDOM K 2005 FUND



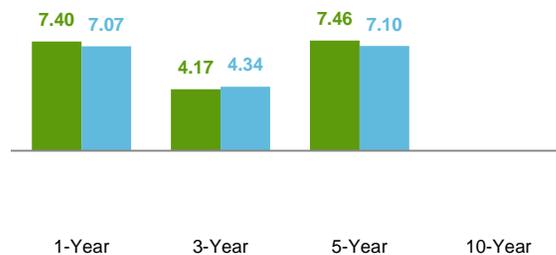
### FREEDOM K 2010 FUND



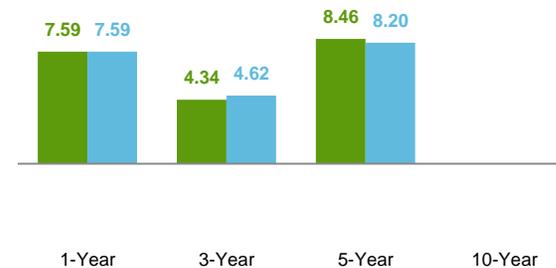
### FREEDOM K 2015 FUND



### FREEDOM K 2020 FUND



### FREEDOM K 2025 FUND



**Benchmarks:** Each Fidelity Freedom Extended Asset Class Linked Composite Index is a customized blend of the following unmanaged indexes: Dow Jones U.S. Total Stock Market Index; MSCI ACWI (All Country World Index) ex USA Index; Barclays U.S. Aggregate Bond Index; and Barclays U.S. 3 Month Treasury Bellwether Index. The index weightings are adjusted monthly to reflect the fund's changing asset allocations. The composition differed in periods prior to January 1, 2014.

Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower.

Source: Fidelity Investments.

Please see previous Fund Diagnostics for complete performance information.

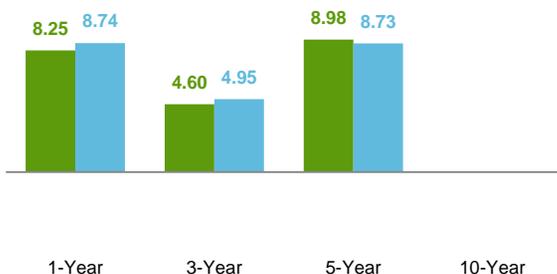


# Fidelity Freedom<sup>®</sup> K Funds Performance Summary— Average Annual Total Returns as of 12/31/2016

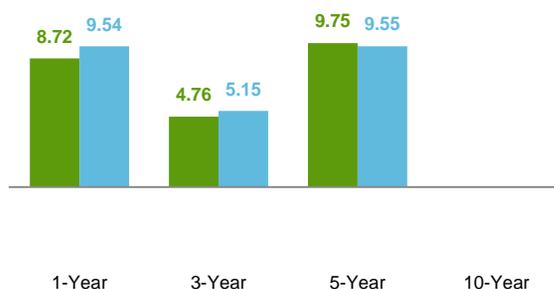
Understanding investment performance: As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit [www.401k.com](http://www.401k.com) (log in, choose plan, select “Investment Choices & Research”, then pick investment option.).

■ Freedom K Fund | ■ EAC Linked Composite Benchmark

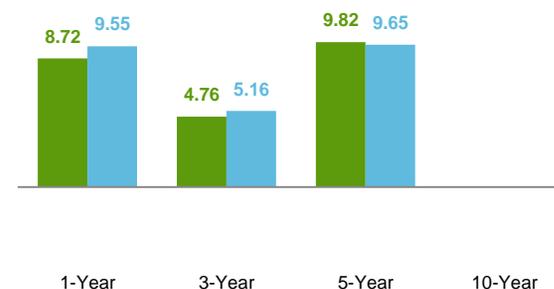
### FREEDOM K 2030 FUND



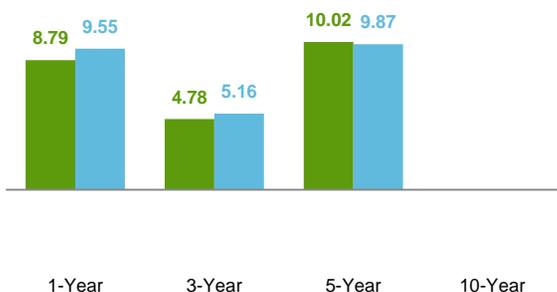
### FREEDOM K 2035 FUND



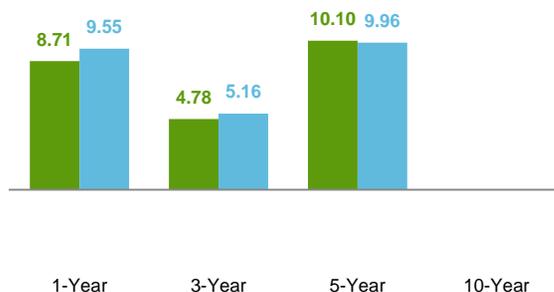
### FREEDOM K 2040 FUND



### FREEDOM K 2045 FUND



### FREEDOM K 2050 FUND



### FREEDOM K 2055 FUND



Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower.

Source: Fidelity Investments.

Please see previous Fund Diagnostics for complete performance information.

# Fidelity Freedom<sup>®</sup> K Funds Performance Summary— Average Annual Total Returns as of 12/31/2016

Understanding investment performance: As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit [www.401k.com](http://www.401k.com) (log in, choose plan, select “Investment Choices & Research”, then pick investment option.).

■ Freedom K Fund | ■ EAC Linked Composite Benchmark

## FREEDOM K 2060 FUND



Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower.

Source: Fidelity Investments.

Please see previous Fund Diagnostics for complete performance information.

# Mutual Funds by Expense Ratio after Reductions: Approximate Rank by Quartile— as of 12/31/2016

STATE OF VERMONT - 37566

Fidelity Rank In Cat	Mstar Cat Count	Fund Name	Exp Ratio After Red	% Total Plan Assets
1%	751	VANG BAL INDEX ADM	0.08	1.1%
2%	1365	FID 500 INDEX PR	0.045	10.2%
2%	425	FID EXT MKT IDX PR	0.07	4.8%
2%	970	VANG TOT BD MKT ADM	0.06	1.7%
4%	751	VANG TOT INTL STK AD	0.12	0.5%
4%	751	FID PURITAN K	0.46	0.4%
7%	668	JANUS TRITON I	0.77	0.9%
9%	124	COL/ACORN INTL Z	0.99	0.3%
10%	751	AMERICAN BALANCED R4	0.63	3.7%
14%	365	FID LOW PRICED STK K	0.78	3.5%
14%	1403	FID BLUE CHIP GR K	0.7	1.0%
15%	1200	TRP EQUITY INCOME	0.66	2.0%
16%	1365	FID DIVIDEND GR K	0.5	3.5%
19%	970	PIM TOTAL RT INST	0.46	3.5%
19%	365	FID INTL DISCOVERY K	0.86	2.6%
24%	970	PIM TOT RTN ESG INST	0.5	0.7%
25%	1033	PAX GLB ENV MKT IS	0.98	0.1%
33%	762	FID SM CAP DISCOVERY	1.01	3.4%
37%	1365	DOMINI IMPACT EQ R	0.82	4.4%

## Fidelity Quartile rankings

0-25% 26-50% 51-75% 76-100%

Top 19 Funds by Asset (with rank) totaling

**48.2%** of Total Plan Assets

Chart indicates approximate ranking of mutual funds by expense ratios after reductions. The Plan's (or Plans') other investment options are not taken into account. This chart excludes Lifecycle products. Expense reductions may reflect waivers, reimbursements or voluntary caps that expire at any time or on a specific date. See previous pages after Fund Diagnostic Summary for details of expense reductions for each fund.

Expense Ratio after Reduction is the total annual operating expense from the fund's most recent prospectus after any fee waiver and/or expense reimbursements that will reduce any fund operating expenses for no less than one year from the effective date of the fund's registration statement. This number does not include any fee waiver arrangement or expense reimbursement that may be terminated without agreement of the fund's board of trustees during the one-year period.

Approximate rankings are determined by Fidelity on quarterly basis using data available at the time of publication. Fidelity ranks the expense ratio after reductions of each fund within each Morningstar category by first ordering the funds from those with the lowest expenses to those with the highest expenses, and then dividing their numerical order by the number of funds in the category. The highest percentile rank (or most favorable) is 1% and the lowest percentile rank (or least favorable) is 100%. The first quartile represents funds with lower expenses, and the fourth quartile represents funds with higher expenses. Fidelity Quartile Rankings display the funds' quartile rankings within their respective Morningstar categories.

Please see previous Fund Diagnostics for Morningstar Category information.

Although Morningstar gathers information from reliable sources, it cannot guarantee the accuracy, completeness or timeliness of its data. Please refer to the most recent prospectus or annual/semiannual report for the most current and complete information about a fund's fees and expenses.



# Important Additional Information

If more than one benchmark is shown, the first listed is the primary benchmark.

The Morningstar Category Average is the average return for the peer group based on the returns of each individual fund within the group, for the period shown. This average assumes reinvestment of dividends and capital gains, if any, and excludes sales charges.

Morningstar, Inc., provided data on the non-Fidelity mutual funds. Although the data is gathered from reliable sources, accuracy and completeness cannot be guaranteed by Morningstar.

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Indices are unmanaged and you cannot invest directly in an index.

Manager Tenure: If a fund has more than one manager, the one with the longest tenure has been used obtain manager tenure.

## **Other Information:**

FID 500 INDEX PR: As of June 14, 2016, this fund changed its name from Spartan 500 Index Fund - Fidelity Advantage Class.

FID EXT MKT IDX PR: As of June 14, 2016, this fund changed its name from Spartan® Extended Market Index Fund - Fidelity Advantage Class.

DOMINI IMPACT EQ R: As of November 30, this fund changed its name from Domini Social Equity Fund.

MIP CL 1: Expense Ratio (Gross) includes management and wrap contract fees. For certain investments, it may also include distribution fees. Please note that the Gross and Net Expense Ratio are the same for this investment.

MIP CL 1: Management Fee includes the costs associated with managing the investments in the pool. The management fee does not include the wrap contract fees, which are paid to third party wrap providers and do not result in any additional compensation to Fidelity. The wrap contract fees are not separately stated but are included in the Expense Ratio and do reduce returns.

FID BLUE CHIP GR K, FID DIVIDEND GR K, FID INTL DISCOVERY K, FID LOW PRICED STK K, FID PURITAN K: On May 9, 2008, an initial offering of the retirement (K) class took place. Returns and expenses prior to that date are those of the non-K, non-advisor class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

FID EXT MKT IDX PR: Returns prior to October 14, 2005 are those of the Investor Class and reflect the Investor Class' expense ratio. Had the Premium Class' expense ratio been reflected, total returns would have been higher.

FID 500 INDEX PR: Returns prior to October 14, 2005 are those of the Investor Class and reflect the Investors Class' expense ratio. Had the Premium Class' expense ratio been reflected, total returns would have been higher.

VANG TOT INTL STK AD: The FTSE Global All Cap ex US Index is part of a range of indices designed to help US investors benchmark their international investments. The index comprises large, mid and small cap stocks globally excluding the US.

MIP CL 1: This investment option is not a mutual fund.

# Additional Information about Fees and Expenses

## General Information on Fund Expenses

For a mutual fund, the Gross Expense Ratio is the total annual fund or class operating expenses (before waivers or reimbursements) paid by the fund and stated as a percent of the fund's total net assets. Where the investment option is not a mutual fund, the figure displayed in the Gross Expense Ratio field is intended to reflect similar information. However, it may have been calculated using methodologies that differ from those used for mutual funds and may not include all the fees that mutual fund expense ratios are required to reflect. For mutual funds, the values were drawn from their respective prospectuses. For non-mutual fund investment options, the information has been provided by the trustee or plan sponsor. When no ratio is shown for these options it is due to the fact that none was available. Nevertheless, there may be fees and expenses associated with the investment option.

Expense Ratio after Reduction is the total annual operating expense from the fund's most recent prospectus after any fee waiver and/or expense reimbursements that will reduce any fund operating expenses for no less than one year from the effective date of the fund's registration statement. This number does not include any fee waiver arrangement or expense reimbursement that may be terminated without agreement of the fund's board of trustees during the one-year period.

Morningstar does not provide information on funds in reimbursement. For information on non-Fidelity funds in reimbursement, please contact the applicable fund company.

The returns of funds with reimbursed expenses would be lower if their expenses had not been reimbursed.

Morningstar Category Gross Expense Ratio: This figure is calculated by Morningstar and represents the mean average of the gross expense ratio paid by each fund in the Morningstar category. Each share class of a fund is treated as a separate fund. Morningstar uses each fund's most current, publicly available prospectus at the time the average is calculated.

Morningstar Category's Expense Ratio After Reductions: This figure represents the average expense ratio after reductions paid by the funds in the Morningstar category. Morningstar calculated and provided the average based on information reported in each fund's prospectus.

## Specific Fund Expense Information

For Fidelity Funds, if the Expense Ratio after Reduction is lower than the Gross Expense Ratio and no fee cap is provided for below , the difference may be attributable to certain broker service and other offset arrangements which may be discontinued at any time.

*Expense Ratios After Reductions information for non-Fidelity mutual funds is provided by Morningstar, Inc. and its accuracy cannot be guaranteed. Consult the prospectus for each fund you are interested in to obtain the most current and detailed information on its fees and expenses.*

PAX GLB ENV MKT IS: Contractual Expense Ratio Waiver of 0.08 subject to Expiration Date of 12/31/2017

# Glossary

**Watch List Product:** Any product indicated as being on a watch list has been previously placed in this status by the plan sponsor. This may indicate that a product is subject to additional due diligence by the plan sponsor. This does not indicate a product that is being recommended to be placed on a watch list.

**Standard Deviation:** Statistical measure of how much a return varies over an extended period of time. The more variable the fund's returns, the larger the fund's standard deviation. A higher standard deviation indicates a wider dispersion of past returns and thus greater historical volatility. Standard deviation indicates the volatility of a portfolio's return over time, not the actual performance of the portfolio. Standard deviation measures volatility independent of a benchmark, and it is annualized.

**Sharpe Ratio:** A risk-adjusted performance measure that help indicate if returns are due to excess risk. It is calculated by dividing the fund's excess returns (fund's average monthly returns minus the risk-free rate (such as that of the 3-month T-bill)) by the standard deviation of those returns. The higher the ratio, the better the fund's return per unit of risk. The Information Ratio (see definition below) is similar to the Sharpe Ratio. The Sharpe Ratio compares the excess return of an asset against the return of a risk free asset but the Information Ratio compares active return to the fund's most relevant benchmark index. Excess Return denotes the return over the risk-free asset while Active Return denotes the return over the benchmark.

**Tracking Error:** A measure of the deviation of fund performance from index performance (i.e., the underlying index it is intended to either match or outperform). For example, a fund with a tracking error of 20 basis points has earned the return of the index against which it is tracked, plus or minus 20 basis points, 67% of the time. This 67% represents one standard deviation in what is referred to a "normal distribution" in probability theory and statistics. It is called 'Tracking Error' because it describes how well the portfolio can track the benchmark. The annual tracking error is obtained by multiplying the monthly tracking error by 12.

**Information Ratio:** Shows the risk-adjusted active return of the fund compared to its benchmark. It's a measure of the amount of risk an investment manager took relative to the fund's benchmark to achieve the fund's Alpha (see definition above). It is calculated by dividing Alpha by the Tracking Error, where Tracking Error is the Standard Deviation (see definition above) of Alpha.

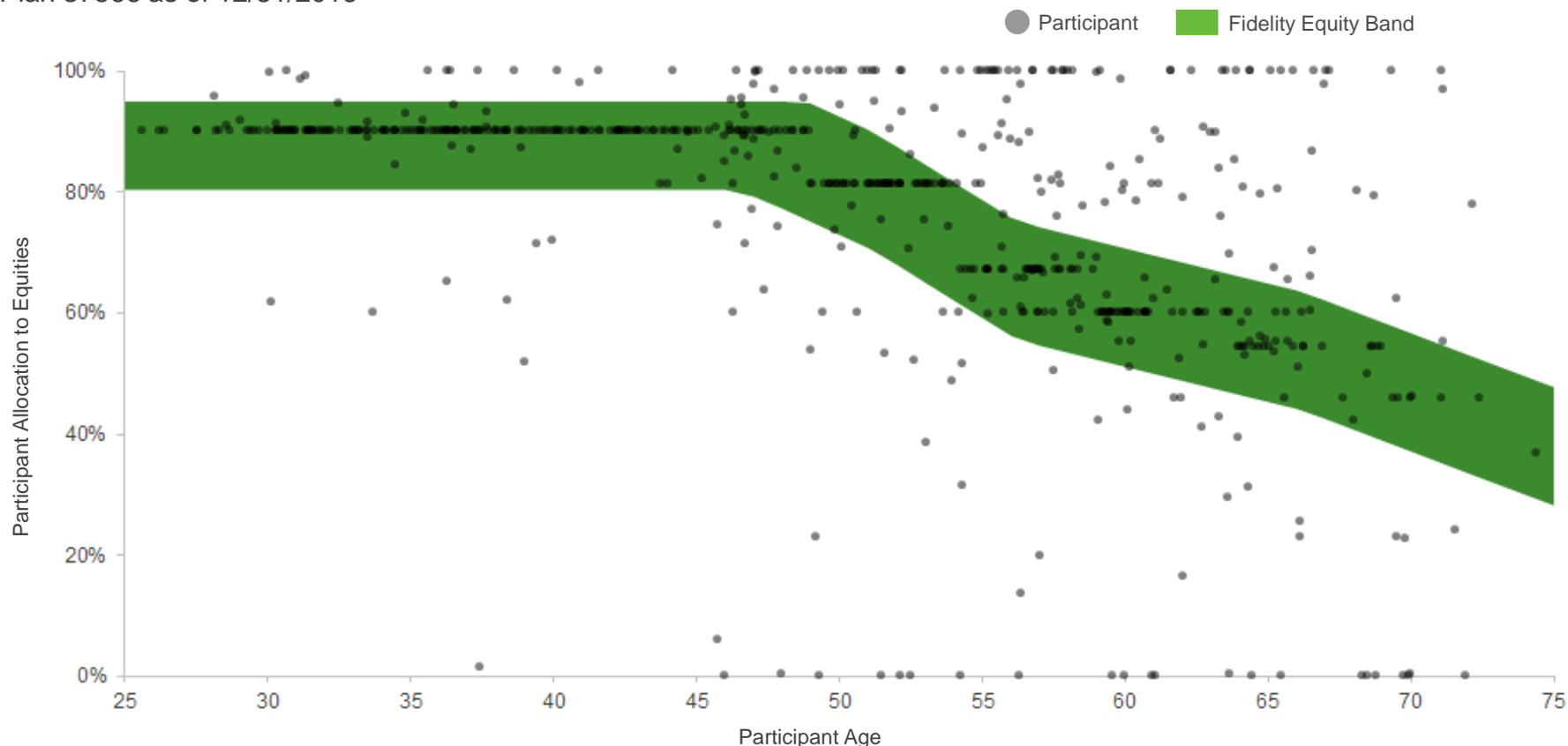
Tracking Error measures the extent to which a fund's returns deviates from its benchmark's returns over time. A high ratio means a manager can achieve higher returns more efficiently than one with a low ratio by taking on additional risk. Additional risk could be achieved through leveraging.

## Plan / Participant Review



# Participant Allocation to Equities

Plan 37566 as of 12/31/2016



Age Range	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	Overall
Percent of Participants in Age Range	12%	18%	26%	32%	10%	100%
Percent of Participants Inside Fidelity Equity Band	90%	86%	62%	55%	45%	66%
Percent of Participants Invested 0% in Equities	0%	0%	4%	2%	6%	2%
Percent of Participants Invested 100% in Equities	1%	6%	10%	12%	10%	9%

Percentage of assets invested in equities is based on data for participants in the plan with a balance as of quarter end. "Equities" are defined as domestic equity, international equity, company stock and the equity portion of blended investment options. Investors should allocate assets based on individual risk tolerance, investment time horizon, and personal financial situation. A particular asset allocation may be achieved by using different allocations in different accounts or by using the same one across multiple accounts. Stock markets are volatile and can fluctuate significantly in response to company, industry, political, regulatory, market, or economic developments. Investing in stock involves risks, including the loss of principal.

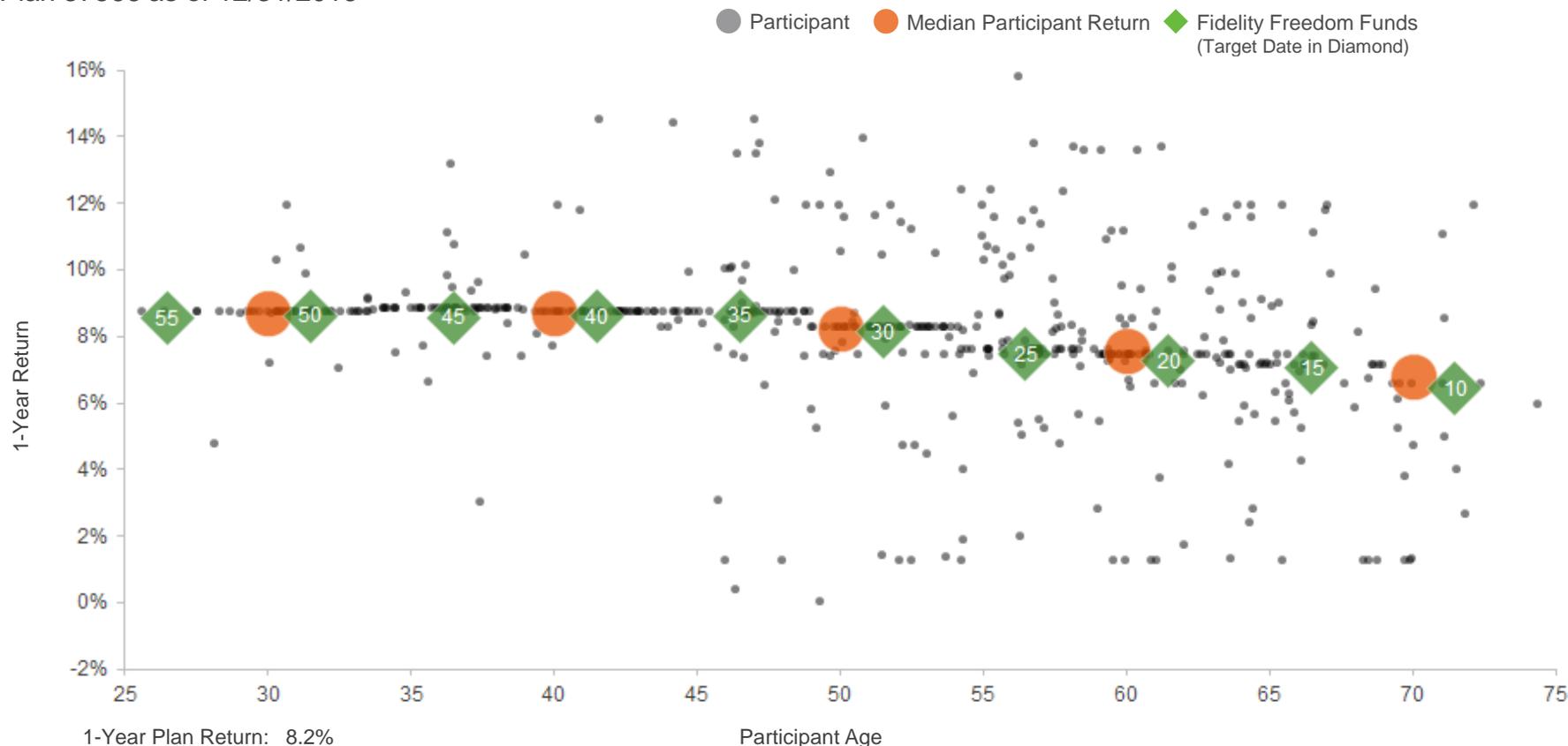
The Fidelity equity band represents an interval of plus or minus ten percentage points around the Fidelity equity glide path, not to exceed 95% equity. Participants whose actual equity allocations fall within this age-based interval are said to be "inside" the equity band. The Fidelity equity band is not intended as a benchmark for individual investors; rather, it represents a range of equity allocations that may be appropriate for many investors saving for retirement.

This chart and table assume participants will retire in the year they turn age 65. If your plan has more than 5,000 participants, this chart represents a random sample of 5,000 participants.

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# Participant 1-Year Time-Weighted Returns

Plan 37566 as of 12/31/2016



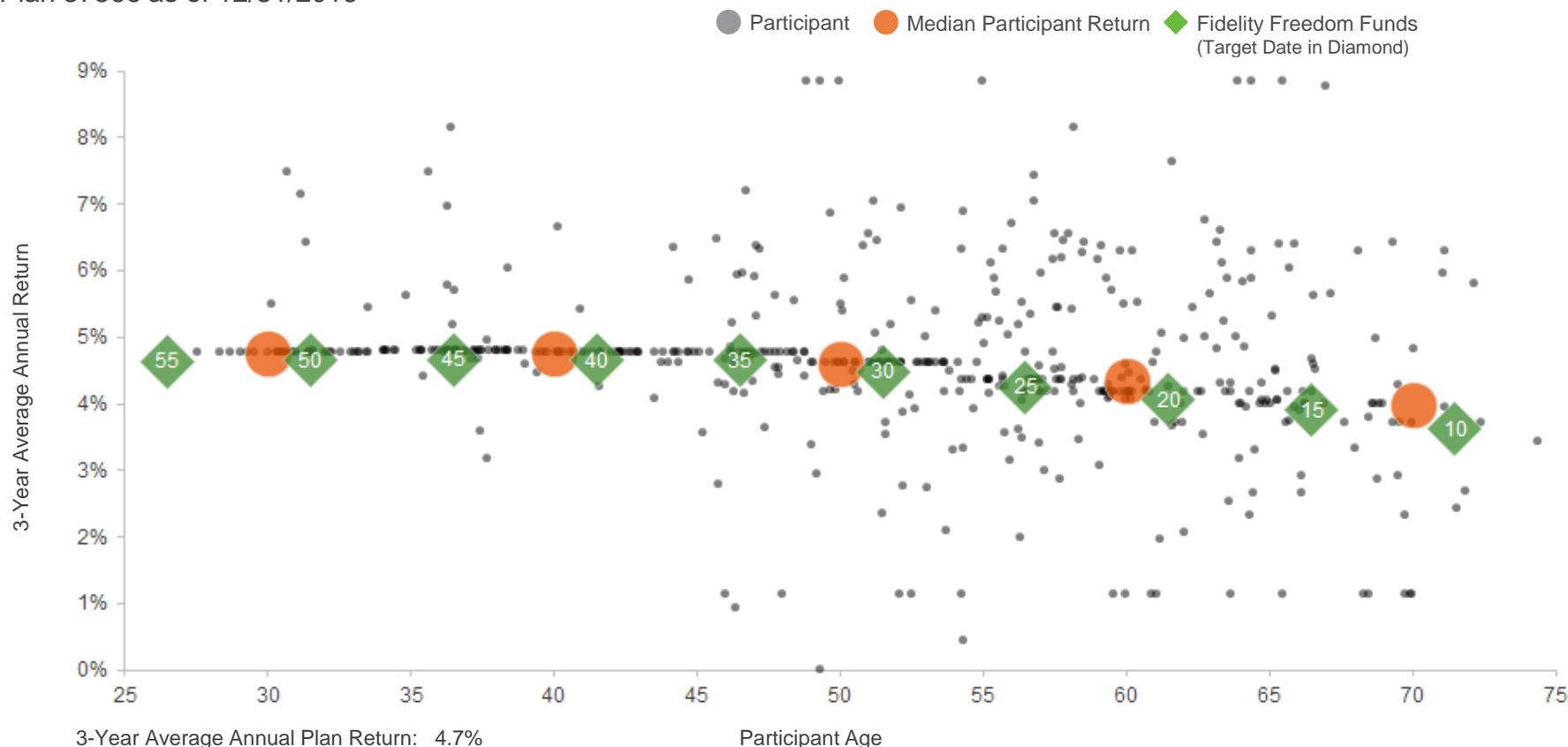
Age Range	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	Overall
Percent of Participants in Age Range	11%	19%	27%	32%	11%	100%
Median Participant 1-Year Return	8.7%	8.7%	8.3%	7.6%	6.8%	8.4%
Participants Below Applicable Freedom Fund	7%	11%	28%	25%	42%	23%

All participants illustrated on this page have been participating in the plan for at least 1 year and were compared to a target date fund assuming retirement age 65. All performance shown is past performance, which does not guarantee future results. Participant returns were calculated using a time-weighted investment return formula that eliminates the effect of participants' cash flows during the entire return period. The formula is intended to reflect the performance of the managers of the underlying investments rather than the actual returns of investors who may have bought and sold the investments at different times over the return period. Returns that take into account the effect of participant cash flows during the return period could be significantly different from these time-weighted returns. The longer the return period, the larger the cash flows and the more volatile the investment, the greater the potential difference between the two types of returns. All returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Plan returns were calculated based on aggregate plan assets, not individual participant returns. Fidelity Freedom Fund returns were calculated pursuant to SEC rules. For more details on the methodology, refer to the "Important Additional Information" slide.



# Participant 3-Year Time-Weighted Returns

Plan 37566 as of 12/31/2016

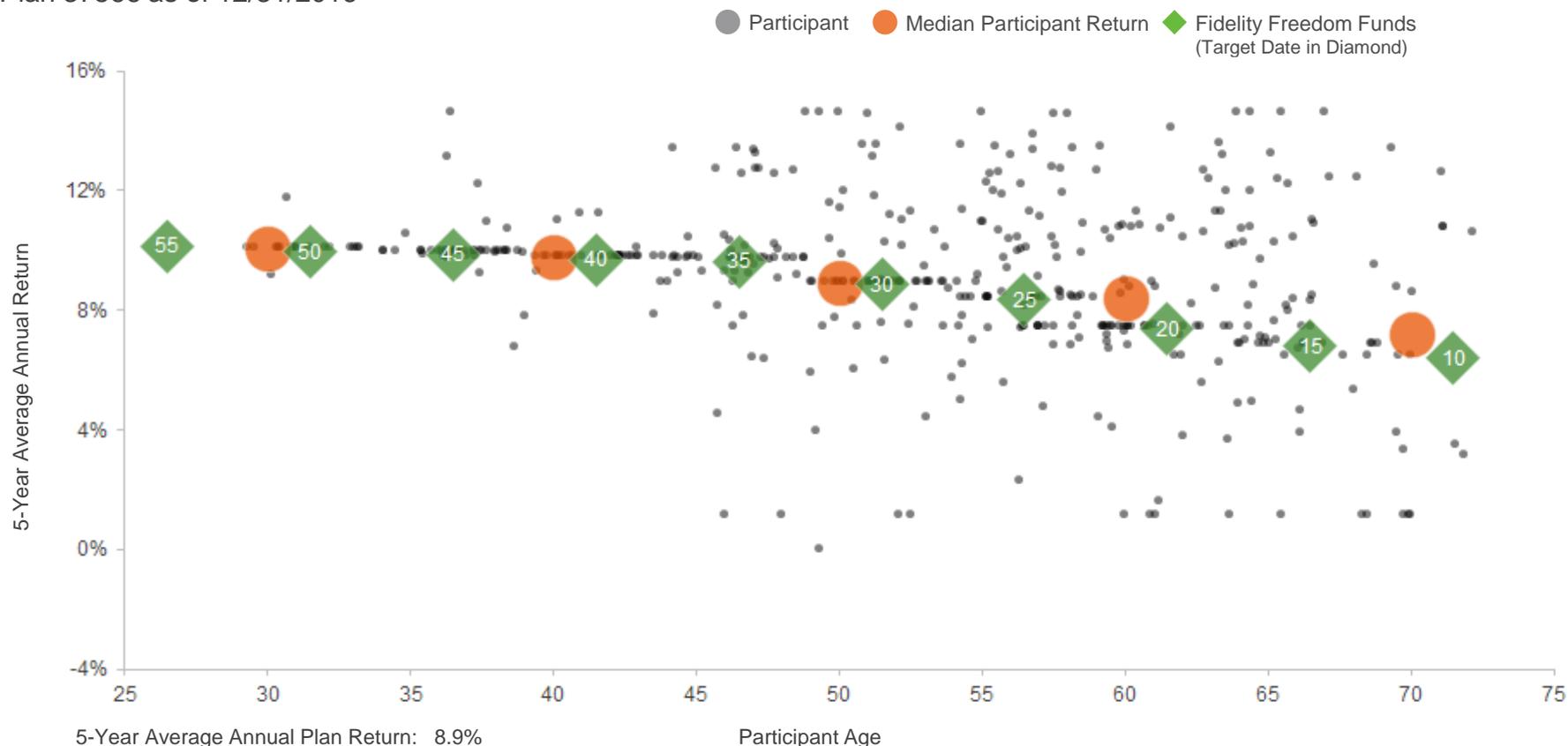


Age Range	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	Overall
Percent of Participants in Age Range	9%	19%	28%	33%	12%	100%
Median Participant 3-Year Return	4.8%	4.8%	4.6%	4.3%	4.0%	4.7%
Participants Below Applicable Freedom Fund	0%	11%	31%	23%	30%	22%

All participants illustrated on this page have been participating in the plan for at least 3 years and were compared to a target date fund assuming retirement age 65. All performance shown is past performance, which does not guarantee future results. Participant returns were calculated using a time-weighted investment return formula that eliminates the effect of participants' cash flows during the entire return period. The formula is intended to reflect the performance of the managers of the underlying investments rather than the actual returns of investors who may have bought and sold the investments at different times over the return period. Returns that take into account the effect of participant cash flows during the return period could be significantly different from these time-weighted returns. The longer the return period, the larger the cash flows and the more volatile the investment, the greater the potential difference between the two types of returns. All returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Plan returns were calculated based on aggregate plan assets, not individual participant returns. Fidelity Freedom Fund returns were calculated pursuant to SEC rules. For more details on the methodology, refer to the "Important Additional Information" slide.

# Participant 5-Year Time-Weighted Returns

Plan 37566 as of 12/31/2016



Age Range	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	Overall
Percent of Participants in Age Range	5%	19%	29%	35%	12%	100%
Median Participant 5-Year Return	10.1%	9.8%	9.0%	8.4%	7.2%	9.7%
Participants Below Applicable Freedom Fund	5%	17%	29%	25%	31%	24%

All participants illustrated on this page have been participating in the plan for at least 5 years and were compared to a target date fund assuming retirement age 65. All performance shown is past performance, which does not guarantee future results. Participant returns were calculated using a time-weighted investment return formula that eliminates the effect of participants' cash flows during the entire return period. The formula is intended to reflect the performance of the managers of the underlying investments rather than the actual returns of investors who may have bought and sold the investments at different times over the return period. Returns that take into account the effect of participant cash flows during the return period could be significantly different from these time-weighted returns. The longer the return period, the larger the cash flows and the more volatile the investment, the greater the potential difference between the two types of returns. All returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Plan returns were calculated based on aggregate plan assets, not individual participant returns. Fidelity Freedom Fund returns were calculated pursuant to SEC rules. For more details on the methodology, refer to the "Important Additional Information" slide.

# Target Date Fund Performance

**Understanding investment performance: As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit [www.401k.com](http://www.401k.com). Log in, choose plan, select “investment Choices and Research”, and pick investment option.**

## Fidelity Freedom® Fund Performance

Average Annual Returns for the Period Ending 12/31/2016								
Target Date	1 Year	3 Year	5 Year	10 Year	LOF	Expense Ratio	Expense Ratio Date	Inception Date
Income	5.16%	2.85%	3.89%	3.58%	4.74%	0.49%	05/28/2016	10/17/1996
2005	5.91%	3.32%	5.33%	3.69%	4.68%	0.56%	05/28/2016	11/06/2003
2010	6.42%	3.62%	6.42%	4.29%	6.35%	0.60%	05/28/2016	10/17/1996
2015	7.04%	3.91%	6.80%	4.32%	5.52%	0.64%	05/28/2016	11/06/2003
2020	7.26%	4.07%	7.36%	4.20%	6.55%	0.67%	05/28/2016	10/17/1996
2025	7.47%	4.26%	8.36%	4.49%	6.00%	0.69%	05/28/2016	11/06/2003
2030	8.13%	4.49%	8.86%	4.27%	6.56%	0.75%	05/28/2016	10/17/1996
2035	8.63%	4.66%	9.63%	4.44%	6.21%	0.77%	05/28/2016	11/06/2003
2040	8.60%	4.65%	9.70%	4.34%	3.27%	0.77%	05/28/2016	09/06/2000
2045	8.57%	4.67%	9.86%	4.37%	4.97%	0.77%	05/28/2016	06/01/2006
2050	8.63%	4.66%	9.96%	4.18%	4.79%	0.77%	05/28/2016	06/01/2006
2055	8.56%	4.64%	10.15%	N/A	6.97%	0.77%	05/28/2016	06/01/2011
2060	8.61%	N/A	N/A	N/A	4.66%	0.78%	05/28/2016	08/05/2014

Fidelity Freedom Funds invest in a combination of Fidelity equity, fixed income, and money market funds (underlying Fidelity funds) and allocates assets among these funds according to an asset allocation strategy consistent with each Fidelity Freedom Fund's target date. Fidelity Freedom Funds are designed for investors expecting to retire around the year indicated in each fund's name. Except for the Fidelity Freedom Income Fund, the funds' asset allocation strategy becomes increasingly conservative as it approaches the target date and beyond. Ultimately, they are expected to merge with the Fidelity Freedom Income Fund. The investment risks of each Fidelity Freedom Fund change over time as its asset allocation changes. They are subject to the volatility of the financial markets, including equity and fixed income investments in the U.S. and abroad and may be subject to risks associated with investing in high yield, small cap and, commodity-related, foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates.

In general, bond prices rise when interest rates fall, and vice versa. The effect is usually more pronounced for longer-term securities.

For a mutual fund, the expense ratio is the total annual fund or class operating expenses (before waivers or reimbursements) paid by the fund and stated as a percent of the fund's total net assets. Mutual fund data has been drawn from the most recent prospectus. Expense ratios change periodically and are drawn from the fund's prospectus. For more detailed fee information, see the fund prospectus or annual or semiannual reports.

Fidelity may be temporarily reimbursing a portion of certain funds' expenses. Absent such reimbursement, returns would have been lower. Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Life of Fund figures are reported as of the inception date to the period indicated. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower. Life of fund figures are reported as of the inception date to the period indicated.

# Important Additional Information

Participant Time-Weighted Returns including Company Stock reflect participants' investments including company stock. They were calculated using a Time Weighted Daily Valuation Method by geometrically linking the return of each of the sub-periods making up the entire return period. A new sub-period is considered to begin each time there is cash flow. To calculate returns for each sub-period, the beginning market value of non-company stock holdings of the sub-period is subtracted from the ending market value of the sub-period and the difference is divided by the beginning market value. For purposes of this methodology, cash flows included such things as contributions, withdrawals, and plan fees, however, exchanges, dividends and interest were not considered cash flows. Participant Time-Weighted Returns excluding Company Stock were calculated using the same methodology except that company stock holdings were excluded in the calculations and exchanges related to company stock were considered cash flows.

For the charts, a maximum of 5,000 participant return data points are shown. If your plan had more than 5,000 participants, a random sample of 5,000 participant return data points was used. Participants who had returns within the top and bottom 2 ½% of their plan may not be included in the charts for purposes of visual clarity. Unless otherwise noted on the slide itself, the median data points in the chart and all the values in the table reflect the returns of all participants who had balances in your plan for the entire period.

The comparison to Fidelity Freedom Funds are for informational purposes only and are not intended to imply that the returns of Fidelity Freedom Funds are benchmarks for individual investors; rather the funds are shown as a proxy for a diversified account appropriate for many investors saving for retirement and retiring at age 65. Participants should choose investments and allocate assets based on their individual risk tolerance, investment time horizon and personal financial situation.

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Strategic Advisers, Inc., a subsidiary of FMR LLC., manages the Fidelity Freedom Funds.

When choosing a Freedom Fund, investors should consider whether they anticipate retiring significantly earlier or later than age 65 even if such investors retire on or near a fund's approximate target date. There may be other considerations relevant to fund selection and investors should select the fund that best meets their individual circumstances and investment goals.

**Before investing in any mutual fund, please carefully consider the investment objectives, risks, charges and expenses. For this and other information, call or write Fidelity for a free prospectus or, if available, a summary prospectus. Read it carefully before you invest.**

Fidelity Brokerage Services LLC, Member NYSE, SIPC, 900 Salem Street, Smithfield, RI 02917.

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# Appendix



# Important Additional Information

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**Before investing in any investment option, consider the investment objectives, risks, charges, and expenses. Contact Fidelity for a mutual fund or variable annuity prospectus or, if available, a summary prospectus. For information on fixed annuities, contact Fidelity to request a fact sheet. Read them carefully.**

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