

Cash Segmentation

An Active Approach to Liquidity Management

May 22, 2018



Carolina Cash Adventure

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FIDELITY INSTITUTIONAL ASSET MANAGEMENTSM



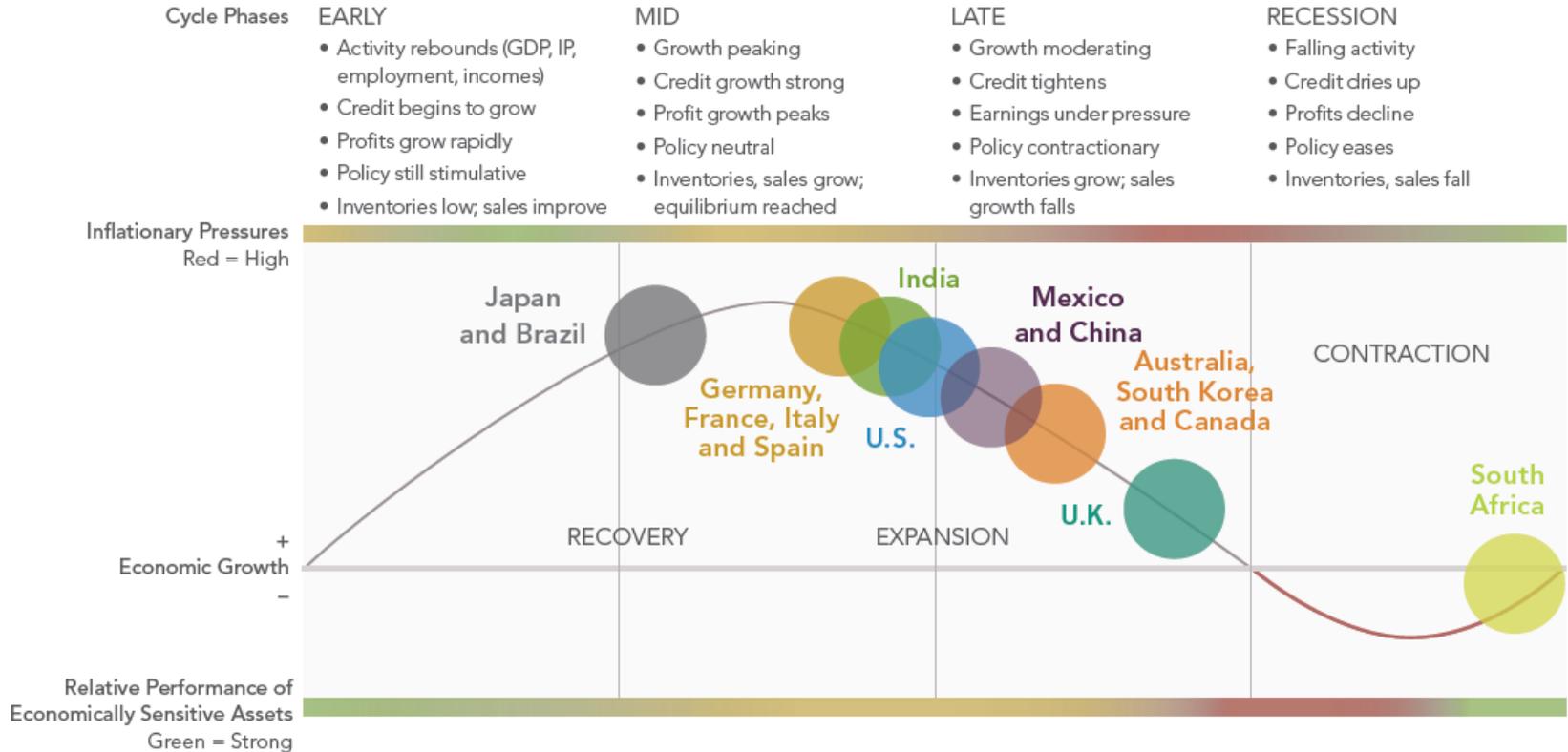
Agenda

1. Global Macroeconomic Update
2. Public Policy and US Tax Implications
3. Cash Segmentation
4. Q&A

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Global Macroeconomic Update

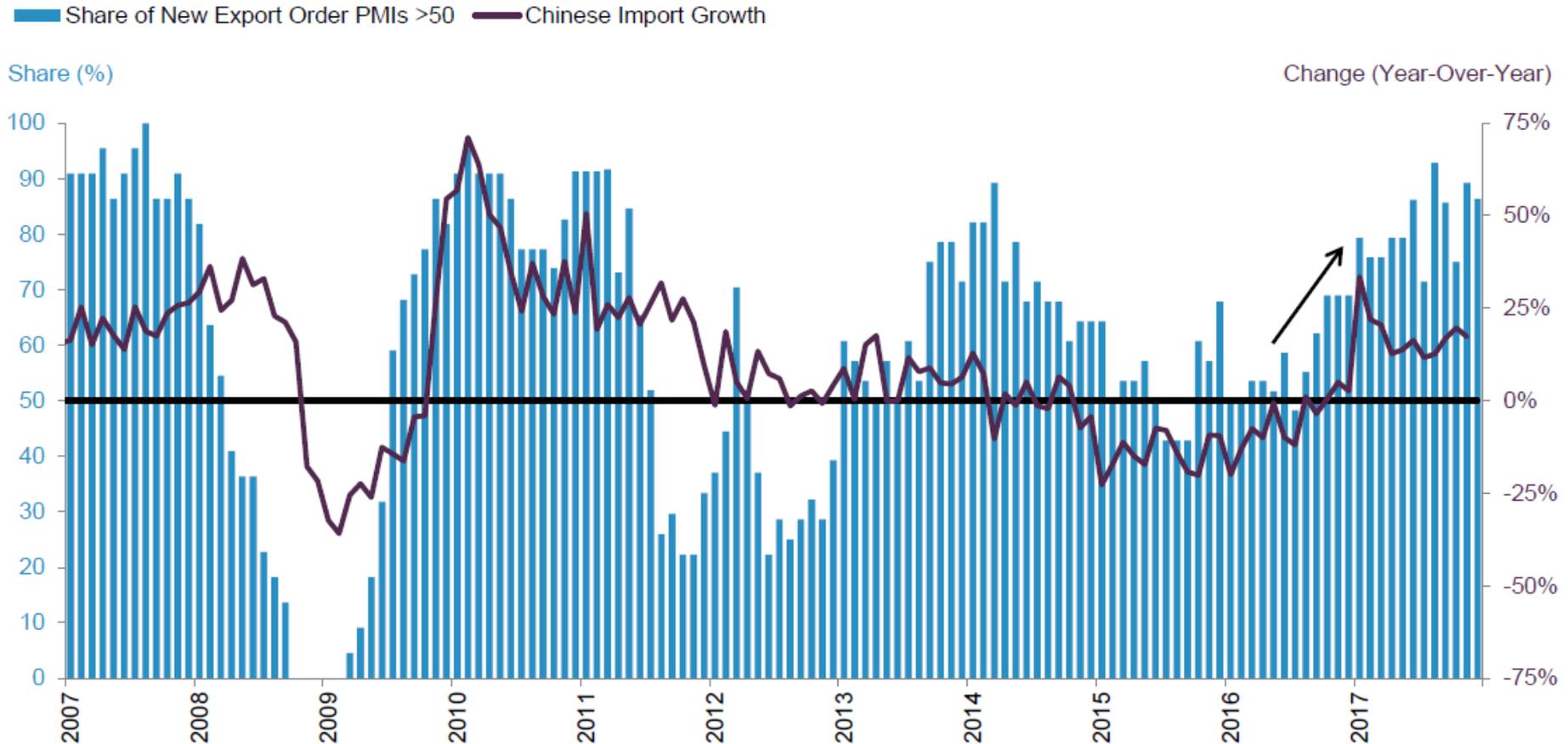
Business Cycle Framework



Note: The diagram above 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. Source: Fidelity Investments (AART), as of 1/31/18.

Strong Trade Continues to Reinforce Global Growth

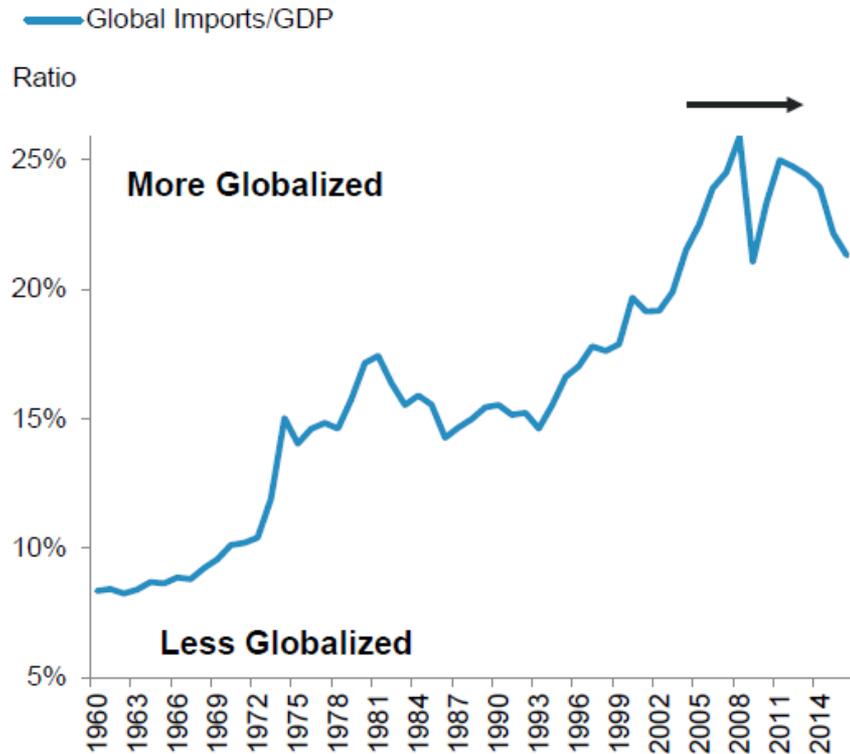
Global New Export Orders and China Import Growth



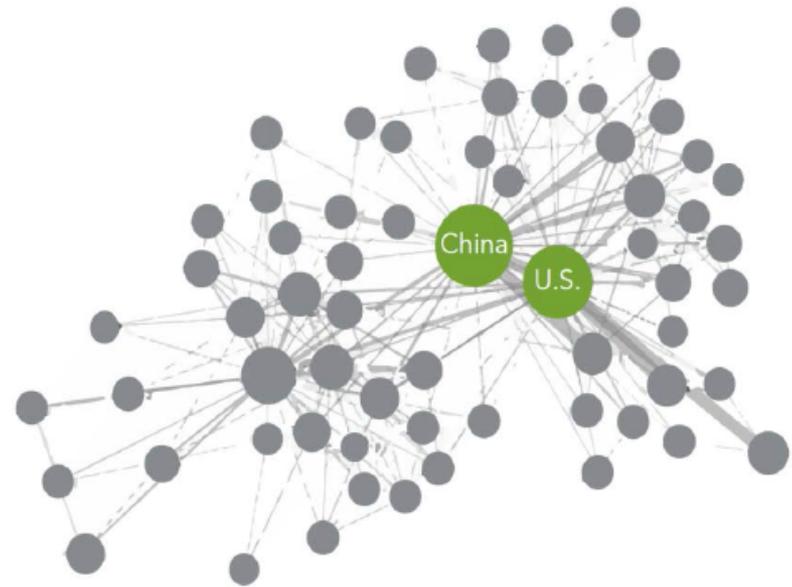
Blue series includes 32 countries. Source: Markit, China Customs, Haver Analytics, Fidelity Investments (AART), as of 12/31/17.

Geopolitical Risks and Peak Globalization

Trade Globalization



Global Trade Interdependence

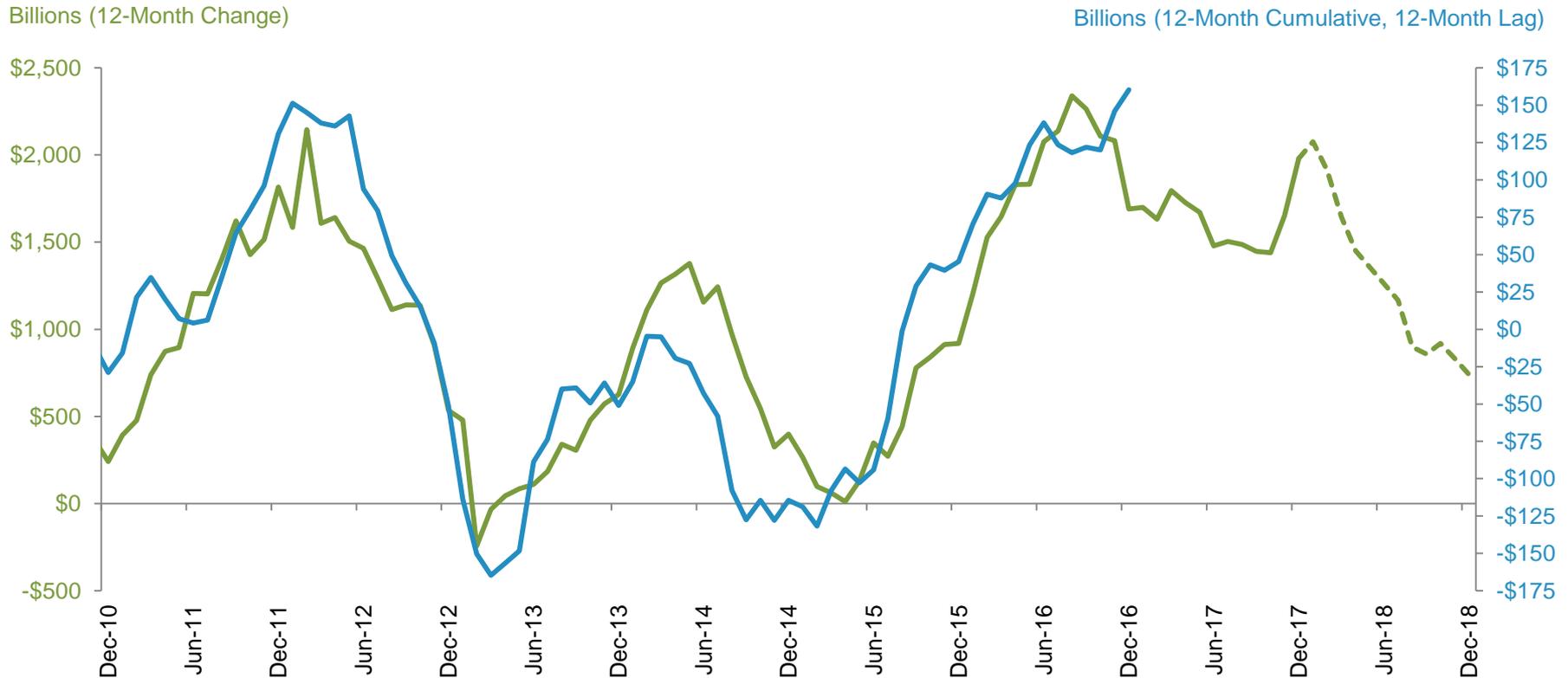


LEFT: Source: International Monetary Fund (IMF), World Bank, Haver Analytics, Fidelity Investments (AART), as of 12/31/16. **RIGHT:** The thickness of lines represents the volume of trade flows. Grey circles represent other countries. The size of the circles represents total trade. Source: International Monetary Fund, Haver Analytics, Fidelity Investments (AART), as of 12/31/15.

QE Unwind to Challenge Global Liquidity Growth

Fed, ECB, BOJ, BOE Balance Sheets and Asset Flows

— G4 Central Bank Assets — EME, EMD & HY Fund Flows



Fund Flows: Mutual funds and ETFs. EME: Emerging Market Equity. EMD: Emerging Market Debt, HY: High Yield. Dotted line estimates future central bank assets: Fed to roll-off balance sheet assets by lesser of stated caps or total bonds maturing each month. ECB to begin tapering in January 2018 to EUR30B of monthly purchases for nine months. BOJ to purchase at annualized rate of JPY60T going forward. BOE to keep balance sheet constant. Source: Federal Reserve, Bank of England (BOE), European Central Bank (ECB), Bank of Japan (BOJ), EPFR, Haver Analytics, Fidelity Investments (AART), as of 12/31/17.

Massive Debt Build-up Triggers Policy Tightening in China

Private Sector Debt-to-GDP Ratios

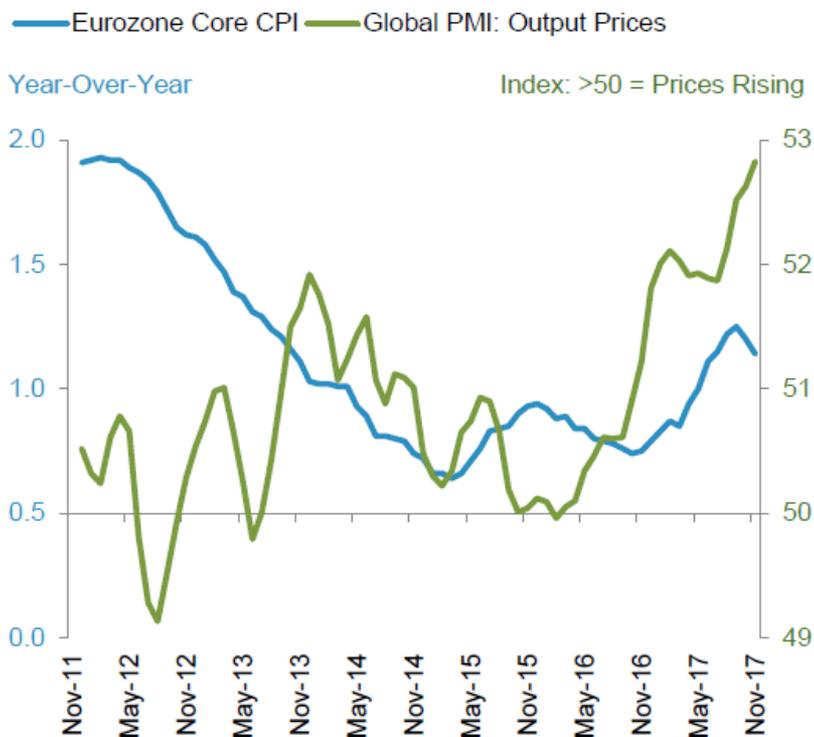
— China — U.S.



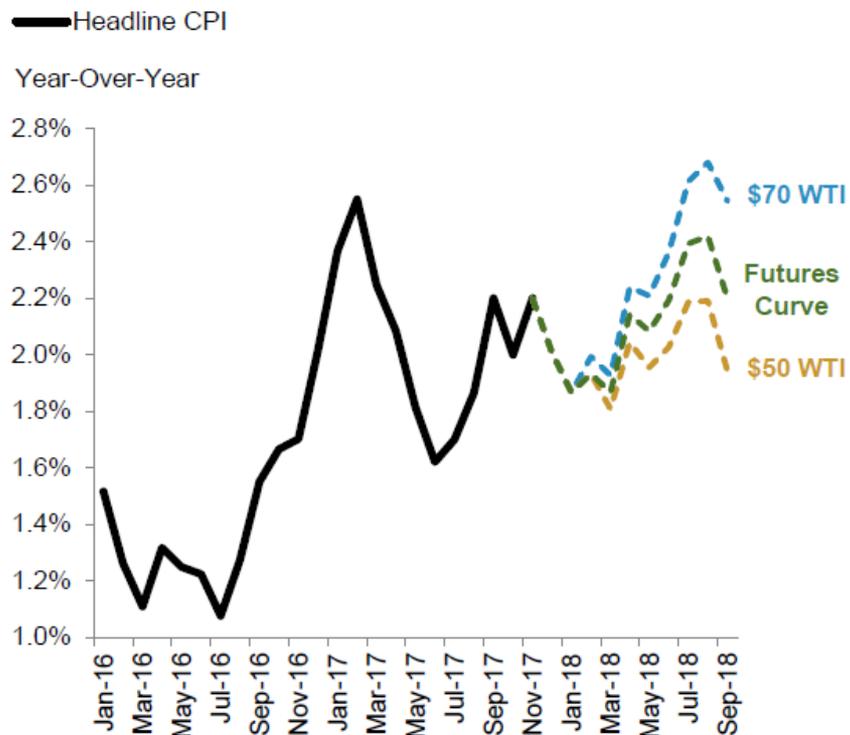
Source: China National Bureau of Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

Global Inflation Firming with Upside Risks

Eurozone and Global Inflation



U.S. Inflation Under Various Oil Scenarios



WTI: West Texas Intermediate crude oil. Headline CPI: Consumer Price Index. Core CPI excludes Food and Energy. **LEFT:** Source: European Central Bank, IHS Markit, Haver Analytics, Fidelity Investments (AART), as of 11/30/17. **RIGHT:** Scenarios assume AART core CPI and food cost growth rate forecasts under various average prices of oil for 2018. Bureau of Labor Statistics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 11/30/17.

Public Policy and US Tax Implications

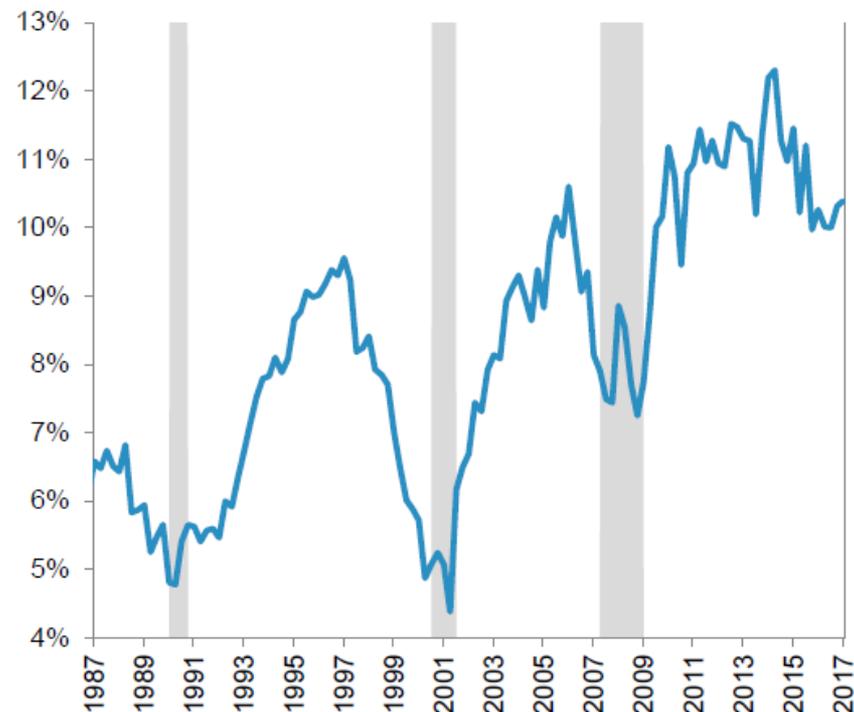
U.S. Economy a Mix of Mid- and Late-Cycle Dynamics

Mid- to Late- Cycle Phase Transition

Indicator	Typical Late Cycle	Current Cycle	
		Mid-Cycle	Late-Cycle
Corporate Profits*	Margins decline	●	●
Inventories	Rise relative to orders	●	
Employment	Pace of hiring slows	●	
Wage Growth*	Accelerates	●	●
Monetary Policy	Fed Tightens, yield curve flattens		●
Credit	Lending standards tighten	●	

U.S. Profit Margins

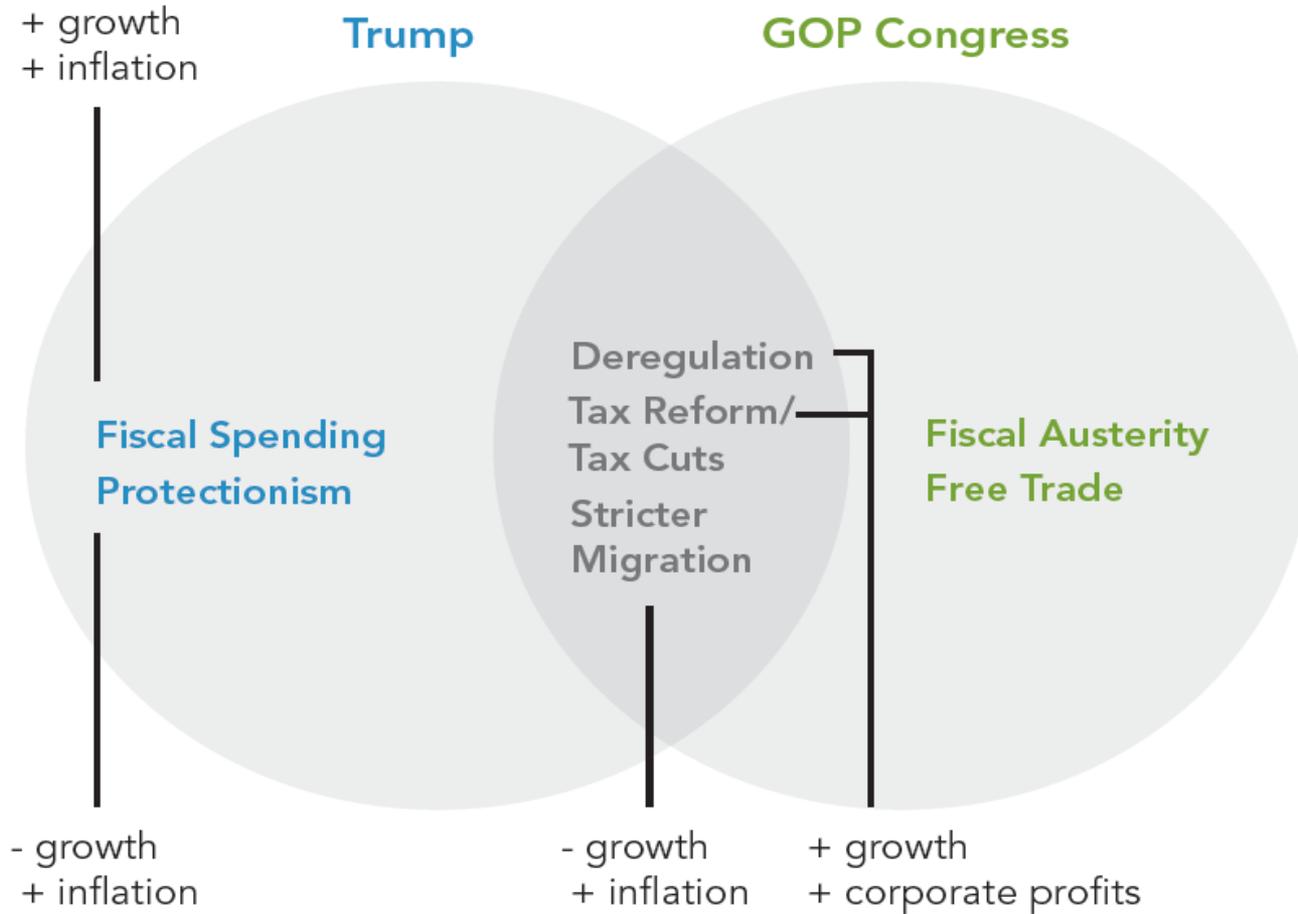
Non-Financial Corporate After Tax Profits Over Revenues



LEFT: *Listing of both green circle and orange square indicates evidence of both mid and late-cycle traits. Source: Fidelity Investments (AART), as of Dec 31, 2017. **RIGHT:** Grey bars represent U.S. recessions. Source: Bureau of Economic Analysis, Haver Analytics, NBER, Fidelity Investments (AART), as of 11/30/17.

The Impact of Potential Public Policies

Various policies are likely to have different implications for U.S. growth and inflation



Source: Fidelity Investments as of 12/12/2016

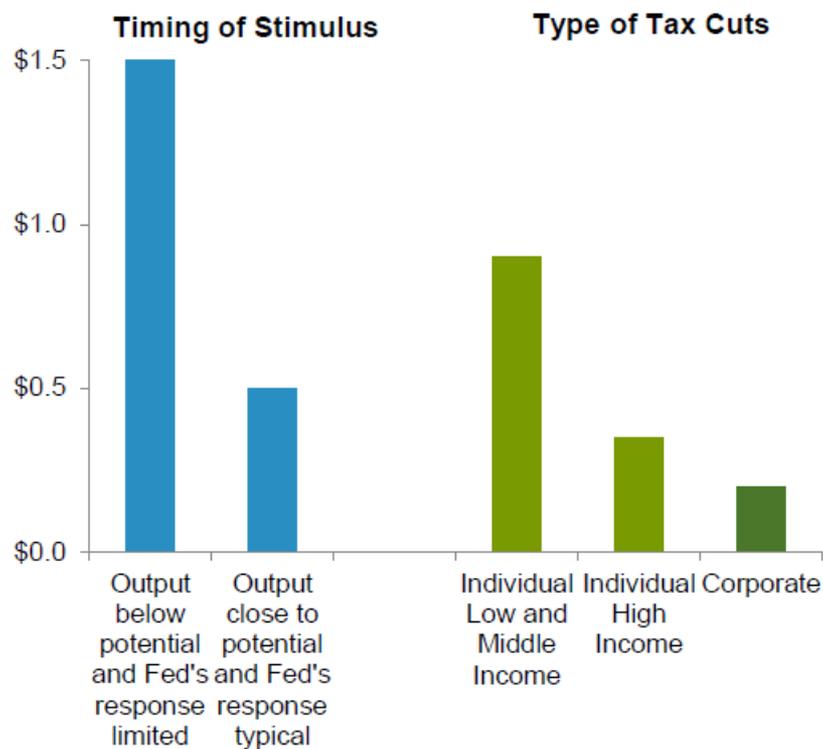
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Tax Legislation: The Final Take

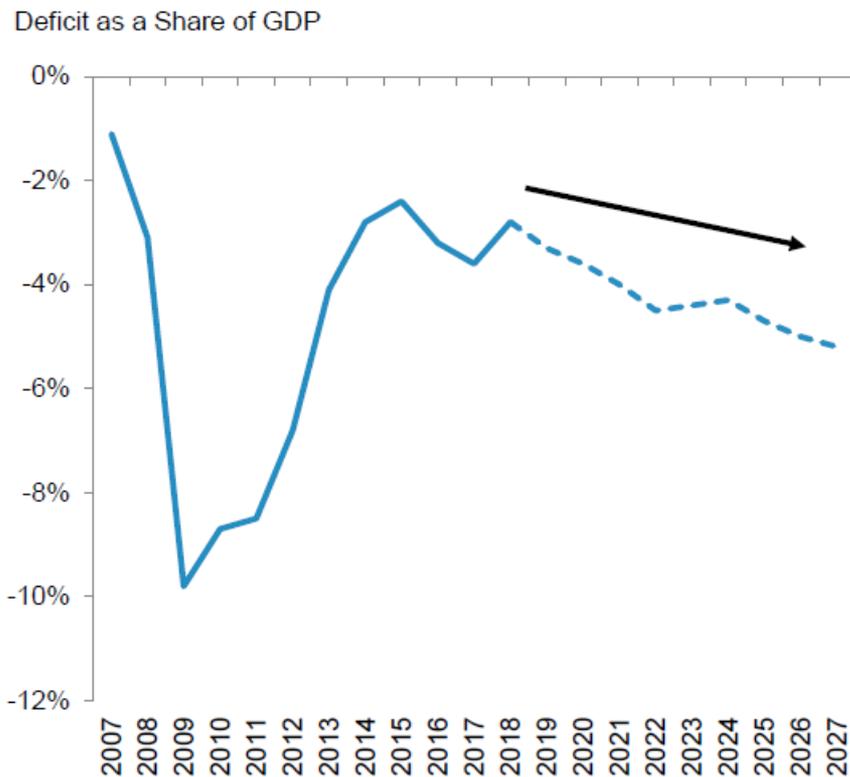
- Proceeds from repatriation and higher earnings likely to wind up everywhere = modest positive for everything but no game changers
- Asset Markets
 - Long-term positive for credit fundamentals, technicals
 - Also helpful for equity shareholders (M&A, buybacks, dividends)
- Macro
 - Near-term growth impact: +0.3% of GDP
 - Capex part of growth pick-up but only helps productivity with a lag
 - Fiscal easing = inflationary pressures

Limited Tax-Cut Stimulus, but Fiscal Policy on Easing Path

Impact of \$1 Fiscal Stimulus Boost over Next Two Years

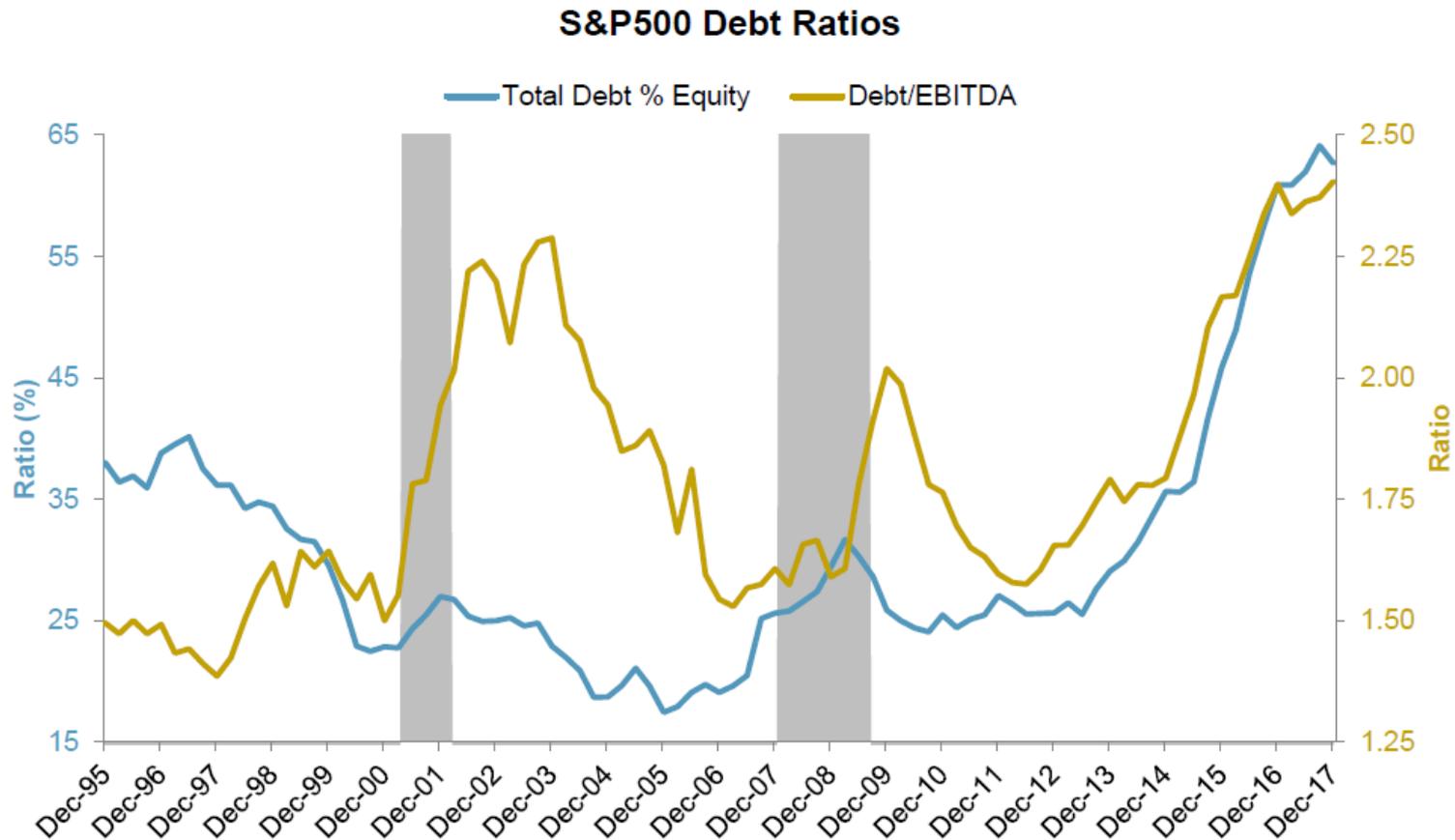


U.S. Fiscal Deficit



LEFT: Source: Congressional Budget Office, Fidelity Investments (AART), as of 2/28/15. **RIGHT:** Dashed line represents CBO projections. Source: Congressional Budget Office, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

Old Incentives: Store Cash Offshore, Issue Debt, Buy Back Stock



CB Easing + Old Tax Policy Encouraged Debt/Buybacks

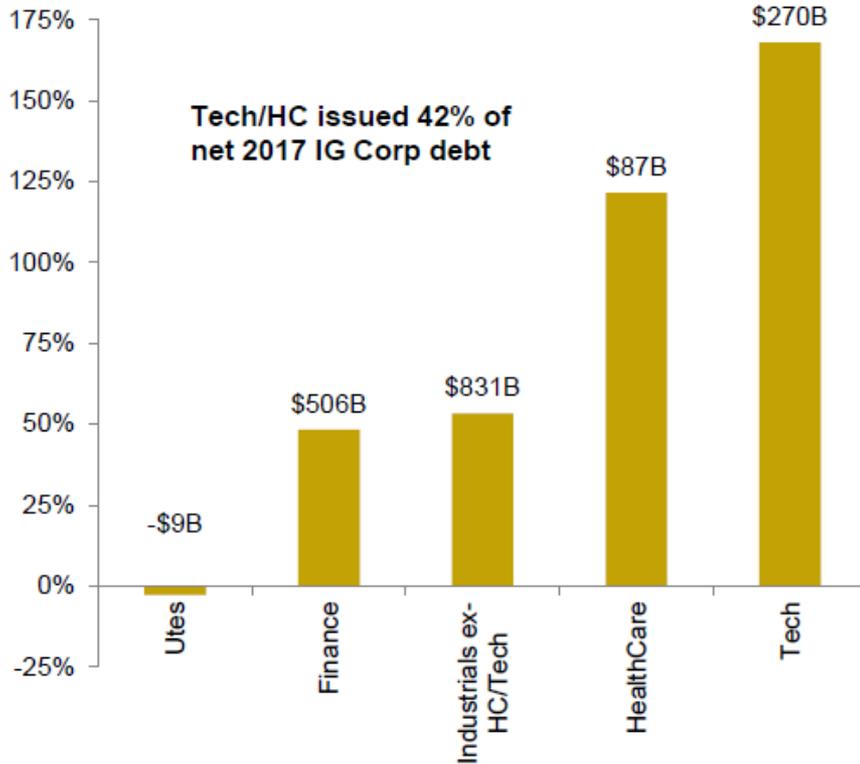
New Incentives: Less Debt, No Trapped Cash Offshore

Tax Changes and Impact on Credit Markets

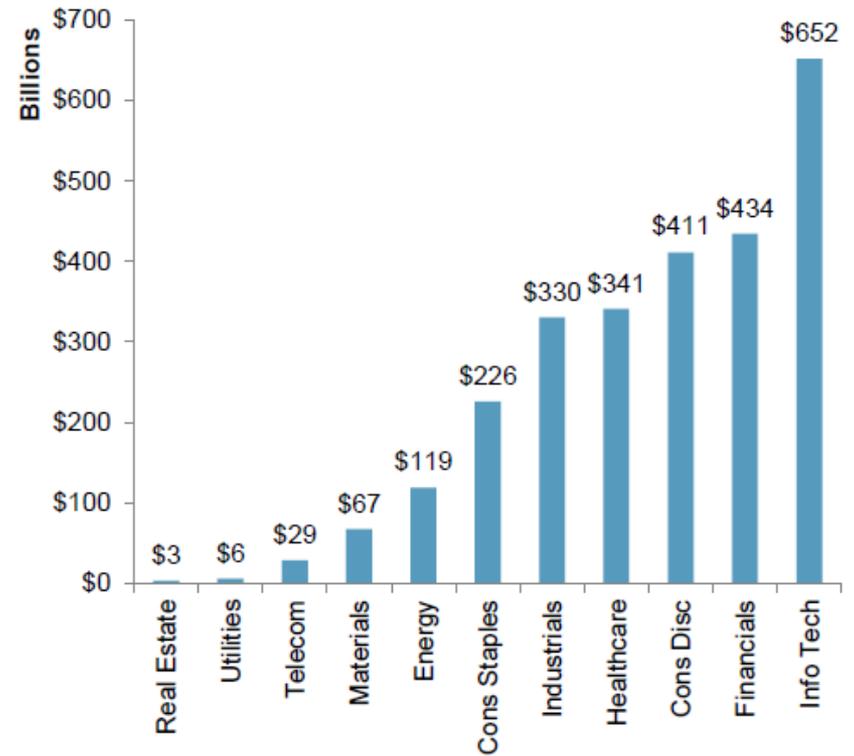
	Lower Tax Rate	Interest Expense Deduction	Offshore Earnings
Specifics	<ul style="list-style-type: none"> Corporate tax rate 35% to 21% 	<ul style="list-style-type: none"> Interest expense limited to 30% of EBITDA 	<ul style="list-style-type: none"> Offshore earnings moves towards a more territorial tax system Deemed repatriation at 8% / 15.5%
High-level impact on credit	<ul style="list-style-type: none"> Higher FCF Less issuance 	<ul style="list-style-type: none"> Impacts 1% of IG and 48% of HY market In four years switches to EBIT – Impacts 23% of IG and 81% of HY market 	<ul style="list-style-type: none"> Greater access to cash Less issuance
Conclusion	<ul style="list-style-type: none"> (+) fundamentals (+) technicals 	<p>HY only (for now)</p> <ul style="list-style-type: none"> (-) fundamentals (short-term) (+) technicals (long-term) 	<ul style="list-style-type: none"> (mixed) fundamentals (+) technicals

Debt-fueled Buybacks Dominated by Tech and Health Care

5-Year Change in IG Debt Outstanding



S&P500 Buybacks over Past 5 Years

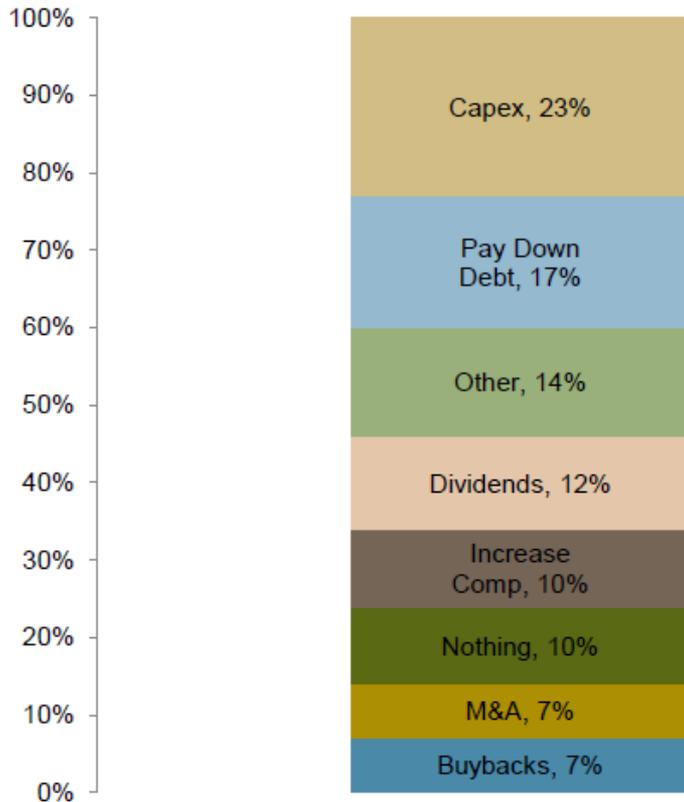


Source: Fidelity Investments as of 12/31/2017

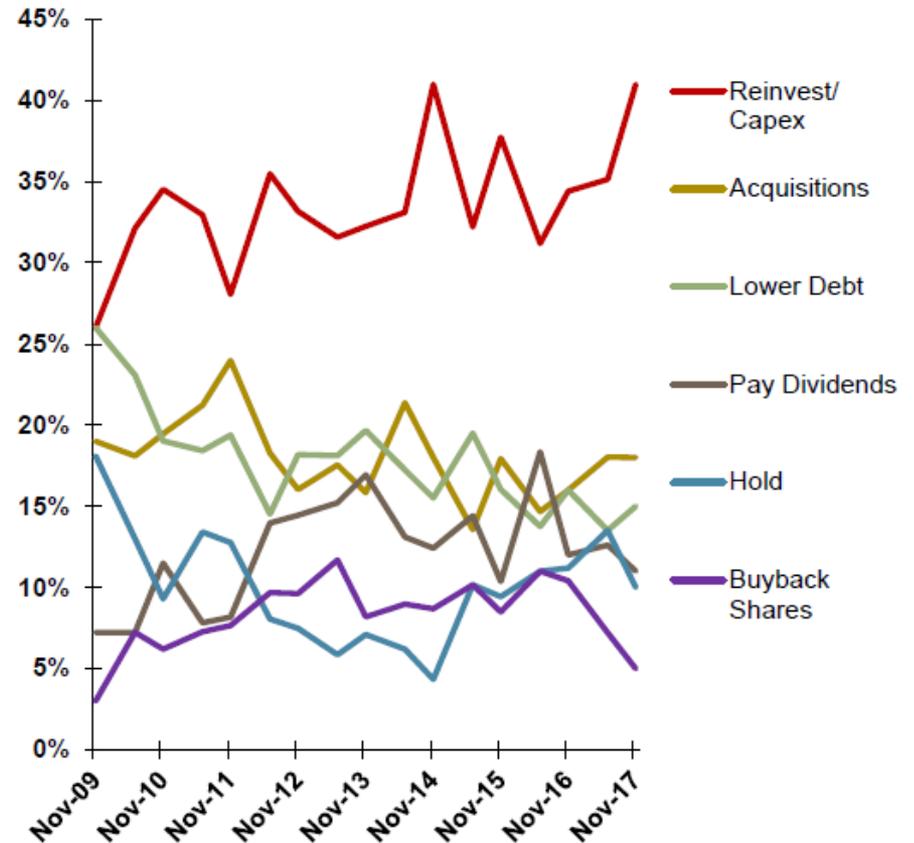
What do Companies Plan to do With More Cash?

Evercore ISI Company Survey

What do you plan to do with funds made available from the reduction in tax rates and repatriated funds?



ISI Company Survey Uses of Cash



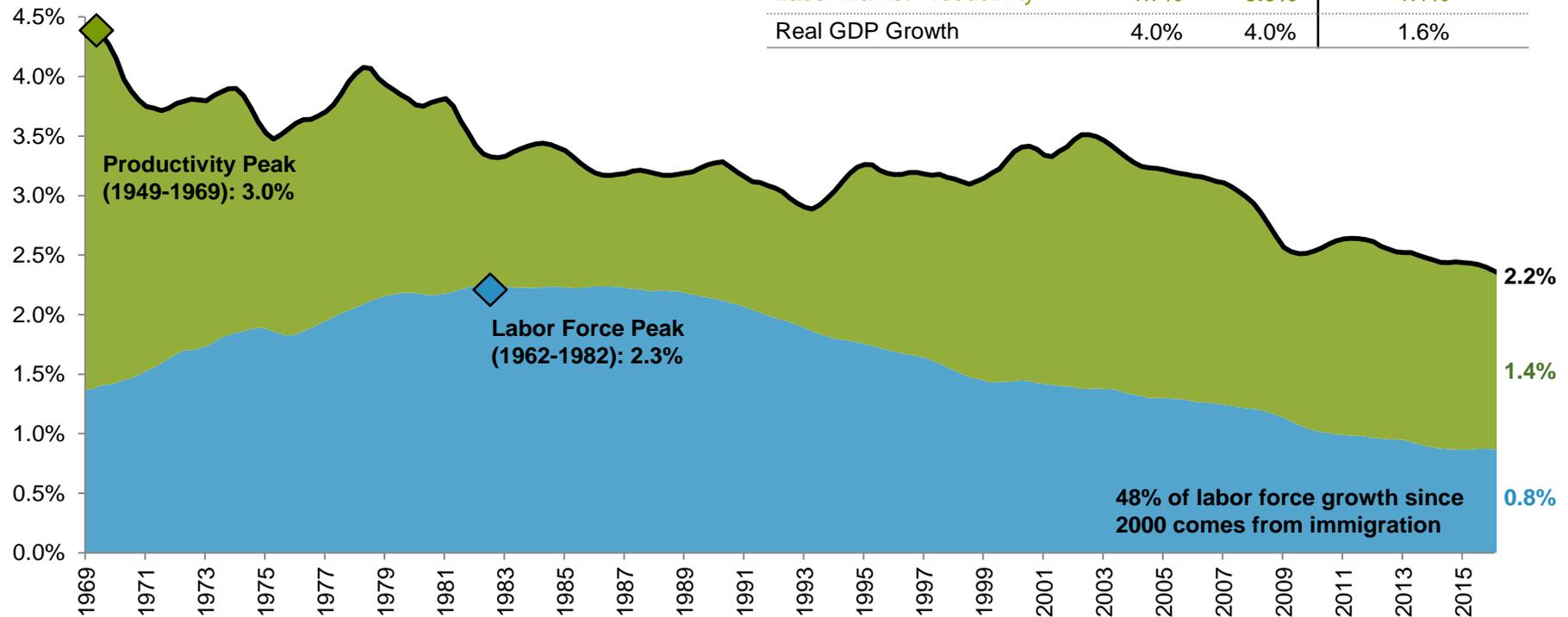
Source: Fidelity Investments as of 12/31/2017

4% GDP Growth Not Likely over the Long Run

Real GDP Components

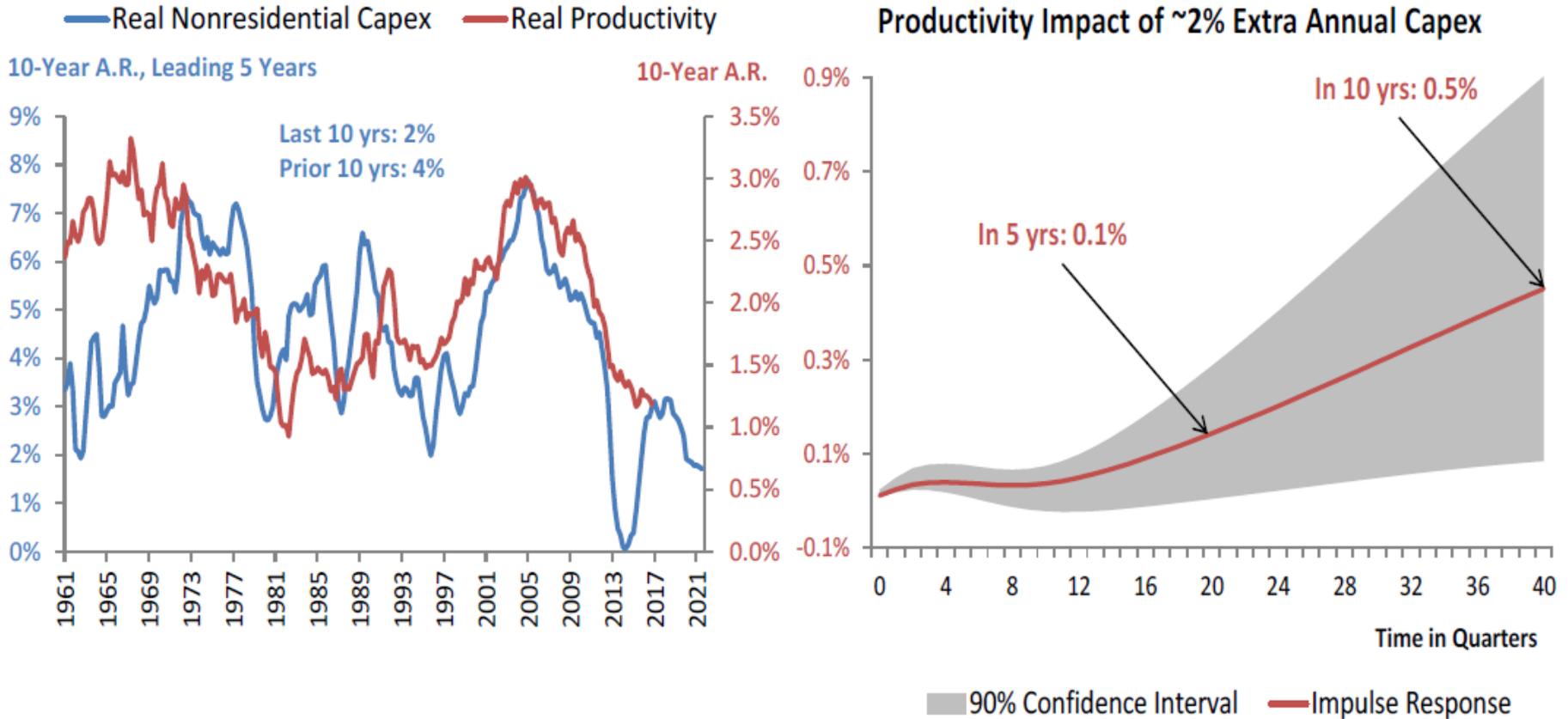
■ Labor Force ■ Productivity — Real GDP

Year-over-Year Growth (20-Year Average)



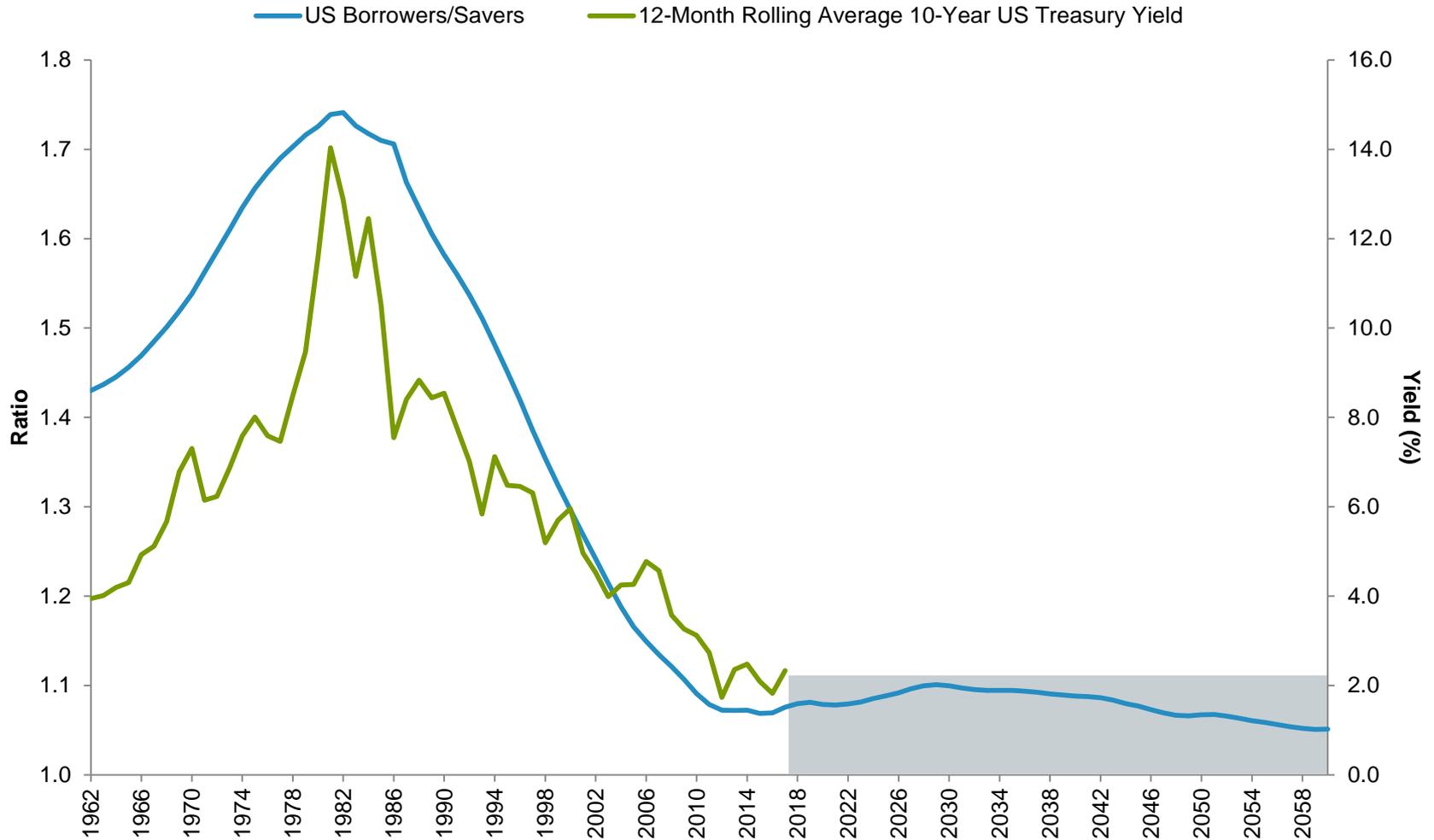
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

The Productivity Impact is Lagged, Uncertain, and Moderate



Source: Fidelity Investments as of 12/31/2017

Demographics are an Important Driver of Interest Rates



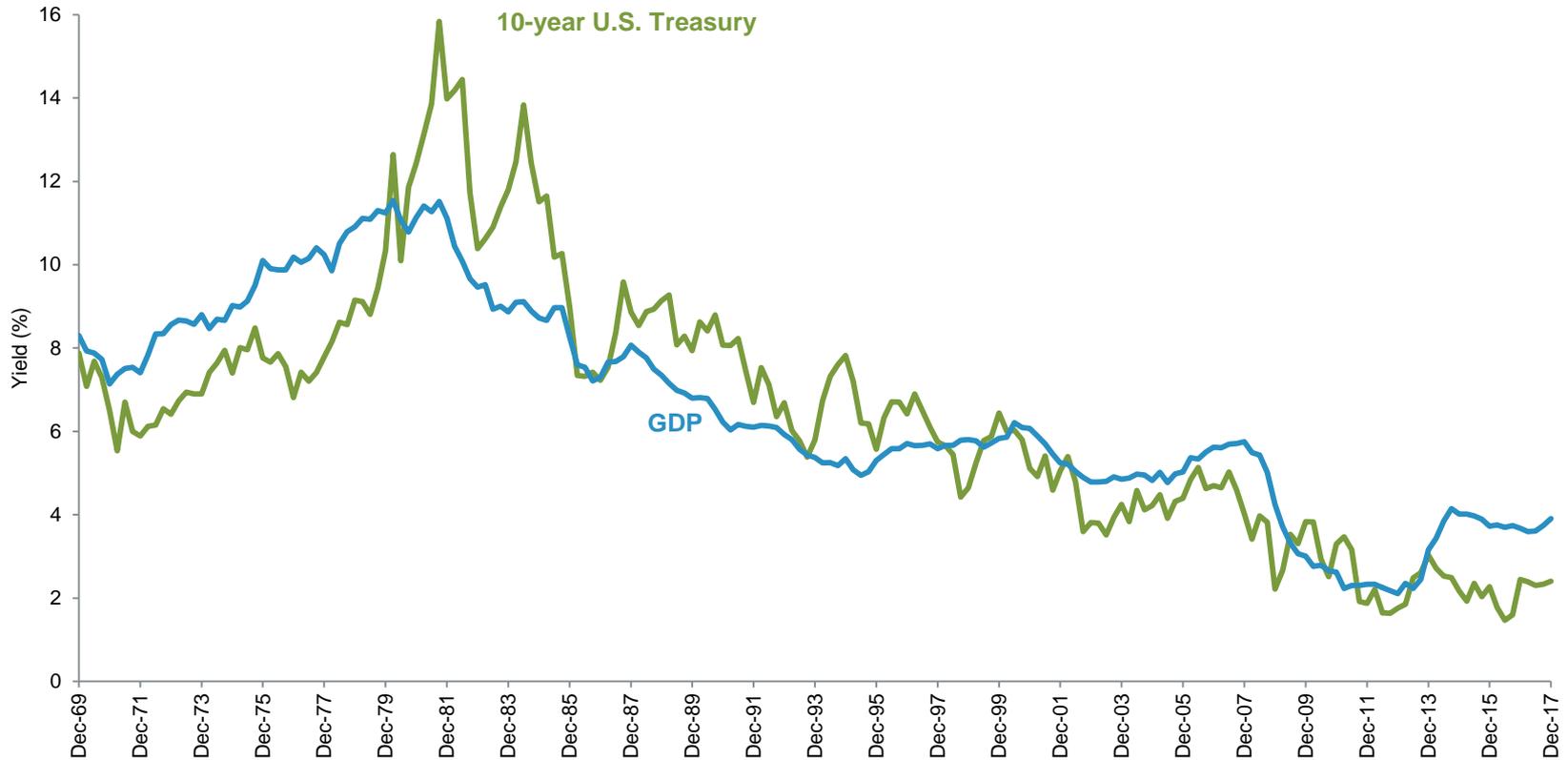
*Includes all 50 states, District of Columbia, and Puerto Rico.

Note: Borrowers are represented by ages 10-39 and savers are represented by ages 40-69.

Sources: US Treasury Data - Bloomberg as of 12/31/2017; US Borrowers/Savers Ratio - Organisation For Economic Co-Operation And Development (OECD) as of 8/29/2017; Median Age – United States Census Bureau as of 7/1/2016.

GDP and 10-Year U.S. Treasury

Highly correlated



Source: Bloomberg as of 9/30/2017. GDP as of 12/31/2017.

GDP data represents annualized 20-quarter percent change.

Past performance is no guarantee of future results.

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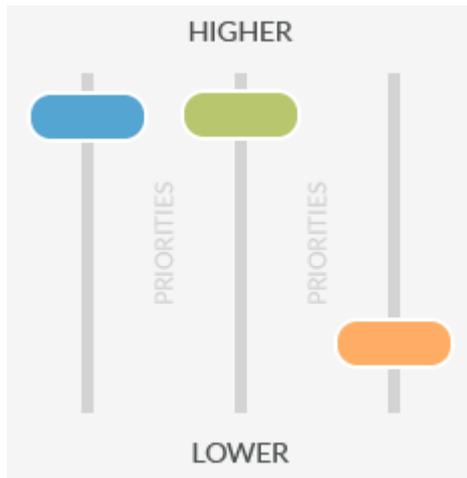
Investment Objectives and Cash Segmentation

Segmenting Liquidity is Critical

Objectives drive investment strategy

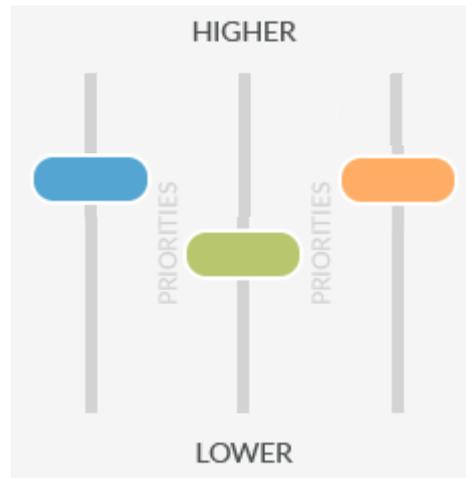
Different Objectives—Different Investment Priorities

Operating Cash



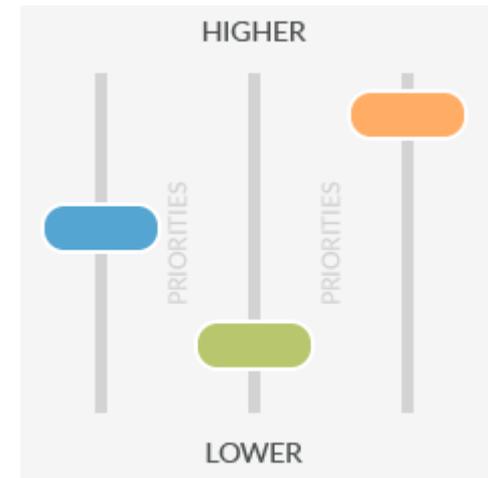
SAFETY LIQUIDITY RETURN

Short-Term Strategic Liquidity



SAFETY LIQUIDITY RETURN

Long-Term Strategic Liquidity



SAFETY LIQUIDITY RETURN

Balancing safety, liquidity and returns

Aligning Investment Parameters

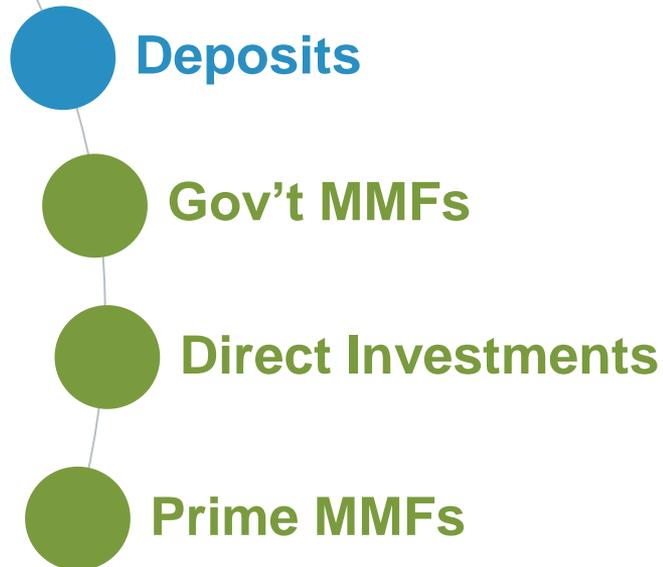
Considering constraints (constraints differ with objectives, tolerance, and resources)

<p style="text-align: center;">Operating Cash Zero-Loss Tolerance</p>	<p style="text-align: center;">Short-Term Strategic Liquidity Minimal-Loss Tolerance</p>	<p style="text-align: center;">Long-Term Strategic Liquidity Moderate-Loss Tolerance</p>
<ul style="list-style-type: none"> • Safety: Credit Quality (High grade)-Durations (<3 m)/Ave. Maturities (<0 - 6 m) • Liquidity: Same-day availability or maturity • Return: Market based or bank administered • Measurement: Yield 	<ul style="list-style-type: none"> • Safety: Credit Quality (Upper medium grade) -Durations (<3–6 m)/Ave. Maturities (<3–12 m) • Liquidity: Maturity or next day subject to market liquidity/ volatility tolerance • Return: Market based—typically higher than Operating Cash • Measurement: Total return 	<ul style="list-style-type: none"> • Safety: Credit Quality (Investment-grade)-Durations (>6 m)/Ave. Maturities (>12 m) • Liquidity: Maturity or next day subject to market liquidity/ volatility tolerance • Return: Market based—typically higher than Short-Term Strategic Liquidity • Measurement: Total return

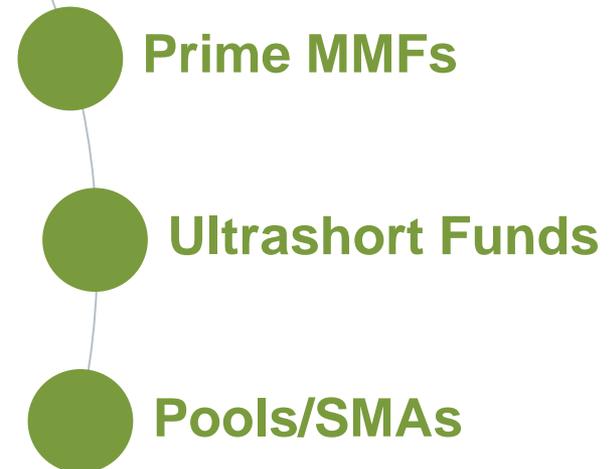
Liquidity Management Solutions

A more diverse suite of alternative products

OPERATING CASH



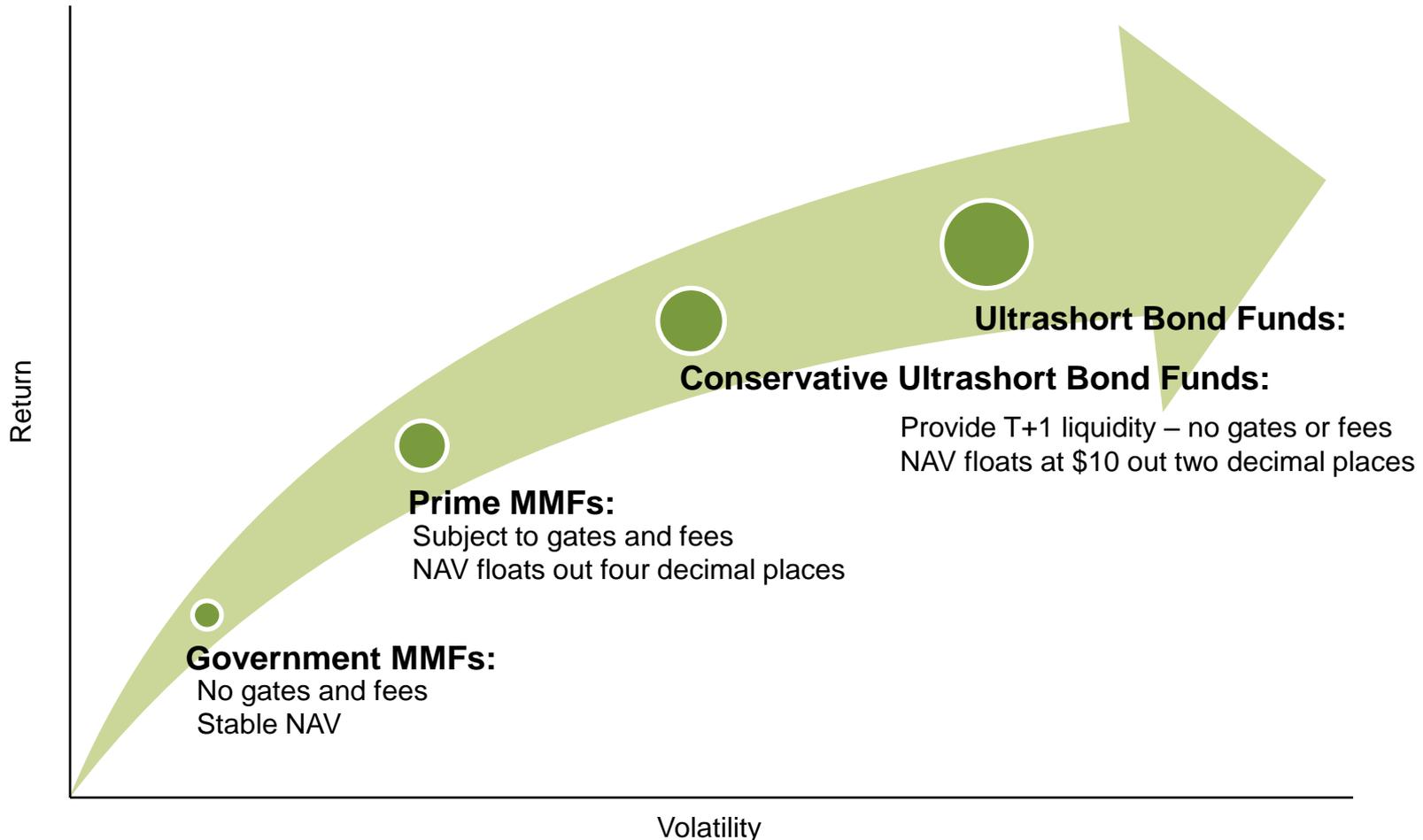
STRATEGIC LIQUIDITY



Diversification does not ensure a profit or guarantee against a loss.

See last pages for more information including risks.

Investment Considerations for Liquidity Management



Hypothetical chart for illustration purposes. Does not intend to represent specific products. The risk/return characteristic of individual funds will vary and may differ.

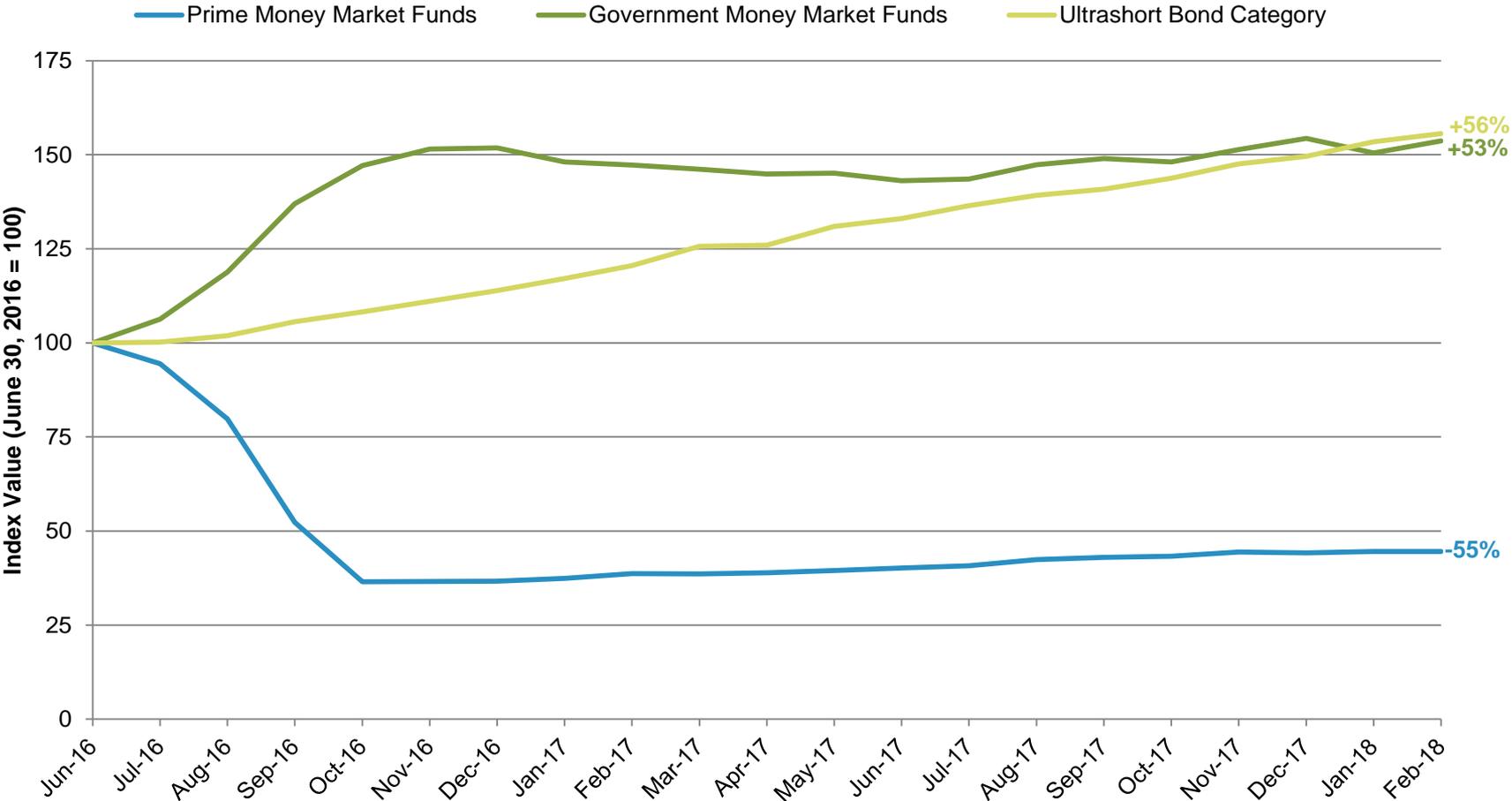
Investment Constraints

	Government MMFs	Prime MMFs	Conservative Ultrashort Bond Funds	Ultrashort Bond Funds
Duration (DWAM)	≤ 60 Days	≤ 60 Days	≤ 1 Year	≤ 1.5 Years
WAL	≤ 120 Days	≤ 120 Days	≤ 1 Year	≤ 2.0 Years
Final Maturity	≤ 397 Days	≤ 397 Days	Fixed Rate Notes: 2-years Floating Rate Notes: 3-years	Fixed Rate Notes: 2-years Floating Rate Notes: 3-years
Quality	Minimal Credit Risk	Minimal Credit Risk	Primarily Investment Grade	Primarily Investment Grade
Security Types	U.S. Treasury, U.S. Agency, Repurchase Agreements	U.S. Treasury, U.S. Agency, Repurchase Agreements, CP, CDs, Corporate Notes, other Private Instruments	U.S. Treasury, U.S. Agency, Corporates, Money Market Instruments	U.S. Treasury, U.S. Agency, Corporates, ABS, CMBS, MBS

Source: Morningstar Direct, Fidelity Investments and iMoneyNet as of 6/30/2017.

Custom universe chosen based on similar duration length (less than 1-year) as Fidelity Conservative Income Bond Fund.

Asset Growth Among Key Liquidity Solutions

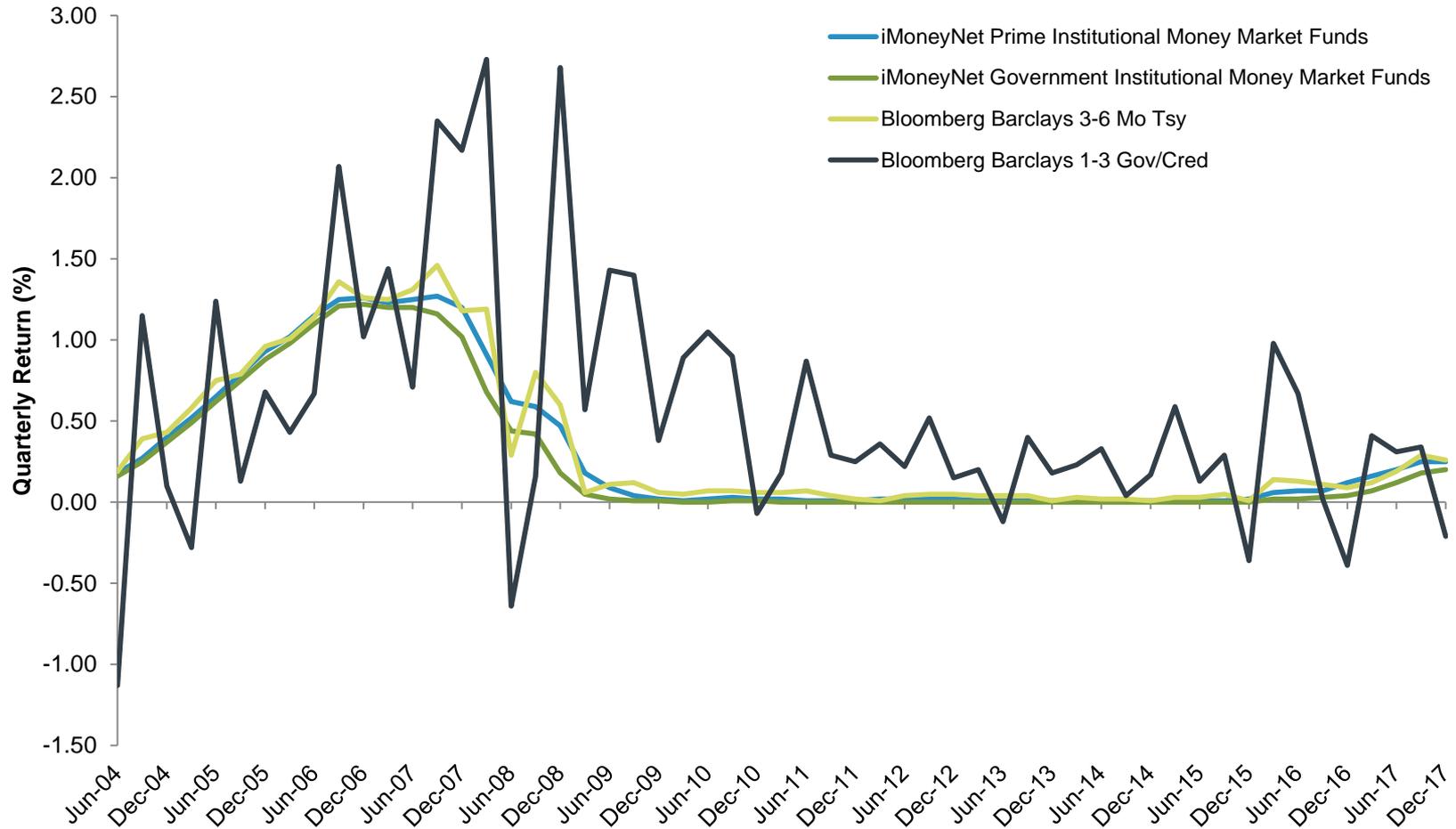


Source: iMoneyNet and Morningstar Direct as of 2/28/2018.



Volatility of Returns

The more credit and duration/maturity risk – the more volatility of returns



Source: iMoneyNet, Bloomberg Barclays as of 12/31/2017.

Prime Money Market Fund Considerations

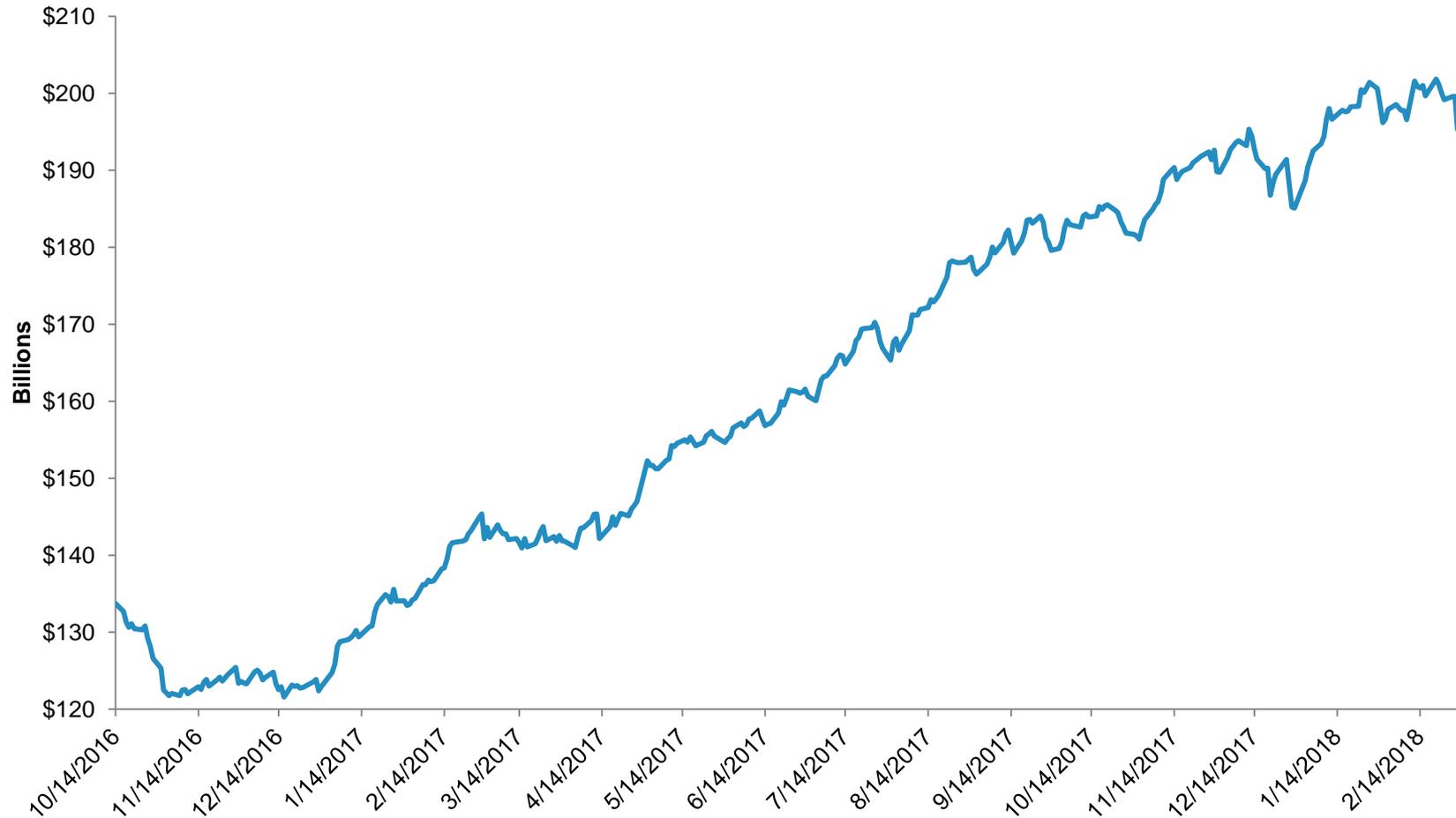
Institutional Prime Money Market Fund

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.

Size of Prime Money Market Funds

Prime Money Market Fund Considerations

Attractive Yields Drive Prime MMF Asset Growth

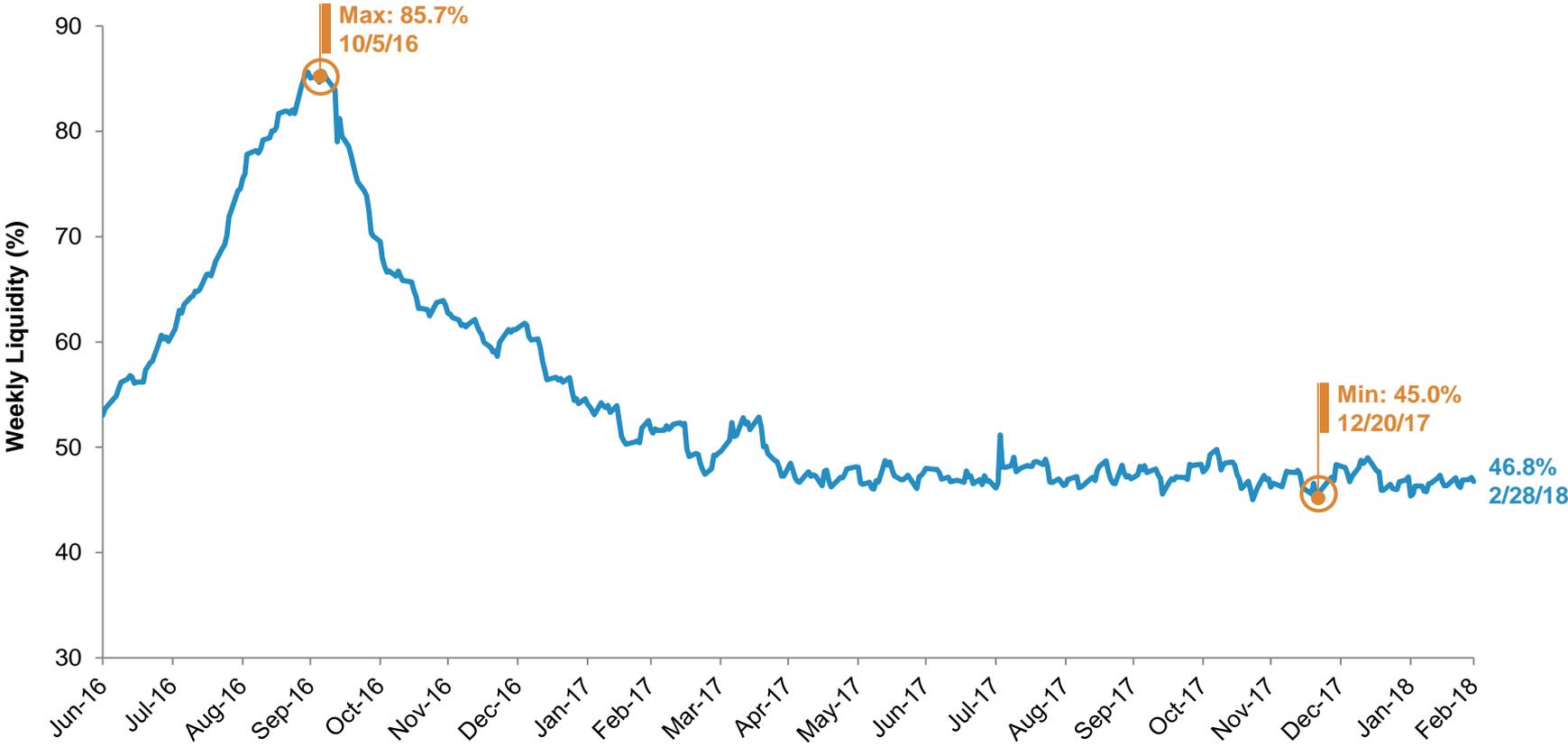


Source: iMoneyNet as of 2/28/2018.

The Importance of Liquidity Risk Management

Prime Money Market Fund Considerations

Institutional Prime MMF Historical Weekly Liquidity



Source: iMoneyNet as of 2/28/2018.



Understanding Conservative Ultrashort Bond Funds

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, 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. Foreign securities can be more volatile than U.S. markets due to increased risks of adverse issuer, political, regulatory, market or economic developments. Changes in government regulation, interest rates and economic downturns can have a significant effect on issuers in the financial services sector, including the price of their securities or their ability to meet their payment obligations. Prepayment of principal prior to a security's maturity can cause greater price volatility if interest rates change. The fund can invest in securities that may have a leveraging effect (such as derivatives and forward-settling securities) that may increase market exposure, magnify investment risks, and cause losses to be realized more quickly.

Unlike money market funds, the Conservative Ultrashort Bond funds are not subject to the portfolio holdings restrictions required by Rule 2a-7.

Conservative Ultrashort Bond Funds are not money market funds and will have a fluctuating NAV.

Conservative Ultra-Short Bond Funds

Strategic liquidity consideration – offers spread without liquidity “gates & fees”

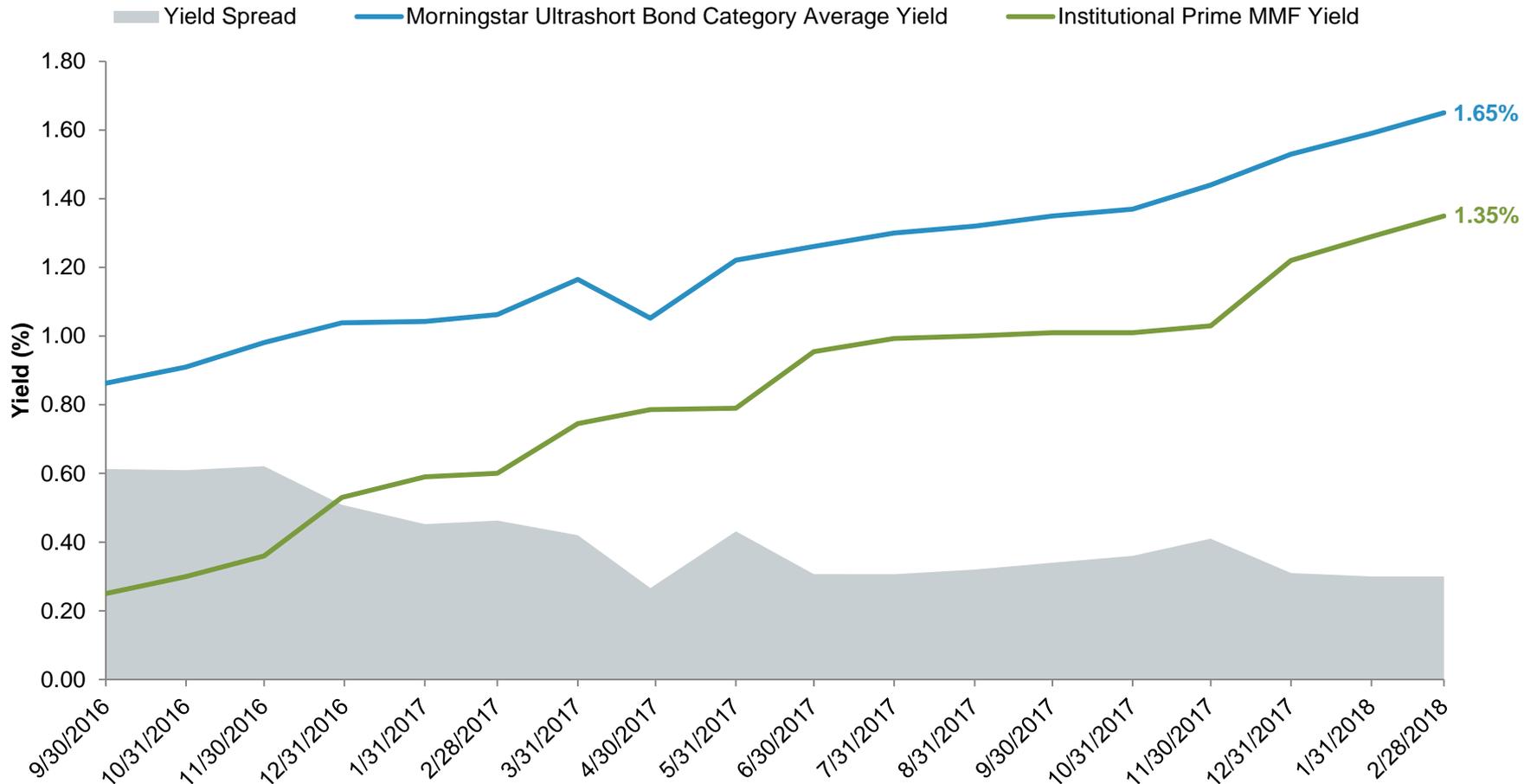
-
- Transacts at a variable \$10.00 NAV and are not subject to SEC liquidity “gates and fees”
 - Conservative diversified investment containing upper to middle grade securities
 - Offers next day purchases and redemptions
 - Ultra-short bond assets exceed \$100 billion with growth from the conservative segment
 - Conservative ultra-short bonds benefit from bank regulatory reform that encourages the issuance of longer-dated wholesale funding
-

Source: Morningstar Direct, Fidelity Investments and iMoneyNet as of 6/30/2017.

Custom universe chosen based on similar duration length (less than 1-year) as Fidelity Conservative Income Bond Fund.

Yield Differential

Ultrashort Bond Funds and Institutional Prime MMF Yields and Spread



Note: while conservative bond funds have historically returned higher yields, they also carry more risk than money market funds. Past performance is no guarantee of future results.

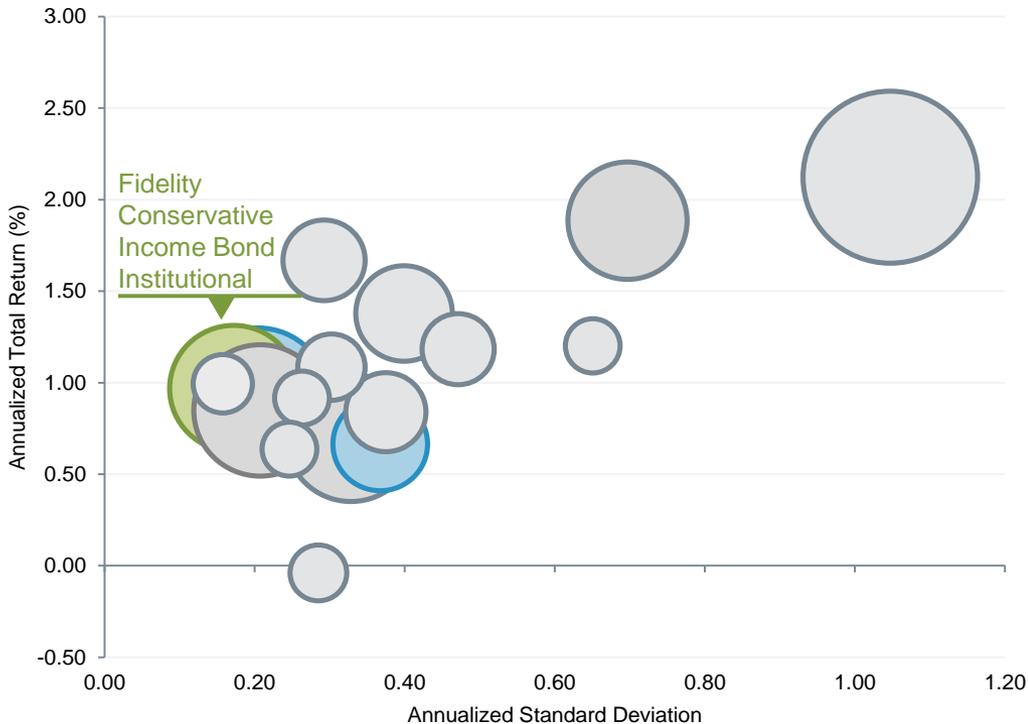
Source: iMoneyNet and Morningstar Direct as of 2/28/2018.

Assessing Ultra-Short Bond Risks

Consider conservative ultra-short bond funds

MORNINGSTAR ULTRASHORT BOND FUNDS

(> \$1B AUM & 3-Year Risk/Return)



Risk Profile Considerations

- Low Volatility
 - Low NAV standard deviation
 - Limited duration and maturity exposure
- Low Credit Risk
 - High-quality securities
 - Prohibits high-yield securities
- Low Liquidity Risk
 - Liquidity structured within fund
 - Limits structured products/ illiquidity securities

Source: Morningstar Direct, Fidelity Investments as of 12/31/2017.

Note: Gray bubbles represent bond funds that invest in mortgages (Agency MBS, Non-Agency RMBS, and CMBS) and/or below investment grade securities). Blue bubbles do not invest in mortgages. The size of the bubbles correlates to the total assets of the fund.

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.

Past performance is no guarantee of future results.

For illustration purposes only.

Conclusions

Summary

- Optimizing corporate liquidity has become more complicated following the regulatory changes to money market funds.
- Accurate cash forecasting remains a critical process that enables the treasury team to appropriately segment their cash between operating and strategic components.
- The potential solution set has expanded following money market reform and the fundamental characteristics of prime funds has been altered requiring additional monitoring and due diligence.
- While a return to institutional prime money market funds may not be appropriate for every corporate treasurer, those with an investment policy that permits variable net asset value (VNAV) funds and a thorough understanding of the risks and rewards, may view prime funds as critical component of their cash segmentation strategies.
- Clients have also utilized the new breed of conservative ultra-short duration bond funds to help them optimize their short-term and strategic cash.
- In the end, each organization must review their investment policy, segment their cash, and identify the appropriate solutions given the company's risk and reward profile.

Q&A

Important Information

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Past performance is no guarantee of future results. Investment return will fluctuate, therefore you may have a gain or loss when you sell shares.

Diversification does not ensure a profit or guarantee against a loss.

Fidelity Conservative Income Bond Fund

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, 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. Foreign securities can be more volatile than U.S. markets due to increased risks of adverse issuer, political, regulatory, market or economic developments. Changes in government regulation, interest rates and economic downturns can have a significant effect on issuers in the financial services sector, including the price of their securities or their ability to meet their payment obligations. Prepayment of principal prior to a security's maturity can cause greater price volatility if interest rates change. The fund can invest in securities that may have a leveraging effect (such as derivatives and forward-settling securities) that may increase market exposure, magnify investment risks, and cause losses to be realized more quickly. Conservative Ultrashort Bond Funds are not money market funds and will have a fluctuating NAV.

Fidelity Government/Treasury Money Market Funds

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 the fund, 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.

Fidelity Institutional Prime Money Market Fund

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.

Important Information

Fidelity Retail Prime and/or Municipal Money Market Funds

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.

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Before investing, consider the funds' and/or accounts' investment objectives, risks, charges, and expenses. Contact Fidelity or visit institutional.fidelity.com for a prospectus or, if available, a summary prospectus containing this information, if applicable. Read it carefully.

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