blf 2017 BOARDSOURCE LEADERSHIP FORUM

IGNITING LEADERSHIP FOR POWER PURPOSE & IMPACT

Seeking the elusive CPI + 5%

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Russell Investments

Russell Investments has been providing outsourced CIO solutions to non-profit organizations for over 25 years. Learn more at russellinvestments.com/nonprofits

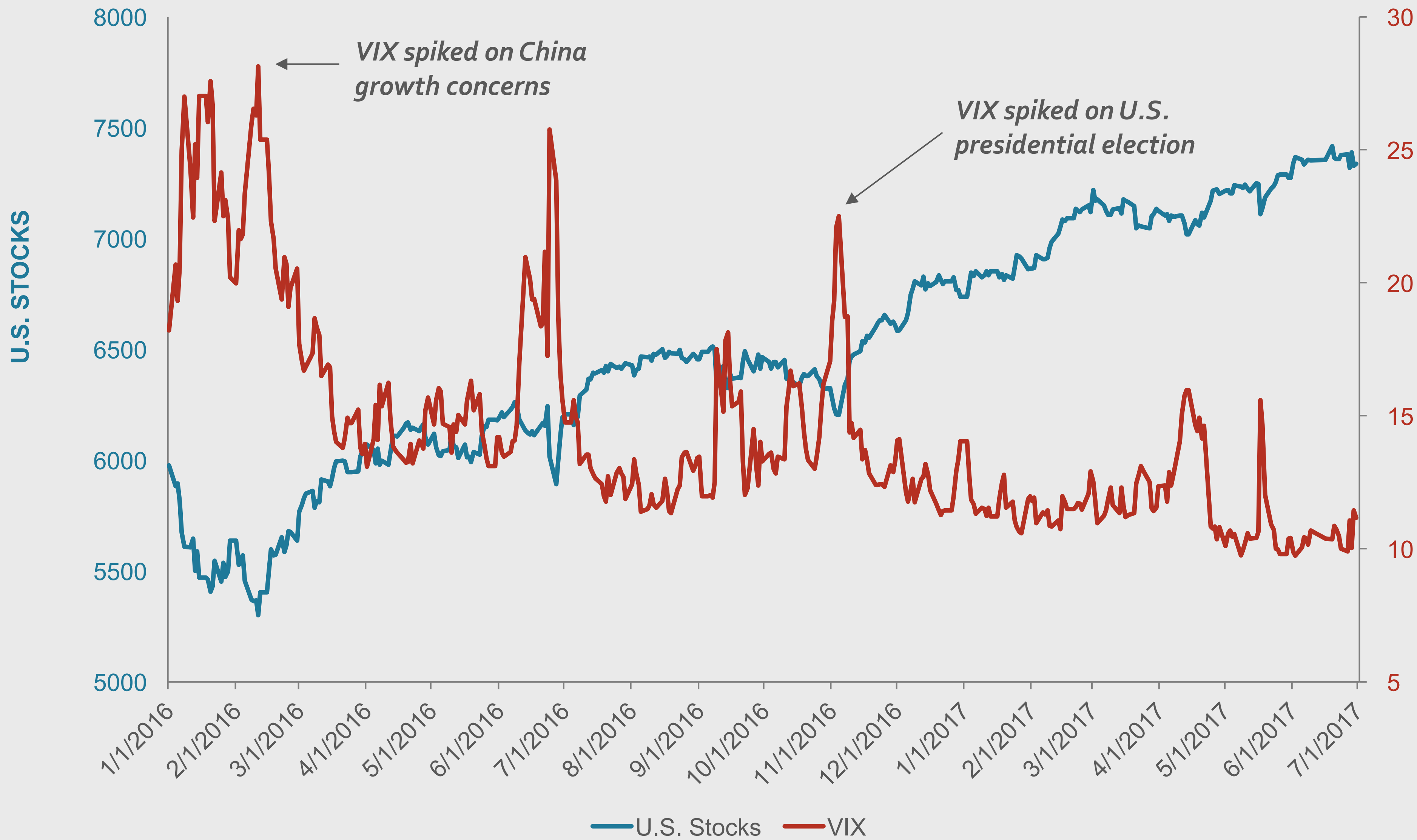
Late-cycle lean out

We're in a late-cycle, momentum-driven market, where valuation is at an extreme.

- The U.S. equity market is expensive
- Foreign equities have select pockets of opportunity
- Interest rates remain low
- Inflation is being closely monitored
- Both the earnings and growth outlooks are lackluster

We're in a late-cycle, momentum-driven market, where valuation is at an extreme.
The U.S. equity market is expensive
Foreign equities have select pockets of opportunity
Interest rates remain low
Inflation is being closely monitored

What goes up, must come down



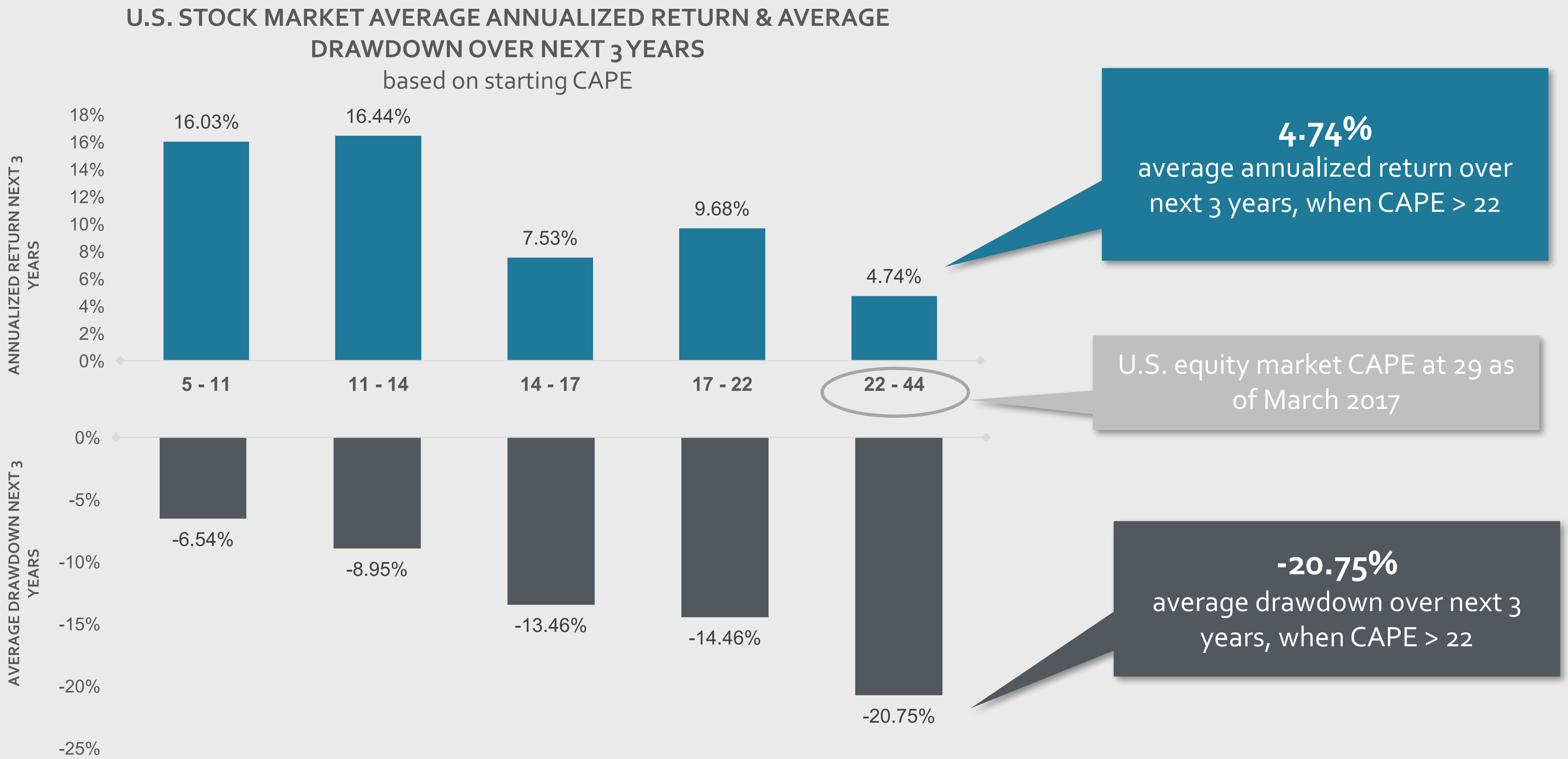
U.S. EQUITIES UP 23% SINCE JANUARY 2016

VIX TRENDING LOW VS. HISTORY

- Markets have had attractive returns with below average volatility
- While volatility has been on pause, it should not be forgotten

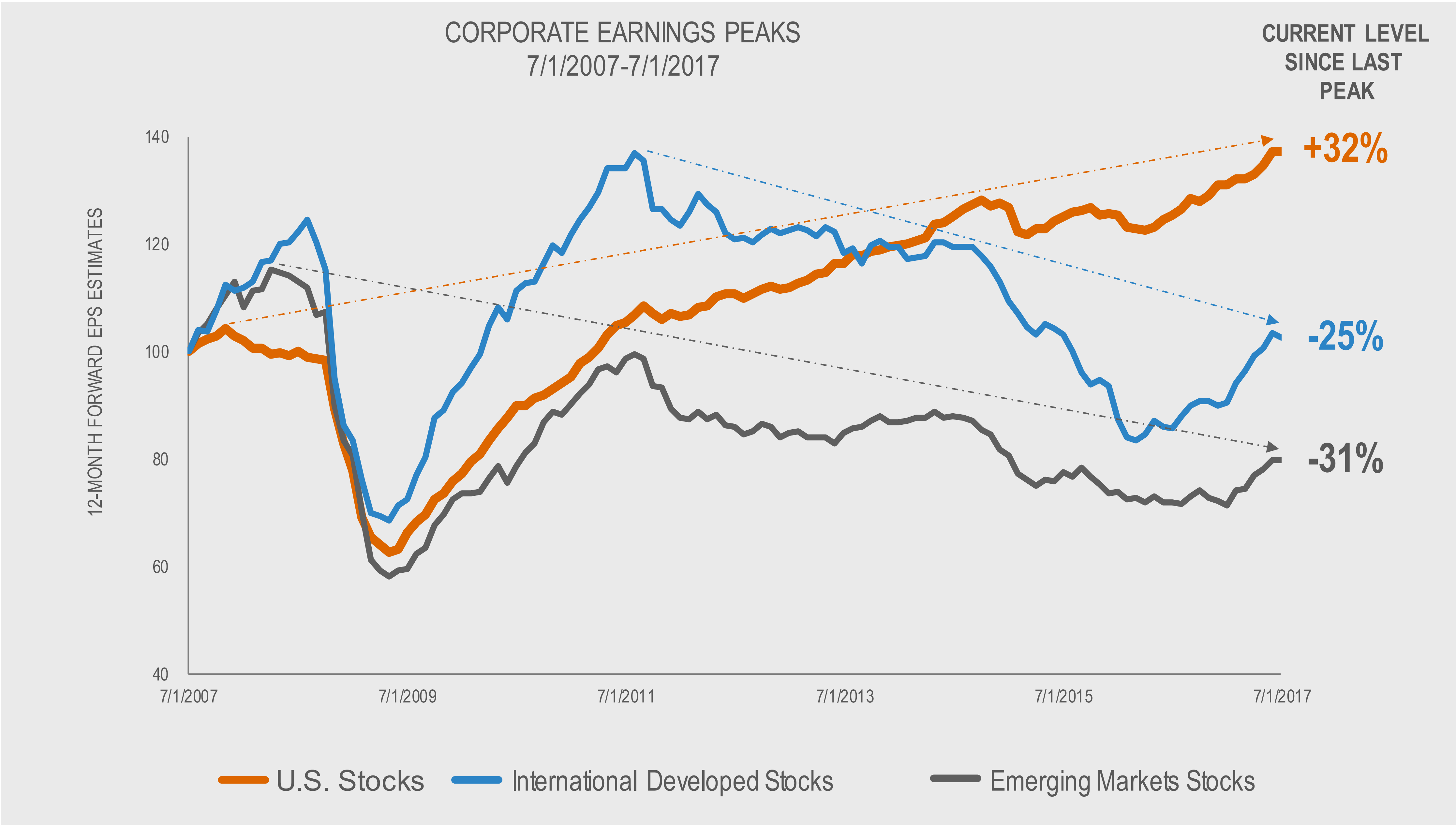
Chicago Board Options Exchange (CBOE) Volatility Index, which shows the market's expectation of 30-day volatility using the implied volatilities of a wide range of S&P 500® index options.
U.S. Stocks: Russell 3000® Index; VIX: Yahoo Finance.
Index returns represent past performance, are not a guarantee of future performance, and are not indicative of any specific investment. Indexes are unmanaged and cannot be invested in directly.

Beware of betting big on U.S. stocks



Yale Professor Robert Shiller calculates a Cyclically Adjusted P/E Ratio based on stock price divided by prior 10-year earnings. U.S. stock market is represented by an index created by Professor Shiller. The stocks included are those of large publicly held companies that trade on either of the two largest American stock market exchanges: the New York Stock Exchange and the NASDAQ. Prior to 1926 his data source was Cowles and Associates Common Stocks Index, after 1926 his source has been S&P.
Index returns represent past performance, are not a guarantee of future performance, and are not indicative of any specific investment. Indexes are unmanaged and cannot be invested in directly. Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment. Average drawdown is the percentage return from period start date to the market trough within the subsequent three years.

Non-U.S. corporate earnings still have room to expand



Source: Thomson Reuters Datastream, as of June 30, 2017.U.S. Stocks: S&P 500® Index; International Developed Stocks: MSCI EAFE Index; and Emerging Markets Stocks: MSCI Emerging Markets Index.

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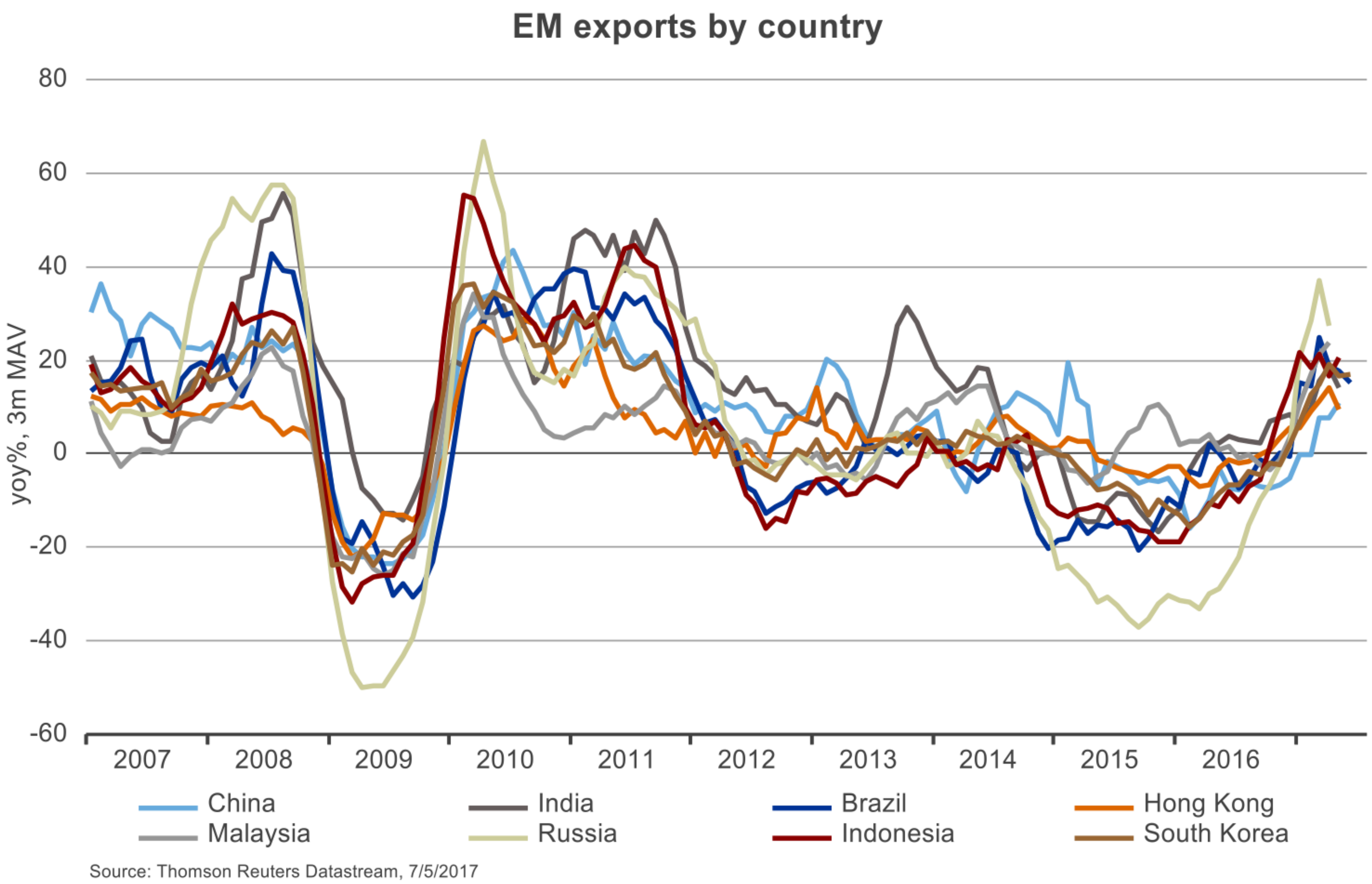
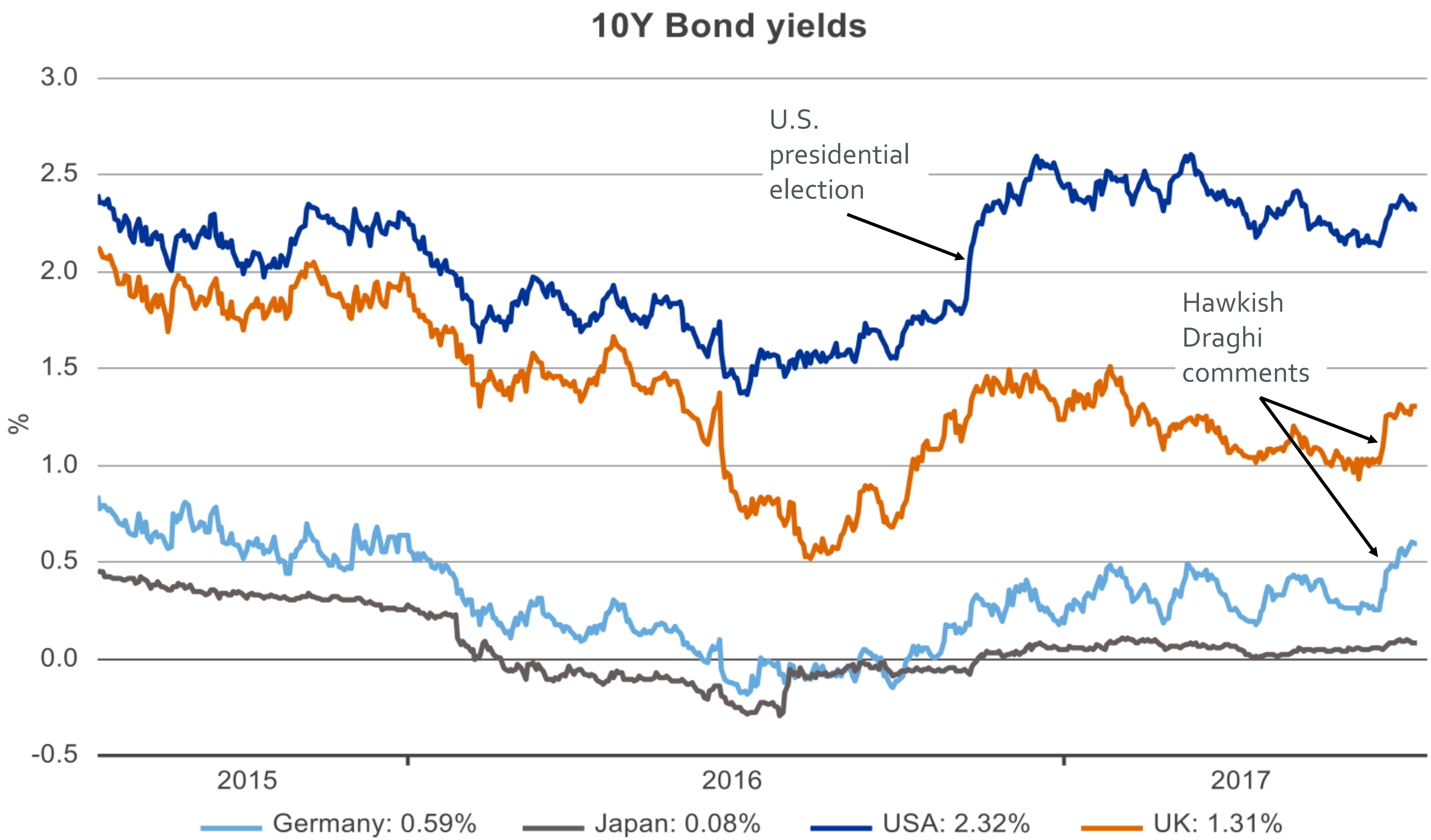
Emerging market trade has picked up steam

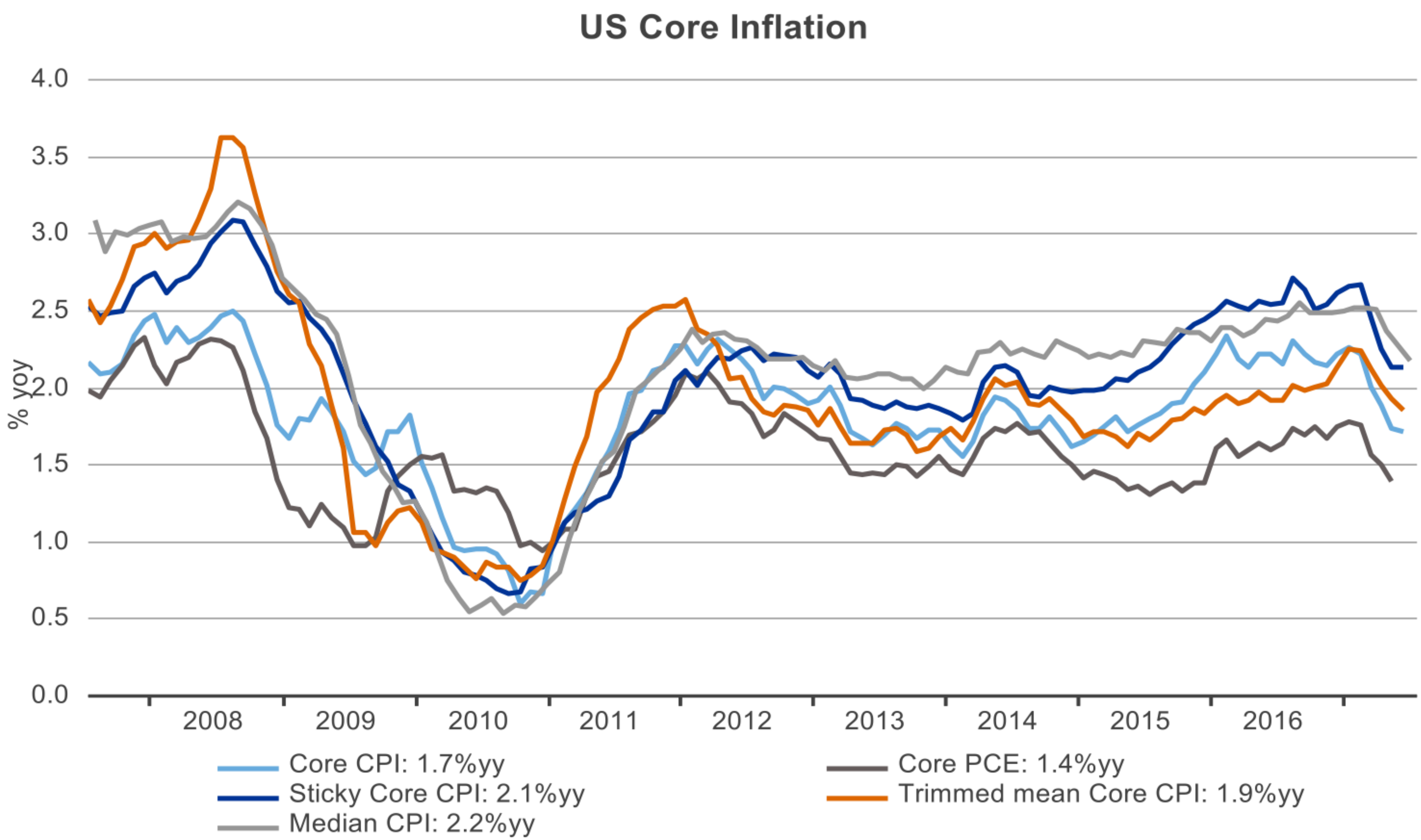


Hawkish shift in central bank rhetoric outside the U.S. vs. positive yield advantage of U.S. Treasuries



SOURCE: Thomson Reuters Datastream, 23 February 2017

Weak core inflation (at least in part) keeping rates lower for longer



Source: Thomson Reuters Datastream, Jun 17

Don’t fight the Fed… in reverse?

FED BALANCE SHEET

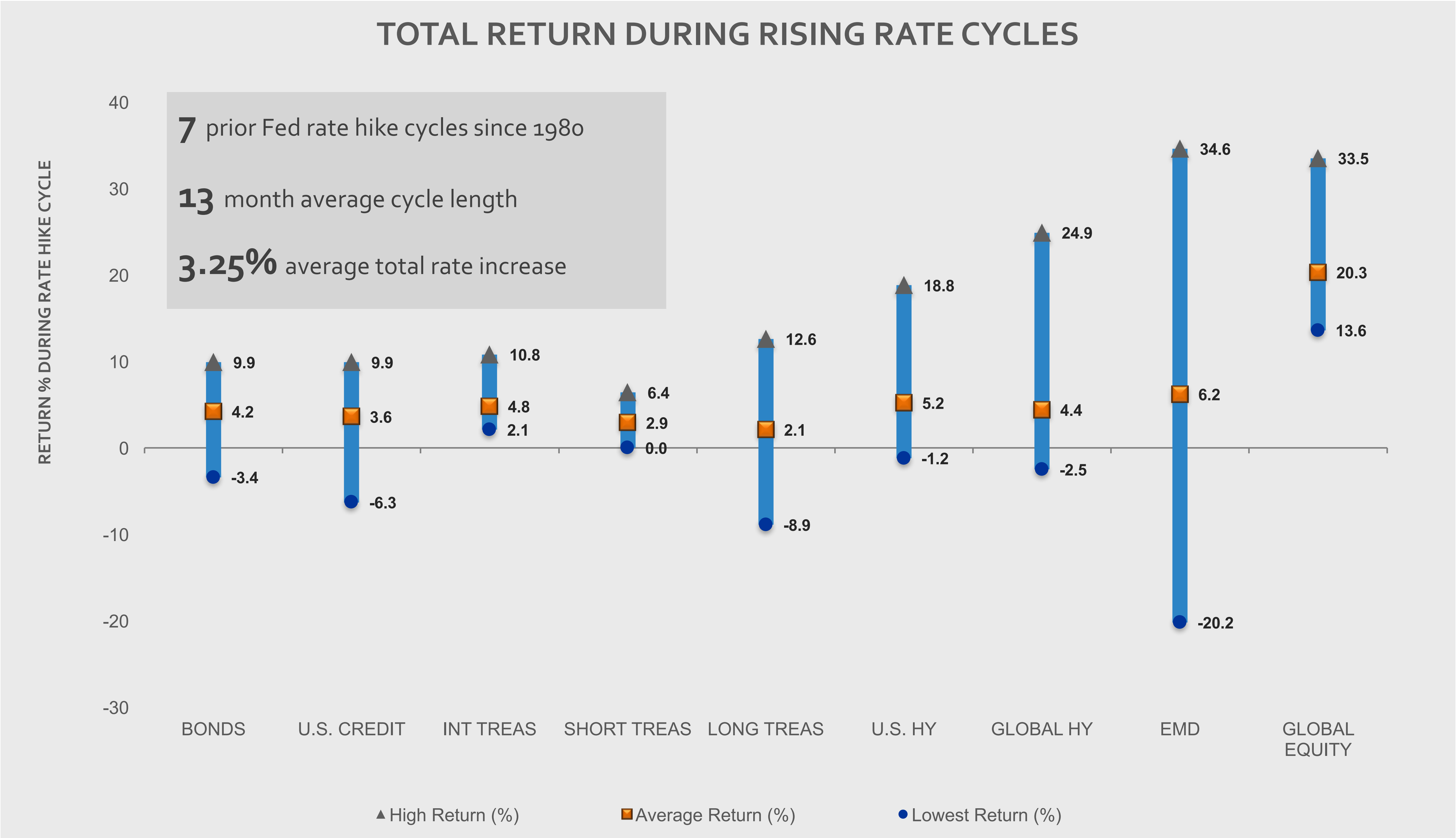
- Now: $4.5 trillion
- 2008: $900 billion
- $2.5 trillion in treasuries
- $1.8 trillion on mortgages

SLOW ROLL OFF

- Beginning at $10 billion target per month
- Gradually increasing $50 billion monthly

- Target balance likely to be considerably larger than 2008 levels
- Normalization could increase the 10-Year yield by 10 to 20 bps
- Impact on bond markets should be modest

Do rising rates sink bond returns?



Bonds: Bloomberg Barclays U.S. Aggregate Bond Index; U.S. Credit: Bloomberg Barclays U.S. Credit Index; Int Treas: Bloomberg Barclays Intermediate Treasury Index; Short Treas: Bloomberg Barclays Short Treasury Index; Long Treasury: Bloomberg Barclays Long Treasury Index; U.S. HY: Bloomberg Barclays U.S. High Yield Index; Global HY: BofA Merrill Lynch Global High Yield Index; EMD: JP Morgan Emerging Markets Debt Index; Global Equity: MSCI World Index.

Index returns represent past performance, are not a guarantee of future performance, and are not indicative of any specific investment. Indexes are unmanaged and cannot be invested in directly.

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Russell Investments' 2017 global market outlook

UNITED STATES Late cycle?	EUROZONE Positive momentum	ASIA-PACIFIC Emerging strength
› 2% GDP growth, with downside risk › Q1 corporate earnings good, but likely as good as it gets for 2017 › No more Fed hikes this year, given soft inflation	› 1.5% GDP growth, with upside potential › 5%–10% earnings growth with room to expand › Optimistic about business cycle	› 5% GDP growth › More optimistic on developing vs developed countries › Valuations slightly expensive given recent performance
Underweight: Expensive valuations without enough cyclical support	**Overweight**: Strong fundamentals	**Neutral**: Tailwind from resilient global trade, but valuations now slightly expensive

KEY EXPECTATIONS

Given expensive valuations, look outside the U.S. and diversify

There is no guarantee the stated expectations will be met.
As of 6/30/2017
Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.

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In this environment, how could you get to CPI + 5%?

- Be dynamic
- Be a risk manager, not a risk taker
- Go beyond traditional asset classes
- Implement efficiently

Dynamic portfolio management

Dynamic management is designed to allow you to diversify return sources, capitalize on market opportunities, and mitigate risks.

Certain managers have performed better in certain market environments and value can be added or lost based on the timing, or exit, of a manager allocation.

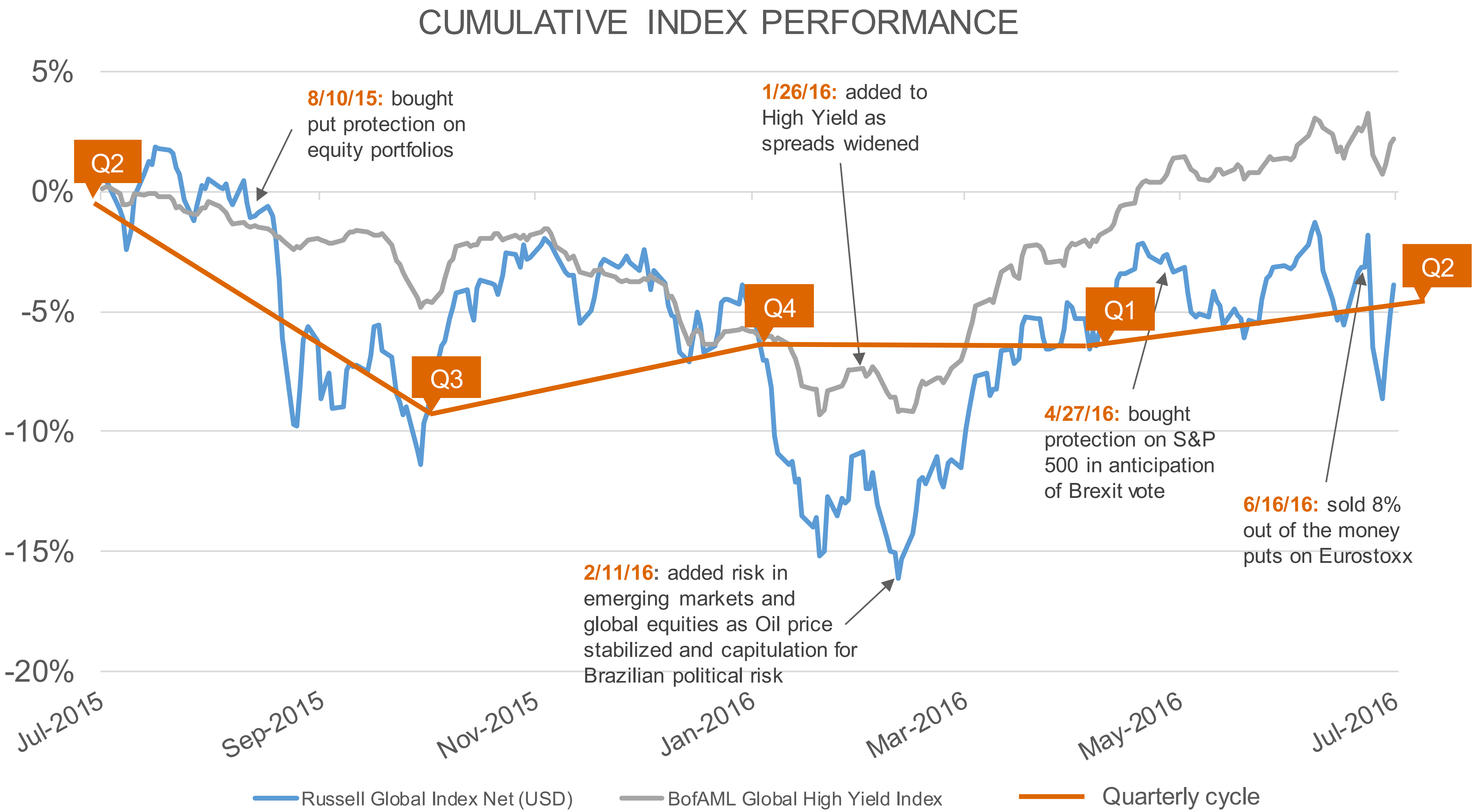
.35% per annum
in missed opportunities or transaction costs

=

Re-allocating 8%
from bonds to equity to maintain expected return

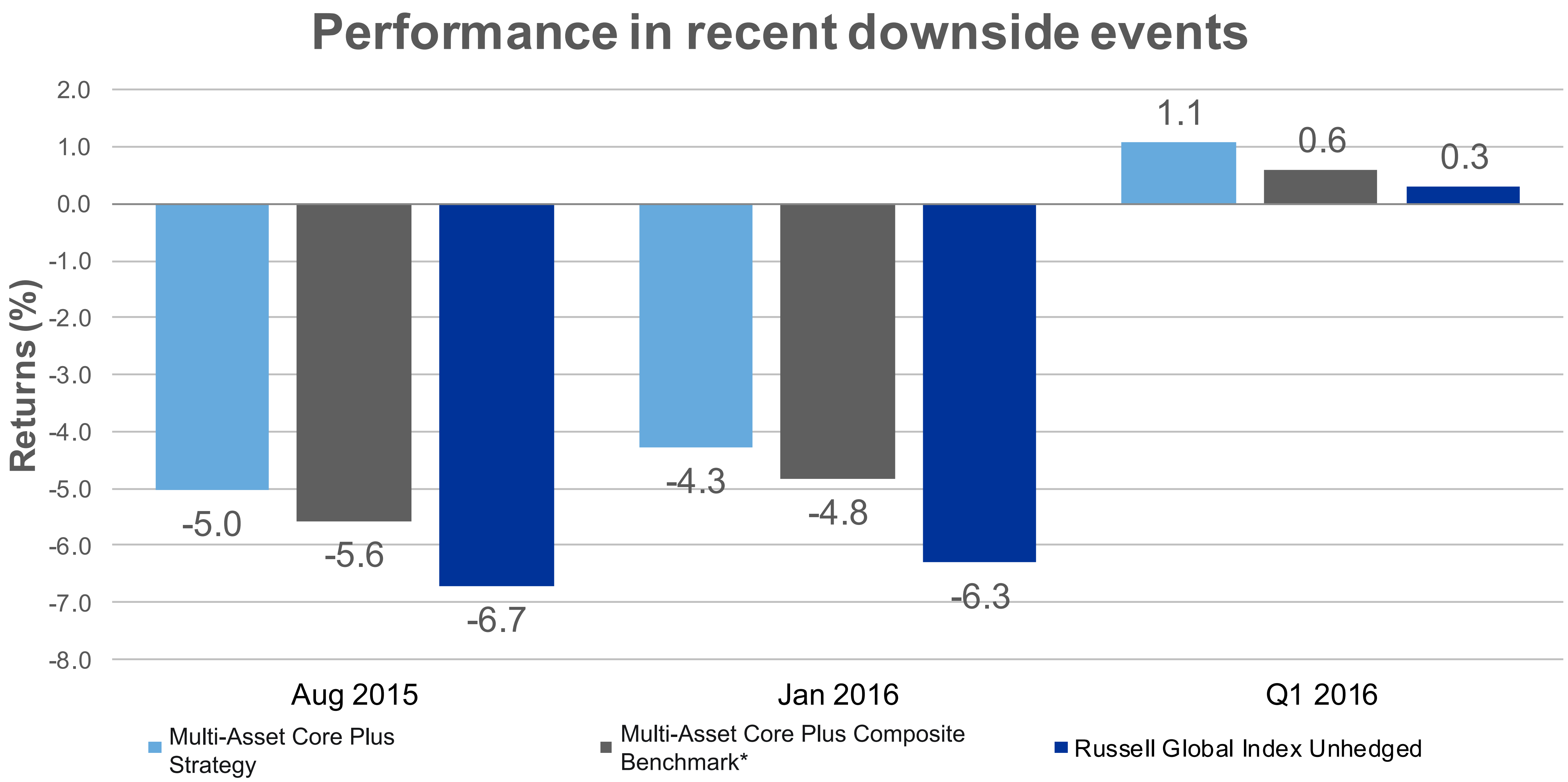
Source: How non-profits can improve upon the endowment model – and make it work for them, Mary Beth Lato, Russell Investments, 10-2017

Be dynamic



For illustrative purposes only.
Past performance is no guarantee of future results. Indexes are unmanaged and cannot be invested in directly.

Be a risk manager, not a risk taker



* The Multi-Asset Core Plus Strategy Composite Benchmark consists of: 75% Russell Global Index 50% Hedged, 5% Bloomberg Commodity Index Total Return (USD), 5% FTSE EPRA/NAREIT Developed Real Estate Index (Net), 5% S&P Global Infrastructure Index Net (USD), 5% BofAML Global High Yield 2% Constrained Index TR USDH, 5% JP Morgan Emerging Market Bond Index Global (USD. This benchmark is appropriate for evaluating the Multi-Asset Core Plus Strategy over a 3 to 5 year horizon. Allocation changes and underlying strategy additions and deletions over time will be captured in the composite index.

Performance is shown gross of fees. Fees will reduce the overall performance of the strategy.

Past performance is not indicative of future results. Indexes/benchmarks are unmanaged and cannot be invested in directly.

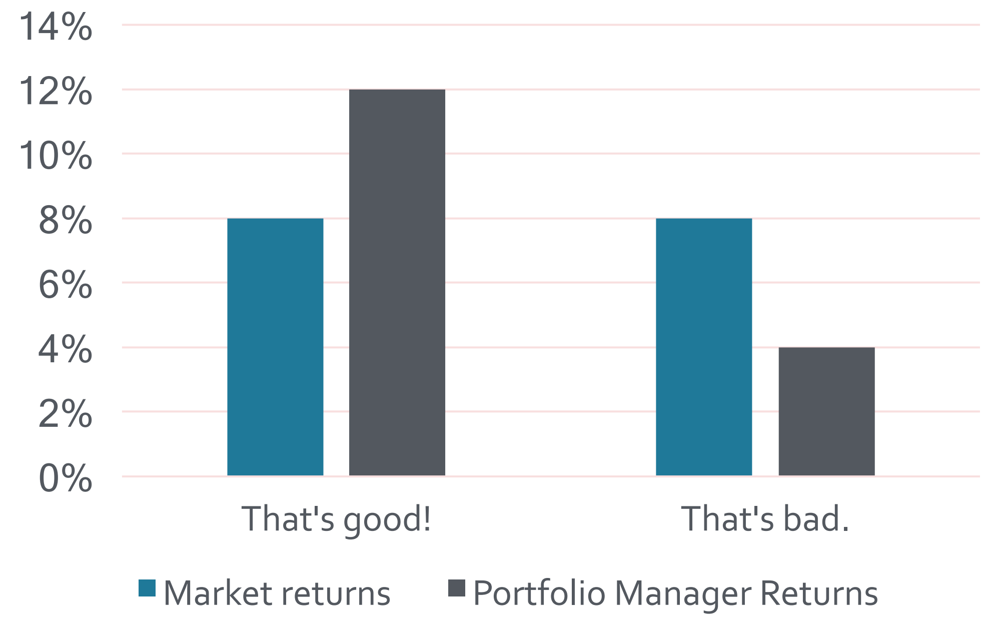
Go beyond traditional asset classes

Every investment portfolio should have the following:

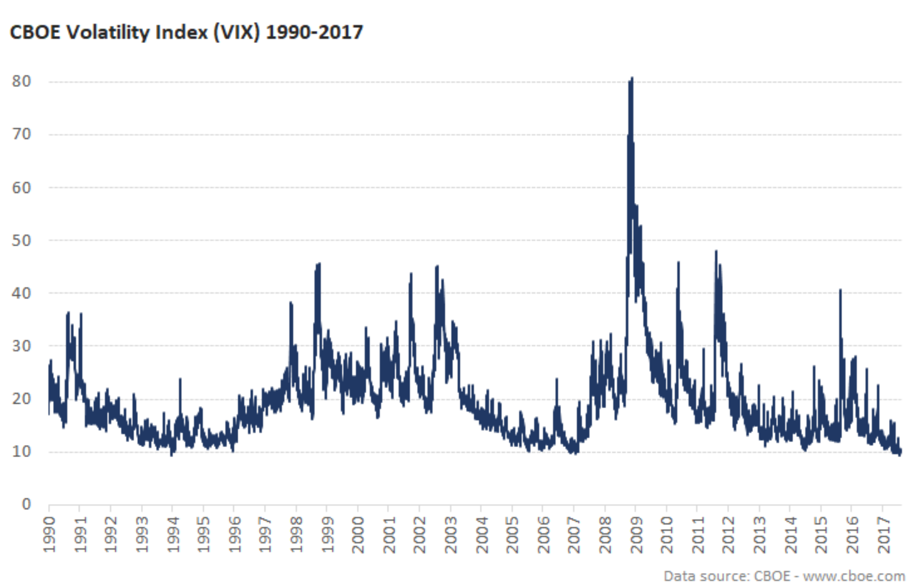
- Alpha generating managers
- Diversified sources of beta
- Illiquid assets which provide an expected return premium
- Exposure to alternative risk premia (factor exposures)
- Dynamic portfolio management

What are alpha and beta?

Alpha is the expected excess return generated by a portfolio manager



Beta is a measure of market volatility and describes how an asset is expected to perform relative to a benchmark of similar assets



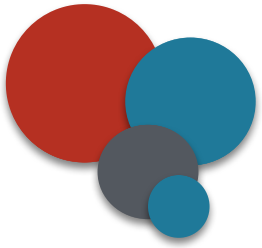
Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data.
There is no guarantee that any stated results will occur.

Illiquidity and alternative risk premia can also add returns

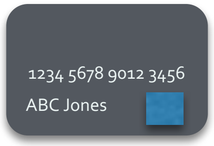
Illiquidity premiums result from investment in capital assets that can't be easily sold before they mature

Real estate
Hedge funds
Private Equity
Infrastructure

Alternative risk premia (factor exposures) exploit systematic risks in the markets which can lead to long-term excess returns



Size

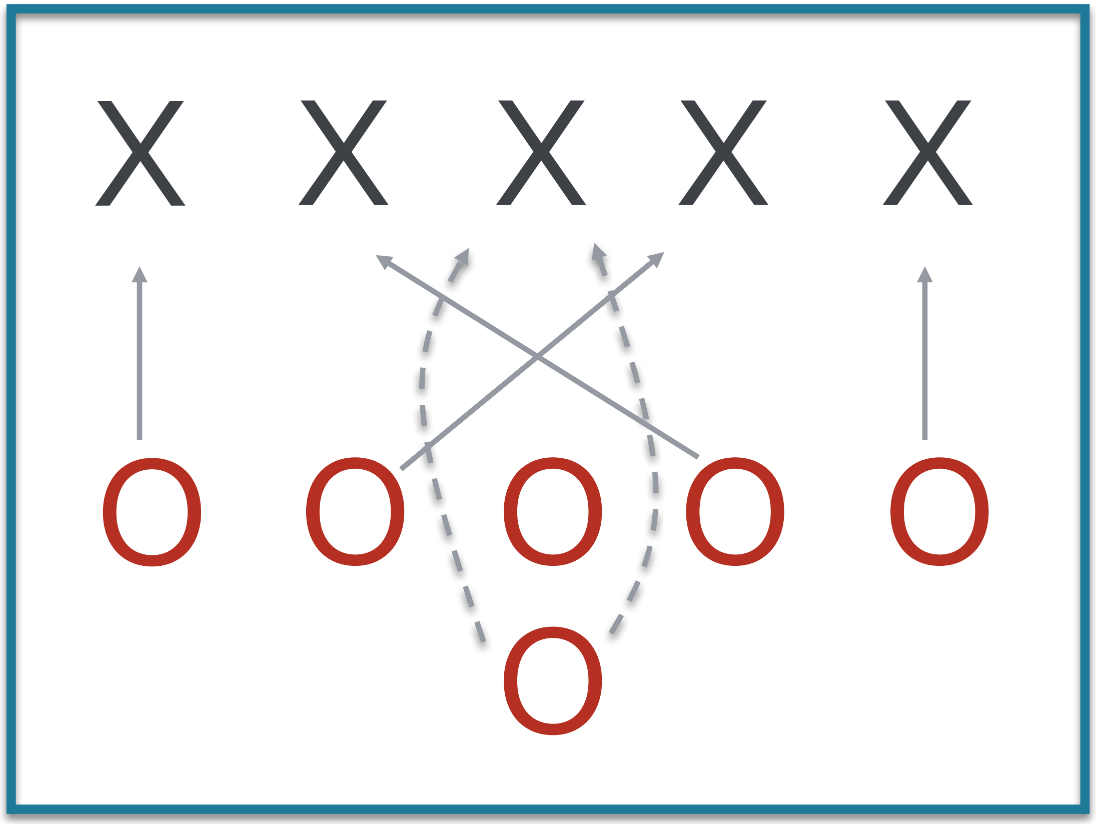


Credit

Carry

Dynamic portfolio management

The portfolio manager is responsible for adjusting the portfolio exposures, in real time, based on market expectations, to pursue additional returns and mitigate risks.

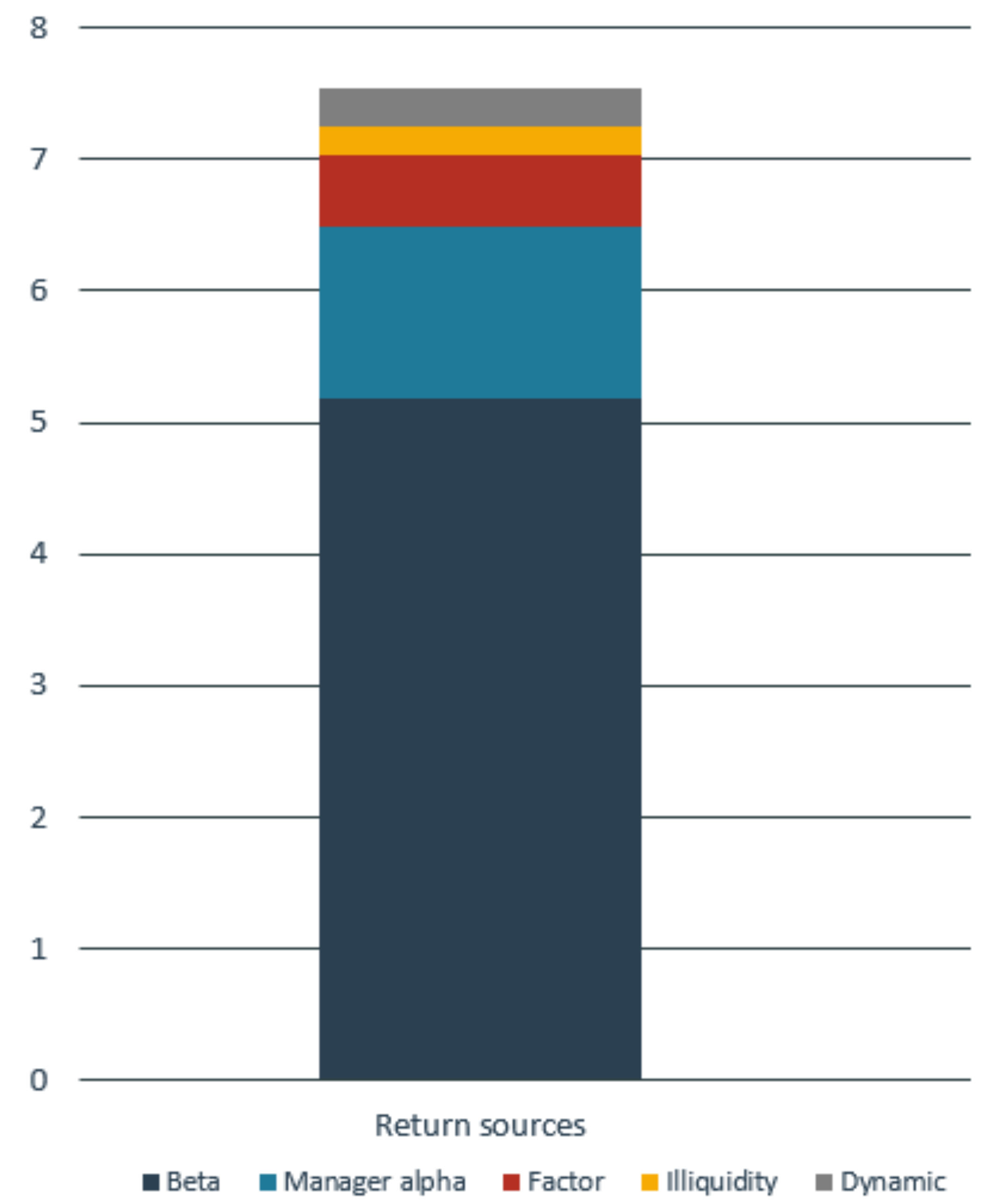


For illustrative purposes only. Not meant to represent any actual investment or performance.

Bringing it all together

Getting to CPI + 5% means incorporating all these strategies into your portfolio, and implementing them efficiently.

So, how do you do that?



Based on Russell Investments' strategic planning assumptions. See slide 43. For illustrative purposes only. Not meant to represent any actual investment or portfolio allocation.

Efficient implementation is the key

- Capture your intentions in your strategic asset allocation
- Look for providers and managers who will seamlessly and efficiently integrate these concepts into your portfolio construction efforts
- Ensure you have the right resources to manage your investment portfolio dynamically

Your strategic asset allocation (SAA)

Your strategic asset allocation is dependent upon the decisions you make about the following:

- Spending policy
- Desire for perpetuity
- Risk tolerance
- Liquidity needs

Spending policy

Your spending policy outlines your organization's total expected annual spending and the extent to which the spending is fixed or flexible.

SPENDING POLICY	SPENDING RATE	SPENDING METHODOLOGY
4% of 3-year average assets	4%	3-year averaging
$4 million annually, adjusted for inflation	$4 million	Spending rate adjusted by annual inflation rate

Desire for perpetuity

You have three possible decisions you could make:

1. We wish to exist for as long as possible.
2. We wish to prioritize spending today, and worry about how long we want to exist later.
3. We wish to make a point of spending down our assets over time.

Risk tolerance

Risk tolerance is the amount of risk your organization (and investment committee) is comfortable taking while still being able to sleep at night.

1. What is your *capacity* to tolerate loss?
2. What is your *willingness* to tolerate loss?
3. What is your *perception* of risk?

Liquidity needs

Liquidity allows you to:

1. Meet your spending requirements
2. Deploy your capital opportunistically to take advantage of evolving market conditions
3. Rebalance your portfolio as needed or wanted
4. Meet pre-existing capital commitments

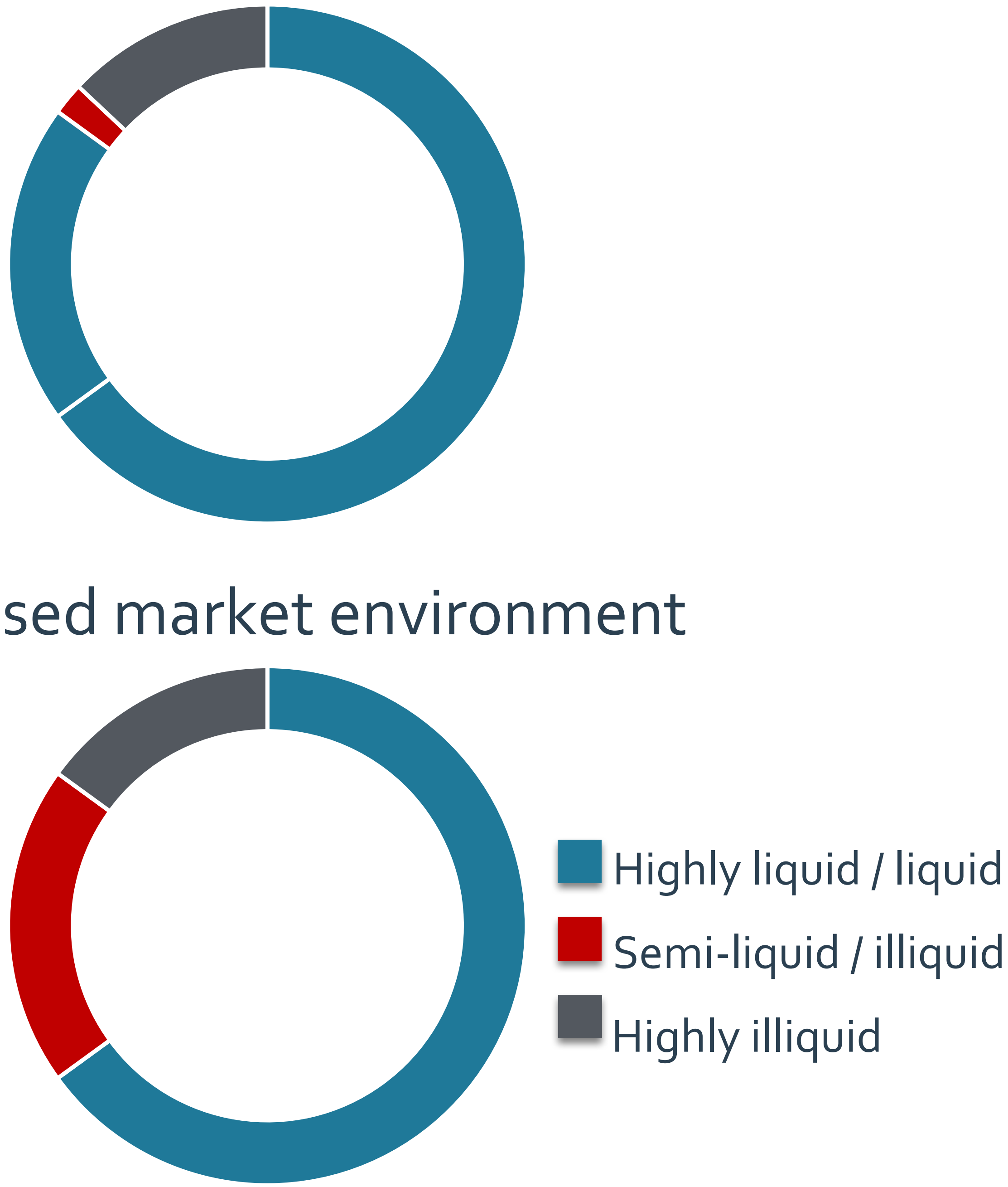
Overallocation to illiquid or *presumed* liquid investments can cause problems in stressed market environments.

Why is understanding liquidity so important?

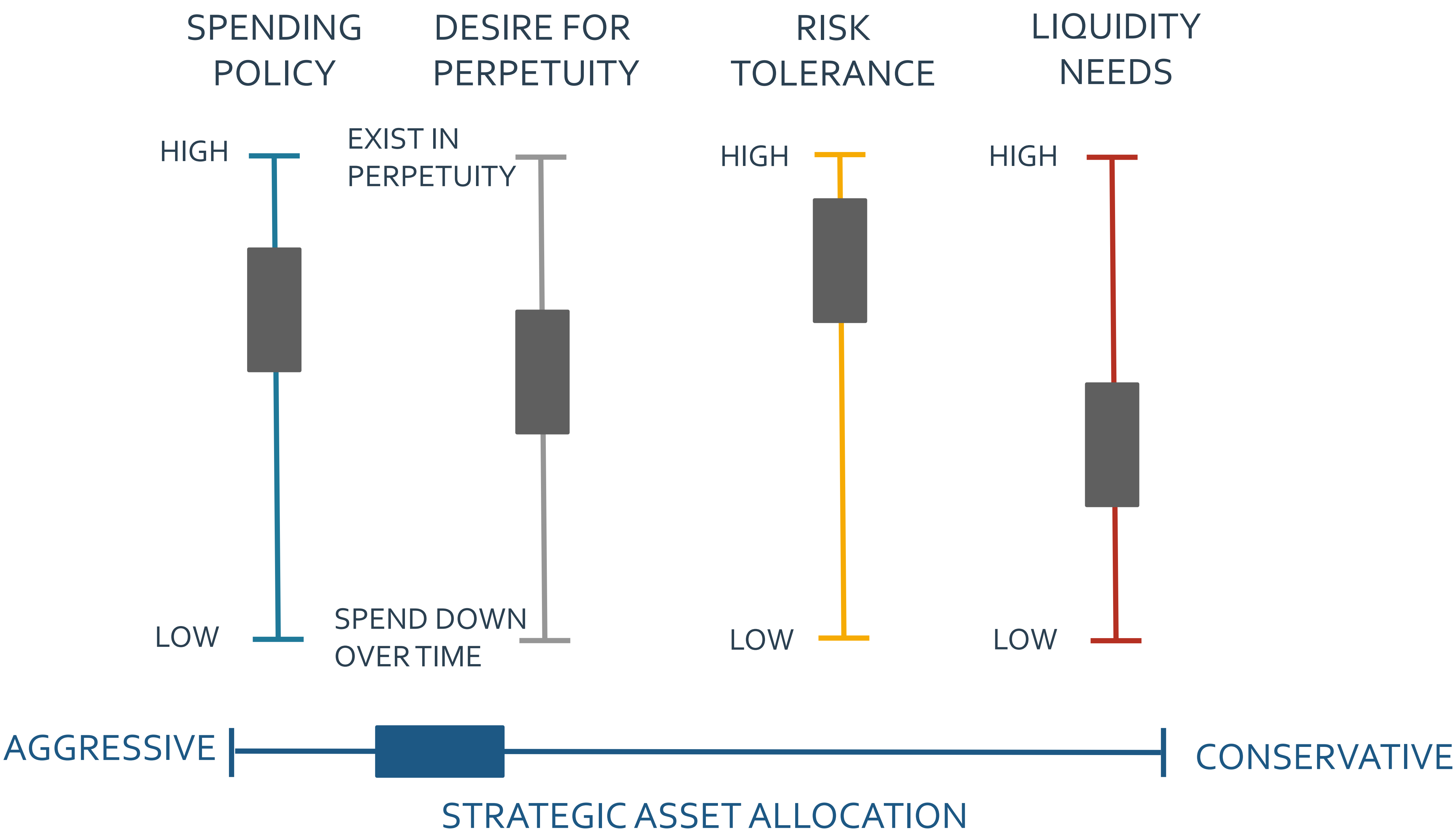
ACCESS TO CASH	LIQUIDITY LEVEL
Daily	Highly liquid
Quarterly	Liquid
Less than 2 years	Semi-liquid
2 to 5 years	Illiquid
More than 5 years	Highly illiquid

normal market environment

stressed market environment



These decisions work together



WORKSHOP

Board vs. Investment committee?

The Board of Directors should:

- Set the spending policy for the organization
- Determine the organization's approach to perpetuity
- Approve the investment policy statement, which includes:
- Liquidity policy
- Risk tolerance
- Oversee the results of the Investment committee's efforts and re-direct where appropriate

The Investment committee should:

- Determine a strategic asset allocation that is designed to meet the organization's spending, liquidity, risk, and perpetuity needs
- Work with the appropriate providers to construct and dynamically manage the investment portfolio
- Review the results and report to the board at least quarterly

Finding the right spending policy

		CIRCLE ONE		
1	We have an IRS-mandated spending requirement.	Y	N	N/A
2	We have the ability to fundraise	Y	N	N/A
	If 'Yes' to question 2, which of the following apply?			
	We fundraise to offset our spending needs	Y	N	N/A
	We fundraise to increase our endowed assets	Y	N	N/A
	The assets we raise are:			
	Restricted	Y	N	N/A
	Unrestricted	Y	N	N/A
	Both restricted and unrestricted	Y	N	N/A
3	We wish to exist for as long as possible	Y	N	N/A
4	Spending to support our current beneficiaries is more important than ensuring spending for future beneficiaries	Y	N	N/A
	If 'Yes' to question 4, which of the following apply?			
	Our goal is to spend down our assets over time	Y	N	N/A
	Our goal is to adjust our spending to prioritize current beneficiaries, while still existing for as long as possible	Y	N	N/A
	We intend to fund a significant project in the next few years, which will require additional spending over the short term	Y	N	N/A
5	We rely heavily on our investment returns to meet our annual spending obligations	Y	N	N/A
6	We are sensitive to the spending trends of our peers	Y	N	N/A
7	Other:			

Finding the right spending policy

YOUR SPENDING POLICY			
Our spending rate is:			
Our spending methodology is:			
We selected this because:			
We were comfortable with our spending during the financial crisis	Y	N	N/A

Remember, spending more than the inflation-adjusted return generated by your portfolio will lead to a decline in the purchasing power of your assets.

	Your spending rate	______%
+	projected rate of inflation	______%
+	expenses	______%
=	your target return	______%

Perpetuity

Remember, you have three possible decisions you could make:

1. We wish to exist for as long as possible.
2. We wish to prioritize spending today, and worry about how long we want to exist later.
3. We wish to make a point of spending down our assets over time.

Which decision are you making? And why?

And do the rest of your decisions align with this one?

Determining your risk tolerance

	A	B	C	CIRCLE A, B, OR C
I could tolerate:	Up to a 20% loss in any 1 year	A 20% to 35% loss in any 1 year	A 35% to 50% loss in any 1 year	A B C
My annual spend is:	Less than 3.5%, so I don't need a lot of risk to meet my return target	Between 3.5% and 5%, so I need to take a moderate amount of risk to meet my return target	More than 5%, so I need a considerable amount of risk to meet my return target	A B C
My time horizon is:	Short (1 to 3 years)	Medium (3 to 5 years)	Long term (5 or more years)	A B C
I expect future inflows:	No, I am not able to secure future inflows	Yes, I am able to secure some additional inflows	Yes, I am able to secure significant additional inflows	A B C
There are a number of additional demands on my assets	Yes, there are high demands on my assets	Yes, there are some demands on my assets	No, there are minimal demands on my assets	A B C
Other observations affecting my risk tolerance:				

Assessing your liquidity needs

Establish your cash flow expectations	Where will your cash come from?	
	What is the anticipated timing of those cash flows?	
	Is your cash flow steady or variable? What % is steady and what % is variable?	
Use a variety of approaches to achieve your required liquidity profile	Do you regularly review the following with your providers and IC? If not, you should start.	❑ Asset allocation ❑ Spending policy ❑ Rebalancing policy ❑ Derivatives in your portfolio
Document and frequently monitor your liquidity profile	Do you do sensitivity / stress testing of your investment portfolio? Are you liquidity needs documented in your IPS?	
Keep up with regulatory changes	Do you have a source you rely on for regulatory updates? Who is it? Who do you share the information with?	

The pillars of your IPS

1. Spending policy
2. Desire for perpetuity
3. Agreed-upon risk tolerance
4. Liquidity policy
5. Strategic asset allocation

Dynamic portfolio management is a strategic *and* a tactical decision. You must capture your intent to be dynamic in your IPS, ensure all fiduciaries are aligned with this decision, and incorporate strategies into your investment portfolio that can be managed dynamically.

Capturing your decisions in your IPS

GOVERNANCE

- Mission, purpose, and scope
- Investment time horizon
- Statement regarding fiduciary responsibilities under UPMIFA
- Definition of roles and responsibilities
- Expected return goals and objectives
- Unique circumstances
- Delegation of authority
- Beliefs

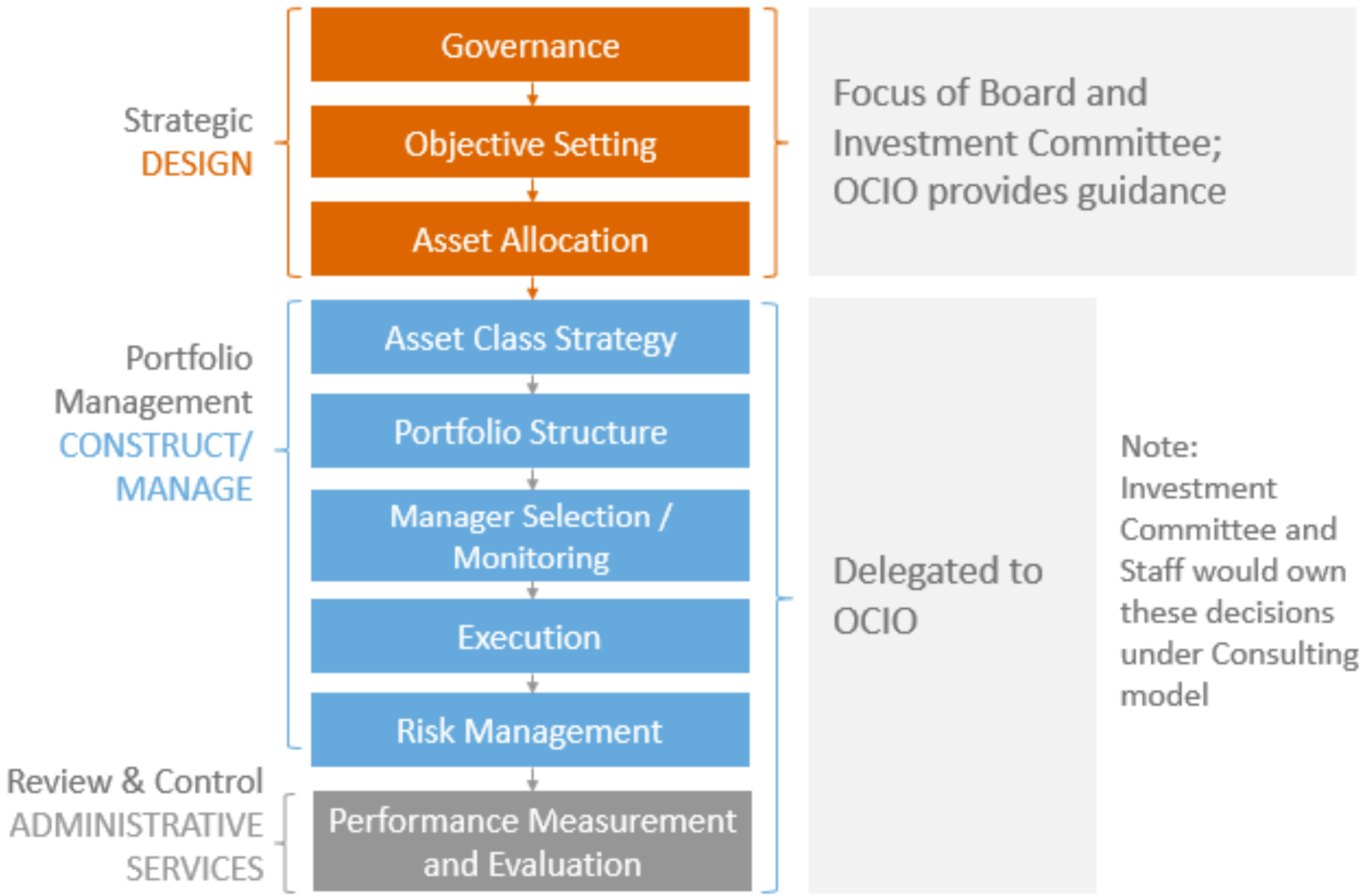
INVESTMENT STRATEGY

- Investment philosophy
- Strategic asset allocation
- Restricted and unrestricted investments
- Investment structure and guidelines
- Spending policy
- Liquidity policy
- Risk policy and benchmarks for measurement
- Purchasing power driven decisions
- Sustainable investment policy,
  if applicable

ACCOUNTABILITY

- Monitoring and review process
- Standards for measuring performance: absolute and relative
- Rebalancing policy
- Handling of spending for underwater funds
- Other operational guidelines

Roles and responsibilities in your IPS



What should you be reviewing?

QUARTERLY

- Performance of assets against organizational goals
- Capital market performance / environment
- Discussion with investment committee regarding any concerns which may need board attention

PERIODICALLY BUT REGULARLY

- Investment policy statement, including:
- Spending policy
- Liquidity needs
- Any changes in risk tolerance
- Strategic asset allocation

- Impact of any organizational or regulatory changes which may affect the investment program

Thank you! Questions?

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Strategic planning assumptions

Through December 31, 2016

		Equity					Private - Unlisted				Fixed Income											Marketable Real Assets				Other	Economic
		US Equity	EAFE Equity	Emerging Markets Equity	Global Equity	Global Equity ex US	Global Private Equity	US Real Estate	Global Real Estate	Global Infrastructure	Long Govt	Govt	Long Credit Fixed	Credit Fixed	Long G/C Fixed	Agg Fixed	Global High Yield H	EM Debt	TIPS	Cash	LIBOR	Global Commodities	US Listed Real Estate	Global Listed Real Estate	Global Listed Infrastructure	NonDir. Hedge Fund	Inflation
	5 Yr Arithmetic Return	6.4%	8.2%	7.5%	7.2%	8.0%	8.6%	5.2%	5.8%	5.4%	1.7%	1.9%	2.7%	2.7%	2.3%	2.3%	4.5%	3.3%	2.1%	2.3%	2.4%	5.0%	5.8%	6.6%	6.4%	3.5%	2.1%
	5 Yr Volatility	17.7%	19.7%	22.8%	18.0%	19.7%	13.5%	11.5%	10.0%	8.1%	6.2%	2.3%	6.2%	3.3%	5.6%	3.5%	14.4%	9.0%	4.3%	2.7%	2.8%	15.8%	23.4%	20.6%	16.3%	4.6%	2.7%
	10 Yr Arithmetic Return	7.0%	8.0%	8.0%	7.5%	8.0%	8.9%	5.7%	6.0%	5.9%	2.4%	2.6%	3.5%	3.5%	3.0%	3.1%	5.1%	4.1%	2.7%	3.0%	3.1%	5.7%	6.5%	7.0%	7.0%	4.1%	2.1%
	10 Yr Volatility	18.1%	19.1%	22.9%	18.0%	19.3%	18.0%	13.6%	11.3%	9.5%	5.1%	2.2%	5.1%	2.8%	4.6%	2.7%	13.8%	8.3%	5.2%	4.7%	4.7%	16.3%	23.8%	20.6%	16.7%	5.9%	4.7%
	20 Yr Arithmetic Return	7.5%	7.9%	8.3%	7.8%	8.0%	9.1%	6.1%	6.3%	6.4%	3.1%	3.3%	4.2%	4.2%	3.7%	3.8%	5.7%	4.7%	3.3%	3.6%	3.7%	6.2%	7.0%	7.2%	7.4%	4.7%	2.3%
	20 Yr Volatility	18.5%	18.5%	22.7%	17.9%	18.6%	21.1%	15.2%	12.3%	10.9%	3.9%	4.0%	4.4%	3.8%	3.7%	3.4%	14.3%	8.6%	6.8%	7.2%	7.2%	17.1%	24.5%	20.7%	17.4%	8.1%	7.5%
	20 Yr Time Series Volatility	17.6%	19.8%	22.7%	17.8%	19.7%	7.9%	7.4%	6.9%	5.3%	8.6%	4.8%	8.3%	5.8%	8.0%	6.1%	13.1%	9.1%	4.6%	1.9%	1.9%	16.1%	24.1%	21.0%	16.3%	4.3%	2.0%
	Correlations																										
Equity	**US Equity**	1.00																									
	EAFE Equity	0.85	1.00																								
	Emerging Markets Equity	0.75	0.82	1.00																							
	Global Equity	0.97	0.95	0.86	1.00																						
	Global Equity ex US	0.86	0.98	0.91	0.96	1.00																					
Private - Unlisted	**Global Private Equity**	0.86	0.85	0.77	0.89	0.86	1.00																				
	US Real Estate	0.48	0.47	0.39	0.49	0.47	0.48	1.00																			
	Global Real Estate	0.64	0.68	0.58	0.68	0.68	0.66	0.91	1.00																		
	Global Infrastructure	0.59	0.56	0.50	0.60	0.57	0.57	0.52	0.63	1.00																	
Fixed Income	**Long Govt**	0.03	0.12	0.10	0.08	0.12	0.08	-0.02	0.01	-0.10	1.00																
	Govt	0.11	0.07	0.10	0.10	0.08	0.02	0.09	0.08	0.13	0.48	1.00															
	Long Credit Fixed	0.28	0.35	0.32	0.33	0.36	0.27	0.12	0.19	0.10	0.75	0.42	1.00														
	Credit Fixed	0.21	0.23	0.22	0.23	0.23	0.11	0.10	0.14	0.12	0.58	0.73	0.76	1.00													
	Long G/C Fixed	0.16	0.25	0.22	0.21	0.25	0.18	0.05	0.10	-0.01	0.95	0.50	0.87	0.73	1.00												
	Agg Fixed	0.14	0.20	0.17	0.17	0.20	0.10	0.06	0.09	0.04	0.73	0.78	0.74	0.88	0.79	1.00											
	Global High Yield H	0.29	0.27	0.24	0.29	0.27	0.23	0.16	0.22	0.21	0.02	0.13	0.45	0.47	0.20	0.28	1.00										
	EM Debt	0.27	0.29	0.25	0.29	0.29	0.23	0.15	0.21	0.18	0.19	0.23	0.60	0.61	0.38	0.45	0.89	1.00									
	TIPS	0.14	0.06	0.12	0.11	0.08	0.03	0.11	0.10	0.18	-0.04	0.41	0.03	0.21	0.00	0.06	0.08	0.05	1.00								
	Cash	0.13	-0.03	0.04	0.06	-0.01	-0.03	0.13	0.10	0.25	-0.40	0.43	-0.25	0.11	-0.34	-0.13	0.09	0.00	0.64	1.00							
	LIBOR	0.10	-0.06	0.01	0.03	-0.05	-0.07	0.12	0.08	0.23	-0.41	0.42	-0.27	0.10	-0.36	-0.14	0.08	-0.02	0.63	1.00	1.00						
Marketable Real Assets	**Global Commodities**	0.35	0.36	0.42	0.39	0.40	0.34	0.27	0.38	0.38	-0.08	0.11	0.08	0.10	-0.01	0.03	0.16	0.13	0.17	0.23	0.22	1.00					
	US Listed Real Estate	0.56	0.57	0.46	0.58	0.56	0.52	0.87	0.86	0.56	0.00	0.06	0.18	0.14	0.09	0.08	0.20	0.19	0.10	0.10	0.08	0.29	1.00				
	Global Listed Real Estate	0.69	0.75	0.62	0.74	0.74	0.67	0.81	0.92	0.64	0.04	0.07	0.25	0.18	0.15	0.12	0.24	0.24	0.09	0.06	0.03	0.38	0.94	1.00			
	Global Listed Infrastructure	0.69	0.69	0.60	0.72	0.70	0.64	0.56	0.71	0.88	-0.05	0.09	0.18	0.15	0.07	0.07	0.26	0.23	0.16	0.18	0.16	0.42	0.65	0.75	1.00		
Other	**NonDir. Hedge Fund**	0.47	0.37	0.43	0.46	0.41	0.35	0.34	0.41	0.52	-0.30	0.33	-0.05	0.16	-0.19	-0.04	0.23	0.15	0.51	0.76	0.74	0.52	0.36	0.41	0.52	1.00	
Economic	**Inflation**	0.12	0.02	0.09	0.09	0.04	0.03	0.10	0.09	0.20	-0.20	0.30	-0.11	0.08	-0.16	-0.10	0.07	0.00	0.91	0.70	0.69	0.17	0.09	0.07	0.16	0.55	1.00

Yields		Yield	Duration	Quality
Yields	**Long G/C Fixed**	4.7	15.0	AA
	Agg Fixed	4.3	6.0	AA
	US Long Credit	5.5	13.5	A
	US TIPS	1.4	4.8	Govt

Correlation values shown are for the 10-year forecast horizon.
Assumptions do not take fees into consideration and all returns are assumed gross of fees. Yields represent the level at a ten-year horizon.
The information presented in this document is based on data from multiple sources: including Russell Investments, Barrie & Hibbert, Barclays Capital, Bloomberg, and Consensus Economics, Inc. The summary statistics presented in this document are not intended for use in mean-variance optimization.
Please note all information shown is based on assumptions. Expected returns employ proprietary projections of the returns of each asset class.

We estimate the performance of an asset class or strategy by analyzing current economic and market conditions and historical market trends.
It is likely that actual returns will vary considerably from these assumptions, even for a number of years.
References to future returns for either asset allocation strategies or asset classes are not promises or even estimates of actual returns a client portfolio may achieve. Asset classes are broad general categories which may or may not correspond well to specific products.

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