



# Employees' Retirement System of the State of Rhode Island

December 16, 2016

Amit Chopra, CFA

Frances L. Coombes



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## About Western Asset

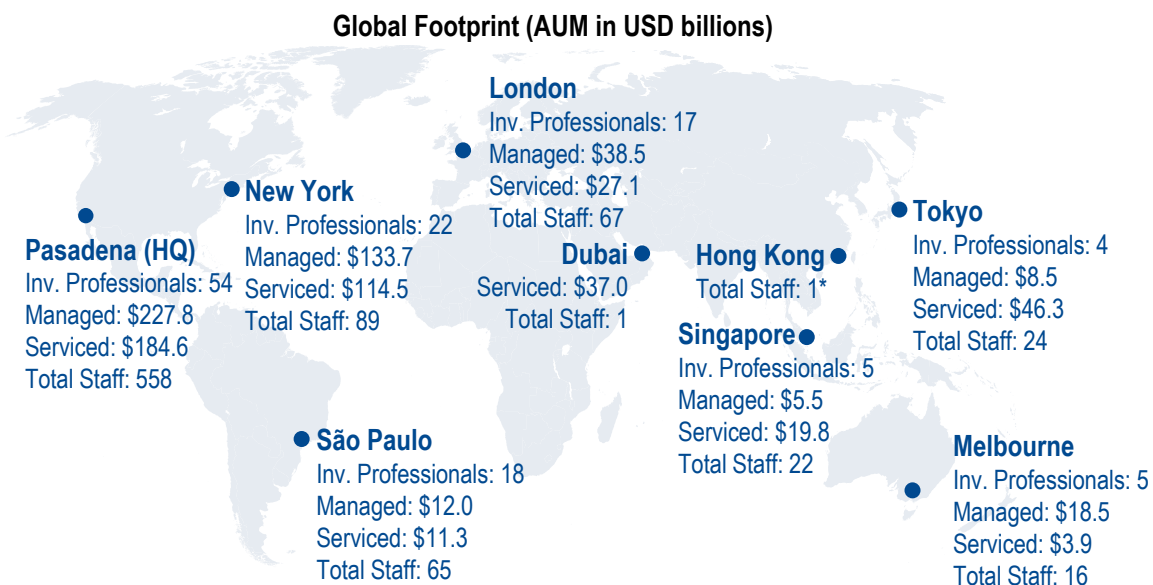
# About Western Asset

Western Asset is a globally integrated fixed-income manager, sourcing ideas and investment solutions worldwide

Western Asset At a Glance	Organizational Pillars	AUM by Sector – Total \$444.5 billion (USD)																		
<ul style="list-style-type: none"> <li>▪ Founded in 1971. Independent affiliate of Legg Mason since 1986</li> <li>▪ Fixed-income value investors</li> <li>▪ \$444.5 billion (USD) AUM                             <ul style="list-style-type: none"> <li>– \$365.4 billion (USD) long-term assets</li> <li>– \$79.1 billion (USD) cash and cash equivalent assets</li> </ul> </li> <li>▪ 842 employees</li> </ul>	<ul style="list-style-type: none"> <li>▪ Clients first</li> <li>▪ Globally integrated</li> <li>▪ Team-based</li> <li>▪ Active fixed-income</li> <li>▪ Integrated risk management</li> </ul>	<table border="1"> <tr><td>Global IG Corporate</td><td>99</td></tr> <tr><td>Sovereign/Treasury</td><td>82</td></tr> <tr><td>Cash &amp; Cash Equivalents</td><td>79</td></tr> <tr><td>MBS/ABS</td><td>56</td></tr> <tr><td>Emerging Markets Debt</td><td>39</td></tr> <tr><td>Global High-Yield</td><td>26</td></tr> <tr><td>US Municipal</td><td>20</td></tr> <tr><td>Global Inflation-linked</td><td>13</td></tr> <tr><td>Other</td><td>30</td></tr> </table>	Global IG Corporate	99	Sovereign/Treasury	82	Cash & Cash Equivalents	79	MBS/ABS	56	Emerging Markets Debt	39	Global High-Yield	26	US Municipal	20	Global Inflation-linked	13	Other	30
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Global High-Yield	26																			
US Municipal	20																			
Global Inflation-linked	13																			
Other	30																			

## Western Asset's Deep Global Integration Allows Us to Source Investment Ideas and Investment Solutions Across Regions

<b>Investment Management</b>	<ul style="list-style-type: none"> <li>▪ 125 investment professionals on five continents and in seven offices</li> <li>▪ 21 years of average experience</li> <li>▪ 38 portfolio and quantitative analysts in portfolio operations</li> </ul>
<b>Client Service &amp; Marketing</b>	<ul style="list-style-type: none"> <li>▪ 172 staff dedicated to client service</li> <li>▪ Specialized teams to meet individual client needs</li> </ul>
<b>Risk Management &amp; Operations</b>	<ul style="list-style-type: none"> <li>▪ Independent risk management function with 40 professionals including 10 PhDs</li> <li>▪ 368 staff dedicated to globally integrated operations</li> </ul>



Source: Western Asset. As of 30 Sep 16  
 \*Splits time between Hong Kong and Singapore offices

# Investment Solutions

Western Asset offers a full range of fixed-income products that can be tailored to meet the needs of our clients

## Identifying Investment Solutions to Align With Client Objectives and Risk Tolerances

- Protect from rising rates
- Protect from inflation
- Preserve capital
- Diversify globally
- Hedge liabilities
- Enhance income
- Generate tax-free income
- Generate total return

### Selected Investment Strategies

#### Broad Market

- Global Core/Core Full Discretion
- Regional Core/Core Full Discretion
- Regional Intermediate
- Global Sovereign

#### Long Duration / LDI

- Long Duration
- Long Credit
- Liability-Driven Investing

#### Inflation-Linked

- US TIPS
- Global Inflation-Linked

#### Credit

- Global Credit
- Investment-Grade Credit
- Global High-Yield
- US Bank Loans
- US High-Yield
- Short-Duration High Income

#### Mortgage / Asset-Backed

- Agency Mortgage-Backed Securities
- Structured Products
- Diversified Loan Opportunities
- MBS Opportunities

#### US Municipals

- Short Duration Muni
- Intermediate Muni
- Managed Muni

#### Unconstrained / Alternatives

- Macro Opportunities
- Total Return Unconstrained
- Global Total Return
- Multi-Asset Credit
- Global Multi-Sector
- Tail Risk Protection

#### Emerging Markets Debt

- EMD Diversified
- EMD Local Currency Sovereign Debt
- EMD USD Corporate Credit
- EMD USD Sovereign
- EMD Total Return

#### Liquidity / Short Duration

- Money Market
- Enhanced Cash
- Limited Duration

# About Western Asset – Clients

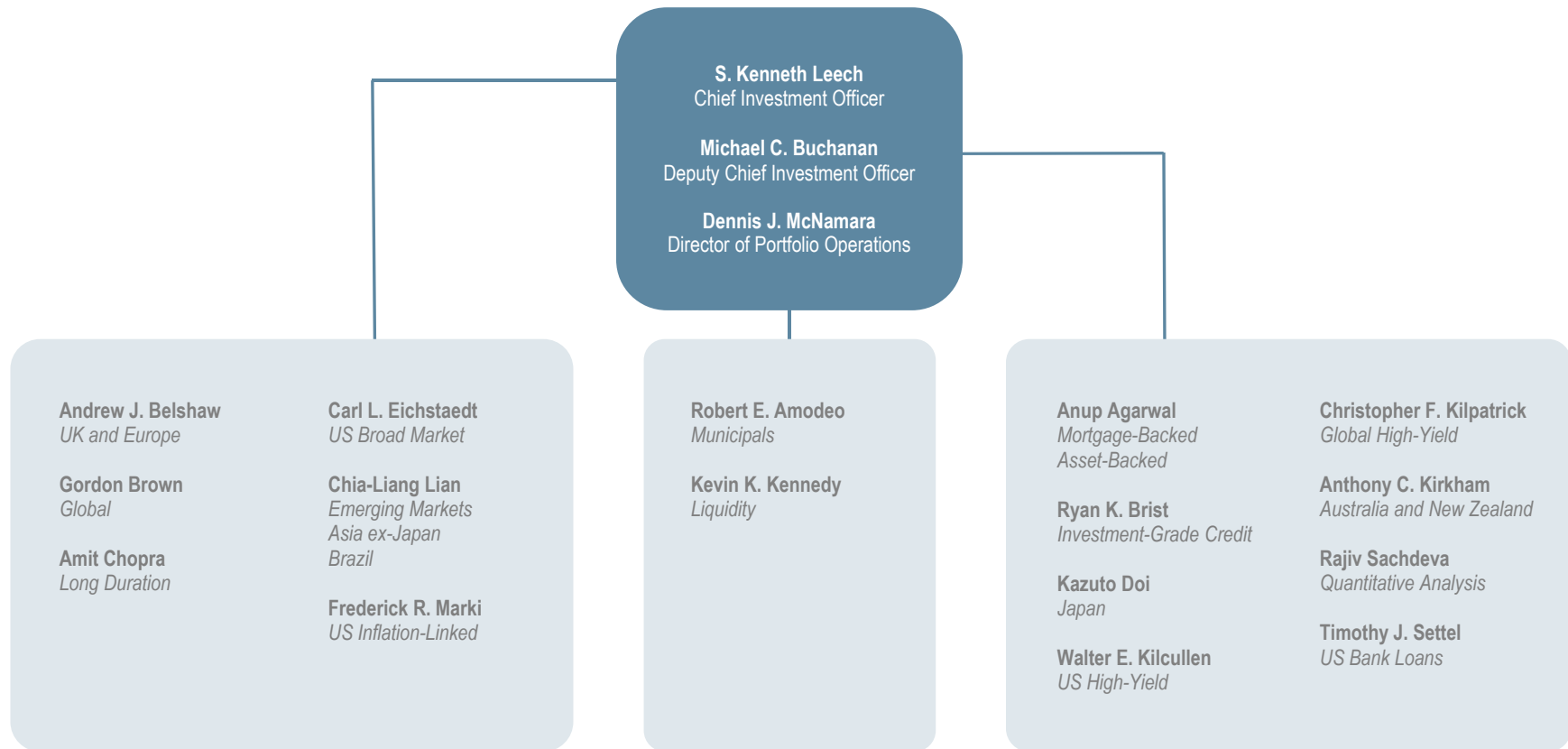
Committed to excellence in client service

## Representative Client List

Corporate	Public / Gov. / Sovereign Wealth	Multi-Employer / Unions	Eleemosynary
<p>Allergan, Inc.                      Allied Domecq Pension Fund                      American Cast Iron Pipe Company                      ArcelorMittal USA Inc.                      AT&amp;T Investment Management Corporation                      Atmos Energy Corporation                      Bayer Corporation                      Campbell Soup Company                      Chrysler LLC                      Clark Enterprises, Inc.                      Consolidated Edison Company Of New York, Inc.                      Consolidated Rail Corporation                      Energy Transfer Partners LP                      Graphic Packaging International Incorporated                      Hawaiian Telcom                      Highbury Pacific Capital Corp.                      International Paper Company                      John Lewis Partnership Pensions Trust                      Lennox International, Inc.                      LyonRoss Capital Management LLC                      Macy's, Inc.                      National Grid USA                      Nestle USA, Inc.                      Nisource, Inc.                      Orbital ATK                      PCS Administration (USA), Inc                      Pensioenfonds Horeca &amp; Catering                      PPG Industries                      Southern California Edison                      Southern Company                      Stichting Pensioenfonds DSM-Nederland                      The Dun &amp; Bradstreet Corporation                      ThyssenKrupp North America, Inc                      Unilever United States, Inc.                      Unisys Corporation                      Vidanova Pension Management</p>	<p>Arkansas Local Police and Fire Retirement System                      California State Teachers' Retirement System                      City of Grand Rapids                      City of Orlando                      compenswiss                      East Bay Municipal Utility District                      ERS of the City of Baton Rouge &amp; Parish of E. BR                      ERS of the State of Rhode Island                      Fire Council Pension Fund                      Fresno County Employees' Retirement Association                      Gloucestershire County Council                      Government of Bermuda Public Funds                      Hampshire County Council                      Indiana State Treasurer's Office                      Iowa Public Employees' Retirement System                      Kansas Public Employees Retirement System                      LA County Employees Retirement Association                      Marin County Employees' Retirement Association                      Minnesota State Board of Investment                      New Jersey Transit                      North Dakota State Investment Board                      Ohio Police &amp; Fire Pension Fund                      Orange County Transportation Authority                      Oregon Investment Council                      Phoenix City Employees' Retirement System                      Public Employee Retirement System of Idaho                      Public School Teachers' Pension and Retirement Fund of Chicago                      Salt River Project Agricultural Improvement and Power District                      School Employees Retirement System of Ohio                      Seattle City Employees Retirement System                      State of Ohio Bureau of Workers Compensation                      Surrey County Council                      Tennessee Valley Authority                      Ventura County Employees' Retirement Association                      Virginia Retirement System                      Washington Metro Area Transit Authority                      Wichita (KS) Retirement Systems                      Wyoming Retirement System</p>	<p>1199SEIU Health Care Employees Pension Fund                      Alaska Electrical Trust Funds                      Automotive Machinists Pension Trust                      Bert Bell / Pete Rozelle NFL Player Retirement Plan                      Boilermaker Blacksmith National Pension Trust                      Carpenters District Council of Kansas City                      Directors Guild of America-PPHP                      Heating, Piping and Refrig Local 602 Pension Fund                      Heavy &amp; General Laborers' Locals 472/172                      IBEW Local 25                      IBEW Local No. 9                      IUOEE Construction Ind Ret Plan, Locals 302 and 612                      Iron Workers Local #11 Benefit Funds                      Line Construction Benefit Fund                      Major League Baseball Players Benefit Plan                      National Asbestos Workers                      National Education Association of the United States                      New England Healthcare Emp Union, 1199, AFL-CIO                      Operating Engineers Local #428 Trust Funds                      Retail Wholesale &amp; Department Store Union                      S. Nevada Culinary &amp; Bartenders Pension Trust Fund                      UA Union Local No. 290 Plumber, Steamfitter &amp; Shipfitter Industry Pension Trust                      United Food &amp; Commercial Workers Union Local 919                      W. Washington Laborers Employers Pension Trust</p>	<p>Abilene Christian University                      Baha'i World Centre                      Bill &amp; Melinda Gates Foundation Trust                      Commonfund                      Creighton University                      Domestic &amp; Foreign Missionary Society ECUSA                      Indiana University                      Saint Louis University                      United Negro College Fund                      University of Southern California                      University of Wisconsin Foundation                      Voelcker Foundation                      Washington College                      Washington State University</p>
			Insurance
			<p>AAA of Northern California, Nevada, &amp; Utah                      American Contractors Insurance Group                      Anthem, Inc.                      Blue Cross Blue Shield of Massachusetts                      Catalina Holdings (Bermuda) Ltd                      Great-West Life &amp; Annuity Insurance Company                      Health Care Service Corporation                      Maryland Automobile Insurance Fund                      Oil Investment Corporation Ltd.                      United Services Automobile Association</p>
			Healthcare
		<p>Abington Memorial Hospital                      Ascension Investment Management                      Baptist Healthcare System, Inc.                      Baylor Scott &amp; White Holdings                      Catholic Health Initiatives                      CHRISTUS Health                      Kaiser Permanente                      LCMC Health                      Lehigh Valley Hospital                      NorthShore University HealthSystem                      Pinnacle Health System                      Sisters of Charity of St. Augustine Health System, Inc.                      St. George Corporation</p>	
			Sub-Advisory
			<p>Asset Management One Co., Ltd.                      AXA                      Cathay Securities Investment Trust Co Ltd.                      Contassur                      Delphi Capital Management Company                      GuideStone Capital Management, LLC                      Legg Mason, Inc.                      Morgan Stanley                      Russell Investment Group                      SEI Investments Management Corporation                      Sumitomo Mitsui Asset Management Company, Limited</p>

As of 31 Oct 16. Please see the Representative Client List Disclosure in the Appendix for more information. All have authorized the use of their names by Western Asset for marketing purposes. Such authorization does not imply approval, recommendation or otherwise of Western Asset or the advisory services provided.

# Investment Management Organization\*



As of 30 Sep 16

\*Illustrates direct-reporting only and does not represent the entire investment management team.

# US Government Capabilities

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## History

- Managing US government mandates since 1986

## Assets

- \$10bn in US government only mandates
- \$18bn in long Treasuries (10+ years average life) held across the Firm

## Approach

- Consultative, customized approach

## Broad Range of Experience With Government-Focused Mandates

	Client Type					
	Foreign Government Agency	University Endowment	US State Pension Plan	US State Pension Plan	US Corporate Pension	US Corporate Pension
<b>Benchmark</b>	Merrill Lynch Treasury Index	BofA Merrill Lynch US Treasury Current 10 Yr	Bloomberg Barclays U.S. Treasury Index	Custom*	Bloomberg Barclays U.S. Treasury Index	Barclays 25+ STRIPS Index
<b>Client's Strategic Objective</b>	FX reserves	Tail Risk Hedge	Equity Offset and Deflation Hedge	Equity Offset and Deflation Hedge	Cash Surrogate "Dry Powder"	LDI Construct, Offsets 'Return Seeking Assets'
<b>Alpha Target</b>	No explicit targets. Exceed return of client's internal team.	25 bps	10 bps	100 bps	Passive	Passive
<b>Tracking Error Target</b>		50 bps	20 bps	225 bps		
<b>Inception</b>	30 Jun 93	13 Sep 13	31 Dec 13	31 Aug 09**	8 Feb 16	May 13 – Feb 16
<b>Select Guidelines</b>	Min 50% UST. Agencies allowed. Max 35% to Agency MBS and AAA ABS. Max 20% Supras. Max 15% to select corporates on approved list. Duration +/- 1.5 yrs	UST only Duration +/- 20%	UST (incl. TIPS) and Agency allowed. Futures allowed. Duration +/- 1.0 yrs	Broad latitude overall as the long government component is wrapped into a custom broad market benchmark.	UST only Duration +/- 0.25 yrs	UST STRIPS Only

\* Custom benchmark = 62.5% Bloomberg Barclays US Government Long Bond Index, 18.75% Bloomberg Barclays US Securitized Index, 18.75% Bloomberg Barclays US Investment Grade Corporate Index

\*\* Current benchmark adopted 10/1/15

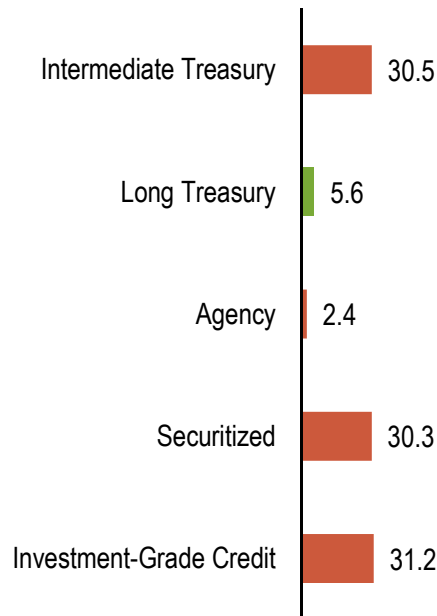
## The Case for Long Treasuries

# Know Your Index

November 30, 2016

## Bloomberg Barclays U.S. Aggregate Index Benchmark Characteristics

- Market Value (\$) 19.03 trillion
- Effective Duration (years) 5.86
- Yield-to-Worst (%) 2.57

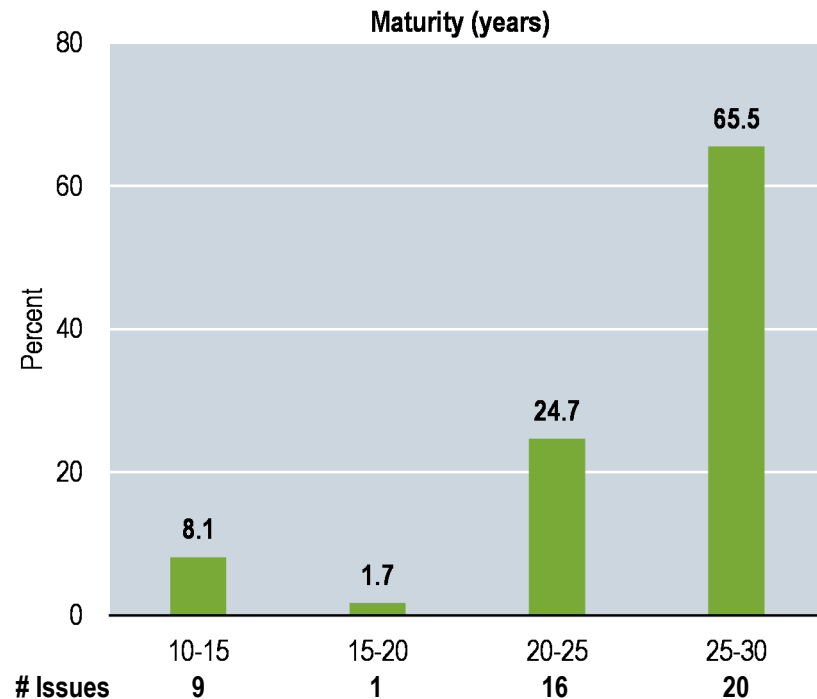


**Broad based fixed income flagship benchmark of investment grade, US denominated, taxable fixed-rate debt with at least one year to maturity**

Source: Bloomberg Barclays, Western Asset

## Long Treasury Benchmark Characteristics

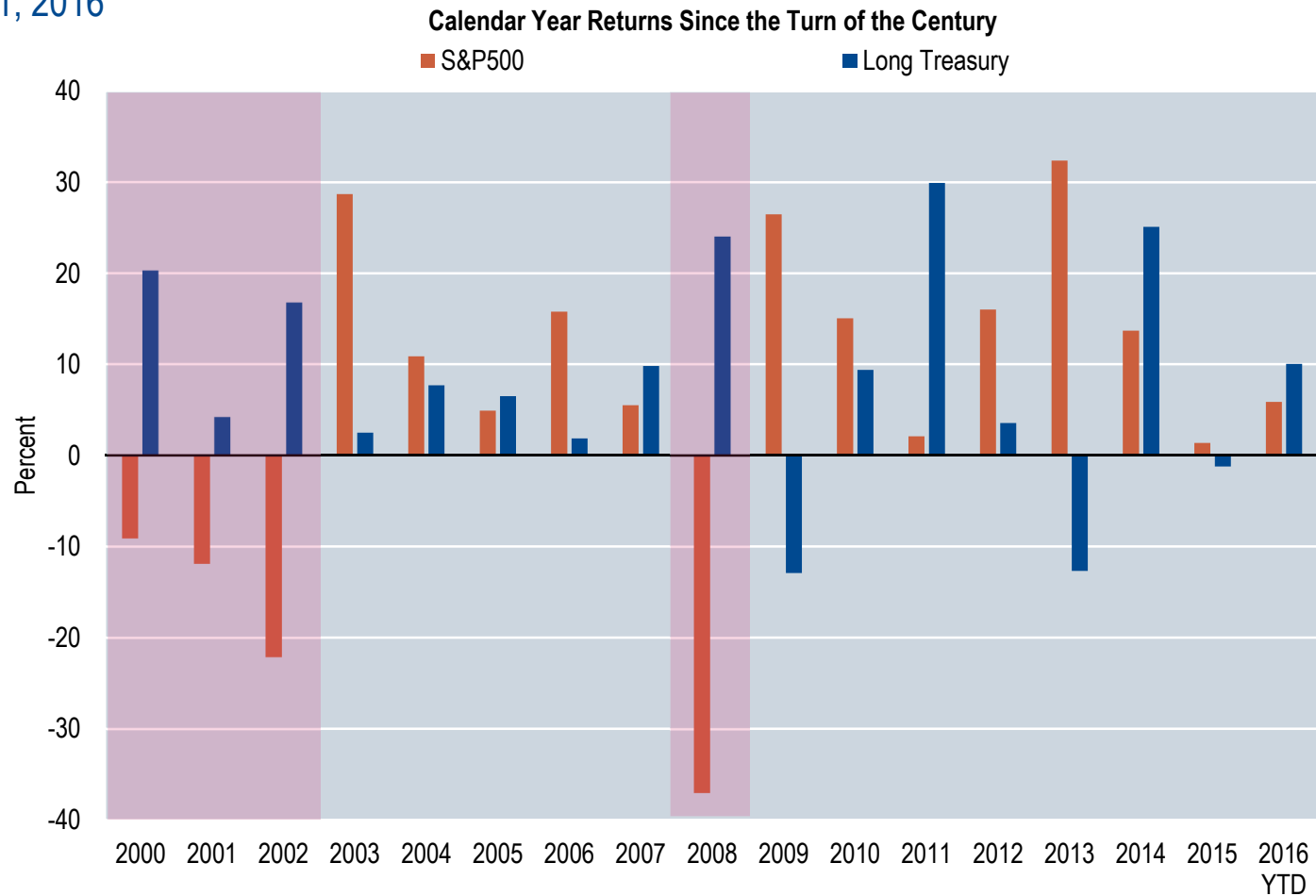
- Market Value (\$) 1.07 trillion
- Effective Duration (years) 17.55
- Yield-to-Worst (%) 2.94



**Index of fixed-rate Treasury bonds with at least ten years to maturity**

# Long Treasuries Outperform in “Risk-Off” Periods

October 31, 2016

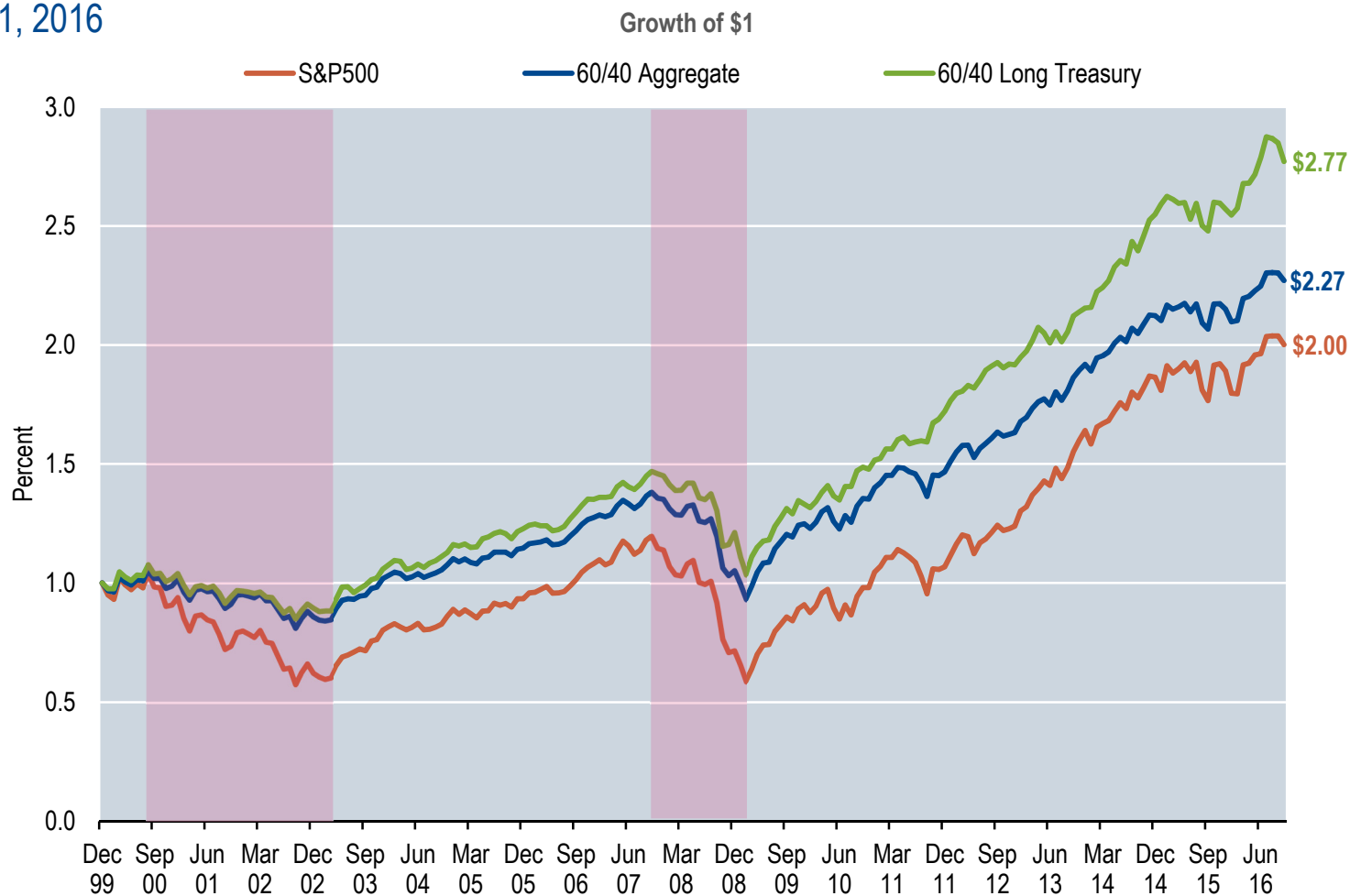


	S&P 500	Long Treasury
Annualized Return Since 2000 (%)	4.17	7.88
Correlation (2000 to Oct. 2016)	-0.29	

Source: Bloomberg Barclays, Western Asset

# Long Treasuries Have Provided Favorable Diversification Benefits

October 31, 2016



	S&P 500	60/40 S&P/Agg	60/40 S&P/Tsy
Annualized Return (2000 to Oct. 2016, %)	4.17	4.94	6.18
<b>Peak-to-Trough Equity Drawdowns</b>			
Aug-'00 to Mar-'03 Drawdown (%)	-42.51	-19.82	-18.05
Oct-'07 to Feb-'09 Drawdown (%)	-50.95	-32.54	-29.59

Source: Bloomberg Barclays, Western Asset

## People, Philosophy and Process

# People

The US Government investment team leverages Western Asset's global investment capabilities

## US Government Investment Team



### Portfolio Analysts

Jay Lin, CFA  
Portfolio Analyst

Nicholas Mastroianni  
Portfolio Analyst

Rafael Zielonka, CFA  
Portfolio Analyst

### Risk Management

Alan M. Nadel, PhD  
Portfolio Risk Manager

Scott A. Spear, PhD  
Manager, US Portfolio Risk

### Product Specialists

James J. So, CFA  
Product Specialist

## Western Asset Investment Team

### Investment Management Professionals

- Chief Investment Officer: S. Kenneth Leech
- Deputy CIO: Michael C. Buchanan
- 127 Investment Professionals on five continents and seven offices, as of June 30, 2016
- 21 years of average experience

### Major Investment Committees

- Global Investment Strategy Committee
- Global Credit Committee
- US Broad Strategy Committee
- Global Emerging Markets Strategy Committee
- Unconstrained Asset Allocation Committee

### Sector and Regional Teams

- |                    |               |
|--------------------|---------------|
| ▪ Global credit    | ▪ US          |
| ▪ Investment-grade | ▪ Europe      |
| ▪ High-yield       | ▪ UK          |
| ▪ Emerging markets | ▪ Japan       |
| ▪ MBS/ABS          | ▪ Asia        |
| ▪ Long duration    | ▪ Brazil      |
| ▪ US municipal     | ▪ Australia / |
| ▪ Liquidity        | New Zealand   |
| ▪ Insurance        |               |

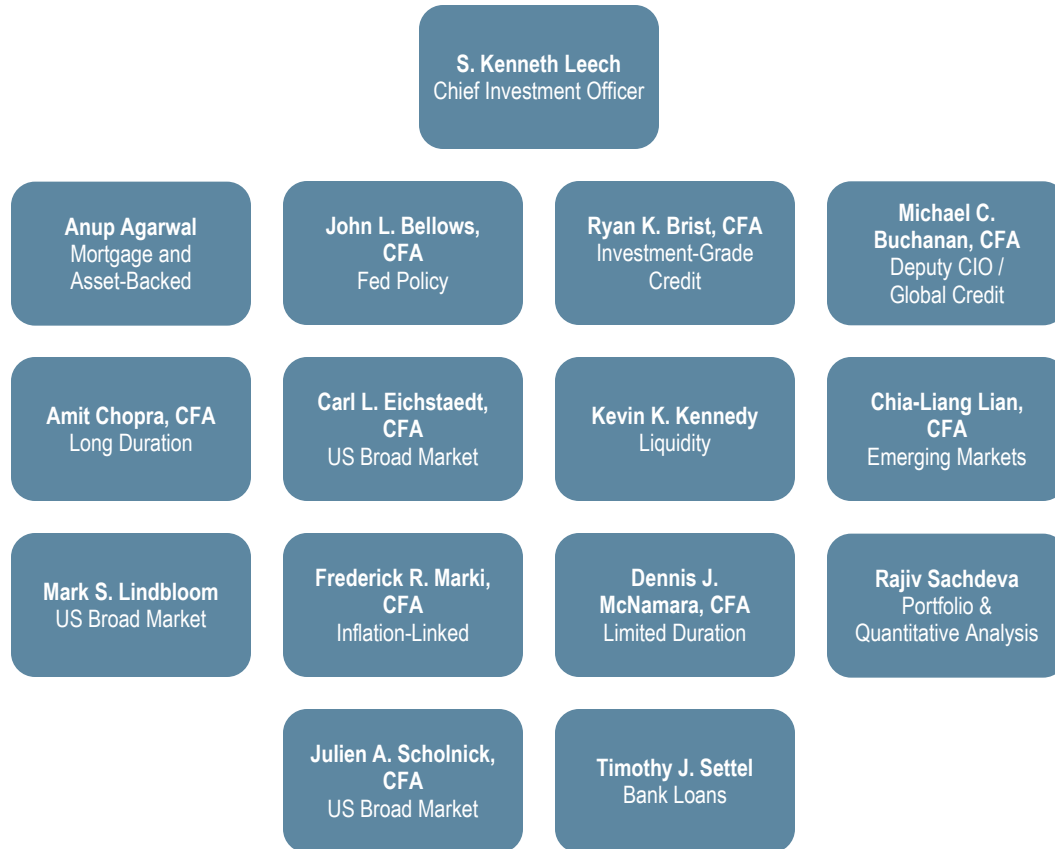
### Independent Risk Management Function

- Chief Risk Officer: Kenneth J. Winston, PhD
- Independent evaluation of strategies and risks in portfolios
- Market and Credit Risk Committee
- 40 investment risk professionals of which 10 are PhDs, across four offices, as of June 30, 2016

# People

The US Broad Strategy Committee sets the overall themes for the US broad market investment strategies.

## US Broad Strategy Committee



- Sets macro and sector investment themes
- Meets weekly to evaluate and establish the US investment outlook over a 6-9 month horizon.
  - Within the context of our global investment outlook
  - Based on long-term economic developments and market valuations
  - Leveraging sector input and broad top-down analysis
- Evaluates risk factors and potential scenarios. Sets the risk tone for US investment strategies

# Investment Philosophy

These are the core beliefs that drive our investment decision-making

## Long-term fundamental value

- **Markets often misprice securities.** Prices can deviate from fundamental fair value, but over time, they typically adjust to reflect inflation, credit quality fundamentals and liquidity conditions. Consistently investing in undervalued securities may deliver attractive investment returns.
- **We can systematically identify mispricings.** We believe we can identify and capitalize on markets and securities that are priced below fundamental fair value. We do this through disciplined and rigorous analysis, comparing prices to the fundamental fair values estimated by our macroeconomic and credit research teams around the globe.
- **Our portfolios emphasize our highest convictions.** The greater the difference between our view of fair value and markets' pricing, the bigger the potential value opportunity. The greater the degree of confidence in our view of fundamentals, the greater the emphasis of the strategies in our portfolios.

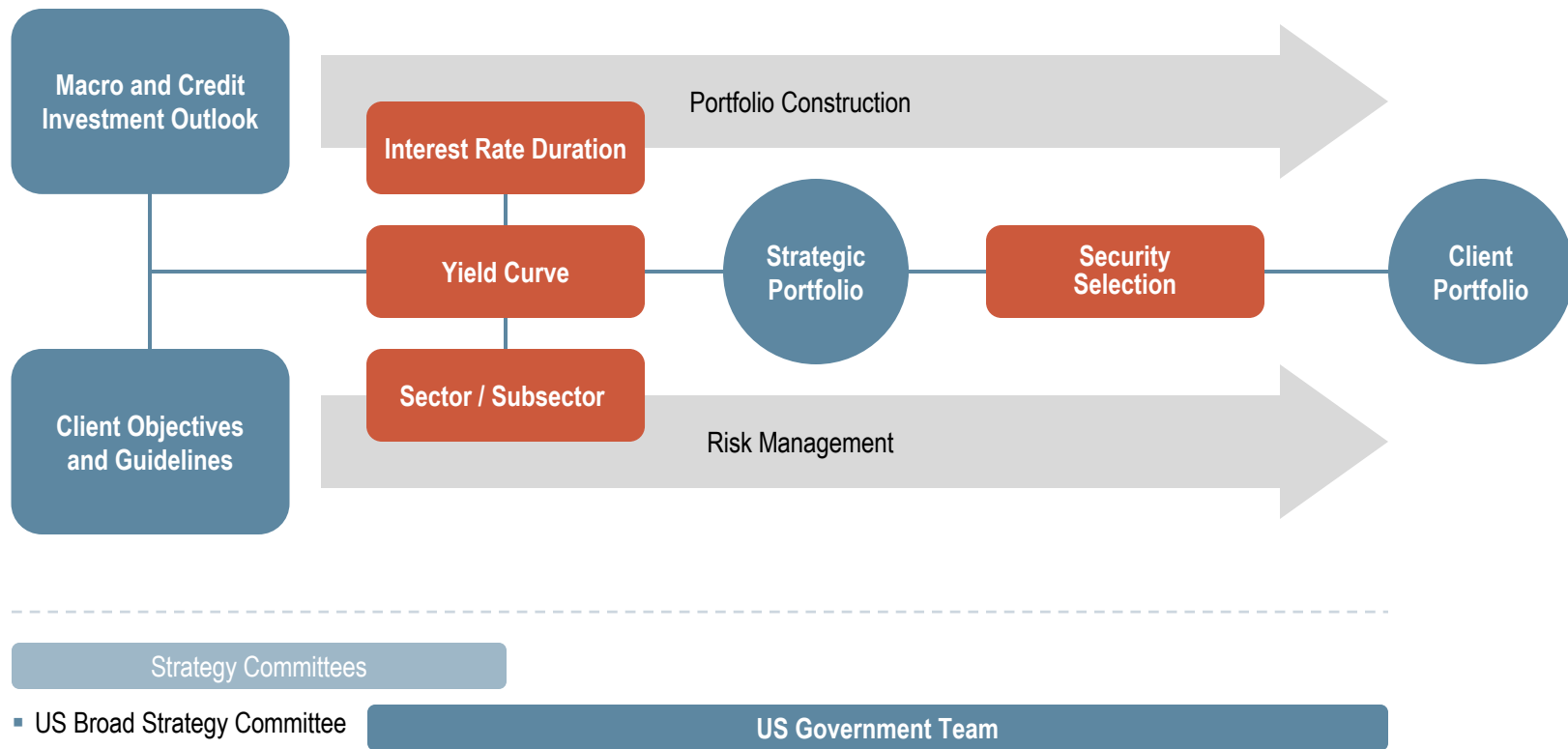
## Multiple diversified strategies

- **We seek diversified sources of returns.** Our objective is to meet or exceed our investors' performance objectives within their tolerances for risk. We seek to diversify investments and add value across interest rate duration, yield curve, sector allocation, security selection, country and currency strategies. We deploy multiple diversified strategies that benefit in different environments so no one strategy dominates performance, helping to dampen volatility.

# Investment Process

Our time-tested investment process is designed around our value philosophy and our team-based approach.

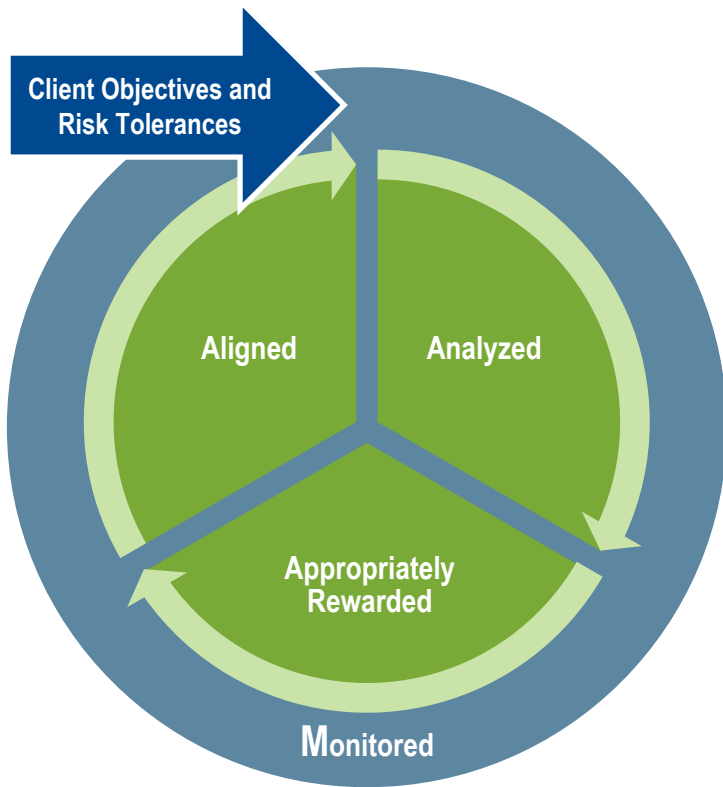
## US Government Investment Process and Team Interaction



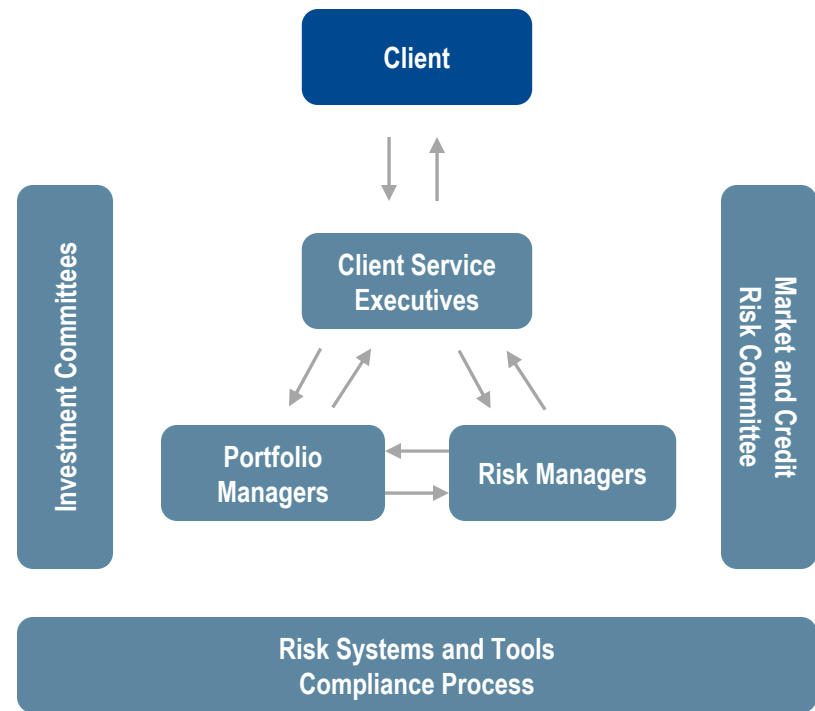
# Risk Management

In our culture, effective risk management is critical to successful portfolio management

Integrating risk management into portfolio construction and in the independent review of portfolio risks strengthens its effectiveness.



Risk management is a team effort. Robust communication and escalation procedures underpin the independence and transparency of risk management.



## Model Portfolio

# Model Portfolio Considerations

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## CURRENT UNDERSTANDING OF MANDATE

### Strategic Objective

- “Crisis risk offset” allocation

### Benchmark

- Bloomberg Barclays US Treasury Long Index

### Eligible Securities and limits

- Tracking error: 2%
- Agency MBS: max. 50%
- U.S. Treasuries: max. 100%
- Non-U.S. Dollar Treasury Denominated: No
- Only Treasuries and Agencies are allowed
- Non-benchmark: max. 50%
- Duration range: +/- 10% of benchmark

## MODEL PORTFOLIO COMMENTS

### Structural Biases for Long Treasury Portfolios

- Curve-steepener
- Overweight duration
- Liquidity premium
- Volatility premium

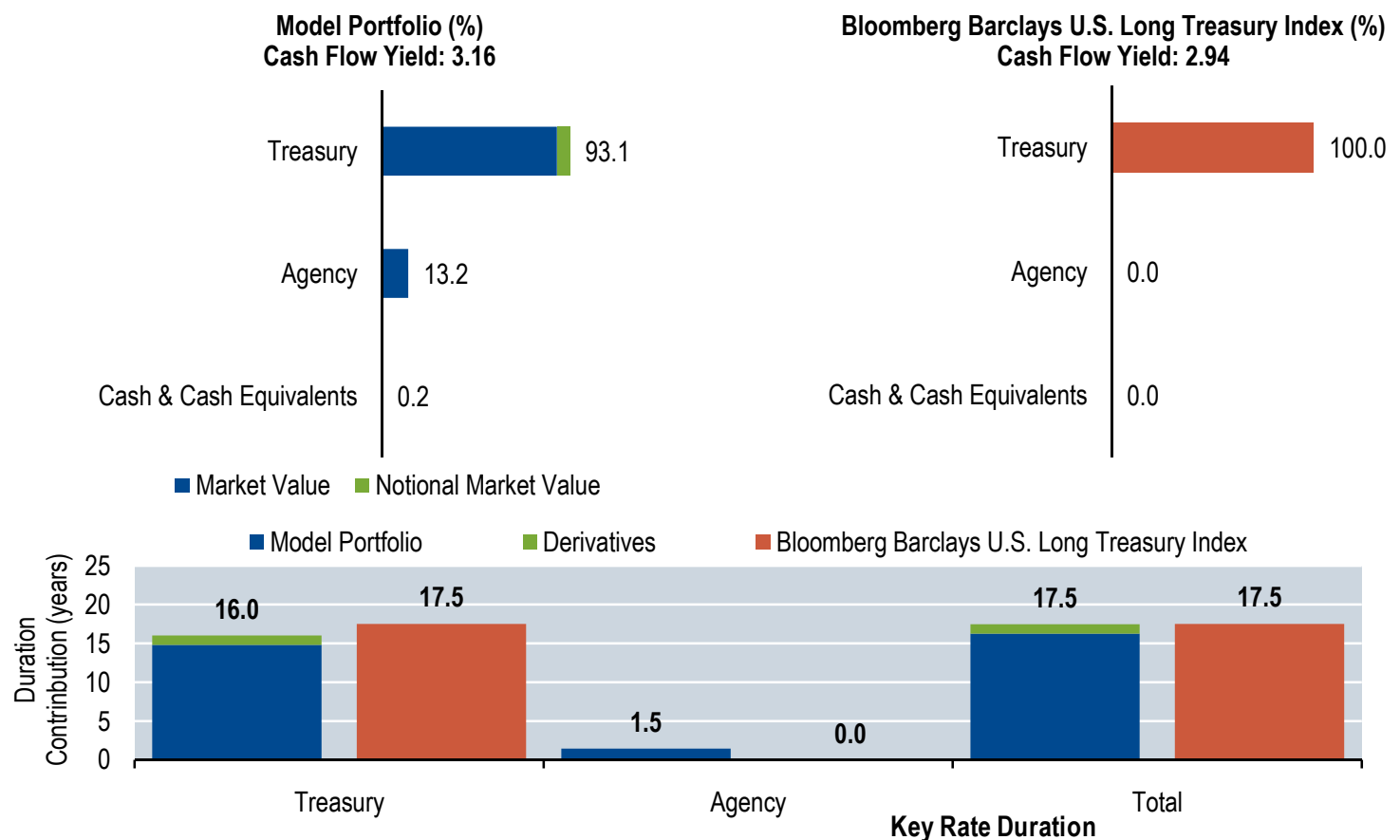
### Portfolio Construction Notes

- SUMMARY: high quality portfolio with specific tilts to enhance base case yield
- Curve-steepener (~1.25yrs) provides additional “carry”/return
- Duration is flat relative to the benchmark due to the risks around potential changes to fiscal, monetary, and regulatory environment
- Model portfolio out-yields the benchmark by 22 basis points (0.22%)
  - Yield enhanced through modest allocations to less liquid securities such as agency debentures, STRIPS<sup>1</sup>, and off-the-run Treasuries

<sup>1</sup>Separate Trading of Registered Interest and Principal of Securities

# Sector Exposure

December 5, 2016



Name	Key Rate Duration						Duration
	0.5-Year	2-Year	5-Year	10-Year	20-Year	30-Year	Contribution
Barclays U.S. Long Treasury Index	0.00	0.02	0.07	0.72	5.71	11.00	17.52
<b>Model Portfolio</b>	<b>0.00</b>	<b>0.00</b>	<b>0.14</b>	<b>0.90</b>	<b>0.20</b>	<b>-1.27</b>	<b>-0.04</b>

\*Represents active exposure

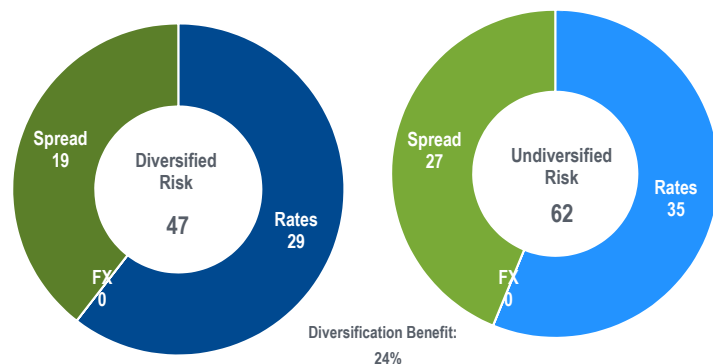
Note: Sector exposure includes look-through to any underlying commingled vehicles if held. All weightings are a percentage of total market value. A negative cash position may be reported, which is primarily due to the portfolio's unsettled trade activity. Data may not sum due to rounding. The benchmark does not provide an allocation to the "Emerging Markets" sector. The emerging market sector allocation shown for the benchmark above is based on Western Asset's emerging market countries definition for comparison purposes.

# WISER Risk Report, US Long Treasury Model Portfolio



Benchmark: Bloomberg Barclays U.S. Long Treasury Index  
Portfolio MV (millions, USD): 315

As of December 5, 2016



Annual Tracking Error Standard Deviation (bps)	
Ex-Post	
Ex-Ante	47
Risk Target	

Volatility Ratio	
Ex-Post	
Ex-Ante	1.00

Spread Risk	Active MV (%)	Undiversified Risk (bps)	Diversified Risk (bps)
Agency	13.2%	27	19
Treasuries	-13.4%	0	0
Cash	0.2%	0	0

Rates Risk	Active Duration (yrs)	Undiversified Risk (bps)	Diversified Risk (bps)
USD Rates	-0.04	35	29
Duration by Tenors			
Short (6m+2y)	-0.01	0	0
Intermediate (5y+10y)	1.05	91	12
Long (20y+30y)	-1.08	94	17
Duration by Level/Slope Factors			
Level (10y)	-0.03	3	0
Slope (5/30s)	-0.61	33	24

Scenario Analysis: Scenarios		Rates	FX	Credit	Total Return
Historical	Return to pre-Lehman	-2,566	0	-102	-2,668 ■■■■
	Return to November 2008	-988	0	-158	-1,146 ■■■■
	Replay Jun '07 to Nov. '08 with Carry	2,912	0	-141	3,244 ■■■■
	Return to June 2007	-3,904	0	-17	-3,921 ■■■■
	Replay Russia Crisis 1998	727	0	0	727 ■■■■
	Return to LT Median	-868	0	-7	-876 ■■■■
	Replay May and June 2013	-1,117	0	-11	-1,129 ■■■■
Forward	Market Unchanged, 1y horizon	0	0	0	316 ■■■■
Looking	Eurozone Continued Uncertainty	214	0	-11	203 ■■■■
	Eurozone Controlled Breakup	1,068	0	-21	1,047 ■■■■
	China Slowdown	1,424	0	-74	1,350 ■■■■

Note: This risk dashboard is for illustrative purposes only and reflects Western Asset's best efforts to identify and measure the major sources of risk in the portfolio. Results depicted are dependent on an underlying statistical model and/or varying market conditions and are therefore subject to change without notice. There is no guarantee that ex-ante risk measures will be in line with their ex-post realizations.

## Appendix

# Biographies

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## **AMIT CHOPRA**

*18 Years Experience*

- Western Asset Management Company – Portfolio Manager, 2016-
- Pacific Investment Management Company – Senior Vice President, Portfolio Management, 2008-2016
- Pacific Investment Management Company – Vice President, Supervisor Trade and Portfolio Analytics, 2001-2007
- Blackrock Financial – Associate, 1998-2001
- *University of Southern California, B.S.*
- *Chartered Financial Analyst*

## **FRANCES L. COOMBES**

*18 Years Experience*

- Western Asset Management Company – Client Service Executive, 1998-
- *Columbia University, School of International and Public Affairs, M.P.P.*
- *University of California, Berkeley, B.A.*

*Western Asset experience reflects current position title and hire date.*

## *Long Duration Investment Outlook*

## Summary

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**Global growth will remain slow and sustainable with US GDP potentially getting a near-term boost from Trump policies**

**Global Inflation will remain subdued**

**Central banks will continue aggressive accommodative policies but the FED may diverge**

**Treasuries and sovereign bonds continue to be underpinned by global factors and low policy rates**

**Spread sectors, especially the US consumer dependent, will continue to provide attractive returns but valuations will be challenged if discount rates move higher**

# **New Considerations: President-Elect Trump's policies and their potential impact**

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**Fiscal Policy – Higher spending**

**Structural Policies – Tax and Regulation relief**

**Trade Policy – Greater protectionism**

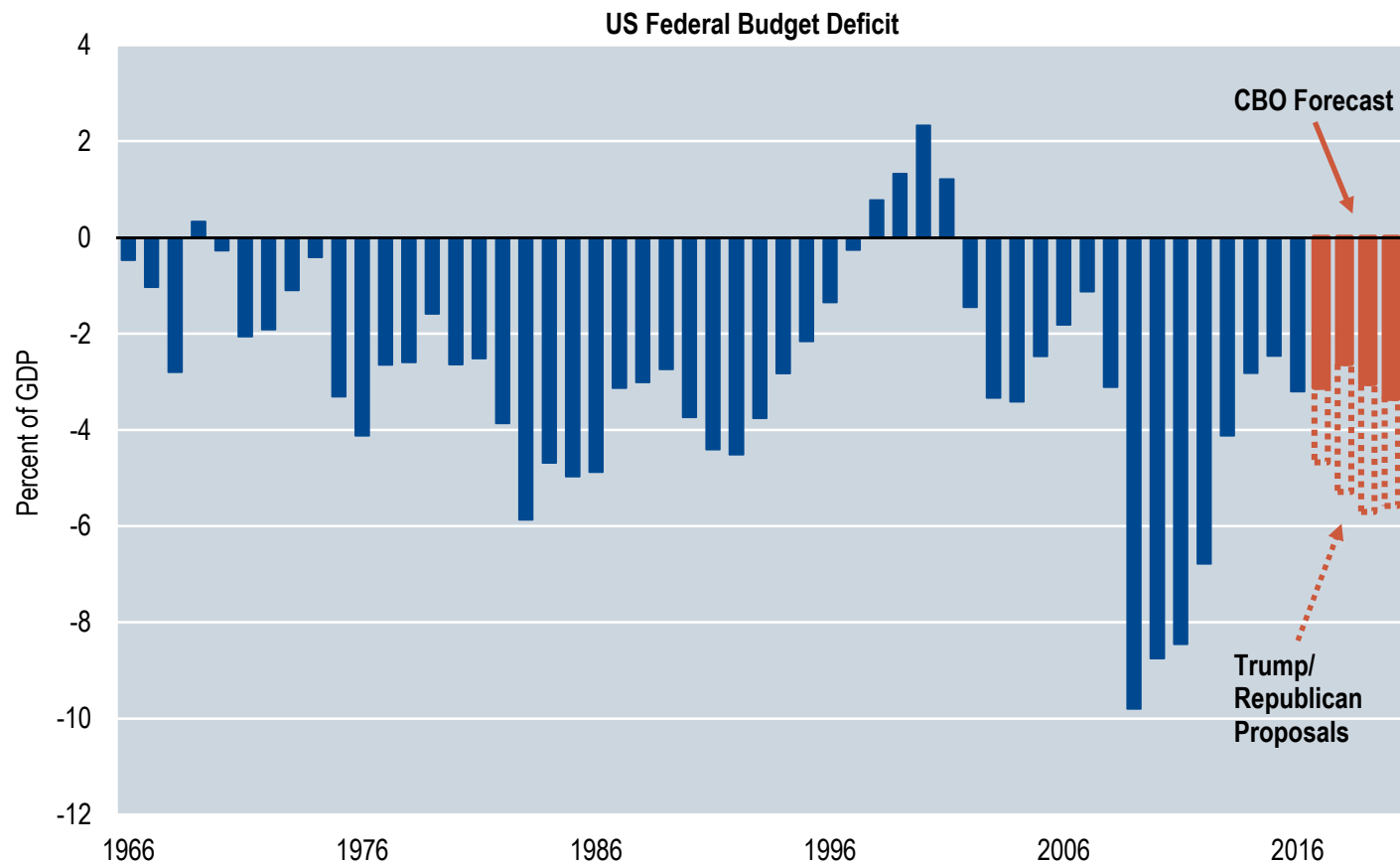
**Monetary Policy – More hawkish**

**Immigration Policy – More restrictive**

**Foreign Policy – Unclear and a potential risk**

# Trump Has Proposed Looser Fiscal Policy

Outstanding questions: Will deficit concerns constrain size of fiscal easing? Will Senate Democrats back infrastructure spending?

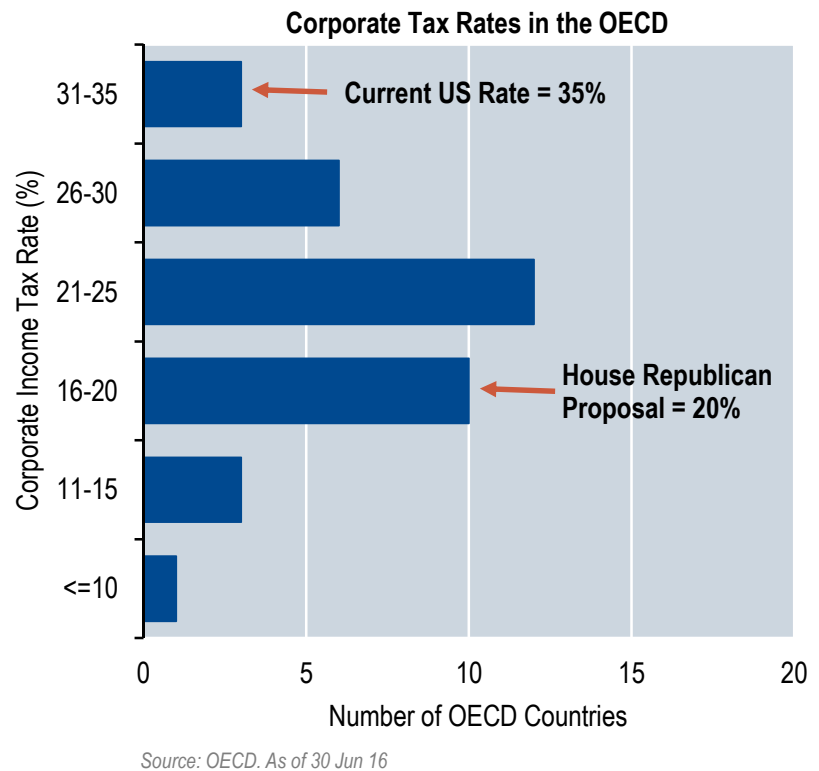
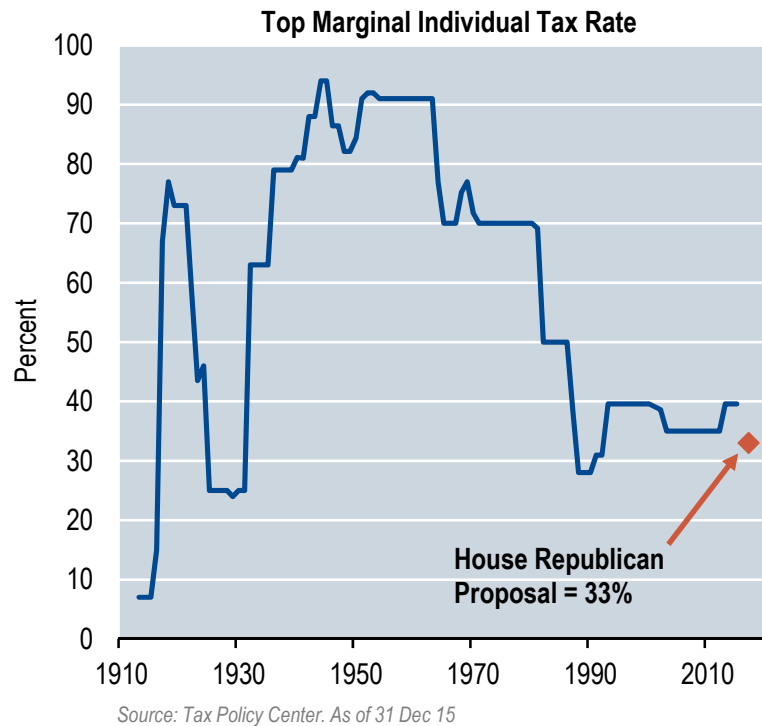


Source: Congressional Budget Office, Tax Policy Center. As of 15 Sep 16

Note: The Tax Policy Center estimates the House Republican tax reform would increase the deficit by 1.3% in 2017 and 2% in 2018 and 2019. Estimates for additional spending are less precise, but here assumed to be \$500bn over coming five years.

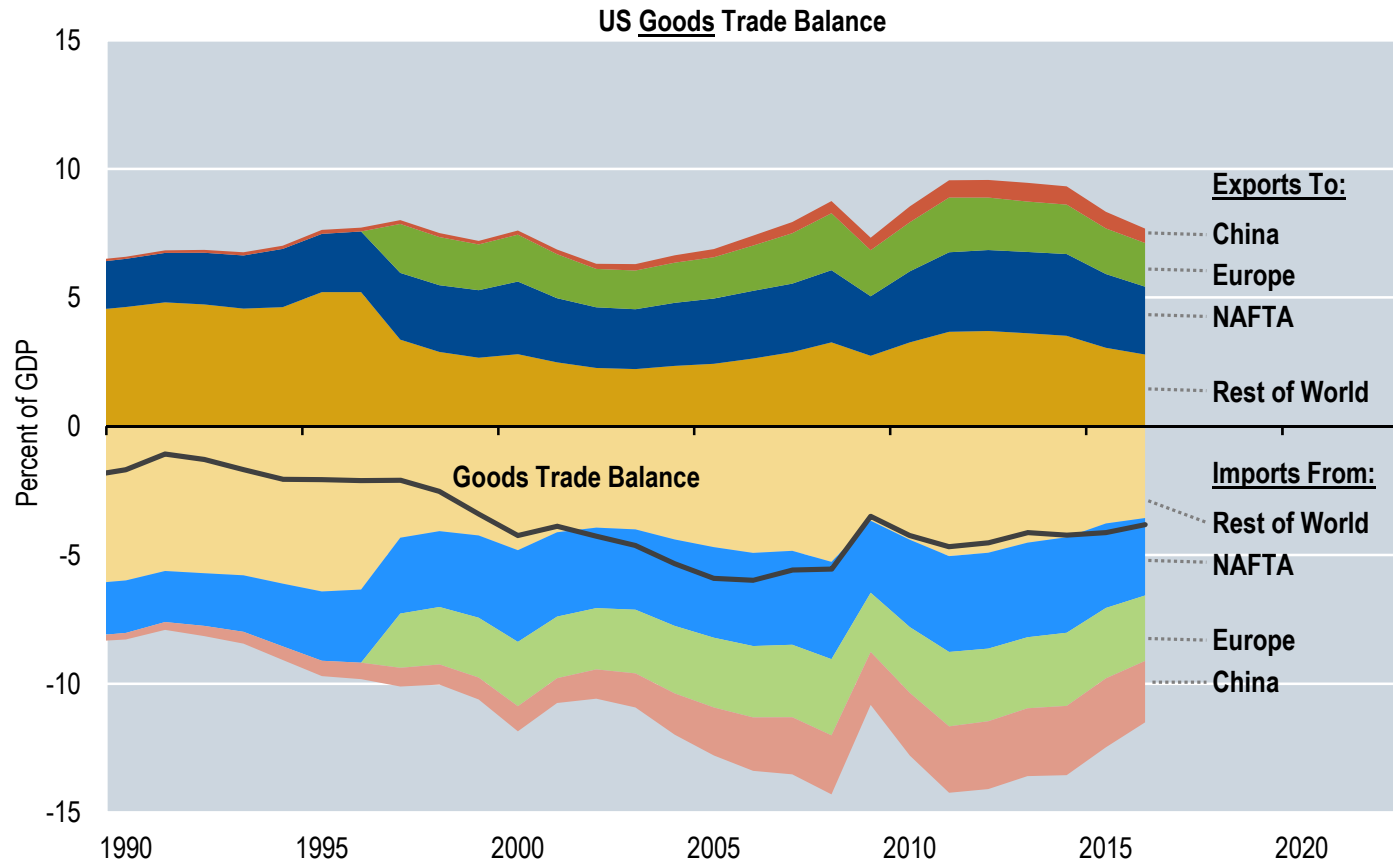
## Tax Reform is Likely to Be Early Focus

Outstanding questions: Which “loopholes” will be closed? How will foreign profits be treated? Will there be more significant changes to structure of corporate taxes (e.g. taxing imports, deductibility of interest payments)?



## Trade Policy

Trump pledged to name China a currency manipulator and suggested he would renegotiate NAFTA. This could be very disruptive to growth given the gross amount of US exports and imports of goods.



Source: US Census Bureau. As of 30 Sep 16

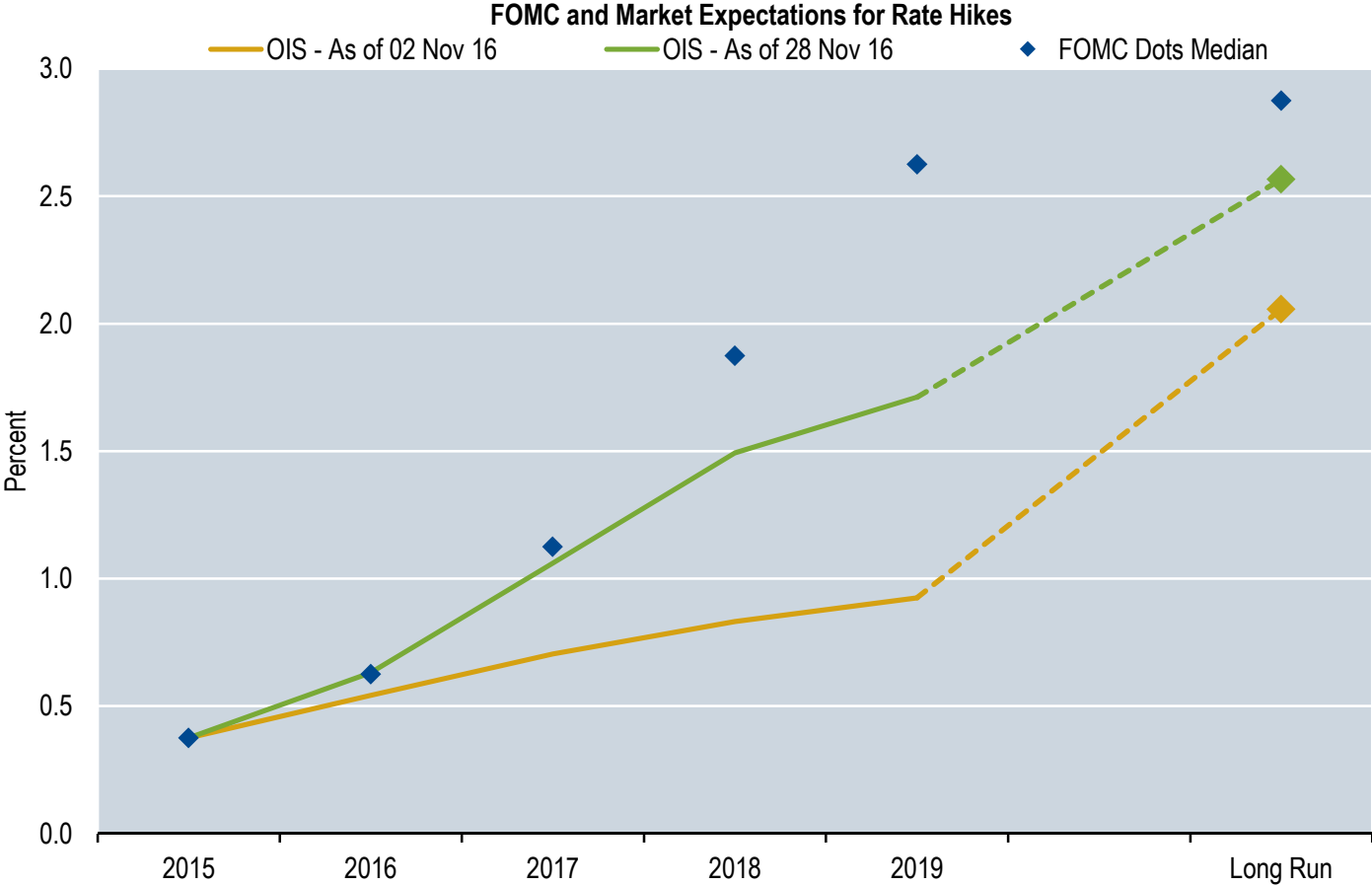
Note: This chart shows only the goods trade balance.

The US runs a services trade surplus with the world of about 1.25% equal to approximately of GDP.

The US current account deficit is approximately 2.5% of GDP: -3.75% goods deficit + 1.25% of service surplus.

# Monetary Policy Will Respond to Changes in the Outlook

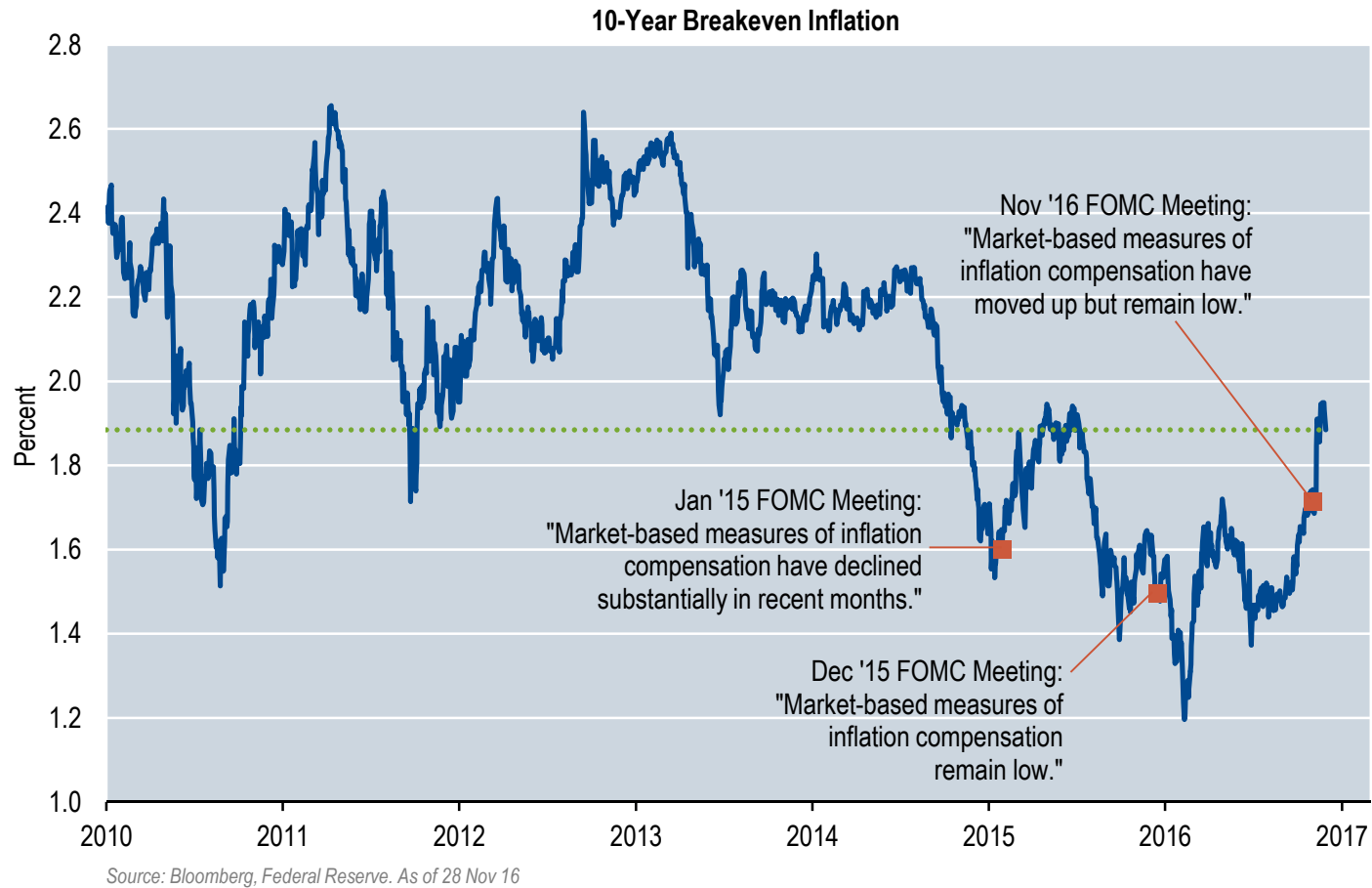
Following the change in the outlook for fiscal policy and growth, expectations for Fed hikes have moved closer to the FOMC's own expectations



Source: Bloomberg, Federal Reserve. As of 28 Nov 16  
 OIS = Overnight indexed swap

# Inflation Expectations Suggest "Gradual" Approach to Rate Hikes

Although they have rebounded significantly following Trump's election, inflation expectations remain lower than mid-2014 levels



# Alternative Trump Investment Themes – Markets leaning towards risk-on case

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## Case – Risk-off

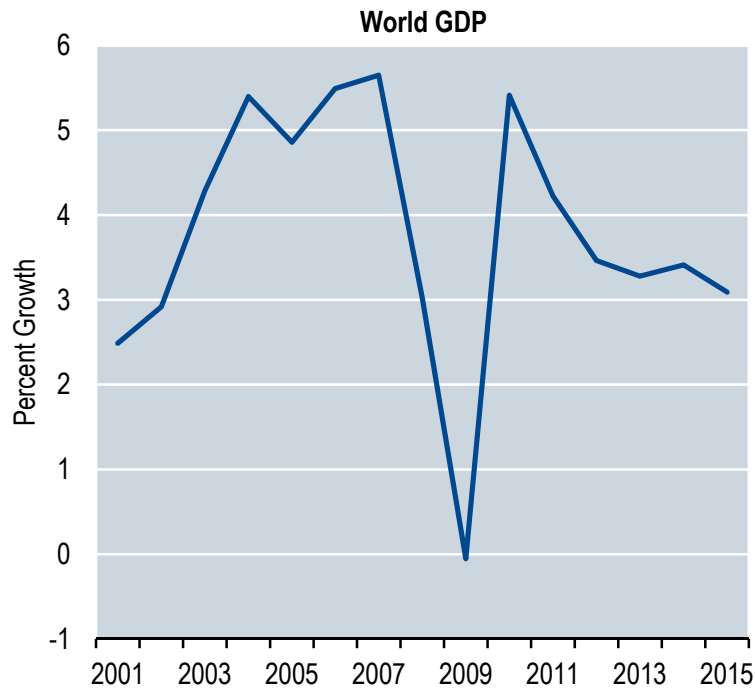
- Protectionism (Mexico, China)
- Immigration (Mexico)
- Currency policy (China)
- Anti-globalization — Global recession?

## Case – Risk-on

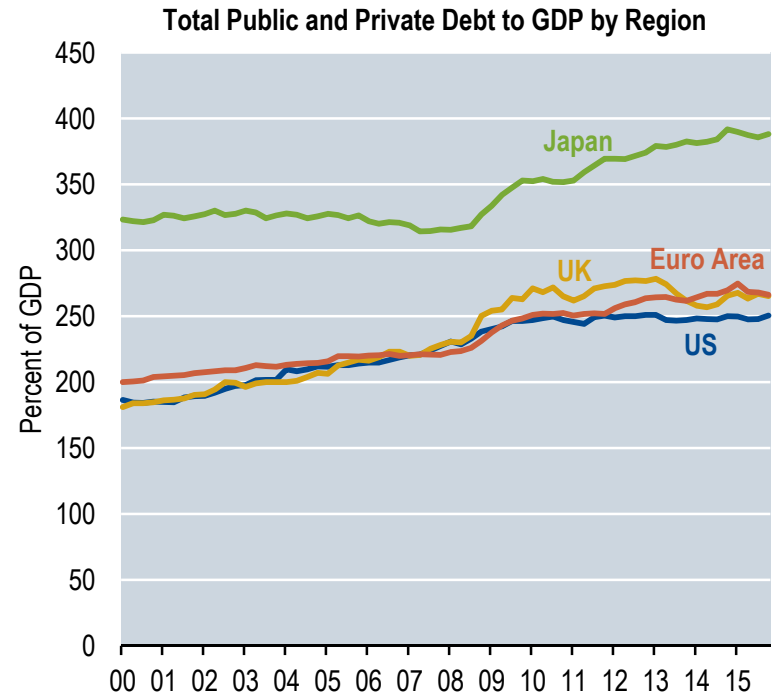
- Cut taxes
- Increased infrastructure spending
- Reduced regulations
- Most pro-business president ever?

## Macro Outlook – Growth and Inflation

Global growth is slow but sustainable at about 3%. The US likely gets a boost but global structural impediments to growth remain. Namely debt levels, demographics, reduced trade, productivity and a growing public sector. A stronger USD and higher rates in the US will also hold back growth.

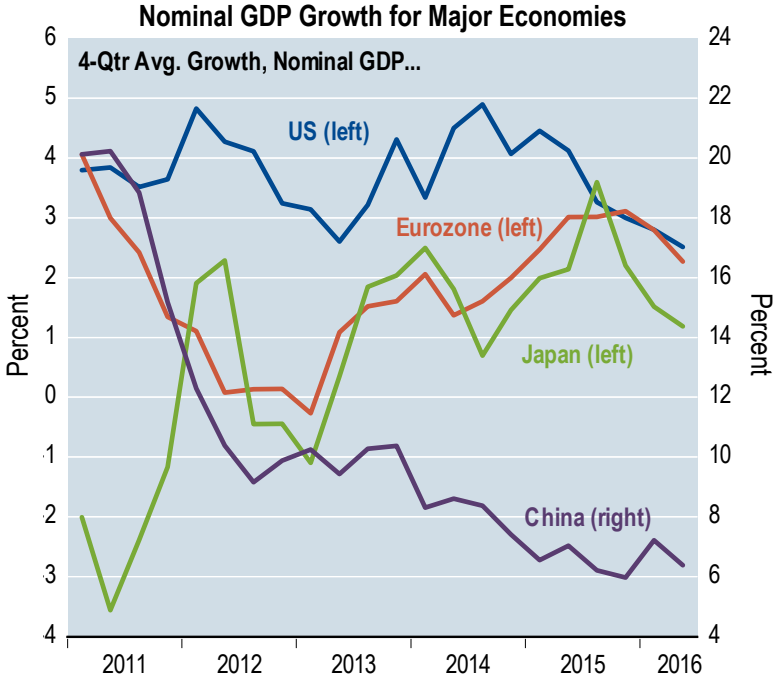


Source: International Monetary Fund. As of 31 Dec 15  
Note: Reflects real GDP



# Macro Outlook – Weak Global Demand

Global demand remains weak with slowing nominal GDP and muted inflation in major economies.



Source: Bureau of Economic Analysis, Bloomberg, Eurostat. As of 30 Sep 16



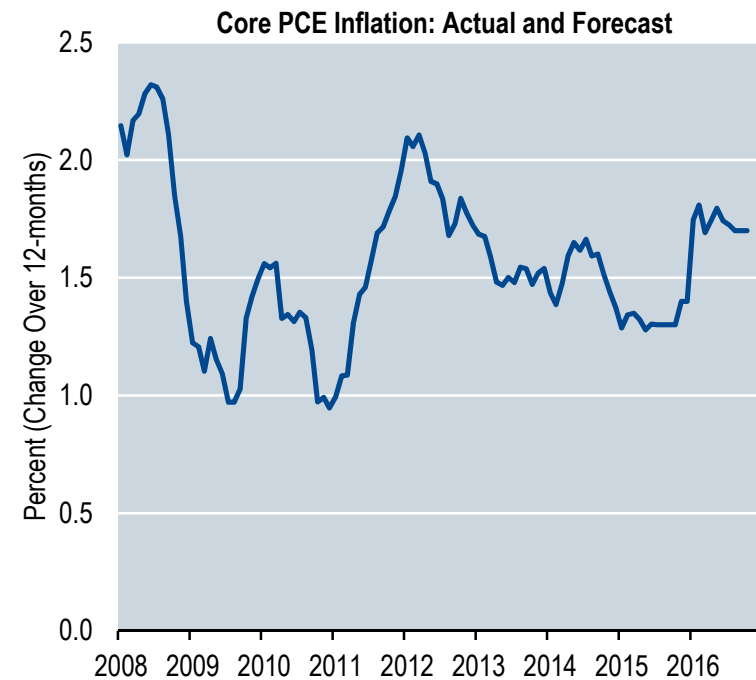
Source: Bloomberg. As of 30 Sep 16

## Monetary Policy – The Fed Will Remain Very Cautious Due to Global Influences

U.S. employment and inflation readings might argue for a rate hike but the weak global picture has forced the Fed to remain very cautious



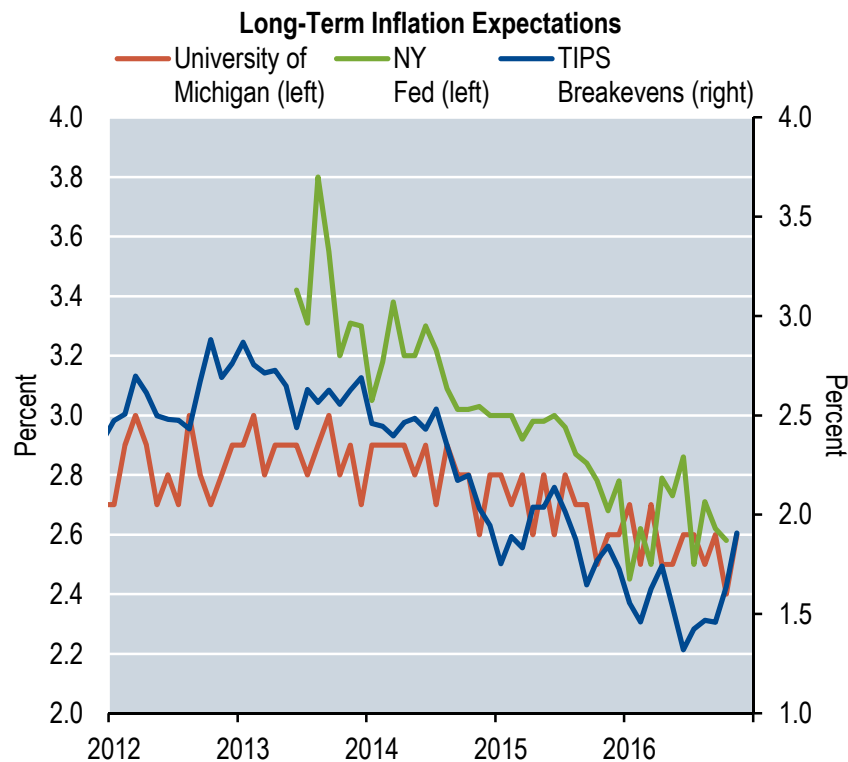
Source: Federal Reserve, Bureau of Labor Statistics. As of 31 Oct 16



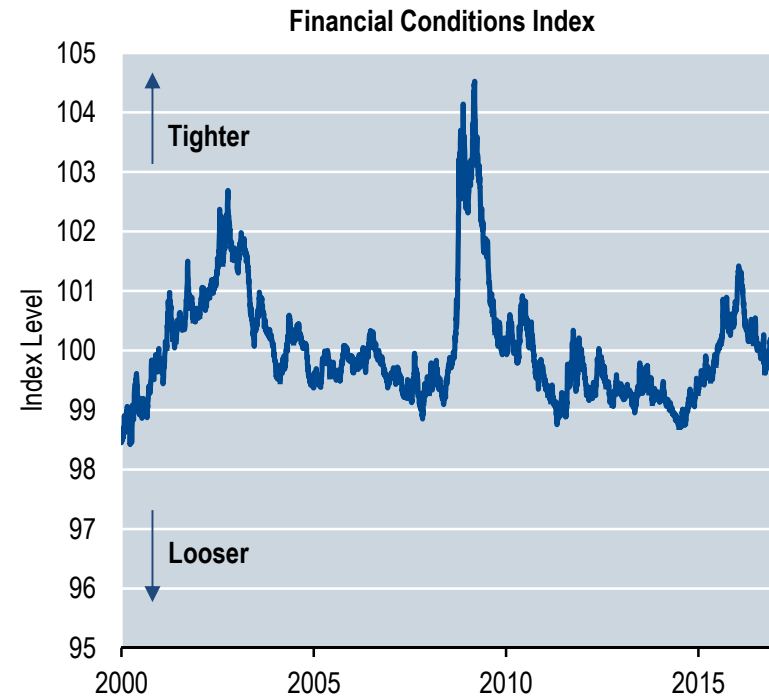
Source: Federal Reserve, Census Bureau. As of 31 Oct 16

## Monetary Policy – Fed is likely to hike in December

Markets are pricing in two more hikes in 2017. But the Fed will look for signs from 1. Economic growth, 2. Realized and expected inflation, and 3. Financial conditions.



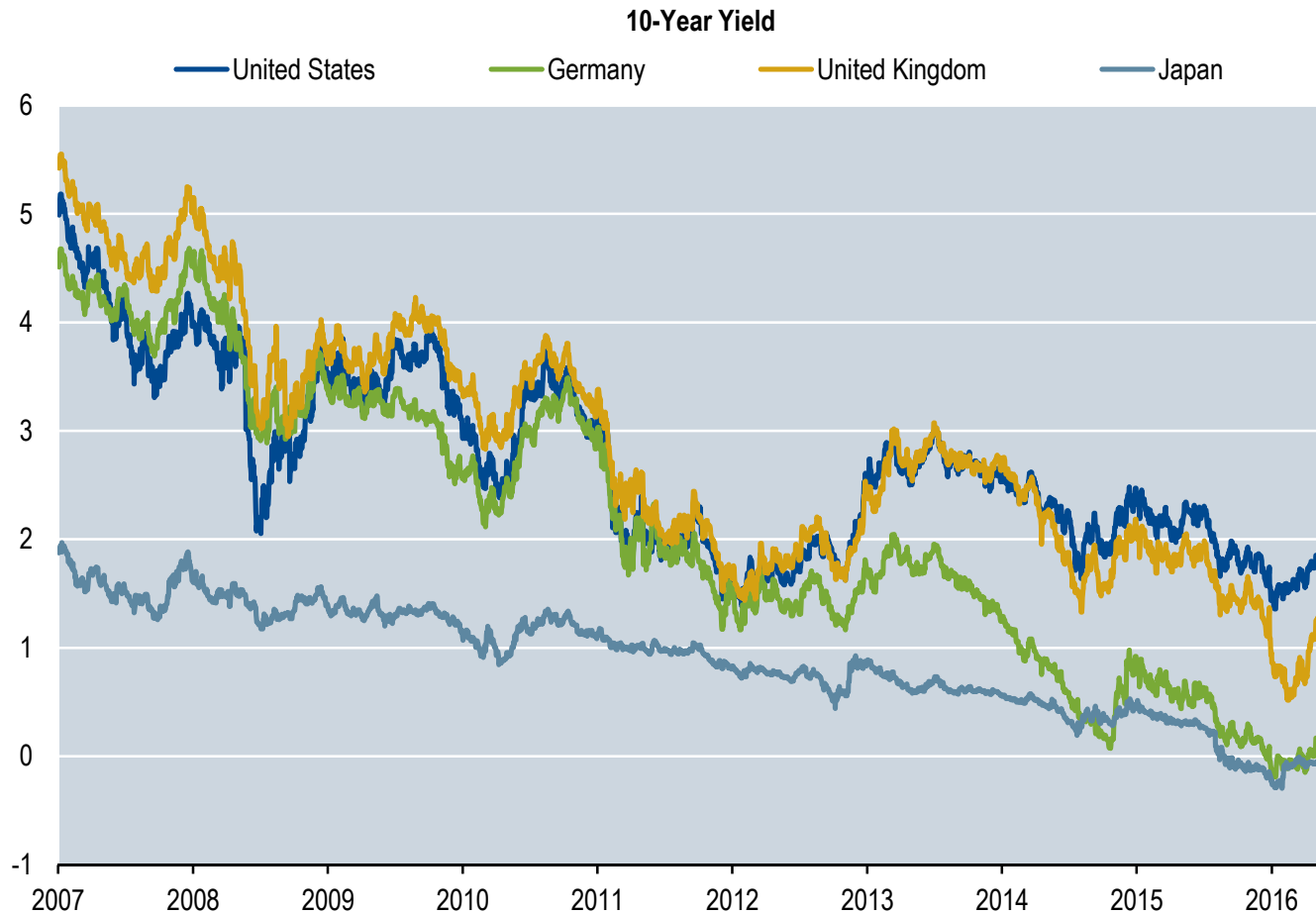
Source: Bloomberg, New York Fed, Federal Reserve Board. As of 30 Nov 16  
 New York Fed data as of 31 Oct 16  
 Note: University of Michigan Survey refers to inflation expectations 5-10 years ahead, NY Fed survey refers to expectations 3-5 years ahead, and TIPS breakevens are 5-10 years ahead



Source: Goldman Sachs, Bloomberg. As of 29 Nov 16  
 Note: The Goldman Sachs financial conditions index is a weighted average of interest rates, credit spreads, equities and the US dollar, calibrated to the estimated effects of each on 1-year ahead US GDP growth

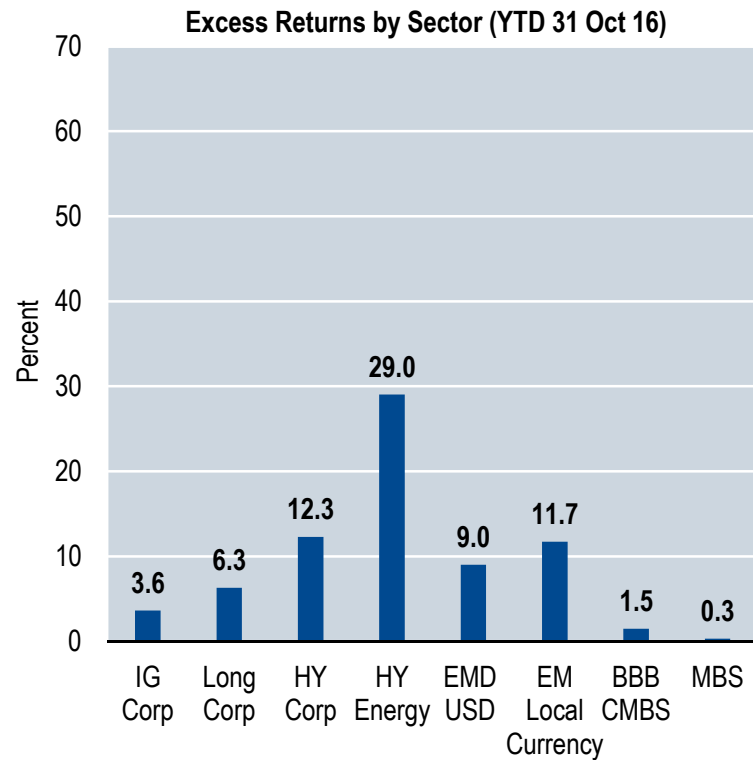
# Investment Themes – Global Treasury Yields Pinned by Central Bank Policies

Central Bank policies will keep front-end rates low and curves steep

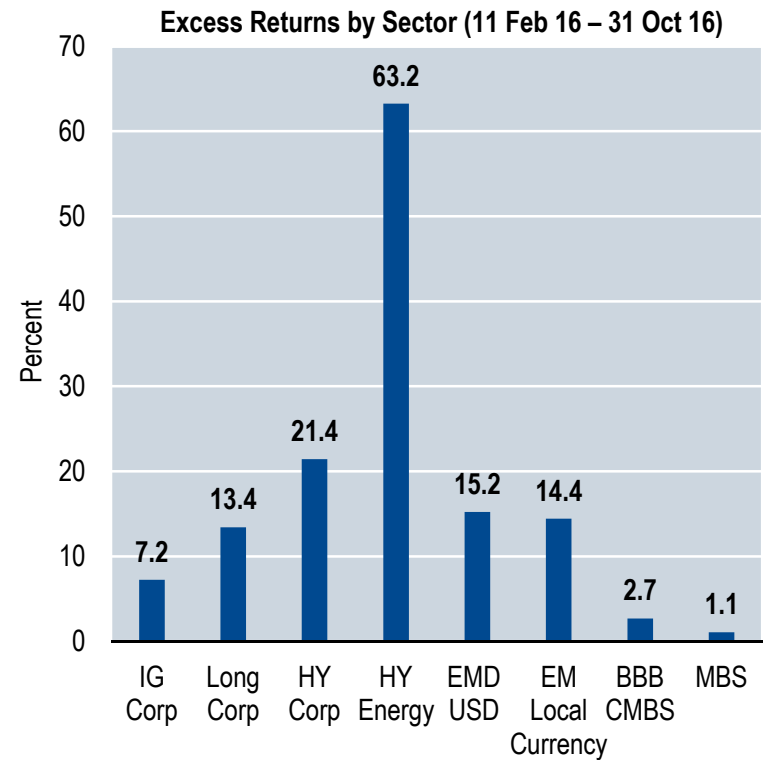


## Investment Themes – Excess Returns

Recent excess returns for spread sectors have been remarkable, particularly following the low mark in February.



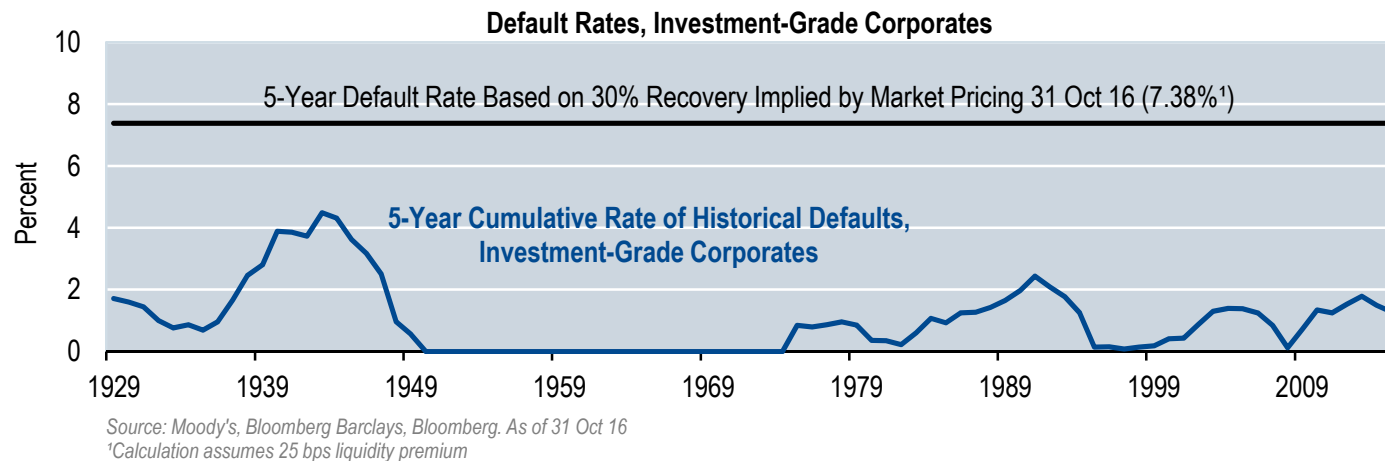
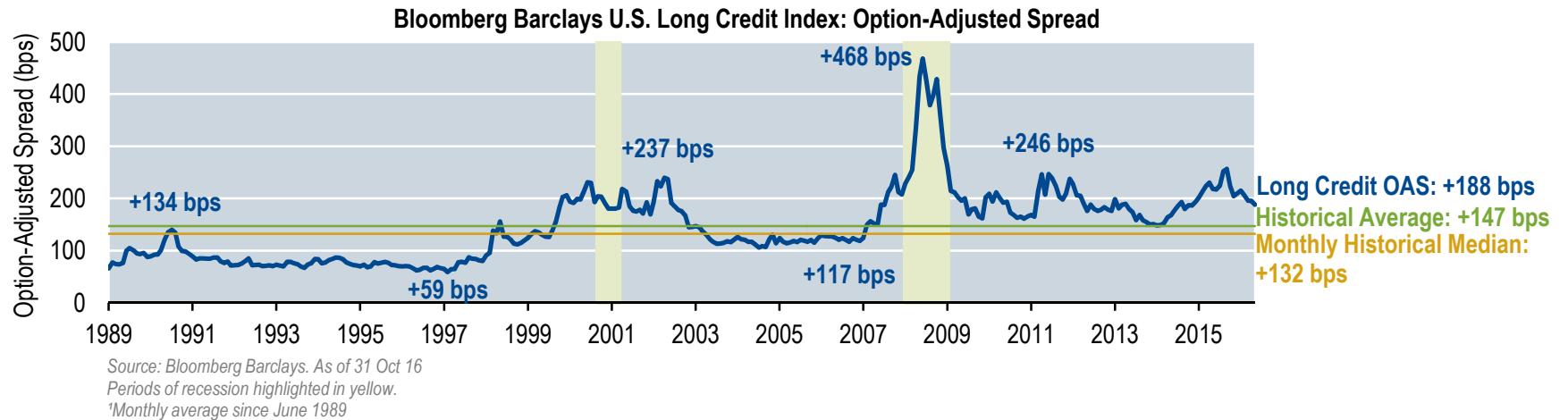
Source: Bloomberg Barclays, J.P. Morgan. As of 31 Oct 16



Source: Bloomberg Barclays, J.P. Morgan. As of 31 Oct 16

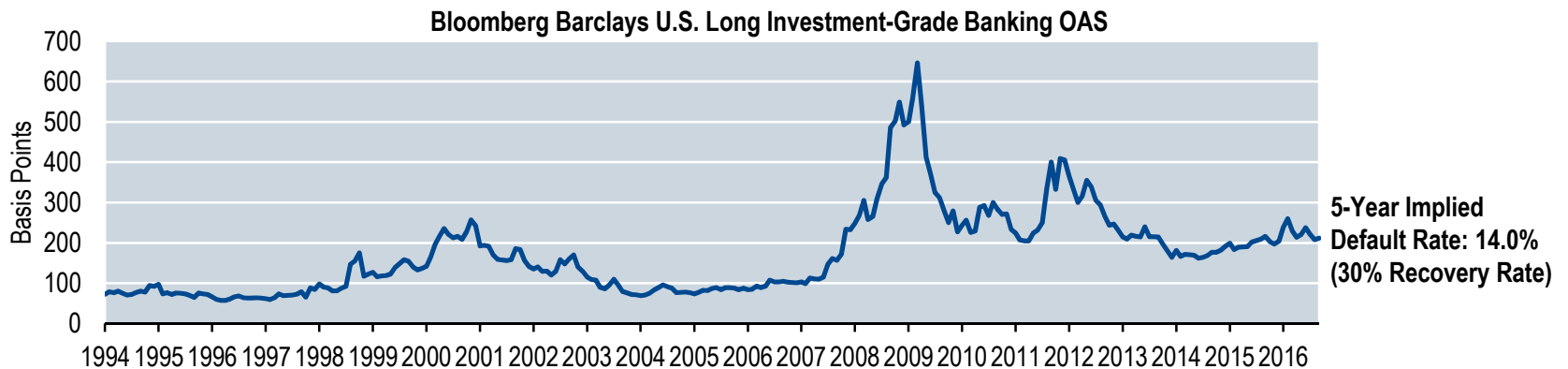
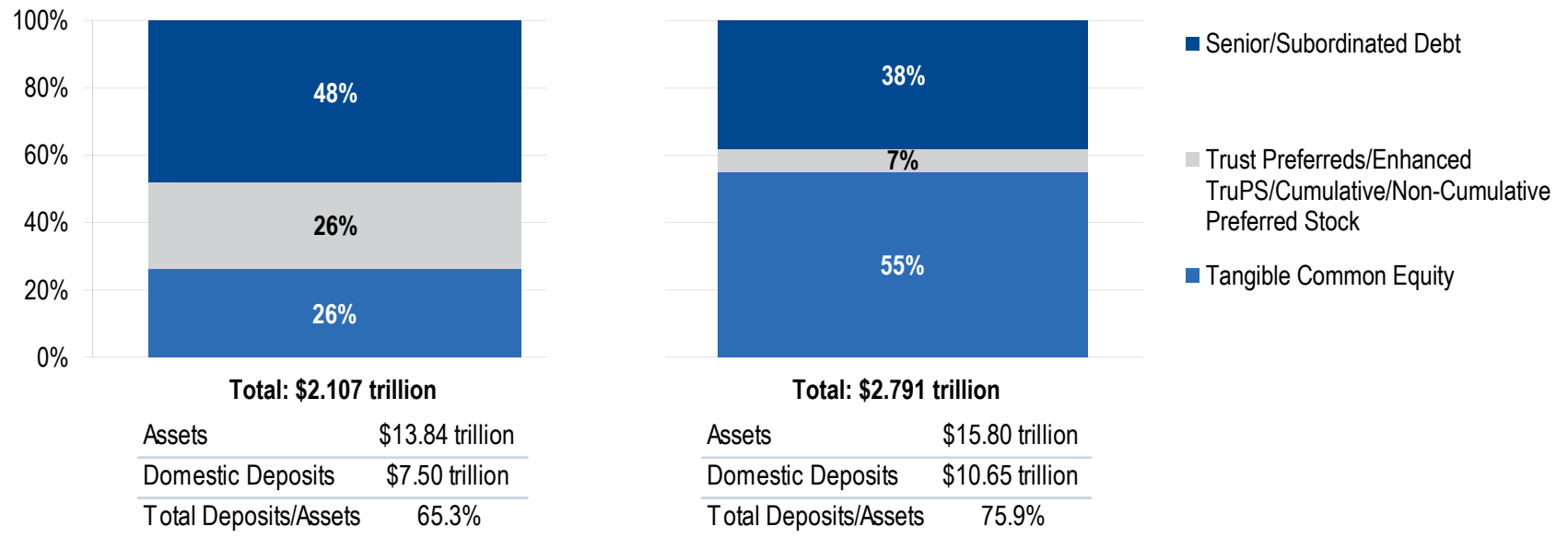
## Investment Themes – Corporate Bonds

Investment-grade corporate bond spreads in the long-end appear attractive, especially when considering our growth outlook and where we are in the business cycle (more room to run)



## Investment Themes – US Banks

Bank bonds remain attractive with more conservative balance sheets and more “utility-like” business models. Higher interest rates and fewer new regulations will help banks topline.



Source: Bloomberg Barclays. As of 30 Sep 16

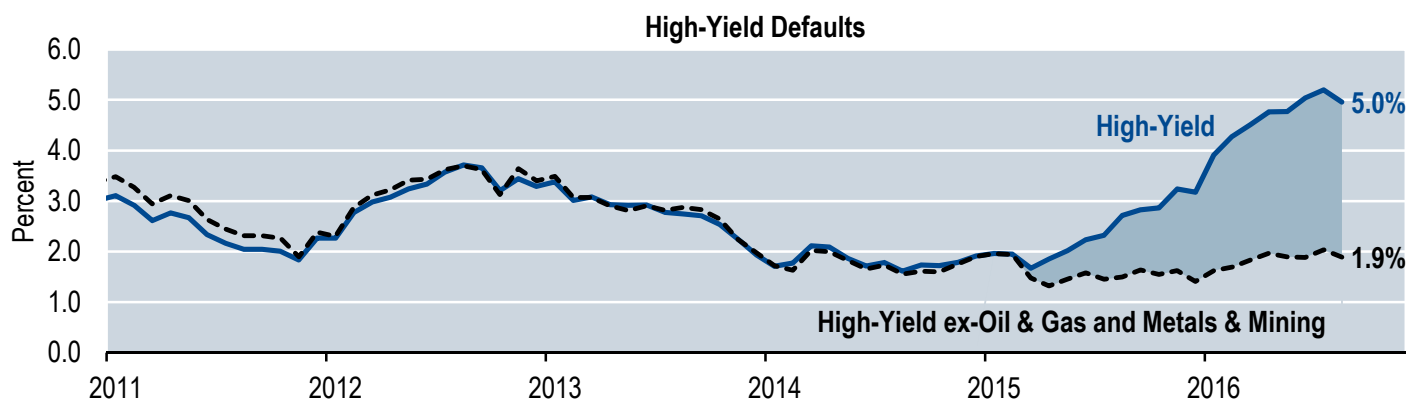
## Investment Themes – US High-Yield

Ex-energy and metals and mining, high-yield defaults are near post-crisis lows and valuations are still attractive.

Implied Default Rates

	29 Feb 16	31 Oct 16	
<b>Bloomberg Barclays U.S. High Yield Index OAS:</b>	<b>726 bps</b>	<b>477 bps</b>	<b>Actual Modern Era Peak</b>
<b>Assumed Recovery Rate: 30%</b>	<b>Year 5</b>	<b>Year 5</b>	<b>1999-2003</b>
Implied Annual Default Rate	9.9%	6.6%	
Implied Cumulative Default Rate	40.5%	28.9%	37.2%
<b>Bloomberg Barclays U.S. High Yield Ex-Energy Index OAS:</b>	<b>639 bps</b>	<b>464 bps</b>	<b>1983-1987</b>
<b>Assumed Recovery Rate: 30%</b>	<b>Year 5</b>	<b>Year 5</b>	
Implied Annual Default Rate	8.7%	6.4%	
Implied Cumulative Default Rate	36.7%	28.2%	22.1%

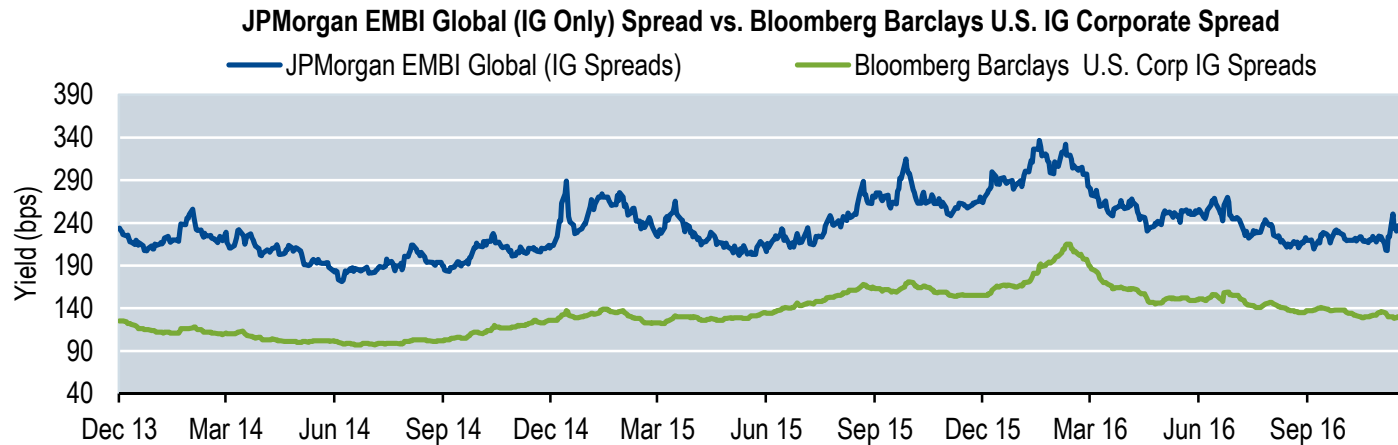
Source: Bloomberg Barclays, Bloomberg



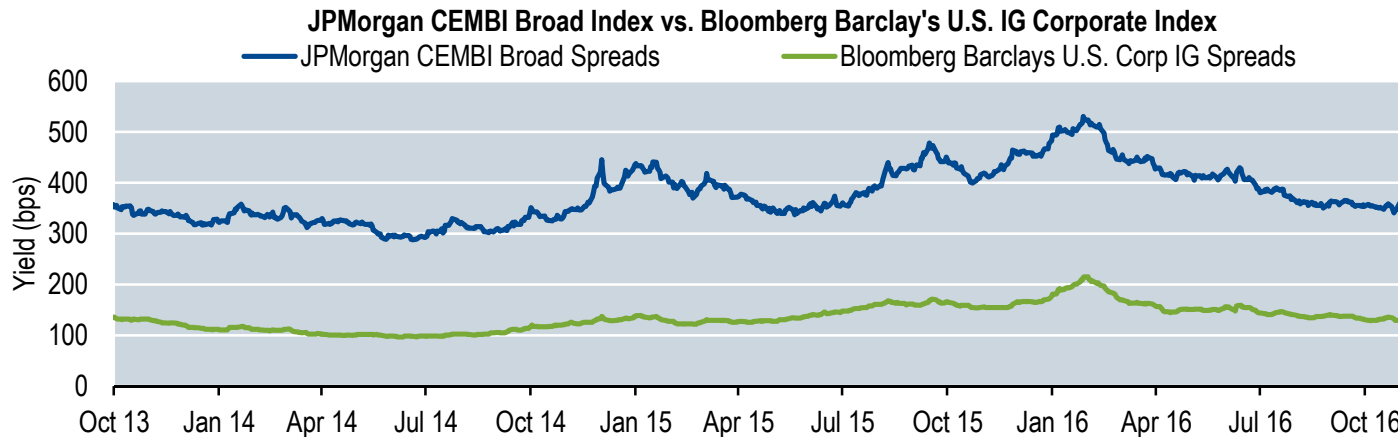
Source: Goldman Sachs Global Investment Research. As of 30 Sep 16

## Investment Themes – Emerging Markets

Protectionism and USD strength is the biggest question marks hanging over EM. Emerging markets fundamentals are better than the past but uncertainty out of the US is driving investor caution.



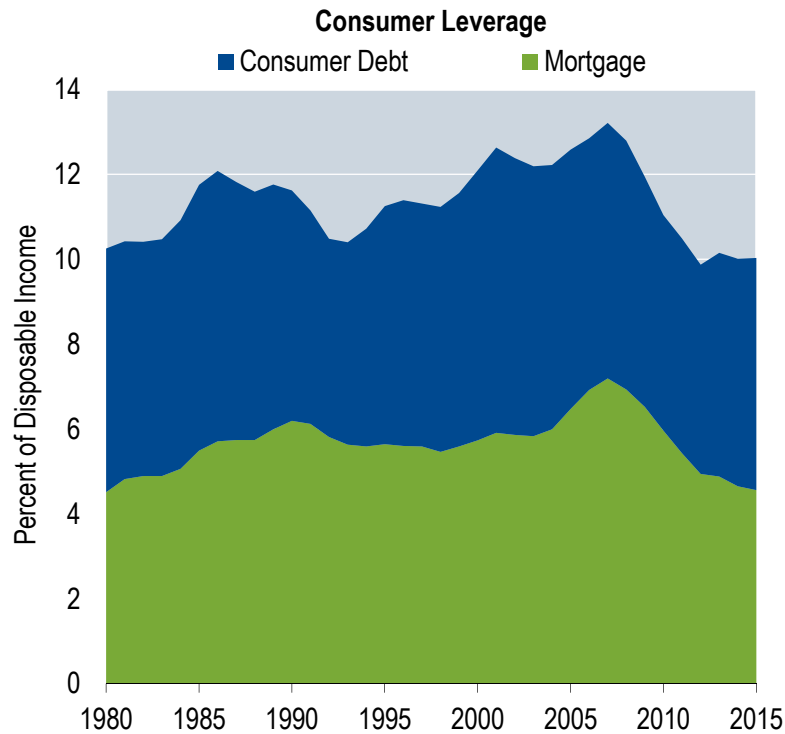
Source: JPMorgan, Barclays. As of 30 Nov 16



Source: JPMorgan, Bloomberg Barclays. As of 30 Nov 16

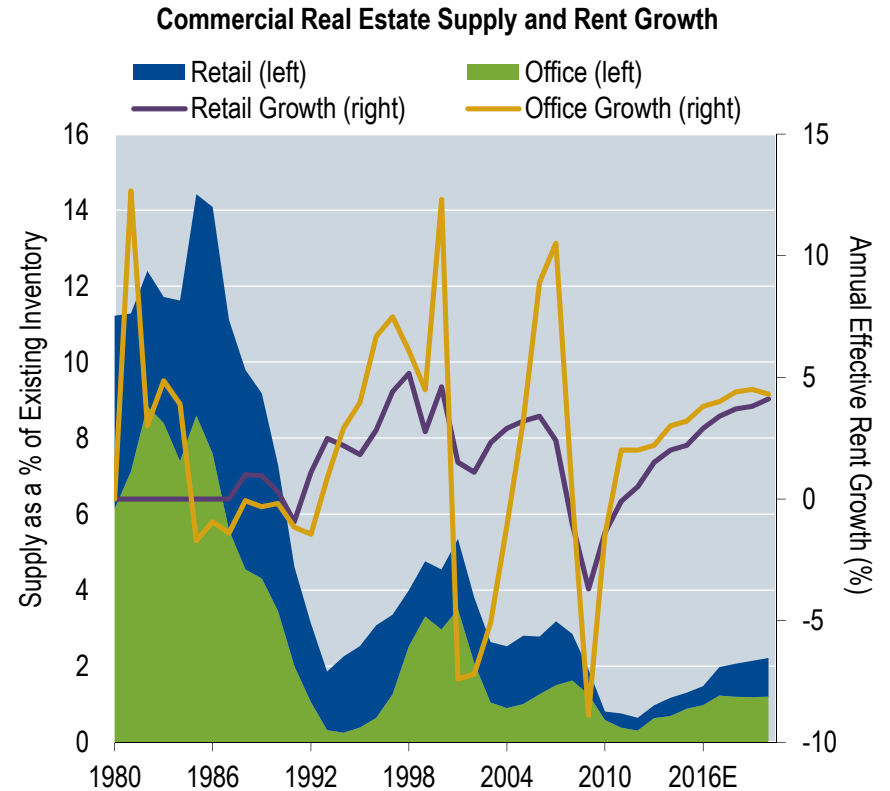
## Investment Themes – MBS / ABS Sectors

Consumer and commercial real estate fundamentals remain at historically attractive levels.



Source: Federal Reserve. As of 31 Dec 15

- Consumer leverage is at lowest levels in 35 years, while mortgage availability continues to be constrained
- Student Loan ABS, legacy and new issue RMBS should be the biggest beneficiaries



Source: REIS, Bank of America. As of 31 Dec 15

- CRE supply and demand hasn't been as favorable in decades...rental growth in office and retail should accelerate as new construction remains muted
- New issue CMBS and subordinate debt opportunities should be the biggest beneficiaries

# MBS/ABS Team – Sector View

October 31, 2016

Sector	Sector View	Comment	Positioning	Yield Ranges
<b>Legacy Residential Mortgages</b>	Neutral	<ul style="list-style-type: none"> <li>Constructive on medium-term fundamentals, relative value and net negative issuance technical pressures</li> <li>Expect modest home price growth over the coming years with limited downside risks as housing appears reasonably valued and supported</li> </ul>	<ul style="list-style-type: none"> <li>Maintain exposure skewed towards lower-dollar-priced floating-rate option ARMs, seasoned subprime, and Alt-A hybrids</li> <li>Opportunistically rotating from fully recovered/low-yielding sectors into areas with greater recovery optionality</li> </ul>	IG: 2%-4% BIG: 4%-7%
<b>New-Issue Residential Mortgages</b>	Positive	<ul style="list-style-type: none"> <li>Positive on credit risk of GSE and new originated non-agency loans</li> <li>Neutral on re-performing loans, non-performing loans and prime jumbo strategies</li> <li>Negative on new-issue prime jumbo senior bonds</li> </ul>	<ul style="list-style-type: none"> <li>Added exposure to high-quality new-issue underwriting through GSE Risk Transfer bonds</li> <li>High-quality non-QM loans</li> </ul>	IG: 2%-3% BIG: 5%-8%
<b>Commercial Mortgages</b>	Positive	<ul style="list-style-type: none"> <li>Remain constructive on the CMBS market, due to CRE fundamentals and favorable relative value</li> <li>Liquidity of BBB &amp; below rated conduit remains challenged</li> </ul>	<ul style="list-style-type: none"> <li>Neutral on AAA-A rated conduit deals, neutral on BBB-B rated conduit deals and positive on legacy junior AAA (AJ)</li> <li>Positive on floating-rate large loan CMBS conduit deals and positive on legacy junior AAA (AJ)</li> </ul>	AAA - A: 3%-6% BBB - B: 6%-10% Legacy AJ: 6%-10%
<b>Consumer Loans</b>	Neutral	<ul style="list-style-type: none"> <li>Opportunity set exists in well protected off-the-run sectors, which offer attractive risk/return</li> </ul>	<ul style="list-style-type: none"> <li>Positive on private student loan residuals</li> <li>Opportunistically reducing short-duration FFELP student loans that have tightened since purchasing</li> <li>Positive on high-quality unsecured credit</li> </ul>	IG: 2-4% BIG: 6-10%
<b>Agency Passthroughs</b>	Neutral	<ul style="list-style-type: none"> <li>Option-adjusted spreads have widened, but extension risks remain</li> <li>Supported by Fed backstop and yield-driven buyer base</li> </ul>	<ul style="list-style-type: none"> <li>Overweight specified pools vs. TBA</li> <li>Underweight 30-year 3.0%</li> <li>Underweight GNMA and 15-year</li> </ul>	2.25% - 3.00%
<b>Agency CMOs</b>	Neutral	<ul style="list-style-type: none"> <li>Secondary supply and curve flattening has cheapened short-duration and floating rate securities</li> <li>Opposite parts of the cashflow such as inverse IO and back-end bonds offer attractive carry</li> <li>IO adds yield and extension protection to MBS position</li> </ul>	<ul style="list-style-type: none"> <li>Have reduced allocation to IO's as spreads have tightened</li> <li>Positive on Agency CMBS IO's</li> </ul>	1% - 4%

Source: Western Asset

## Summary

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**Global growth will remain slow and sustainable with US GDP potentially getting a short-term boost from Trump policies**

**Global Inflation will remain subdued**

**Central banks will continue aggressive accommodative policies but the FED may diverge**

**Treasuries and sovereign bonds continue to be underpinned by global factors and low policy rates**

**Spread sectors, especially the US consumer dependent, will continue to provide attractive returns but valuations will be challenged if discount rates move higher**

# Index Comparison

## Option-Adjusted Spreads / Excess Returns

November 30, 2016

Index	30 Nov 16 OAS (%)	YTD Excess Rtn (%)	2015 Excess Rtn (%)	Since 31 Dec 08 Excess Rtn (%)	10 Year Excess Rtn (%)
U.S. Aggregate	0.45	1.13	-0.53	14.98	4.93
U.S. Long Government Credit	1.11	4.21	-2.89	29.55	6.30
U.S. Long Credit	1.80	6.96	-4.56	4.76	8.43
U.S. Long Corporate	1.78	7.57	-4.56	61.89	9.04
U.S. Corporate Investment Grade	1.29	4.07	-1.61	46.39	13.06
U.S. Intermediate Corporate	1.07	2.55	-0.30	42.02	14.50
Invest. Grade: Long Financials	1.78	4.83	-0.63	76.83	2.91
Invest. Grade: Long Industrial	1.84	8.71	-5.83	56.99	13.04
Invest. Grade: Long Utility	1.47	5.44	-3.64	69.06	16.57
Long Non-Corporate Investment Grade	1.90	3.80	-4.55	33.10	6.28
U.S. Corporate High Yield	4.55	13.57	-5.77	148.93	58.42
Emerging Markets (U.S. Dollar)	3.14	7.48	0.03	85.99	37.04
Bank Loans <sup>1</sup>	L+4.60	9.05	0.10	10.46	4.77
U.S. Mortgage Backed Securities	0.16	-0.17	-0.05	10.09	6.26
Asset-Backed Securities	0.50	1.12	0.44	38.21	0.56
CMBS: Erisa Eligible	0.67	2.70	-0.28	79.88	21.06

Source: Bloomberg Barclays, S&P/LSTA

<sup>1</sup>3-year discounted spread and total returns are shown for S&P/LSTA Leveraged Loan Index

Past performance is no guarantee of future results.

## Representative Client List Disclosure

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The clients listed are invested in a wide range of mandates, and are located in a variety of countries or regions of the United States.

The clients listed in the Corporate company type have portfolios with an AUM of \$3(M) or greater.

The clients listed in the Public company type have portfolios with an AUM of \$77(M) or greater.

The clients listed in the Multi-Employer / Union company type have portfolios with an AUM of \$21(M) or greater.

The clients listed in the Healthcare company type have portfolios with an AUM of \$14(M) or greater.

The clients listed in the Eleemosynary company type have portfolios with an AUM of \$4(M) or greater.

The clients listed in the Insurance company type have portfolios with an AUM of \$5(M) or greater.

The clients listed in the Sub-Advisory company type have portfolios with an AUM of \$15(M) or greater.

Clients that have advised Western Asset of account terminations have been excluded from the lists.

## Risk Disclosure

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