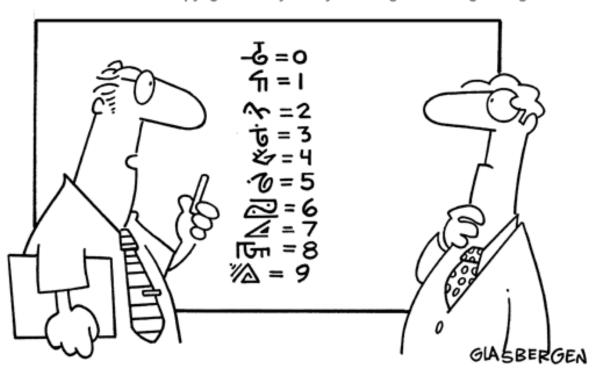


# Monthly Market Update October 2016

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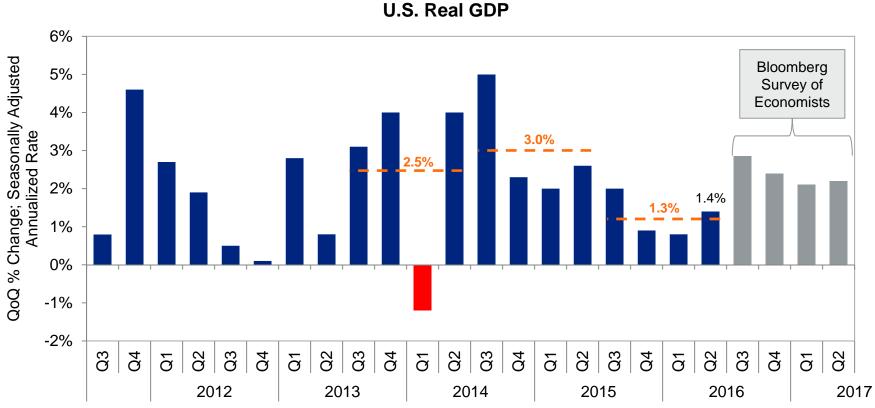
"The accounting department just can't live with the old numbers anymore. There is just too much bad history, too many painful memories. We've replaced them with a whole new set of digits and we'd like the rest of the company to cooperate."

#### **Current Market Themes**

- Moderate U.S. economic conditions:
  - Lackluster GDP growth rate
  - Labor market approaching full employment
  - Inflation picking up, but still below target
- Treasury yield curve remains flat by historic standards, although rates ended the quarter modestly higher
- Central banks continue to accommodate markets
- Global headwinds have dissipated

### U.S. Economy on Disappointing Growth Track

- U.S. GDP growth increased at an annual rate of 1.4% in the second quarter of 2016, according to the Bureau of Economic Analysis. This was revised up from 1.1%, but still paints the same picture of moderate growth in the US.
- Second quarter GDP reflected positive contributions from personal consumption, which contributed the most to GDP since the 4<sup>th</sup> quarter of 2014. Business investment detracted from GDP for the 3<sup>rd</sup> quarter in a row, the most since the 2<sup>nd</sup> quarter of 2009, amid a significant decline in inventories.



Source: Bureau of Economic Analysis; Bloomberg survey results as of 10/03/16. Orange is average over last 12 months.

#### Labor Market Nears Full Employment

- The U.S. labor market added 156,000 jobs in September, short of the 172,000 expectations, while the prior month's number was revised up to 167,000.
- Both the unemployment rate and labor force participation rate ticked up 0.1% to 5.0% and 62.9% respectively, suggesting that more people are re-entering the work force as the labor market approaches full employment.
- Average hourly earnings inched up by 0.2% in August while rising 2.6% year-over-year.

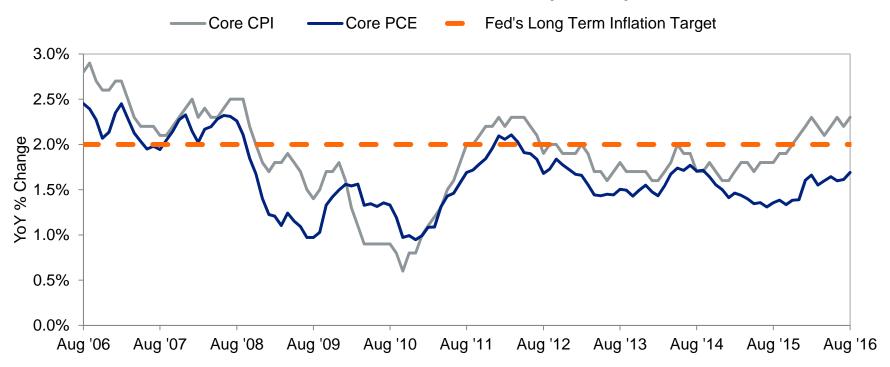
#### **Monthly Change in Nonfarm Payrolls Unemployment Rate** Nonfarm Payrolls 12-Month Moving Average 10% 350K 300K 9% 250K 8% 200K 7% 150K 6.0% 6% 100K 5.0% 5% 50K Sep '15 Sep '16 Mar '12 Mar '13 Sep '13 Mar '15 Mar '16 Mar '14 Sep '14 Sep '15

Source: Bureau of Labor Statistics, as of 10/07/16.

#### Inflation Rising Slowly

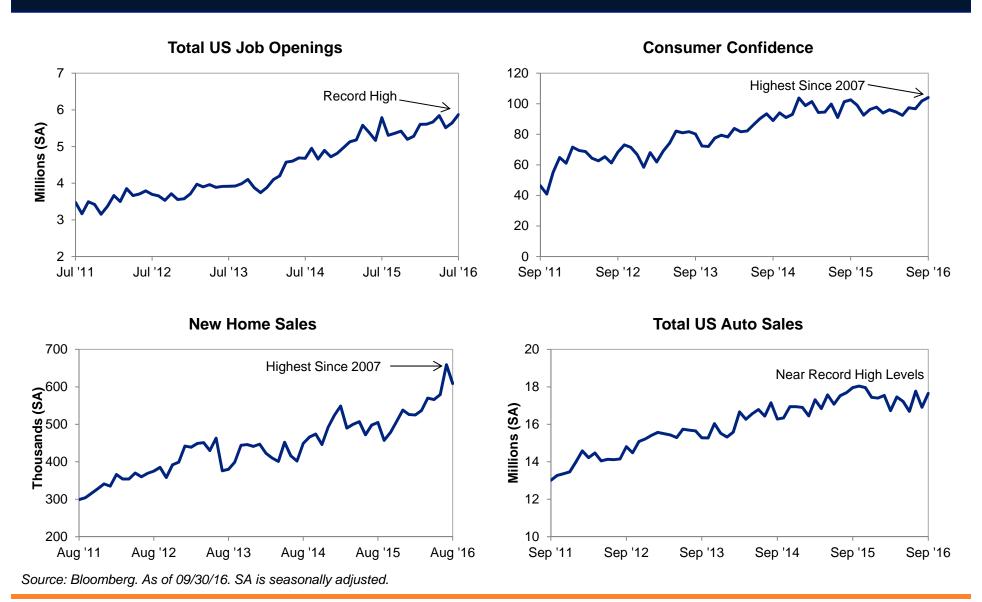
- The core personal consumption expenditures (PCE) price index, the Fed's preferred gauge of core inflation, inched up to 1.7% year-over-year through August, but continues to undershoot the 2% target.
- Some regional Fed Presidents, such as Cleveland's Mester and Richmond's Lacker, have urged for a pre-emptive rate
  increase, to prevent the economy from overheating. Mester said that "the Fed should be looking ahead and not just waiting".

### Inflation Measures Consumer Price Index vs Personal Consumption Expenditures

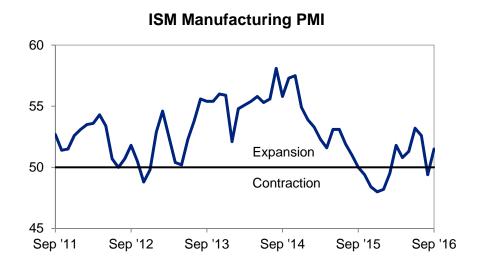


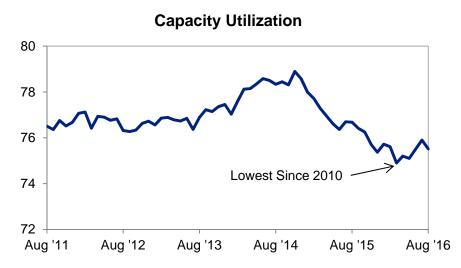
Source: Bloomberg as of 08/31/2016.

### Economic Backdrop: Areas of Strength

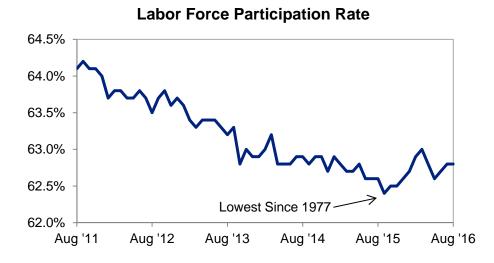


#### Economic Backdrop: Areas of Weakness



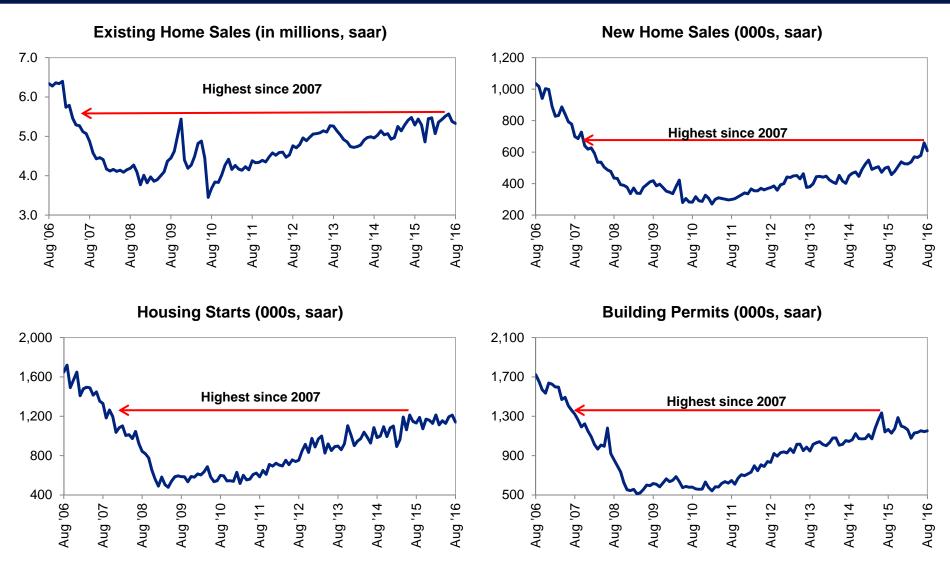






Source: Bloomberg. As of 09/30/16. SA is seasonally adjusted.

### Housing Market Adding to Economic Momentum

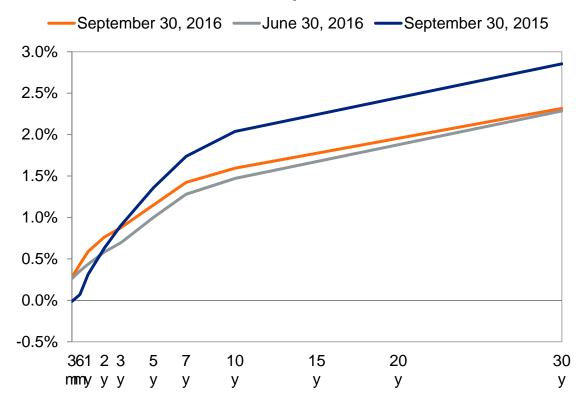


Source: Bloomberg. As of 08/31/2016. SAAR is the seasonally adjusted annualized rate.

#### U.S. Treasury Curve Remains Flat

- Longer maturity yields have fallen substantially this year over concerns about global growth and higher global demand for U.S. treasuries given negative yields abroad.
- On the shorter end of the curve, rates continued to rise in September, as market expectations for a rate hike this year inched up following speeches by regional Fed officials and the FOMC seeing a stronger case for increasing rates by year-end.

**U.S. Treasury Yield Curve** 



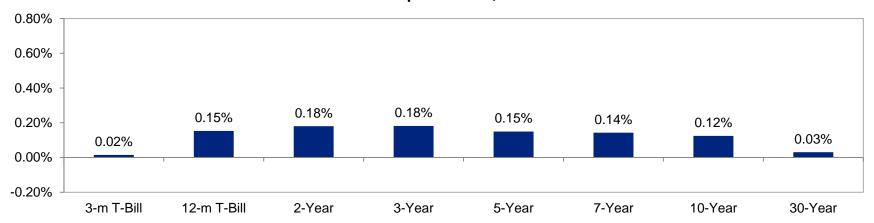
#### **Yield Curve History**

	09/30/16	06/30/16	09/30/15
1-Mo.	0.19	0.17	-0.02
3-Mo.	0.28	0.26	-0.02
6-Mo.	0.43	0.35	0.07
1-Yr.	0.59	0.44	0.31
2-Yr.	0.76	0.58	0.63
3-Yr.	0.88	0.69	0.90
5-Yr.	1.15	1.00	1.36
7-Yr.	1.42	1.28	1.74
10-Yr.	1.60	1.47	2.04
30-Yr.	2.32	2.29	2.85

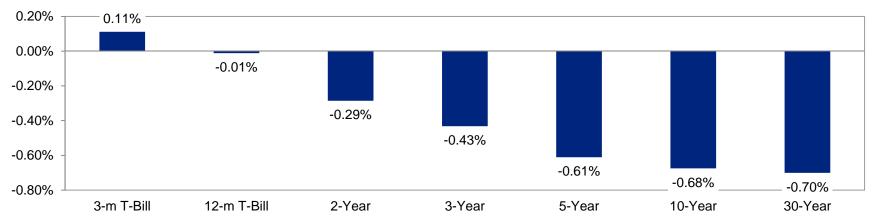
Source: Bloomberg.

### U.S. Treasury Yields Rose in the 3<sup>rd</sup> Quarter

#### QTD Change in Yield As of September 30, 2016



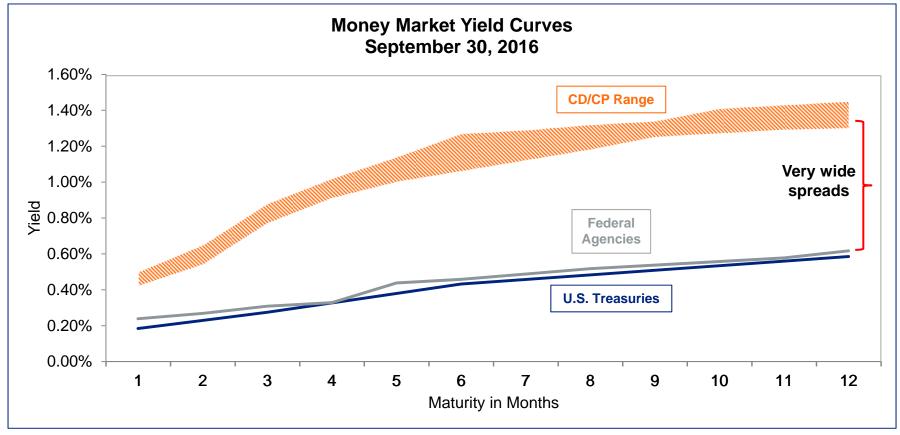
YTD Change in Yield As of September 30, 2016



Source: Bloomberg.

### CP/CD Offer Wide Yield Spread over Treasuries

 Yields on commercial paper and negotiable bank CDs remain very attractive alternatives to Treasury Bills and short-term agencies. As investors continue to move from Prime to Government money market funds ahead of the reforms (effective 10/14/16), yield spreads on short-term credit instruments have widened significantly, especially in the 3-12 month part of the curve.



Source: Bloomberg, PFMAM. Information on CD/CP ranges are estimates based on independently compiled data. CP/CD rates vary by issuer, credit quality and structure.

#### Yield Environment

As of September 30, 2016

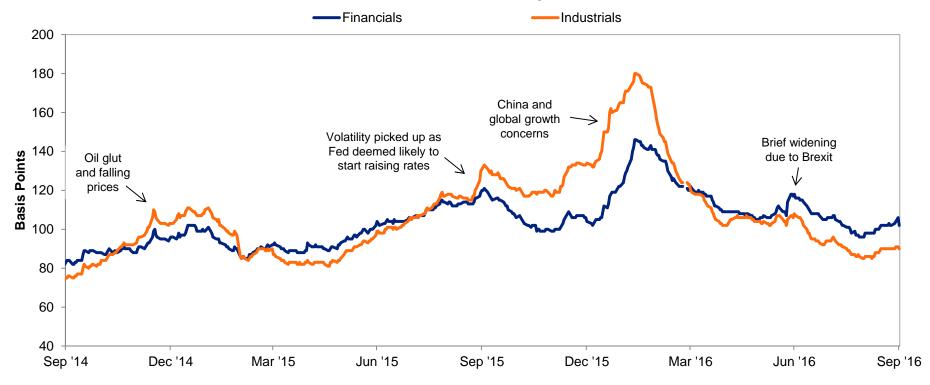
Maturity	Treasury	Federal Agency	AA Corporate	A Corporate	AAA Taxable Municipal	
3-Month	0.28%	0.31%	0.66%	0.85%	-	
6-Month	0.43%	0.46%	0.87%	1.19%	-	
1-Year	0.59%	0.62%	0.98%	1.13%	0.86%	
2-Year	0.76%	0.87%	1.17%	1.33%	1.06%	
3-Year	0.88%	0.99%	1.35%	1.53%	1.24%	
5-Year	1.15%	1.29%	1.70%	1.87%	1.57%	
10-Year	1.60%	1.92%	2.49%	2.65%	2.33%	

Source: Bloomberg BVAL yield curves for Treasury, Corporate and Municipal yields, TradeWeb for Federal Agency yields. 3 and 6 month corporate yields from commercial paper; A-1+ for AA and A-1 for A.

#### Corporate Yield Spreads Remain Lower

- Yield spreads on corporate securities have come down significantly since the beginning of the year as global headwinds have faded away. As a result, corporates have outperformed other fixed income sectors. Spread volatility could pick up again should central banks migrate away from accommodative policies.
- Credit profiles continue to be strong, but industrials are becoming more leveraged because of heavier debt issuance used to
  fund dividend payouts and stock buybacks; meanwhile profitability measures for financials remain pressured due to the low
  interest rate environment and higher capital requirements.

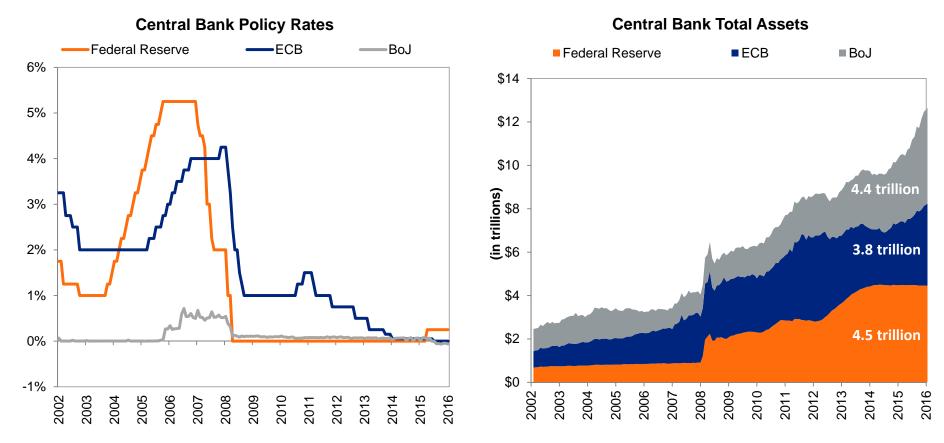
#### 1-5 Year Investment Grade Corporate OAS



Source: Based on BofA Merrill Lynch 1-5 Year Corporate Indexes. As of 09/30/16. OAS is option-adjusted spread.

#### Global Central Banks' Unconventional Policies

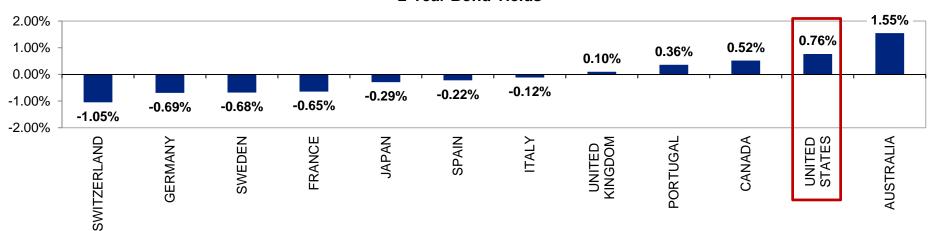
- Central banks around the world remain very accommodative. Although the Federal Reserve may raise rates again by the end
  of the year, any rate hikes are expected to be gradual and data dependent. Meanwhile, the European Central Bank (ECB)
  refinancing rate remains at zero while the Bank of Japan (BoJ) has a target rate of -0.1%.
- In addition, both central banks continue to expand their asset buying program: the total size of their balance sheets have increased from around \$2.7 trillion in 2014 to \$3.8 trillion in Europe and \$4.4 trillion in Japan as of September 2016.



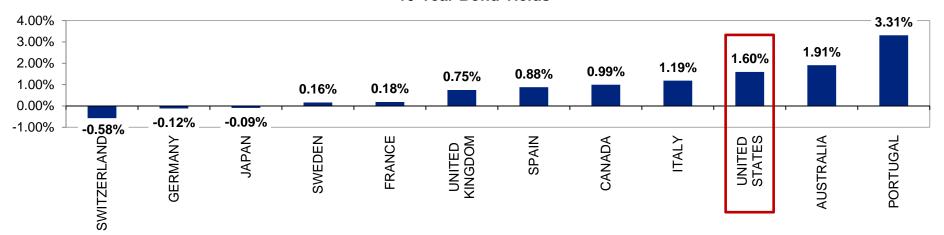
Source: Bloomberg. As of 09/30/16.

#### Global Interest Rates Remain Very Low

#### 2-Year Bond Yields

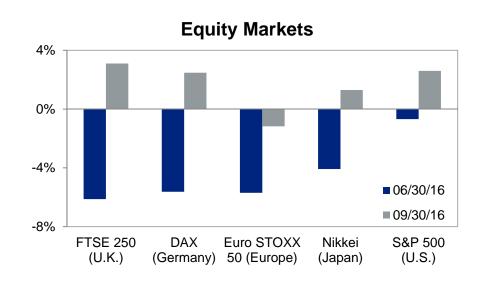


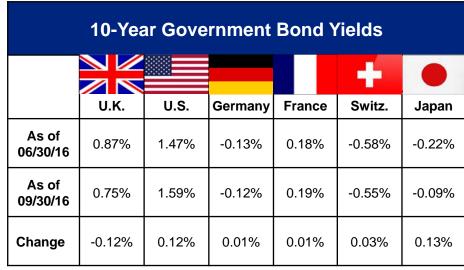
#### 10-Year Bond Yields



Source: Bloomberg. As of 09/30/16.

#### The Brexit Effect Fades





8% ⊤	Cur	rencies a	and Comr	nodities	3
			40		
0% +					
-8% -	٠.				■ 06/30/16 ■ 09/30/16
-16% <sup>⊥</sup>	GBP vs USD	EUR vs USD	JPY vs USD	Oil	Gold

Cuadit Indiantara	June 23	June 30	Sep 30	
Credit Indicators	Before Brexit	After Brexit	Quarter End	
Investment Grade Spreads	76 bps	77 bps	69 bps	
High Yield Spreads	422 bps	425 bps	375 bps	
U.S. CDS	25 bps	25 bps	30 bps	
German CDS	19 bps	22 bps	19 bps	
U.K. CDS	36 bps	43 bps	32 bps	

Source: Bloomberg, as of 09/30/16. Change for equities, currencies and commodities is from just before the Brexit vote on 06/23/16.

#### FOMC Statement Highlights

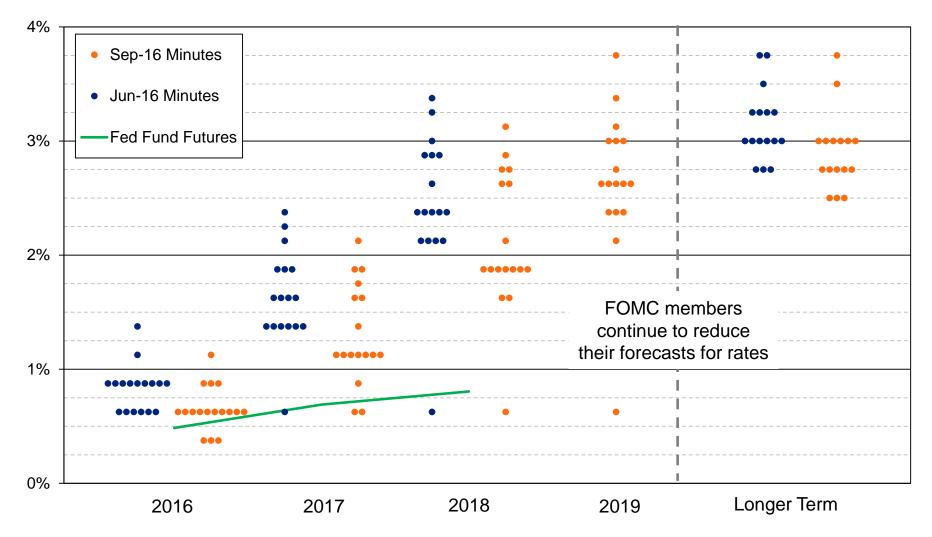
#### September

21

- Information received since the FOMC met in July indicates that the labor market has continued to strengthen and growth of economic activity has picked up from the modest pace seen in the first half of the year.
- Although the unemployment rate is little changed in recent months, job gains have been solid, on average.
- Inflation has continued to run below the Committee's 2% longer-run objective, partly reflecting earlier declines in energy prices and decreasing prices of non-energy imports.
- Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at 0.25 – 0.50%.
- The Committee judges that the case for an increase in the federal funds rate has strengthened but decided, for the time being, to wait for further evidence of continued progress toward its objectives.
- Voting against the action were: Esther L. George (Kansas City), Loretta J. Mester (Cleveland), and Eric Rosengren (Boston), each of whom preferred at this meeting to raise the target range for the federal funds by ¼ percent.

Source: Federal Reserve.

#### FOMC "Dot Plot"



Source: Federal Reserve; Fed Funds Futures as of 09/30/16. Individual dots represent each of the 17 FOMC members' judgment of the midpoint of the appropriate target range for the federal funds rate. One participant did not submit longer-run projections in the September 2016 meeting.

## The Fed's Updated Projections: Lower Growth and Lower Rates

Actual	2016		2017		2018		2019		Longer run		
Indicator	2015	June	Sept.	June	Sept.	June	Sept.	June	Sept.	June	Sept.
Real GDP (YoY)	2.0%	2.0%	1.8%	2.0%	2.0%	2.0%	2.0%	N/A	1.8%	2.0%	1.8%
Unemployment Rate	5.0%	4.7%	4.8%	4.6%	4.6%	4.6%	4.5%	N/A	4.6%	4.8%	4.8%
PCE Inflation (YoY)	0.7%	1.4%	1.3%	1.9%	1.9%	2.0%	2.0%	N/A	2.0%	2.0%	2.0%
Core PCE (YoY)	1.4%	1.7%	1.7%	1.9%	1.8%	2.0%	2.0%	N/A	2.0%	-	-
Federal Funds Rate (Median)	0.4%	0.9%	0.6%	1.6%	1.1%	2.4%	1.9%	N/A	2.6%	3.0%	2.9%

Source: Federal Reserve as of September 2016. The table compares the Fed's annual median projections at the September FOMC meeting to those from June's meeting. Red denotes a lower projection and green denotes a higher projection.

#### Fixed-Income Index Returns

			Periods Ended 09/30/2016					
September 30, 2016	Effective Duration	Yield	YTD	1 Month	3 Month	1 Year	3 Years	5 Years
1-3 Year Indices								
U.S. Treasury	1.90	0.78%	1.33%	0.12%	(0.11%)	0.88%	0.85%	0.69%
Agency	1.69	0.90%	1.31%	0.15%	0.03%	0.94%	0.95%	0.83%
Corp A-AAA	1.90	1.48%	2.10%	0.05%	0.17%	2.04%	1.60%	2.05%
MBS (0 to 3 Years)	2.22	1.40%	1.44%	0.07%	0.29%	2.43%	1.67%	1.40%
Municipals	1.84	0.95%	0.80%	(0.32%)	(0.18%)	0.71%	0.87%	0.94%
1-5 Year Indices								
U.S. Treasury	2.73	0.90%	2.20%	0.17%	(0.19%)	1.52%	1.43%	1.11%
Agency	2.14	0.98%	1.86%	0.18%	0.00%	1.36%	1.41%	1.17%
Corp A-AAA	2.76	1.66%	3.17%	0.04%	0.30%	3.01%	2.44%	2.87%
MBS (0 to 5 Years)	3.29	1.81%	3.13%	0.31%	0.61%	3.29%	2.91%	2.31%
Municipals	2.47	1.03%	1.24%	(0.37%)	(0.16%)	1.32%	1.43%	1.42%
Master Indices (Maturitie	es 1 Year and G	reater)						
U.S. Treasury	6.59	1.28%	5.31%	(0.18%)	(0.33%)	4.33%	3.70%	2.32%
Agency	3.90	1.27%	3.65%	0.07%	0.13%	2.98%	2.82%	1.96%
Corp A-AAA	7.16	2.46%	7.62%	(0.39%)	0.89%	7.52%	5.38%	4.81%
MBS (0 to 30 Years)	3.49	1.90%	3.72%	0.28%	0.61%	3.66%	3.57%	2.63%
Municipals	6.77	1.84%	4.09%	(0.48%)	(0.31%)	5.88%	5.89%	4.70%

Source: BofA Merrill Lynch Indices. Returns greater than on year are annualized.

#### Sector Preferences – October 2016

Sector	PFMAM Investment Preference	Sector Considerations
MMF/LGIP		CP/CDs CP/CD spreads beyond 3 months remain extremely wide as money market reform has led to a steep curve for short-term credit. This has created an attractive opportunity for investors without near-term liquidity needs.
Commercial Paper/CDs		Treasuries  New issuance shrinking as federal deficit improves; 1-5 year maturities offer value near the
Treasury: T-Bill		upper end of recent trading ranges, but the yield curve continues to flatten, reducing value in longer maturities.
T-Note		Federal Agencies Federal agency spreads have trended tighter across the curve given the recent bump in rates, coupled with continued investor appetite. Securities in the 3-yr part of the curve
Agency: <= 3 year		continue to offer the most value relative to the rest of the curve, offering on average 9 bps of additional yield spread.
> 3 Years		Corporates  We are growing increasingly cautious with the corporate sector. Spreads remain quite narrow heading into the fall with the potential for several volatility generating events to occur, including the election and an FOMC interest rate hike. Increased volatility will
Corporates: Financials		undoubtedly widen spreads and affect corporate returns in the short term.  Municipals
Industrial		Taxables offer value compared to other spread products but remain deal specific with limited availability of inventory.
Municipal Bonds		ABS ABS spreads have tightened, but still offer value relative to government securities and select corporates. Economic outlook supports incremental value in prime auto loan, equipment and credit card issuers. Collateral performance remains within rating agency expectations. The new issue market offers the most attractive avenue to add exposure.
Asset-Backed  Mortgage Backed		MBS Given the recent tightening on both an OAS and nominal basis, the sector is now trading at fair valuation levels. While seasonal supply is starting to slow, the sector will likely need the treasury market to sell off in order to generate positive excess returns over the near term.

Source: PFMAM, as of 09/30/16. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. Analysis is subject to changes in the market environment, and may vary based on the client's particular circumstances.

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