

Investment Options for Illinois Community Colleges in Today's Market

ICCCFO Conference

October 13, 2016



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Agenda

- I. Current Economic and Interest Rate Environment**
- II. Investment Options Permitted Under the Illinois Public Funds Investment Act**
- III. Implementation of Applicable Investment Strategies**
- IV. CFOs' Economic and Interest Rate Forecasts**

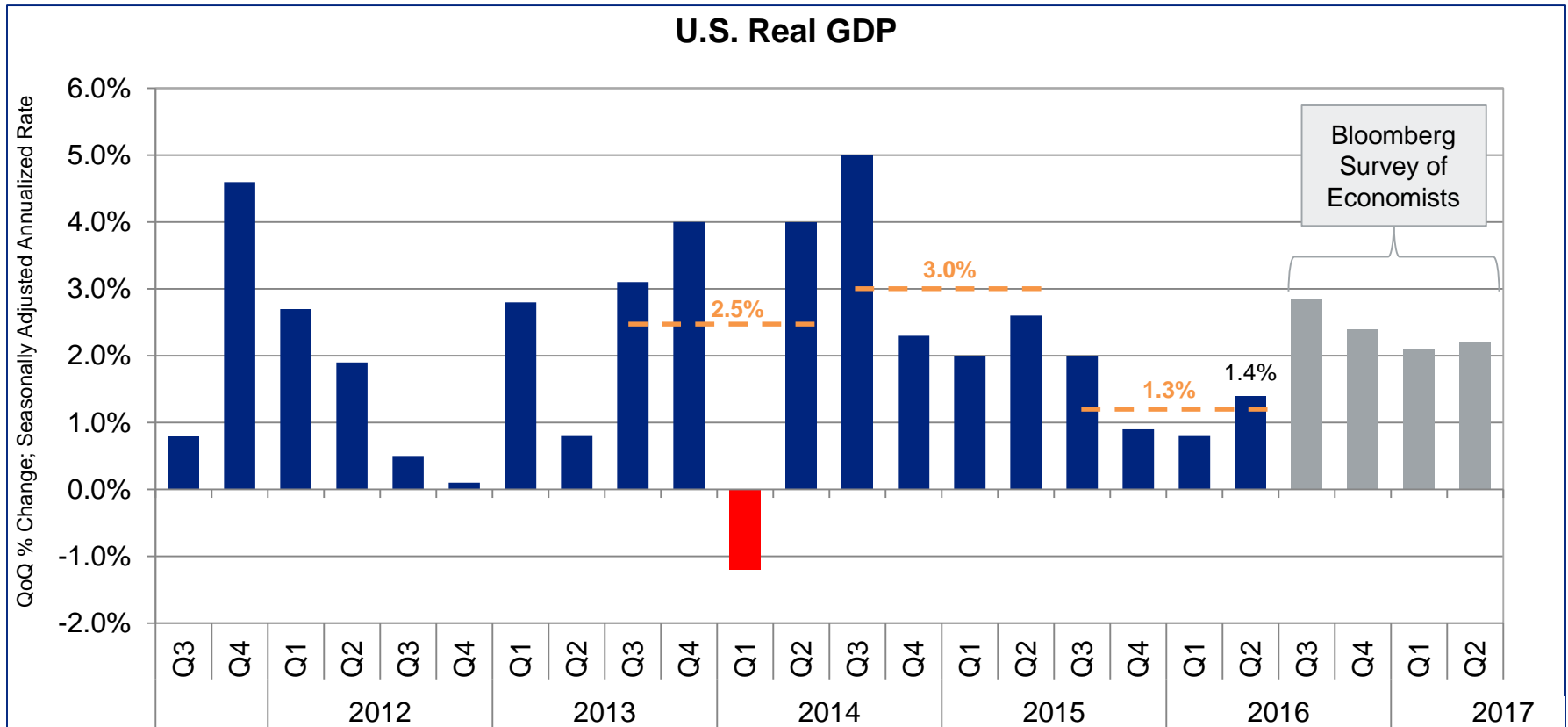
Current Economic and Interest Rate Environment

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 third quarter significantly higher**
- **Central banks continue to accommodate markets**
- **Global headwinds have dissipated**

U.S. Economy on Moderate Growth Track

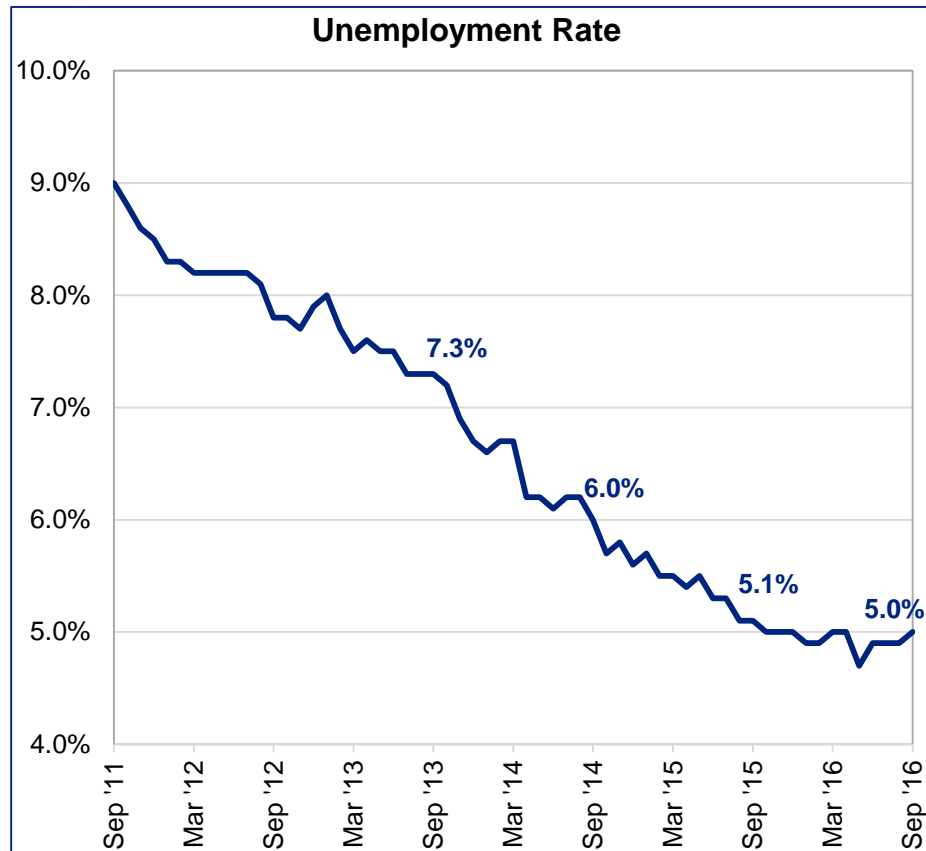
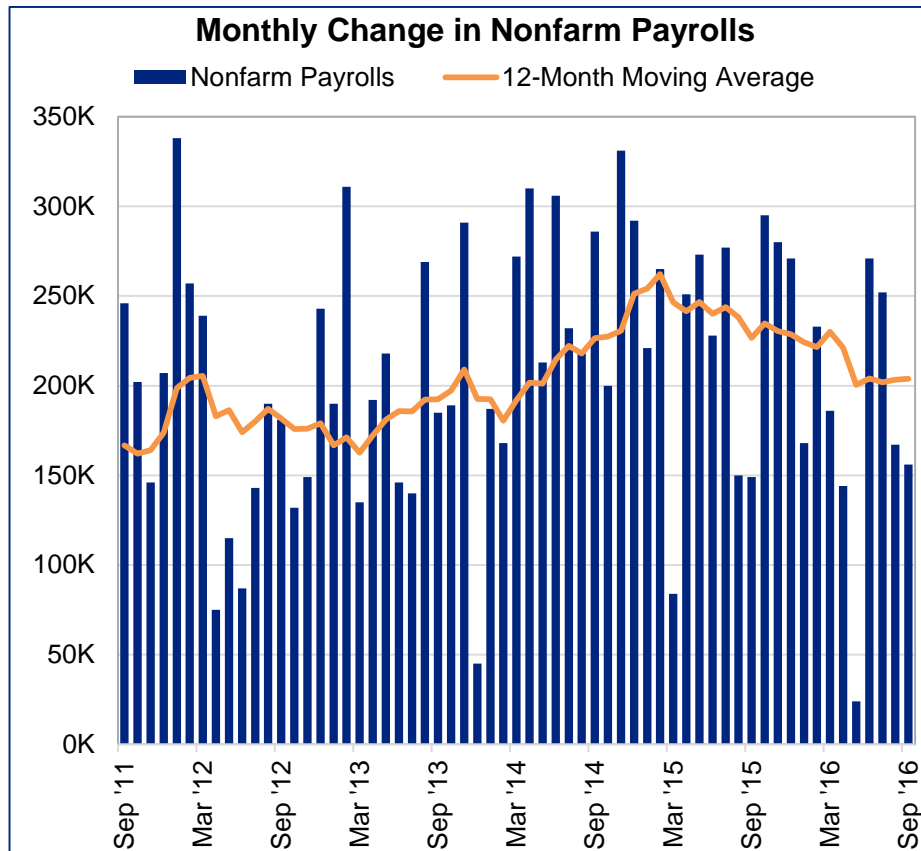
- U.S. GDP growth increased at an annual rate of 1.4% in the second quarter of 2016, according to the Bureau of Economic Analysis; this was revised up from 1.1%, but still paints the same picture of moderate growth in the U.S.
- Second quarter GDP reflected positive contributions from personal consumption, which contributed the most to GDP since the 4th quarter of 2014; business investment detracted from GDP for the third quarter in a row, the most since the 2nd 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

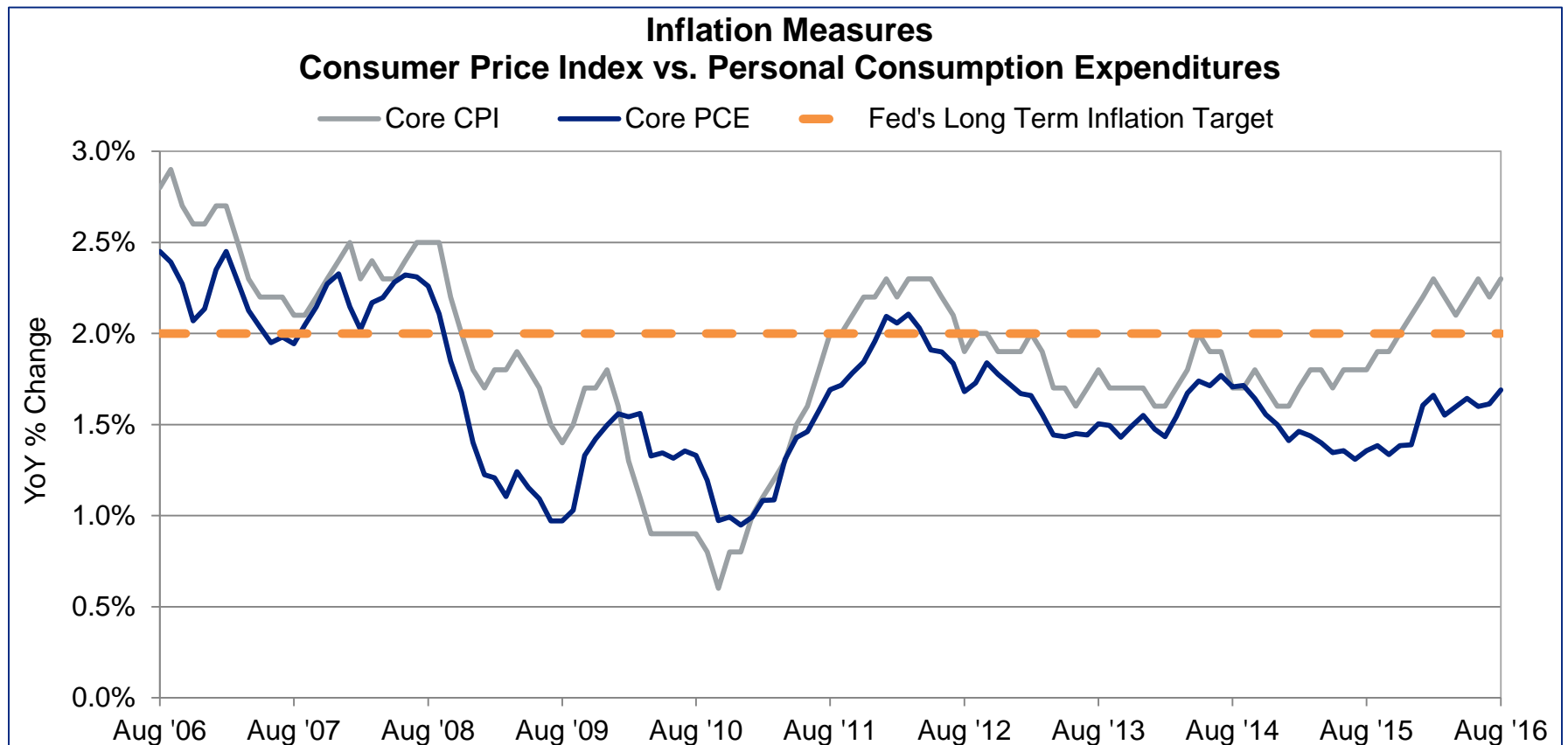
- The U.S. labor market added 156,000 jobs in September, short of the 172,000 expectations, while the prior month's number was revised up to 167,000
- Both the unemployment rate and labor force participation rate ticked up 0.1% to 5.0% and 62.9% respectively, suggesting that more people are re-entering 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



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

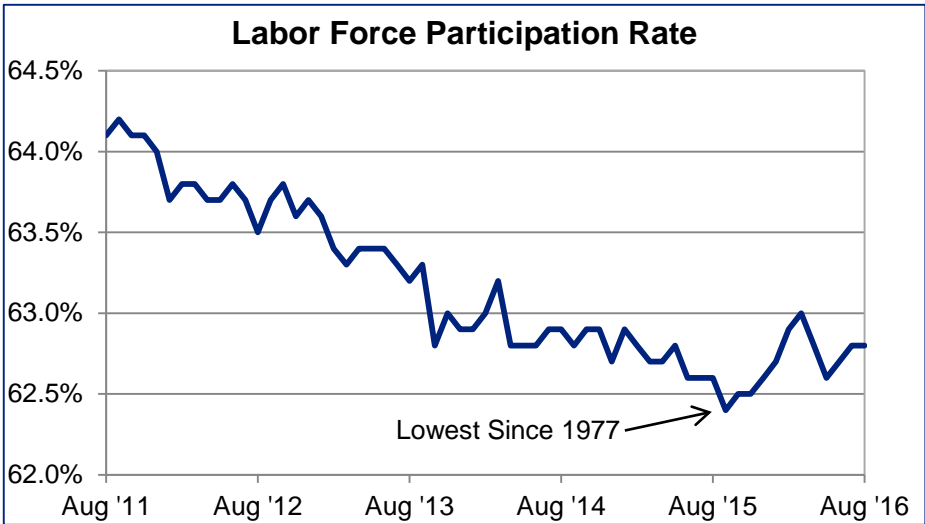
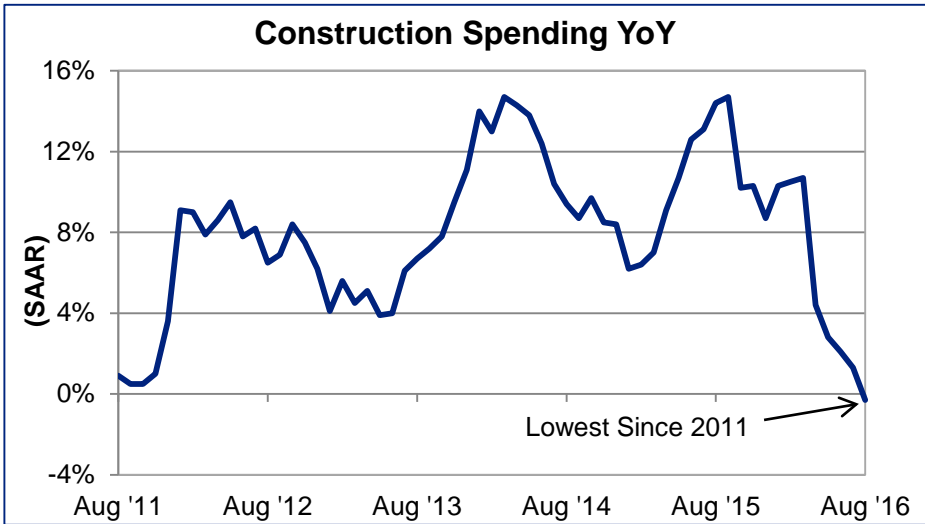
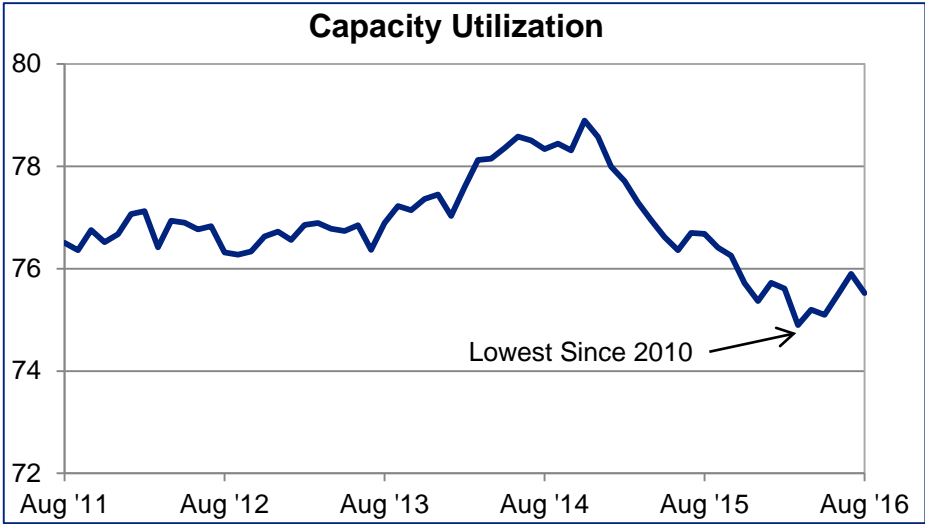
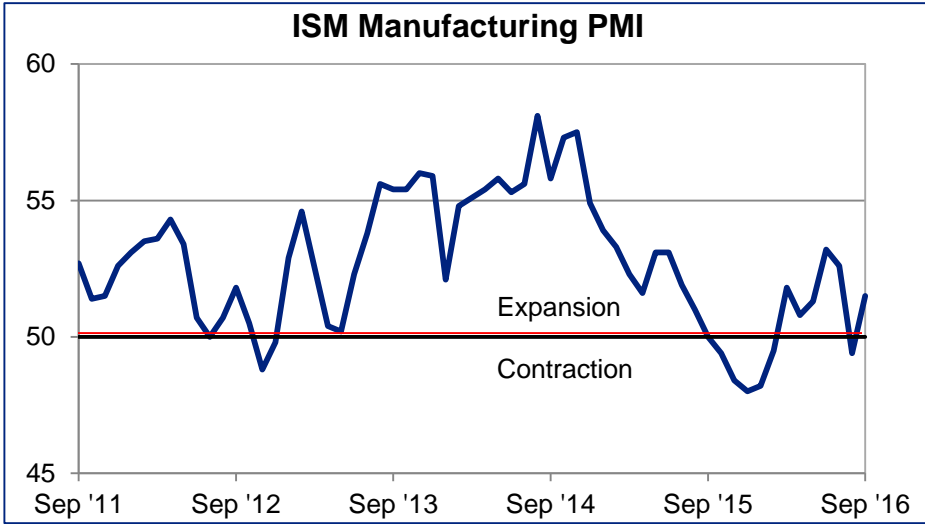
Inflation Rising Slowly

- 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 2.0% target
- Some regional Fed Presidents, such as Cleveland’s Mester and Richmond’s Lacker, have urged for a pre-emptive interest rate increase to prevent the economy from overheating, stating that “the Fed should be looking ahead and not just waiting”



Source: Bloomberg as of 08/31/2016

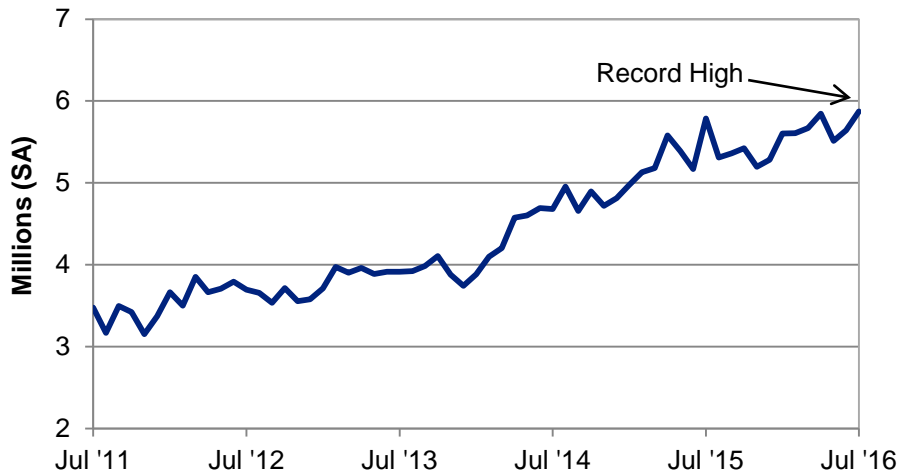
Economic Backdrop: Areas of Weakness



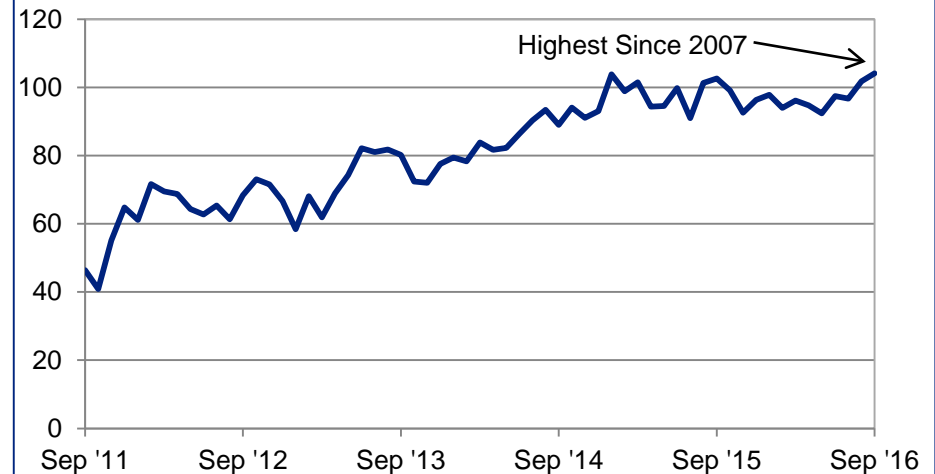
Source: Bloomberg. As of 09/30/16. SA is seasonally adjusted.

Economic Backdrop: Areas of Strength

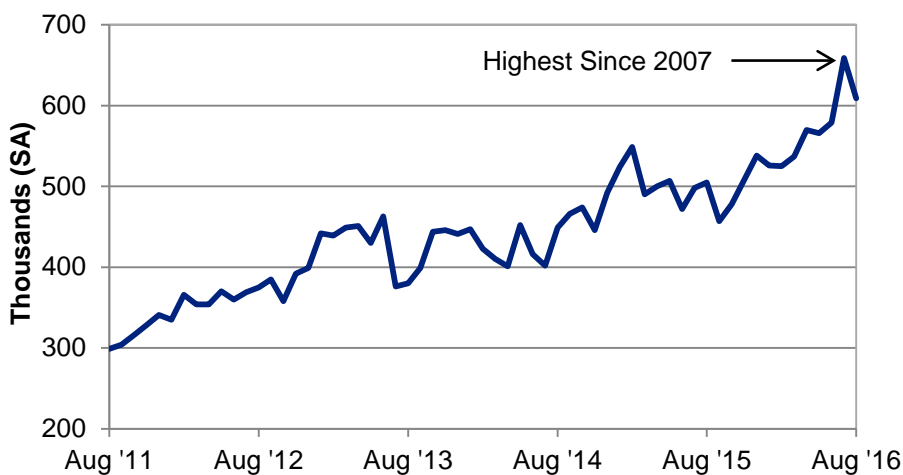
Total U.S. Job Openings



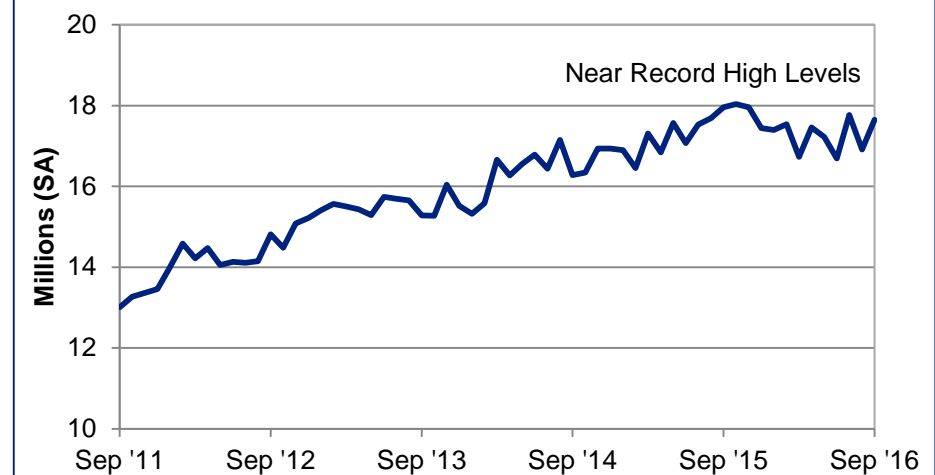
Consumer Confidence



New Home Sales



Total U.S. Auto Sales

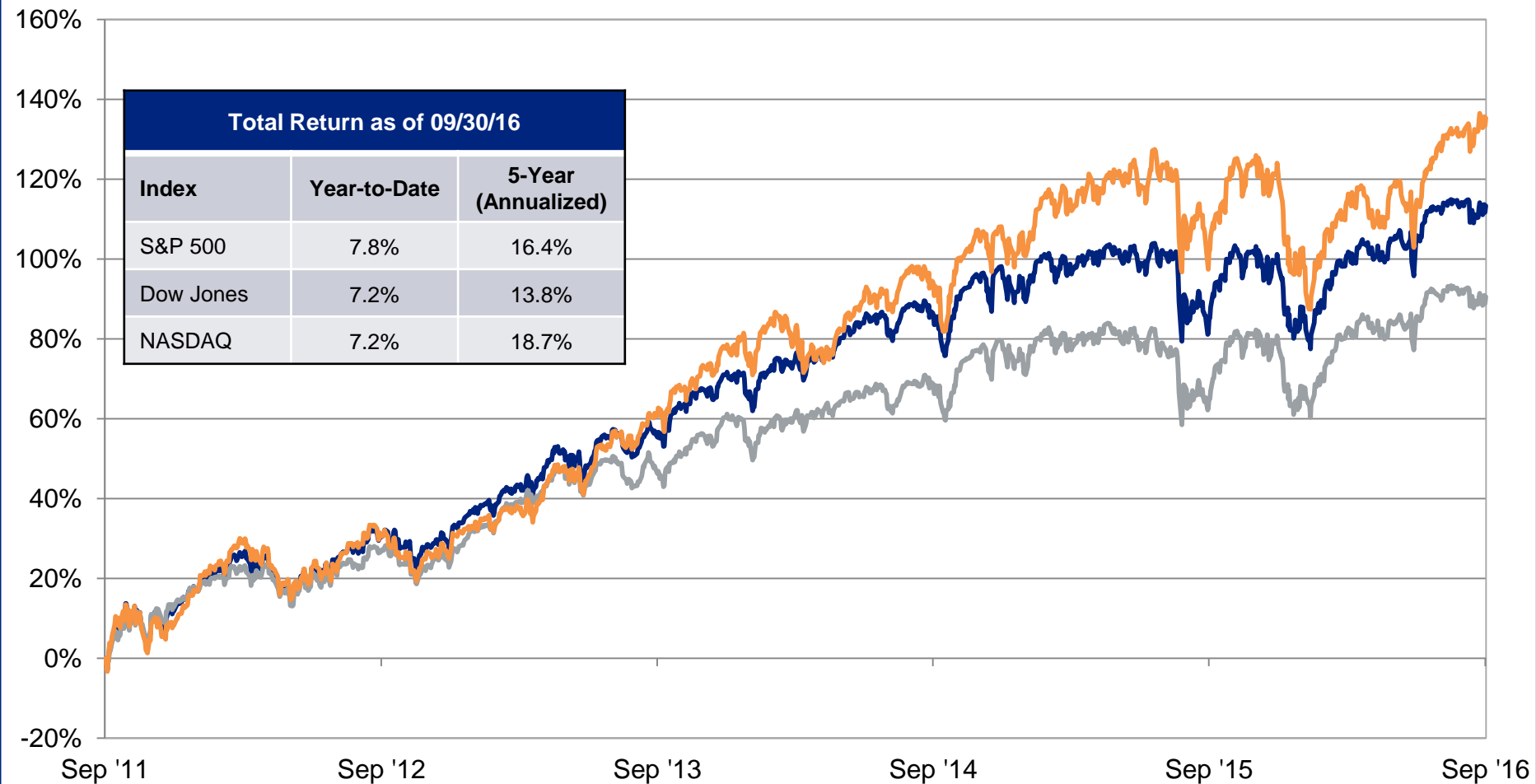


Source: Bloomberg. As of 09/30/16. SA is seasonally adjusted.

U.S. Equities Near Record Highs

Cumulative 5-Year Total Return in Key U.S. Equity Indices

— S&P 500 — Dow Jones — NASDAQ

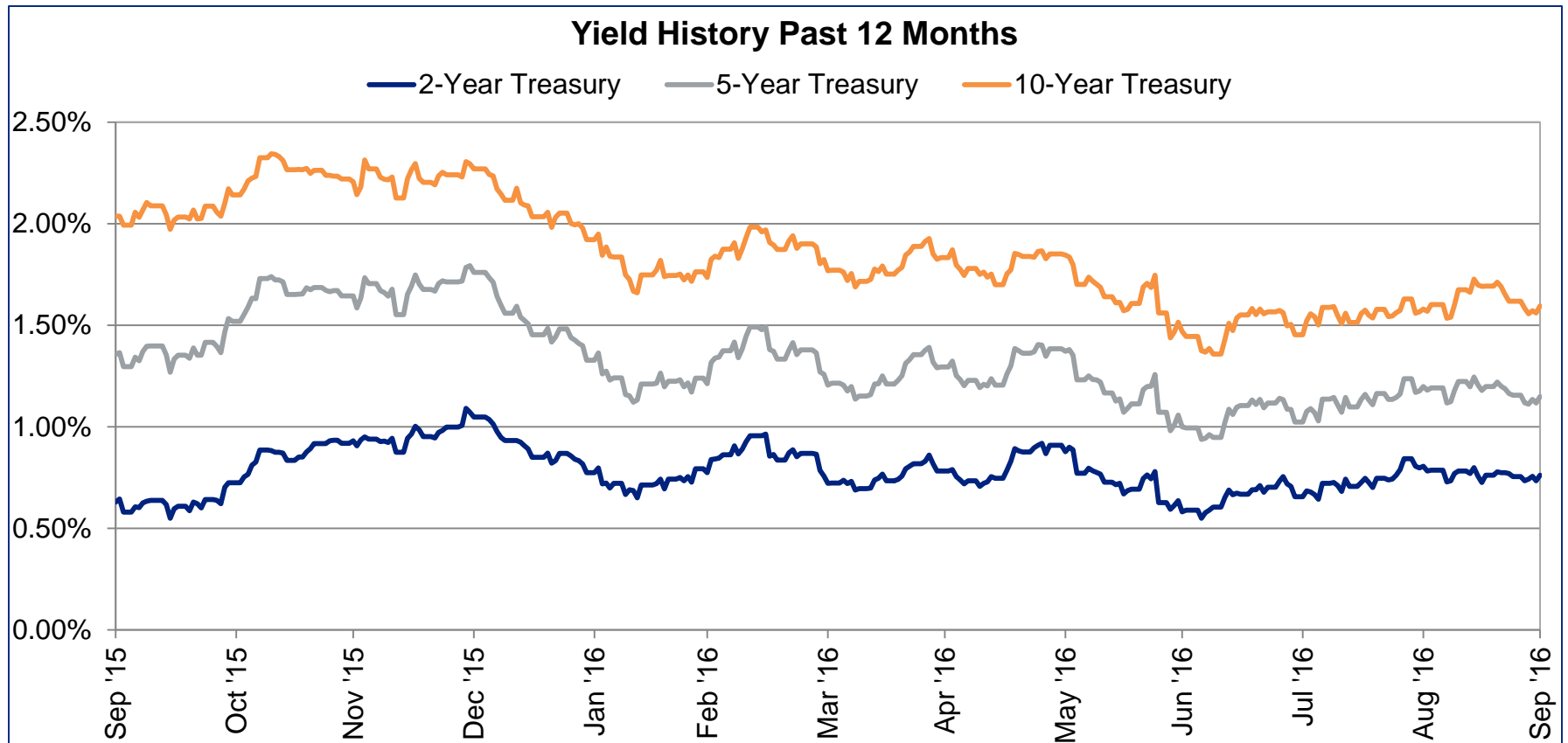


Total Return as of 09/30/16		
Index	Year-to-Date	5-Year (Annualized)
S&P 500	7.8%	16.4%
Dow Jones	7.2%	13.8%
NASDAQ	7.2%	18.7%

Source: Bloomberg, as of 09/30/16

U.S. Treasury Yields

- Treasuries have had a rough ride so far this year: Yields fell to begin the year amid concerns over China's slowing economy; a dovish Fed in March led to a decline in yields, before recovering following the April meeting's minutes and stronger economic data – yields fell substantially again following the Brexit vote, but have since stabilized as fears abated and investors looked ahead to a possible rate hike by year-end



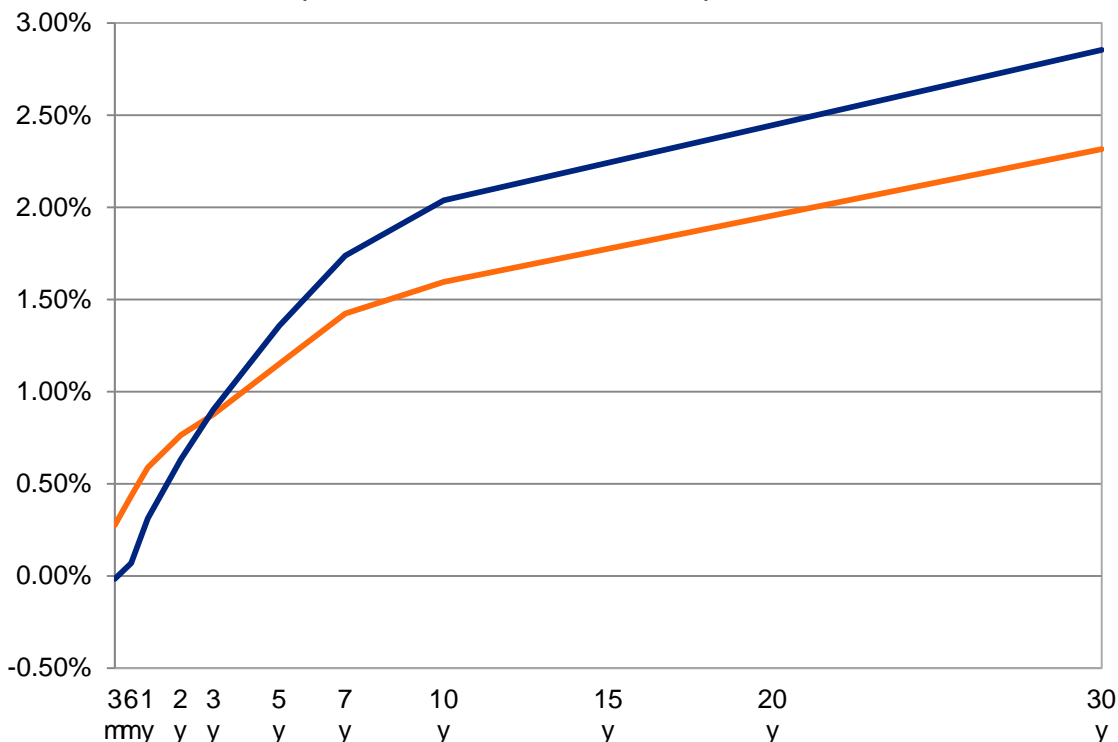
Source: Bloomberg, as of 09/30/16

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

— September 30, 2016 — September 30, 2015



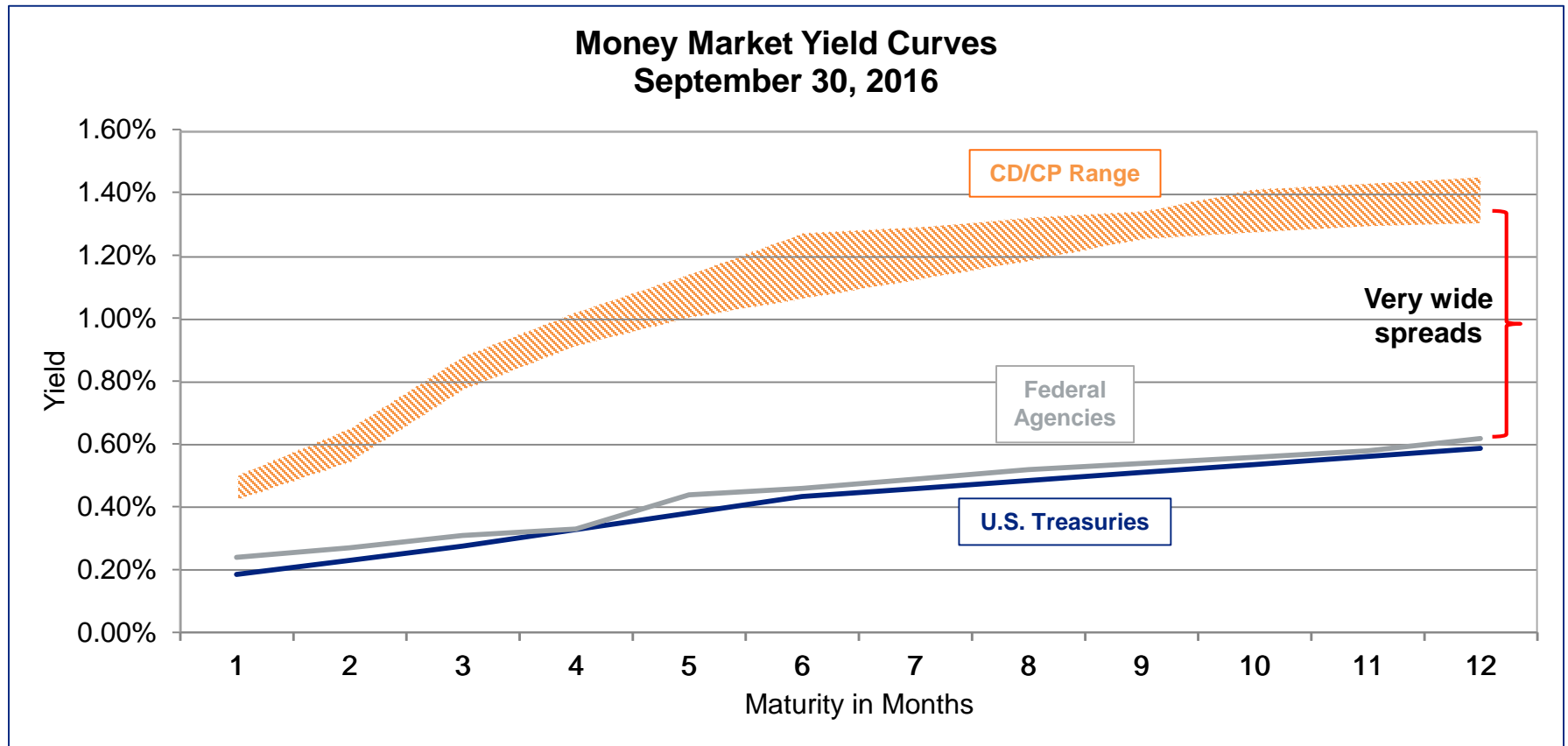
Yield Curve History

	09/30/16	09/30/15
1-Mo.	0.19	-0.02
3-Mo.	0.28	-0.02
6-Mo.	0.43	0.07
1-Yr.	0.59	0.31
2-Yr.	0.76	0.63
3-Yr.	0.88	0.90
5-Yr.	1.15	1.36
7-Yr.	1.42	1.74
10-Yr.	1.60	2.04
30-Yr.	2.32	2.85

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; money market reforms, effective 10/14/2016, have driven spreads apart: yields on these government securities fell due to increased demand while CP yields kept rising as investors continued to move from prime to government money market funds



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.

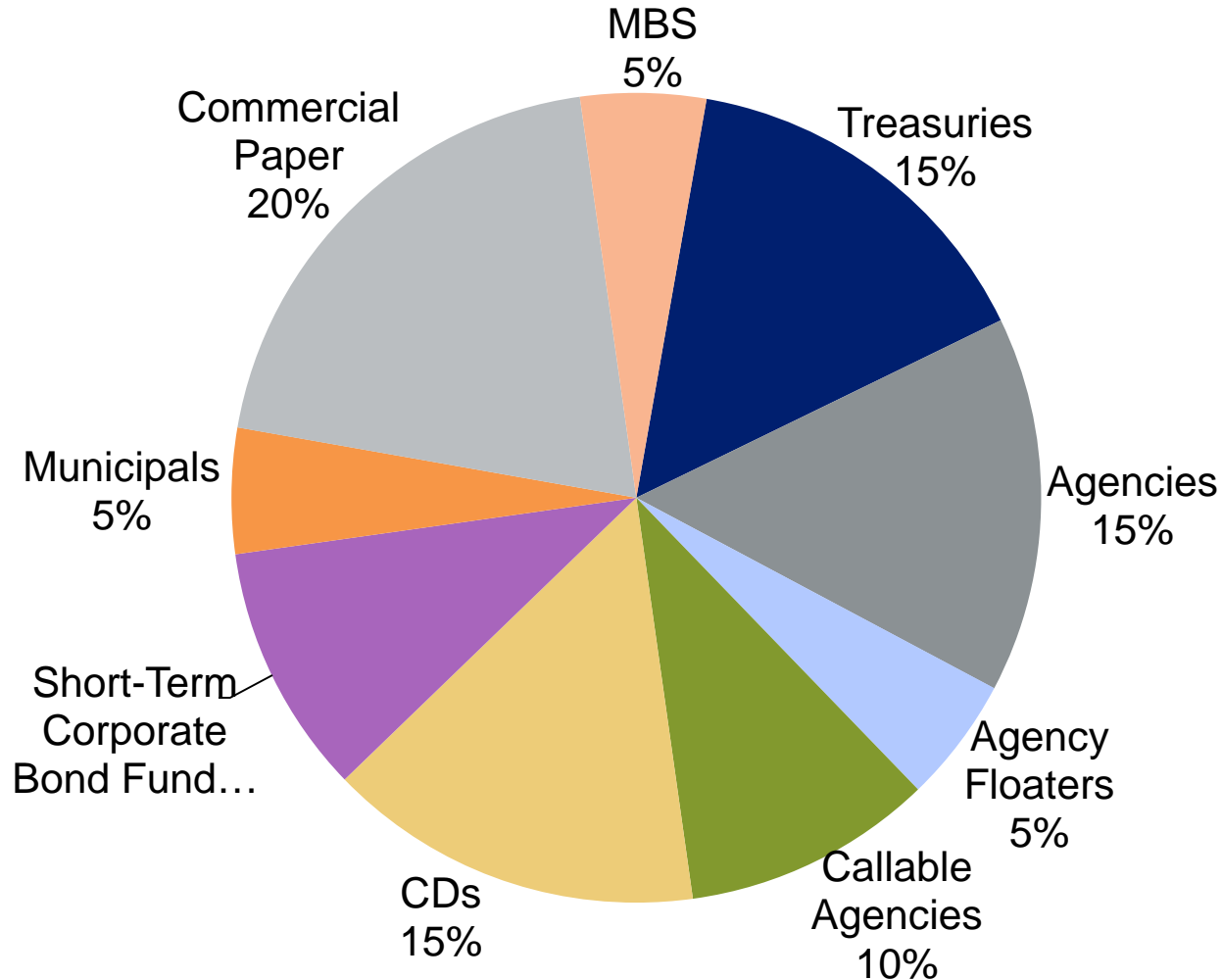
Investment Options Permitted Under the Illinois Public Funds Investment Act

Investments Currently Allowed by State Statutes

Investment Type	Allowed By the Illinois Public Funds Investment Act
U.S. Treasury Obligations	Yes
Federal Agency Obligations	Yes
Agency Mortgage-Backed Securities	Yes
Government Money Market Funds	Yes
Repurchase Agreements	Yes
FDIC-Insured Certificates of Deposit	Yes
Negotiable Certificates of Deposit	Yes
Municipal Bonds	Yes. Must be rated within the four highest general classifications.
Commercial Paper	Yes. No more than 1/3 of the portfolio. Must also be rated within the three highest general classifications.
Short-Term Corporate Bond Funds	Yes
Local Government Investment Pools	Yes

Value Added Through Diversification in the Portfolio

Sample Diversified Portfolio Asset Allocation*

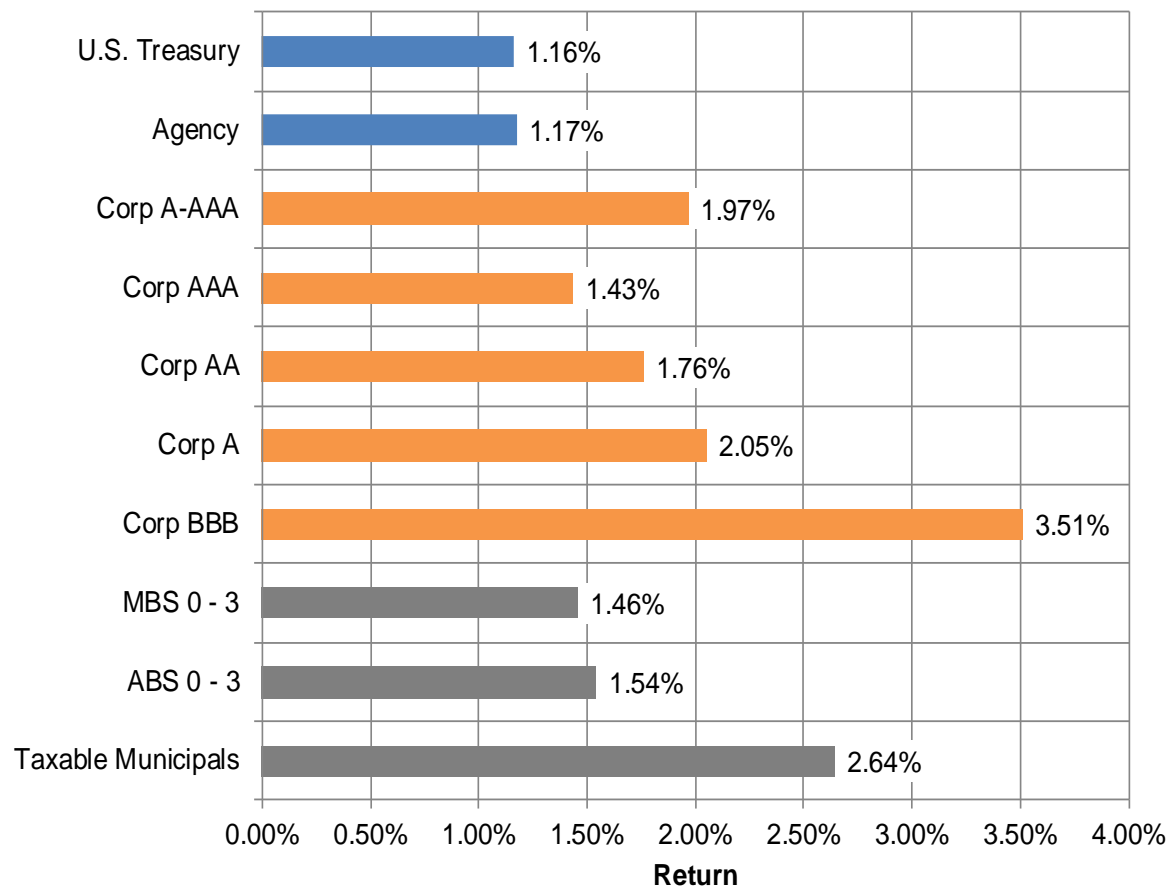


* Sample diversified portfolio asset allocation is within the Illinois Public Funds Investment Act

1 – 3 Year Index Returns by Sector

1 – 3 Year Index Returns

Year-to-Date (12/31/15 - 10/07/16)

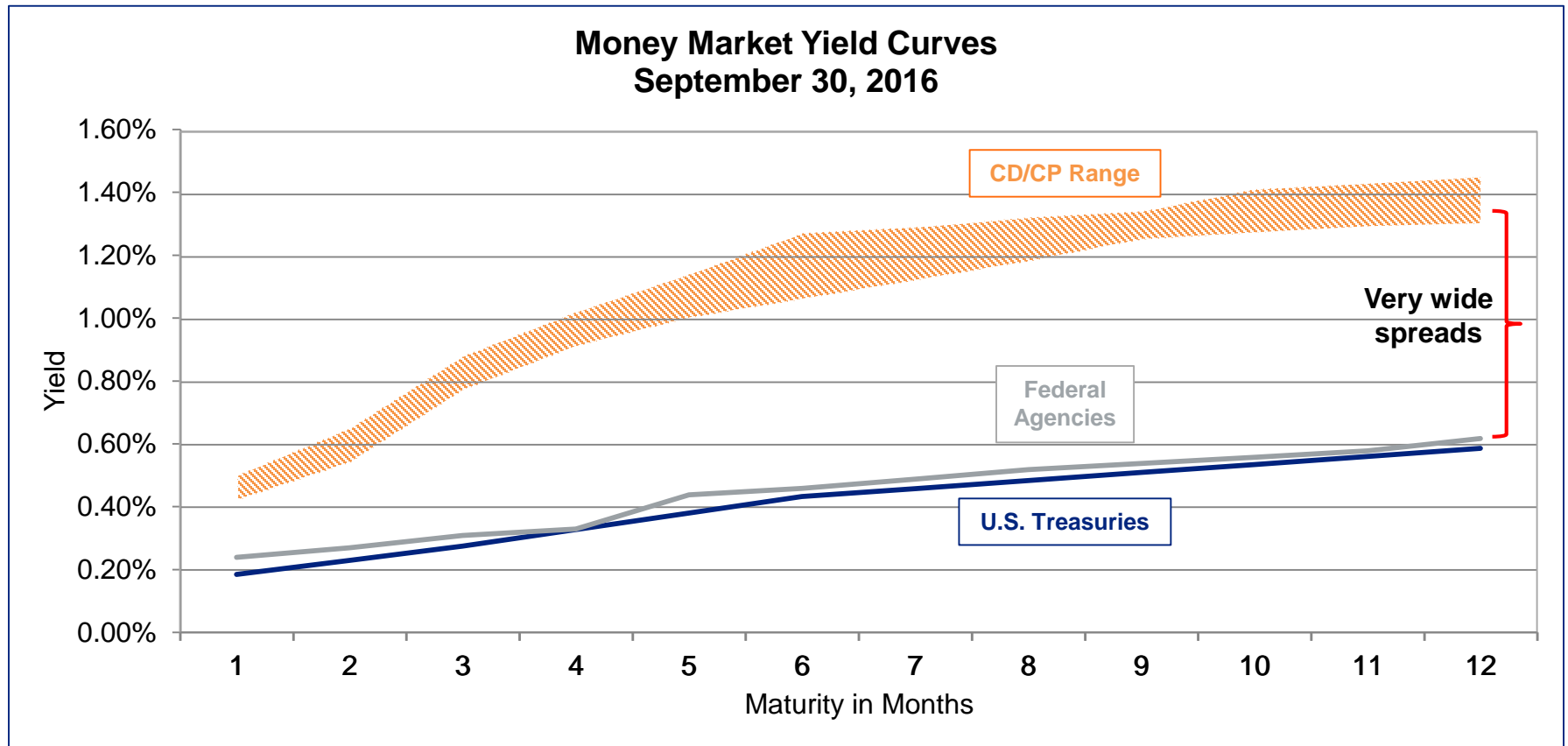


Source: Bank of America Merrill Lynch

Implementation of Applicable Investment Strategies

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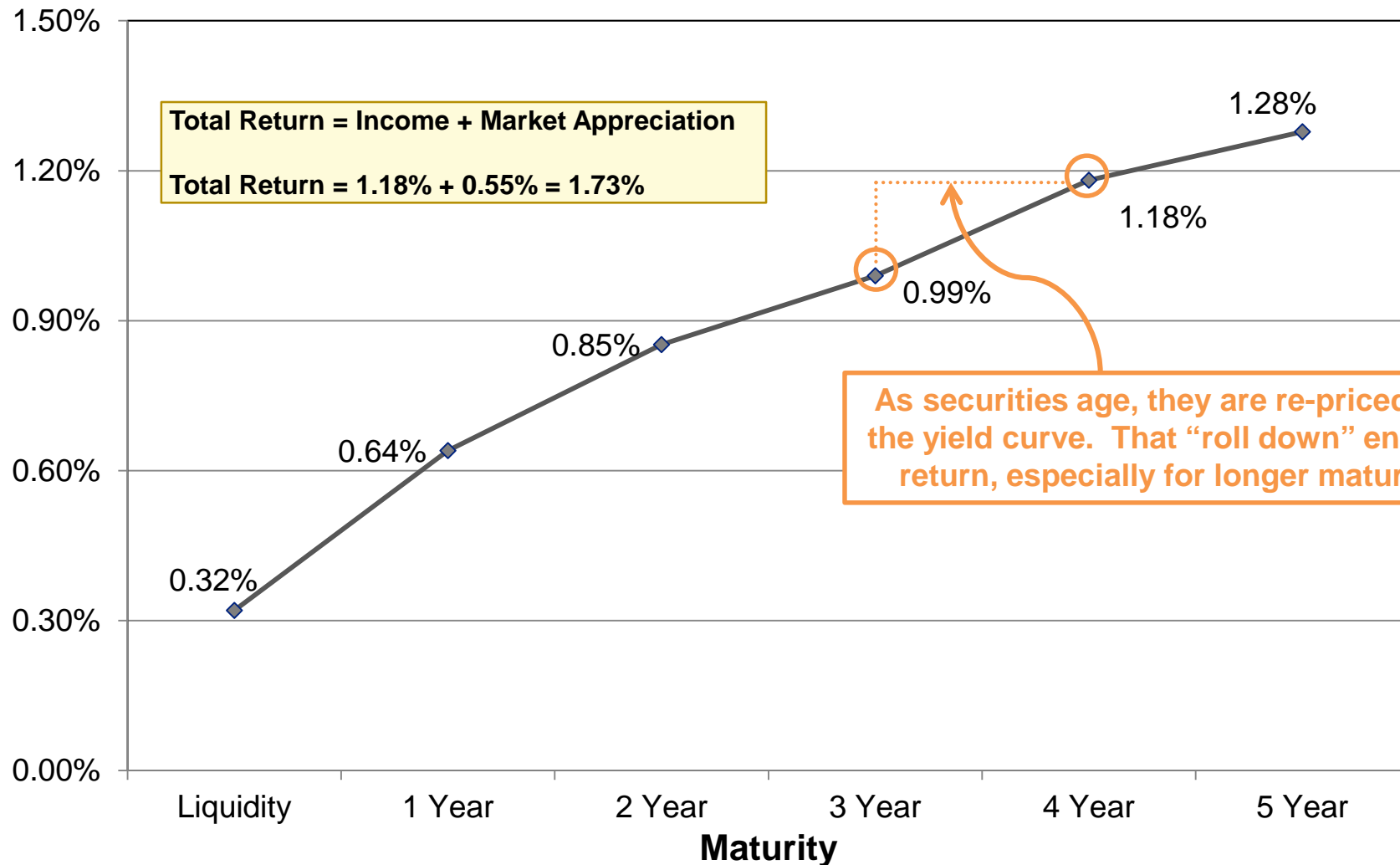


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The Benefit of “Roll Down”

U.S. Treasury Yield Curve

October 6, 2016



Be Wary of Callable Securities

“I’ve got an October 2022 FNMA for you. It has a Yield-to-Maturity of 2.24% and a Yield-to-Call of 1.40%. This will go fast.”



When Does a Security Get Called?

- The issuer will always act in their **own** best interest – which will be to the **investor's detriment**

Possible Outcome	Why?	Impact on Investor
Agency gets called	Rates are lower	Investor is forced to reinvest, but now at lower yields.
Agency does not get called	Rates are higher	Investor retains ownership, locked in until maturity, but in a market environment where rates are now higher (and they wish they did not own it).

Investor loses either way

Question: *“Was it worth the small amount of extra yield?”*

Investment Strategy Considerations

- Setting the target duration of the portfolio is a critical component of the investment strategy
- Duration is often the greatest determinant of the expected rate of return and volatility of a fixed income portfolio



Duration

**Sector
Allocation**

**Issue
Selection**

Benchmark Consideration

Risk/Return of Various Benchmarks

10 Years Ended 6/30/2016

Merrill Lynch Index	Duration	Average Annual Return	Cumulative Value of \$125,000,000	Quarters With Negative Returns
3-Month Treasury Bill	0.25 Years	1.03%	\$138,458,130	0 out of 40
6-Month Treasury Bill	0.50 Years	1.40%	\$143,682,765	0 out of 40
1 Year Treasury Index	0.99 Years	1.68%	\$147,747,441	5 out of 40
1-3 Year Treasury Index	1.90 Years	2.47%	\$159,545,791	6 out of 40
1-5 Year Treasury Index	2.74 Years	3.23%	\$171,844,343	10 out of 40
1-10 Year Treasury Index	3.89 Years	4.17%	\$188,213,676	11 out of 40

* Source: Bloomberg, Bank of America / Merrill Lynch Indices

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Economist Survey Forecasts

U.S. Indicator	Actual			Forecast			
	Q4-15	Q1-16	Q2-16	Q3-16	Q4-16	Q1-17	Q2-17
GDP QoQ % (saar)	0.9	0.8	1.4	2.9	2.4	2.1	2.2
CPI YOY %	0.5	1.1	1.0	1.2	1.6	2.1	2.1
Core PCE YOY %	1.4	1.6	1.6	1.6	1.8	1.7	1.8
Unemployment Rate %	5.0	4.9	4.9	4.9	4.8	4.7	4.7
Budget % of GDP	-2.6	-2.5	-2.8	-2.9	-2.9	-3.1	-2.8
Fed Funds Target Rate	0.50	0.50	0.50	0.50	0.70	0.75	0.90
3-Month LIBOR	0.61	0.63	0.65	0.85	0.89	0.98	1.11
2-Year Treasury	1.05	0.72	0.58	0.76	0.92	1.01	1.11
10-Year Treasury	2.27	1.77	1.47	1.60	1.76	1.84	1.95

Source: Bloomberg Survey of Economists. As of 10/03/2016.