

Interest Rate Environment and FHLB Advance Strategies

Jason Hwang

Director, Financial Strategies, Research, and Membership Applications

Kevin Martin

Manager, Member Financial Strategies

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FHLBBoston

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This webinar is being recorded

Today's topics

- Fed Guidance and FOMC Projections
- Labor Market Update
- Market Expectations of Interest Rates
- Advance Rate Curve
- Advance Strategies: Symmetrical Prepayment and Flattener
- Special Offerings

FOMC Forward Guidance

June 17, 2015

“On balance, a range of labor market indicators suggests that underutilization of labor resources diminished somewhat. Inflation continued to run below the Committee's longer-run objective, partly reflecting earlier declines in energy prices and decreasing prices of non-energy imports.”

“The Committee anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term.”

“The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.”

FOMC Projections

March 2015 vs June 2015

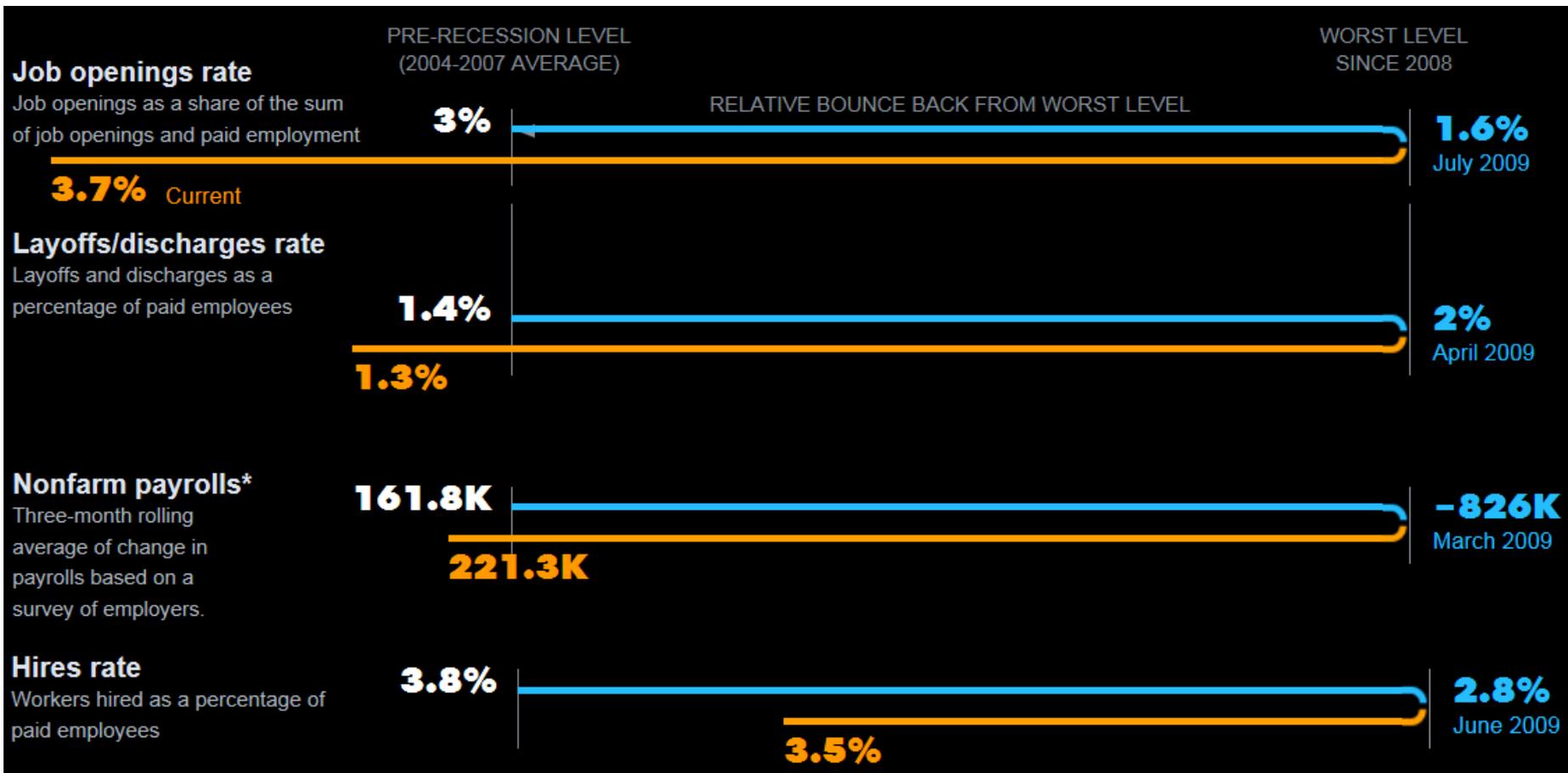


Percent

Variable	Central tendency ¹			
	2015	2016	2017	Longer run
Change in real GDP	1.8 to 2.0	2.4 to 2.7	2.1 to 2.5	2.0 to 2.3
March projection	2.3 to 2.7	2.3 to 2.7	2.0 to 2.4	2.0 to 2.3
Unemployment rate	5.2 to 5.3	4.9 to 5.1	4.9 to 5.1	5.0 to 5.2
March projection	5.0 to 5.2	4.9 to 5.1	4.8 to 5.1	5.0 to 5.2
PCE inflation	0.6 to 0.8	1.6 to 1.9	1.9 to 2.0	2.0
March projection	0.6 to 0.8	1.7 to 1.9	1.9 to 2.0	2.0
Core PCE inflation ³	1.3 to 1.4	1.6 to 1.9	1.9 to 2.0	
March projection	1.3 to 1.4	1.5 to 1.9	1.8 to 2.0	

Yellen's Labor Market Dashboard

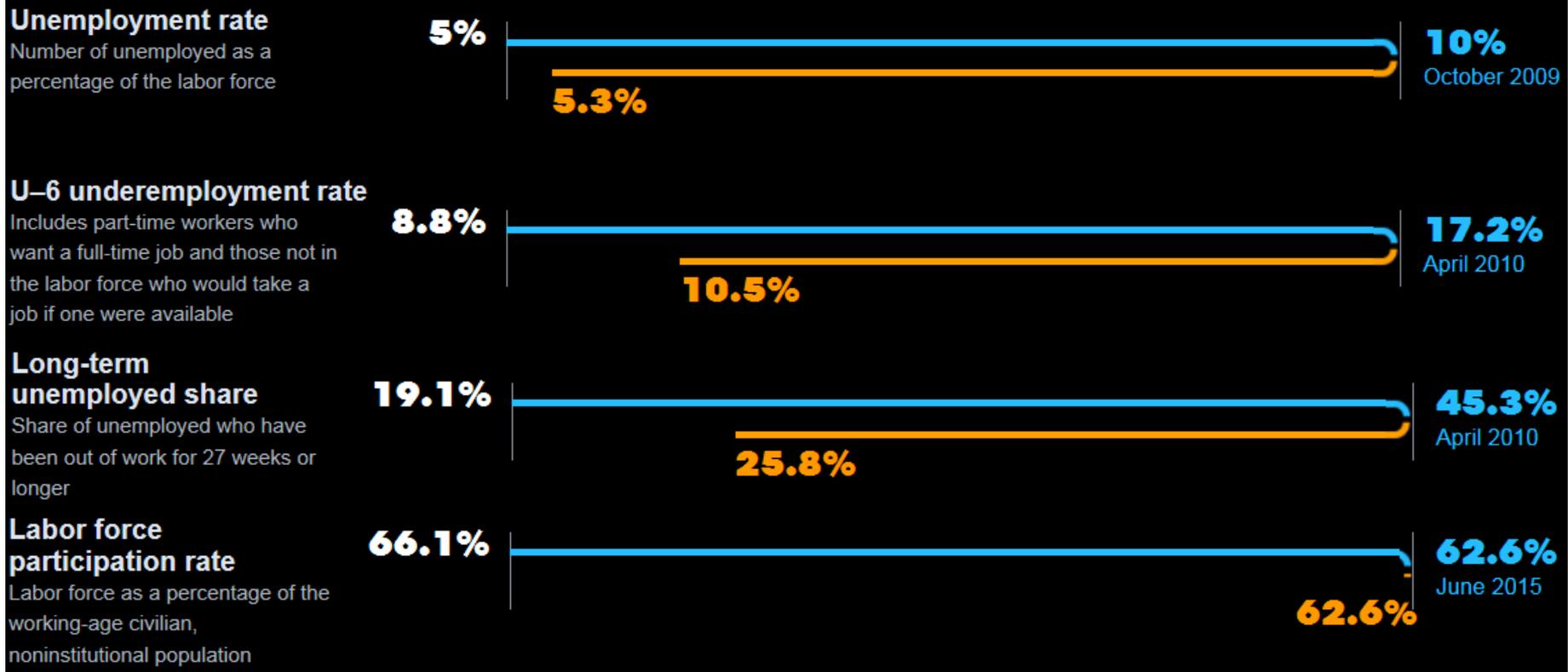
Employer Behavior – Back to Full Employment



Source: Bloomberg.com, accessed 7/3/15

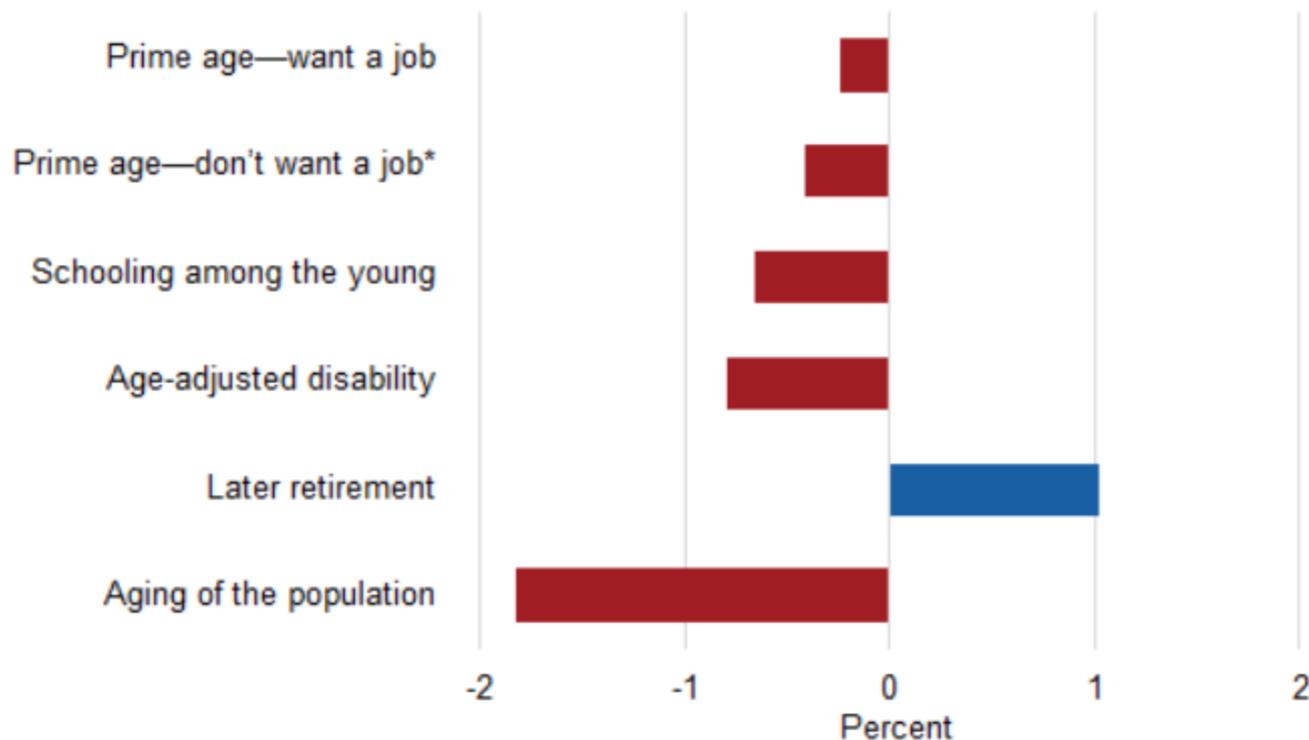
Yellen's Labor Market Dashboard

Utilization – Mixed Picture



Why Does Labor Force Participation Keep Declining?

Contributions to Change in Labor Force Participation between 2007 and 2014



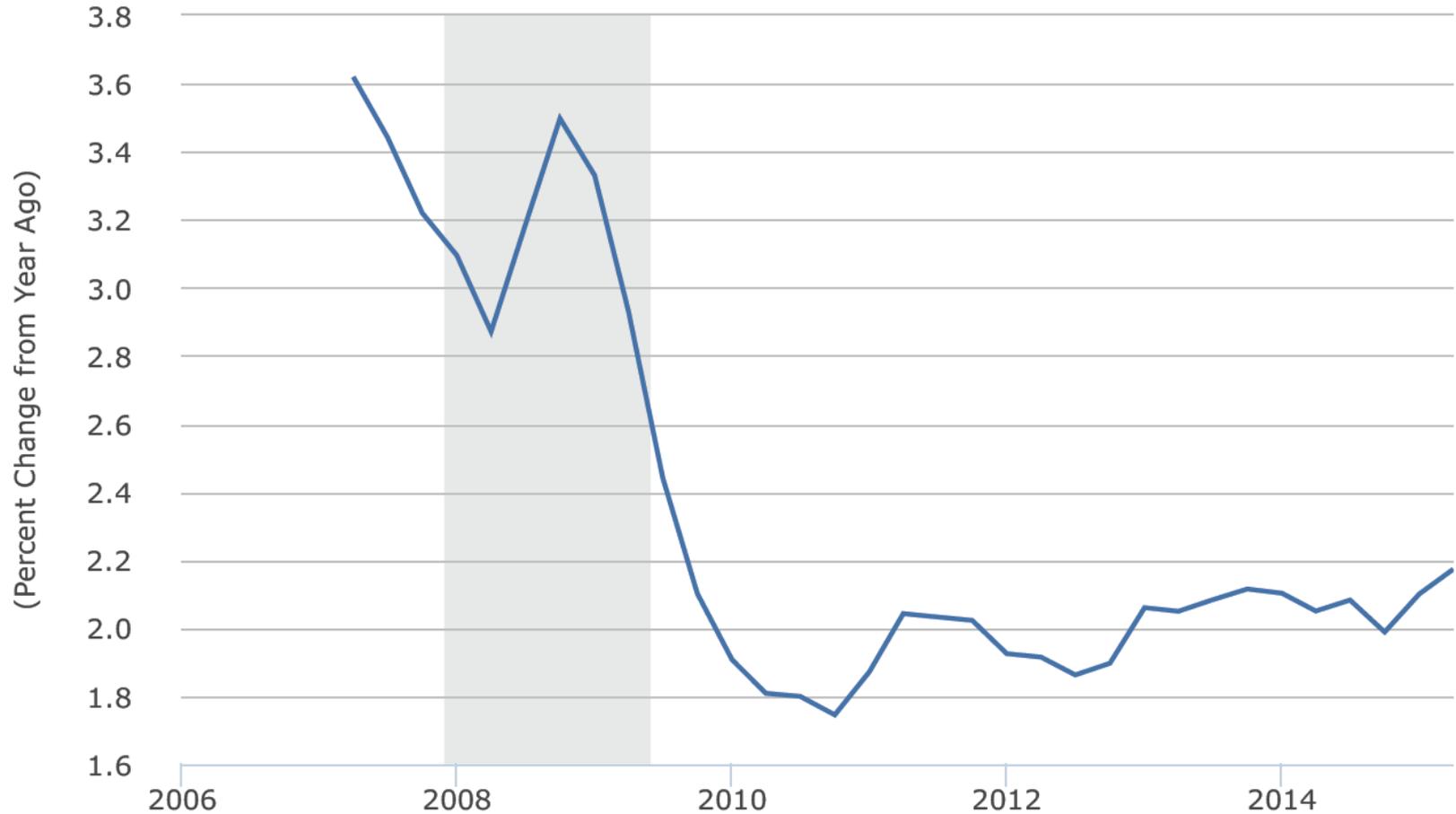
Note: Prime age—don't want a job excludes illness or disability as a reason for not participating

Sources: U.S. Bureau of Labor Statistics Current Population Survey, authors' calculations

Wage Growth – On a (Slowly) Rising Trend?



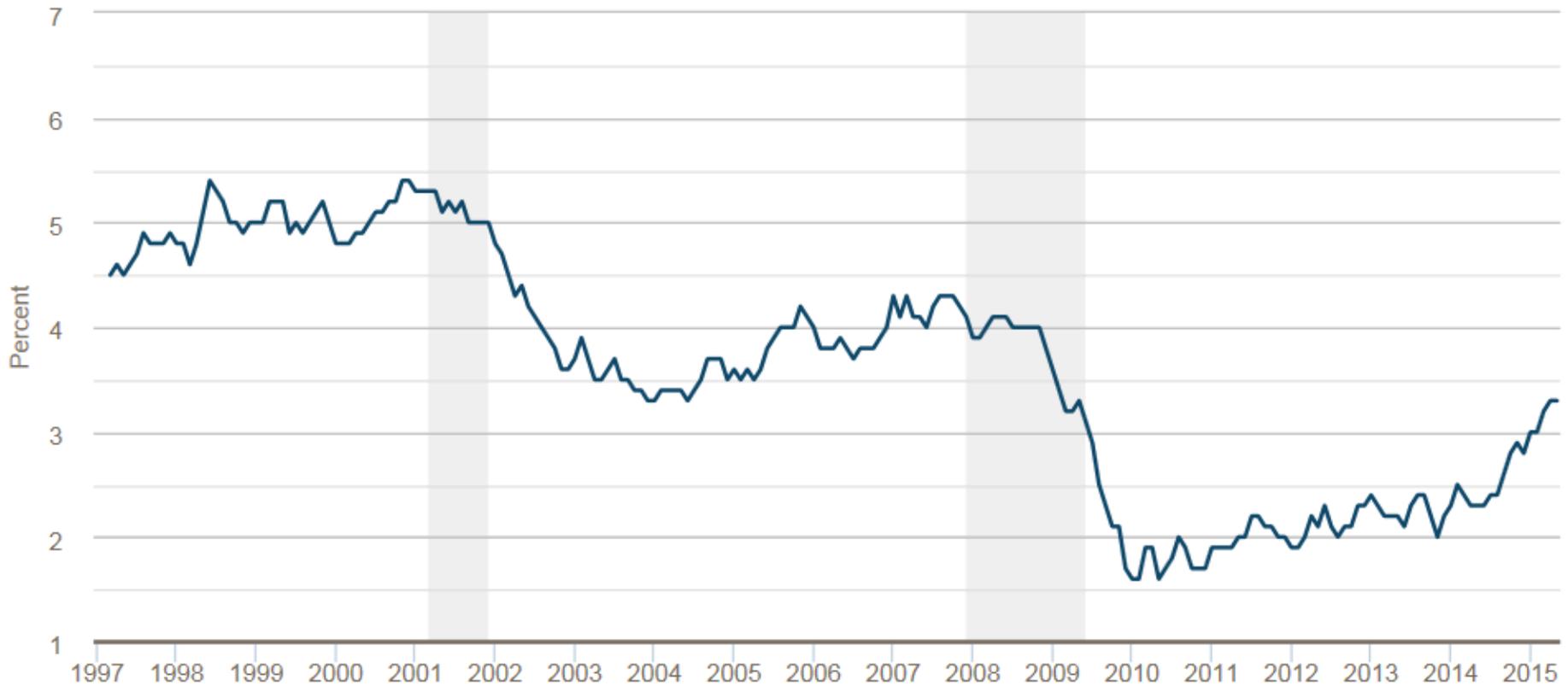
— Average Hourly Earnings of All Employees: Total Private



Source: US. Bureau of Labor Statistics

Shaded areas indicate US recessions - 2015 research.stlouisfed.org

FRB Atlanta Wage Growth Tracker

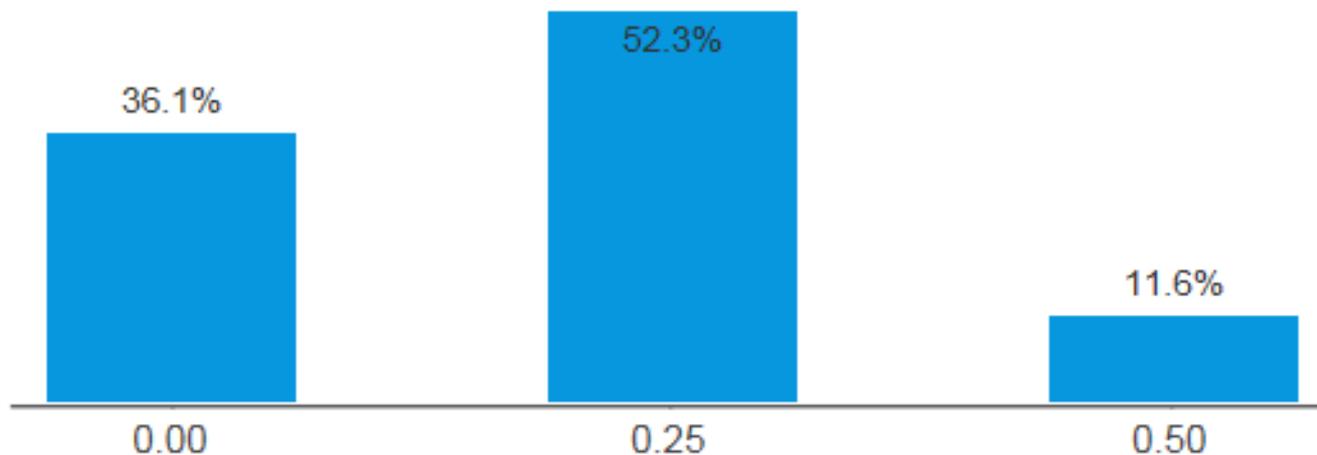


Source: Current Population Survey, Bureau of Labor Statistics and authors' Calculations

Market Expectation of Fed Funds Rate As of 7/6/15

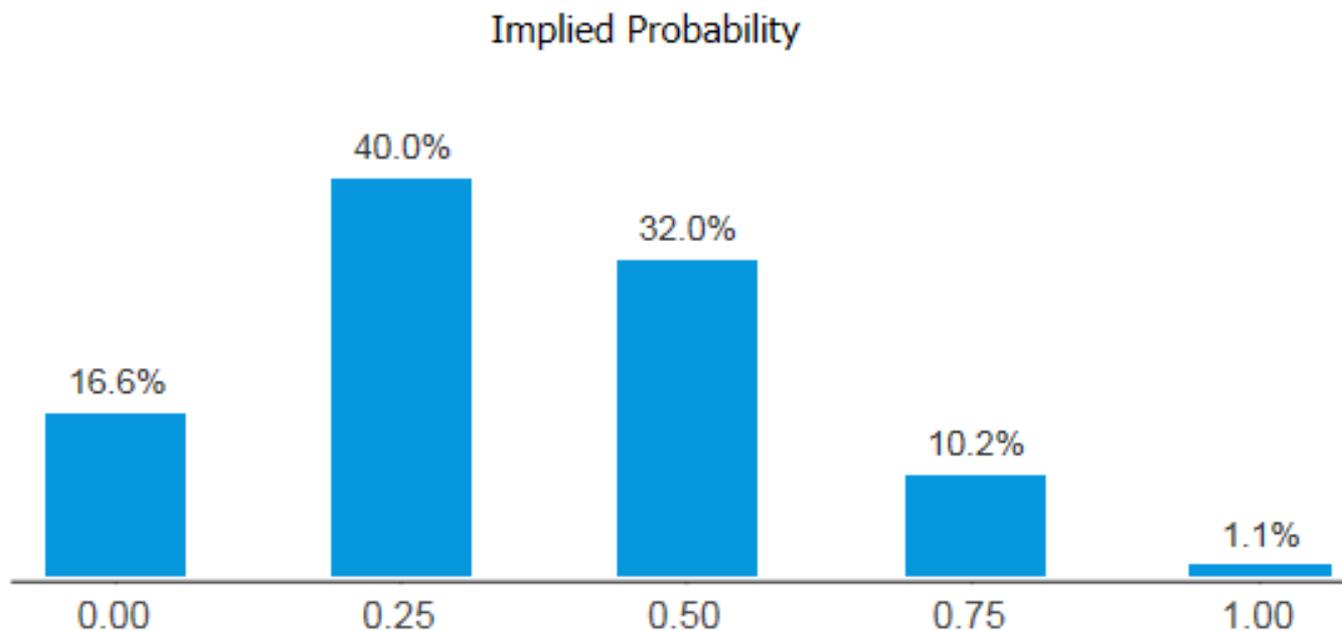
Meeting Date:	Thursday, September 17, 2015		
Futures Expiry:	September 2015	Previous Day	
Futures Price:	99.8400	Volume:	13,073
Probability of Rate Hike:	12%	Open Interest:	72,069

Implied Probability



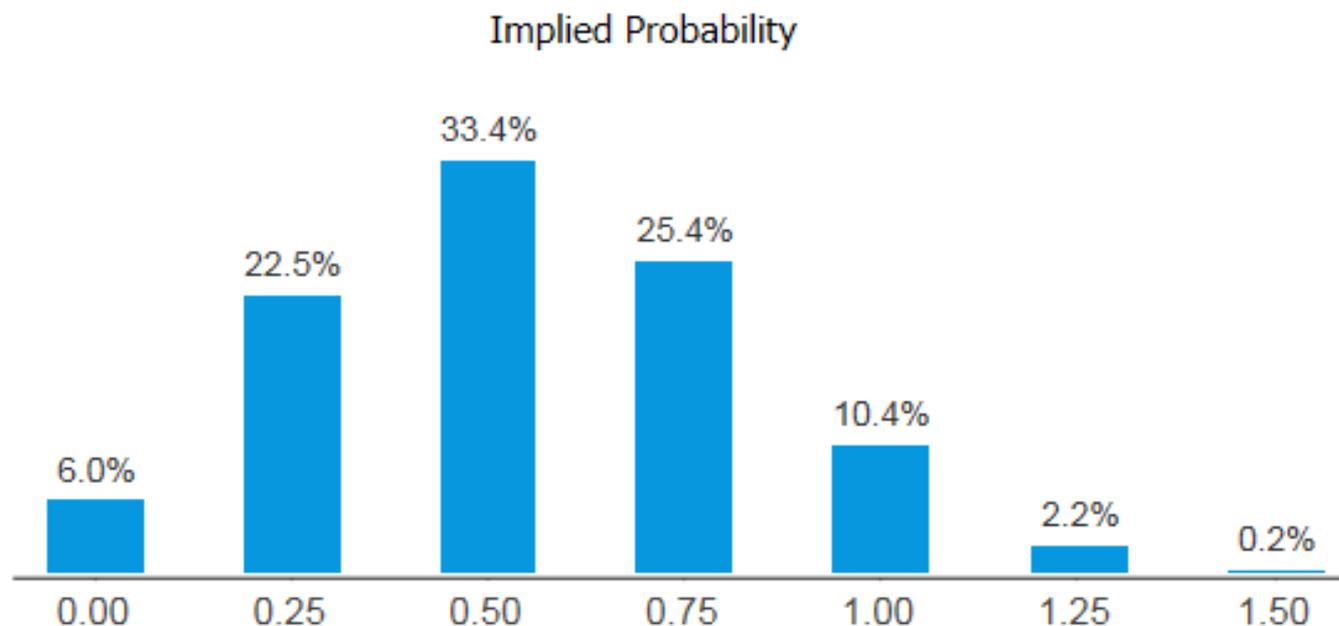
Market Expectation of Fed Funds Rate As of 7/6/15

Meeting Date:	Wednesday, December 16, 2015		
Futures Expiry:	December 2015	Previous Day	
Futures Price:	99.7300	Volume:	13,206
Probability of Rate Hike:	43%	Open Interest:	60,541



Market Expectation of Fed Funds Rate As of 7/6/15

Meeting Date:	Wednesday, March 16, 2016		
Futures Expiry:	March 2016	Previous Day	
Futures Price:	99.5850	Volume:	2,805
Probability of Rate Hike:	71%	Open Interest:	9,256



Market Expectations of Treasury Yields

Livingston Survey, June 2015



3-Month Treasury Bill Interest Rate

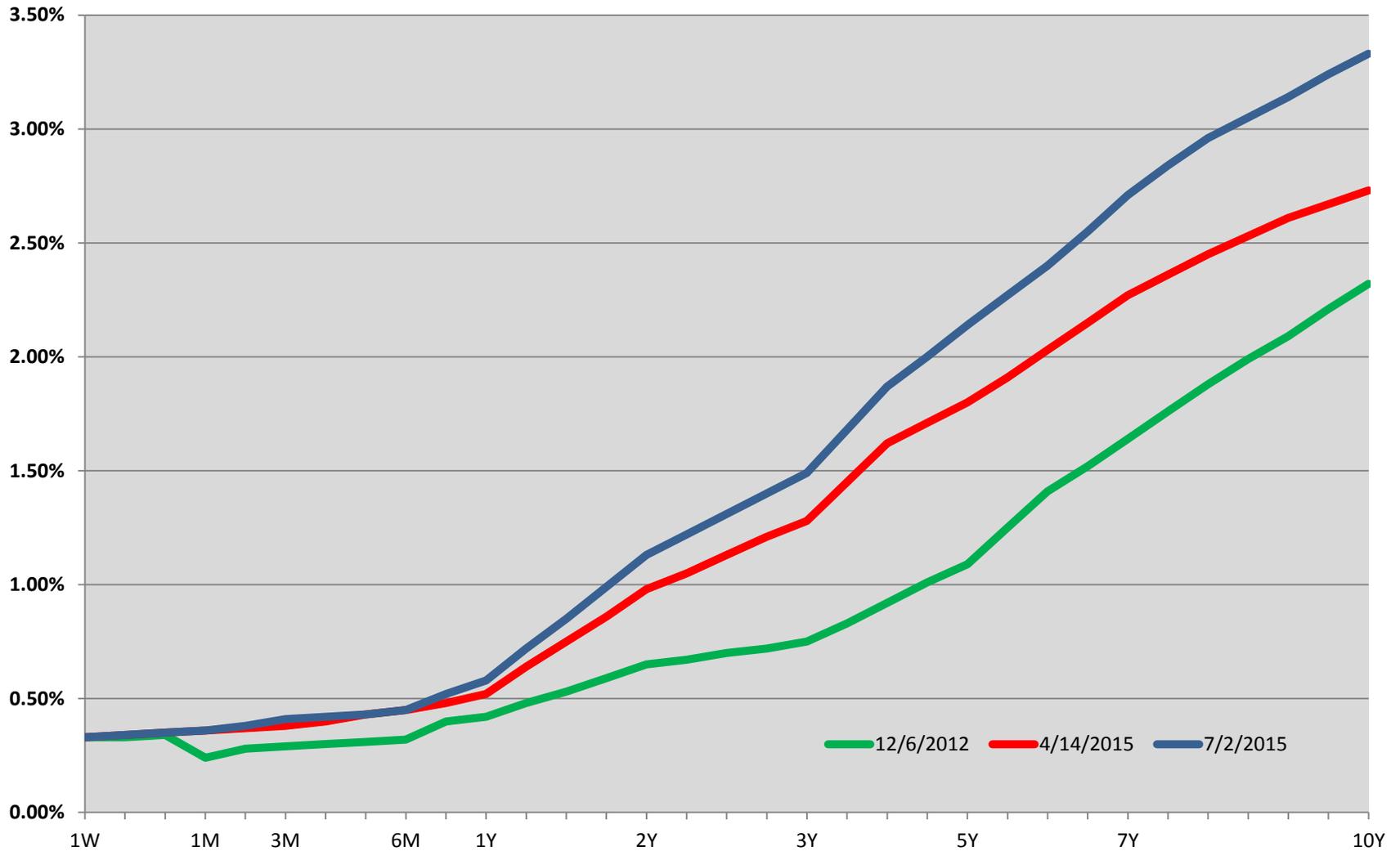
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10-Year Treasury Bond Interest Rate

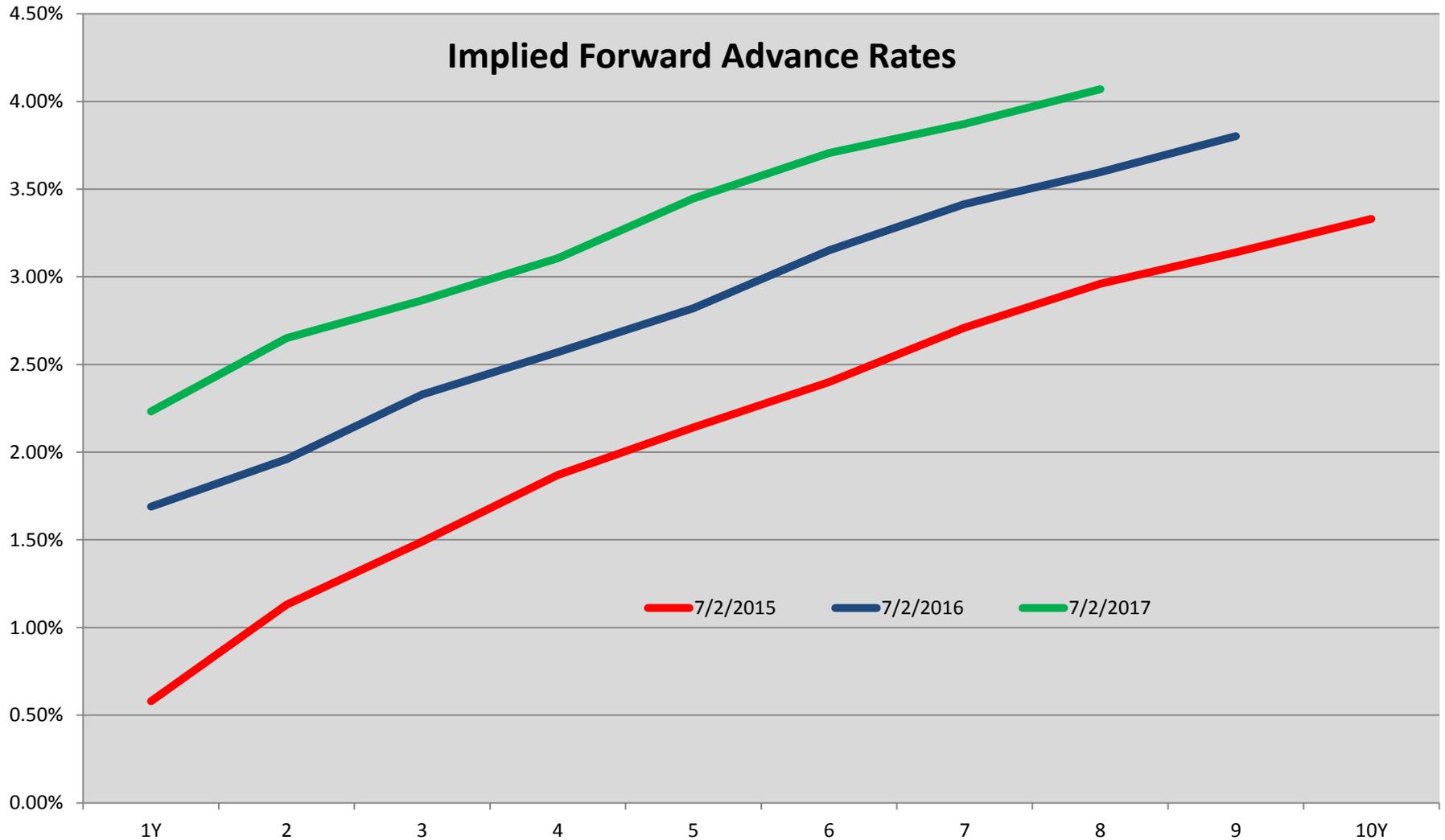
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June 30, 2015	0.25	0.05	2.72	2.16
Dec. 31, 2015	0.81	0.59	3.20	2.50
June 30, 2016	N.A.	1.11	N.A.	2.84
Dec. 30, 2016	2.25	1.50	3.75	3.00

FHLB Boston Classic Advance Curves



FHLB Boston – Implied Forward Advance Rates



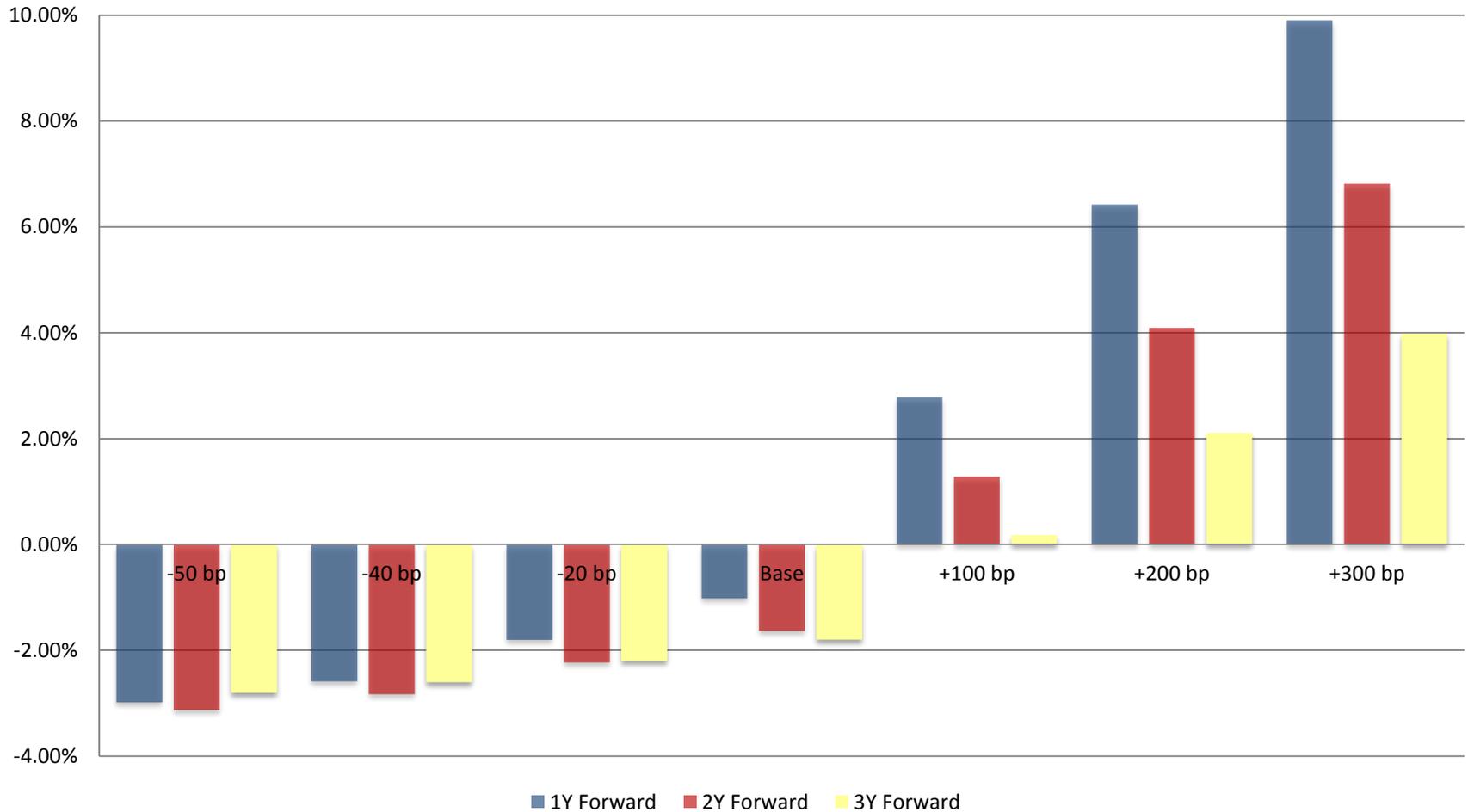
Symmetrical Prepayment Advance

- Fixed-term, fixed-rate, non-amortizing advance
- Usually priced 2 basis points over the Classic advance
- Special prepayment feature that allows the member to prepay the advance at its approximate market value
 - Potential to **monetize a gain** in a rising rate scenario 
 - **Lower prepayment fee** than Classic advances in all rate scenarios

Symmetrical Prepayment Advance – Estimated Prepay Fees



5 Year Symmetrical Prepayment advance@ 2.16%



Curve Flattener Advance

- Financial institutions are exposed to changes in the shape of the yield curve
 - Especially vulnerable to a flattening yield curve
 - Difference between long-term and short-term interest rates declines
- How will your net interest margin be impacted if the Fed increases short-term rates by 50 to 100 basis points?
 - Will you be able to control the increase in core deposit costs?
 - Will you be forced to match the competition?
 - How will loan pricing be effected?

Curve Flattener Advance

- Fixed-term, floating-rate advance
- Member chooses:
 - Final maturity – out to 20 years
 - Two points on CMS yield curve (1-, 2-, 5-, 10-, and 30 year points available). These are used as part of the rate reset calculation.
- Advance reprices quarterly
 - Advance rate will DECLINE if the curve FLATTENS
 - Advance rate will INCREASE if the curve STEEPENS
 - **Advance rate can reset below zero**
- No optionality to cancel the advance

Curve Flattener Advance – Rate Reset Formula



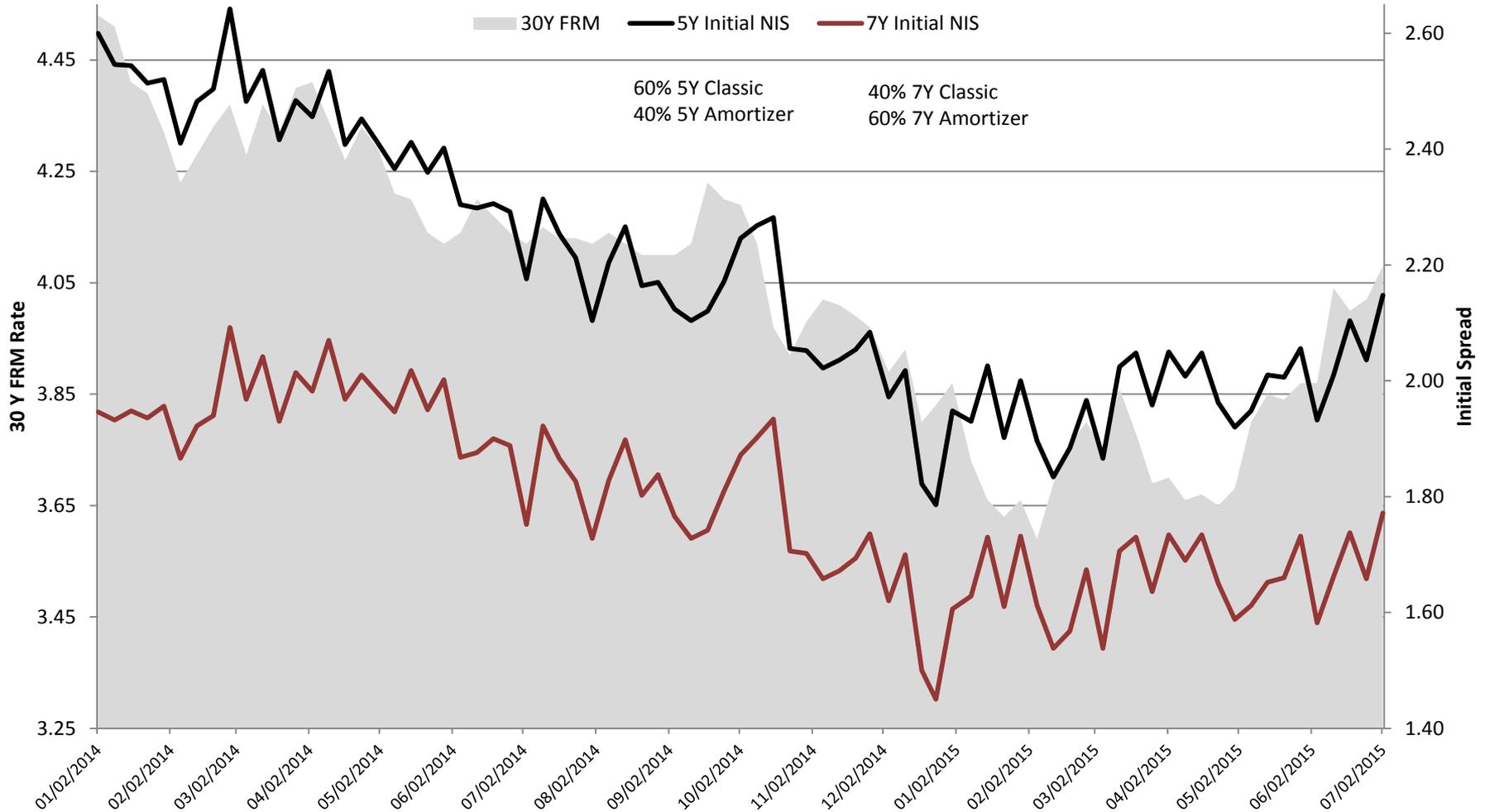
2 Year Term
5Y CMS & 1Y CMS

Fixed Component	(5Y CMS	- 1Y CMS)	Rate Differential Component ¹	Advance Rate ²	
0.16%	1.13%	2.25%	-1.12%	-0.96%	Flatter (or inverted)
0.16%	1.33%	1.49%	-0.16%	0.00%	
0.16%	1.53%	0.99%	0.54%	0.70%	
0.16%	1.73%	0.49%	1.24%	1.40%	START
0.16%	1.98%	0.44%	1.54%	1.70%	Steeper
0.16%	2.23%	0.39%	1.84%	2.00%	
0.16%	2.48%	0.34%	2.14%	2.30%	

¹ Rate differential component equals longer-term CMS less shorter-term CMS

² Advance rate equals the sum of the fixed component and the rate differential component

30 Year Mortgage Strategy Spreads



Dan Redmond VP / Money Desk Manager

- Spread-to-Benchmark advance special
- Upcoming Dutch auction advance special
- Please contact the Money Desk 800-357-3452