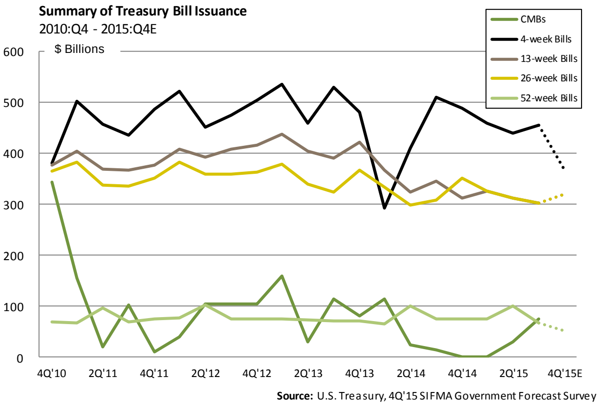
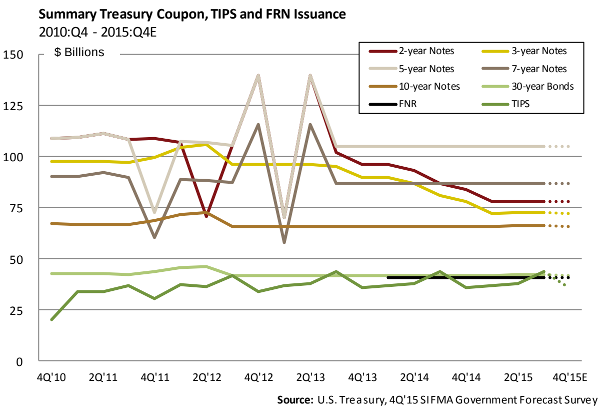
GOVERNMENT FORECAST





TOTAL ISSUANCE OUTLOOK

The SIFMA Quarterly Issuance Survey[1] forecasts total net Treasury bill, note, and bond issuance to be $166.0 billion in the fourth quarter of 2015, 24.9 percent higher than the $132.9 billion issued in 3Q'15 (actuals include cash management balances). SIFMA's forecast for the fourth quarter issuance of net marketable debt is much lower than Treasury's August debt issuance estimate of $270.0 billion.[2] The net bill redemption in 4Q'15 is expected to be $30.0 billion compared to the $37.0 billion redeemed during the third quarter, while the net issuance of coupons is expected to be $196.0 billion, a 15.4 percent increase from $169.8 billion issued in the previous quarter.

U.S. Treasury net issuance, including CMBs, increased significantly to a net $132.9 billion in the third quarter, more than double the $56.6 billion in the previous quarter and 4.6 percent above the Treasury's August net borrowing estimate of $127.0 billion[3], but a 35.0 percent decrease from 3Q'14's net issuance of $204.5 billion.

Excluding cash management bills (CMBs), total net issuance of Treasury bills, notes and bonds in 3Q'15 stood at $57.9 billion, a 117.8 percent increase from the net issuance of $26.6 billion in the prior quarter but 69.5 percent below the $189.5 billion issued on net in 3Q'14.

TREASURY COUPON ISSUANCE

The median forecast for net issuance of Treasury coupon securities (notes and bonds) is $196.0 billion for the fourth quarter, 15.4 percent above the 3Q'15's net issuance of $169.8 billion. Gross coupon issuance is expected to total approximately $527.0 billion, a 1.7 percent decrease from the $536.3 billion issued in the prior quarter. The gross issuance of notes and bonds is expected to be flat for all maturities with all notes and bonds issuance expected to stay exactly the same as in 3Q'15. Coupon issuance has been steady since November 2014, in line with Treasury Borrowing Advisory Committee of SIFMA (TBAC) recommendation.

Survey respondents expect the Treasury to finish 4Q'15 with $215.0 billion in cash, 21.8 percent lower than the $275.0 billion estimated by Treasury in August for an end-December cash balance.

As the Treasury transitioned from bill to coupon financing, the weighted average maturity of the Treasury's portfolio has increased significantly during the last year and stood at 69.6 months as of June 30, 2015 (most recent data available at time of publication), slightly up from 68.7 months on March 31, 2015 and well above the three decade average of 58.8 months. By 2025, the maturity of the Treasury's portfolio is expected to reach 85 months if the proportions for coupon issuance remain constant, the highest level since the mid-1950s.[4]

FRNS ISSUANCE

In 3Q'15, $41.0 billion in FRNs was issued, consistent with the $41.0 billion in 2Q'15 and each quarter since the inaugural FRN auction in January 2014. The demand for FRNs has been steadily declining since the first auction with the average bid-to-cover ratio of 3.5 in 3Q'15, down from 3.8 in the previous quarter and from 4.3 in 3Q'14. The survey respondents expect the Treasury to continue issuing FRNs at the same pace of $41.0 billion in 4Q'15.

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[1] The survey was conducted beginning on October 14, 2015 and ending on October 26, 2015. Survey results are medians and the dates and numbering of quarters are based on calendar year rather than fiscal year, unless otherwise noted. A description of the participants is provided on page 5. Previous survey reports may be found at http://www.sifma.org (Research Reports).
[2] Treasury's August borrowing estimates can be found here.
[3] Op. Cit. 2.
[4] Treasury Presentation to TBAC, August 5, 2015.

TIPS ISSUANCE

Survey respondents forecast that the Treasury will issue $36.0 billion of Treasury Inflation-Protected Securities (TIPS) in the fourth quarter of 2015, down 18.2 percent from the previous quarter. In 3Q'15 $44.0 billion in TIPS was issued, a 15.6 percent increase from $38.1 billion in 2Q'14. Bid-to-cover ratios for TIPS increased slightly in 3Q'14 to an average of 2.4 in 3Q'15 and they remain elevated relative to pre-2009 levels.

T-BILL ISSUANCE

Survey participants expect to see net bill redemption of $30.0 billion in the fourth quarter compared to the net redemption of $37.0 billion in the third quarter. While the forecast of coupon issuance was uniform among survey respondents, the expectations for the net bill issuance varied among the survey respondents, showing no clear consensus in net bill issuance forecast for 4Q'15 (the forecast ranged from the net redemption of $100.0 billion to net issuance of $77.0 billion). The gross issuance of bills is expected to decrease by 8.5 percent to $1.03 trillion in 4Q'15, from $1.13 trillion issued in the prior quarter. The composition of bill issuance is expected to change slightly: the issuance of 4-week and 52-week bills is forecasted to decrease by 19.3 percent and 21.6 percent, respectively while the issuance of both 13-week and 26-week bills is projected to increase by 5.8 percent in 4Q'15. The bid-to-cover ratios for bills remain high (between 3.5 and 3.9) relative to historical levels, showing that demand for short-term debt remains high.

MONETARY POLICY OUTLOOK

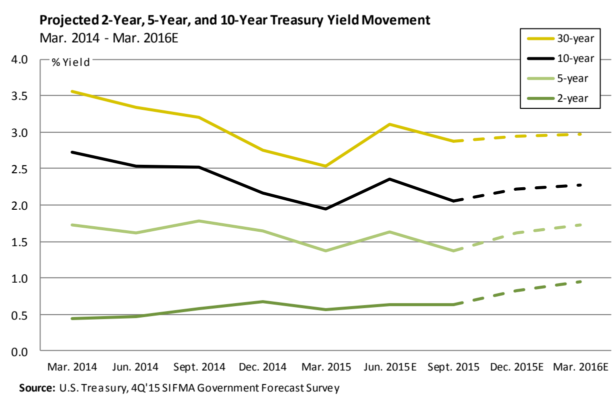
During the most recent FOMC meeting on October 27-28, 2015, the Committee judged that the economic growth has been expanding at a moderate pace, the labor market continued to improve with solid job gains and falling unemployment rate and growth in household spending and business fixed investment has been increasing at solid rates in recent months.

The Fed reaffirmed that a highly accommodative stance of monetary policy and the exceptionally low range for the target Fed Funds rate of 0-0.25 percent remains appropriate. The Committee anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen some further improvement in the labor market and inflation moves closer 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.[5]

This quarter the survey asked the participants when they expect the Fed to raise the target rate. Majority of respondents (80 percent) expect the first rate hike to come in December 2015 with the remaining votes (20 percent) pointing to March 2016 as the more likely time the Fed raises the target rate.

U.S. TREASURY YIELD OUTLOOK

In 3Q'15, the Treasury yields decreased for almost all maturities with larger decreases in the medium term securities. Two-year rates stayed flat at 0.64 percent at the end of September, the 5-year yields decreased to 1.37 percent in 3Q'15 from 1.63 percent at the end of June, the 10-year yields decreased to 2.06 percent from 2.92 percent in 2Q'15, and 30-year yields decreased to 2.87 percent in September 2015 from 3.11 percent in June. Survey respondents forecast benchmark yields to continue gradually increasing across all maturities through the end of 2015 and in the first quarter of 2016. The 2-year Treasury yields are expected to increase to 0.83 percent by December 2015 and further to 0.95 percent by March 2016. Five-year yields are projected to increase to 1.63 percent and then increase to 1.73 in 1Q'16. Similarly, for 10-year maturities, survey responders expect a gradual increase to 2.23 percent and 2.28 percent at the end of December and March, respectively, while 30-year yields are



Source: U.S. Treasury, 4Q'15 SIFMA Government Forecast Survey

Treasury Yield Projections and Ranges

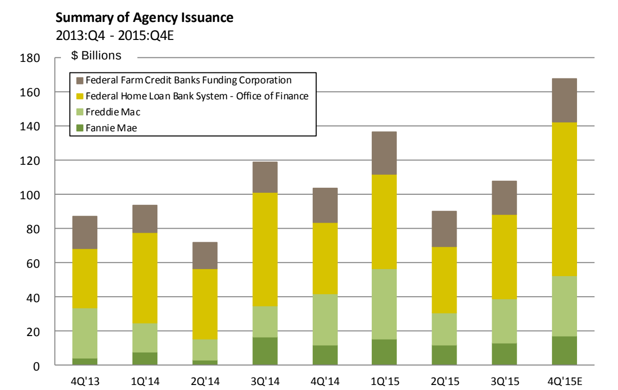
	Sep 30, 2015	Dec. 31, 2015E	Mar. 31, 2016E
2 year Treasury Note	0.64	**0.83** (0.50 - 1.05)	**0.95** (0.50 - 1.30)
5 year Treasury Note	1.37	**1.63** (1.10 - 1.80)	**1.73** (0.90 - 1.95)
10 year Treasury Note	2.06	**2.23** (1.75 - 2.45)	**2.28** (1.90 - 2.60)
30 year Treasury Bond	2.87	**2.95** (2.75 - 3.20)	**2.98** (2.80 - 3.30)

Source: 4Q'15 SIFMA Government Forecast Survey

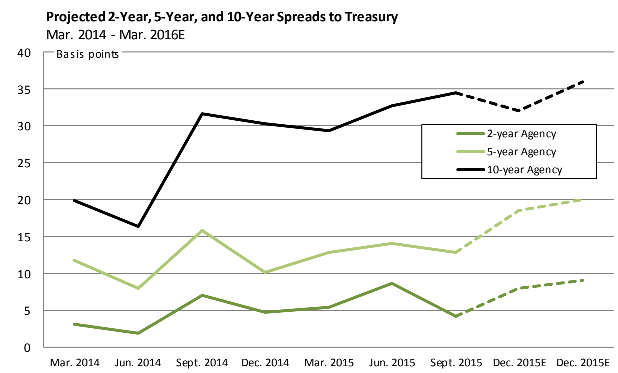
[5] Statement from the Federal Open Market Committee Meeting, October 27-28, 2015.

Risks to Upside	
#1	Improved global growth outlook
#2	Stronger improvement in inflation outlook, labor participation rate, and/or wage inflation, Fed more hawkish than market pricing
#3	Upside oil price shock, acceleration of wage inflation, Fed hikes in 2015
#4	Rebound in commodity prices/inflation, acceleration in wage growth, good news about international economies, accelerated Fed tightening
#5	*No response*
#6	*No response*
Risks to Downside	
#1	Deterioating global outlook, risk assets sell off, Fed delays liftoff into 2016
#2	Continued weakness in international economies and commodity prices, further deterioration in domestic economic data
#3	Global growth slowdown, oil staying low, USD strengthening, lower term premia due to risk-off trade
#4	Deterioration in domestic demand
#5	*No response*
#6	*No response*

Source: 4Q'15 SIFMA Government Forecast Survey



Source: U.S. Treasury, 4Q'15 SIFMA Government Forecast Survey



Source: U.S. Treasury, 4Q'15 SIFMA Government Forecast Survey

expected to increase to 2.95 percent and further to 2.98 in 1Q'16 (forecast summarized in the table on the left side).

UPSIDE AND DOWNSIDE RISKS TO RATES

The survey asked participants about risks to their forecasts or events that could cause interest rates to move higher or lower than forecasted (summarized in the table on the left). The main risks to rates for both the upside and the downside have remained relatively the same over the last few quarters.

The main risks to the forecast identified on the upside (higher-than-expected yields) remained consistent from the previous quarter: stronger pickup in inflation, more hawkish Fed, stronger than expected rebound in employment, acceleration in wage inflation and stronger than expected recovery in oil prices.

In contrast, the main risks noted on the downside (lower-than-expected yields) were: US and global economic deterioration, strengthening US dollar, and persisting low oil prices.

AGENCIES' COUPON ISSUANCE

In 3Q'15 the total issuance by the four largest Federal agencies stood at $107.6 billion, up 19.4 percent from $90.1 billion in 2Q'15.[6] Survey participants forecast total gross coupon issuance by the four largest Federal agencies to increase by 55.7 percent to $167.5 billion in the fourth quarter of 2015. The projections reflect an increase in all four agencies issuance. Fannie Mae is expected to issue $17.5 billion in 4Q'15, up 33.6 percent from 3Q'15, Freddie Mac's issuance is expected to increase by 34.1 percent to $35.0 billion, the Federal Home Loan Banks are expected to issue $90.0 billion in coupons in 4Q'15, an 83.3 percent increase from their 3Q'15 issuance of $49.1 billion and Federal Farm Credit Banks' issuance is projected to increase to $25.0 billion from $19.3 billion in 3Q'15.

SPREADS OUTLOOK

The agency-to-Treasury yield spreads decreased in 3Q'14 for short and medium term maturities and decreased for long term maturities: for 2-year agency the spread tightened to 4.1 basis points (bps) from 8.6 bps in 2Q'15 and the 5-year spread decreased to 12.8 bps from 14.0 bps in the previous quarter. The 10-year spread widened to 34.5 bps end-September from 32.7 bps end-June 2015. Survey respondents expect agency-to-Treasury yield spreads to widen across short and medium-term maturities through March 2016 while the 10-year maturities are expected to tighten slightly in by December 2015 and then widen in 1Q'16. Two-year spreads are projected to increase to 8.0 bps in 4Q'15 and 9.0 bps in 1Q'16, 5-year spreads are expected to increase to 18.5 bps end-December and increase further to 20.0 bps end-March 2016, and 10-year spreads are projected to slightly tighten to 32.0 bps by the end of 4Q'15 and widen to 36.0 bps by March 2016 (results summarized in the forecast table at the end).

[6] Includes Fannie Mae, Freddie Mac, the Federal Home Loan Banks (FHLBs), and the Federal Farm Credit Banks Funding Corporation.

GOVERNMENT FORECAST SUMMARY

SIFMA's Government Securities Issuance and Rates Forecast

Forecast numbers appear in bold

Issuance Projections (in $Billions)

U.S. Treasury Borrowing[1]	3Q'15		4Q'15E
Net Coupon Issuance	169.8		**196.0**
Gross Coupon Issuance	*536.3*		***527.0***
Gross Coupon Redemptions	*366.4*		***330.5***
Net Bill Issuance	(37.0)		**(30.0)**
Gross Bill Issuance	*1,126.0*		***1,030.0***
Gross Bill Redemptions	*1,238.0*		***1,040.0***
Quarter end cash balance (expected)			**215.0**
U.S. Treasury Quarterly Gross New Issuance			
4 week Bill	455.0		**367.0**
13 week Bill	302.0		**319.5**
26 week Bill	302.0		**319.5**
52 week Bill	67.0		**52.5**
2 year Treasury Note	78.0		**78.0**
3 year Treasury Note	72.5		**72.0**
5 year Treasury Note	105.0		**105.0**
7 year Treasury Note	87.0		**87.0**
10 year Treasury Note	66.5		**66.0**
30 year Treasury Bond	42.3		**42.0**
Floatng Rate Notes	41.0		**36.0**
Treasury Inflation-Indexed Securities	44.0		**41.0**
Federal Agency: Projected Total Gross Coupon Debt Issuance[2]			
Fannie Mae	13.1		**17.5**
Freddie Mac	26.1		**35.0**
Federal Home Loan Bank System - Office of Finance	49.1		**90.0**
Federal Farm Credit Banks Funding Corporation	19.3		**25.0**
		FY estimates	
Federal Budget Deficit Estimate - FY2015		**436.0**	
Federal Budget Deficit Estimate - FY2016		**465.0**	
Rates & Spreads Outlook	9/30/2015	**12/31/2015E**	**3/31/2016E**
Interest Rates (End of Quarter in %Yield)			
2 year Treasury Note	0.64	**0.83**	**0.95**
5 year Treasury Note	1.37	**1.63**	**1.73**
10 year Treasury Note	2.06	**2.23**	**2.28**
30 year Treasury Bond	2.87	**2.95**	**2.98**
Spreads to Treasury (End of Quarter in Basis Points)			
2 year Agency Benchmark/Reference Notes[3]	4.1	**8.0**	**9.0**
5 year Agency Benchmark/Reference Notes[3]	12.8	**18.5**	**20.0**
10 year Agency Benchmark/Reference Notes[3]	34.5	**32.0**	**36.0**
2 Year SWAP Spreads	11.4	**15.3**	**18.5**
5 Year SWAP Spreads	2.1	**3.0**	**5.5**
10 Year SWAP Spreads	-5.8	**3.0**	**6.5**

[1] *Excluding Federal Reserve's purchase*

[2] *Including all callable coupon issuance and excluding all discount notes*

[3] *Agency spreads to Treasury yield are in basis points.*

SURVEY PARTICIPANTS

Government Securities Research and Strategist Committee

The Securities Industry and Financial Markets Association's Quarterly Government Securities Issuance and Rates Forecast reflects the responses to a survey of members of the Association's Primary Dealers Committee and Government Securities Research and Strategist Committee. The Committee is composed of trading strategists and research analysts at Association member firms who specialize in the U.S. government and agency securities markets. The survey is intended to provide market participants with the current consensus expectations and median forecasts of many of the Primary Dealers and other firms active in the U.S. government and agency securities markets.

CAPITAL MARKETS

Robert Toomey
Managing Director and Associate General Counsel, Rates Division

SIFMA RESEARCH

Justyna Podziemska
Senior Associate, Research