Office of Debt Management



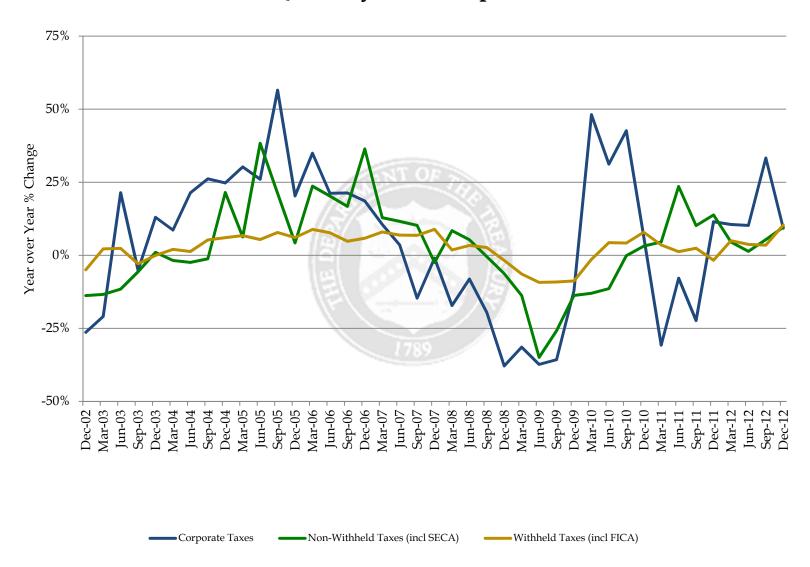
Fiscal Year 2013 Q1 Report

Table of Contents

[.	Fiscal	
	A. Quarterly Tax Receipts	p. 4
	B. Monthly Receipt Levels	p. 5
	C. Ten Largest Outlays	p. 6
	D. Treasury Net Nonmarketable Borrowing	p. 7
	E. Cumulative Budget Deficits	p. 8
	F. Deficit and Borrowing Estimates	p. 9
	G. Budget Surplus/Deficit	p. 10
II.	Financing	
	A. Sources of Financing	p. 12
	B. OMB's Projections of Borrowing from the Public	p. 14
	C. Interest Rate Assumptions	p. 15
	D. Net Marketable Borrowing on "Auto Pilot" Versus Deficit Forecasts	p. 16
III.	Portfolio Metrics	
	A. Weighted Average Maturity of Marketable Debt Outstanding with Projections	p. 19
	B. Recent and Projected Maturity Profile	p. 20
IV.	Demand	
	A. Summary Statistics	p. 25
	B. Bid-to-Cover Ratios	p. 26
	C. Investor Class Auction Awards	p. 30
	D. Foreign Awards at Auction	p. 37
	E. Primary Dealer Awards at Auction	p. 41

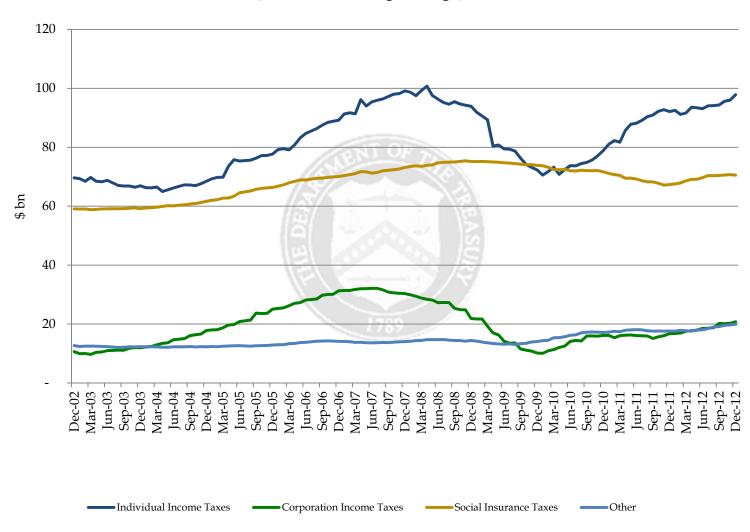
Section I: Fiscal

Quarterly Tax Receipts

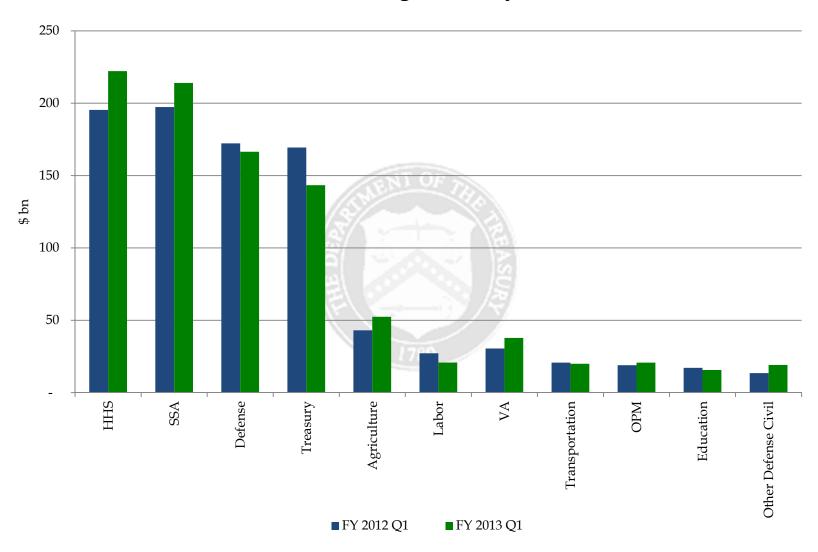


Monthly Receipt Levels

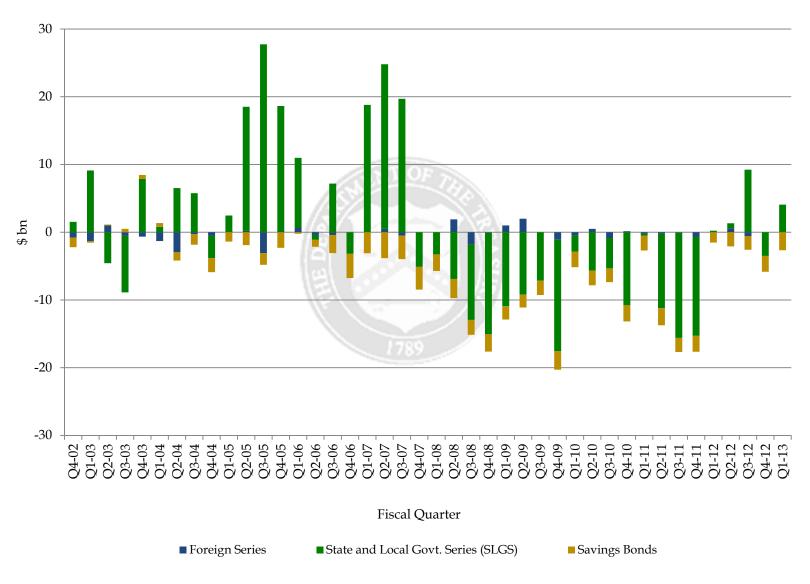
(12-Month Moving Average)



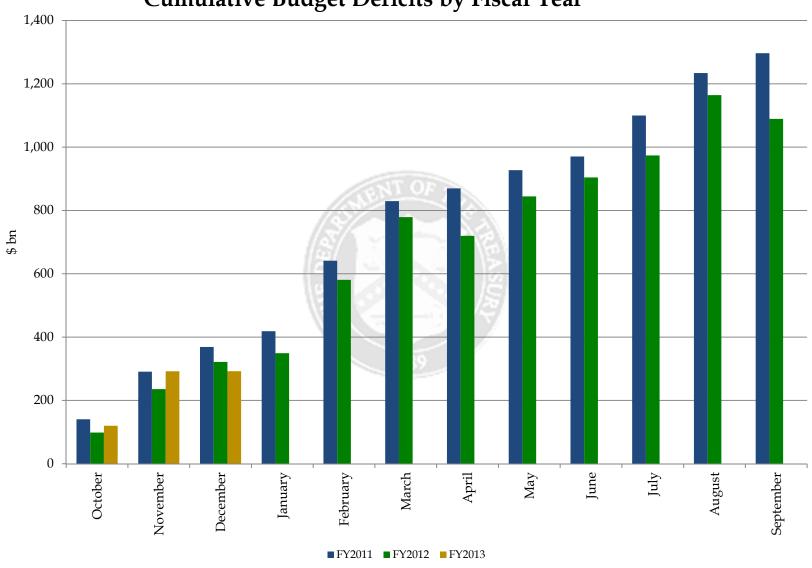
Ten Largest Outlays



Treasury Net Nonmarketable Borrowing



Cumulative Budget Deficits by Fiscal Year



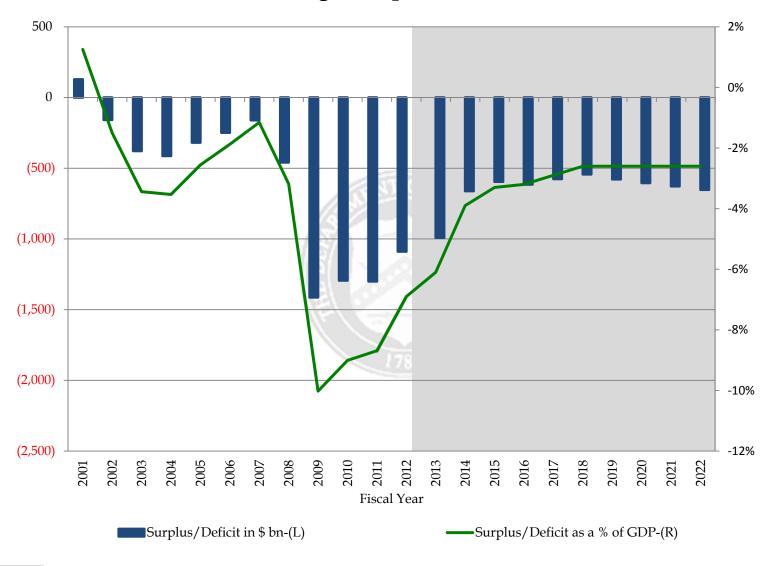
	Primary Dealers ¹	CBO ²	OMB^3
FY 2013 Deficit Estimate	929	971	991
FY 2014 Deficit Estimate	790	741	661
FY 2015 Deficit Estimate	692	524	595
FY 2013 Deficit Range	843-1,037		
FY 2014 Deficit Range	639-950		
FY 2015 Deficit Range	402-850		
FY 2013 Net Marketable Borrowing Estimate	951		1,158
FY 2014 Net Marketable Borrowing Estimate	822		803
FY 2015 Net Marketable Borrowing Estimate	715		736
FY 2013 Net Marketable Borrowing Range	810-1,100		
FY 2014 Net Marketable Borrowing Range	645-1,050		
FY 2015 Net Marketable Borrowing Range	436-950		
Estimates as of:	Jan-13	Jan-13	Jul-12

¹Based on primary dealer feedback on January 28, 2013. Estimates above are averages.

²Table 1 from "An Update to the Budget and Economic Outlook: Fiscal Years 2012 to 2022" and changes from the "H.R. 8, American Taxpayer Relief Act of 2012"

 $^{^3}$ Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government"

Budget Surplus/Deficit



OMB's Projection

Section II: Financing

Sources of Financing in Fiscal Year 2013 Q1

October-December 2012	
Beginning Cash Balance	85
Ending Cash Balance	93
Subtotal: Funding from Drawdown of Cash	(7)
Net Bill Issuance	13
Net Coupon Issuance	282
Subtotal: Net Marketable Borrowing	295*
Net Required Funding for FY 2013 Q1	288

		er-Decembe Bill Issuance		Fiscal Year to Date				
Issuance	Gross Maturing		Issuance Gross Maturing Net		Net	Gross	Maturing	Net
4-Week	505	505	0	505	505	0		
13-Week	416	408	8	416	408	8		
26-Week	364	359	5	364	359	5		
52-Week	75	75	0	75	75	0		
CMBs	105	105	0	105	105	0		
Bill Subtotal	1,465	1,452	13	1,465	1,452	13		

	Octob	er-Decembe	r 2012	Fise	cal Year to D	ate
	Co	upon Issuan	ice			
Issue	Gross	Maturing	Net	Gross	Maturing	Net
2-Year	140	146	(6)	140	146	(6)
3-Year	96	124	(28)	96	124	(28)
5-Year	140	63	77	140	63	77
7-Year	116	0	116	116	0	116
10-Year	66	18	48	66	18	48
30-Year	42	0	42	42	0	42
5-Year TIPS	14	0	14	14	0	14
10-Year TIPS	13	0	13	13	0	13
30-Year TIPS	7	0	7	7	0	7
Coupon Subtotal	634	352	282	634	352	282

Total 2	2,099 1,8	304 295	2,099	1,804	295
---------	-----------	---------	-------	-------	-----

^{*}Includes \$1.3 bn in SOMA redemptions.

Sources of Financing in Fiscal Year 2013 Q2 Assuming Constant Issuance Sizes as of 12/31/2012

January-March 2013	
Net Required Funding for FY 2013 Q2	394
Met with:	
Beginning Cash Balance	93
Treasury Annouced Estimate: Ending Cash Balance*	30
Subtotal: Funding from Drawdown of Cash	63
Assuming Constant Issuance Sizes as of 12/31/2012**:	
Net Bill Issuance	2
Net Coupon Issuance	187
Subtotal: Net Marketable Borrowing	189
Treasury Announced Estimate: Net Marketable Borrowing*	331
Implied: Increase In FY 2013 Q2 Net Issuances	142

	Ť	iary-March 2 Bill Issuance		Fis	cal Year to D	ate
Issuance	Gross Maturing Ne		Net	Gross	Maturing	Net
4-Week	520	520	(0)	1,025	1,025	(0)
13-Week	416	416	0	832	824	8
26-Week	364	360	4	728	719	9
52-Week	75	77	(2)	150	152	(2)
CMBs	0	0	0	105	105	0
Bill Subtotal	1,375	1,373	2	2,840	2,825	15

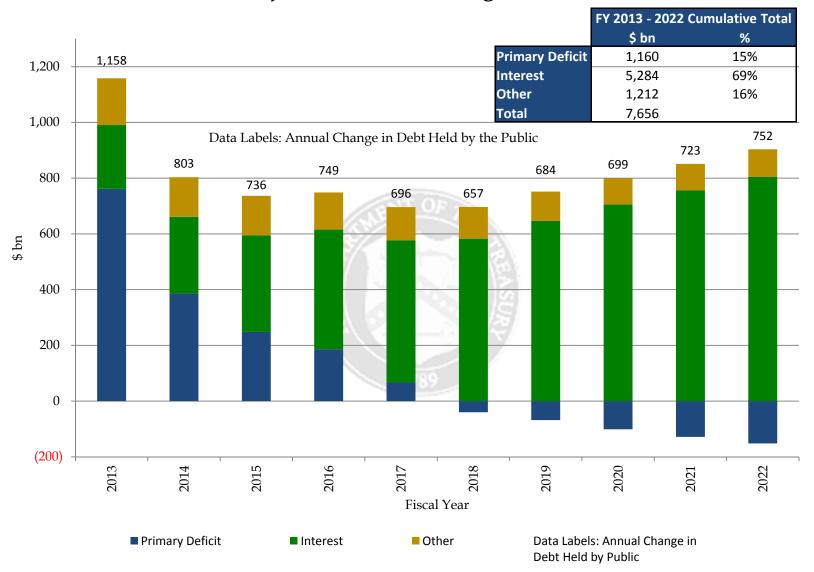
	Janu	ıary-March 2	013	Fisc	cal Year to D	ate
	Co	upon Issuan	ice			
Issue	Gross	Maturing	Net	Gross	Maturing	Net
2-Year	70	73	(3)	210	219	(9)
3-Year	96	127	(31)	192	251	(59)
5-Year	70	33	37	210	96	114
7-Year	58	0	58	174	0	174
10-Year	66	19	47	132	38	94
30-Year	42	0	42	84	0	84
5-Year TIPS	0	0	0	14	0	14
10-Year TIPS	28	0	28	41	0	41
30-Year TIPS	9	0	9	16	0	16
Coupon Subtotal	439	252	187	1,073	604	469

Total 1,8	1,625	189	3,913	3,429	484

^{*}Financing Estimates released by the Treasury can be found via the following url: http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx

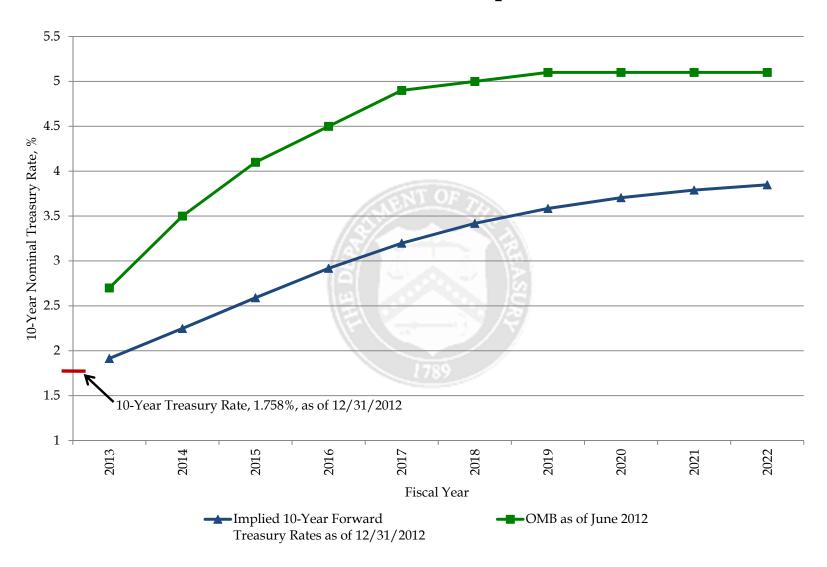
^{**}Keeping issuance sizes, as of 12/31/2012, constant for all Bills securities while maintaining the same issuance size and pattern for all Nominal Coupon and TIPS securities.

OMB's Projections of Borrowing from the Public



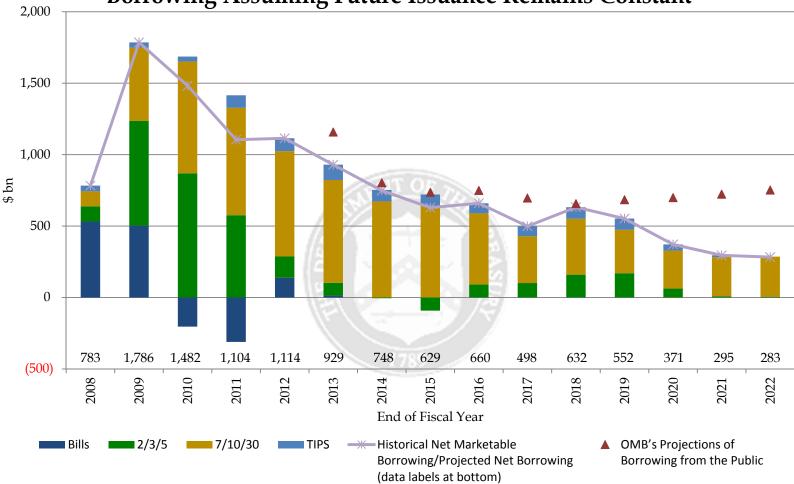
OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." Data labels represent the change in debt held by the public in \$ billions. "Other" represents borrowing from the public to provide direct and guaranteed loans, in addition to TARP activity. Data labels represent the annual change in debt held by the public.

Interest Rate Assumptions



OMB's economic assumption of the 10-Year Treasury rate is from Table 2 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The implied 10-Year forward Treasury rates are the average of the four quarter-ends for each fiscal year.

Historical Net Marketable Borrowing and Projected Net Borrowing Assuming Future Issuance Remains Constant



Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. Assumes issuance sizes for Bills, Nominal Coupons and TIPS are unchanged from 12/31/2012 levels, along with SOMA reinvestment. The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. No attempt was made to match future financing needs. OMB's projections of borrowing from the public projections are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government."

Data labels represent historical net marketable borrowing and projected net borrowing assuming future issuance remains constant at current sizes. See table on the following page for details.

Historical Net Marketable Borrowing and Projected Net Borrowing* Assuming Future Issuance Remains Constant, \$ Billion

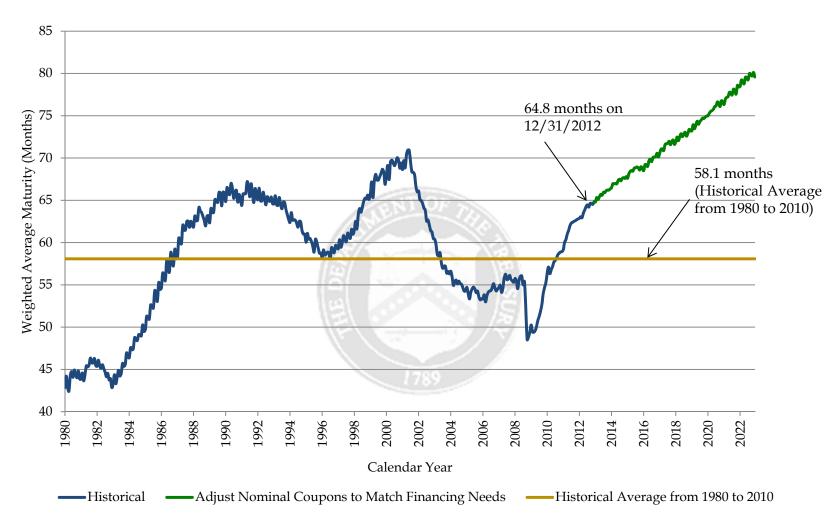
End of Fiscal Year	Bills	2/3/5	7/10/30	TIPS	Historical Net Marketable Borrowing/Projected Net Borrowing Capacity	OMB's Projections of Borrowing from the Public
2008	532	106	105	40	783	
2009	503	732	512	38	1,786	
2010	(204)	869	782	35	1,482	
2011	(311)	576	751	88	1,104	
2012	139	148	737	90	1,114	
2013	13	90	720	107	929	1,158
2014	0	(5)	672	81	748	803
2015	0	(92)	641	80	629	736
2016	0	91	498	71	660	749
2017	0	101	327	70	498	696
2018	0	160	391	81	632	657
2019	0	170	304	78	552	684
2020	0	63	266	43	371	699
2021	0	9	274	13	295	723
2022	0	3	283	(3)	283	752

Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. Assumes issuance sizes for Bills, Nominal Coupons and TIPS are unchanged from 12/31/2012 levels, along with SOMA reinvestment. The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. No attempt was made to match future financing needs. OMB's projections of borrowing from the public projections are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government."

^{*} Details for Fiscal Year 2013 is in the Appendix.

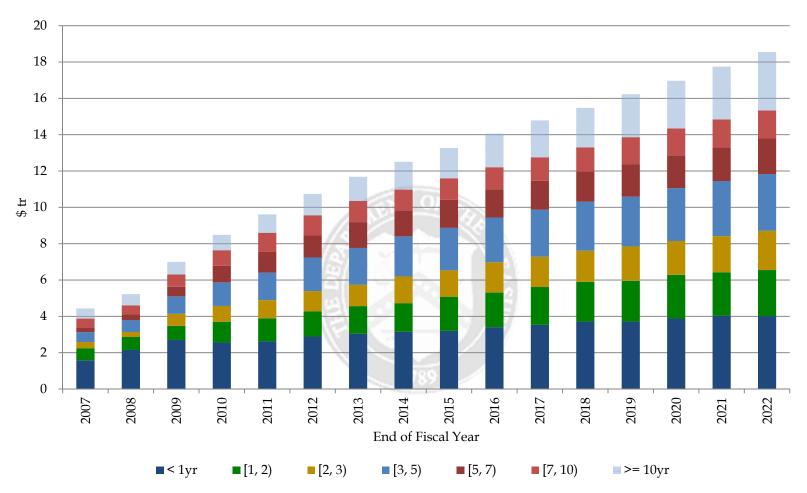
Section III: Portfolio Metrics

Weighted Average Maturity of Marketable Debt Outstanding



Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury.

Recent and Future Maturity Profile, \$ Trillion



Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury. See table on the following page for details. Maturity distribution by original issuance type and term can be found in the appendix (slide 45).

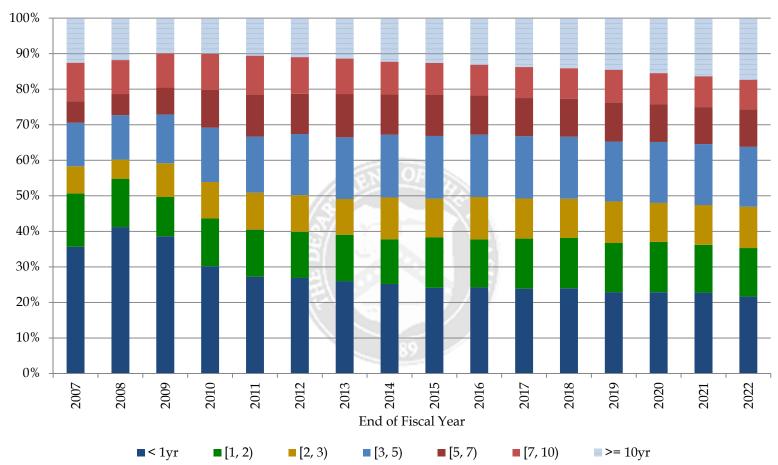
Recent and Future Maturity Profile, \$ Billion

End of Fiscal Year	< 1yr	[1, 2)	[2, 3)	[3, 5)	[5, 7)	[7, 10)	>= 10yr	Total	[0, 5)
2007	1,581	663	341	545	267	480	557	4,434	3,130
2008	2,152	711	280	653	310	499	617	5,222	3,796
2009	2,702	774	663	962	529	672	695	6,998	5,101
2010	2,563	1,141	869	1,299	907	856	853	8,488	5,872
2011	2,620	1,272	1,002	1,516	1,136	1,053	1,017	9,616	6,410
2012	2,889	1,395	1,109	1,847	1,214	1,108	1,181	10,742	7,239
2013	3,039	1,524	1,176	2,026	1,424	1,165	1,331	11,684	7,764
2014	3,154	1,573	1,470	2,207	1,419	1,152	1,534	12,509	8,404
2015	3,204	1,876	1,450	2,340	1,545	1,180	1,677	13,272	8,871
2016	3,406	1,901	1,674	2,462	1,547	1,215	1,848	14,054	9,444
2017	3,533	2,081	1,669	2,590	1,589	1,290	2,037	14,789	9,873
2018	3,713	2,190	1,709	2,699	1,658	1,324	2,184	15,478	10,311
2019	3,715	2,242	1,892	2,737	1,794	1,479	2,364	16,223	10,587
2020	3,880	2,407	1,861	2,910	1,806	1,477	2,629	16,970	11,058
2021	4,041	2,384	1,991	3,038	1,849	1,538	2,905	17,745	11,453
2022	4,018	2,532	2,157	3,128	1,954	1,544	3,220	18,553	11,835

Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury.

Maturity distribution by original issuance type and term can be found in the appendix (slide 45).

Recent and Future Maturity Profile, Percent



Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury. See table on the following page for details. Maturity distribution by original issuance type and term can be found in the appendix (slide 45).

Recent and Future Maturity Profile, Percent

End of Fiscal Year	< 1yr	[1, 2)	[2, 3)	[3, 5)	[5, 7)	[7, 10)	>= 10yr	[0, 3)	[0, 5)
2007	35.7%	15.0%	7.7%	12.3%	6.0%	10.8%	12.6%	58.3%	70.6%
2008	41.2%	13.6%	5.4%	12.5%	5.9%	9.6%	11.8%	60.2%	72.7%
2009	38.6%	11.1%	9.5%	13.7%	7.6%	9.6%	9.9%	59.1%	72.9%
2010	30.2%	13.4%	10.2%	15.3%	10.7%	10.1%	10.0%	53.9%	69.2%
2011	27.2%	13.2%	10.4%	15.8%	11.8%	10.9%	10.6%	50.9%	66.7%
2012	26.9%	13.0%	10.3%	17.2%	11.3%	10.3%	11.0%	50.2%	67.4%
2013	26.0%	13.0%	10.1%	17.3%	12.2%	10.0%	11.4%	49.1%	66.5%
2014	25.2%	12.6%	11.7%	17.6%	11.3%	9.2%	12.3%	49.5%	67.2%
2015	24.1%	14.1%	10.9%	17.6%	11.6%	8.9%	12.6%	49.2%	66.8%
2016	24.2%	13.5%	11.9%	17.5%	11.0%	8.6%	13.1%	49.7%	67.2%
2017	23.9%	14.1%	11.3%	17.5%	10.7%	8.7%	13.8%	49.2%	66.8%
2018	24.0%	14.2%	11.0%	17.4%	10.7%	8.6%	14.1%	49.2%	66.6%
2019	22.9%	13.8%	11.7%	16.9%	11.1%	9.1%	14.6%	48.4%	65.3%
2020	22.9%	14.2%	11.0%	17.1%	10.6%	8.7%	15.5%	48.0%	65.2%
2021	22.8%	13.4%	11.2%	17.1%	10.4%	8.7%	16.4%	47.4%	64.5%
2022	21.7%	13.6%	11.6%	16.9%	10.5%	8.3%	17.4%	46.9%	63.8%

Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury.

Maturity distribution by original issuance type and term can be found in the appendix (slide 45).

Section IV: Demand

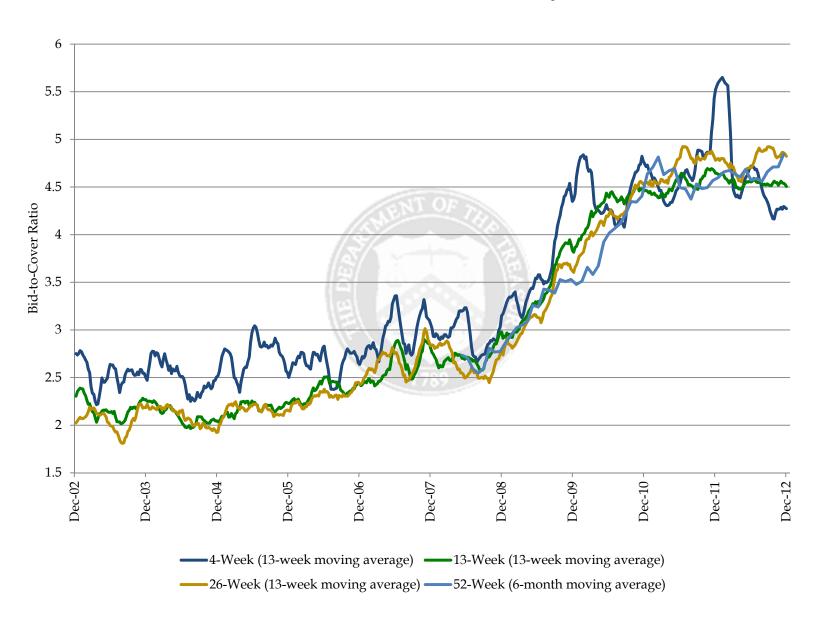
Summary Statistics for Fiscal Year 2013 Q1 Auctions

Security		Stop Out Rate	Bid-to-Cover	Competitive	% Primary			Non-Competitive	SOMA Add	10-Yr Equivalent
Туре	Term	(%)*	Ratio*	Awards (\$ bn)	Dealer*	% Direct*	% Indirect*	Awards (\$ bn)	Ons (\$ bn)	(\$ bn)**
Bill	4-Week	0.104	4.2	499.0	68.1%	9.2%	22.7%	3.3	0.0	4.41
Bill	13-Week	0.094	4.5	405.2	69.3%	8.0%	22.7%	7.0	0.0	11.81
Bill	26-Week	0.139	4.8	351.3	59.7%	7.4%	32.9%	6.0	0.0	20.66
Bill	52-Week	0.173	5.0	74.4	55.7%	10.8%	33.5%	0.5	0.0	8.53
Bill	CMBs	0.152	5.0	105.0	76.0%	11.8%	12.2%	0.0	0.0	0.92
Coupon	2-Year	0.271	3.8	139.0	44.9%	26.9%	28.2%	0.6	0.0	31.77
Coupon	3-Year	0.355	3.6	95.6	51.5%	23.2%	25.3%	0.1	0.0	32.66
Coupon	5-Year	0.708	2.9	139.8	41.3%	18.1%	40.6%	0.1	0.0	78.19
Coupon	7-Year	1.150	2.7	115.9	42.5%	19.5%	38.0%	0.1	0.0	88.47
Coupon	10-Year	1.676	2.9	65.9	38.7%	26.0%	35.3%	0.1	0.0	68.53
Coupon	30-Year	2.876	2.6	42.0	48.7%	15.4%	35.9%	0.0	0.0	94.39
TIPS	5-Year	(1.496)	2.7	14.0	40.4%	10.7%	49.0%	0.0	0.0	7.69
TIPS	10-Year	(0.720)	2.5	13.0	41.3%	10.4%	48.3%	0.0	0.0	15.55
TIPS	30-Year	0.479	2.8	7.0	37.7%	13.2%	49.1%	0.0	0.0	23.68
			•		•				•	
	Total Bills	0.117	4.6	1,434.9	66.3%	8.7%	25.0%	16.7	0.0	46.33
	Total Coupons	0.894	3.1	598.2	44.2%	21.9%	33.8%	1.0	0.0	394.01
	Total TIPS	(0.793)	2.7	33.9	40.2%	11.1%	48.7%	0.1	0.0	46.93

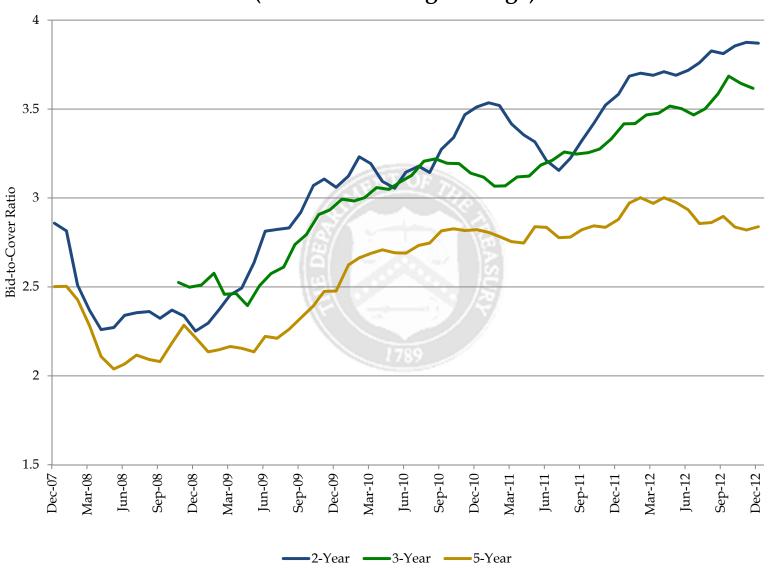
^{*}Weighted averages of Competitive Awards.

^{**}Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS' 10-Year Equivalent, a constant auction BEI is used as the inflation assumption.

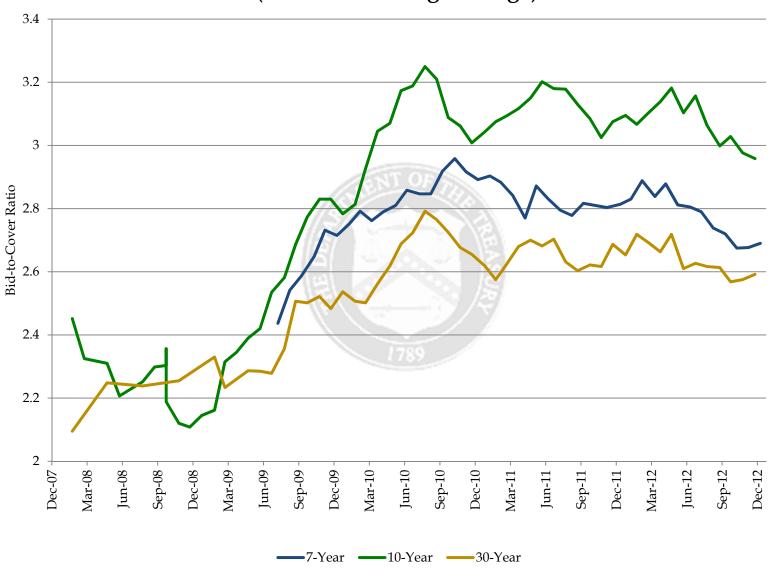
Bid-to-Cover Ratios for Treasury Bills



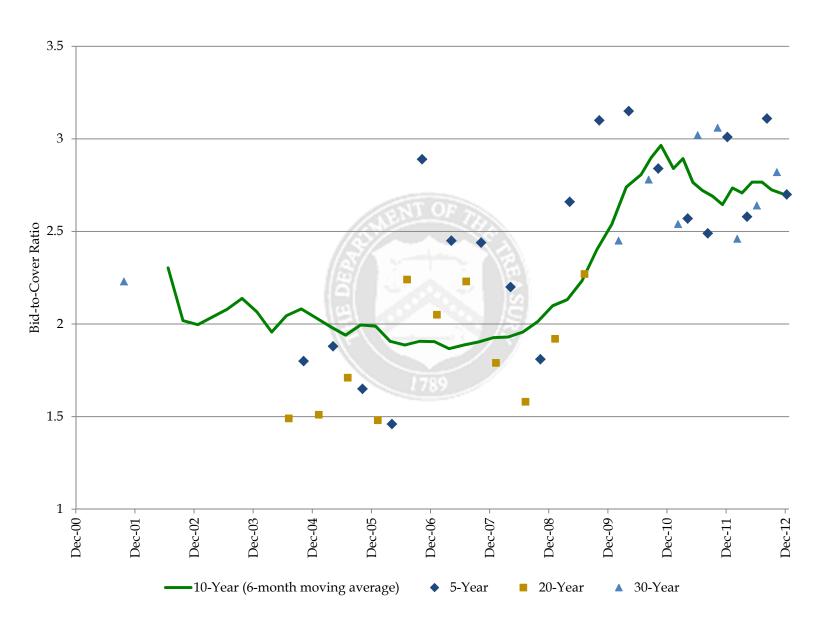
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



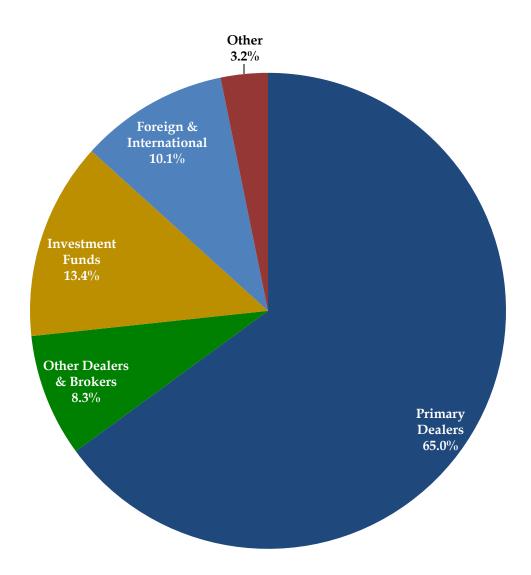
Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)



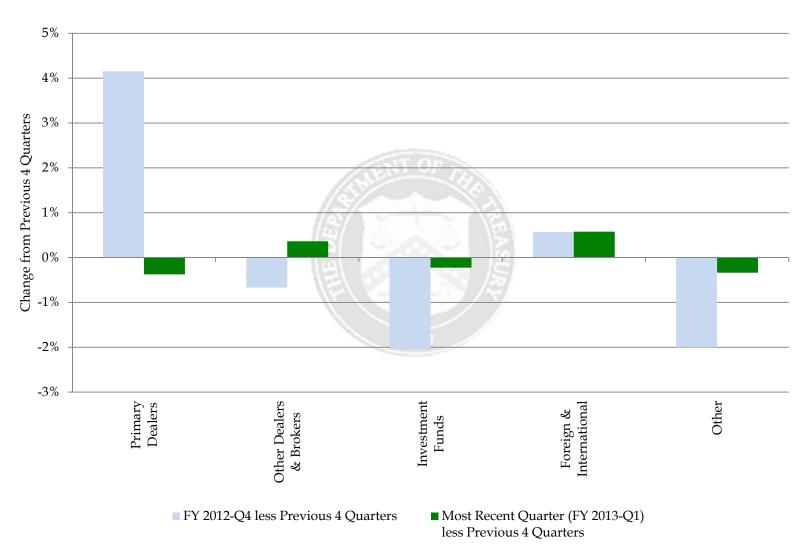
Bid-to-Cover Ratios for TIPS



Investor Class Auction Awards: Bills Fiscal Year 2013-Q1



Change in Demand Over the Last Year in Bills, Auction Awards by Investor Class

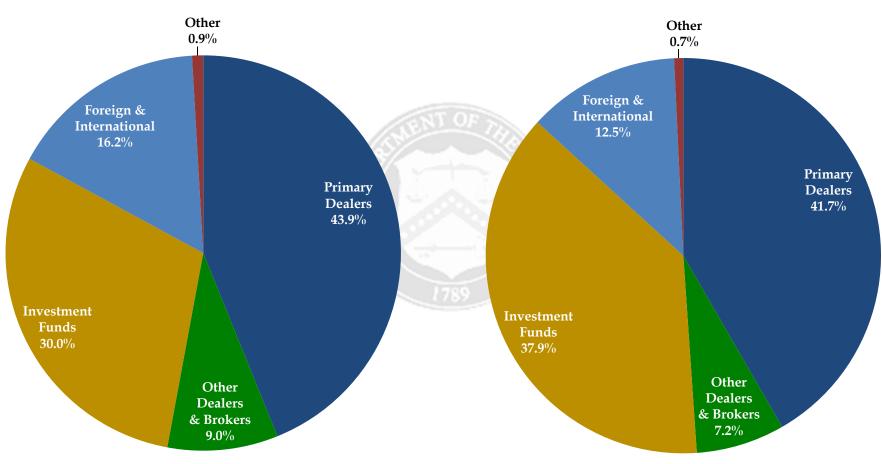


Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance. These results may include seasonal effects.

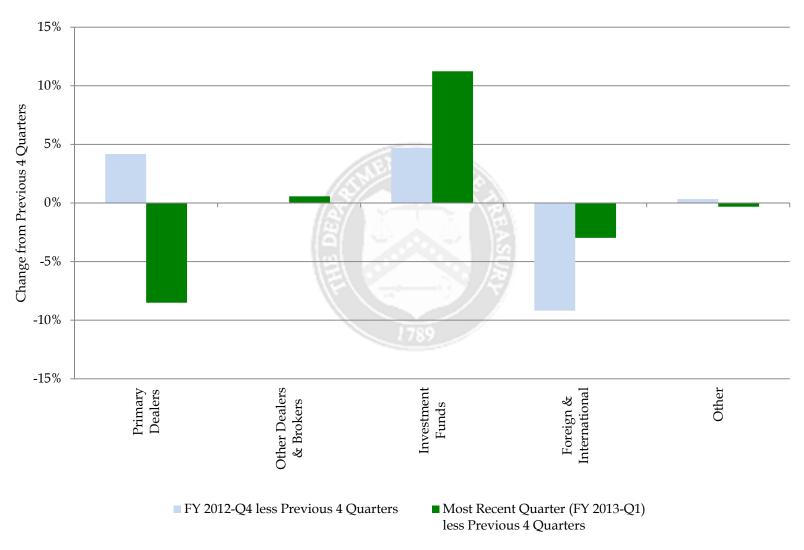
[&]quot;Previous 4 Quarters" = Total Awards for the previous 4 quarters divided by Total Auction Awards of the previous 4 quarters

Investor Class Auction Awards: 2-, 3-, and 5-Year Nominal Securities Fiscal Year 2013-Q1

Investor Class Auction Awards: 7-, 10-, and 30-Year Nominal Securities Fiscal Year 2013-Q1



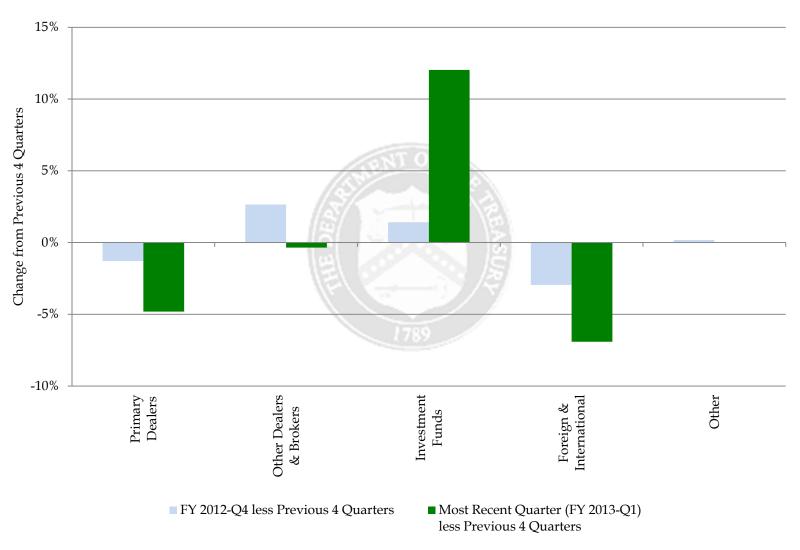
Change in Demand Over the Last Year in 2-, 3-, 5-Year Nominal Securities, Auction Awards by Investor Class



Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance. These results may include seasonal effects.

[&]quot;Previous 4 Quarters" = Total Awards for the previous 4 quarters divided by Total Auction Awards of the previous 4 quarters

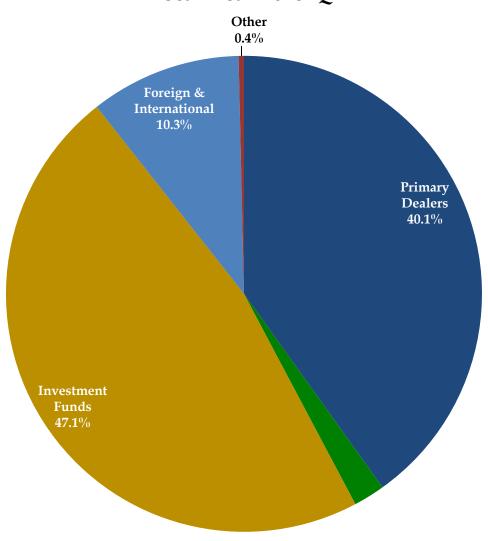
Change in Demand Over the Last Year in 7-, 10-, 30-Year Nominal Securities, Auction Awards by Investor Class



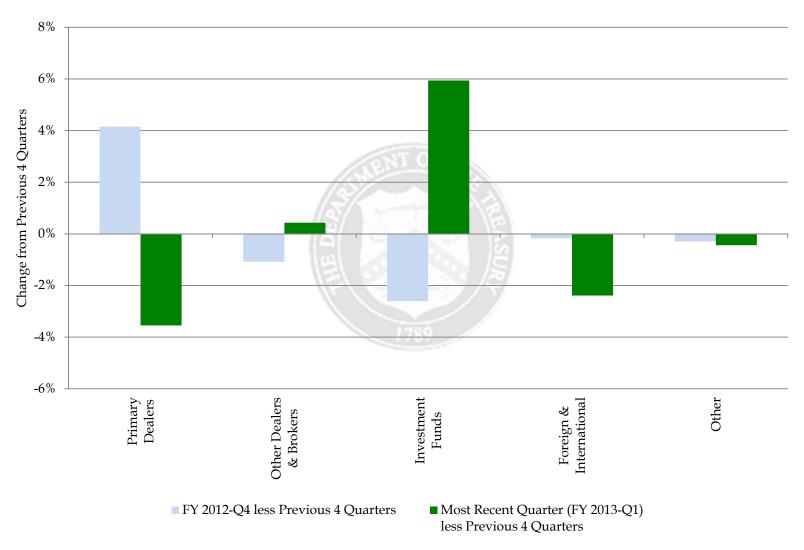
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance. These results may include seasonal effects.

[&]quot;Previous 4 Quarters" = Total Awards for the previous 4 quarters divided by Total Auction Awards of the previous 4 quarters

Investor Class Auction Awards: TIPS Fiscal Year 2013-Q1



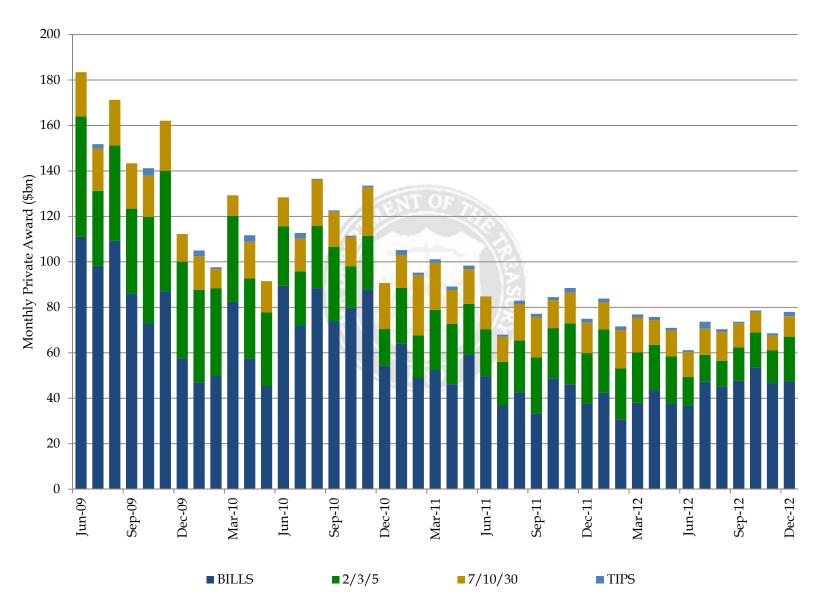
Change in Demand Over the Last Year in TIPS, Auction Awards by Investor Class



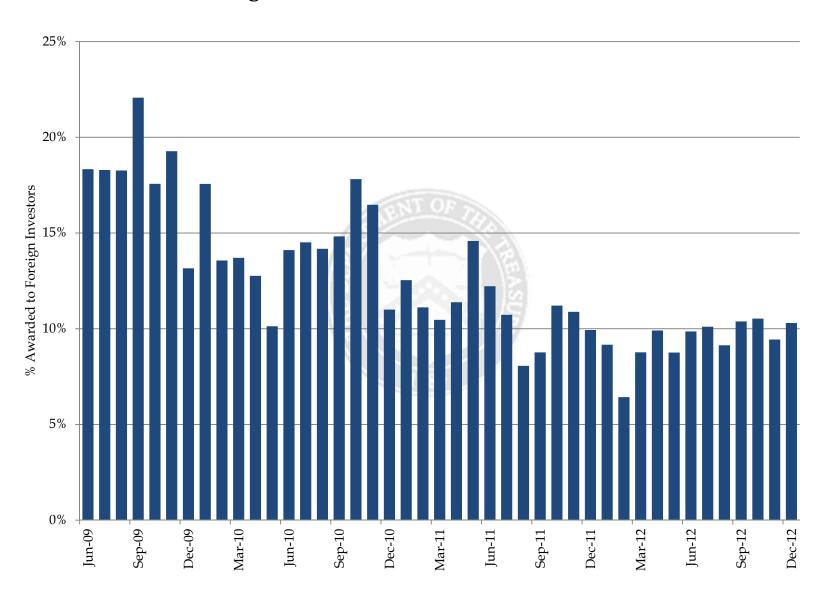
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance. These results may include seasonal effects.

[&]quot;Previous 4 Quarters" = Total Awards for the previous 4 quarters divided by Total Auction Awards of the previous 4 quarters

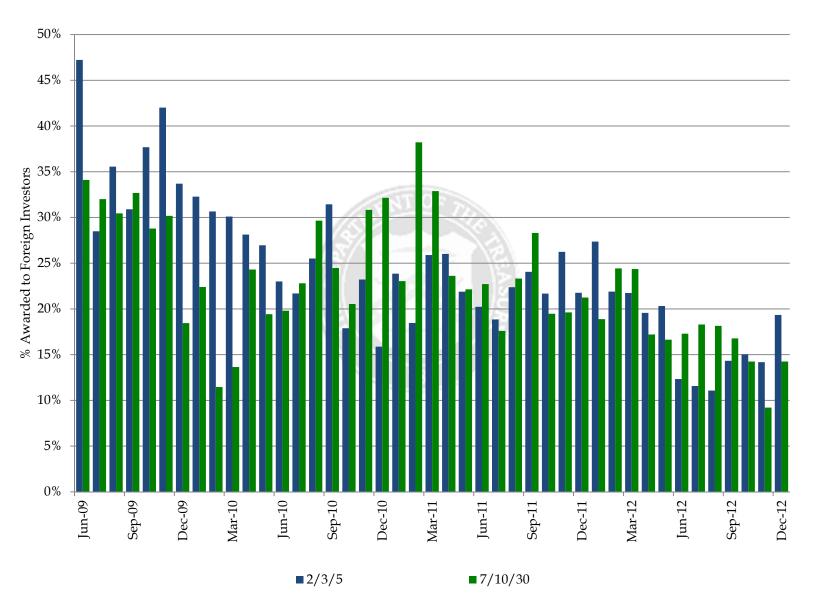
Total Foreign Awards of Treasuries at Auction, \$ Billion



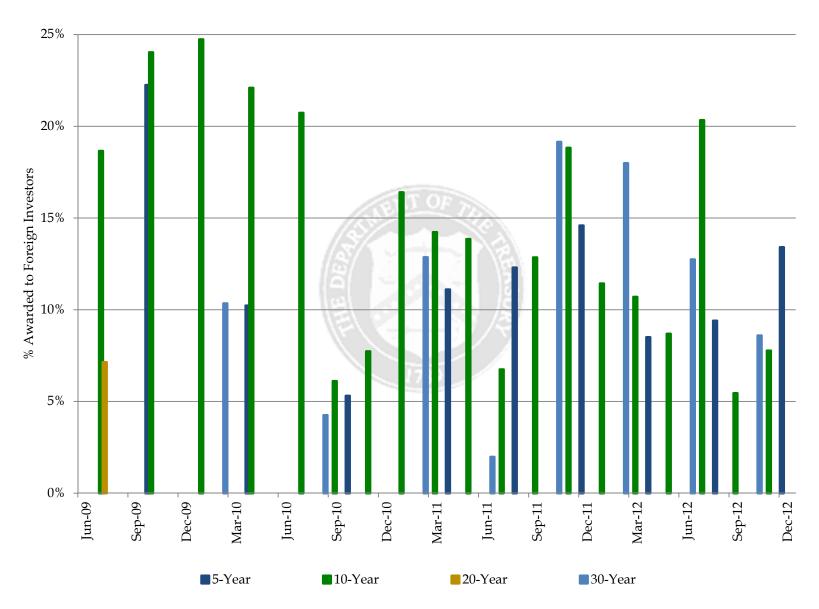
Foreign Awards of Bills at Auction, Percent



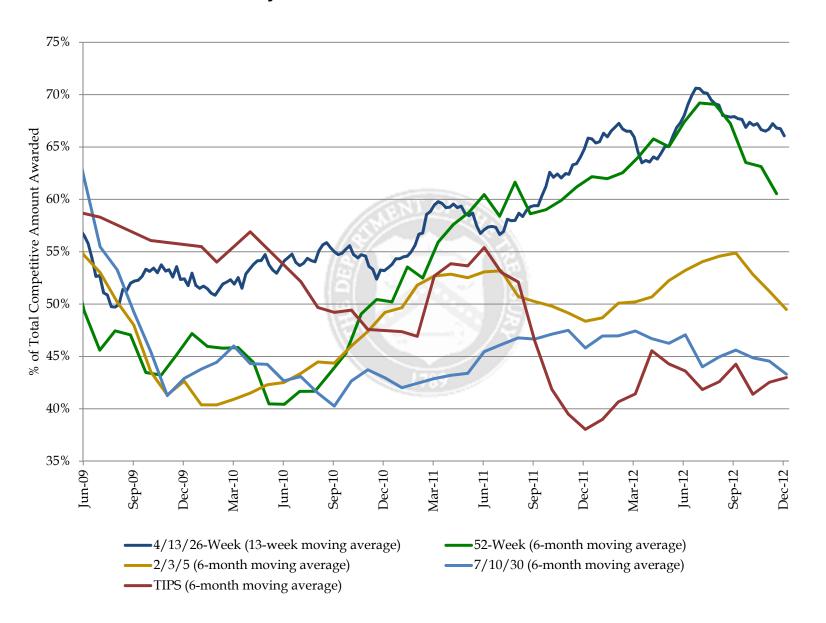
Foreign Awards of Nominal Coupons at Auction, Percent



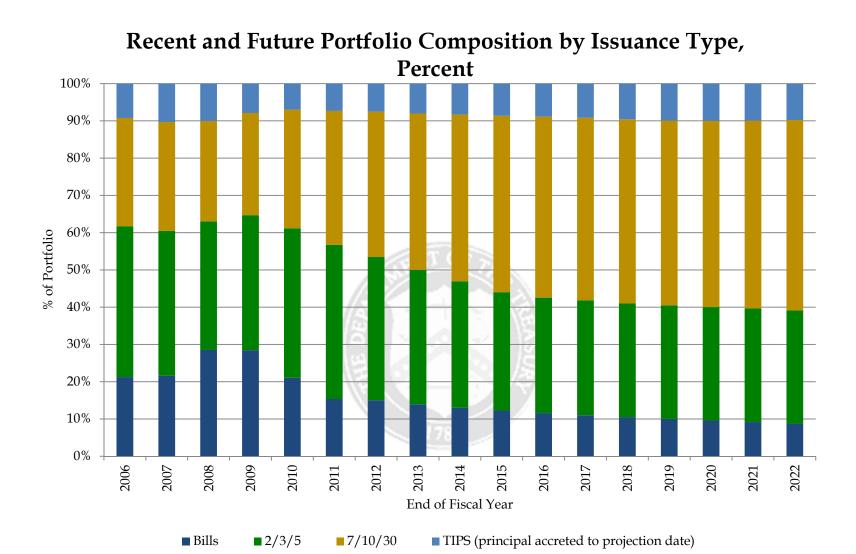
Foreign Awards of TIPS at Auction, Percent



Primary Dealer Awards at Auction, Percent



Appendix



Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury. See table on the following page for details.

Recent and Future Portfolio Composition by Issuance Type, Percent

End of Fiscal Year	Bills	2-, 3-, 5-Year Nominal Coupons	7-, 10-, 30-Year Nominal Coupons	Total Nominal Coupons	TIPS (principal accreted to projection date)
2006	21.3%	40.5%	29.0%	69.5%	9.2%
2007	21.6%	38.9%	29.2%	68.1%	10.3%
2008	28.5%	34.5%	26.9%	61.4%	10.0%
2009	28.5%	36.2%	27.4%	63.6%	7.9%
2010	21.1%	40.1%	31.8%	71.9%	7.0%
2011	15.4%	41.4%	35.9%	77.3%	7.3%
2012	15.0%	38.4%	39.0%	77.4%	7.5%
2013	13.9%	36.1%	42.0%	78.0%	8.0%
2014	13.0%	33.9%	44.8%	78.7%	8.3%
2015	12.3%	31.7%	47.3%	79.1%	8.6%
2016	11.6%	31.0%	48.5%	79.5%	8.9%
2017	11.0%	30.8%	49.0%	79.8%	9.2%
2018	10.5%	30.5%	49.4%	79.9%	9.6%
2019	10.0%	30.4%	49.6%	80.0%	9.9%
2020	9.6%	30.4%	50.0%	80.4%	10.0%
2021	9.2%	30.5%	50.4%	80.9%	9.9%
2022	8.8%	30.4%	51.1%	81.5%	9.8%

Portfolio & SOMA holdings as of 12/31/2012 and estimated projections of the Large Scale Asset Purchase program announced on 12/12/2012 by the Federal Reserve assumed to last for about 1 year. This assumption is based on the Federal Reserve's most recent primary dealer survey. To match OMB's projected borrowing from the public for the next 10 years, nominal coupon securities (2-, 3-, 5-, 7-, 10-, and 30-year) were adjusted by the same percentage. OMB's projections of borrowing from the public are from Table S-5 and S-14 of the "Fiscal Year 2013 Mid-Session Review Budget of the US Government." The principal on the TIPS securities were accreted to each projection date based on market ZCIS levels. This scenario does not represent any particular course of action that Treasury is expected to follow. Instead, it is intended to demonstrate the basic trajectory of average maturity absent changes to the mix of securities issued by Treasury.

					Bill Issu	IAS				
		Stop Out	Bid-to-Cover	Competitive	% Primary			Non-Competitive	SOMA Add	10-Yr Equivalent (\$
Issue	Settle Date	Rate (%)*	Ratio*	Awards (\$ bn)	Dealer*		% Indirect*	Awards (\$ bn)	Ons (\$ bn)	bn)**
4-Week	10/4/2012	0.100	3.86	39.76	71.5%	9.7%	18.8%	0.24	0.00	0.34
4-Week	10/11/2012	0.115	4.17	39.75	69.9%	6.6%	23.5%	0.25	0.00	0.34
4-Week	10/11/2012	0.125	4.01	39.68	67.6%	10.3%	22.1%	0.22	0.00	0.35
4-Week	10/25/2012	0.125	4.46	39.65	74.0%	11.9%	14.1%	0.25	0.00	0.36
4-Week	11/1/2012	0.123	5.23	24.69	47.7%	11.3%	41.0%	0.16	0.00	0.30
4-Week	11/8/2012	0.130	4.73	39.65	62.4%	9.3%	28.3%	0.10	0.00	0.34
4-Week	11/15/2012	0.120	4.14	39.61	56.3%	7.2%	36.5%	0.25	0.00	0.34
4-Week	11/13/2012	0.143	4.14	39.55	73.6%	7.2%	19.1%	0.23	0.00	0.32
4-Week	11/29/2012	0.133	4.12	38.76	76.0%	14.6%	9.3%	0.25	0.00	0.32
4-week	12/6/2012	0.175	4.32	38.76	66.3%	6.7%	27.0%	0.23	0.00	0.33
			4.64			10.8%		-	0.00	
4-Week	12/13/2012	0.050		39.76	54.2%		35.0%	0.24		0.34
4-Week	12/20/2012	0.015	3.99	39.67	82.5%	7.4%	10.1%	0.33	0.00	0.34
4-Week	12/27/2012	0.045	3.80	38.77	76.4%	6.6%	16.9%	0.26	0.00	0.34
13-Week	10/4/2012	0.085	4.63	31.16	65.8%	7.1%	27.1%	0.66	0.00	0.88
13-Week	10/11/2012	0.100	4.55	31.11	58.9%	8.4%	32.7%	0.62	0.00	0.88
13-Week	10/18/2012	0.105	4.61	31.16	62.2%	9.3%	28.5%	0.63	0.00	0.90
13-Week	10/25/2012	0.100	4.69	31.25	71.8%	7.1%	21.1%	0.65	0.00	0.90
13-Week	11/1/2012	0.125	4.36	31.43	65.3%	8.1%	26.7%	0.42	0.00	0.89
13-Week	11/8/2012	0.105	4.56	31.37	76.0%	6.9%	17.1%	0.43	0.00	0.88
13-Week	11/15/2012	0.105	4.33	31.19	67.1%	5.9%	27.1%	0.56	0.00	0.88
13-Week	11/23/2012	0.090	4.73	31.29	70.9%	7.7%	21.5%	0.51	0.00	0.87
13-Week	11/29/2012	0.100	4.59	30.62	67.2%	8.4%	24.4%	0.44	0.00	0.87
13-Week	12/6/2012	0.090	4.39	31.31	78.1%	7.2%	14.6%	0.49	0.00	0.87
13-Week	12/13/2012	0.090	4.63	31.41	83.6%	10.3%	6.0%	0.49	0.00	0.88
13-Week	12/20/2012	0.040	4.44	31.37	71.2%	9.1%	19.7%	0.53	0.00	0.89
13-Week	12/27/2012	0.085	4.06	30.52	62.0%	8.5%	29.5%	0.53	0.00	0.89
26-Week	10/4/2012	0.135	4.79	26.46	58.5%	7.9%	33.7%	0.59	0.00	1.54
26-Week	10/11/2012	0.145	4.68	26.94	70.4%	8.2%	21.4%	0.66	0.00	1.55
26-Week	10/18/2012	0.150	5.00	26.79	55.5%	7.8%	36.7%	0.61	0.00	1.57
26-Week	10/25/2012	0.150	4.73	27.06	71.6%	7.8%	20.6%	0.57	0.00	1.57
26-Week	11/1/2012	0.160	4.44	27.66	65.6%	4.8%	29.7%	0.34	0.00	1.56
26-Week	11/8/2012	0.150	4.76	27.19	57.5%	7.9%	34.6%	0.36	0.00	1.54
26-Week	11/15/2012	0.145	4.98	27.13	49.3%	7.6%	43.2%	0.42	0.00	1.54
26-Week	11/23/2012	0.135	4.91	27.32	64.0%	6.2%	29.8%	0.38	0.00	1.52
26-Week	11/29/2012	0.145	4.94	26.68	65.1%	7.2%	27.7%	0.34	0.00	1.52
26-Week	12/6/2012	0.140	5.17	27.06	56.2%	10.0%	33.8%	0.44	0.00	1.52
26-Week	12/13/2012	0.135	5.05	27.17	59.8%	8.7%	31.4%	0.43	0.00	1.54
26-Week	12/20/2012	0.090	4.75	27.31	56.6%	8.4%	35.0%	0.44	0.00	1.56
26-Week	12/27/2012	0.130	4.50	26.56	45.7%	3.6%	50.6%	0.44	0.00	1.55
52-Week	10/18/2012	0.180	4.86	24.86	48.2%	8.1%	43.7%	0.14	0.00	2.81
52-Week	11/15/2012	0.180	5.08	24.73	61.2%	8.6%	30.2%	0.18	0.00	2.75
52-Week	12/13/2012	0.160	4.96	24.86	57.9%	15.5%	26.6%	0.15	0.00	2.75
CMBs	11/8/2012	0.125	4.72	25.00	87.3%	10.9%	1.8%	0.00	0.00	0.32
CMBs	11/15/2012	0.190	4.69	25.00	72.0%	14.7%	13.4%	0.00	0.00	0.35
CMBs	11/23/2012	0.155	5.23	20.00	70.6%	4.4%	25.1%	0.00	0.00	0.13
CMBs	12/6/2012	0.165	5.11	25.00	65.7%	18.1%	16.2%	0.00	0.00	0.08
CMBs	12/14/2012	0.090	5.62	10.00	94.2%	5.8%	0.0%	0.00	0.00	0.01

^{*}Weighted averages of Competitive Awards.

**Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards.

	Nominal Coupon Securities									
		Stop Out	Bid-to-Cover	Competitive	% Primary			Non-Competitive	SOMA Add	10-Yr Equivalent (\$
Issue	Settle Date	Rate (%)*	Ratio*	Awards (\$ bn)	Dealer*	% Direct*	% Indirect*	Awards (\$ bn)	Ons (\$ bn)	bn)**
2-Year	10/1/2012	0.273	3.60	34.73	55.3%	17.5%	27.2%	0.17	0.00	7.67
2-Year	10/31/2012	0.295	4.02	34.73	28.3%	38.2%	33.5%	0.16	0.00	7.78
2-Year	11/30/2012	0.270	4.07	34.75	41.9%	23.6%	34.4%	0.15	0.00	7.61
2-Year	12/31/2012	0.245	3.59	34.78	53.9%	28.4%	17.7%	0.12	0.00	7.77
3-Year	10/15/2012	0.346	3.96	31.87	48.7%	22.5%	28.8%	0.03	0.00	10.56
3-Year	11/15/2012	0.392	3.41	31.86	52.7%	22.3%	25.1%	0.04	0.00	10.54
3-Year	12/17/2012	0.327	3.36	31.87	53.3%	24.8%	21.9%	0.03	0.00	10.59
5-Year	10/1/2012	0.647	3.06	34.98	47.2%	10.7%	42.0%	0.02	0.00	18.90
5-Year	10/31/2012	0.774	2.73	34.96	42.2%	15.5%	42.3%	0.04	0.00	19.11
5-Year	11/30/2012	0.641	2.89	34.97	38.8%	15.9%	45.4%	0.03	0.00	18.75
5-Year	12/31/2012	0.769	2.72	34.93	37.2%	30.4%	32.4%	0.02	0.00	19.10
7-Year	10/1/2012	1.055	2.61	28.99	48.1%	17.0%	34.9%	0.01	0.00	21.43
7-Year	10/31/2012	1.267	2.56	28.94	43.7%	18.0%	38.2%	0.01	0.00	21.61
7-Year	11/30/2012	1.045	2.81	28.99	41.2%	19.7%	39.1%	0.01	0.00	21.26
7-Year	12/31/2012	1.233	2.72	28.97	37.0%	23.1%	39.9%	0.03	0.00	21.54
10-Year	10/15/2012	1.700	3.26	20.99	35.7%	22.9%	41.4%	0.01	0.00	20.93
10-Year	11/15/2012	1.675	2.59	23.97	46.2%	14.1%	39.7%	0.03	0.00	24.27
10-Year	12/17/2012	1.652	2.95	20.98	33.1%	42.7%	24.2%	0.02	0.00	21.26
30-Year	10/15/2012	2.904	2.49	12.99	59.3%	14.2%	26.5%	0.01	0.00	28.07
30-Year	11/15/2012	2.820	2.77	15.98	42.1%	12.4%	45.4%	0.02	0.00	35.32
30-Year	12/17/2012	2.917	2.50	12.99	46.1%	20.3%	33.7%	0.01	0.00	28.12

					TIPS					
		Stop Out	Bid-to-Cover	Competitive	% Primary			Non-Competitive	SOMA Add	10-Yr Equivalent (\$
Issue	Settle Date	Rate (%)*	Ratio*	Awards (\$ bn)	Dealer*	% Direct*	% Indirect*	Awards (\$ bn)	Ons (\$ bn)	bn)**
5-Year	12/31/2012	(1.496)	2.70	13.98	40.4%	10.7%	49.0%	0.02	0.00	7.51
10-Year	11/30/2012	(0.720)	2.52	12.98	41.3%	10.4%	48.3%	0.02	0.00	14.96
30-Year	10/31/2012	0.479	2.82	6.99	37.7%	13.2%	49.1%	0.01	0.00	23.08

^{*}Weighted averages of Competitive Awards.

^{**}Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS' 10-Year Equivalent, a constant auction BEI is used as the inflation assumption.

Conditions in the Primary and Secondary Housing Finance Markets

Treasury Borrowing Advisory Committee Quarterly Meeting February 2013 Charge Question #2

Mortgage and Housing Market Conditions

We would like the Committee to comment on current conditions in the primary and secondary financing markets for housing credit. Please identify and discuss any barriers or hurdles that impede the availability of credit within these markets. What steps can the banking industry, regulators, and/or policy makers take to assure that the availability of credit to this market continues to improve?

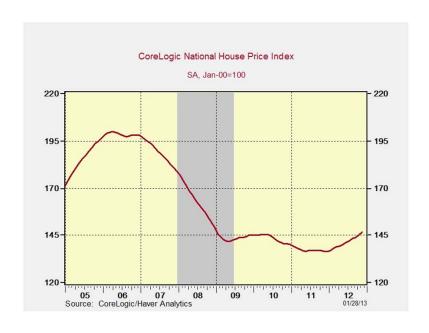
Summary

- I. General Macro and Market Conditions
 - Housing market improving, rate levels down and stock market recovering
- II. Relative Asset Prices
 - Mortgage securities richer, Treasuries cheaper, high-grade and high-yield corporates richer
- III. Secondary Mortgage Market
 - Secondary market liquid and functioning well
- IV. Primary Market
 - After initially widening, the primary secondary spreads are trending tighter
- V. Capacity Issues
 - Industry faces challenges to expansion due to capacity
- VI. Policy/Regulatory Issues
 - Sheer volume and depth of proposals, bills and changes in regulations have created significant uncertainty

I. General Macro and Market Conditions: Housing Market Improving

- Home sales continue to rise, with some supply limitations now apparent; buyer traffic is strong, and residential investment has risen for 6 consecutive quarters
- Home prices are now up 7.6% year over year
- An index of home affordability remains close to its all-time high, reflecting still low home prices and very low mortgage rates

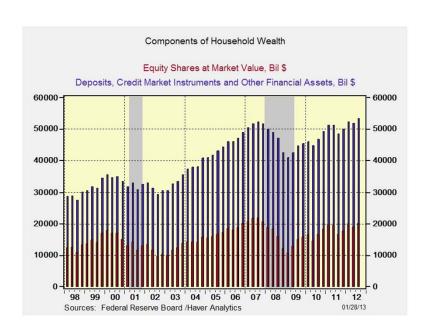


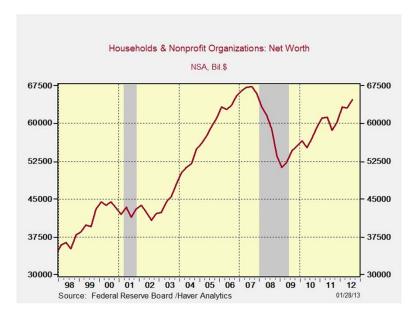


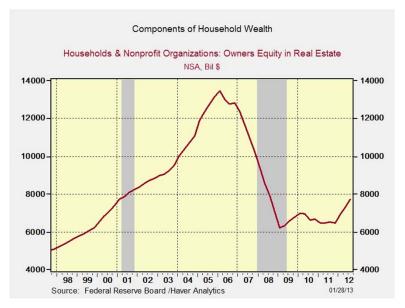


I. General Macro and Market Conditions: Household Net Worth Rising

- Following a 6-quarter, 24% decline of \$16.2 trillion, household net worth has rebounded strongly, primarily reflecting higher stock and bond valuations
- Owners' equity in real estate, which fell \$7.3 trillion, or 54% from its 2006Q1 peak, remains \$3.2 trillion below its pre-recession level in Q3 2007
- Equity valuations have regained more than 80% of their \$11.1 trillion decline, while valuations of deposits, credit instruments and other financial assets are near all-time highs

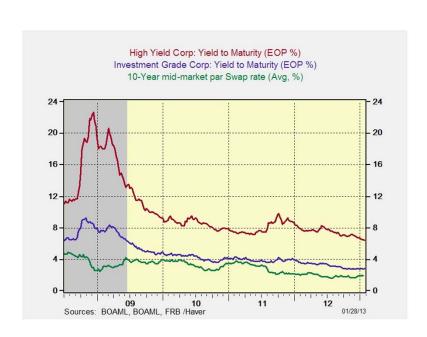






I. General Macro and Market Conditions: Select Interest Rates

- Generally, Libor swap rates are higher and credit spreads tighter
- Mortgage yield near 2.5%
- S&P 500 creeping back toward record levels

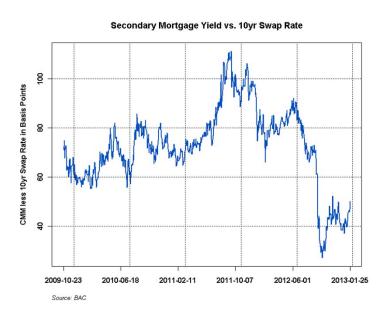


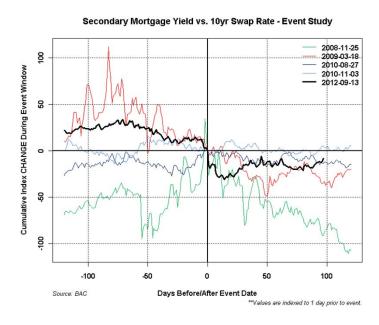


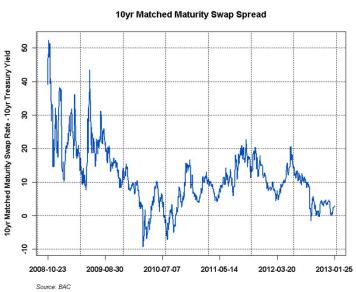
II: Relative Asset Prices: Event Study Analysis

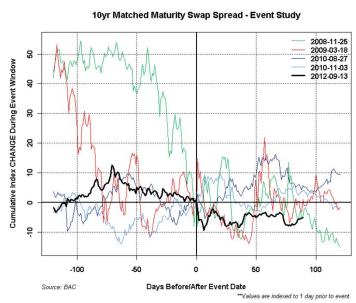
- In the following analysis, there are several events studied. The critical dates are:
 - November 25, 2008: FOMC Announces QE1
 - March 18, 2009: FOMC Expands MBS Program to \$1.25TN and \$300BN Treasuries
 - August 27, 2010: 2010 Jackson Hole Economic Symposium
 - November 3, 2010: FOMC Announces QE2
 - September 13, 2012: FOMC Announces QE3

II: Relative Asset Prices: Treasuries & Mortgage Spreads

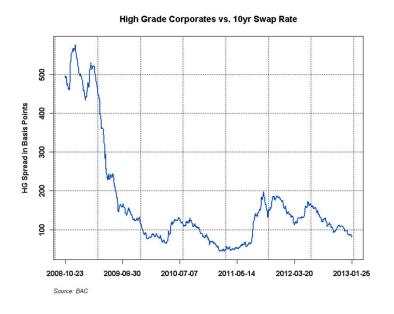


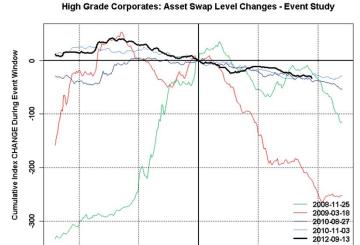






II. Relative Asset Prices: Corporate





Days Before/After Event Date

50

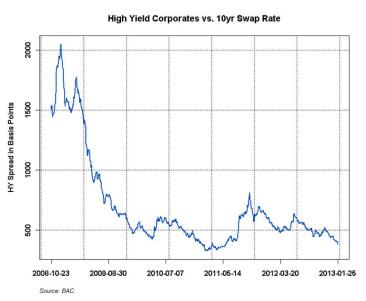
100

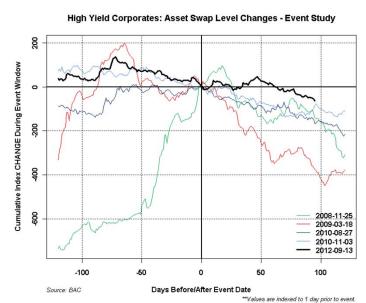
**Values are indexed to 1 day prior to event.

-100

Source: BAC

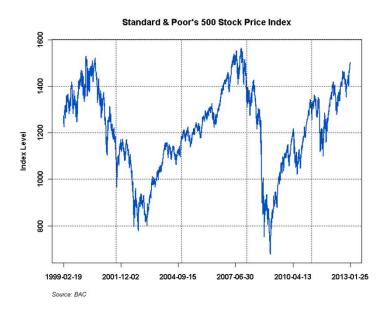
-50



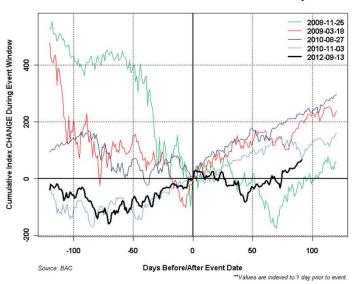


II. Relative Asset Prices: Equities

- Equity market traded sideways after QE3 announcement, but has recently appreciated sharply as the economy and housing gather momentum
- QE1 in late 2008 may have forestalled equity slide. Equities rose significantly after 2009 and 2010 announcements (QE1X and QE2)
- The S&P 500 has appreciated during each of the Fed's QE programs, although many factors are at work. Index now within 4% of record levels

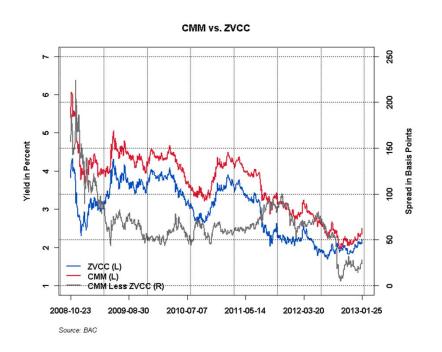


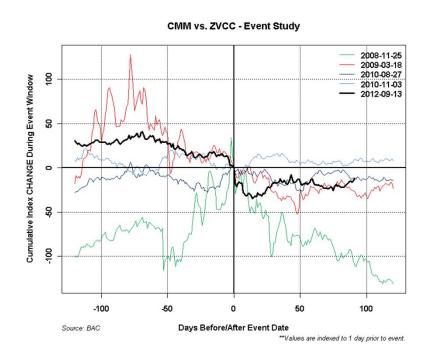
Standard & Poor's 500 Stock Price Index - Event Study



III. Secondary Mortgage Market: Secondary Mortgage Yield vs. Comparable Amortizing Bond

- Mortgage yields are very tight against zero volatility amortizing bond
- Overall, MBS have richened in response to the latest Fed action, with few signs of excessive market stress



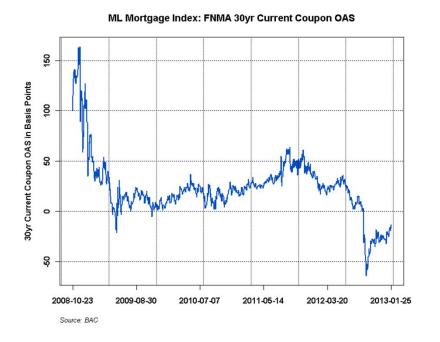


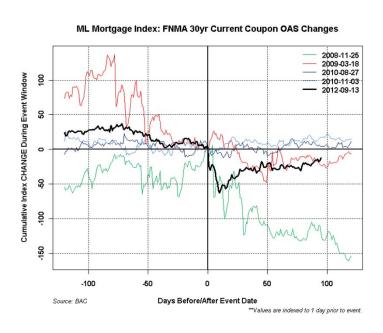
CMM: Yield of MBS at par

ZVCC: Par rate for an amortizing bond with cash flows comparable to a par mortgage along the forward curve

III. Secondary Mortgage Market: MBS Market Summary

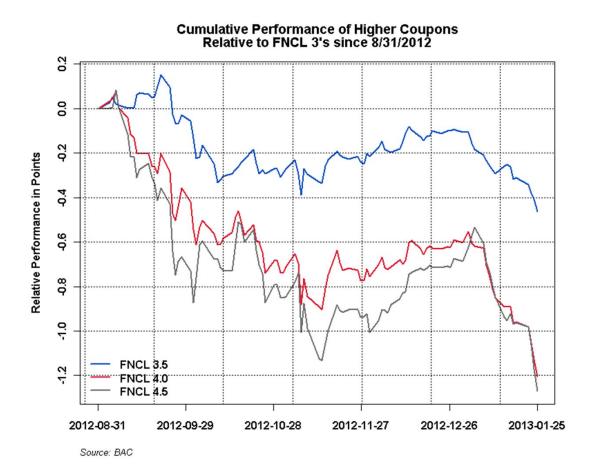
- Agency MBS richened significantly in response to Chairman Bernanke's Jackson Hole speech and the subsequent announcement of QE3, despite the fact that they were already at relatively tight levels
- This supports the view that valuations are being driven by stock rather than flow effects





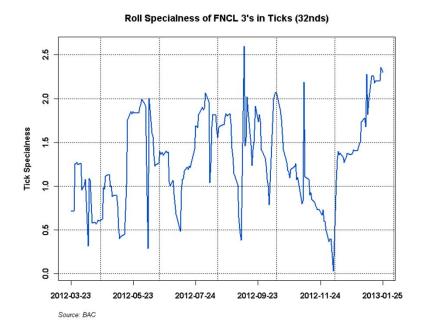
III. Secondary Mortgage Market: MBS Coupon Performance

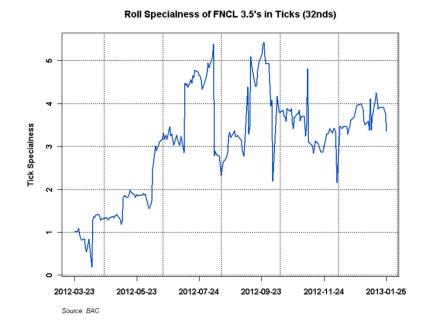
• Higher coupon TBAs have underperformed relative to FN 3s since Jackson Hole



III. Secondary Mortgage Market: MBS Dollar Rolls

• FNCL 3 and 3.5 rolls showed some signs of stress in the weeks following the September FOMC announcement. The roll specialness remains elevated





III. Secondary Mortgage Market: MBS Volatility and Transactions Costs Impacts

• Intraday volatility is now at or below pre-Jackson Hole levels





• Similarly, dealer estimated mortgage transaction costs were elevated following the September FOMC announcement, but have since returned to pre- Jackson Hole levels

Transaction Costs

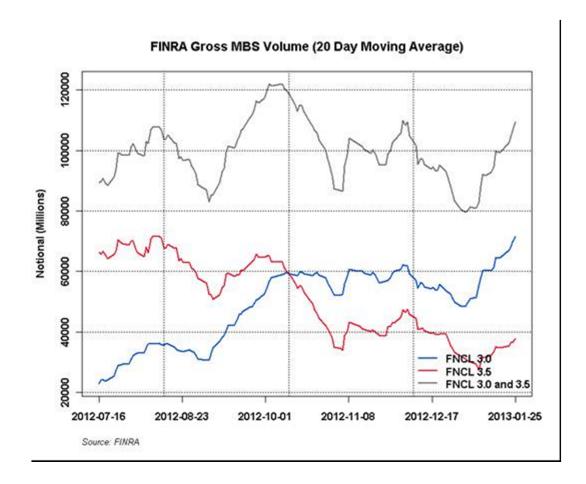
Source: Multiple Dealers

Bid-Offer Spread in Ticks for 1 Billion Production Coupon FNCL TBA Outright

Month Prior To Jackson	Week following Jackson	Week following 9/13		
Hole	Hole	FOMC Announcement	10/16/2012	1/14/2013
1.0	1.0	2.0	1.0	1.3
1.5	2.0	3.0	2.0	1.5
1.4	1.8	2.9	2.0	1.6
2.0	2.5	4.0	3.0	2.0
	Hole 1.0 1.5 1.4	Hole Hole 1.0 1.0 1.5 2.0 1.4 1.8	1.0 1.0 2.0 1.5 2.0 3.0 1.4 1.8 2.9	Hole Hole FOMC Announcement 10/16/2012 1.0 1.0 2.0 1.0 1.5 2.0 3.0 2.0 1.4 1.8 2.9 2.0

III. Secondary Mortgage Market: MBS Volumes Impact

- MBS volumes increased after the September FOMC announcement but have since returned to normal levels
- Volume in FN 3s now exceeds FN 3.5 volume



 Volume and liquidity in the specified pool market do not appear to have been significantly impacted by QE3

Spec Balance Auctioned by all Originators (mm)

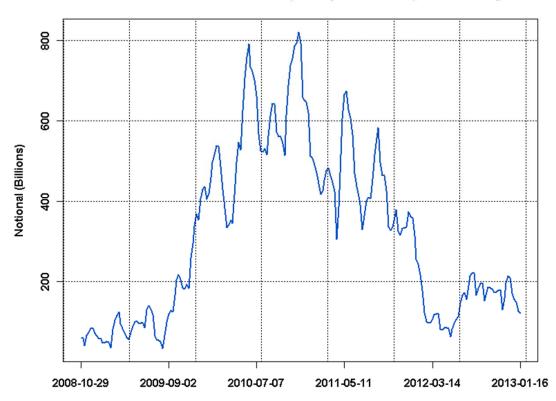
	Values	
Month	Sum	Average Pool Size
Jun	66,368	27
Jul	62,556	27
Aug	66,265	31
Sep	67,622	30
Oct	73,648	31
Nov	80,451	30
Dec	55,961	26
Jan	70 , 559	35
Total	543,430	30

Source: BAC

III. Secondary Mortgage Market: MBS Fails

• Mortgage fails increased during the summer, but have not shown any additional increase since the Fed action and remain well below the peak levels of 2010-2011

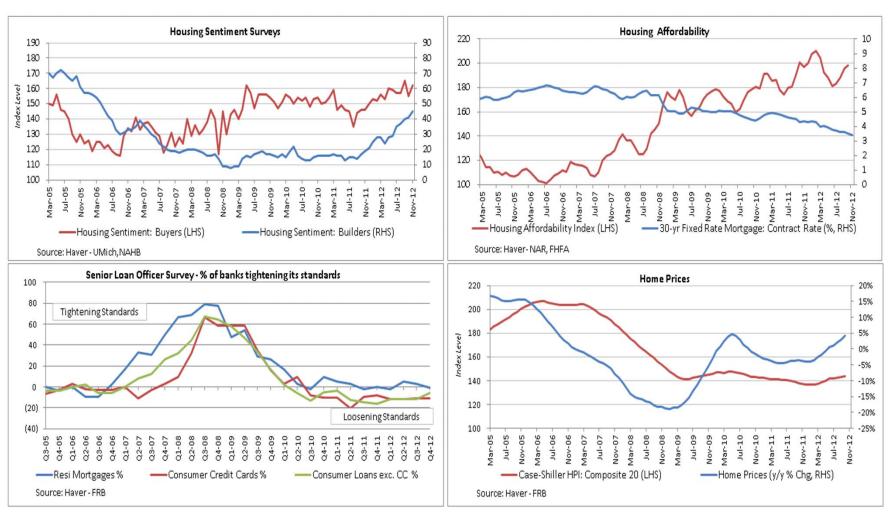
NY Fed MBS Failed to Deliver (Weekly Cumulative) - 4 Week Avg



Source: Federal Reserve

IV. Primary Market: Housing Affordability Indicators

- Traditional affordability measures show improvement across the board
- Housing sentiment is improving, rates are at historic lows, standards loosening and lower home prices (now rising)



IV. Primary Market: Primary and Secondary Market Rates

• Primary and secondary market rates have continued to trend downward; ticking up slightly post year-end

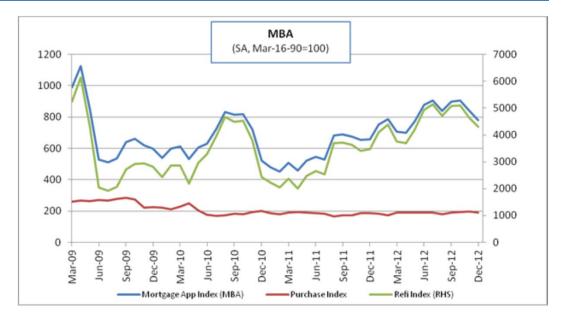


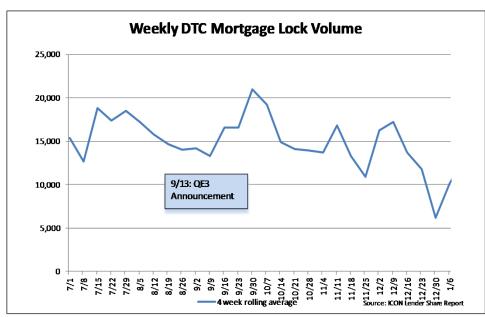
PCC: Primary current coupon for a purchase money borrower with 70LTV and 750 FICO for a 30 day lock CMM: Yield of MBS at par

Source: Internal BAC

IV. Primary Market: Post QE3 Impact on Mortgage Applications & Locks

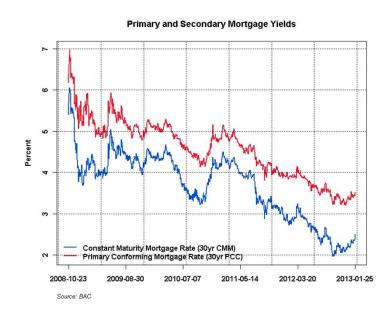
- Lower rates resulted in increase in lock volume
- Mortgage Application index spiked in late Sep 2012
- Downturn in lock volume in late Dec 2012 due to holiday season

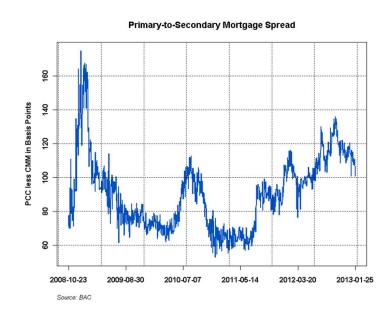


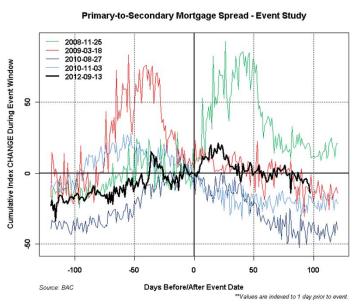


IV. Primary Market: Primary & Secondary Mortgage Spreads

- The September 2012 FOMC announcement initially pushed spreads to a new post-crisis high, but they have since retraced their gains
- Primary rates have fallen at a slower pace than secondary since the second half of 2011, and may have neared a natural floor

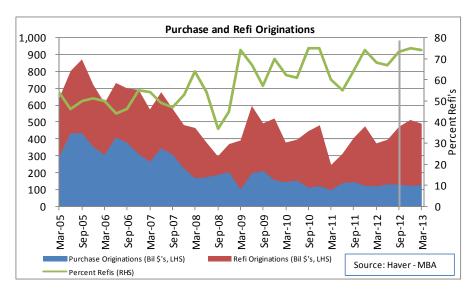


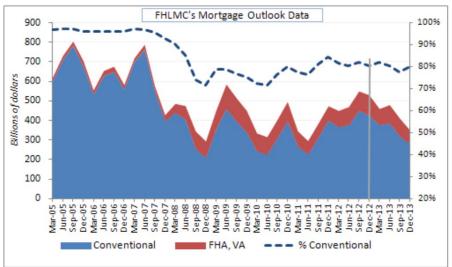




IV. Primary Market: Mortgage Originations

- Market is dominated by refinance volume. Refinance volumes are over 70% of total originations
- Majority of new originations volumes are Fixed Product
- Purchase index is near 7 year lows
- Freddie 's outlook shows the mortgage market will continue to be dominated by GSEs.
- FHA will continue to play a role in origination market

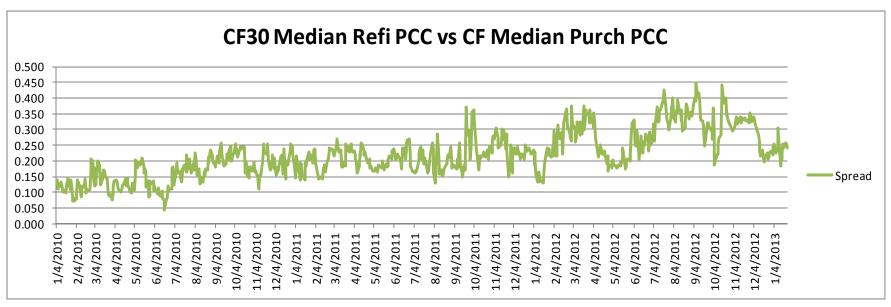




^{*}Grey line in above charts represents break between actual vs. forecasted numbers

IV. Primary Market: Refinance vs. Purchase Spread

• Rates charged for Refinance borrowers are higher than rates charged for purchase borrowers



Source: Internal BAC

Purchase PCC: Primary current coupon for a purchase money borrower with 70LTV and 750 FICO for a 30 day lock Refi PCC: Primary current coupon for a refinance borrower with 70LTV and 750 FICO for a 30 day lock

V. Capacity Issues

- Times to Close extended consistently from 2011
- Based on latest data (Source: Ellie Mae) as of Dec 2012, refinance application on an average took 57 days to close and purchase application took 51 days to close.
- MBS Issuances trend post 2009, indicates industry capacity is approaching the \$150B per month high water mark
- It is clear that the originator's capacity would be tested at these levels if rates remain low and HARP 2.0 volume remains consistent over 2013

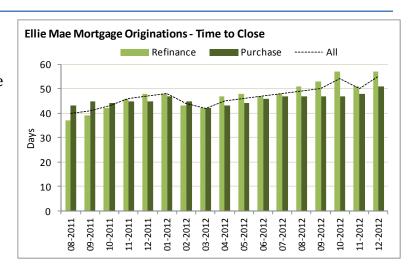
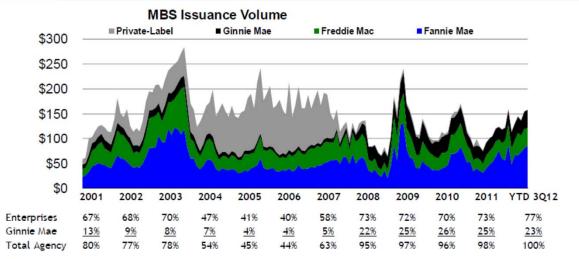


Figure 1.2 Enterprises' Market Share – MBS Issuance Volume (\$ in billions)

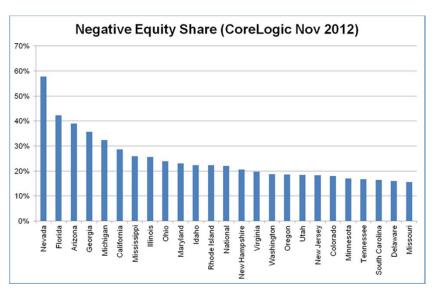


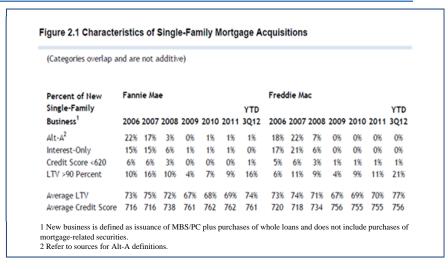
Sources:

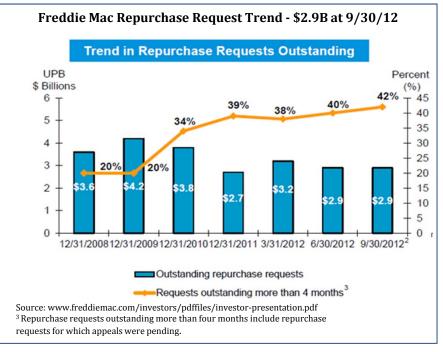
Inside Mortgage Finance, Inside MBS & ABS, Enterprises' Monthly Volume Summaries. Issuance figures exclude MBS issued backed by assets previously held in the Enterprises' portfolios.

V. Capacity Issues: Other Factors Affecting Primary Market

- Elevated Underwriting Standards Review of new GSE originations indicate a strong shift towards lower LTV and higher FICO borrowers; 3Q 12 YTD LTV increase reflects HARP 2
- Negative Equity Surge in refinancing under to HARP 2 for underwater borrowers indicates a pool of borrowers who were otherwise ineligible for refinance.
- Put back Risks Growing repurchase demand from GSEs has forced lenders to be extra cautious with quality of borrowers and the collaterals of new originations
- Production Capacity Capacity may continue to be less scalable, due to protracted training regimen associated with stronger underwriting







VI. Policy/Regulatory Issues

- There is a vast array of policy and regulatory changes in progress that will affect the future of the housing market
- QM and the Ability-to-Repay Final Rule was released January 10, 2013
 - •The CFPB QM "Ability To Repay" (ATR) standard promotes prudent underwriting and encourage mortgage lending
 - •Whole-loan and Securitization markets expect improved liquidity and execution efficiency as a result of CFPB QM implementation
 - •Clarity around CFPB QM/Non QM capital requirements per Basel III will further encourage a robust mortgage market and establish consistency between mortgage origination and capital framework
 - •Potentially dramatic implications for product outside of safe harbor both at low-end and high-end of income distribution
 - •GSE/agency reaction to carve-out provisions will have potential implications as well
- Some of the more significant issues are set forth on the following pages. These include:
 - Mortgage originations
 - GSE reform
 - Servicing standards
 - Changes to regulatory capital for MSR and mortgage loans under BASEL III
 - Private-label issues
- Coupling the uncertainty related to these changes with recent experience regarding put backs, settlement of lawsuits, ongoing lawsuits and the prospect of unknown future exposure impedes the availability of credit. It is likely that both investors and lenders will remain cautious until there is more clarity around these issues

VI. List of Policy/Regulatory Issues

Issues impacting Mortgage Servicing, Mortgage Prod	uction and Return	of Private Capital	
Issue	Agency	Description	Concerns
Mortgage Originations			
Mortgage Originator Standard including Loan Officer Compensation under TILA/RESPA	CFPB	Creates rules for loan originator compensation that are clear, balanced and crafted to assure there are no abuses while maintaining a structure in which originators can be compensated	CFPB's proposed requirement for a creditor to offer a consumer a comparable, alternative loan when a consumer's original loan has discount points and origination points or fees
Ability-to-repay -Qualified Mortgages (QM)	CFPB	Established minumum mortgage underwriting standards for determining a consumers' ability-to-repay	Large number of new rules with the potential to increase the cost and complexity of mortgage origination
Mortgage Rules & Disclosures	CFPB	New restrictions prepayment penalties, single premium credit insurance, arbitration, negative amortization, and partial payments. a. For high-cost mortgages, provides new points/fees definition and prepayment penalty test, and adjusts APR test	
Requirements for Escrow Accounts	CFPB	Requires the mandatory establishment of escrow accounts for T&I.	
Appraisal Proposal under amend the Equal Credit Opportunity Act (ECOA)'s Regulation B	CFPB	Proposed rule that would require mortgage lenders to provide home loan applicants with copies of written appraisals and other home value estimates developed in connection with the application. property's value was determined. Imposes appraisal independence requirements on any person extending credit or providing services for a consumer credit transaction secured by a consumer's principal dwelling	Under the proposed rule, creditors could still charge reasonable fees associated with conducting appraisals and home value estimates; however, the rule would prohibit creditors from charging consumers fees for obtaining the reports. a relatively short and uncomplicated proposal would increase lender's overhead and require changes in the information technology, their compliance guides, their employee training rules and manuals, etc.
Appraisal Proposal related to "higher-risk loans"	CFPB	Proposal establishes rules for appraisals for a category of loans called "higher-risk mortgage loans," closed end loans on principal dwelling with rates similar to thresholds for higher priced mortgage loans in Reg Z. QM loans are excluded.	Concerns around using an all-in APR will increase the number of loans that exceed compliance thresholds for various laws and regulations
Risk Retention - QRM	CFPB	Qualified Residential Mortgages would be exempt from the Dodd-Frank Act requirement that securitizers/originator retain a 5% economic interest in secutitized loans	GSEs and FHA exempt. Depending on definition of QM, and resolution of key issues (e.g., premium recapture) potentially significant increases in cost
Boxer/Menendez bill	Senate	Expansion of underwater refinance program to Non-GSE loans; includes fees and UPB forgiveness component	Uncertainty over who will bear costs of forgiveness, loss of margin and extent of fees charged
FHA loan limits	Policymakers	Focus on reducing market share of FHA could be accomplished by reducing FHA loan limits or downpayment requirements	FHA has been critical recently in the purchase and first-time home buyer market. New restrictions could reduce availability of credit for these consumers.

VI: Policy/Regulatory Issues

Issue	Agency	Description
CSE Deforms		
GSE Reform GSE Reform - Single Platform	FHFA	Proposed framework for a common securitization platform and a model Pooling and Servicing Agreement
GSE Reform - Increased G-fees	FHFA	Proposal to adjust the guarantee fees (g-fees) that Fannie Mae and Freddie Mac charge on single-family mortgages in states where costs related to foreclosure practices are statistically higher than the national average. The size of the fee adjustments are intended to reflect the disparity in costs, as compared to the national average.
UST Revision of Preferred Stock Purchase Agreement	UST	On August 17, Treasury revised its preferred stock purchase agreements with the GSEs to eliminate the 10 percent dividend, while instituting an income sweep on GSE profits
Rep and Warrants new framework	FHFA	Fannie Mae and Freddie Mac are launching a new rep and warrant framework for conventional loans "to clarify lenders' repurchase exposure and liability on future deliveries."
Servicing compensation	FHFA	Various proposals to move 25 bps servicing fee to new levels

VI: Policy/Regulatory Issues

Servicing		
CFPB Proposed Servicing Standards	CFPB	These two notices contain rules to protect homeowners from surprises and costly mistakes by their mortgage servicers
State specific Servicing Standards	Various States	States are introducing their own mortgage servicing standards that need to be put in place in addition to OCC standards
Eminent Domain	Various Municipalities	Municipalities are exploring seiizng mortgage notes via Eminet Domain concept
Capital		
BASEL III - Proposed MSR capital rules	OCC/Fed/FDIC	Proposed MSR rules would increase risk weighting for MSRs
BASEL III - Proposed treatment of PLS	OCC/Fed/FDIC	Proposed rules would increase risk-weighting associated with Private Label Securitization;
BASEL III - Proposed treatment of Whole Loans	OCC/Fed/FDIC	Proposed rules increase risk weighting associated with whole loans
Return of Private Label		
Uncertanty regarding pending regulations	All of Above	Market Participants can not plan for the future and are in a "pull-back" mode as various issues are circulating
Rep and Warrants Liabilities	FHFA	Part of FHFA's strategic Plan is to pursue R&W for loans sold to GSEs prior to 1/1/13
Capabilities/credibility of rating agencies	N/A	Lack of confidence in rating agency models or the agencies themselves
MI Rescissions	N/A	The volume of MI rescissions that lenders are experiencing today reflects a lack of clarity on the scope of mortgage insurance coverage
Lawsuits filed by FHFA against Major Financial Institutions for MBS sold ro GSEs during housing boom	FHFA	In total, 17 banks face possible penalties for allegedly misrepresenting the quality of the collateral backing these securities. According to the lawsuits, the FHFA found evidence of violations in \$190 billion worth of MBS sold to Fannie and Freddie. The allegations range from misrepresented loan-to-value ratios, employment and occupancy status of the borrower.

TBAC Presentation

February 5, 2013

<u>Charge #3</u>: For the past several years, Treasury has been pursuing a policy of extending the average maturity of its debt. Should Treasury consider even more rapidly extending the weighted average maturity of its debt? If Treasury were to do so, what strategies might best assist us in achieving the goal, while remaining consistent with our broader debt management principles?

Reminder: Previous TBAC Meetings

Previous TBAC meetings have considered similar questions.

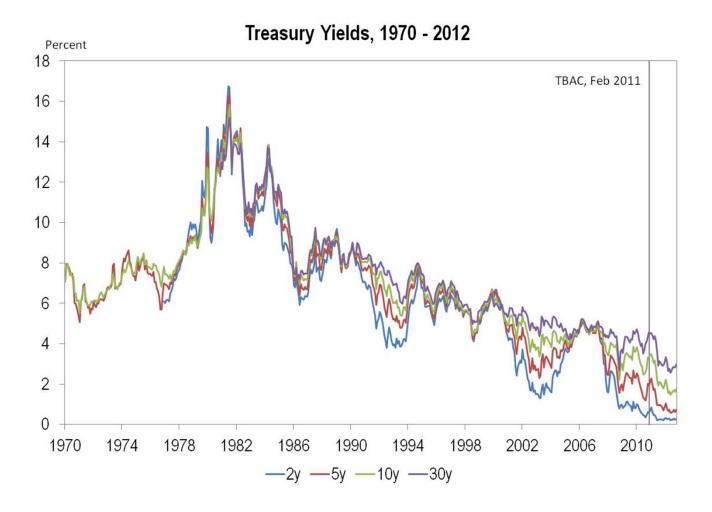
Some observations from those meetings include:

- Feb 2011: Issuing 50y coupon bonds does not lengthen duration significantly
- Aug 2011: The term premium has been positive since the 1980s, implying the lowest cost strategy would be to borrow at the short end and avoid paying the term premium
- Aug 2011: The benefits of extension do not come for free. Historical analysis suggests that shorter term funding has at many times been both cheaper and the volatility costs have not been high.
- Aug 2011: Previous periods of local low points in interest rates would not have provided dramatic benefit to an extension of average maturity
- Feb 2012: "With interest rate risk premium currently near all time lows, savings [from FRN] are likely to be marginal"

Update on Market Conditions

TBAC considered a similar question in February 2011.

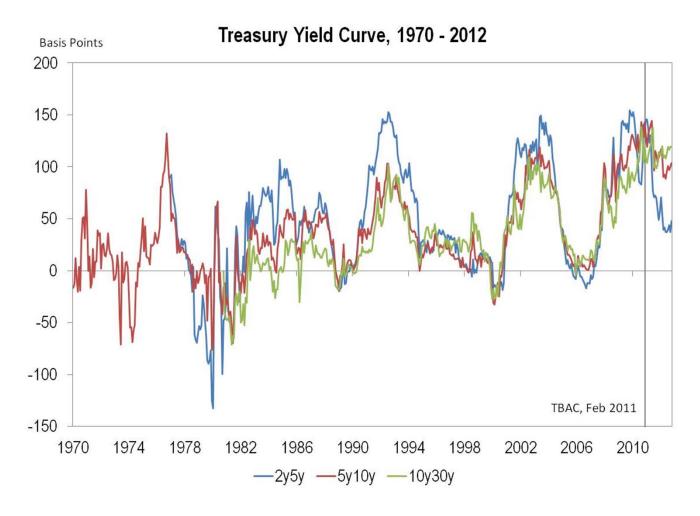
Since Feb 2011, yields have fallen across the yield curve



Source: Bloomberg

Update on Market Conditions

Curve flattened from 2y5y
Parallel shifts at 5y, 10y and 30y



Source: Bloomberg 4

Term Premium

Jeremy Stein, Federal Reserve Governor, November 30, 2012:

"Treasury term premiums are now near historic lows, on the order of minus 80 basis points, according to a model used by the Board staff."

Definition of the Term Premium from Kim-Wright 2005:

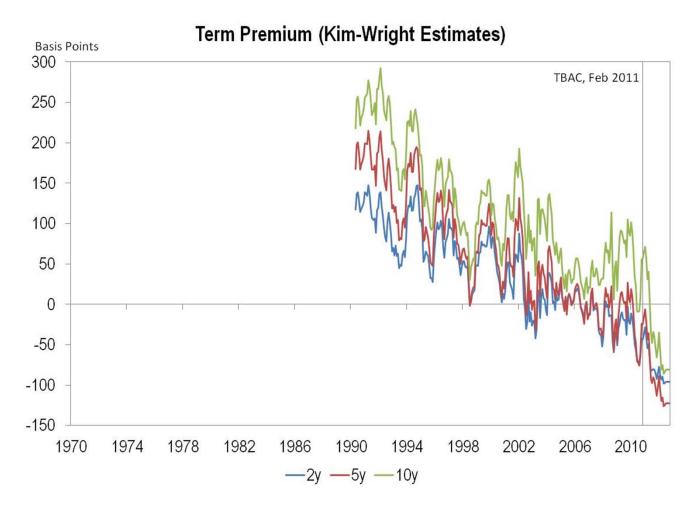
"The yield on a nominal Treasury security can be decomposed into the sum of the compounded expected future short-term interest rate over the maturity of the bond and a risk or term premium to compensate investors for the uncertain return on holding the bond (over a horizon less than its maturity)."

"This paper uses an arbitrage-free three-factor term structure model to estimate a decomposition of the term structure of nominal interest rates into expected future short rates and term premiums."

Data from the Kim-Wright model are available daily since 1990. The data include the estimated term premium on zero-coupon bonds of maturities 1, 2, ... 10 years. These data are updated frequently and are publicly available on the Federal Reserve website.

Term Premium

Kim-Wright term premiums are negative at 2y, 5y and 10y 10y term premium turned negative in August 2011

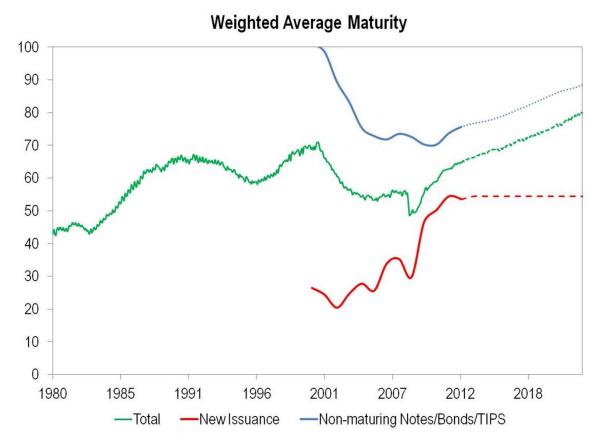


A fact about Maturity Extension

WAM extension is *not* due to extending WAM of new issuance.

WAM extends as maturing securities are reissued as longer maturity notes/bonds.*

■ E.g. a maturing note goes from WAM < 1 to WAM ~ 50. This process extends the WAM of total debt outstanding. Bills are also being reduced as a share of the portfolio



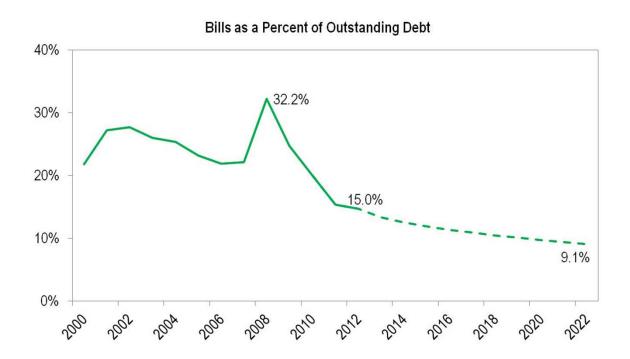
^{*} See Appendix for an example

What about bills? What's the right level?

Current projections maintain the current nominal amount of bills through 2022.

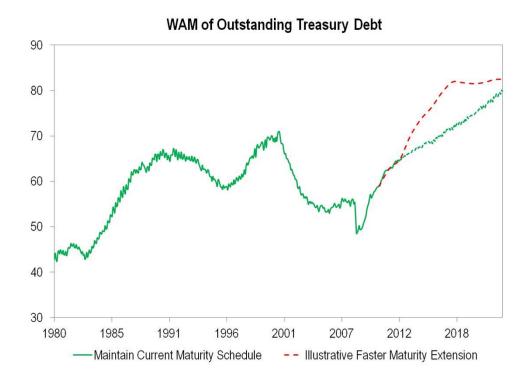
Considerations:

- Fastest way to extend WAM would be to reduce bills issuance
- Maintaining the current nominal amount of bills outstanding means bills will be declining as share of the outstanding debt and declining as a share of GDP
- Term premiums would suggest the short end is not the cheapest way to fund in current environment
- Long term demand for liquidity may keep bills rates low in the future



Maintaining current maturity structure of new issuance will extend WAM to 80 months by <u>2022</u>
The following alternatives would maintain the recent pace of WAM extension, extending WAM to 80 months by <u>2017</u>:*

- 1. Same auction schedule: Reduce 2y/3y issuance by 4pp each, increase 10y/30y issuance by 4 pp each
- 2. 50y Bond: Reduce 2y/3y issuance by 1.25pp each, add 50y bond equal to 3 percent of total coupons
- 3. 20y Bond: Reduce 2y/3y issuance by 4pp each, add 20y bond equal to 8 percent of total coupons



^{*} Assume that the WAM of new issuance is increased through 2017. After 2017 revert to current WAM of new issuance. Maintain constant nominal amount of bills outstanding throughout.

The base case involves significant amounts of new issuance at the long end

■ In the base case, the amount of 20+ year Treasury debt outstanding will double from 2012 to 2017

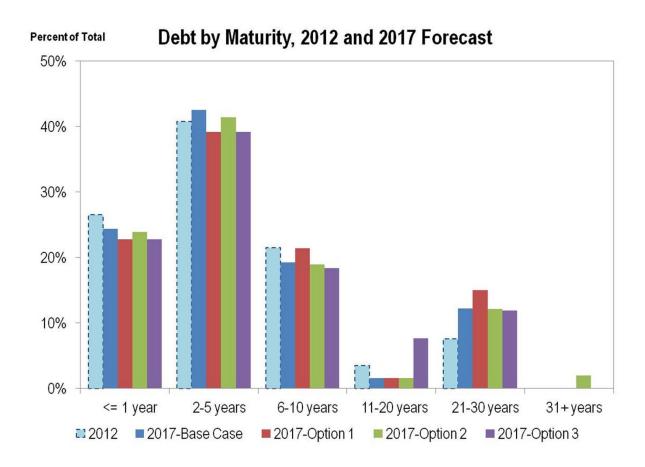
Faster maturity extension would require the investors to absorb more than this base case

Distribution of Outstanding Debt, 2012 and 2017 (\$bn)

					2017				_
					Fa	ster Maturi	ity Extensi	on	
		Base C	Case	Opti	on 1	Optio	on 2	Opti	on 3
			∆ from		Δ from		Δ from		Δ from
	2012	\$bn	2012	\$bn	2012	\$bn	2012	\$bn	2012
Bills	1,629	1,629	0	1,629	0	1,629	0	1,629	0
Notes/Bonds/TIPS	<u> </u>								
<= 1 year	1,304	2,019	715	1,784	480	1,943	639	1,784	480
2-5 years	4,509	6,359	1,850	5,855	1,346	6,196	1,687	5,855	1,346
6-10 years	2,379	2,881	501	3,204	824	2,838	459	2,745	366
11-20 years	388	234	-154	234	-154	234	-154	1,150	762
21-30 years	(837)	1,827	(990)	2,243	1,406	1,814	977	1,785	948
31+ years	0	0	0	<u>0</u>	0	<u> 295</u>	<u>295</u>	<u>0</u>	9
Total	11, 0 46	14,948	3,902	14,948	3,902	14,948	3,902	14,948	3,902

Maintaining current issuance profile leads to changes in profile of outstanding debt by 2017:

- Increase in percent of outstanding debt in 21-30 year maturities
- Increase in percent of outstanding debt in the 2-5 year maturities (due 2009/10 issuance maturing)
- Decrease in percent of outstanding debt in 11-20 year maturities
- Decrease in percent of outstanding debt <=1 year (due to smaller bill share)



Changes in auction sizes would be significant

• E.g. if the current auction schedule was maintained, would add \$7bn for each 30y auction in 2013 under Option 1

Issuance in 2013: Base Case v. Faster Maturity Extension

							Faster M	laturity Ex	tension			
		Base	<u>Case</u>		Option 1			Option 2			Option 3	
			Ave		Ave	Δin		Ave	Δ in		Ave	Δ in
		Total	Auction	Total	Auction	Auction	Total	Auction	Auction	Total	Auction	Auction
	# of	Issuance	Size	Issuance	Size	Size	Issuance	Size	Size	Issuance	Size	Size
	Auctions	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)	(\$bn)
Bills*	52 (weekly)	1,628		1,628			1,628			1,628		
Notes/Bonds												
2-yr note	12	477	40	377	31	-8	448	37	-2	377	31	-8
3-yr note	12	465	39	367	31	-8	432	36	-3	367	31	-8
5-yr note	12	471	39	471	39		471	39		471	39	
7-yr note	12	395	33	395	33		395	33		395	33	
10-yr note	12	287	24	358	30	6	287	24		287	24	
20-yr bond	12						-			195	16	16
30-yr bond	12	191	16	277	23	7	191	16		193	16	
50-yr bond	4			•			61	15	15	•		
TIPS**												
5-yr TIPS	3	52	17	52	17		52	17		52	17	
10-yr TIPS	6	96	16	119	20	4	96	16		96	16	
30-yr TIPS	3	26	9	38	13	4	26	9		26	9	
Total		4,088		4,083			4,087			4,087		

^{*}Bills issuance is equal to the total bills outstanding as of Dec 31, 2013

^{**}TIPS are assumed to be 12% of 30y issuance, 25% of 10y issuance, and 10% of 5y Issuance

Evaluating the Alternatives

Treasury's goal is "to ensure the federal government's financing needs are met at the lowest cost to taxpayers over time. To achieve this goal, Treasury issues a variety of marketable Treasury securities in sufficient amounts to ensure the liquidity of each and maintains a regular and predictable auction schedule." (GAO)

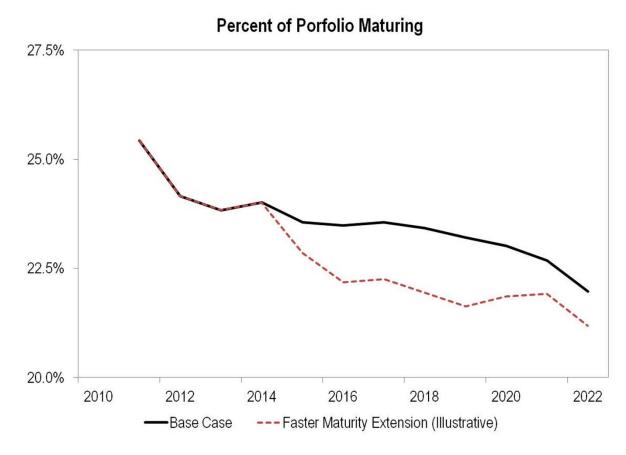
Accordingly, evaluate the costs/benefits of faster maturity extension on the following metrics:

- 1. Percent of portfolio maturing each year
- Gross Issuance of notes/bonds/TIPS
- 3. Average interest costs of outstanding notes/bonds/TIPS
- 4. Duration of new issuance

Percent of Portfolio Maturing Each Year

Decreasing 2y/3y issuance would reduce the percent of the portfolio maturing each year starting in 2015*

 Issuing a 50y bond would have a comparatively smaller impact on the percent of portfolio maturing, because there is a smaller reduction in 2y/3y issuance.

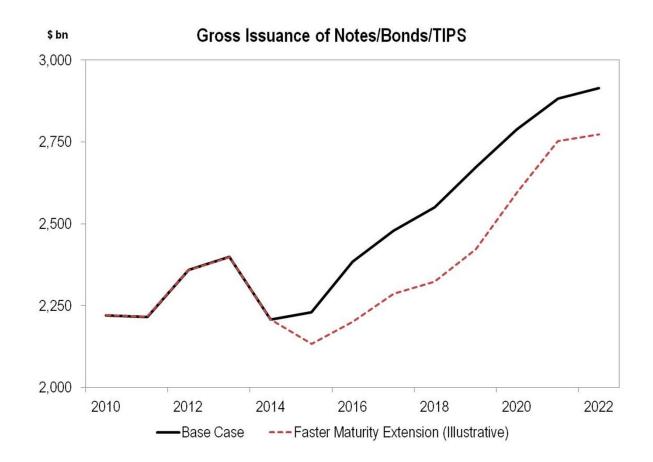


^{*} The Faster Maturity Extension depicted in the following four charts corresponds to Option 1: From 2013 to 2017, reduce 2y/3y issuance by 4pp each, increase 10y/30y issuance by 4pp each; after 2017 revert to current maturity structure of issuance

Gross Issuance of Notes/Bonds/TIPS

A smaller percentage of the portfolio maturing means that annual gross issuance will also be smaller through 2022

 Reducing gross issuance after 2017 will lower interest costs, because Treasury would be issuing less at the (forecasted) higher interest rates

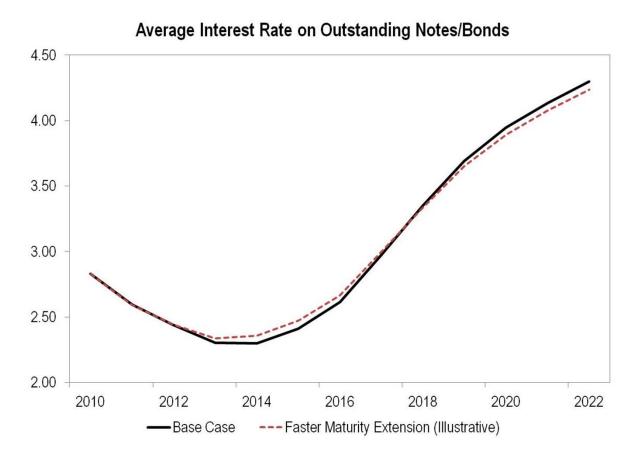


Average Interest Rate on Outstanding Debt

The impact of faster maturity extension on interest costs is a combination of:

- a. Higher interest costs from 2013 to 2016 due to longer maturity of new issuance
- b. Lower issuance after 2017 reduces the amount issued when interest rates are higher

Preliminary estimate: these two factors cancel each other over 10 yrs => no net savings

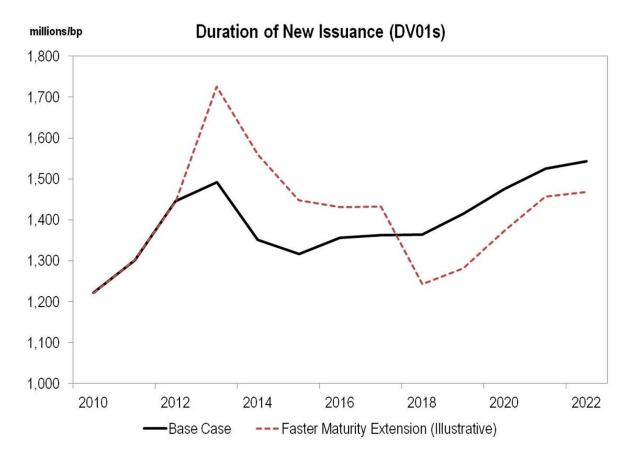


NOTE: The forecasts for the 3m and 10y Treasury rate are from the CBO (Aug 2012). By 2017 the yield curve is assumed to return to its average shape over the past 20 years. These forecasts do <u>not</u> include any impact of faster maturity extension on rates

Cost Effectiveness of Faster Maturity Extension (1 of 2)

Faster maturity extension would add duration to the market each year through 2017

- Would add close to 600 million in DV01s through 2015
- TBAC Aug 2011*: "adding 375-475 m additional duration (DV01s) to the market would increase term premiums 19-24 bps"

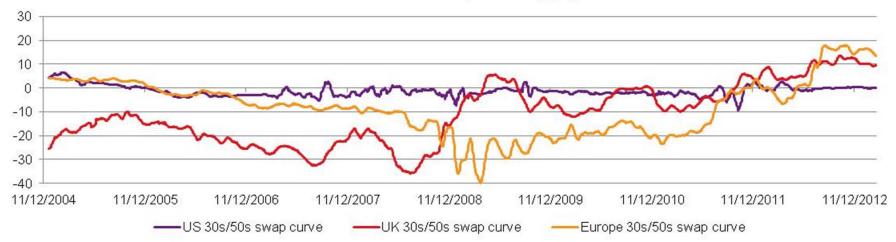


^{*} The TBAC Aug 2011 analysis relied on work by Gagnon, J., M. Raskin, J. Remache and B. Sack (2010). The original Gagnon et al (2010) analysis has been used by the Federal Reserve to estimate the impact of LSAPs on term premium and interest rates.

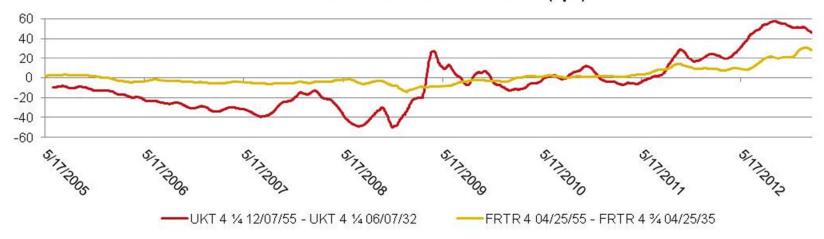
Cost Effectiveness of Faster Maturity Extension (2 of 2)

Potential Term Premiums

Global 30s/50s Swap Curves (bps)



UK and France Cash Govt Curves (bps)

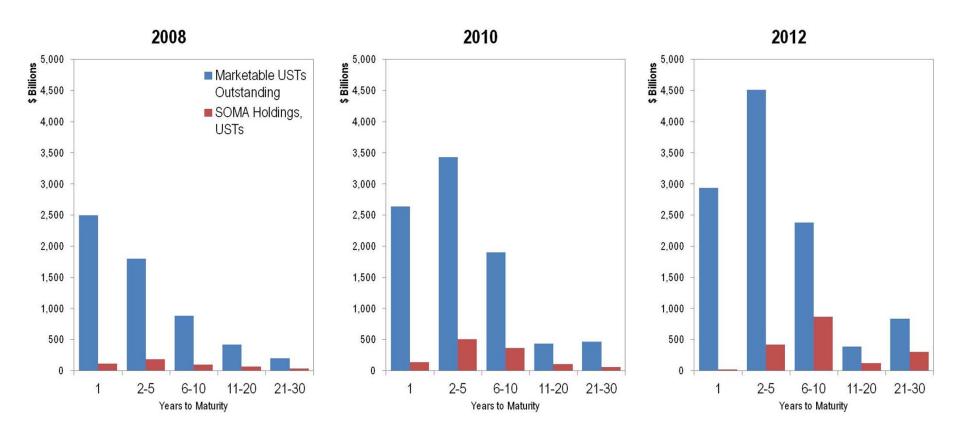


Source: Bloomberg

Federal Reserve Holdings (1 of 2)

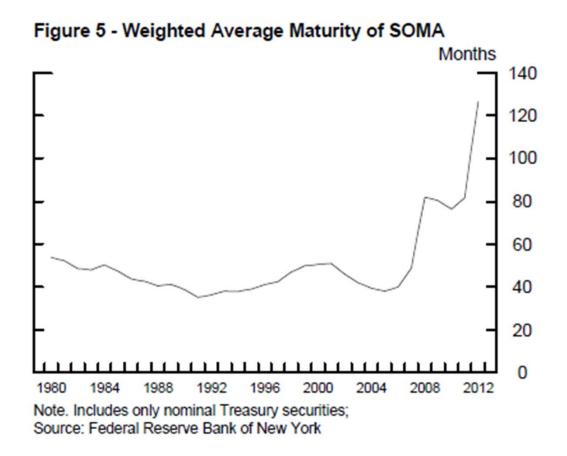
As of Dec 26, 2012 the Federal Reserve System Open Market Account (SOMA) held approximately \$300 billion in 21+ year US Treasury debt

- SOMA holds 41% of the 30y Treasury bonds issued since 2009
- In Feb 2013, Fed will buy 75% of new 30y Treasury supply



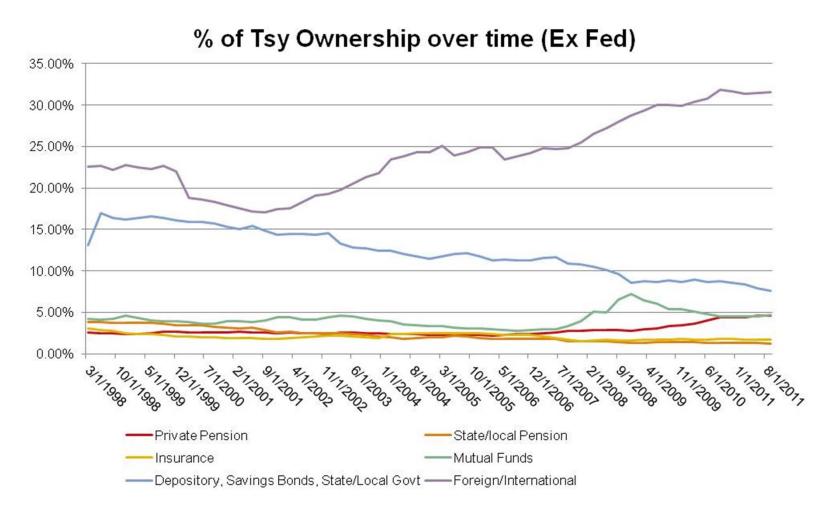
Federal Reserve Holdings (2 of 2)

Twist and QE operations have significantly lengthened the WAM of the Fed's SOMA portfolio The Fed currently owns 29% of all marketable 10yr Equivalents outstanding



Ownership of Treasury Debt

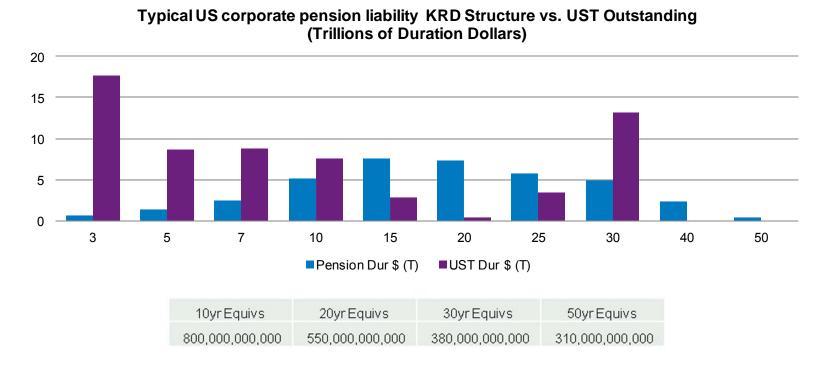
Private pension demand has been on the rise while other investors have been falling, replaced by the Fed and foreign buyers



Potential Sources of Demand

The Pension & LDI community is expected to provide the most domestic demand for long-dated USTs

- The majority of pension fund duration (KRD)* demand is in the 15 to 25 year sector, while there is currently no UST issuance in this sector and few outstanding issues to choose from
- Hedging demand also exists in the 40 and 50yr KRD buckets
- \$125B in 40 and 50yr maturities would be required to plug long-end duration needs assuming all demand is currently unmet
- \$575B in 20yr notes would be required to cover 20yr pension demand assuming all demand is currently unmet
- With a \$600B funding gap and a 12yr pension liability, at current yields the pension industry needs



* KRD = Key Rate Duration Source: Bloomberg, BlackRock

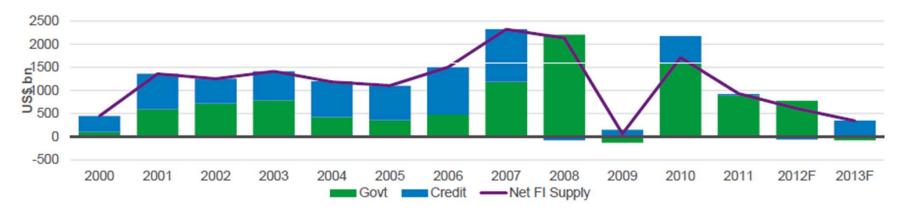
Other Sources of Duration

Corporate credit duration is already increasing

Mortgage duration could extend significantly in a higher rate regime

Additionally, WAMs are already extending with base case Treasury projections

Fixed income issuance forecast for 2012 & 2013



Duration of net supply - \$bn of 10yr equivalents

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	853	88	235	184	310	741	1,751	1,756	991	1,233

Duration of gross supply - \$bn of 10yr equivalents

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	1,736	1,034	1,020	1,105	1,712	1,777	3,080	3,076	2,760	3,382

Source: CS, JPM, Blackrock

Local, Sovereign, and Corporate Issuers have also been extending duration

Yields and Duration of US Fixed Income

			YIELD			DURATION	YEARS		
	2006	2012		Change	2006	2012		Change	
Total	5.34%	1.7%	-3.6		4.46	5.02	0.6		
Treasury	4.79%	0.9%	-3.9		4.95	5.52	0.6		
Government-related	5.13%	1.5%	-3.7		3.98	5.12	1.1		
Agency	5.11%	1.0%	-4.1	—	3.55	3.87	0.3	-	
Local authority	5.30%	3.2%	-2.1		7.78	9.72	1.9		-
Sovereign	5.36%	2.7%	-2.6		5.83	8.19	2.4		
Supranational	5.02%	0.7%	-4.3		4.29	3.48	-0.8	-	
Corporate	5.66%	2.7%	-3.0		6.05	7.25	1.2		
Industrial	5.81%	2.6%	-3.2		6.64	7.74	1.1		
Utility	5.79%	3.0%	-2.8		7.12	9.17	2.1		-
Financials	5.47%	2.6%	-2.9		5.16	5.72	0.6	-	
Securitized	5.59%	2.1%	-3.5		3.60	2.93	-0.7	—	
MBS	5.63%	2.1%	-3.5		3.46	2.92	-0.5	—	
ABS	5.32%	0.9%	-4.4	——	2.77	3.21	0.4	-	
CMBS	5.36%	1.8%	-3.5		4.83	3.17	-1.7		

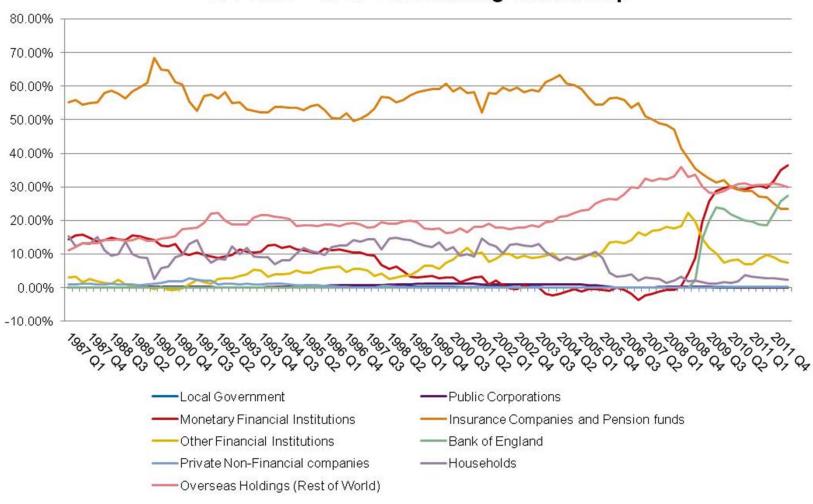
Mortgage Extension Scenarios in 10yr Equivalents (Billions)

MBS Interest Rate Scenarios

Interest Rate Change	-100	-50	0	+50	+100
OAD	1.19	1.83	2.78	3.76	4.51
OAC	-0.88	-1.64	-2.08	-1.61	-1.03
10Y EQ Chng (Billions)	-904	-540		538	928

Ownership of Gilt stock and changes over time





Brief History of UK and US LDI

UK

- Movement to LDI started with amendments to funding and accounting in the early 2000s.
- The previous very off-market rules were replaced with ones that were much more on-market and provided much greater mark-to-market transparency of risk. In this regard you could argue the UK leapfrogged the rest of the pensions world.
- Plans started adopting LDI in 2002-2005. The good markets of the post dot-com burst steadily made conversion to largely matched investment policies relatively affordable
- The 2004 Pensions Act and the creation of the role of 'Pensions Regulator' was a final spur, encouraging Trustees to seek to fully fund and in most cases de-risk their plans.
- Due to this focus on de-risking, discount rates are generally set by reference to risk-free curves (ie gilts or swaps), and, due to the nature of UK liabilities, focus on real yields*.
- The main challenge, therefore, was accessing sufficient quantities of very long-dated inflation-linked assets. The IL Gilt market was not of sufficient size, and hence pension plans looked to the nascent inflation swap market (IFS).
- Government issuance out to the 50 year point significantly helped with pricing (risk measurement) and supply of very long-dated rates exposure

US

- Funding and accounting reforms did not happen in the US until 2007
 - PPA made it a requirement to fully fund pension deficits over 7 years.. albeit with a 5 year initial phase-in period.
 - FAS87 reform (phase I) put pension surplus or deficit on plan sponsor's balance sheet raising awareness of surplus risk (income statement reform is phase II – which is expected in 2015 or so)
- 2006/7 was marked with a lot of discussion about LDI (conferences were in full swing), but there was very little action.
- By the time pension plans were ready to move, the cash/liquidity crisis was in full swing, followed of course by the 'Great Recession'. This is relevant because pension plans became very underfunded, and hence the perceived 'opportunity cost' of de-risking was high.
- Of note, both PPA and accounting center around high-quality corporate bond discount rates. Therefore the perceived 'matching asset' is a long corporate bond.

US Debt Mix vs OECD Nations

Treasury projects that 10+ yr issuance will be 17.2% of outstanding debt stock by 2022

	< 5 yrs (Chg since 2010)	5-10 yrs	>10 yrs
U.S.	67% (-4%)	22% (+2%)	11% (+2%)
Finland	59% (+6%)	28% (-10%)	13% (+4%)
Germany	57% (-2%)	26% (+1%)	17% (+1%)
Italy	55% (+10%)	23% (-3%)	22% (-7%)
Netherlands	54% (0%)	27% (0%)	19% (0%)
Belgium	54% (3%)	27% (-3%)	19% (1%)
France	54% (5%)	25% (-4%)	21% (-2%)
Spain	50% (-16%)	27% (24%)	23% (-8%)
Austria	45% (5%)	35% (-1%)	20% (-3%)
U.S. (1946)	41%	24%	35%
Average	54% (-1%)	26% (0%)	20% (1%)

Conclusions

Treasury yields have fallen since Feb 2011

Some measures suggest the term premium is currently negative

Outstanding debt between 21-30 yrs of maturity will roughly double over the coming 5 years

Benefits from faster WAM extension are small

- Small (<2pp) decrease in percent of portfolio maturing each year
- Preliminary estimate: no net savings, assuming CBO's interest rate forecast is realized
- Cost/benefit analysis changes significantly if interest rates move sharply higher

Potential to increase interest rates, counter-acting monetary policy

Back-of-the-envelope: additional duration could push up interest rates by >25 bps

Absent changes in the accounting or regulatory environment, demand in excess of already planned long end issuance is uncertain.

Treasury should further explore issuance philosophy

- Opportunistic issuance
- Distribution methodology

- WAM extension dynamics
- Assumptions for Scenario Analysis

WAM extension dynamics

As the portfolio matures, the maturing securities are reissued at longer maturities out the curve. This means that the WAM of the portfolio can be extended, even if the WAM of new issuance is below the WAM of the overall portfolio.

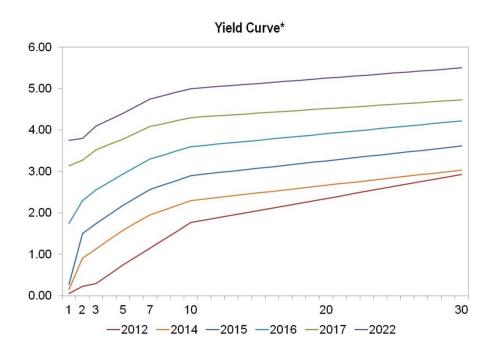
Example:

- A portfolio with 50 percent in 30y bonds and 50 percent in 1 week bills has a WAM of 15 years.
- Assume ½ of the bills are reissued as 5y notes. The WAM of new issuance is 5 years.
- The new portfolio is: 50 percent in 30y bonds, 25 percent in 5y notes, and 25 percent in 1 week bills. This portfolio has a WAM of 17.5 years.
- => WAM of the total portfolio was extended by 2.5 years, even though the WAM of new issuance was lower than the WAM of the original portfolio

Assumptions for Scenario Analysis (1 of 2)

BASE CASE: Debt Issuance and Outstanding (\$ billions)

		2013	2014	<u>2015</u>	<u>2016</u>	2017	2018	2019	2020	2021	2022
[1]	Bills (outstanding as of Dec 31st)	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629
[2]	Seasoned Coupons w Maturity < 1 year	1,447	1,562	1,862	1,859	2,019	2,108	2,208	2,318	2,299	2,481
[3]	Deficit (source: OMB MSR '12)	991	661	595	615	576	543	578	604	627	652
[4]	Dec Tax Deal (source: OMB Dec '12)	-4	-42	-57	-65	-74	-79	-87	-98	-108	-123
[5]	Other Financing Needs (source: OMB MSR '12)	168	142	142	134	120	114	105	95	95	99
[6]	Treasury Net Financing Needs ([3]+[4]+[5])	1,155	761	680	684	622	578	596	601	614	628
[7]	Gross Coupon Issuance (prior yr [2] + [6])	2,459	2,208	2,242	2,546	2,481	2,597	2,704	2,809	2,932	2,927
[8]	Total Debt Outstanding (Coupon + Bills)	12,201	12,962	13,642	14,326	14,948	15,526	16,122	16,723	17,337	17,965



*The forecasts for the 3m and 10y Treasury rate are from the CBO (Aug 2012). By 2017 the yield curve is assumed to return to its average shape over the past 20 years. These forecasts do <u>not</u> include any impact of faster maturity extension on rates

Assumptions for Scenario Analysis (2 of 2)

New Notes	/Bonds/TIP	S Issuance	e (Pct of To	otal)									
Base Case	From 2013	onwards us	e the 2011	percentage	s								
Maturity	<u>2010</u>	2011	2012	2013	<u>2014</u>	2015	2016	2017	2018	<u>2019</u>	2020	2021	2022
2	21.3%	19.4%	20.2%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%
3	19.6%	18.9%	17.7%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%
5	21.6%	21.3%	22.2%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%
7	16.3%	16.1%	16.8%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%
10	13.4%	15.5%	14.9%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%
30	7.7%	8.8%	8.2%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Option 1	From 2013	to 2017, sui	btract 4pp f	rom the 2/3	3 percentag	e in 2011, a	add 4 pp to	the 10/30 p	ercentage	in 2011, aft	er 2017 rev	ert to 2011	percentag
Maturity	2010	2011	2012	2013	<u>2014</u>	<u>2015</u>	2016	2017	2018	<u>2019</u>	2020	2021	2022
2	21.3%	19.4%	20.2%	15.4%	15.4%	15.4%	15.4%	15.4%	19.4%	19.4%	19.4%	19.4%	19.4%
3	19.6%	18.9%	17.7%	14.9%	14.9%	14.9%	14.9%	14.9%	18.9%	18.9%	18.9%	18.9%	18.9%
5	21.6%	21.3%	22.2%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%
7	16.3%	16.1%	16.8%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%	16.1%
10	13.4%	15.5%	14.9%	19.5%	19.5%	19.5%	19.5%	19.5%	15.5%	15.5%	15.5%	15.5%	15.5%
30	7.7%	8.8%	8.2%	12.8%	12.8%	12.8%	12.8%	12.8%	8.8%	8.8%	8.8%	8.8%	8.8%
Option 2	From 2013	to 2017, sui	btract 1.25µ	op from the	2/3 percen	tage in 201	1, add 2.5 j	op to the 30) percentad	e in 2011, a	after 2017 r	evert to 20	11 nercent
Maturity	2010	0044										OVOIL TO EO	, , polocin
2		<u>2011</u>	<u>2012</u>	2013	2014	2015	2016	<u>2017</u>	2018	2019	2020	<u>2021</u>	2022
_	21.3%	19.4%	2012 20.2%	<u>2013</u> 18.1%	<u>2014</u> 18.1%	<u>2015</u> 18.1%	<u>2016</u> 18.1%	<u>2017</u> 18.1%					•
3									2018	2019	<u>2020</u>	2021	2022
	21.3%	19.4%	20.2%	18.1%	18.1%	18.1%	18.1%	18.1%	2018 19.4%	<u>2019</u> 19.4%	<u>2020</u> 19.4%	<u>2021</u> 19.4%	2022 19.4%
3	21.3% 19.6%	19.4% 18.9%	20.2% 17.7%	18.1% 17.7%	18.1% 17.7%	18.1% 17.7%	18.1% 17.7%	18.1% 17.7%	2018 19.4% 18.9%	2019 19.4% 18.9%	2020 19.4% 18.9%	2021 19.4% 18.9%	2022 19.4% 18.9%
3 5	21.3% 19.6% 21.6%	19.4% 18.9% 21.3%	20.2% 17.7% 22.2%	18.1% 17.7% 21.3%	18.1% 17.7% 21.3%	18.1% 17.7% 21.3%	18.1% 17.7% 21.3%	18.1% 17.7% 21.3%	2018 19.4% 18.9% 21.3%	2019 19.4% 18.9% 21.3%	2020 19.4% 18.9% 21.3%	2021 19.4% 18.9% 21.3%	2022 19.4% 18.9% 21.3%
3 5 7	21.3% 19.6% 21.6% 16.3%	19.4% 18.9% 21.3% 16.1%	20.2% 17.7% 22.2% 16.8%	18.1% 17.7% 21.3% 16.1%	18.1% 17.7% 21.3% 16.1%	18.1% 17.7% 21.3% 16.1%	18.1% 17.7% 21.3% 16.1%	18.1% 17.7% 21.3% 16.1%	2018 19.4% 18.9% 21.3% 16.1%	2019 19.4% 18.9% 21.3% 16.1%	2020 19.4% 18.9% 21.3% 16.1%	2021 19.4% 18.9% 21.3% 16.1%	2022 19.4% 18.9% 21.3% 16.1%
3 5 7 10	21.3% 19.6% 21.6% 16.3% 13.4%	19.4% 18.9% 21.3% 16.1% 15.5%	20.2% 17.7% 22.2% 16.8% 14.9%	18.1% 17.7% 21.3% 16.1% 15.5%	18.1% 17.7% 21.3% 16.1% 15.5%	18.1% 17.7% 21.3% 16.1% 15.5%	18.1% 17.7% 21.3% 16.1% 15.5%	18.1% 17.7% 21.3% 16.1% 15.5%	2018 19.4% 18.9% 21.3% 16.1% 15.5%	2019 19.4% 18.9% 21.3% 16.1% 15.5%	2020 19.4% 18.9% 21.3% 16.1% 15.5%	2021 19.4% 18.9% 21.3% 16.1% 15.5%	2022 19.4% 18.9% 21.3% 16.1% 15.5%
3 5 7 10 30	21.3% 19.6% 21.6% 16.3% 13.4% 7.7%	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%
3 5 7 10 30 50	21.3% 19.6% 21.6% 16.3% 13.4% 7.7%	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%
3 5 7 10 30 50 Option 3	21.3% 19.6% 21.6% 16.3% 13.4% 7.7% 0.0%	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% the 20y per	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%
3 5 7 10 30 50 Option 3 Year	21.3% 19.6% 21.6% 16.3% 13.4% 7.7% 0.0% From 2013	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% to 2017, sur	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0% btract 4pp f	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% from the 2/3	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% 3 percentage 2014	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% e in 2011, a	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% add 4 pp to 2016	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% the 20y per	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2011, after 2019	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2017 rever	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% t to 2011 p	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% ercentage.
3 5 7 10 30 50 Option 3 Year	21.3% 19.6% 21.6% 16.3% 13.4% 7.7% 0.0% From 2013 2010 21.3%	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% to 2017, sur 2011 19.4%	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0% btract 4pp f 2012 20.2%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% from the 2/3 2013 15.4%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% 3 percentage 2014 15.4%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% e in 2011, a 2015 15.4%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% add 4 pp to 2016 15.4%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% the 20y per 2017 15.4%	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% reentage in 2018 19.4%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2011, after 2019 19.4%	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2017 rever 2020 19.4%	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% t to 2011 p 2021 19.4%	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% ercentage: 2022 19.4%
3 5 7 10 30 50 Option 3 Year 2 3	21.3% 19.6% 21.6% 16.3% 13.4% 7.7% 0.0% From 2013 2010 21.3% 19.6%	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% to 2017, sur 2011 19.4% 18.9%	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0% btract 4pp f 2012 20.2% 17.7%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% from the 2/3 2013 15.4% 14.9%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% 3 percentage 2014 15.4% 14.9%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% e in 2011, a 2015 15.4% 14.9%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% add 4 pp to 2016 15.4% 14.9%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% the 20y per 2017 15.4% 14.9%	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% recentage in 2018 19.4% 18.9%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2011, after 2019 19.4% 18.9%	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2017 rever 2020 19.4% 18.9%	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% to 2011 p 2021 19.4% 18.9%	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% ercentage 2022 19.4% 18.9%
3 5 7 10 30 50 Option 3 Year 2 3 5	21.3% 19.6% 21.6% 16.3% 13.4% 7.7% 0.0% From 2013 2010 21.3% 19.6% 21.6%	19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% to 2017, sur 2011 19.4% 18.9% 21.3%	20.2% 17.7% 22.2% 16.8% 14.9% 8.2% 0.0% btract 4pp t 2012 20.2% 17.7% 22.2%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% from the 2/3 2013 15.4% 14.9% 21.3%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% 8 percentag 2014 15.4% 14.9% 21.3%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% e in 2011, a 2015 15.4% 14.9% 21.3%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% add 4 pp to 2016 15.4% 14.9% 21.3%	18.1% 17.7% 21.3% 16.1% 15.5% 8.8% 2.5% the 20y per 2017 15.4% 14.9% 21.3%	2018 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% recentage in 2018 19.4% 18.9% 21.3%	2019 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2011, after 2019 19.4% 18.9% 21.3%	2020 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% 2017 rever 2020 19.4% 18.9% 21.3%	2021 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% t to 2011 p 2021 19.4% 18.9% 21.3%	2022 19.4% 18.9% 21.3% 16.1% 15.5% 8.8% 0.0% ercentages 2022 19.4% 18.9% 21.3%

8.8%