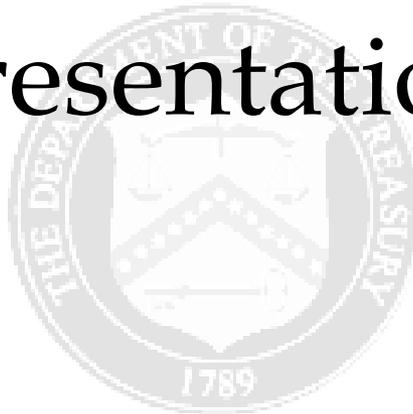


Treasury Presentation to TBAC



Office of Debt Management

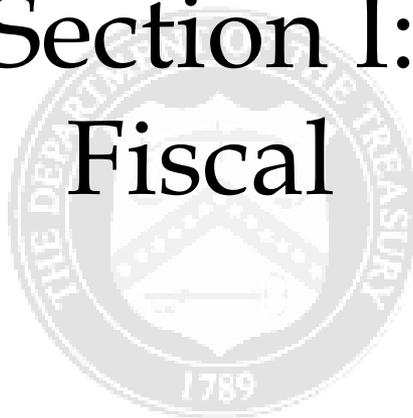


Fiscal Year 2014 Q1 Report

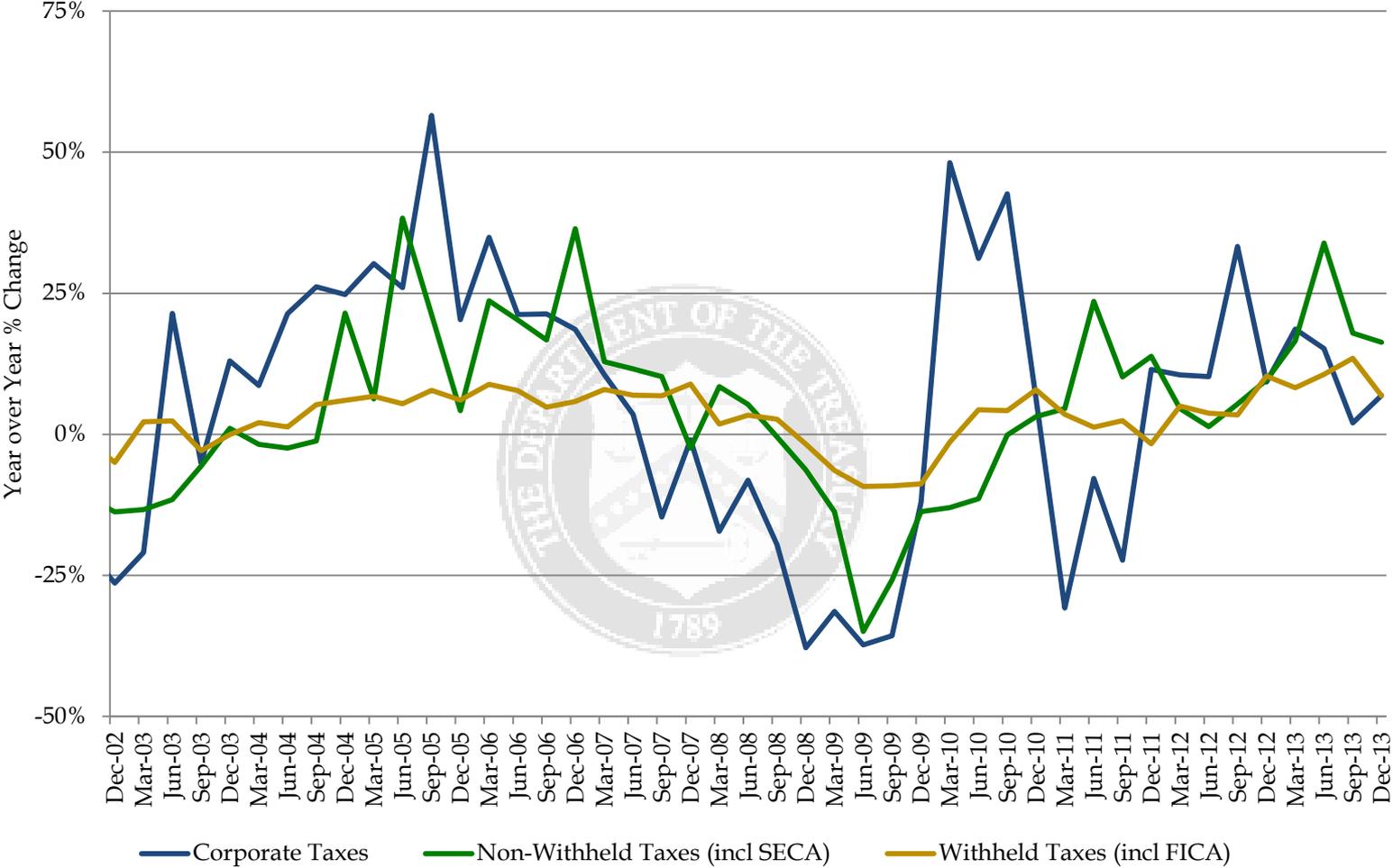
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Section I: Fiscal

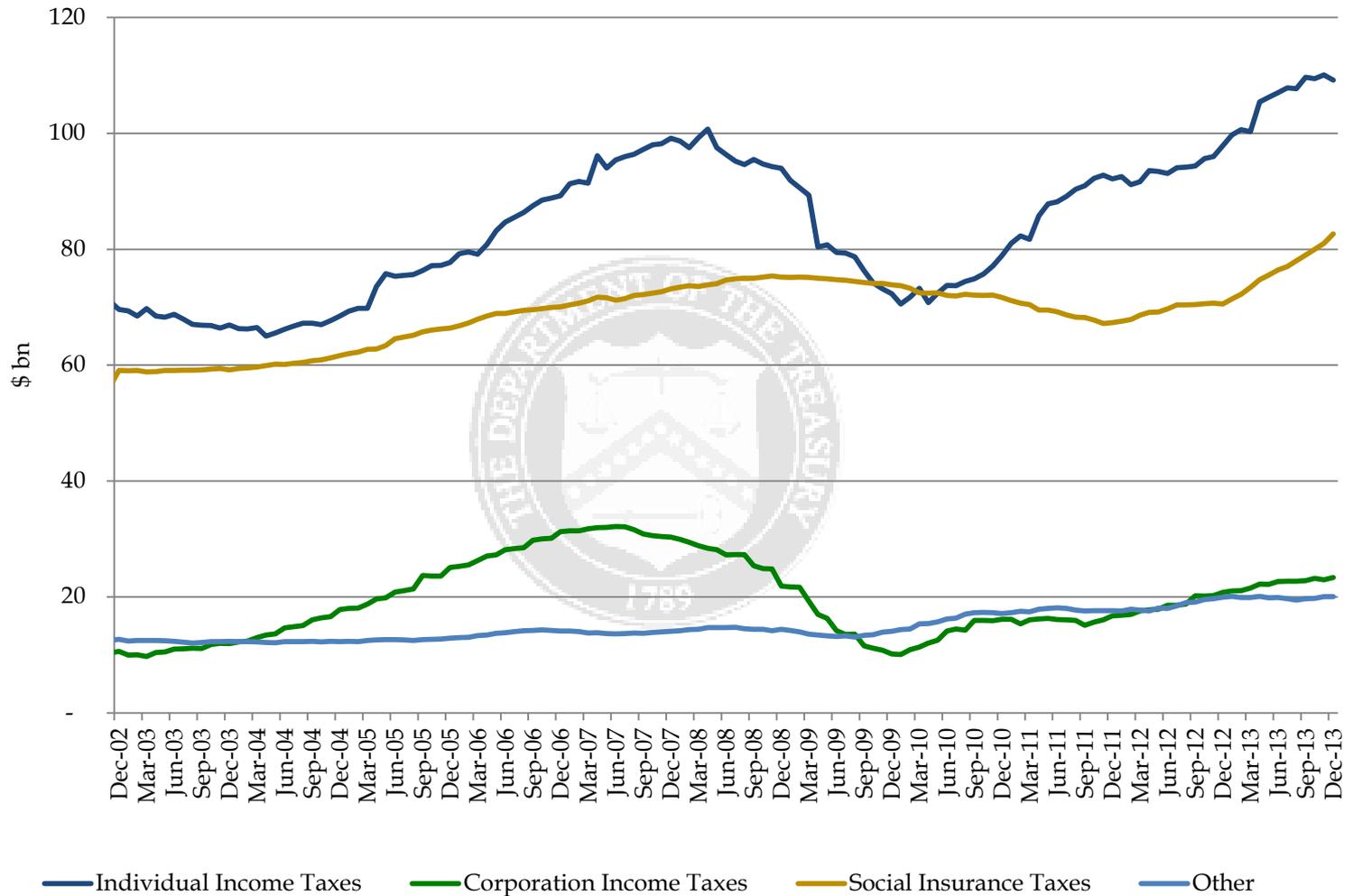


Quarterly Tax Receipts



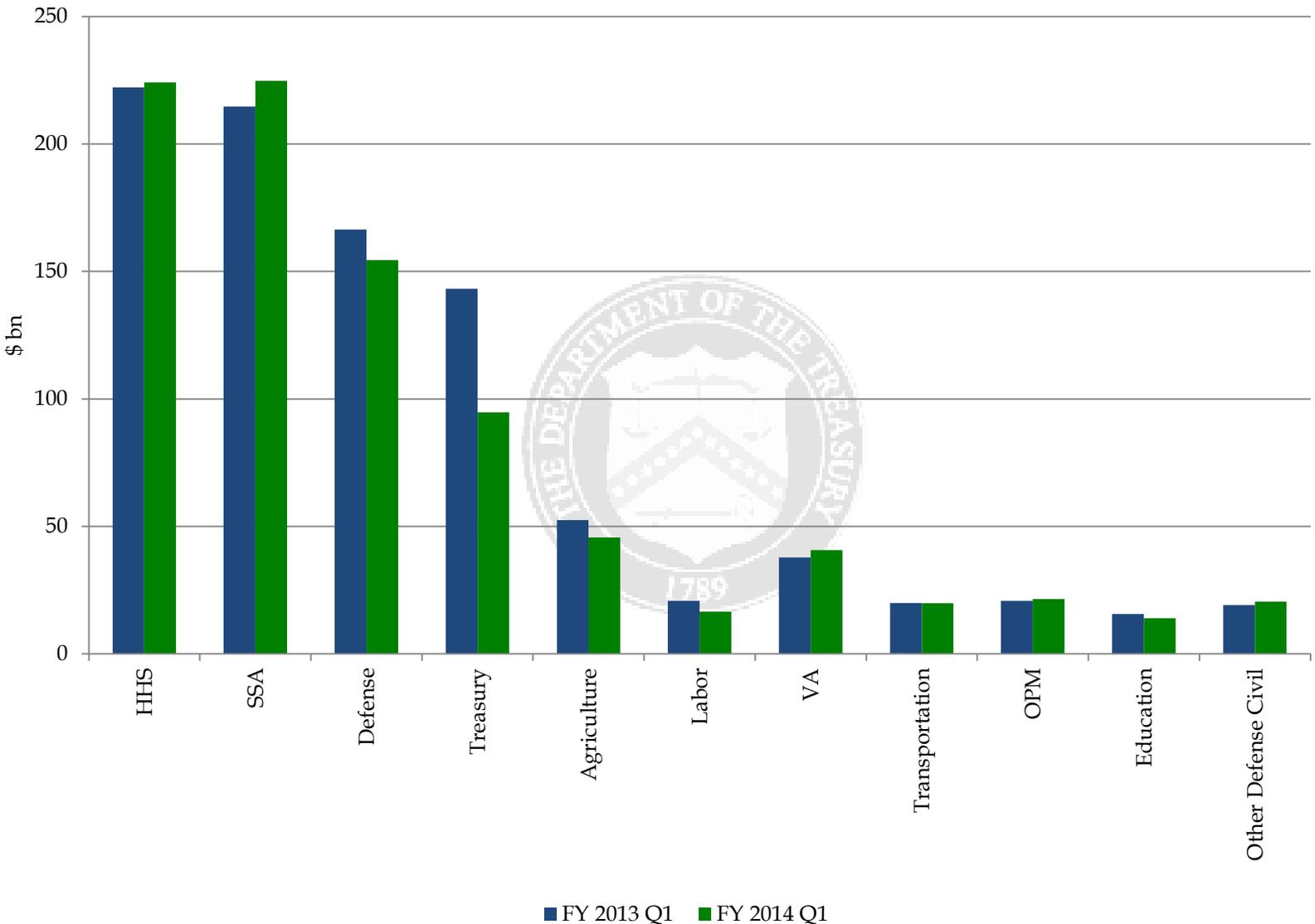
Source: United States Department of the Treasury

Monthly Receipt Levels (12-Month Moving Average)



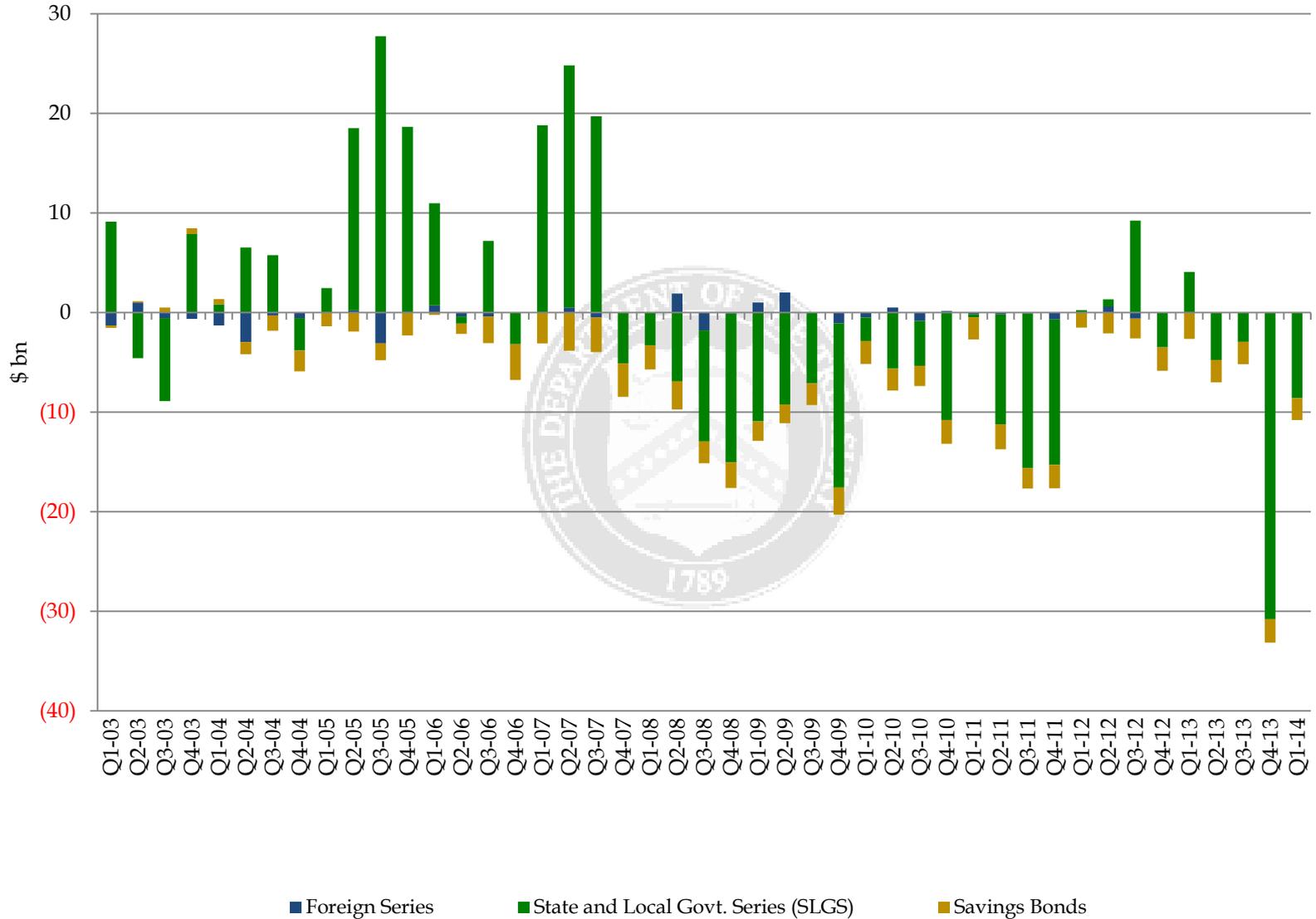
Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts.
Source: United States Department of the Treasury

Eleven Largest Outlays

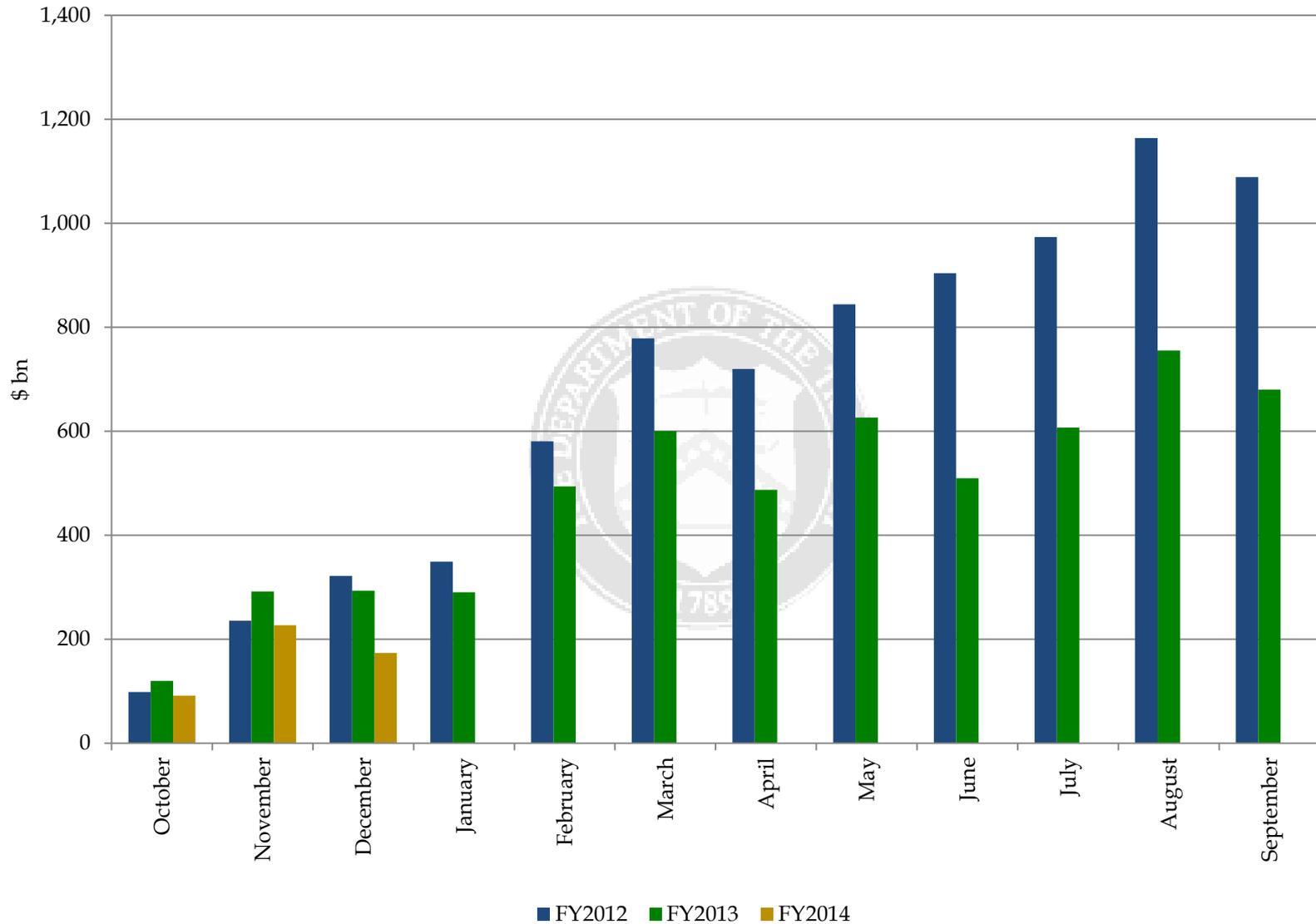


Source: United States Department of the Treasury

Treasury Net Nonmarketable Borrowing



Cumulative Budget Deficits by Fiscal Year



FY 2014-2016 Deficits and Net Marketable Borrowing Estimates

In \$ Billions

	Primary Dealers ¹	CBO ²	CBO's Estimate of the President's Budget ³	OMB ⁴
FY 2014 Deficit Estimate	597	560	675	750
FY 2015 Deficit Estimate	507	378	437	626
FY 2016 Deficit Estimate	502	432	413	578
FY 2014 Deficit Range	464-720			
FY 2015 Deficit Range	300-685			
FY 2016 Deficit Range	350-710			
FY 2014 Net Marketable Borrowing Estimate	702	649	754	874
FY 2015 Net Marketable Borrowing Estimate	609	471	530	787
FY 2016 Net Marketable Borrowing Estimate	608	510	497	736
FY 2014 Net Marketable Borrowing Range	595-844			
FY 2015 Net Marketable Borrowing Range	400-844			
FY 2016 Net Marketable Borrowing Range	450-864			
Estimates as of:	Jan-14	May-13	May-13	Jul-13

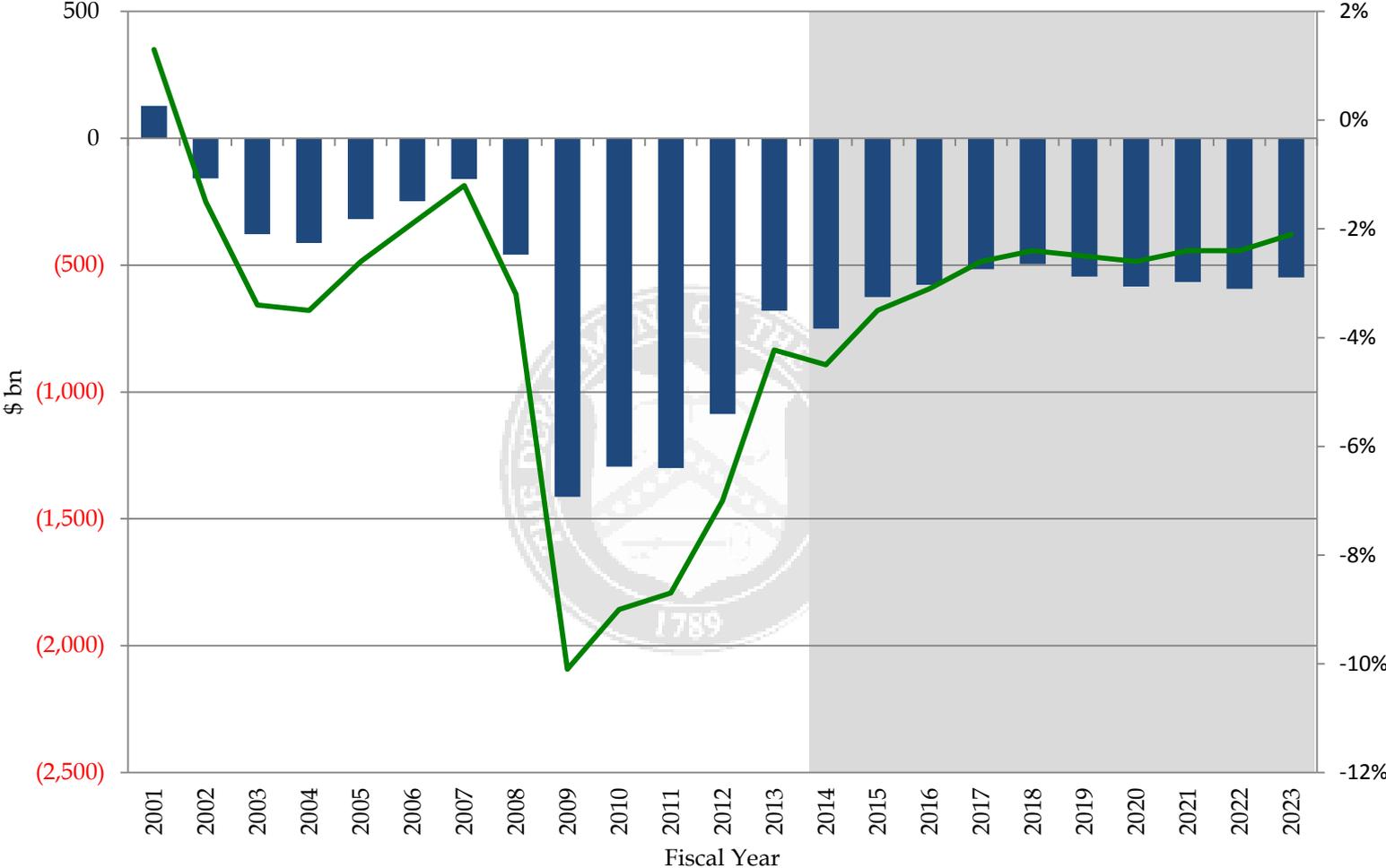
¹Based on primary dealer feedback on Jan 27, 2014. Estimates above are averages.

²Table 1 and 5 of the "Updated Budget Projections: Fiscal Years 2013 to 2023"

³Table 1 and 2 of the "An Analysis of the President's 2014 Budget"

⁴Table S-5 and S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government"

Budget Surplus/Deficit



OMB's Projection
 Surplus/Deficit in \$ bn (L)
 Surplus/Deficit as a % of GDP (R)

Projections are from Table S-5 and S-6 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government."

Section II: Financing



Sources of Financing in Fiscal Year 2014 Q1

October - December 2013	
Net Bill Issuance	62
Net Coupon Issuance	202
Subtotal: Net Marketable Borrowing	264
Ending Cash Balance	162
Beginning Cash Balance	88
Subtotal: Change in Cash Balance	74
Net Implied Funding for FY 2014 Q1*	190

Issuance	October - December 2013 Bill Issuance			Fiscal Year to Date		
	Gross	Maturing	Net	Gross	Maturing	Net
4-Week	480	500	(20)	480	500	(20)
13-Week	422	390	32	422	390	32
26-Week	367	340	27	367	340	27
52-Week	72	75	(3)	72	75	(3)
CMBs	81	55	26	81	55	26
Bill Subtotal	1,422	1,360	62	1,422	1,360	62

Issue	October - December 2013 Coupon Issuance			Fiscal Year to Date		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year	96	109	(13)	96	109	(13)
3-Year	90	98	(8)	90	98	(8)
5-Year	105	83	22	105	83	22
7-Year	87	0	87	87	0	87
10-Year	66	31	35	66	31	35
30-Year	42	0	42	42	0	42
5-Year TIPS	16	0	16	16	0	16
10-Year TIPS	13	0	13	13	0	13
30-Year TIPS	7	0	7	7	0	7
Coupon Subtotal	522	320	202	522	320	202

Total	1,944	1,680	264	1,944	1,680	264
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*Assumes an end-of-December 2013 cash balance of \$162 billion versus a beginning-of-October 2013 cash balance of \$88 billion. By keeping the cash balance constant, Treasury arrives at the net implied funding number.

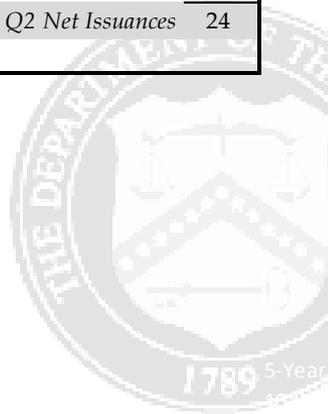
Sources of Financing in Fiscal Year 2014 Q2

January - March 2014	
Assuming Constant Coupon and Average Bill Issuance Sizes as of 12/31/2013*:	
Net Bill Issuance	58
Net Coupon Issuance	202
Subtotal: Net Marketable Borrowing	260
Treasury Announced Estimate: Net Marketable Borrowing**	284
<i>Implied: Increase In FY 2014 Q2 Net Issuances</i>	24

Issuance	January - March 2014 Bill Issuance			Fiscal Year to Date		
	Gross	Maturing	Net	Gross	Maturing	Net
4-Week	520	495	25	1,000	995	5
13-Week	416	422	(6)	838	812	26
26-Week	364	325	39	731	665	66
52-Week	75	75	0	147	150	(3)
CMBs	0	0	0	81	55	26
Bill Subtotal	1,375	1,317	58	2,797	2,677	120

Issue	January - March 2014 Coupon Issuance			Fiscal Year to Date		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year	96	107	(11)	192	216	(24)
2-Year FRN	39	0	39	39	0	39
3-Year	90	97	(7)	180	195	(15)
5-Year	105	101	4	210	184	26
7-Year	87	0	87	174	0	174
10-Year	66	28	38	132	59	73
30-Year	42	0	42	84	0	84
5-Year TIPS	0	0	0	16	0	16
10-Year TIPS	28	27	1	41	27	14
30-Year TIPS	9	0	9	16	0	16
Coupon Subtotal	562	360	202	1,084	680	404

Total	1,937	1,677	260	3,881	3,357	524
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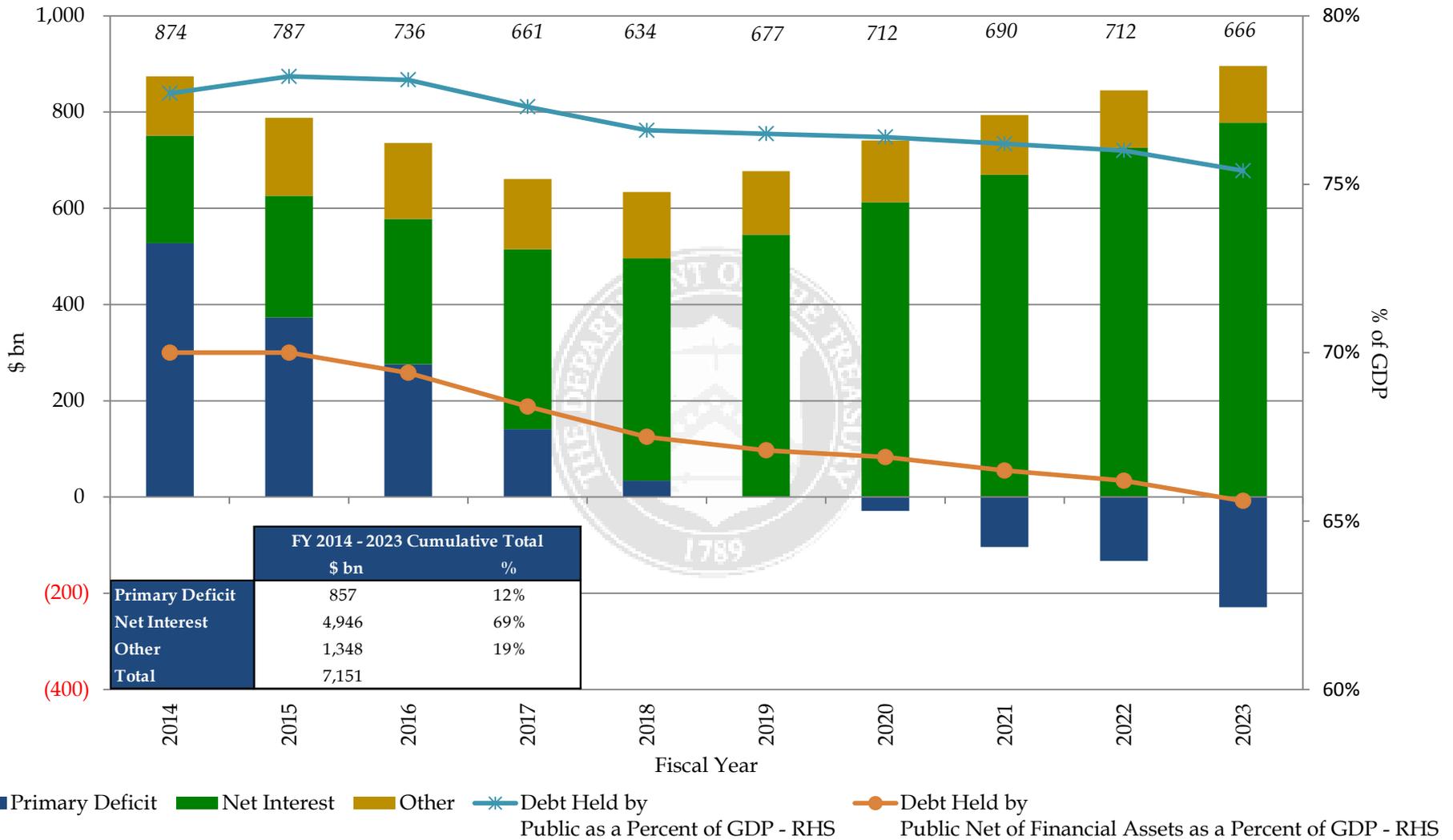
*Keeping issuance sizes and patterns constant for Nominal Coupons and TIPS, as of 12/31/2013, while using average CY 2013 issuance sizes for Bills

**Assumes an end-of-March 2014 cash balance of \$130 billion versus a beginning-of-January 2014 cash balance of \$162 billion.

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>

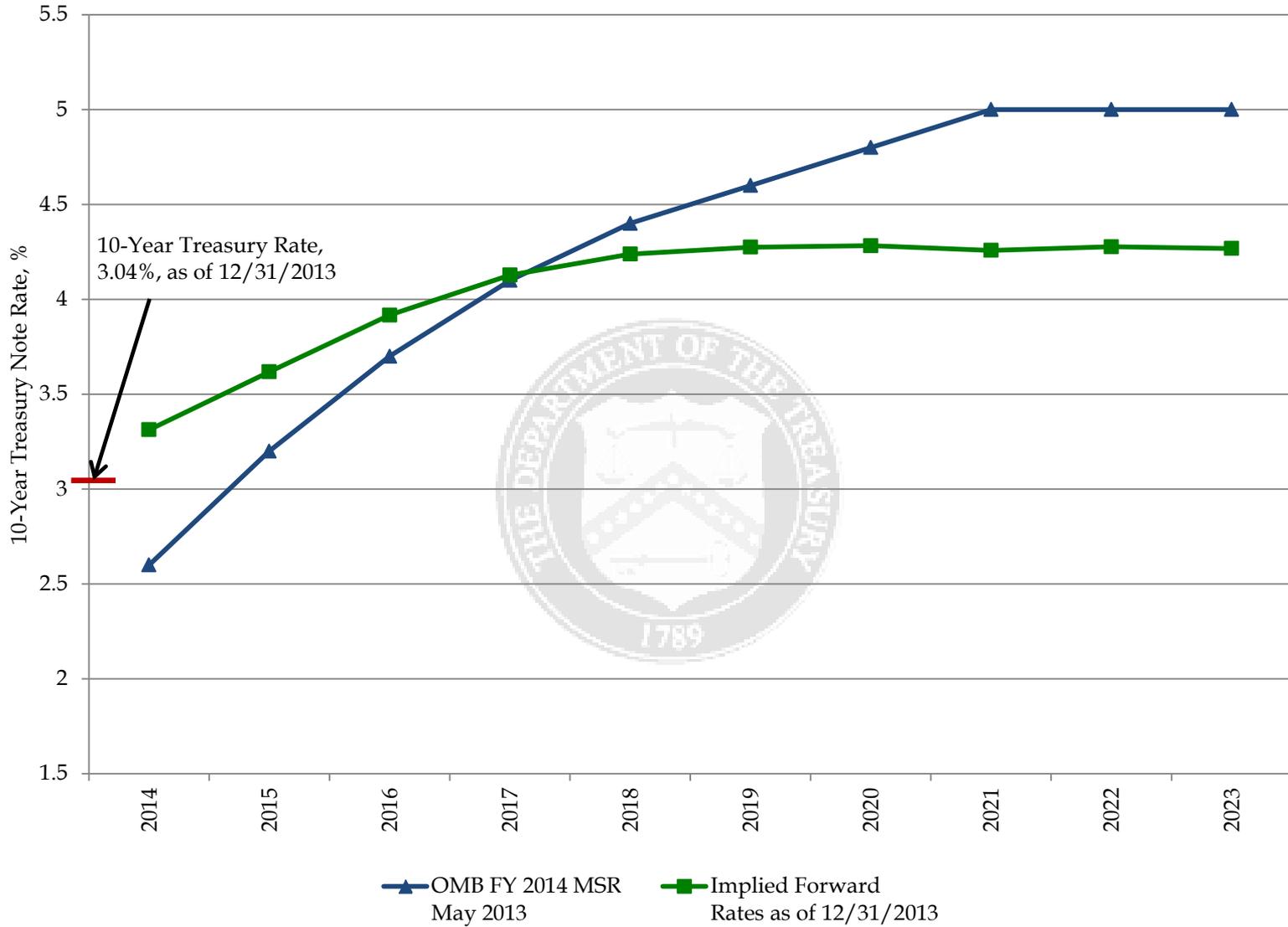
*** FRN issuance amounts are consistent with Treasury guidance of \$10-\$15 bn and are for illustrative purposes only

OMB's Projections of Net Borrowing from the Public



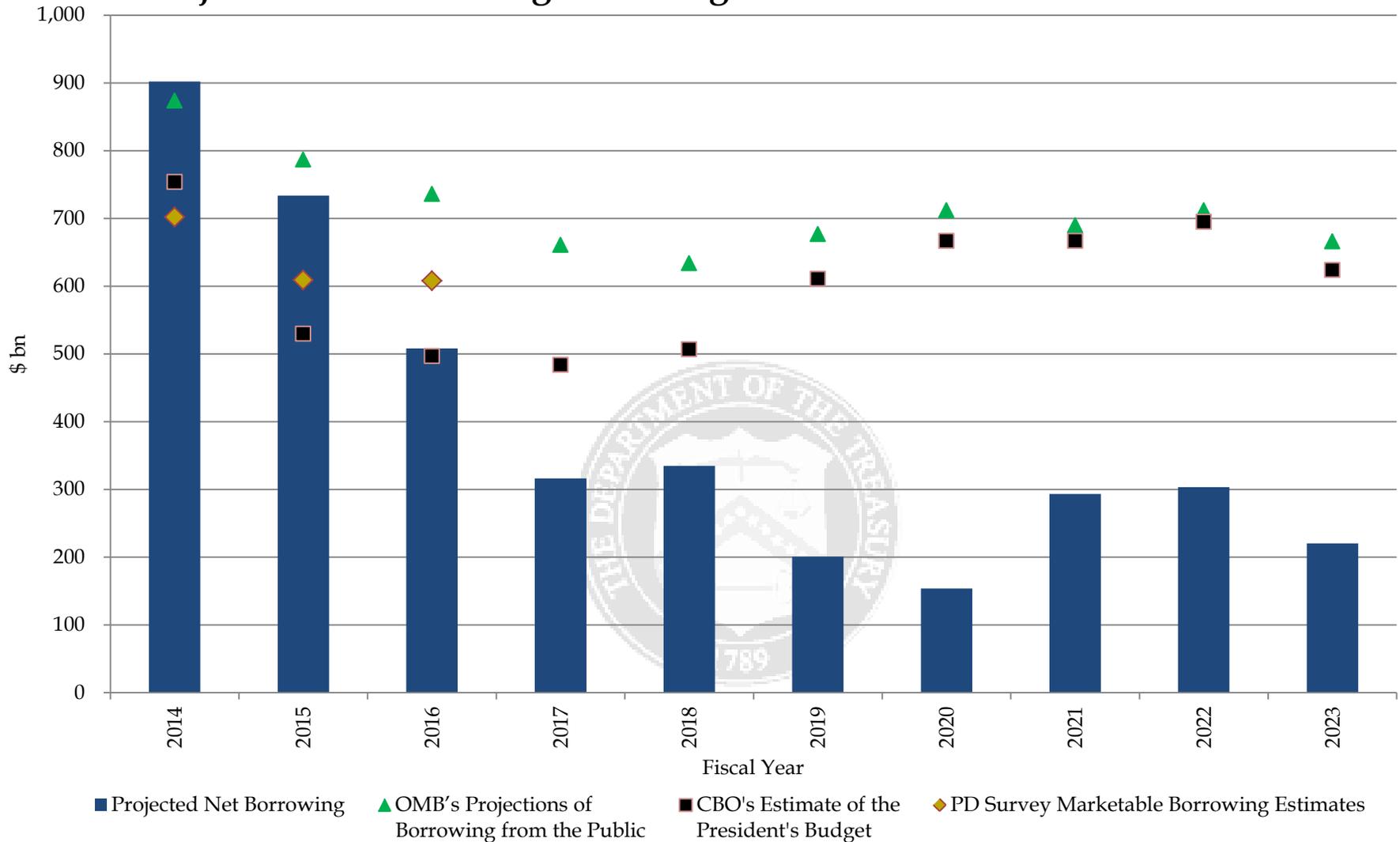
OMB's projections of net borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." Data labels at the top represent the change in debt held by the public in \$ billions. "Other" represents borrowing from the public to provide direct and guaranteed loans, in addition to TARP activity.

Interest Rate Assumptions: 10-Year Treasury Notes



OMB's economic assumption of the 10-year Treasury note rates were developed in late May 2013 and are from Table 2 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." The implied 10-Year Treasury note forward rates are the averages for each fiscal year.

Projected Net Borrowing Assuming Future Issuance Remains Constant

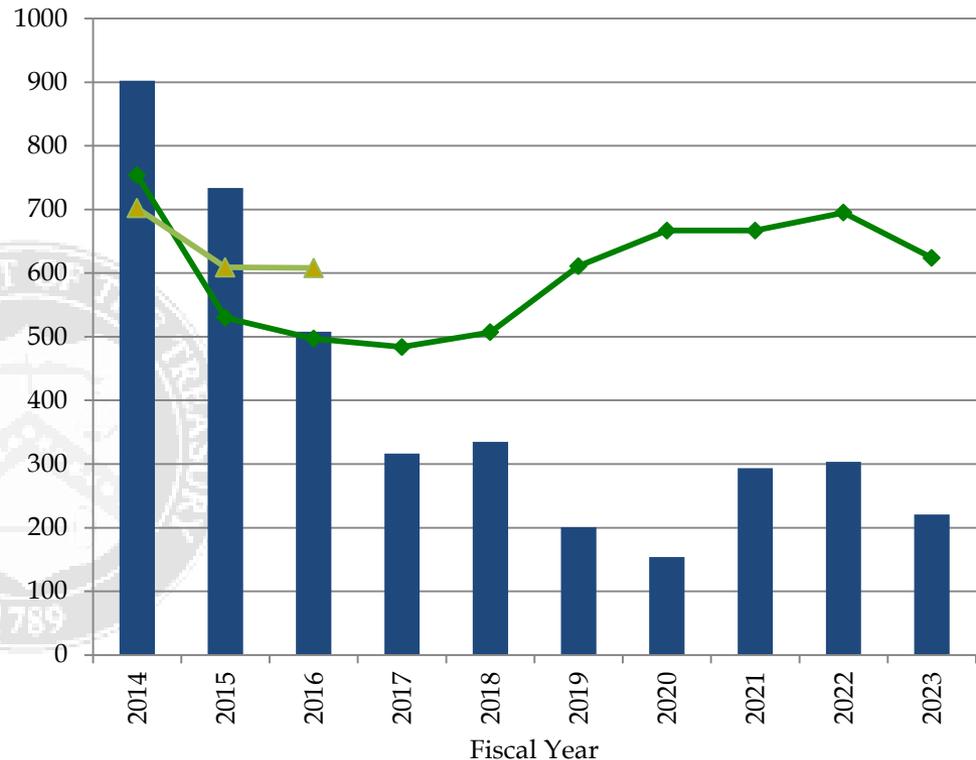
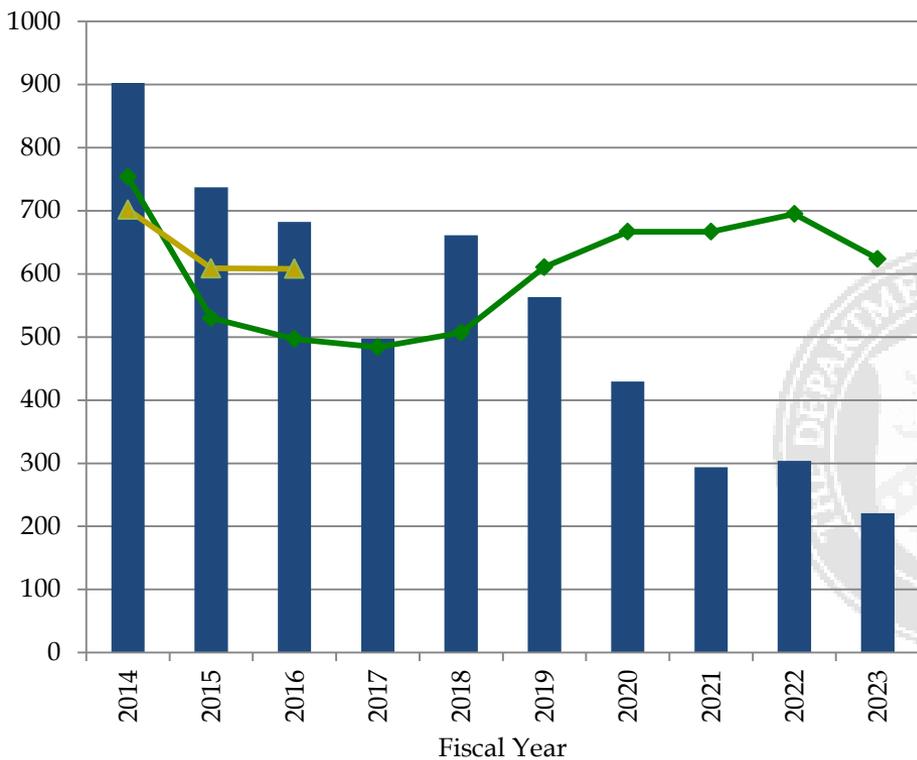


Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. Assumes issuance sizes and patterns constant for Nominal Coupons and TIPS, as of 12/31/2013, while using average CY 2013 issuance sizes for Bills. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. No attempt was made to match future financing needs. Treasury primary dealer survey estimates can be found on page 9. OMB's projections of borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." CBO's estimate of the borrowing from the public are from Table 2 of the "An Analysis of the President's 2014 Budget." See table at the end of this section for details.

Impact of SOMA Actions on Projected Net Borrowing Assuming Future Issuance Remains Constant

With Fed Reinvestments (\$bn)

Without Fed Reinvestments (\$bn)



■ Projected Net Borrowing
 ◆ CBO: Change in Debt Held by the Public
 ▲ PD Survey Marketable Borrowing Estimates

Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve’s December 2013 primary dealer survey and Chairman Bernanke’s June 2013 press conference. Assumes issuance sizes and patterns constant for Nominal Coupons and TIPS, as of 12/31/2013, while using average CY 2013 issuance sizes for Bills. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. No attempt was made to match future financing needs. Treasury primary dealer survey estimates can be found on page 9. CBO’s estimate of the borrowing from the public are from Table 2 of the “An Analysis of the President’s 2014 Budget.” See table on next page for details

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

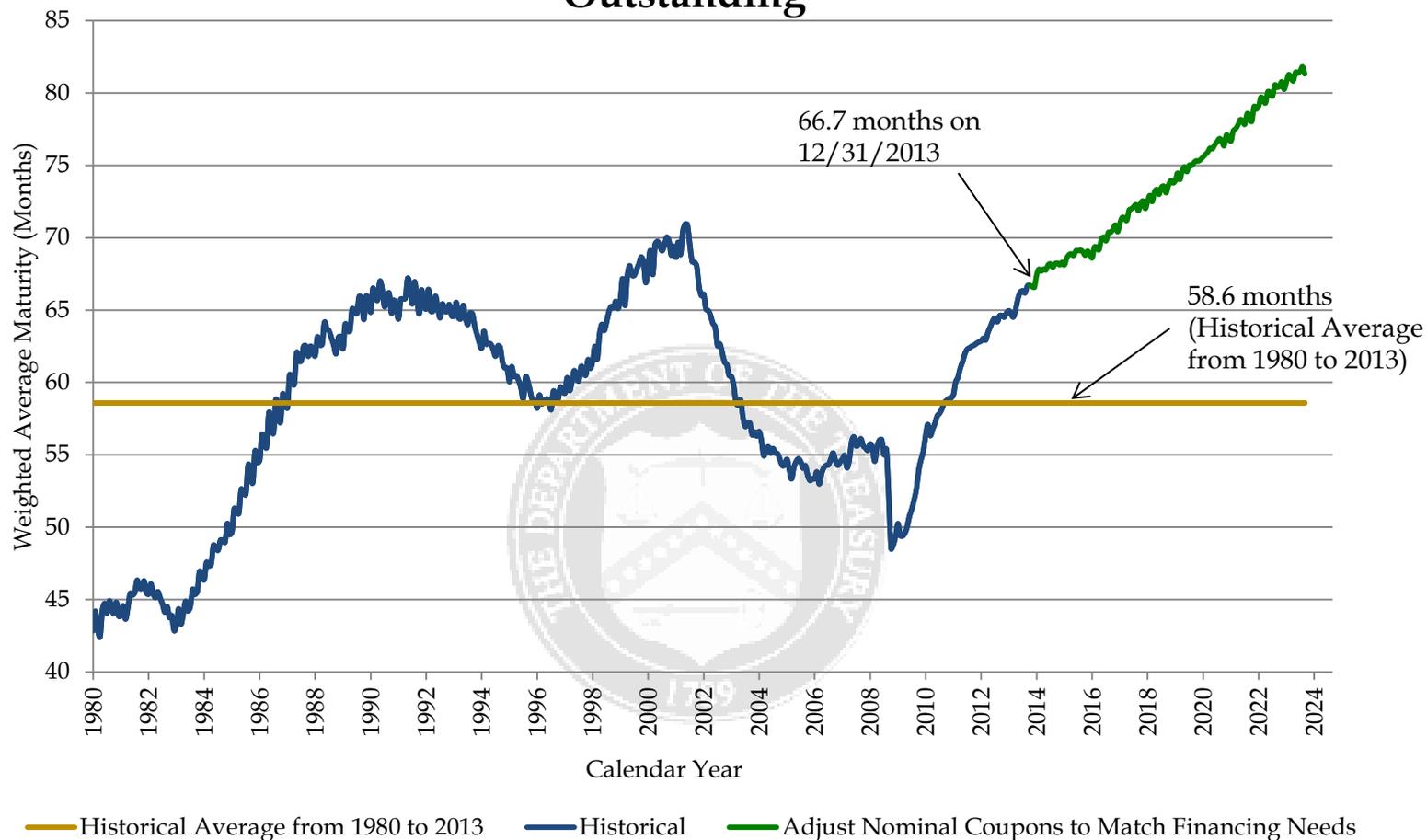
End of Fiscal Year	Bills	2/3/5	7/10/30	TIPS	FRN	Historical Net Marketable Borrowing/Projected Net Borrowing Capacity	OMB's Projections of Borrowing from the Public	CBO's Estimate of the President's Budget
2009	503	732	514	38	0	1,786		
2010	(204)	869	783	35	0	1,483		
2011	(311)	576	751	88	0	1,104		
2012	139	148	738	90	0	1,115		
2013	(86)	86	720	111	0	830		
2014	96	(68)	669	88	117	902	874	754
2015	3	(151)	639	87	156	734	787	530
2016	0	(41)	442	67	39	508	736	497
2017	0	(7)	256	68	0	316	661	484
2018	0	35	238	62	0	335	634	507
2019	0	35	104	62	0	201	677	611
2020	0	0	119	35	0	154	712	667
2021	0	68	217	8	1	294	690	667
2022	0	85	225	(6)	0	304	712	695
2023	0	44	184	(7)	(0)	221	666	624

Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. Assumes issuance sizes and patterns constant for Nominal Coupons and TIPS, as of 12/31/2013, while using average CY 2013 issuance sizes for Bills. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was 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 are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." CBO's estimate of the borrowing from the public are from Table 2 of the "An Analysis of the President's 2014 Budget."

Section III: Portfolio Metrics

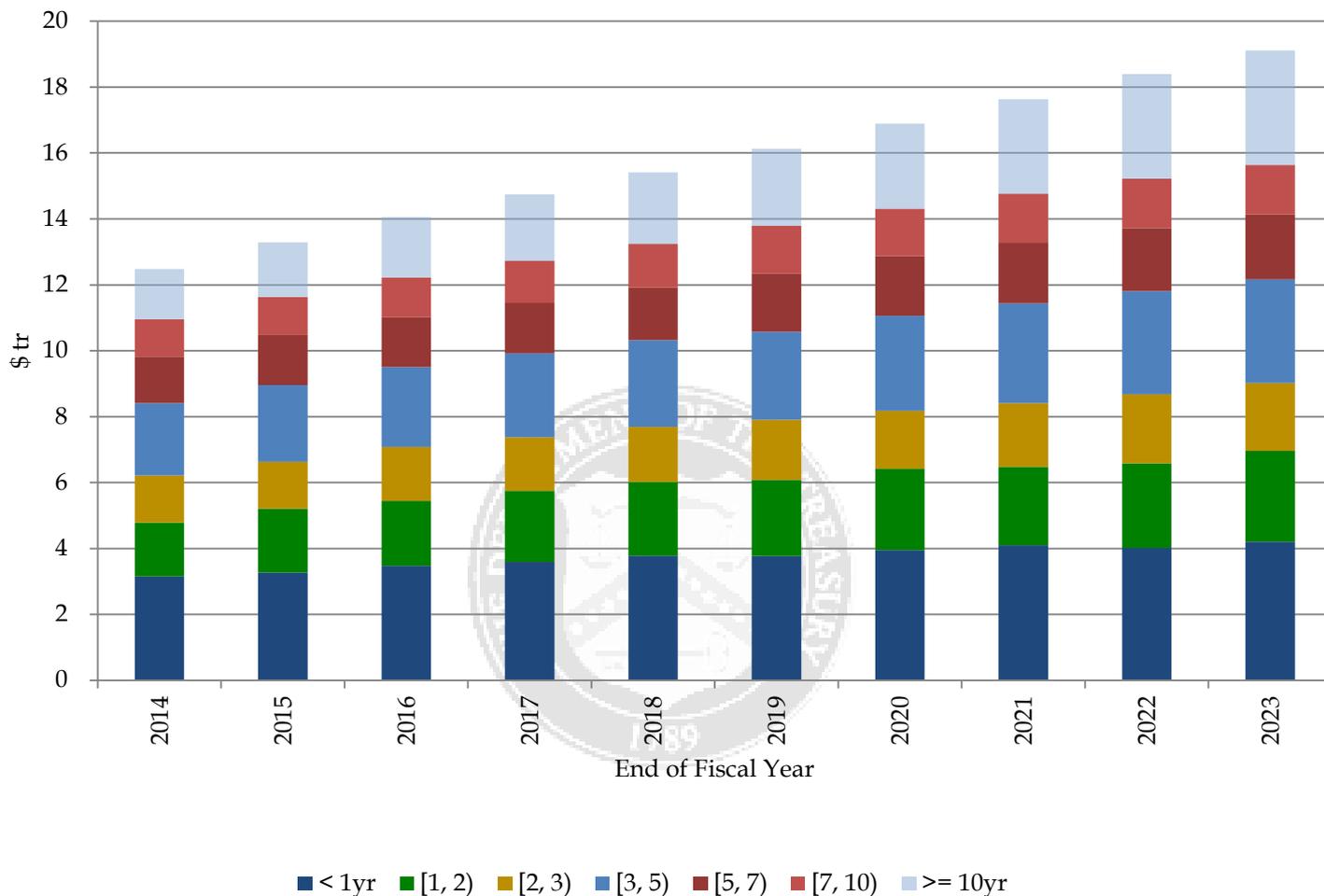


Weighted Average Maturity of Marketable Debt Outstanding



Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. OMB's projections of borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." 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.

Projected Maturity Profile, \$ Trillion



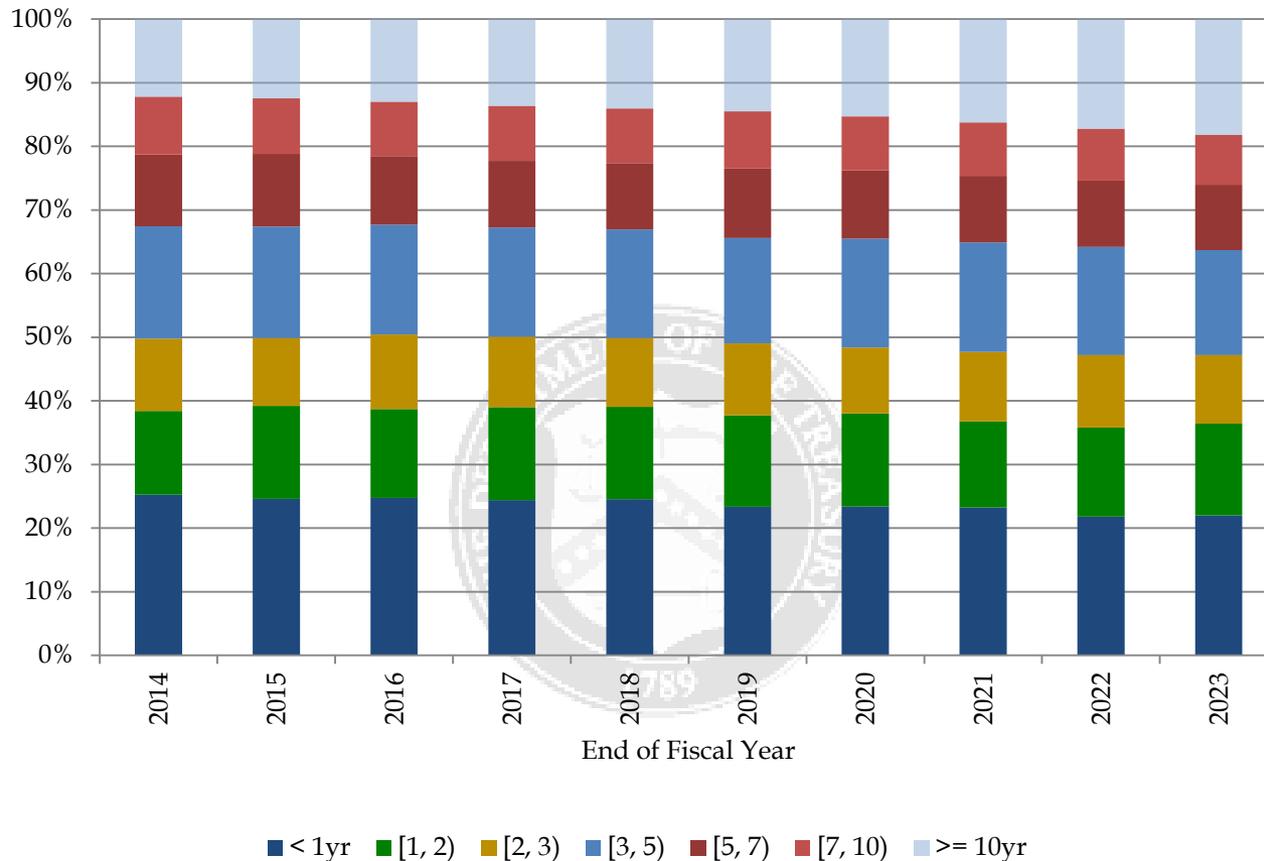
Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. OMB's projections of borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." This scenario does not represent any particular course of action that Treasury is expected to follow. See table on following page for details

Recent and Projected 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	2,939	1,523	1,176	2,031	1,425	1,165	1,331	11,590	7,669
2014	3,150	1,642	1,422	2,200	1,406	1,137	1,524	12,481	8,414
2015	3,273	1,941	1,418	2,323	1,519	1,156	1,659	13,290	8,955
2016	3,475	1,967	1,642	2,424	1,518	1,193	1,832	14,051	9,508
2017	3,598	2,154	1,629	2,536	1,543	1,270	2,015	14,744	9,917
2018	3,785	2,239	1,666	2,631	1,602	1,325	2,167	15,414	10,321
2019	3,770	2,315	1,824	2,668	1,769	1,447	2,338	16,132	10,578
2020	3,954	2,466	1,754	2,884	1,816	1,428	2,588	16,890	11,059
2021	4,100	2,379	1,931	3,029	1,845	1,485	2,862	17,630	11,439
2022	4,013	2,573	2,097	3,126	1,916	1,499	3,170	18,394	11,808
2023	4,207	2,758	2,057	3,150	1,969	1,498	3,476	19,113	12,171

Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. OMB's projections of borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." This scenario does not represent any particular course of action that Treasury is expected to follow. Portfolio Composition by original issuance type and term can be found in the appendix (Page 39).

Projected Maturity Profile, Percent



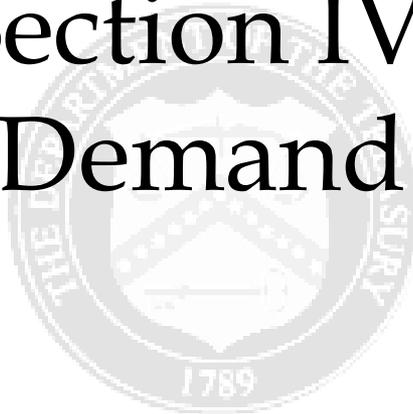
Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. OMB's projections of borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." This scenario does not represent any particular course of action that Treasury is expected to follow. See table on the following page for details. Portfolio Composition by original issuance type and term can be found in the appendix (Page 39).

Recent and Projected 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	25.4%	13.1%	10.1%	17.5%	12.3%	10.1%	11.5%	48.6%	66.2%
2014	25.2%	13.2%	11.4%	17.6%	11.3%	9.1%	12.2%	49.8%	67.4%
2015	24.6%	14.6%	10.7%	17.5%	11.4%	8.7%	12.5%	49.9%	67.4%
2016	24.7%	14.0%	11.7%	17.3%	10.8%	8.5%	13.0%	50.4%	67.7%
2017	24.4%	14.6%	11.1%	17.2%	10.5%	8.6%	13.7%	50.1%	67.3%
2018	24.6%	14.5%	10.8%	17.1%	10.4%	8.6%	14.1%	49.9%	67.0%
2019	23.4%	14.4%	11.3%	16.5%	11.0%	9.0%	14.5%	49.0%	65.6%
2020	23.4%	14.6%	10.4%	17.1%	10.8%	8.5%	15.3%	48.4%	65.5%
2021	23.3%	13.5%	11.0%	17.2%	10.5%	8.4%	16.2%	47.7%	64.9%
2022	21.8%	14.0%	11.4%	17.0%	10.4%	8.2%	17.2%	47.2%	64.2%
2023	22.0%	14.4%	10.8%	16.5%	10.3%	7.8%	18.2%	47.2%	63.7%

Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels. OMB's projections of borrowing from the public are from Table S-11 of the "Fiscal Year 2014 Mid-Session Review Budget of the US Government." This scenario does not represent any particular course of action that Treasury is expected to follow. Portfolio Composition by original issuance type and term can be found in the appendix (Page 39).

Section IV: Demand



Summary Statistics for Fiscal Year 2014 Q1 Auctions

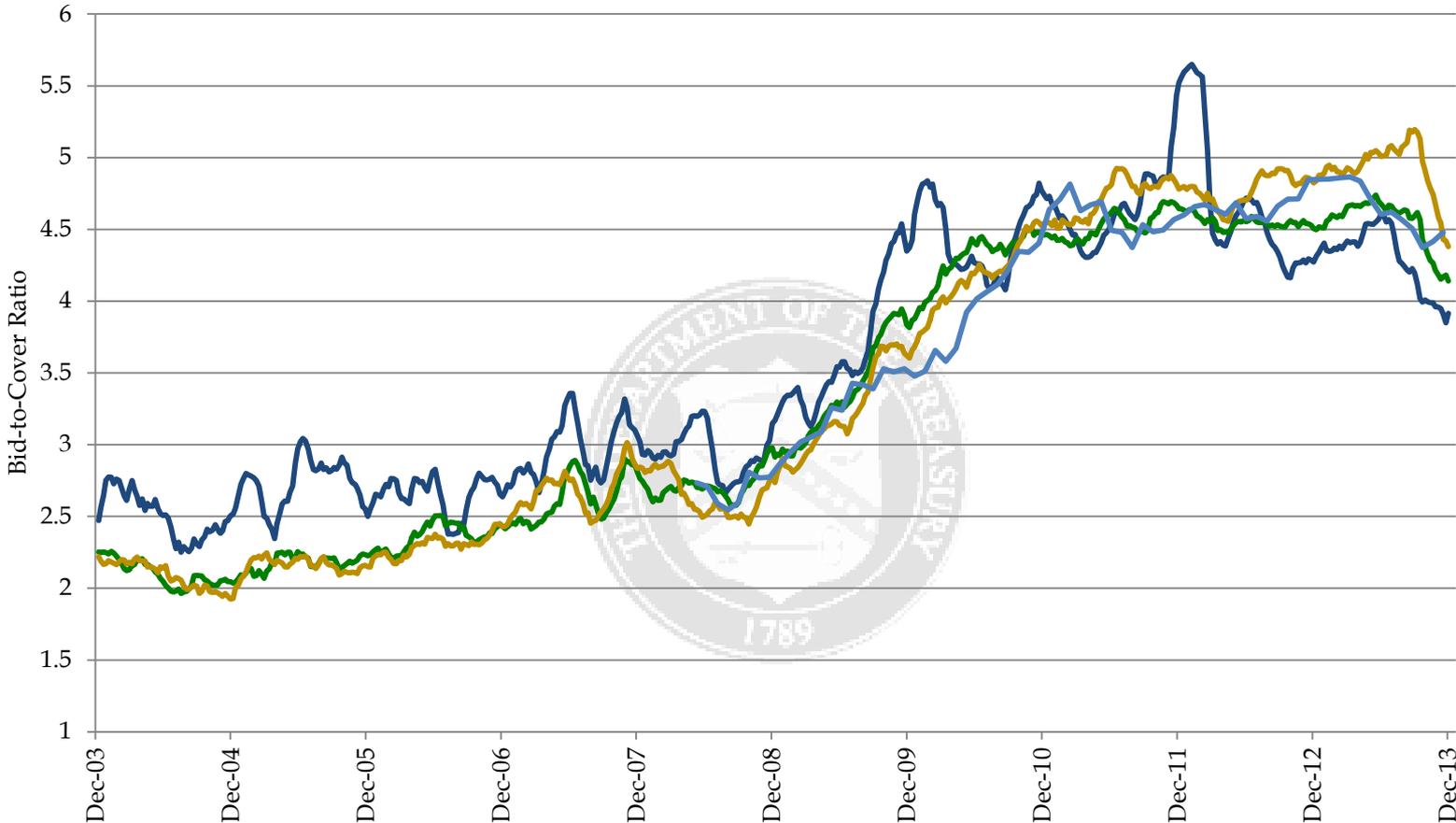
Security Type	Term	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitive Awards (\$ bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$ bn)	SOMA Add Ons (\$ bn)	10-Yr Equivalent (\$ bn)**
Bill	4-Week	0.076	3.9	475.4	66.8%	10.2%	23.1%	3.2	0.0	4.3
Bill	13-Week	0.064	4.1	412.4	72.1%	10.1%	17.9%	5.9	0.0	12.2
Bill	26-Week	0.090	4.4	354.4	58.7%	9.8%	31.5%	4.7	0.0	21.2
Bill	52-Week	0.143	4.4	71.3	64.0%	11.4%	24.6%	0.4	0.0	8.4
Bill	CMBs	0.180	3.5	81.0	74.7%	8.0%	17.4%	0.0	0.0	1.7
Coupon	2-Year	0.323	3.5	95.3	46.2%	29.5%	24.3%	0.4	0.0	22.3
Coupon	3-Year	0.662	3.4	89.6	47.6%	17.1%	35.4%	0.1	0.0	31.1
Coupon	5-Year	1.413	2.6	104.9	47.8%	11.6%	40.6%	0.1	0.0	58.9
Coupon	7-Year	2.120	2.5	87.0	41.6%	19.0%	39.4%	0.0	0.0	65.7
Coupon	10-Year	2.744	2.6	65.9	38.0%	16.8%	45.2%	0.1	0.0	66.5
Coupon	30-Year	3.822	2.4	42.0	41.5%	17.9%	40.6%	0.0	0.0	87.2
TIPS	5-Year	(0.375)	2.5	16.0	41.1%	14.3%	44.5%	0.0	0.0	8.0
TIPS	10-Year	0.560	2.6	13.0	31.8%	21.5%	46.7%	0.0	0.0	14.2

Total Bills	0.085	4.1	1,394.4	66.6%	10.0%	23.4%	14.2	0.0	47.8
Total Coupons	1.576	2.9	484.6	44.4%	18.7%	36.8%	0.7	0.0	331.6
Total TIPS	0.294	2.6	36.0	36.8%	17.8%	45.4%	0.0	0.0	43.7

*Weighted averages of Competitive Awards.

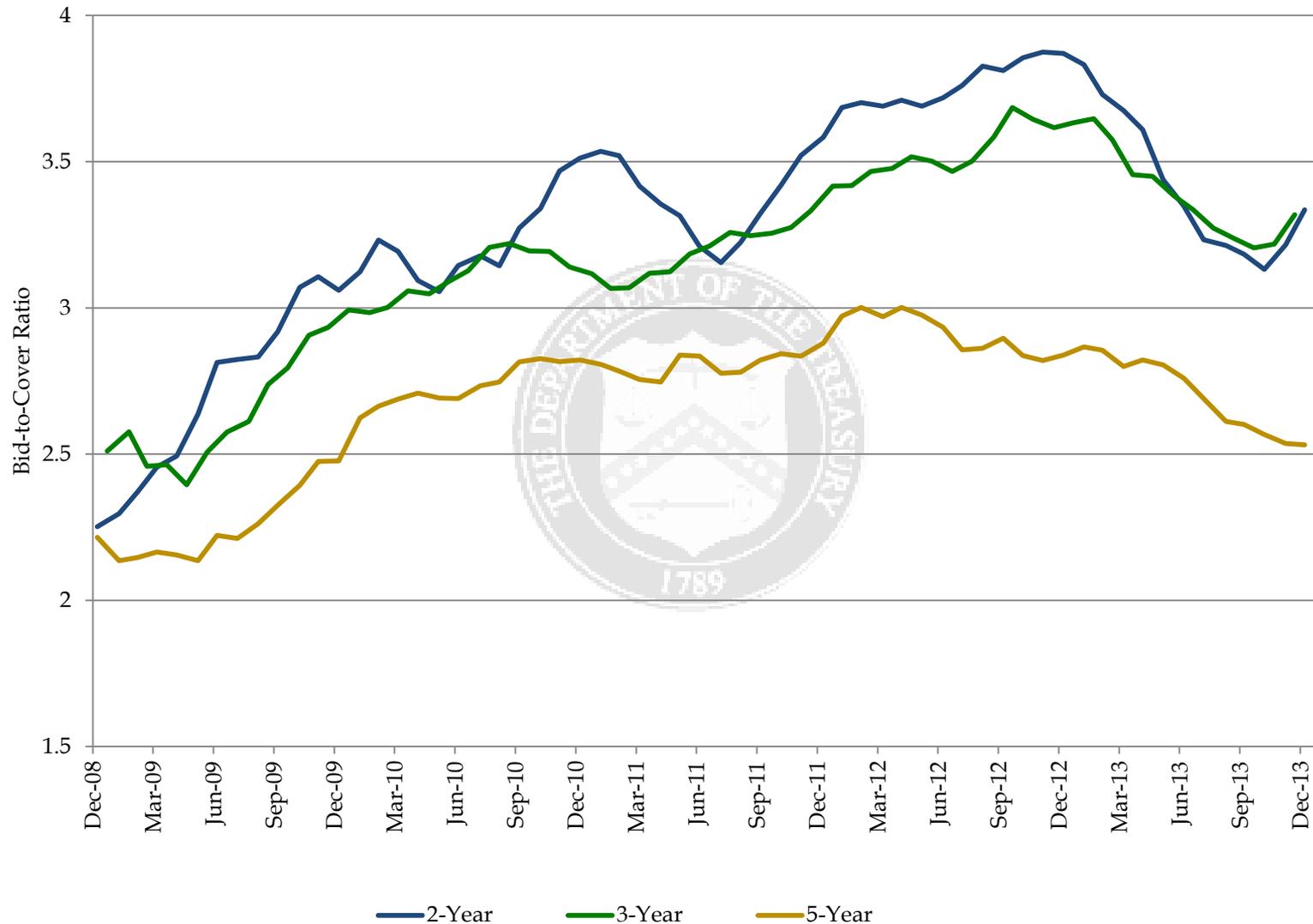
**Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS' 10-Year Equivalent, a constant auction BEI is used as the inflation assumption.

Bid-to-Cover Ratios for Treasury Bills

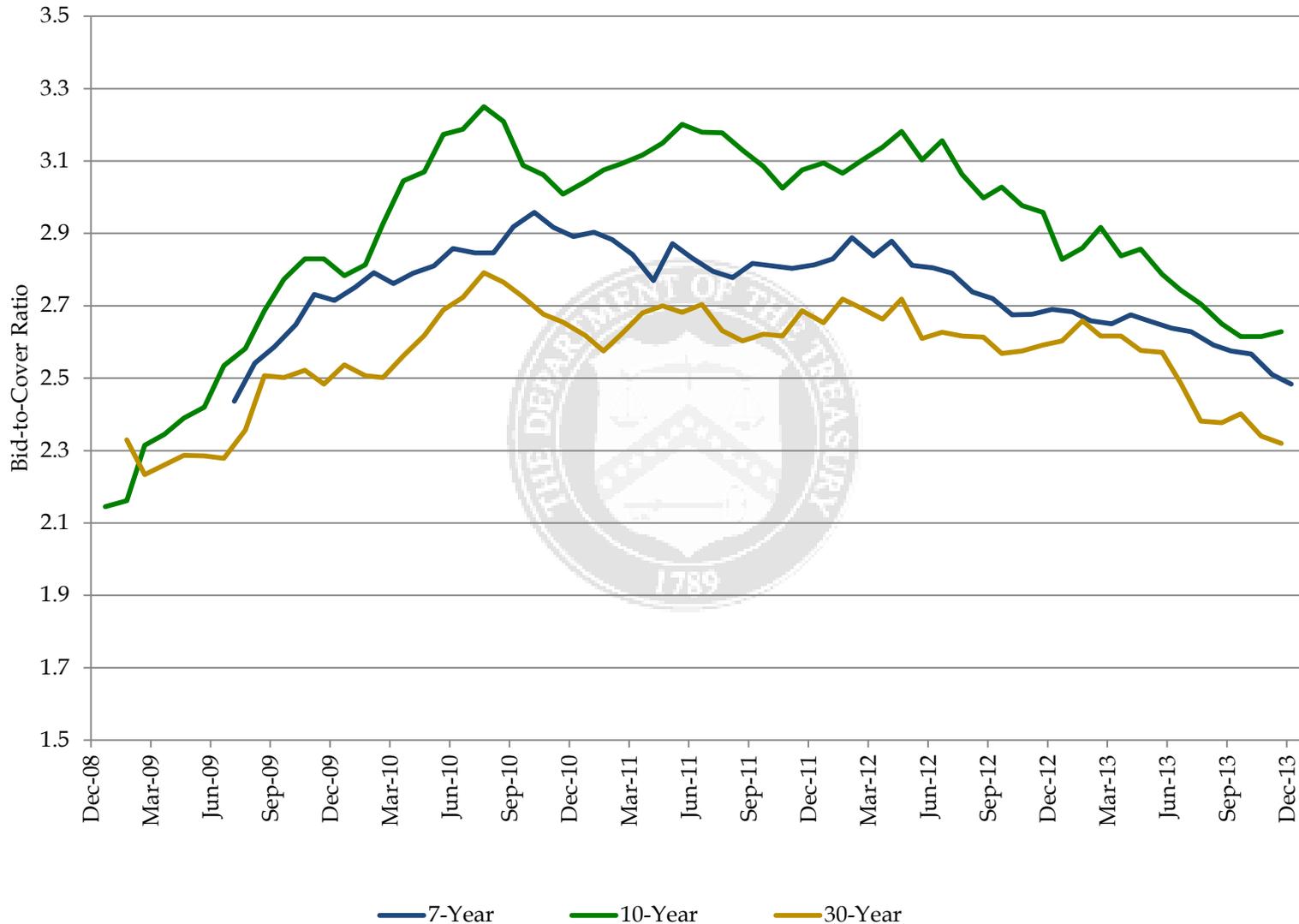


— 4-Week (13-week moving average) — 13-Week (13-week moving average)
— 26-Week (13-week moving average) — 52-Week (6-month moving average)

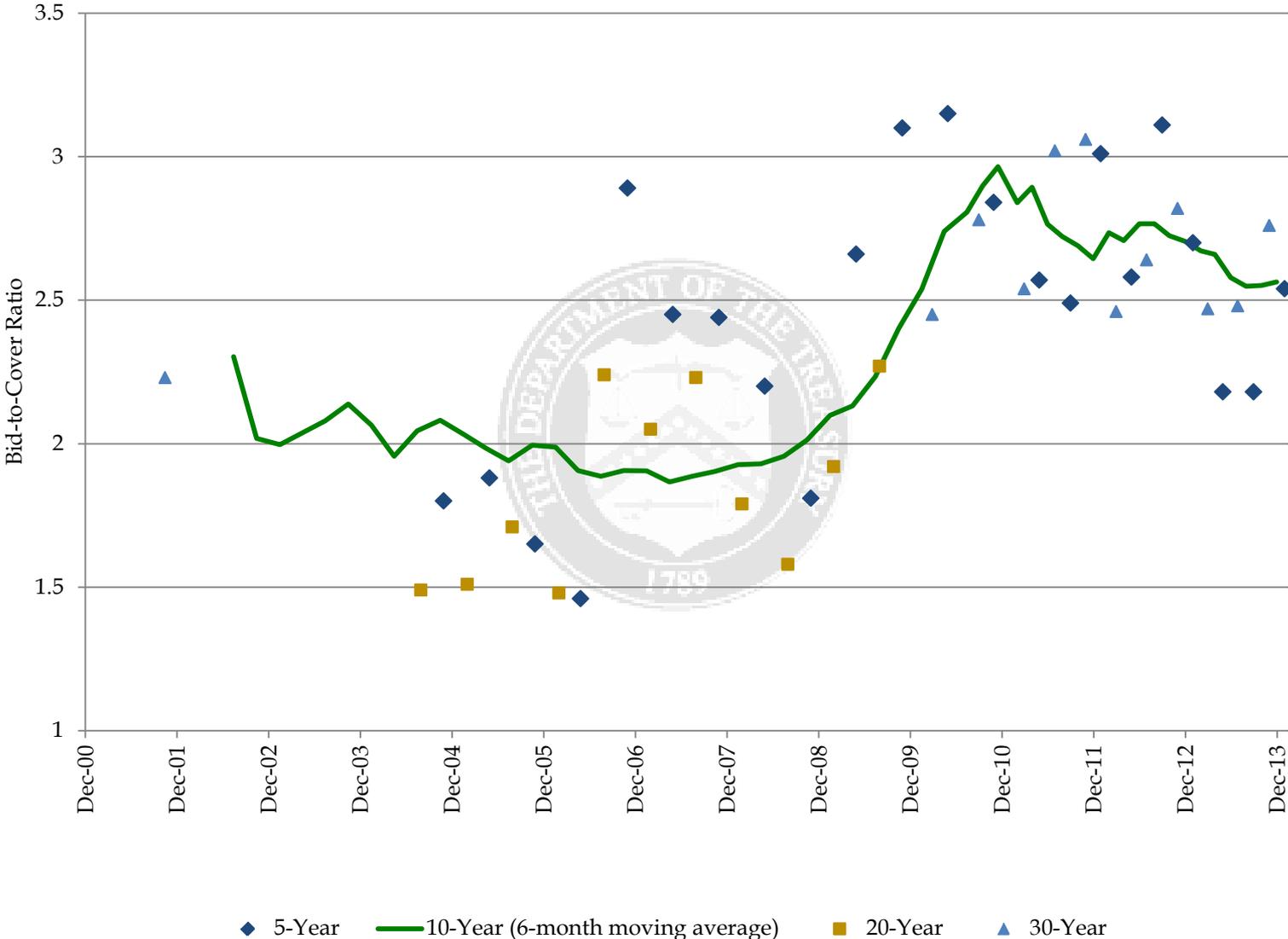
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



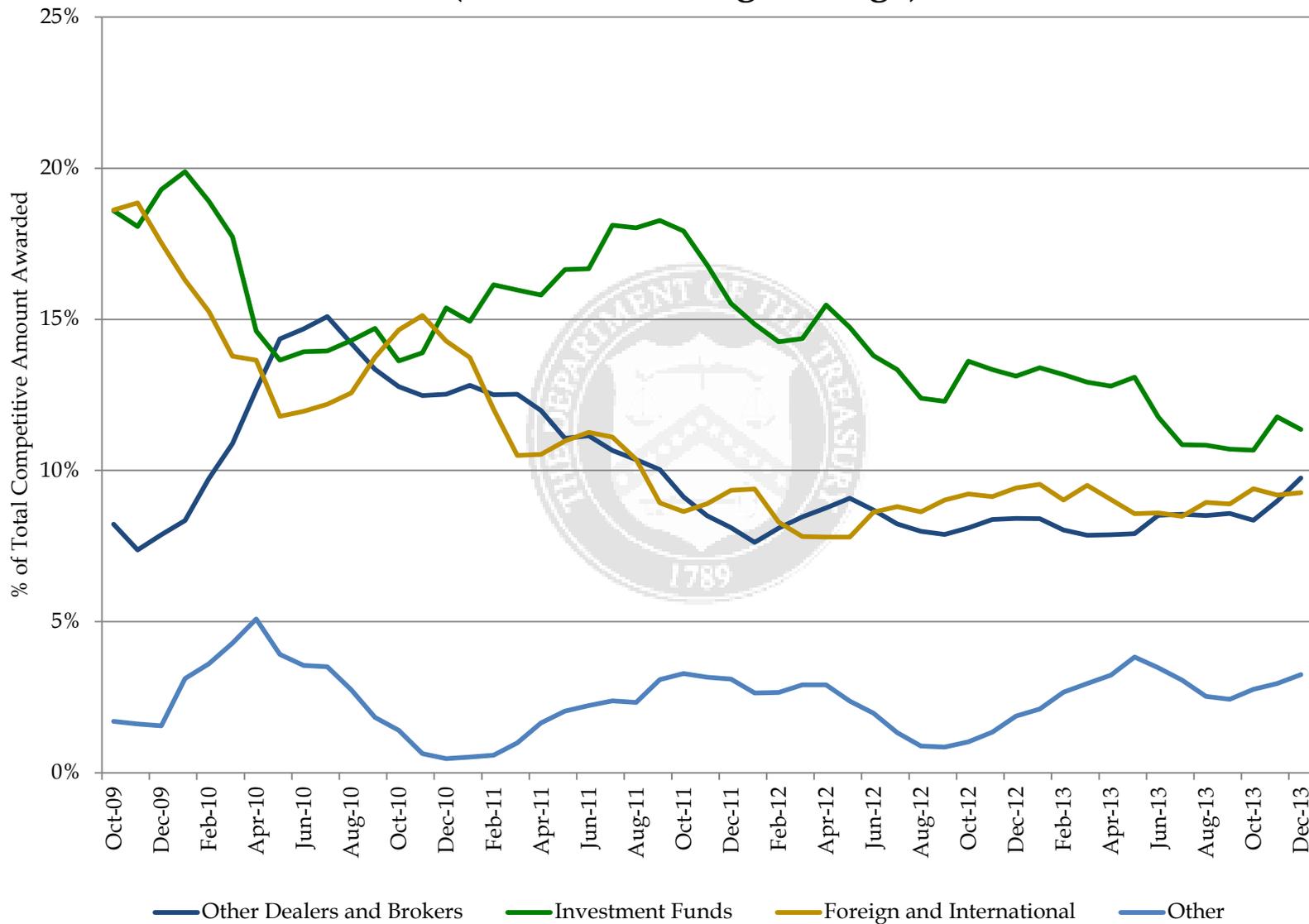
Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)



Bid-to-Cover Ratios for TIPS

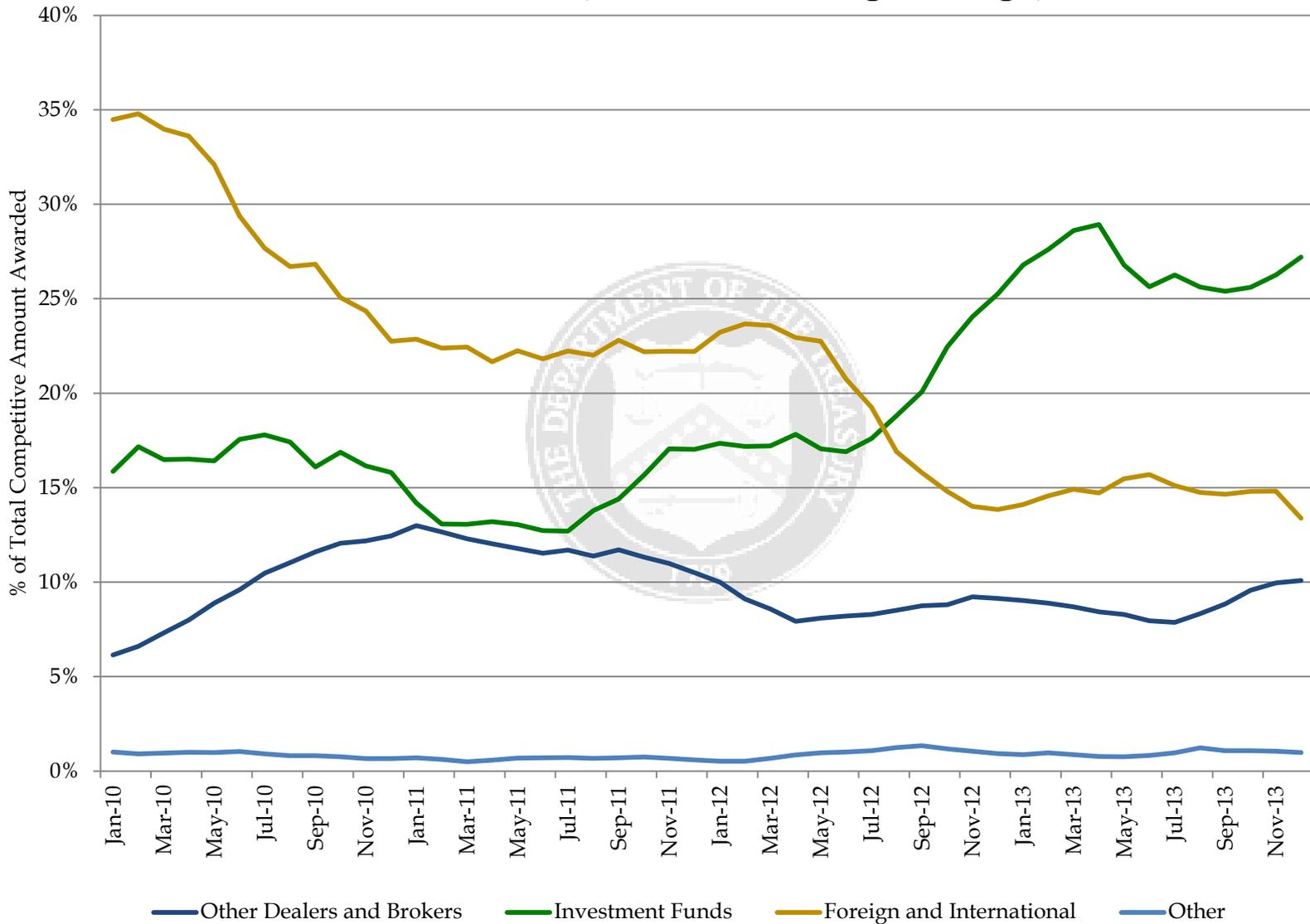


Percent Awarded in Bill Auctions by Investor Class (3-Month Moving Average)



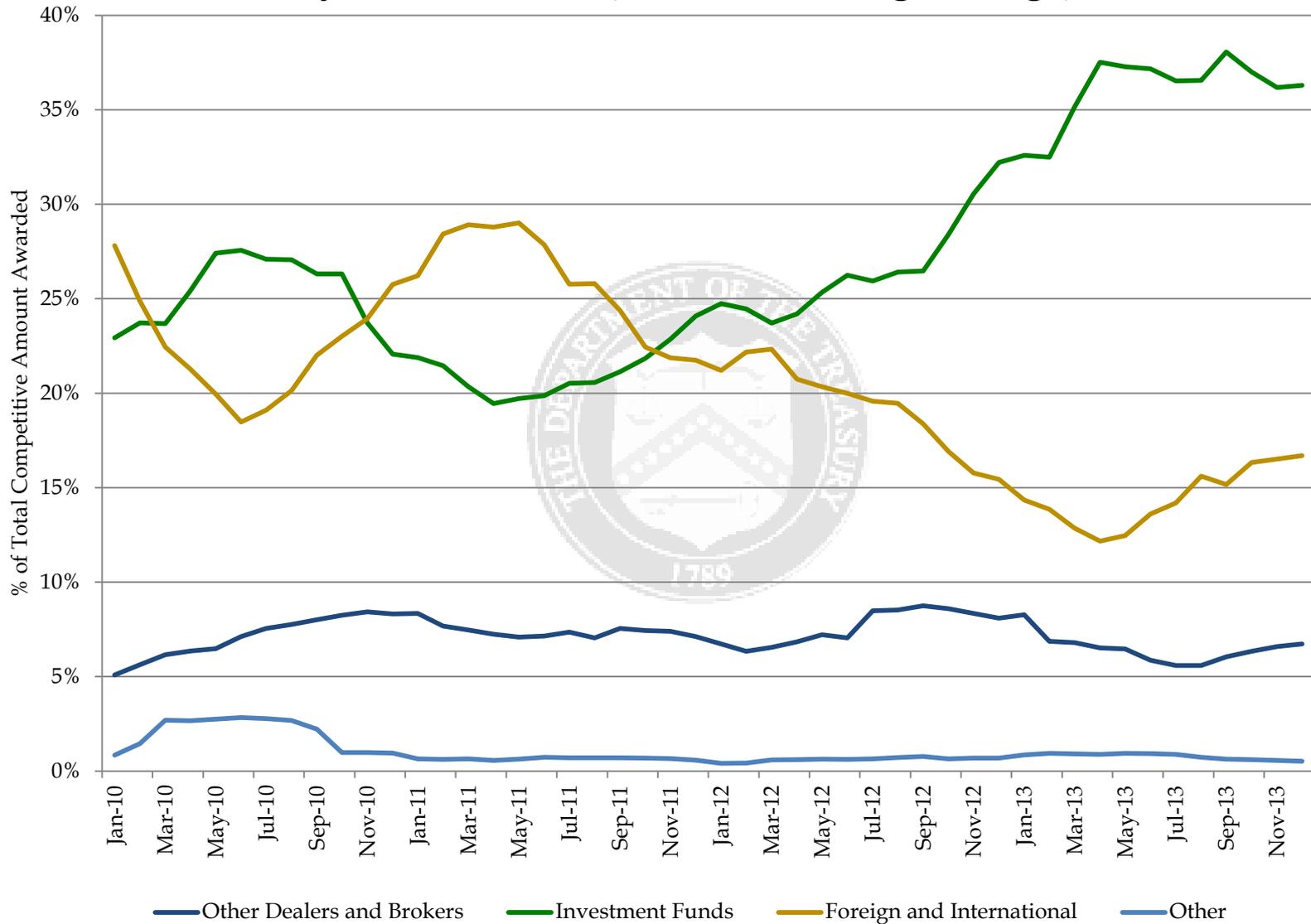
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance.

Percent Awarded in 2-,3-,5-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



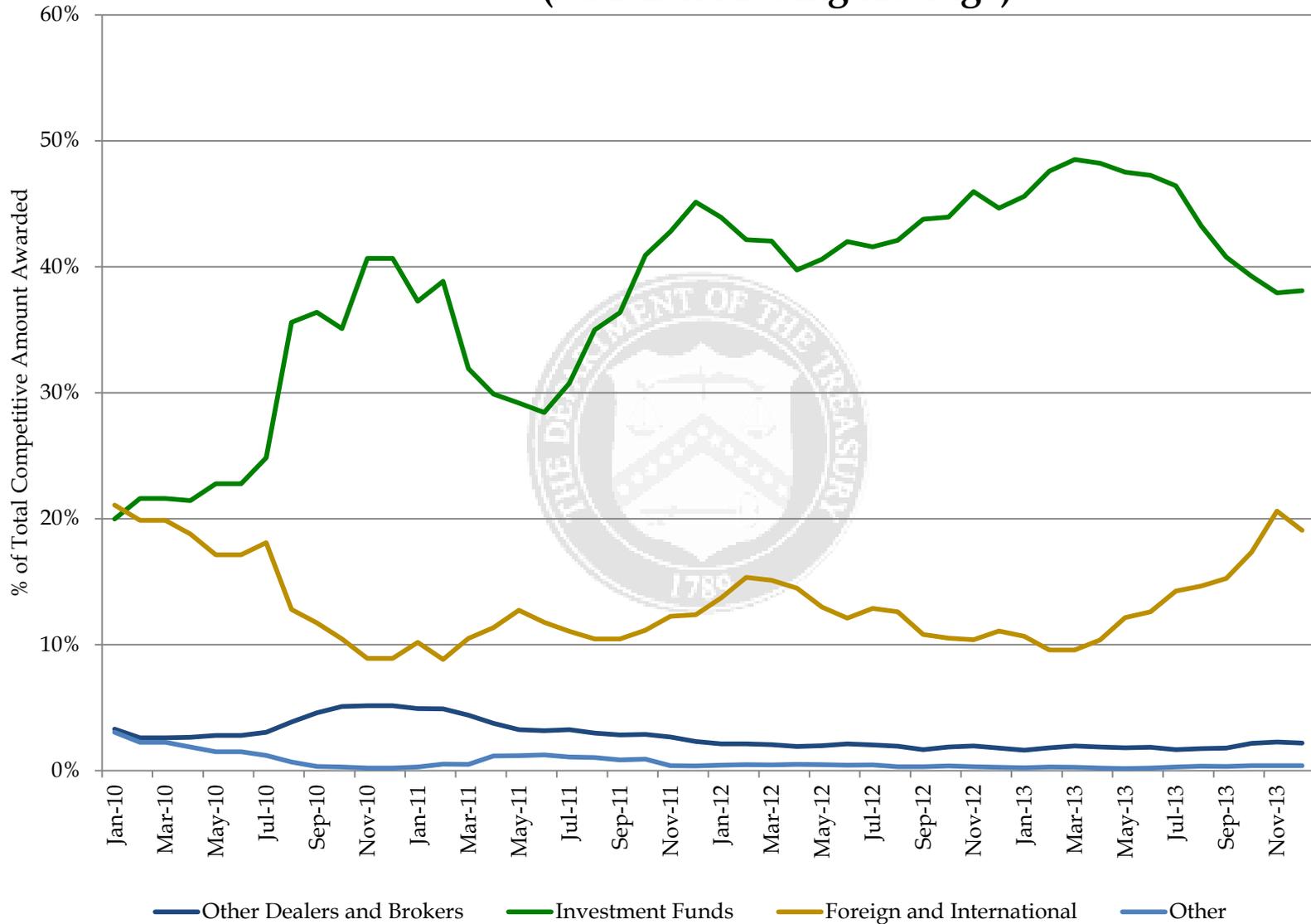
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance.

Percent Awarded in 7-,10-,30-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



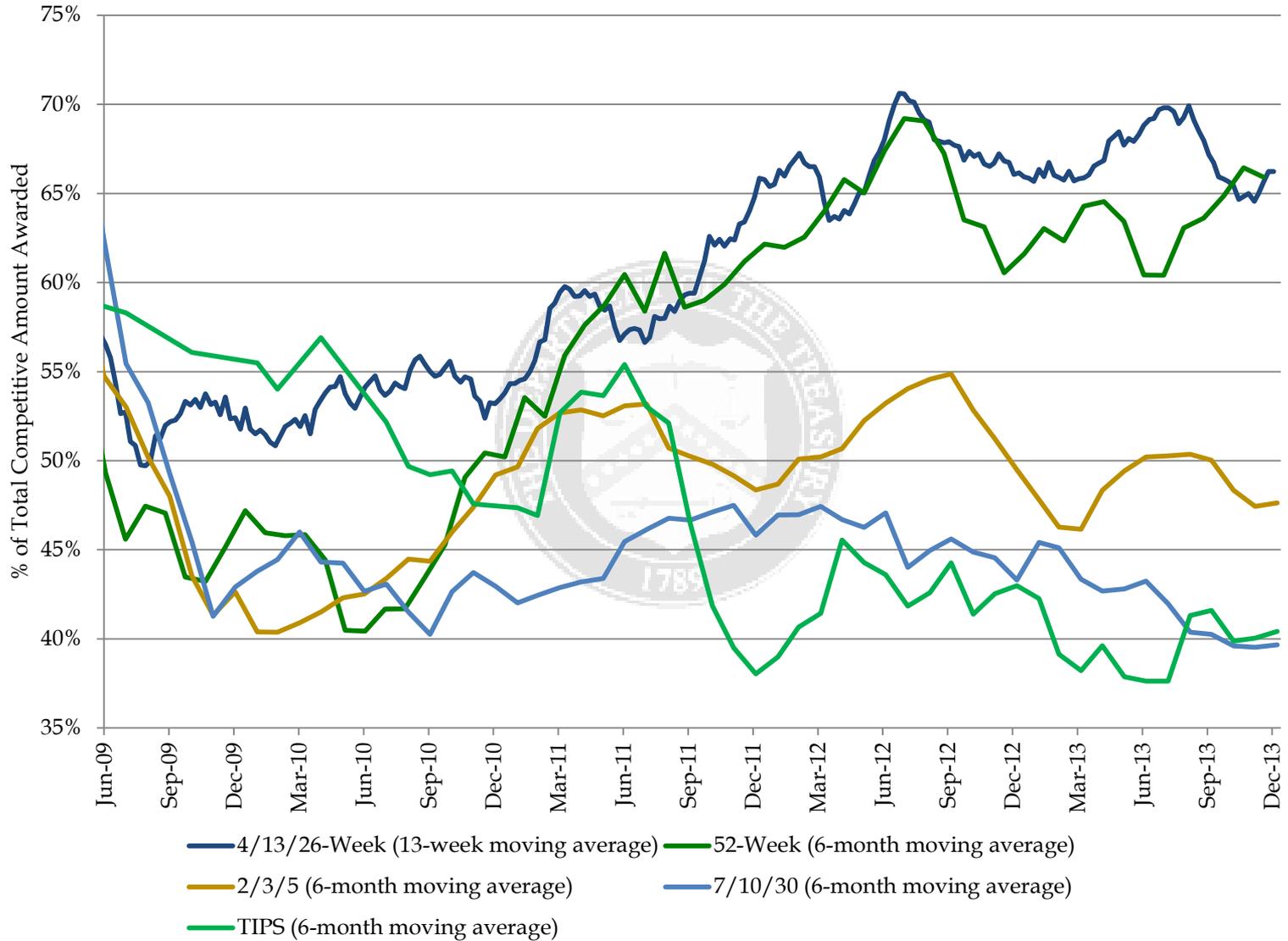
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance.

Percent Awarded in TIPS Auctions by Investor Class (6-Month Moving Average)



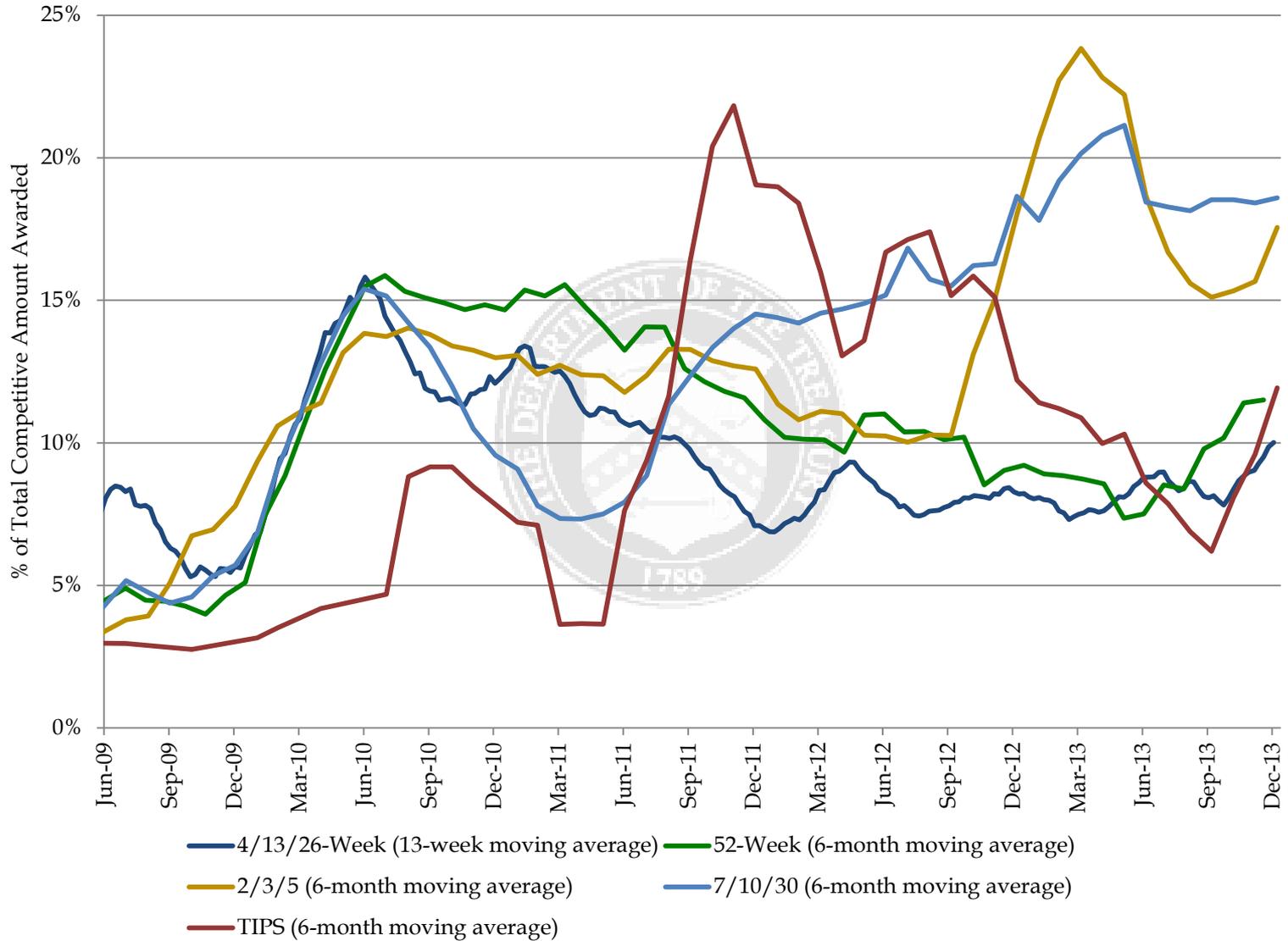
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 2%, which include Depository Institutions, Individuals, Pension and Insurance.

Primary Dealer Awards at Auction, Percent

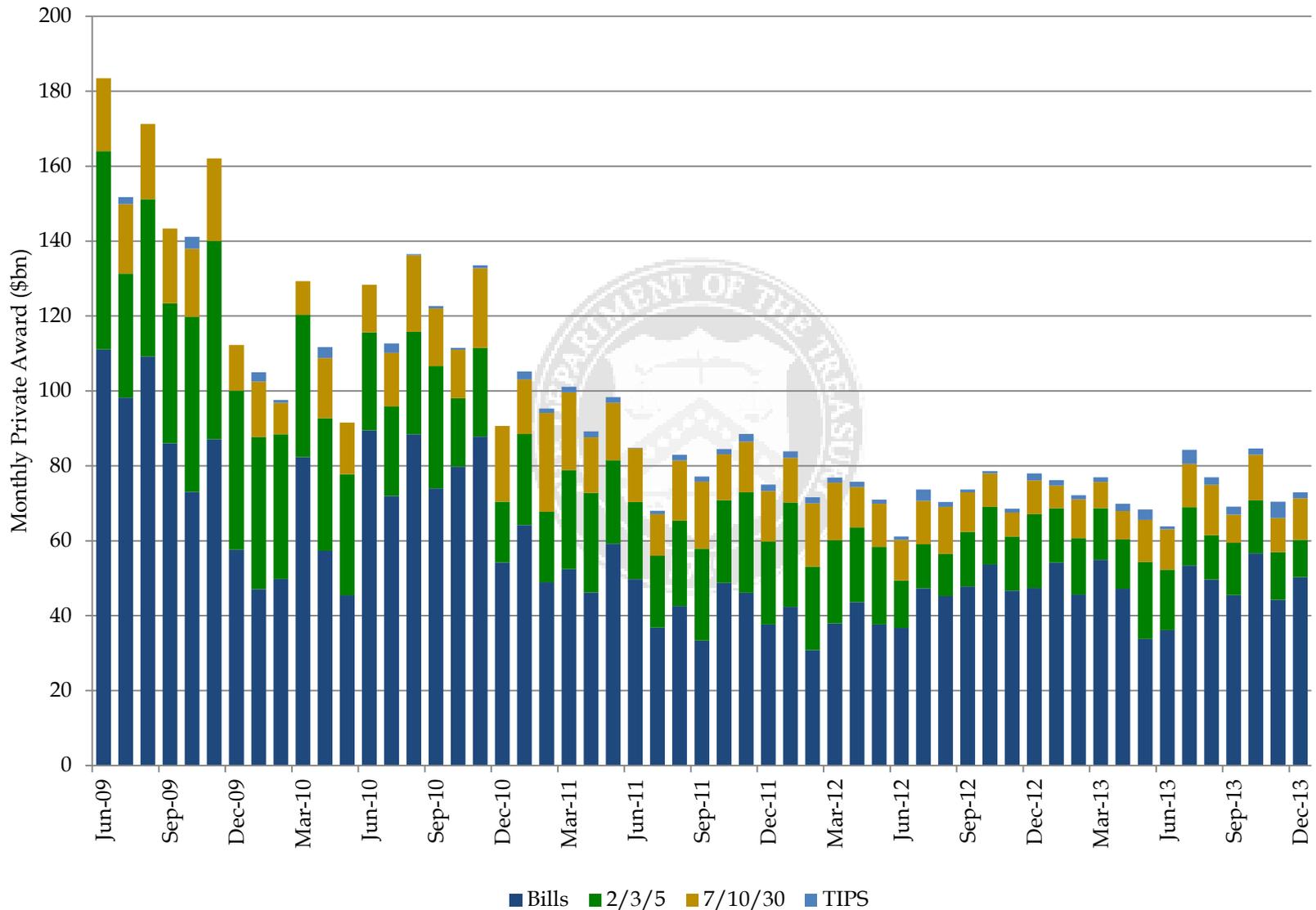


Excludes SOMA add-ons.

Direct Bidder Awards at Auction, Percent



Total Foreign Awards of Treasuries at Auction, \$ Billion

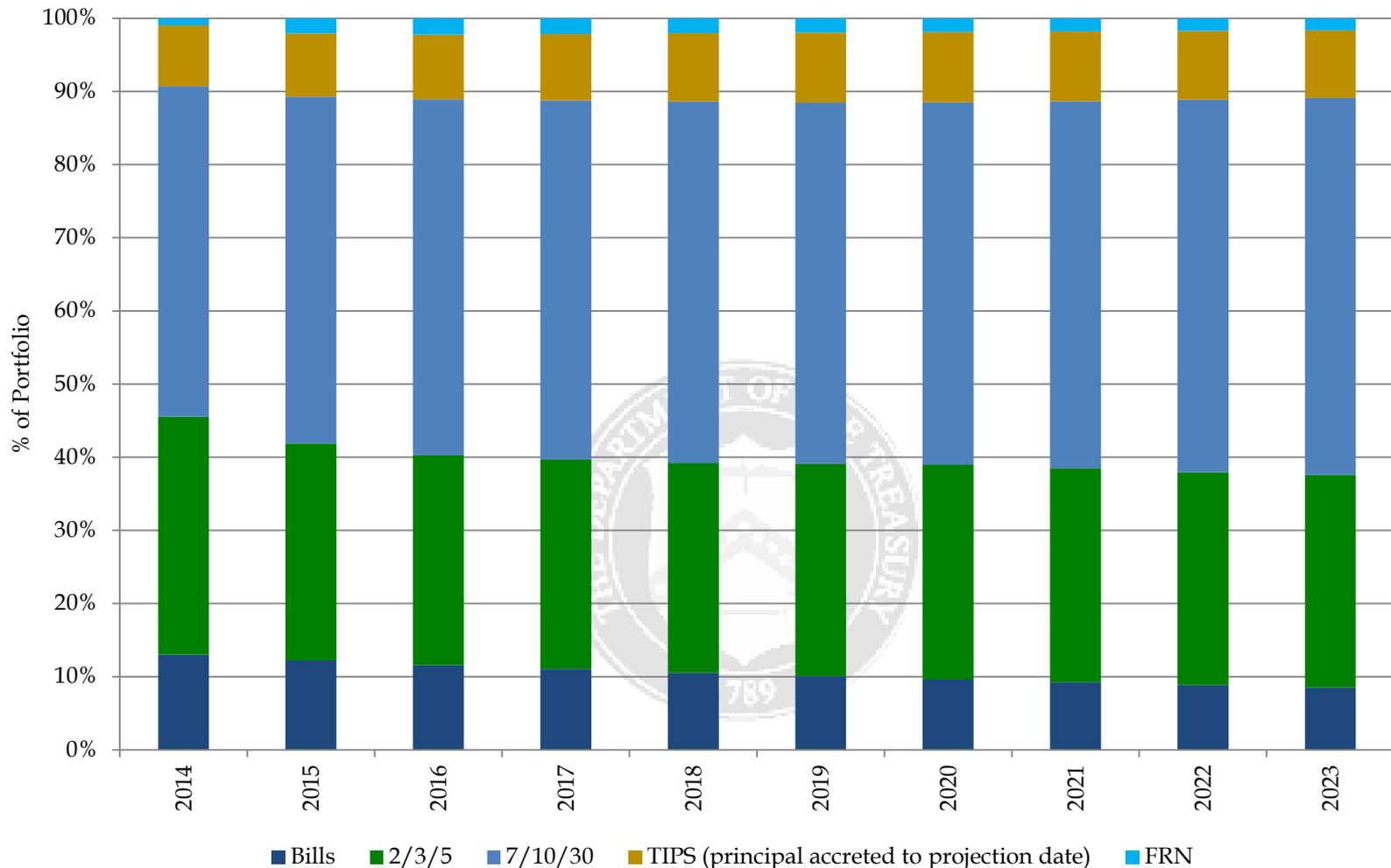


Foreign includes both private sector and official institutions.

Appendix

The seal of the U.S. Department of the Treasury is centered in the background. It features a shield with a scale of justice, a sword, and a chevron with stars. The shield is encircled by the text "THE DEPARTMENT OF THE TREASURY" and the year "1789".

Projected Portfolio Composition by Issuance Type, Percent



Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was 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. See table on the following page for details.

Recent and Projected 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)	FRN
2006	21.3%	40.5%	29.0%	69.5%	9.2%	0.0%
2007	21.6%	38.9%	29.2%	68.1%	10.3%	0.0%
2008	28.5%	34.5%	26.9%	61.4%	10.0%	0.0%
2009	28.5%	36.2%	27.4%	63.6%	7.9%	0.0%
2010	21.1%	40.1%	31.8%	71.9%	7.0%	0.0%
2011	15.4%	41.4%	35.9%	77.3%	7.3%	0.0%
2012	15.0%	38.4%	39.0%	77.4%	7.5%	0.0%
2013	13.2%	35.8%	43.0%	78.7%	8.1%	0.0%
2014	13.0%	32.5%	45.2%	77.7%	8.3%	0.9%
2015	12.3%	29.7%	47.4%	77.0%	8.6%	2.1%
2016	11.6%	28.7%	48.6%	77.3%	8.8%	2.2%
2017	11.0%	28.7%	49.1%	77.7%	9.1%	2.1%
2018	10.6%	28.6%	49.4%	78.1%	9.3%	2.0%
2019	10.1%	29.0%	49.4%	78.4%	9.6%	1.9%
2020	9.6%	29.3%	49.6%	78.9%	9.6%	1.8%
2021	9.2%	29.2%	50.2%	79.5%	9.5%	1.8%
2022	8.9%	29.1%	50.9%	80.1%	9.4%	1.7%
2023	8.5%	29.0%	51.5%	80.6%	9.3%	1.6%

Portfolio & SOMA holdings as of 12/31/2013 and estimated projections of the Large Scale Asset Purchase program, announced on 12/12/2012 by the Federal Reserve, assumed to last until September 2014 with SOMA redemptions until September 2020. These assumptions are based on the Federal Reserve's December 2013 primary dealer survey and Chairman Bernanke's June 2013 press conference. 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. Treasury guidance on FRN issuance projected individual auction sizes of \$10-\$15bn. The principal on the TIPS securities was 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.

Bill Issues										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitive Awards (\$ bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$ bn)	SOMA Add Ons (\$ bn)	10-Yr Equivalent (\$ bn)**
4-Week	10/3/2013	0.120	3.09	34.72	71.8%	8.7%	19.4%	0.28	0.00	0.31
4-Week	10/10/2013	0.350	2.75	29.73	60.1%	8.9%	31.0%	0.27	0.00	0.27
4-Week	10/17/2013	0.240	4.33	19.78	64.3%	8.0%	27.6%	0.22	0.00	0.18
4-Week	10/24/2013	0.030	4.31	34.78	76.7%	10.0%	13.3%	0.22	0.00	0.31
4-Week	10/31/2013	0.055	3.78	44.30	69.8%	9.0%	21.3%	0.21	0.00	0.42
4-Week	11/7/2013	0.050	3.90	44.73	61.5%	11.3%	27.2%	0.27	0.00	0.40
4-Week	11/14/2013	0.060	4.08	44.77	62.4%	8.5%	29.1%	0.23	0.00	0.40
4-Week	11/21/2013	0.060	3.86	44.77	65.6%	11.5%	22.9%	0.23	0.00	0.40
4-Week	11/29/2013	0.065	3.78	44.41	61.4%	16.9%	21.7%	0.26	0.00	0.38
4-Week	12/5/2013	0.030	3.94	44.76	68.2%	10.9%	20.9%	0.24	0.00	0.40
4-Week	12/12/2013	0.025	3.94	39.75	65.0%	6.0%	28.9%	0.25	0.00	0.36
4-Week	12/19/2013	0.010	4.13	29.74	78.6%	9.9%	11.5%	0.26	0.00	0.27
4-Week	12/26/2013	0.005	5.02	19.12	65.5%	10.0%	24.5%	0.24	0.00	0.18
13-Week	10/3/2013	0.010	4.57	24.11	72.7%	9.0%	18.3%	0.54	0.00	0.72
13-Week	10/10/2013	0.035	3.88	34.50	72.3%	6.3%	21.4%	0.45	0.00	1.01
13-Week	10/17/2013	0.130	3.13	34.45	82.3%	5.7%	11.9%	0.45	0.00	1.01
13-Week	10/24/2013	0.035	4.03	34.57	78.9%	12.6%	8.5%	0.43	0.00	1.01
13-Week	10/31/2013	0.045	3.89	32.79	77.1%	9.4%	13.5%	0.41	0.00	0.99
13-Week	11/7/2013	0.050	4.14	32.37	71.6%	10.1%	18.3%	0.43	0.00	0.96
13-Week	11/14/2013	0.075	4.55	32.42	70.1%	7.6%	22.3%	0.48	0.00	0.96
13-Week	11/21/2013	0.080	4.00	31.45	82.1%	10.2%	7.7%	0.45	0.00	0.92
13-Week	11/29/2013	0.080	4.30	30.74	57.4%	5.9%	36.7%	0.49	0.00	0.91
13-Week	12/5/2013	0.075	4.49	31.28	65.9%	13.5%	20.6%	0.42	0.00	0.92
13-Week	12/12/2013	0.070	4.33	31.52	76.3%	15.2%	8.5%	0.48	0.00	0.93
13-Week	12/19/2013	0.065	4.52	31.45	66.8%	15.3%	17.9%	0.43	0.00	0.93
13-Week	12/26/2013	0.070	3.99	30.71	60.8%	10.6%	28.5%	0.47	0.00	0.93
26-Week	10/3/2013	0.040	4.67	24.04	51.1%	9.7%	39.2%	0.38	0.00	1.44
26-Week	10/10/2013	0.060	4.40	29.04	33.9%	6.5%	59.5%	0.38	0.00	1.73
26-Week	10/17/2013	0.150	3.52	28.97	66.7%	8.9%	24.4%	0.35	0.00	1.73
26-Week	10/24/2013	0.070	4.45	28.93	57.9%	10.1%	32.0%	0.33	0.00	1.74
26-Week	10/31/2013	0.080	4.22	28.80	54.6%	8.8%	36.6%	0.33	0.00	1.74
26-Week	11/7/2013	0.085	4.45	28.16	50.4%	11.1%	38.5%	0.36	0.00	1.69
26-Week	11/14/2013	0.095	4.46	28.14	62.4%	10.1%	27.5%	0.39	0.00	1.69
26-Week	11/21/2013	0.100	4.40	27.24	66.1%	10.7%	23.2%	0.39	0.00	1.61
26-Week	11/29/2013	0.105	4.19	26.90	66.9%	7.4%	25.7%	0.35	0.00	1.60
26-Week	12/5/2013	0.100	4.82	26.09	62.1%	9.1%	28.8%	0.34	0.00	1.56
26-Week	12/12/2013	0.095	4.64	26.19	64.3%	3.0%	32.8%	0.34	0.00	1.56
26-Week	12/19/2013	0.090	4.44	26.24	64.5%	12.2%	23.2%	0.39	0.00	1.57
26-Week	12/26/2013	0.090	4.29	25.69	58.7%	13.5%	27.9%	0.34	0.00	1.57
52-Week	10/17/2013	0.160	4.12	21.80	70.2%	10.0%	19.8%	0.12	0.00	2.54
52-Week	11/14/2013	0.135	4.44	24.66	60.7%	15.6%	23.6%	0.17	0.00	2.92
52-Week	12/12/2013	0.135	4.48	24.79	61.7%	8.6%	29.7%	0.14	0.00	2.90
CMBs	10/3/2013	0.030	4.37	20.00	80.2%	9.8%	10.1%	0.00	0.00	0.04
CMBs	10/10/2013	0.300	2.84	35.00	84.7%	5.0%	10.3%	0.00	0.00	0.06
CMBs	10/17/2013	0.135	3.83	26.00	56.9%	10.7%	32.5%	0.00	0.00	1.56

*Weighted averages of Competitive Awards.

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

Nominal Coupon Securities										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitive Awards (\$ bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$ bn)	SOMA Add Ons (\$ bn)	10-Yr Equivalent (\$ bn)**
2-Year	10/31/2013	0.323	3.32	31.75	40.0%	31.0%	29.0%	0.14	0.00	7.43
2-Year	12/2/2013	0.300	3.54	31.74	50.3%	27.3%	22.5%	0.15	0.00	7.36
2-Year	12/31/2013	0.345	3.77	31.79	48.2%	30.2%	21.5%	0.11	0.00	7.47
3-Year	10/15/2013	0.710	3.05	29.87	45.8%	19.7%	34.4%	0.02	0.00	10.33
3-Year	11/15/2013	0.644	3.46	29.87	47.3%	19.4%	33.3%	0.03	0.00	10.43
3-Year	12/16/2013	0.631	3.55	29.87	49.6%	12.0%	38.4%	0.03	0.00	10.35
5-Year	10/31/2013	1.300	2.65	34.96	41.9%	12.2%	45.9%	0.02	0.00	19.69
5-Year	12/2/2013	1.340	2.61	34.95	39.2%	10.8%	50.0%	0.04	0.00	19.54
5-Year	12/31/2013	1.600	2.42	34.97	62.4%	11.8%	25.8%	0.03	0.00	19.67
7-Year	10/31/2013	1.870	2.66	28.99	33.8%	23.9%	42.3%	0.01	0.00	22.14
7-Year	12/2/2013	2.106	2.36	28.99	49.8%	16.1%	34.1%	0.01	0.00	21.79
7-Year	12/31/2013	2.385	2.45	28.99	41.2%	17.1%	41.7%	0.02	0.00	21.79
10-Year	10/15/2013	2.657	2.58	20.97	40.2%	21.2%	38.6%	0.02	0.00	21.02
10-Year	11/15/2013	2.750	2.70	23.95	33.8%	18.6%	47.7%	0.05	0.00	24.44
10-Year	12/16/2013	2.824	2.61	20.97	40.5%	10.6%	48.9%	0.03	0.00	21.01
30-Year	10/15/2013	3.758	2.64	12.99	35.5%	22.6%	41.9%	0.00	0.00	26.98
30-Year	11/15/2013	3.810	2.16	15.98	46.5%	18.3%	35.3%	0.02	0.00	33.46
30-Year	12/16/2013	3.900	2.35	13.00	41.4%	12.5%	46.0%	0.00	0.00	26.71

TIPS										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitive Awards (\$ bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$ bn)	SOMA Add Ons (\$ bn)	10-Yr Equivalent (\$ bn)**
5-Year	12/31/2013	-0.375	2.54	15.99	41.1%	14.3%	44.5%	0.01	0.00	8.04
10-Year	11/29/2013	0.560	2.59	12.98	31.8%	21.5%	46.7%	0.02	0.00	14.17
30-Year	10/31/2013	1.330	2.76	6.99	35.9%	19.1%	45.0%	0.01	0.00	21.46

*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.



Treasury Borrowing Advisory Committee

Committee Charge #2

February 4, 2014

Committee Charge #2

The U.S. Primary Dealer debt distribution model: benefits and challenges

Treasury has used the Primary Dealer model for auctioning and distributing debt for several decades. This highly efficient system has been a key feature for the effective functioning of Treasury auctions. Given the evolution of the financial services industry, market structure, regulation and technology over recent years, does the current structure for distributing Treasury securities remain optimal? Are there any modifications that could result in a lower cost of funding for Treasury and/or enhance secondary market liquidity?

Overview of the Primary Dealer System in the U.S.

U.S. Primary Dealer responsibilities and the differences that exist between the U.S. and other developed nations

Primary Dealer (PDs) responsibilities.

- To participate consistently in the Fed's Open Market Operations (OMOs) and to provide market information and analysis to the Fed's trading desk.
- To report on their primary and secondary market activities.
- To place bids in Treasury auctions, to act as agent in auctions for final investors.
- To enhance liquidity in the secondary market by providing firm, two-way continuous pricing.
- To be an advisor to the U.S. Treasury and to help the Treasury market new securities.
- See Appendix C: Standards for Primary Dealer Status.

Most developed nations use a PD system to distribute debt.

- The U.S. issues all public debt in U.S. dollars and typically does so in 'plain vanilla' instruments such as conventional bonds, bills, inflation-linked bonds (TIPS) and floating rate notes (FRN's). These conventional securities are all auctioned on a uniform price or Dutch Auction basis with competitive auction bids submitted via the TAAPS system.
- Most European countries use their PD systems to auction conventional bonds, typically on a multi-price format. But in Europe there is also issuance in other securities such as ultra-long maturity bonds, zero coupons (Italy and Spain) and bonds denominated in foreign currency. Many EU countries prefer syndications for pricing and distributing such non-conventional, less liquid issues.
- Most PD systems are managed by their respective DMOs.
- The UK uses a PD system to submit competitive bids for conventional bonds via their Gilt-edged Market Makers System or GEMMs. Conventional gilts are auctioned using a multi-price format while indexed-linked gilts are auctioned on a uniform price basis. Gilt sales in public auctions represent the bulk of UK DMO issuance activity but these sales are supplemented by syndicated gilt offerings and mini-tenders.
- Japan instituted a PD system in 2004 and eliminated syndicated issuance in 2006. Like the UK, Japan's Ministry of Finance currently uses a combination of uniform price and multi-price auction formats, depending on the types of securities being auctioned.

Benefits derived from the U.S. Primary Dealer system

The benefits that the U.S. Treasury derives from the Primary Dealer system.

- PDs help develop an auction book and redistribute securities in the primary market process.
- The PD system creates stable and dependable demand for government securities, reducing market refinancing risks for the Treasury.
- PDs assist in the development of new products and in new product promotion.
- PDs provide better market access and market intelligence to end users.
- PDs improve the Treasury's knowledge of the market.
- PDs promote secondary market liquidity.

The benefits of being a U.S. Primary Dealer.

- There is a cachet value to the status of being designated a PD. Some investors will only trade with PDs in secondary market transactions.
- Access to the Fed's securities lending facility— though the Fed's new fixed rate, full allotment reverse RP (RRP) program has opened the door to non-dealer participants, circumventing the dealers.
- PDs meet regularly with Treasury and are often consulted on market development, market structure, regulatory procedures, codes of conduct, etc
- PDs are a privileged counterpart in the Fed's open market operations.
- PDs have the right to submit Indirect bids for customers at auction.

Some of the risks in a Primary Dealer system.

- Moral hazard/"Too Big to Fail" assumptions based on PD status.
- A small number of PDs could lead to collusion.

Changes to the U.S. Primary Dealer System Over Time

Recent changes in the U.S. Primary Dealer system

Consolidation in the financial industry has affected the size of the Primary Dealer system.

- In 1988 there were 46 U.S. PDs and today there are 21.
- In 1988 the size of Total Marketable Debt Outstanding was \$1.7tn, today it is \$11.7tn.
- Since 1988, the quantity of PDs is less than half but the outstanding debt has multiplied by over 7 times.

The impact of technology on the Primary Dealer system.

- Web-based auction bidding (via the Treasury Automated Auction Processing System or TAAPS) has allowed an increasing number of final investors to bid for auctions directly, circumventing PDs. As such, providing secondary market liquidity has become a relatively more important role for PDs versus primary market activity.
- PDs transaction capacity has improved due to technology, enhancing their role as primary and secondary market liquidity providers.
- The introduction of electronic auction bidding has cut the average time to announce auction results to approximately 2 minutes from approximately 30 minutes, reducing the market risks to auction bidders while helping to reduce Treasury's borrowing costs.

Financial industry regulation impacts Primary Dealers.

- Banks dominate the PD ranks and new financial sector regulations have generally restricted bank balance sheets and reduced secondary market activities - one factor behind reduced PD participation at auctions.

Benefits of changes to the Primary Dealer system

The benefit to Treasury from the Primary Dealer system changes over time.

- Wider use of the TAAPS system by Direct bidders has reduced the importance of PDs in some auctions.
- Increasing automation has improved market 'price discovery' for the Treasury, reducing the need for PDs as a source of information on market conditions.
- When government financing needs decline, Treasury will rely more on PDs for maintaining secondary market liquidity and less for their primary market functions.
- The Fed's QE program has reduced the net supply of Treasuries. Once QE ends and net supply rises, PDs will have a more important role in their primary and secondary market liquidity support functions.

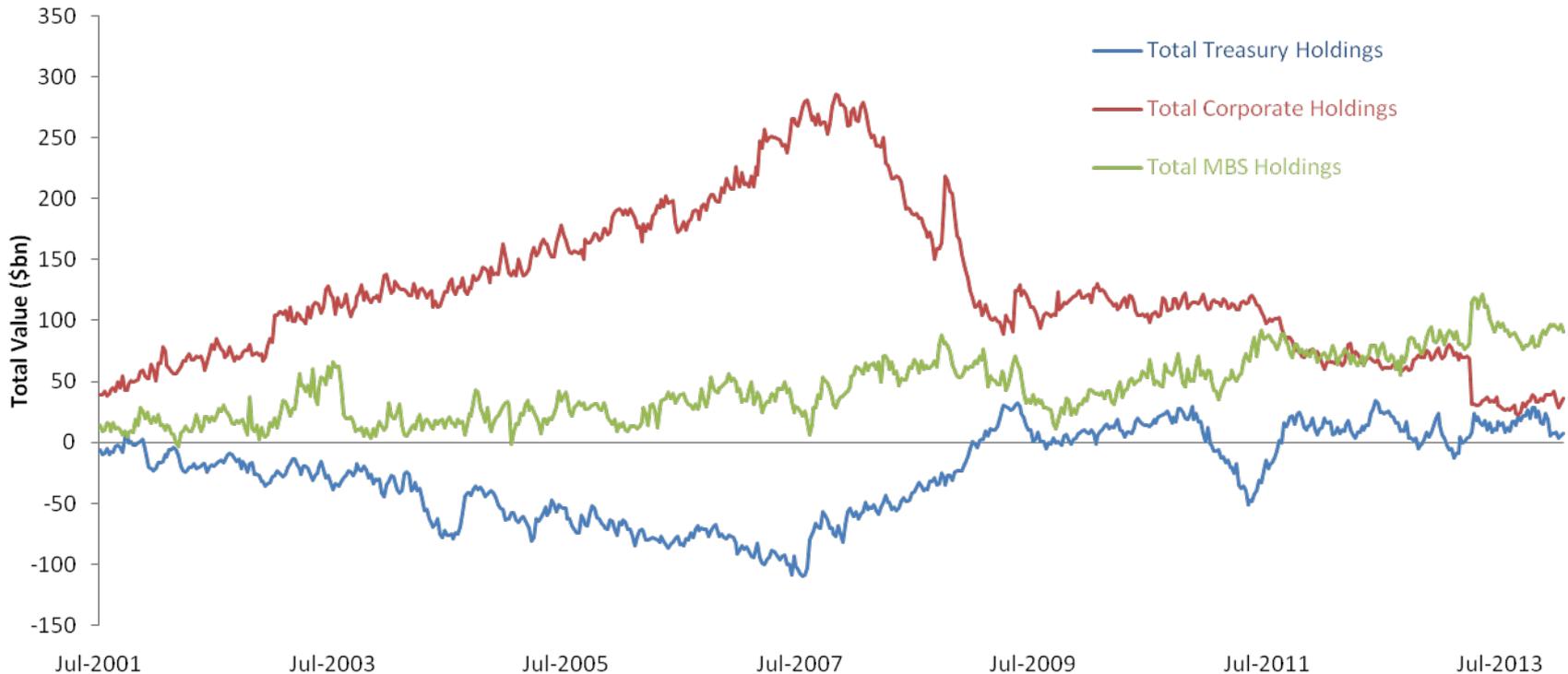
The benefits of being a Primary Dealer have changed over time too.

- Technology and increasing use of the TAAPS auction processing system by investors (Direct bidders) has reduced the benefit to PDs in their role as agents to counterparties in public auctions.
- The wide use of electronic price platforms has reduced the role of PDs as sources of pricing information.
- The shift from a multi-price auction format to single price auctions between 1992-1998 reduced the role of PDs as 'price makers' at auction time.
- The Fed no longer offers PDs exclusive access to open market operations such as in their new fixed rate, full allotment RRP program.
- Treasury has increasing sources of market information outside of the PD system.

Effects of changing regulation on Dealer balance sheets

Liquidity in corporate bond markets has fallen due to balance sheet constraints and the Volcker rule; the supplementary leverage ratio is likely to hurt liquidity in Treasury markets as Primary Dealer balance sheets come under additional pressure

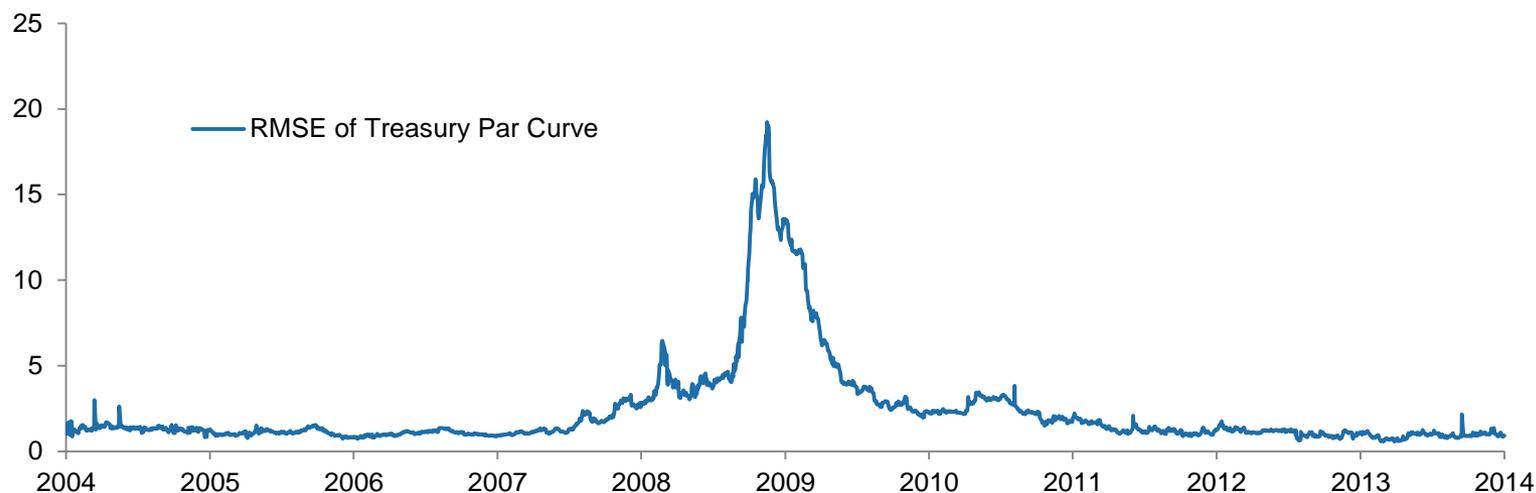
Dealer positioning in corporates (\$bn notional) vs. Treasuries (\$bn of 10Y equivalents) vs. MBS (\$bn notional)



Source: NY Fed

Relative Value opportunities for Primary Dealers

The value of flow information to the Primary Dealer is likely a function of RV opportunities available across the Treasury yield curve and market volatility



Year	Average RMSE	SD RMSE
2004	1.35	0.21
2005	1.12	0.16
2006	1.04	0.14
2007	1.52	0.62
2008	6.25	4.60
2009	5.93	3.71
2010	2.48	0.47
2011	1.35	0.31
2012	1.11	0.19
2013	0.93	0.17
2014	0.95	0.06

- Prior to the crisis: Average RMSE used to be above 1bp
- During the crisis: Severe lack of balance sheet and significant deleveraging caused less liquid Tsy product (TIPS, STRIPS, Off-the-runs) to trade at Libor-plus levels, causing the Treasury curve to bend out of shape
- Post crisis: QE has put downward pressure on RMSE as the Fed has been buying cheap Treasuries.
- Low RMSE, combined with low market volatility, has reduced the attractiveness of RV trading and therefore the value of flow information for Primary Dealers

* RMSE = Root Mean Square Error

Areas for Examination

Federal Reserve's needs drive Primary Dealer responsibilities

"The primary dealers serve, first and foremost, as trading counterparties of the Federal Reserve Bank of New York (The New York Fed) in its implementation of monetary policy. This role includes the obligations to: (i) participate consistently as counterparty to the New York Fed in its execution of open market operations to carry out U.S. monetary policy pursuant to the direction of the Federal Open Market Committee (FOMC); and (ii) provide the New York Fed's trading desk with market information and analysis helpful in the formulation and implementation of monetary policy. Primary dealers are also required to participate in all auctions of U.S. government debt and to make reasonable markets for the New York Fed when it transacts on behalf of its foreign official account-holders."

– NY Fed http://www.newyorkfed.org/markets/pridealers_policies.html

- The Federal Reserve, not the U.S. Treasury, formally maintains the PD system, including the selection and the evaluation of the performance of PDs semiannually, or more frequently if necessary.
- The New York Fed reserves the right to “limit a Primary Dealer’s access to any or all of the primary dealer facilities or operations, and may suspend or terminate a primary dealer if it fails to meet these behavioral standards of conduct or responsibility.”

Treasury's role in the selection and the evaluation of Primary Dealers should be more explicit

- To the extent that PDs derive benefits from their status, it is essential that both the Treasury and the Federal Reserve who 'pay' the benefits be explicitly involved in selecting and evaluating the performance of PDs.
- The Federal Reserve (not the U.S. Treasury) determines the number of PDs and selects the PDs. As a regulator, the Fed may be better positioned to assess and review whether the requirements to be a PD are met. However, the number of PDs desired by the U.S. Treasury may not be the same as those desired by the Fed.
- Underperforming PDs can get a "free ride" from their PD status, making it essential that the PD community remain accountable to both the Treasury and the Fed.
- Treasury may desire to place additional requirements or oversight over the PDs. For example, the NY Fed sets general expectations for PD behavior at auction (http://www.newyorkfed.org/markets/pridealers_policies.html), but the U.S. Treasury may want to set other explicit/specific metrics (see Appendix C).

Treasury should consider how to make its role more explicit

Treasury should periodically disclose performance evaluations to Primary Dealers.

- Publicizing rankings will help to foster competition among the PD community.
- Competition among PDs to meet their primary objectives benefits the U.S. Treasury.

Treasury should decide the optimal number of PDs needed to meet their objectives.

- The optimal number of PDs is primarily a function of the size of the debt. Countries with large borrowing needs and/or high debt-GDP balances can generally support a larger number of PDs. The DMO's funding requirements may not be larger than the aggregate PDs absorption capacity.
- Most countries with PDs have from 5 to 25 PDs at any one time. 5 PDs appears to be a minimum number to ensure competition among PDs and to avoid collusion or moral hazard.
- Too high a number of PDs dilutes the benefits that accrue to PDs, reducing their motivation. There is also less value added to the DMO as the PDs customer bases overlap and the management of a large number of PDs can become an administrative burden to the DMO.
- Both the U.S. Treasury and the Fed must evaluate the ongoing quality of PD performance to assess whether the PD group is appropriately sized and well balanced with complementary skills sufficient to meet all stated objectives.
- Setting the bar for attaining Primary Dealer status too high risks reducing the ranks of PDs, hurting competition that the Treasury and the Fed need for attaining their objectives.

Impact of Direct bidding

“Entities permitted to submit bids directly include, but are not limited to, primary dealers, other brokers and dealers (non-primary), various types of investment funds (for example, pension, hedge, mutual), insurance companies, depository institutions (banks), foreign and international entities (governmental and private), the Federal Reserve (System Open Market Account), and individuals.”
–Treasury Direct’s FAQ page (see Sources)

“Any entity or individual may bid directly as long as the entity or individual has made all the necessary arrangements for access to TAAPS and has made proper arrangements for delivery and payment for auction awards. For entities or individuals that do not have a funds and securities account with the Federal Reserve, payment is arranged through an [autocharge agreement](#).”
–Treasury Direct’s FAQ page (see Sources)

See Appendix A for the evolution of direct bidder behavior.

- The Direct bidding process offers those bidders with TAAPS access anonymity and ease in placing their bids. This has led to increased Direct bidder auction participation.
- PDs are expected to show consistent demand for all Treasury auctions. The increased use of Direct bids during auctions gives PDs a ‘dirtier lens’ through which they assess auction prospects. This could potentially reduce PDs demand in auctions because of increased auction uncertainty.
- PDs are required to bid in all government securities auctions and the New York Fed evaluates PD auction performance on an ongoing basis. Direct bidders have equal access to the TAAPS system as PDs yet there are no apparent requirements for Direct bidders to maintain TAAPS access.

Direct bidder considerations

Primary Dealers are the dominant bidder class in Treasury auctions. The Treasury and the Fed incentivize PDs to support the auctions. Indirect bidders provide information to PDs about the auction process. As more institutions bid Direct, auction uncertainty rises for the PD system which could potentially lead to increased debt funding costs. Should the privilege of Direct bidding come with more requirements and transparency? Requirements should be set that induce consistent Direct Bidder participation over the longer term.

Creating a more balanced environment among auction bidders.

- Treasury could put upper thresholds on Direct bidder auction allotments though this may result in reduced auction participation.
- Another consideration would be minimum auction participation thresholds (nominal terms, possibly as a % of capital or AUM) over a defined time period.
- Greater disclosure on Direct bidder participation.

Should Treasury increase transparency in regards to direct bidding? The current disclosure is vague.

- Direct bidding is a privilege. Standards of conduct should be reviewed, updated and made public to foster greater and more consistent bidding activity from Direct bidders.
- Direct bidders have to fill out a 3-page U.S Treasury Auctions Submitter Agreement (OMB number 1535-0137). Those without a securities and funds account in the Federal Reserve System have to fill out a 6 page Autocharge Agreement with the Treasury.

The “Greenshoe” Option

Treasury may want to consider giving Primary Dealers the opportunity to add-on a percentage of their awarded bids at the original auction price.

- The Greenshoe Option gives the dealer the ability to add-on a percentage (eg 10%) of their awarded bids, at the original auction price. Other DMO's allow from 2 hours (UK) to 5 days (Belgium) for PDs to exercise this option. The maximum non-competitive allocation after the auction is 30% of total for new bonds issued by Italy.
- This is currently done in various manners in the UK, Austria, Belgium, France, Italy, the Netherlands, and Spain (among others).
- The add-on amount is generally based on the successful bids at the relevant auction. One alternative can be to use a 4- or 6-auction trailing average of successfully accepted bids in that maturity.
- A DMO should be indifferent between issuing X or $X*1.1$ within a small window, at the same funding rate. In other words, the sale of the option to the PD is of limited cost to the DMO because the DMO is subject to an issuance calendar and they would not opportunistically issue within the option window in any case (the DMO could not have taken advantage of the subsequent lower yields; there is no opportunity cost). This changes the longer the add-on window is open, however.
- A cost could come from potentially undermining demand if there is an unknown additional supply lurking. This could be ameliorated by the fact the percentage of additional award will be known well ahead of time. But the Greenshoe option may be inappropriate as/if U.S. debt limit thresholds are neared because Treasury needs to be exacting in their issuance levels at time such times.
- On the other hand, the non-comp Greenshoe option auction process awards market participants for a successful auction and motivates PDs to see successful placement of primary issuance. The DMO benefits from more aggressive bidding in the initial auction.
- If the option is regularly exercised, Treasury can reduce bill issuance in lieu of the Greenshoe coupon issuance, fulfilling the desire to extend the average maturity of the outstanding debt. If all add-on's are exercised, there is room to reduce bill supply in lieu of coupons, given current forecasts.

Syndication

The mechanics of syndications and their popularity in the developed world.

- DMO appoints a small group of joint-book running managers to interface with the market and assume underwriting liability for the offered securities.
- Syndicate builds an order book of investor demand at a starting price recommended by lead-managing broker-dealers.
- Syndicate adjusts pricing range to determine the clearing level for DMO's target size.
- Syndicate allocates securities to investors at the market-clearing price.
- Practice is favored generally by countries with lower issuance needs, but also used in certain circumstances by the United Kingdom, Italy, France, and Germany.
- Germany uses syndications for the first ever issuance of a new federal security.
- Primary method of new-issue distribution for other U.S. securities, including GSE benchmark bullets, investment grade corporate bonds, high yield bonds, and equities.

Benefits of the syndication process.

- Increases certainty of execution.
- Enables price discovery and greater transparency for market participants.
- Facilitates a uniform-price clearing mechanism at a price that matches investor demand.
- Provides a competitive incentive for book running managers, through underwriting commissions and status, to find marginal buyers.
- Fulfills the edict of "regular and predictable" borrowing, if syndications are announced in the quarterly calendar of issuance.
- Allows a broader distribution of new issues.
- Syndication may be an effective distribution tool in the issuance of a new Treasury product, where price discovery and execution certainty will be critical.
- Syndications are more likely to be a benefit in situations where the investor base is less certain and the pricing benchmarks are less clear.
- For example, Treasury securities with maturities greater than 30 years, foreign currency-denominated issues, or potentially longer-dated FRNs.

Additional considerations for the U.S. Treasury on syndications.

- Requires a syndicate to be selected by Treasury and compensated for underwriting liability.
- Incorporates syndicate discretion into the investor allocation process.
- Exposes Treasury to market movements across a multi-hour or multi-day execution window.
- Participating investors agree to accept the universal price offered by the book running managers.
- Decision to allocate to a buyer is made by the syndicate, rather than by the buyer's marginal price.
- Enables market psychology to affect the pricing outcome, EG: investors may be "spooked" by a slow book-building process or price widening.
- Incentivizes PDs to perform against their metrics to be chosen as a syndicate manager.

Syndication Practices Globally

Syndication is a common practice

Exhibit A7: The average syndicated deal size is €4-5bn, and peripheral countries in particular can do 2-3 syndicated deals per year

Syndicated issuance: sectors of the curve, instruments, frequency and size in €bn

	Conventional								Others	
	# syndicates per year	Average size	Maturity						IL	Foreign
			2-3Y	5Y	7Y	10Y	15Y	20Y		
Austria	2	4	x	x	x	x		x		x
Belgium	2-3	4	x	x	x	x	x	x		x
Finland	2	5	x		x	x		x		x
France	0-1	5						x	x***	
Germany	0	-							x***	x
Greece*	3	5	x	x		x	x	x	x	x
Ireland*	2	5	x	x		x	x			x
Italy	1-2	5					x	x	x	x
Netherlands**	2	5	x		x			x	x	x
Portugal*	2	3	x		x	x		x		x
Spain	2-3	5				x	x	x		x

* Prior to loss of access.

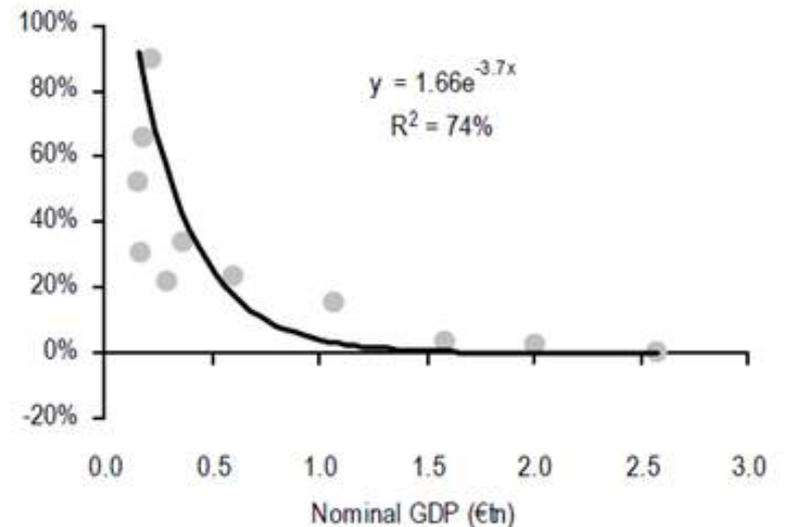
** Dutch Direct Auction.

*** Only for long-dated bonds.

Syndication is more common among smaller countries

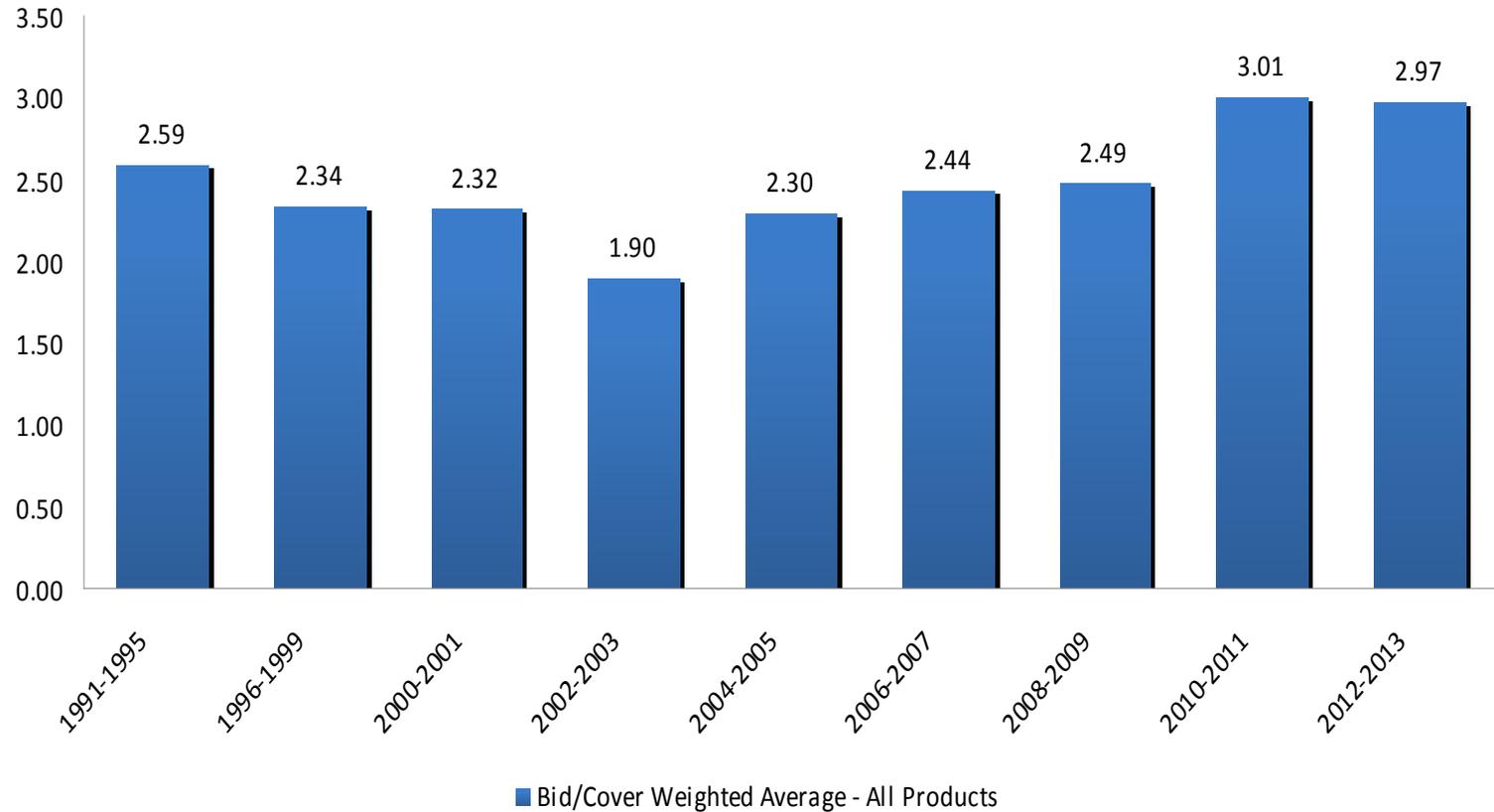
Exhibit A6: Smaller countries issue a higher percentage of their debt via syndication

% of syndicate conventional issuance over 2009-11 vs. 2011 nominal GDP; % and €tn, respectively

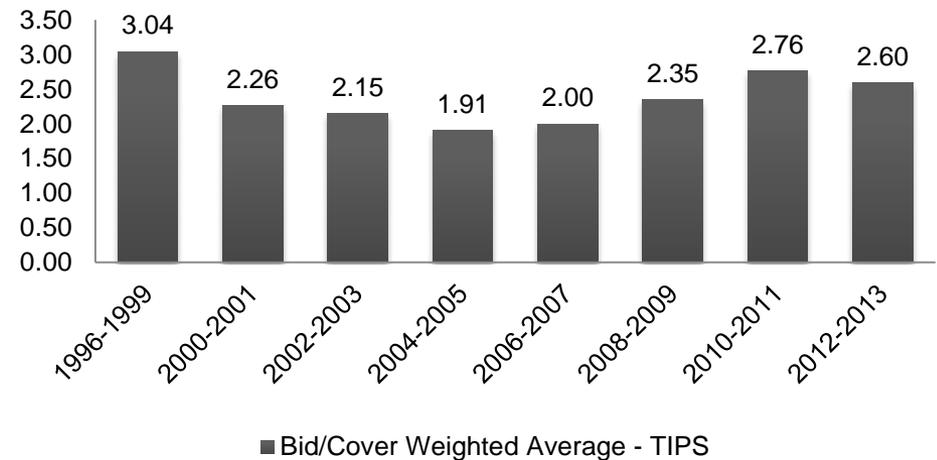
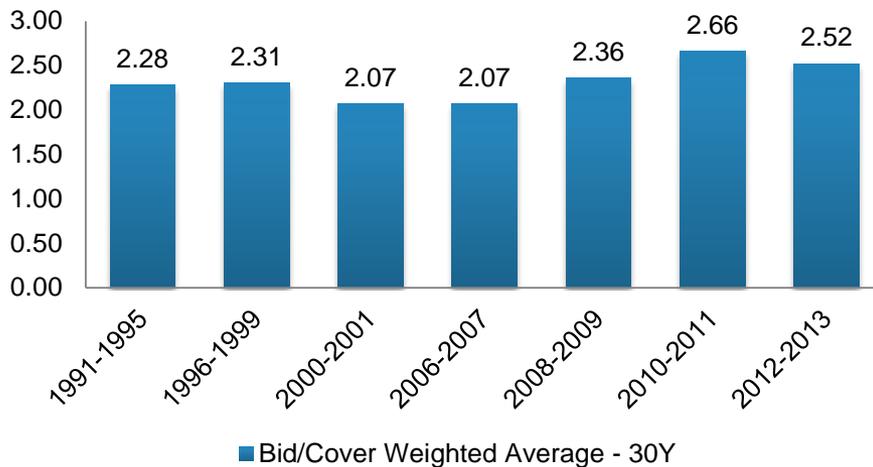
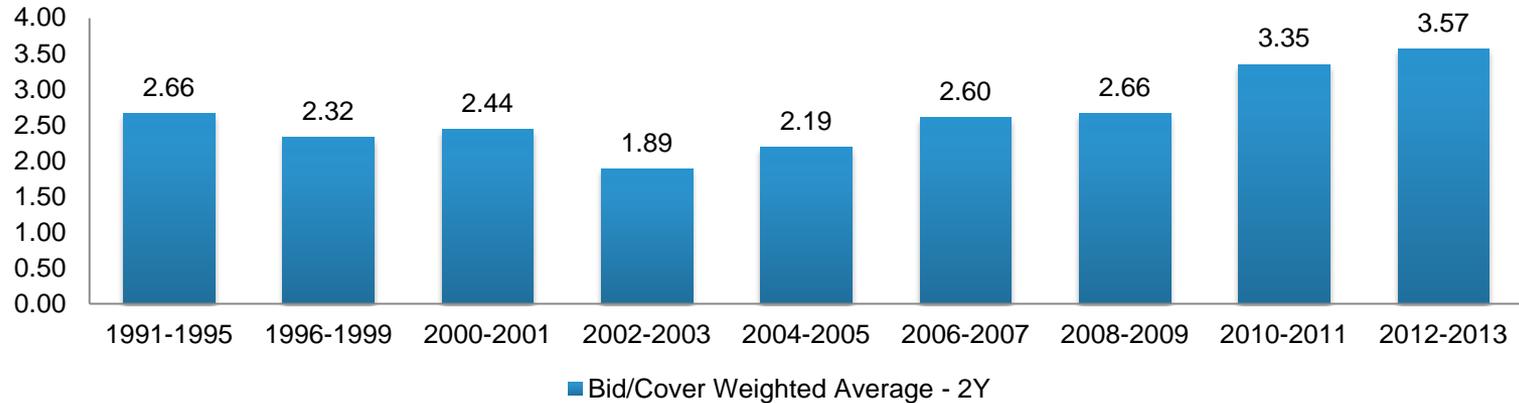


Appendix A: Analysis of auction data and Direct bidder patterns

Although auction demand has increased across the board in the past few years...

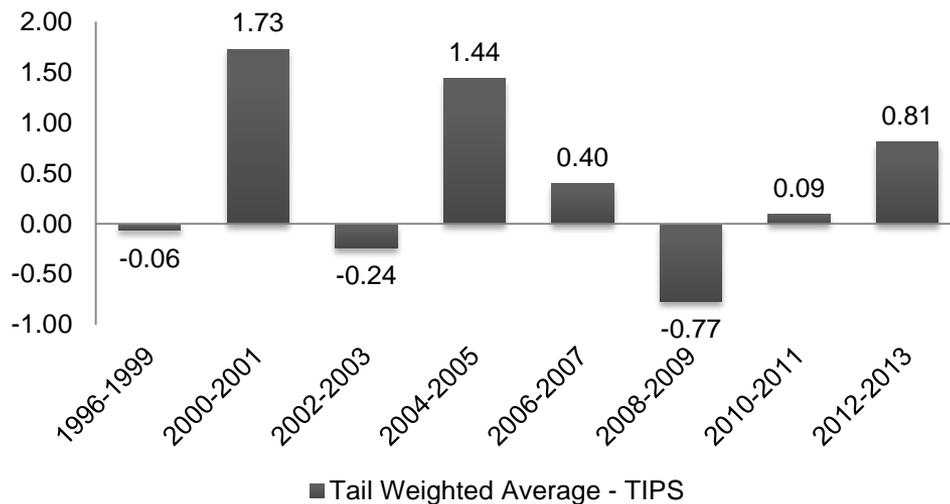
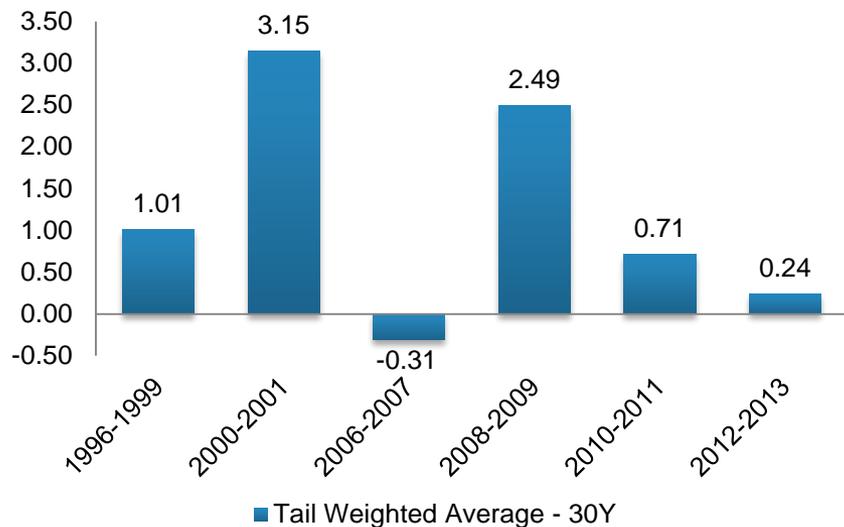
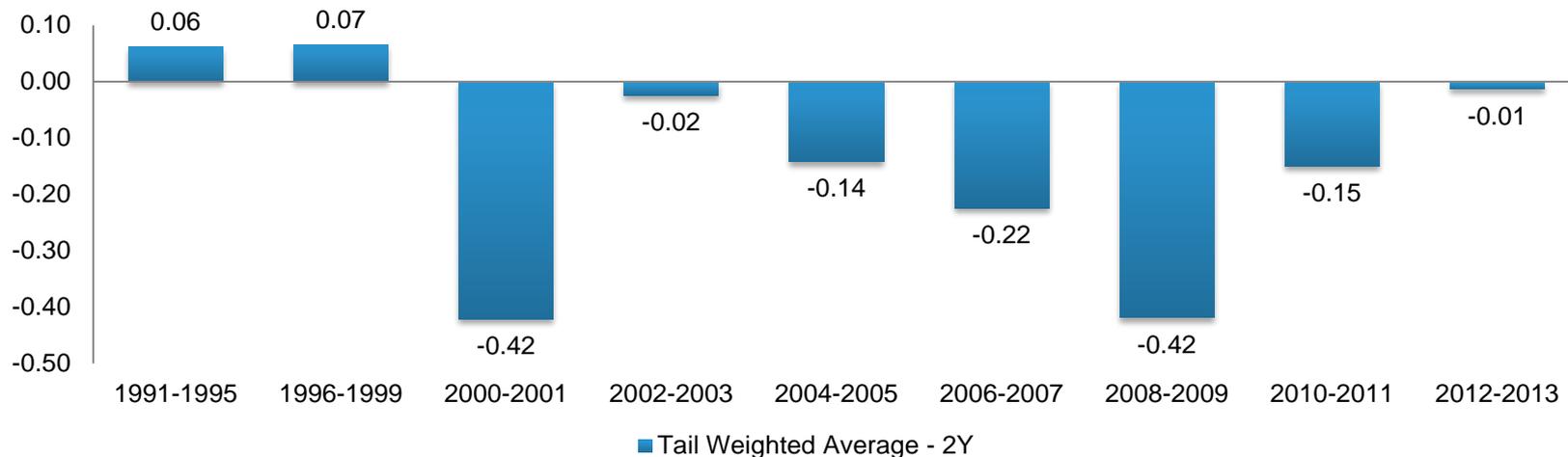


...the higher risk and/or lower liquidity sectors have not benefited quite as much as the other sectors, as evidenced by smaller bid/cover ratios...



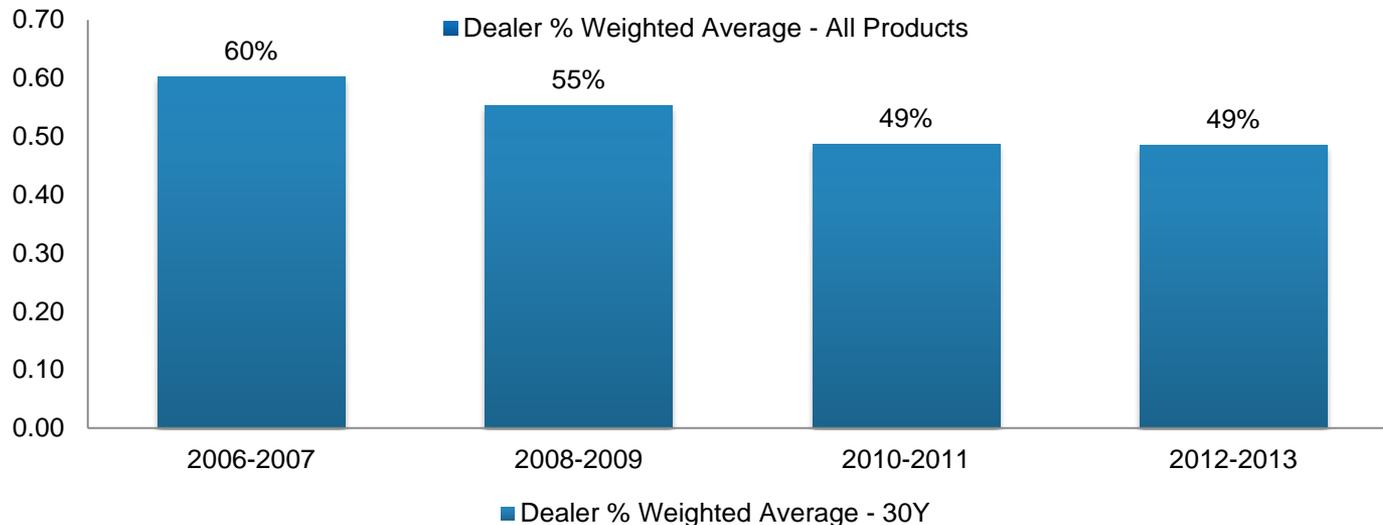
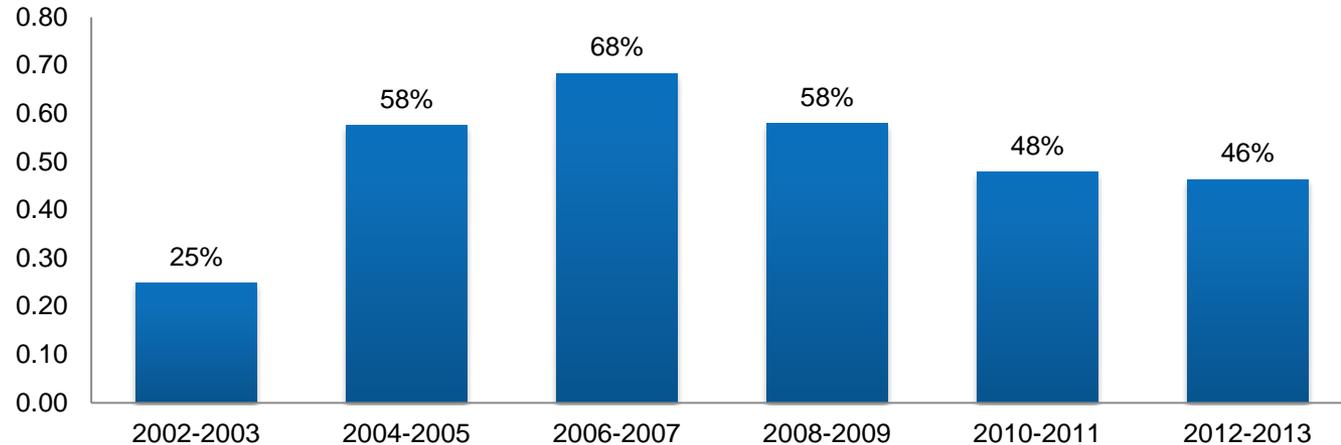
Bid to cover ratios have been increasing over the past decade for all products, especially 2Y Treasuries...
...with 30Y auctions and TIPS witnessing the smallest increase.

...and larger auction tails



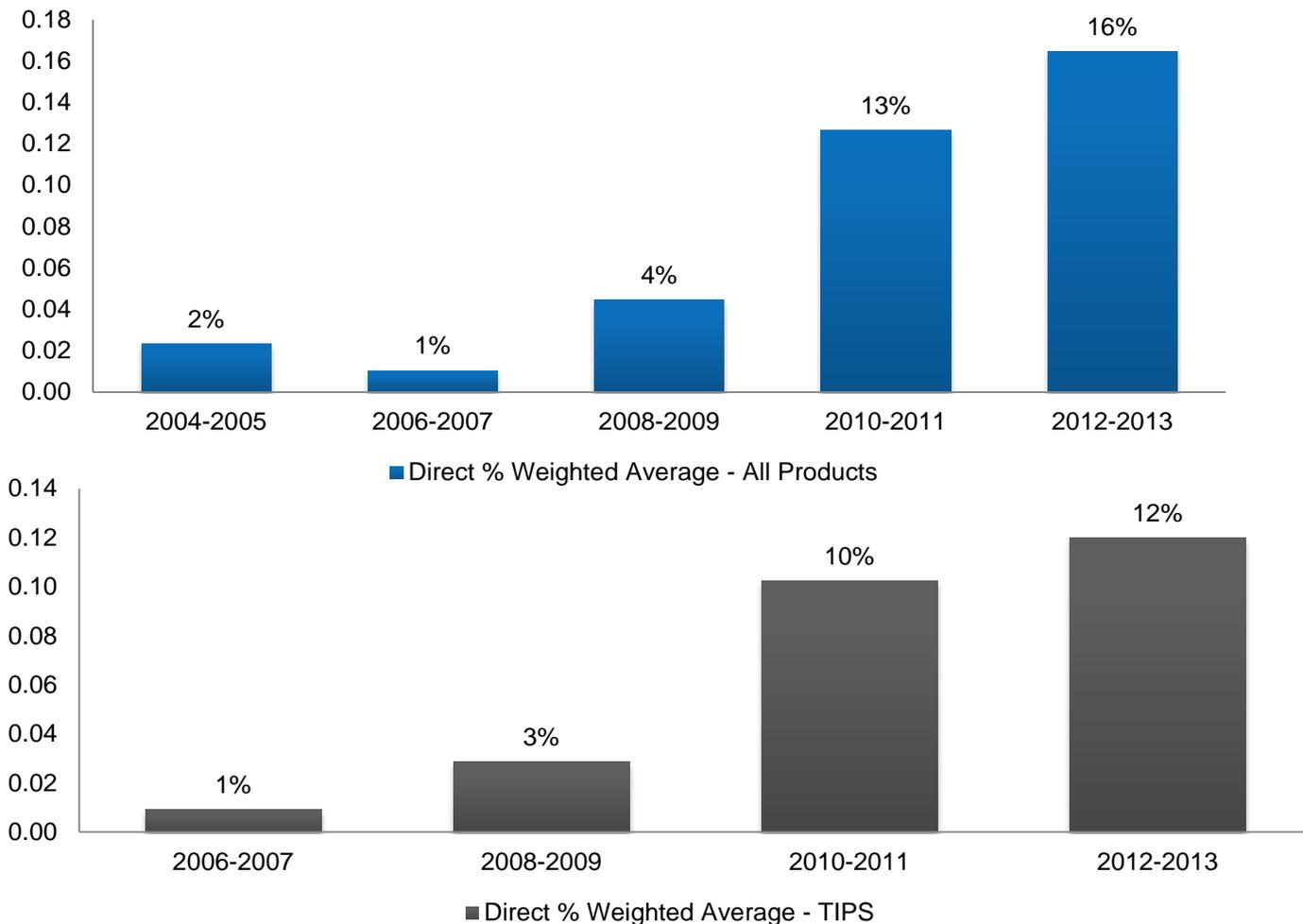
Similarly, average tail has been negative for 2Y Tsys, and positive for 30Y / TIPS.

Primary Dealers have played a smaller role in auctions in recent years, but less so in the long end. This suggests that dealer participation is required more at the long end given lower liquidity in this sector



Overall proportion of dealer participation has declined from 68% in 2006-07 to 46% in 2012-13...
...but in the 30Y sector it has declined from 60% to 49%.

Direct bidders have been replacing Primary Dealers in virtually all auctions, but less so in TIPS. This suggests that of the current suite of products that Treasury offers, TIPS may be best suited for a syndication type structure



Overall proportion of direct bidders has increased from 1% in 2006-07 to 16% in 2012-13...
...but for TIPS the proportion has increased from 1% to 12%

Appendix B: Global Issuance Recap and Other Considerations

Appendix B: Global issuance recap

Global Issuance Recap

	Debt Instrument	Maturity	Auction Type	Auction Timeline	Syndicated	Taps / Mini-Tenders	Buybacks / Switches
 U.K.	Conventional Gilt	2 years – 50 years	Multiple-price auction	Announcement: Tuesday of the previous week; Auction: 30-yr issued quarterly, 5-year and 10-year issued 1 st and 3 rd month of the quarter; Settlement: 3 business days after transaction	Yes: GBP5Bn 50-yr done on 6/2013, (GBP 3.5Bn more in conventional gilts to come for FY 2013)	Tap: Yes, but none since April 1996; Mini-tenders: ~GBP 2Bn sales to date	Buybacks of 6 or fewer months remaining to maturity to smooth maturity peaks; Switches on an ad-hoc basis, last one done 2001 in Treasury stock
	Index-Linked Gilt	5 years – 50 years	Single-price auction	Announcement: Tuesday of the previous week; Auction: Monthly with varying maturities; Settlement: 3 business days after transaction	Yes: GBP 12.5Bn planned for FY 2013	Tap: Yes, but none since November 1998; Mini-tenders: ~GBP 750MM sales to date	Switches on an ad-hoc basis, Last one done 2001
	Other Products	Treasury Bills, Double-dated Gilts and Undated Gilts (both not in circulation currently); DMO provides a Post Auction Option Facility (PAOF) for successful bidders at all auctions to have the option to acquire up to an additional 10% of the total gilts they were allotted at the average accepted price of the auction; Last reverse gilt auction in 2001					
 Japan	JGB	2 years – 40 years	Competitive price auction (2-year, 5 year, 10-year, 20-year, 30-year); Competitive yield auction / Dutch (40-year)	Announcement: About a week before auction at 10:30AM; Auction: Bidding closes at 12PM, 2-year issued end-month, 5-year issued mid-month, 10-year issued beginning of month, Issuance times of longer-maturity bonds vary; Settlement: 2 – 3 business days following auction	Yes: Not since the 1990's	Not ad-hoc but two tap auctions per month (JPY300Bn in 5-year – 15-year and in 15-year – 30-year); Mini-tender: No	Buybacks done on a monthly basis, recently focused on Linkers and Floaters; No switches
	Inflation-Indexed Bonds	10 years	None specified	None specified	No	Tap: No; Mini-tender: No	Buybacks recently targeted in 10-yr Inflation-linked and 15-yr Floaters
	Other Products	5 – 10-yr auctions also issued through non-competitive auctions for smaller bidders; OTC sales system of 2-yr, 5-yr, 10-yr JGBs, price determined by MOF for each issue, max value of JPY100 per individual applicant, monthly OTC sales; Also issue Floating Rate Bonds					
 Germany	Schaetze, Bobl, Bund	Schaetze: 2-year, Bobl: 5-year, Bund: 10- and 30-year	Multiple-price auction	Announcement: 6 business days prior to auction; Auction: Wednesdays at 11:30AM; Settlement: 2 business days following the auction	No	Tap: Yes, usually only off benchmarks; Mini-tender: No	Buybacks on a daily, ad-hoc basis in the secondary market (no announcements beforehand, no post-trading data); Switches on an ad-hoc basis
	Bobl / EI, Bund / EI	Bobl / EI: 5-year, Bund / EI: 10-year	Multiple-price auction	Announcement: Flexible; Auction: Wednesdays at 12:00PM	Yes: only for first issuance and first reopening	Tap: Yes, more sporadically than Bund / Bobl taps; Mini-tender: No	Buybacks on a daily, ad-hoc basis in the secondary market (no announcements beforehand, no post-trading data); Switches on an ad-hoc basis
	Other Products	Foreign currency bonds, Federal Savings Notes; Bunds are strippable					

Appendix: Global issuance recap (Cont'd)

Global Issuance Recap (cont'd)

	Debt Instrument	Maturity	Auction Type	Auction Timeline	Syndicated	Taps / Mini-Tenders	Buybacks / Switches
 Italy	CTZ, BTP	CTZ: 2-year; BTP: 3-year – 30-year	Single-price auction	Announcement: 2 business days prior to auction; Auction: 2-year at end of month, 2-year issued mid-month, 5-year and 10-year issued end of month; Settlement: 3 business days following the auction	Yes: EUR15Bn 15-yr in January 2013; EUR6Bn 30-yr in May 2013	Tap: Yes, off off-the-runs more regularly; Mini-tender: No	Buybacks and Switches on an ad-hoc basis
	CCTeu (FRN), BTP€ (Linker)	CCTeu: 5-year, BTP€: 5-year to 30-year	Single-price auction	CCTeu: Announcement: 2 business days prior to auction; Auction: End of most favorable month; Settlement: 2 business days following the auction; Announcement: 2 business days prior to auction; BTP€: Auction: End of month together with CTZ auction; Settlement: 3 business days following the auction	None in 2012 – 2013 but BTP Italia deal this year (see Other Products section)	Tap: Yes, CCTeu fairly regularly and Linkers more sporadically; Mini-tender: No	Beginning June 2010, MEF offered opportunity to exchange current CCTs with new CCTeu
	Other Products	BTP Italia (Inflation-Linked Bonds): EUR17Bn syndicated deal in 2013; Bonds over 5 years are strippable					
 France	BTAN, OAT	BTAN: 2 years – 5 years; OAT: 7 years to 50 years	Multiple-price auction	Announcement of BTAN and OAT: 4 business days prior to auction; BTAN Auction: 3 rd working Thursday of each month at 10:50AM; OAT auction: 1 st working Thursday of each month at 10:50AM; Settlement of BTAN and OAT: Tuesday following the auction	Yes: EUR4.5Bn of 30-yr OAT done on May 25, 2013 (usually 1 syndication in the long end each year)	Tap: Yes, sporadically, more frequently for 30-year bonds than for shorter paper; Mini-tenders: No	Buybacks daily, Switches on an ad-hoc basis
	OATi, OAT€ (Inflation Linked)	≥ 7 years	Multiple-price auction	Announcement: 4 business days prior to auction; Auction: 3 rd working Thursday of month at 11:50AM; Settlement: Tuesday following the auction	Yes: sporadic, EUR3bln of 15yr in 2008	Tap: Yes, sporadically; Mini-tenders: No	Buybacks on an ad-hoc basis
	Other Products	Floating rate OAT Bonds: TEC 10 OAT (last matured in 2009, none in circulation currently), OATs and BTANs are strippable					
 Canada	Nominal Bond	2-year to 30-year	Multiple-price auction	Announcement: Week prior at 3:30PM; Auction: Usually on Wednesday by 12:00PM; Settlement: 2 business days for 2- and 3-year bonds; 3 business days for 5-, 10-, and 30-year bonds	Yes: not since 1991	Tap: No; Mini-tenders: No	Buybacks and switches done regularly; bond buybacks done once or twice a quarter, target off-the-runs (12 months – 25 years); cash management buybacks (under 18 months) done weekly; Switches quarterly in 2-yr paper, less frequently in 30s
	Real Return Bond	30-year	Single-price auction (as scheduled for the 9/5/2013 30-yr auction)	Announcement: Week prior at 3:30PM; Auction: Usually on Wednesday by 12:05PM; Settlement: 3 business days after auction	Yes: sporadic; 30-yr deal in the mid 1990's	Tap: No; Mini-tenders: No	No buybacks nor switches
	Other Products	Canadian Savings Bonds, Canadian Premium Bonds, Foreign currency funding (syndicated offerings)					

Global Comparison

- Most countries with PDs have anywhere from 5 to 25 PDs at any one time. 5 PDs appears to be a minimum number to ensure competition among PDs and to avoid collusion or moral hazard. A large number of PDs can dilute the benefits that accrue to PDs; benefits that are critical in inducing PDs to perform the responsibilities. Countries with large borrowing needs and/or high debt-GDP balances can generally support a larger number of PDs.
- The PD system in the U.S. appears well-suited to the mix of securities now being auctioned by Treasury. Other G-7 countries use syndications to sell less conventional securities like foreign-denominated bonds and ultra-long instruments. If Treasury decides to issue unconventional securities to further diversify their investor base, then syndications should be considered.
- Syndicated deals in the EU are typically timed for periods when institutions tend to be cash rich. Since Treasury is a frequent borrower and auction statistics tend to be consistent over time, seasonal syndicated deals do not appear necessary in the current environment.
- Most EU countries come with 1-3 syndicated deals per year. Since Treasury likes to be a consistent and reliable borrower, periodic and/or opportunistic syndicated deals would not fit Treasury's stated goals.
- The UK supplements gilt auction sales with other distribution methods such as syndications (long-dated gilts and index-linked gilts), mini-tenders (to supplement shortfalls in syndications) and their Post Auction Option Facility or PAOF (which allows auction bidders to acquire up to an additional 10% of their auction allocation within a 2 hour period after each auction). Treasury often adjusts T-Bill issuance to changing cash flow needs so such 'top-up' schemes are generally not needed.
- In Japan most JGB's are sold via competitive price auctions; the last syndicated JGB deal was in the 1990's. Some JGB auctions are non-competitive and designed for retail investors (minimum of JPY 10,000 and no upper limit) and Japan also has an OTC sales system for 2yr, 5yr and 10yr maturities where the price is set by the MOF and where there is a maximum allotment of JPY100 mln per individual application.

Appendix C: Standards for Primary Dealer Status

Standards for Primary Dealer status

- PDs must be an SEC-registered and supervised broker-dealer or a U.S.-chartered bank subject to official supervision by bank supervisors.
- A registered broker-dealer must have at least \$150mln in regulatory net capital and they must be in compliance with all capital or other regulatory requirements imposed by either the SEC or other self-regulatory organization or SRO.
- A bank must meet the minimum Tier I and Tier II capital standards under the applicable Basel Accord and they must have at least \$150mln of Tier I capital under the applicable Basel Accord guidelines.
- An aspiring PD (either broker-dealer or bank) must have been in business for at least a year prior to application.
- PDs must have sufficient scale and experience in their back office to confirm and manage transactions with the New York Fed.
- PDs must also clear through one of the U.S. clearing organizations that have a clearing relationship with the New York Fed. PDs must also have agreements in place with the clearing organization to transact in triparty reverse/repo operations.
- PDs must be a participant in central counterparty services such as DTCC, FICC and GSD.
- PDs must have a “robust” business continuity plan, including an alternate site staffed by trained professionals in clearing.
- PDs must maintain a robust compliance program. The New York Fed reserves the right to consult with relevant bank supervisors or the SEC on the firm’s control environment.
- Under the Primary Dealers Act of 1988 the New York Fed may deny the application of a foreign, prospective primary dealer if it is deemed that the applicant’s country of domicile does not provide U.S. counterparts with equal access to underwriting and distribution of government debt.
- PDs must file weekly FR 2004 reports on outright positions, transactions and financing and fails in Treasury and other marketable debt securities. PDs must report daily transactions in when-issued (WI) securities via the FR 2004WI report.

Sources

- “Primary Dealers in Government Securities: Policy Issues and Selected Countries’ Experience,” Marco Arnone and George Iden, IMF Working Paper, Monetary and Exchange Affairs Dept., March 2003
- “Primary Dealer Systems,” Gemloc Advisory Services, The World Bank, March 2010
- “UK Government Securities: a Guide to ‘Gilts’,” United Kingdom Debt Management Office, 10th edition, June 2012
- “A primer on Euro area government debt markets,” J.P. Morgan European Rates Strategy, June 29 2012
- “Primary Dealers’ Waning Role in Treasury Auctions,” Federal Reserve Bank of New York, Liberty Street Economics, <http://libertystreeteconomics.newyorkfed.org/2013/02/primary-dealers-waning-role-in-treasury-auctions.html>
- “Administration of Relationships with Primary Dealers,” Federal Reserve Bank of New York, http://www.newyorkfed.org/markets/pridealers_policies.html
- “Auction Frequently Asked Questions,” U.S. Treasury, http://www.treasurydirect.gov/instit/research/faqs/faqs_auct.htm#who