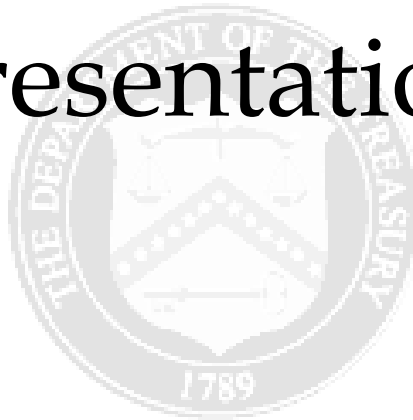


Treasury Presentation to TBAC



Office of Debt Management



Fiscal Year 2018 Q4 Report

Table of Contents

I.	Executive Summary	p. 4
II.	Fiscal	
	A. Quarterly Tax Receipts	p. 6
	B. Monthly Receipt Levels	p. 7
	C. Largest Outlays	p. 8
	D. Treasury Net Nonmarketable Borrowing	p. 9
	E. Cumulative Budget Deficits	p. 10
	F. Deficit and Borrowing Estimates	p. 11
	G. Budget Surplus/Deficit	p. 12
	H. Privately-Held Net Marketable Borrowing Outlook	P. 13
III.	Financing	
	A. Sources of Financing	p. 16
	B. OMB's Projections of Net Borrowing from the Public	p. 18
	C. Interest Rate Assumptions	p. 19
	D. Projected Net Marketable Borrowing Assuming Future Issuance Remains Constant	p. 20
IV.	Portfolio Metrics	
	A. Historical Weighted Average Maturity of Marketable Debt Outstanding	p. 23
	B. Bills Outstanding as a Percent of Portfolio	P. 24
	C. Maturity Profile	p. 25
V.	Demand	
	A. Summary Statistics	p. 28
	B. Bid-to-Cover Ratios	p. 29
	C. Investor Class Awards at Auction	p. 34
	D. Primary Dealer Awards at Auction	p. 38
	E. Direct Bidder Awards at Auction	p. 39
	F. Foreign Awards at Auction	p. 40

Section I: Executive Summary



Highlights of Treasury's November 2018 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays

- During FY 2018, receipts totaled \$3,329 billion (16.1% of GDP). Non-withheld income and SECA taxes were up \$89 billion (15%) in FY 2018, most of which occurred during April, when strong final payments were made for the 2017 (pre-tax cut) liability. Withheld income and FICA taxes were up \$23 billion (1%) in FY 2018, reflecting growth in both employment and wages. Since February, when use of lower tax withholding rates was required, withheld income and FICA taxes have either declined or shown small increases. Mostly offsetting the increases, gross corporate taxes were \$76 billion (22%) lower than last year, largely due to the corporate tax rate reduction and the expanded ability to immediately deduct the full value of equipment purchases. Corporate refunds were up \$17 billion (39%) compared with last year.
- During FY 2018, outlays totaled \$4,108 billion (19.9% of GDP). After calendar adjustments, FY 2018 outlays were \$183 billion (5%) higher than last year. Treasury outlays were \$83 billion (15%) higher due primarily to increased interest on the public debt of \$65 billion (14%) and lower overall receipts from the GSEs. Homeland Security outlays were \$18 billion (35%) higher due to increased payments for disaster relief. Education outlays were \$48 billion (43%) lower due to differences in subsidy re-estimates during the year. Social Security Administration outlays were \$43 billion (4%) higher due to increases in enrollment and the average benefit. Health and Human Services outlays were \$41 billion (4%) higher due to increases in Medicare. Defense expenditures were up \$36 billion (6%) due to increased spending for military personnel, operations, maintenance, and procurement.

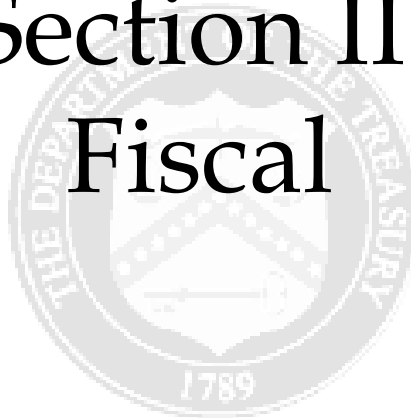
Projected Net Marketable Borrowing (FY 2019)

- Based on the quarterly borrowing estimate, Treasury's Office of Fiscal Projections (OFP) currently estimates a net privately-held marketable borrowing need of \$425 billion for Q1 FY 2019, with an end-of-December cash balance of \$410 billion. For Q2 FY 2019, the net privately-held marketable borrowing need is projected to be \$356 billion, with an end-of-March cash balance of \$320 billion. Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.
- Recent deficit estimates contained in OMB's "Mid-Session-Review, Fiscal Year 2019" (July 2018) in conjunction with SOMA redemptions suggest that Treasury auction sizes will need to rise over the next few years. CBO's updated budget projections are not yet available.

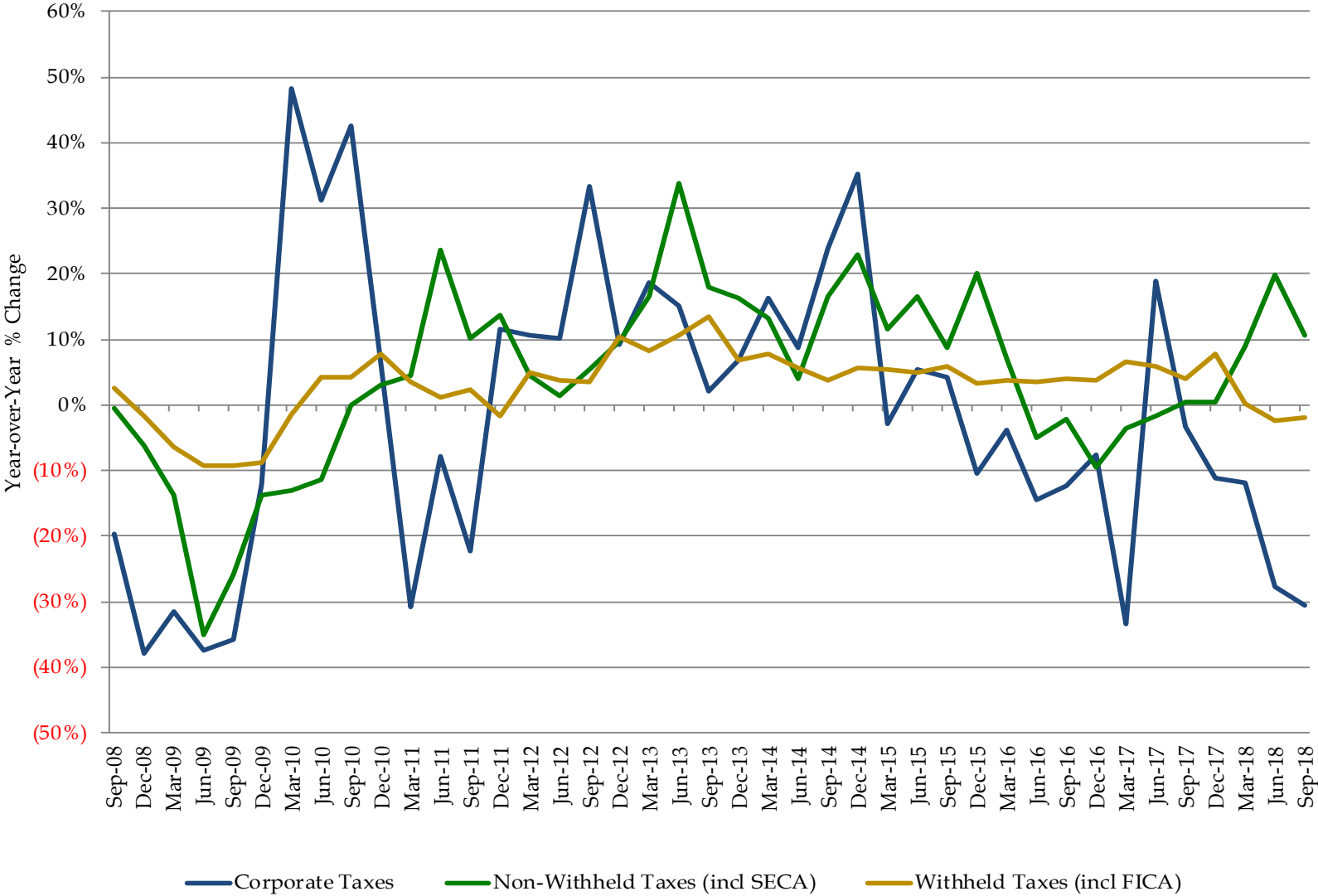
Demand for Treasury Securities

- Bid-to-cover ratios for all securities were largely stable over the last quarter.
- Foreign demand remained steady.

Section II: Fiscal

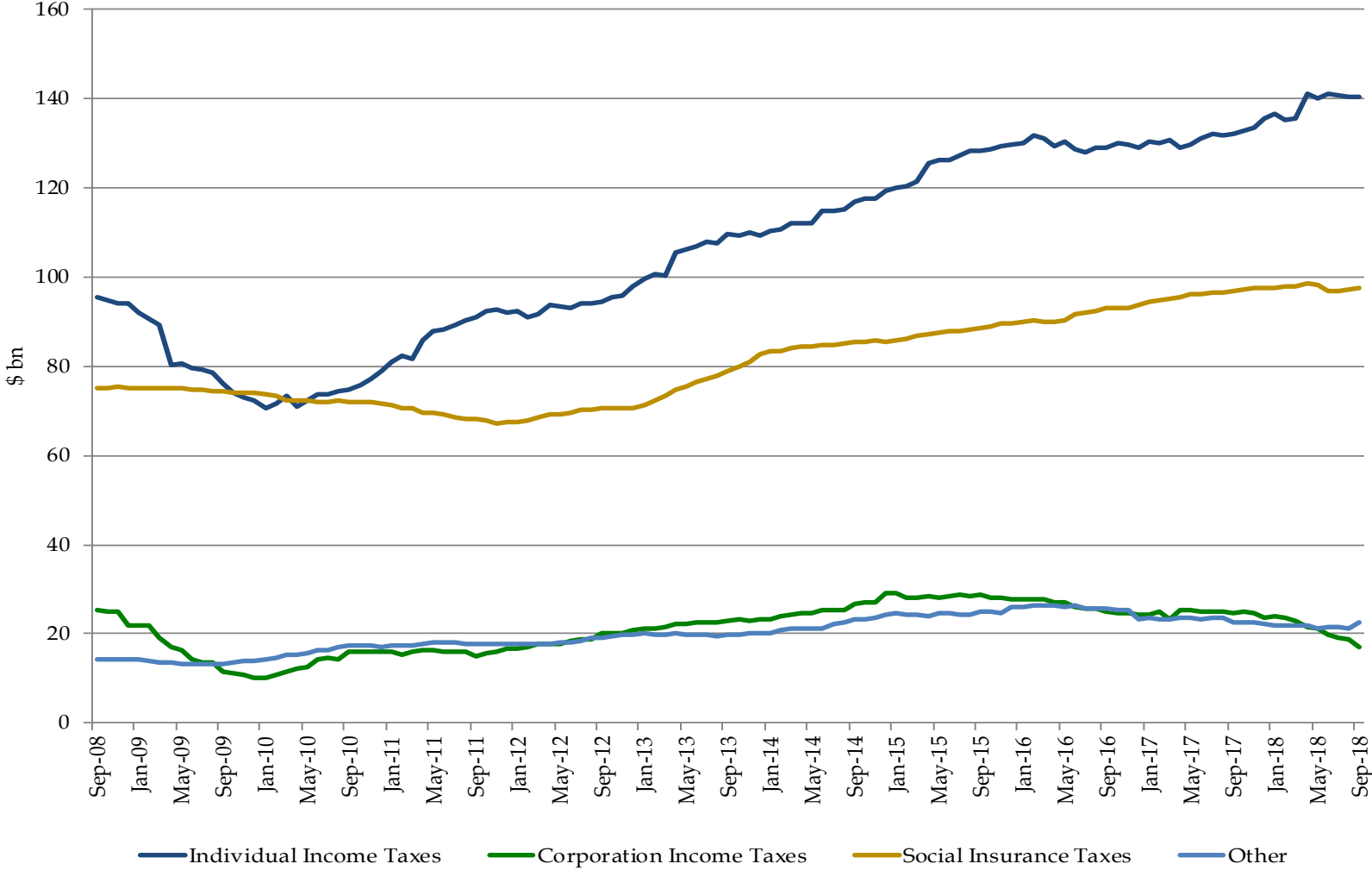


Quarterly Tax Receipts



Source: United States Department of the Treasury

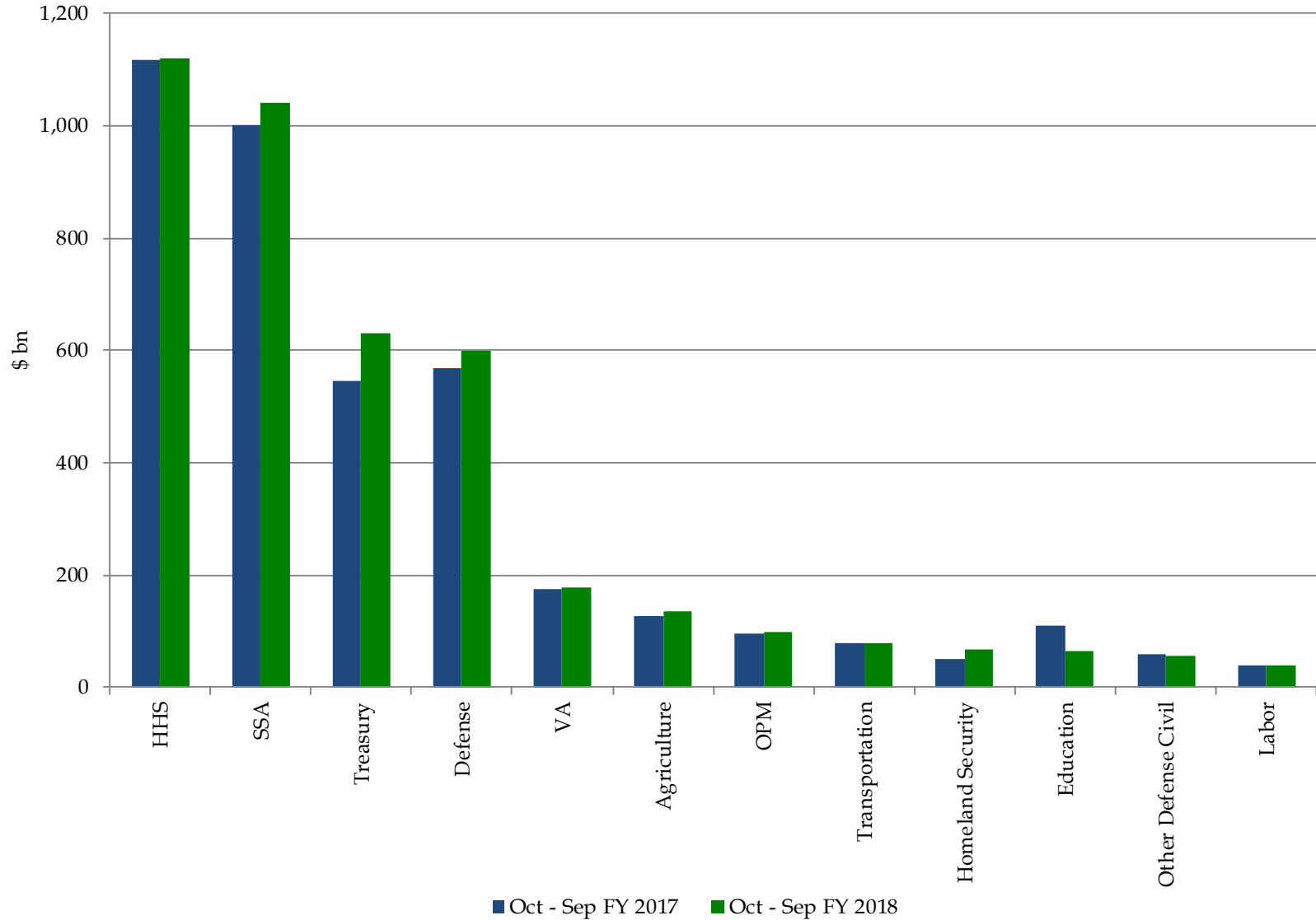
Monthly Receipt Levels (12-Month Moving Average)



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.

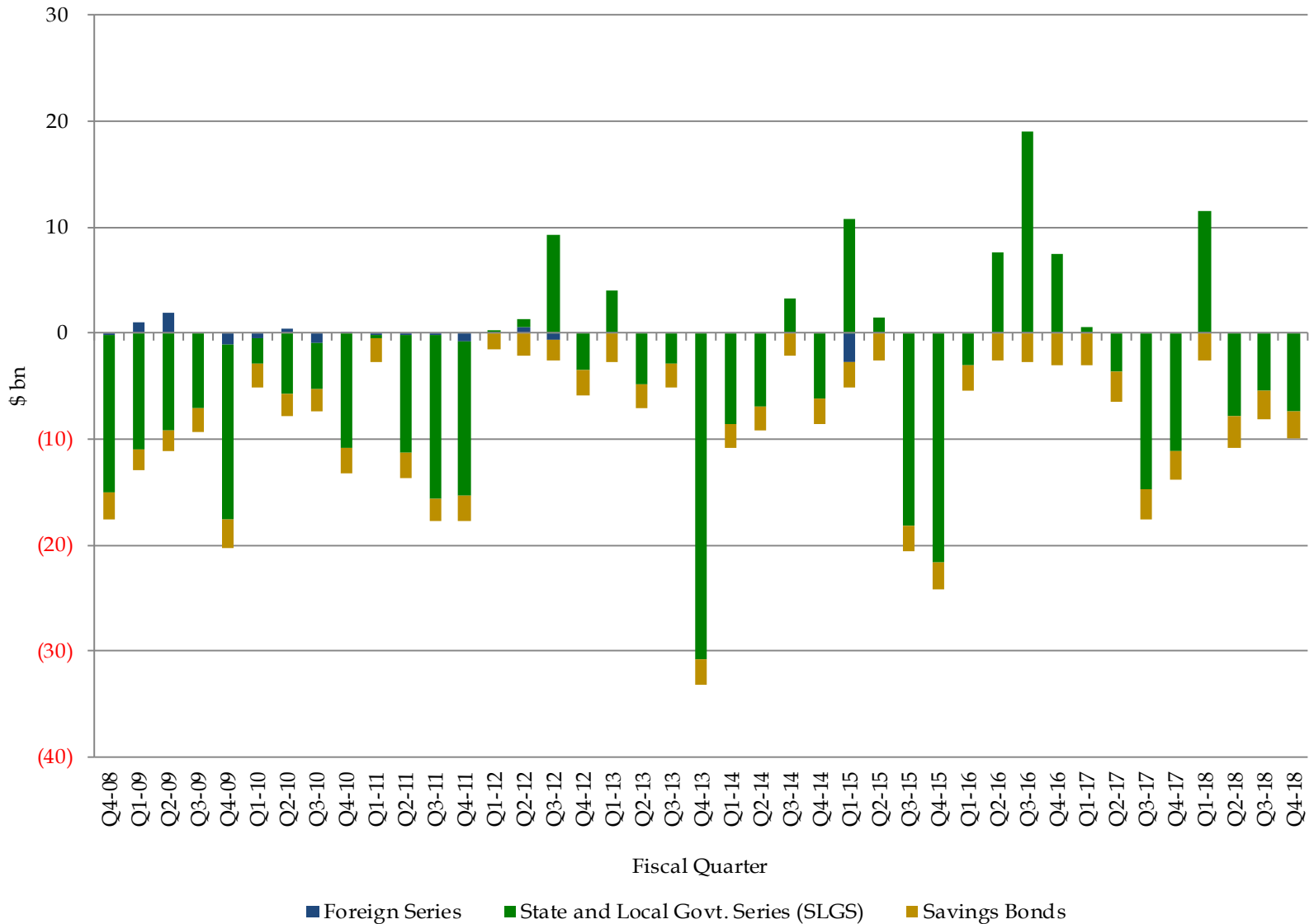
Source: United States Department of the Treasury

Largest Outlays



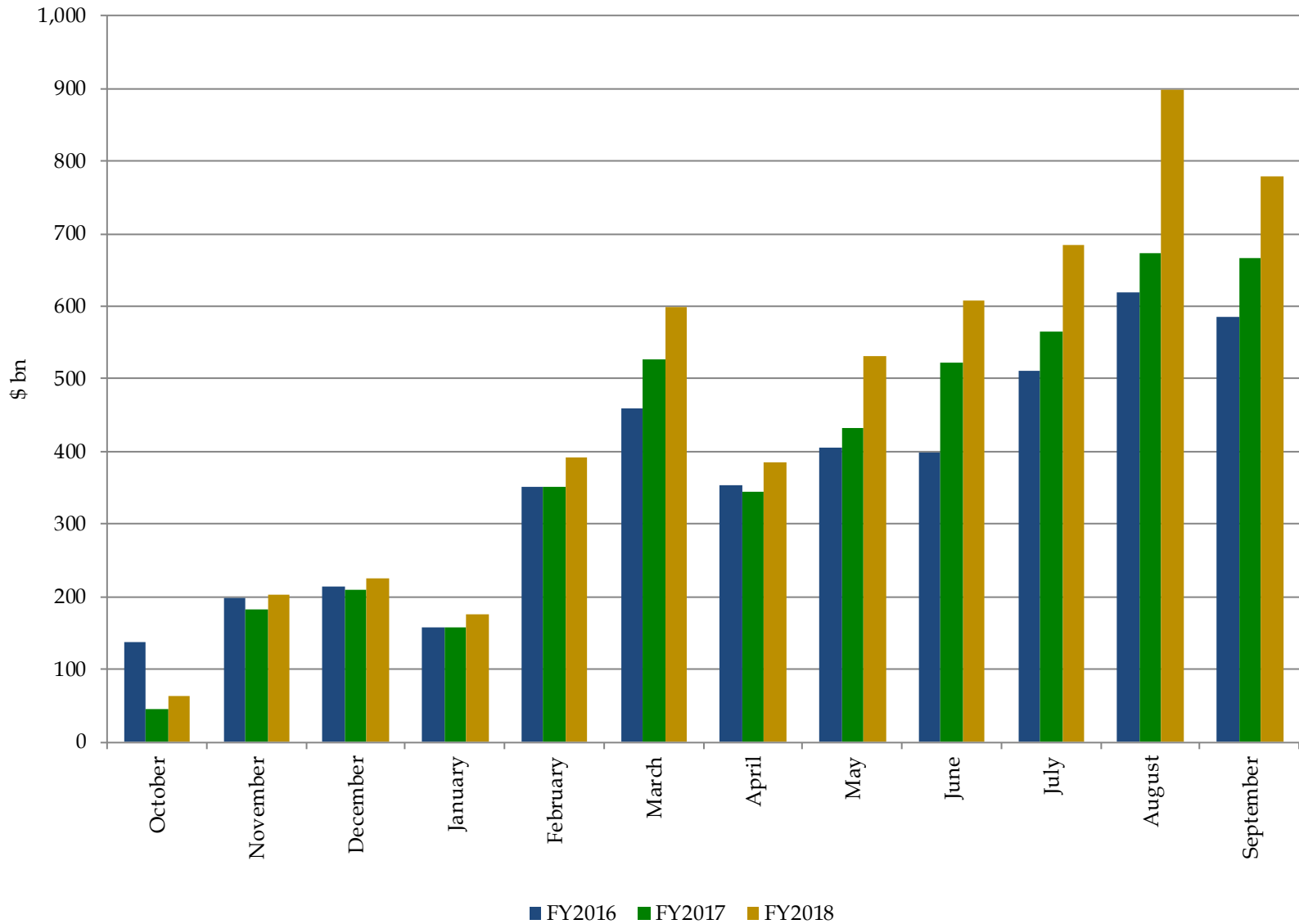
Source: United States Department of the Treasury

Treasury Net Nonmarketable Borrowing



Source: United States Department of the Treasury

Cumulative Budget Deficits by Fiscal Year



Source: United States Department of the Treasury

FY 2019-2021 Deficits and Net Marketable Borrowing Estimates*, in \$ billions

	Primary Dealers ¹	OMB ²	CBO ³	CBO ⁴
FY 2019 Deficit Estimate	1,000	1,086	955	981
FY 2020 Deficit Estimate	1,100	1,076	866	1,008
FY 2021 Deficit Estimate	1,200	1,010	945	1,123
FY 2019 Deficit Range	825-1,135			
FY 2020 Deficit Range	1,000-1,250			
FY 2021 Deficit Range	1,000-1,365			
FY 2019 Privately-Held Net Marketable Borrowing Estimate	1,300			
FY 2020 Privately-Held Net Marketable Borrowing Estimate	1,200			
FY 2021 Privately-Held Net Marketable Borrowing Estimate	1,273			
FY 2019 Privately-Held Net Marketable Borrowing Range	1,036-1,460			
FY 2020 Privately-Held Net Marketable Borrowing Range	900-1,500			
FY 2021 Privately-Held Net Marketable Borrowing Range	895-1,465			
FY 2019 SOMA Redemption Estimate	286			
FY 2020 SOMA Redemption Estimate	120			
FY 2021 SOMA Redemption Estimate	0			
FY 2019 Net Marketable Borrowing Estimate	1,014	1,186	1,049	1,074
FY 2020 Net Marketable Borrowing Estimate	1,080	1,164	924	1,065
FY 2021 Net Marketable Borrowing Estimate	1,273	1,097	993	1,171
Estimates as of:	Oct-18	Jul-18	May-18	Apr-18

¹Based on primary dealer feedback in October 2018. Estimates above are medians.

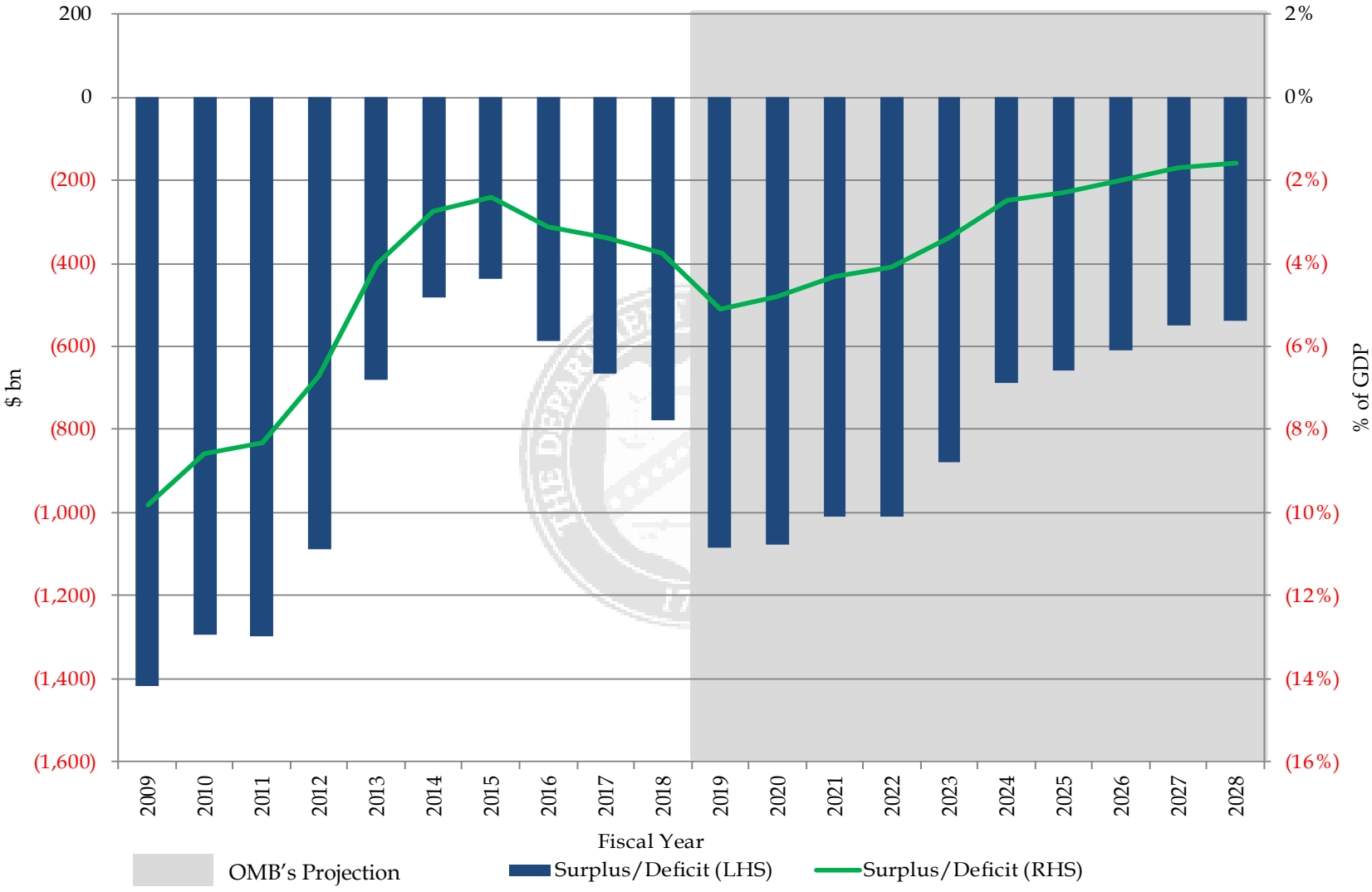
²Table S-11 of OMB's "Mid-Session Review, Fiscal Year 2019," July 2018.

³Table 2 of CBO's "An Analysis of the President's 2019 Budget," May 2018.

⁴Table 4-4 of CBO's "The Budget and Economic Outlook: 2018 to 2028," April 2018 (current law).

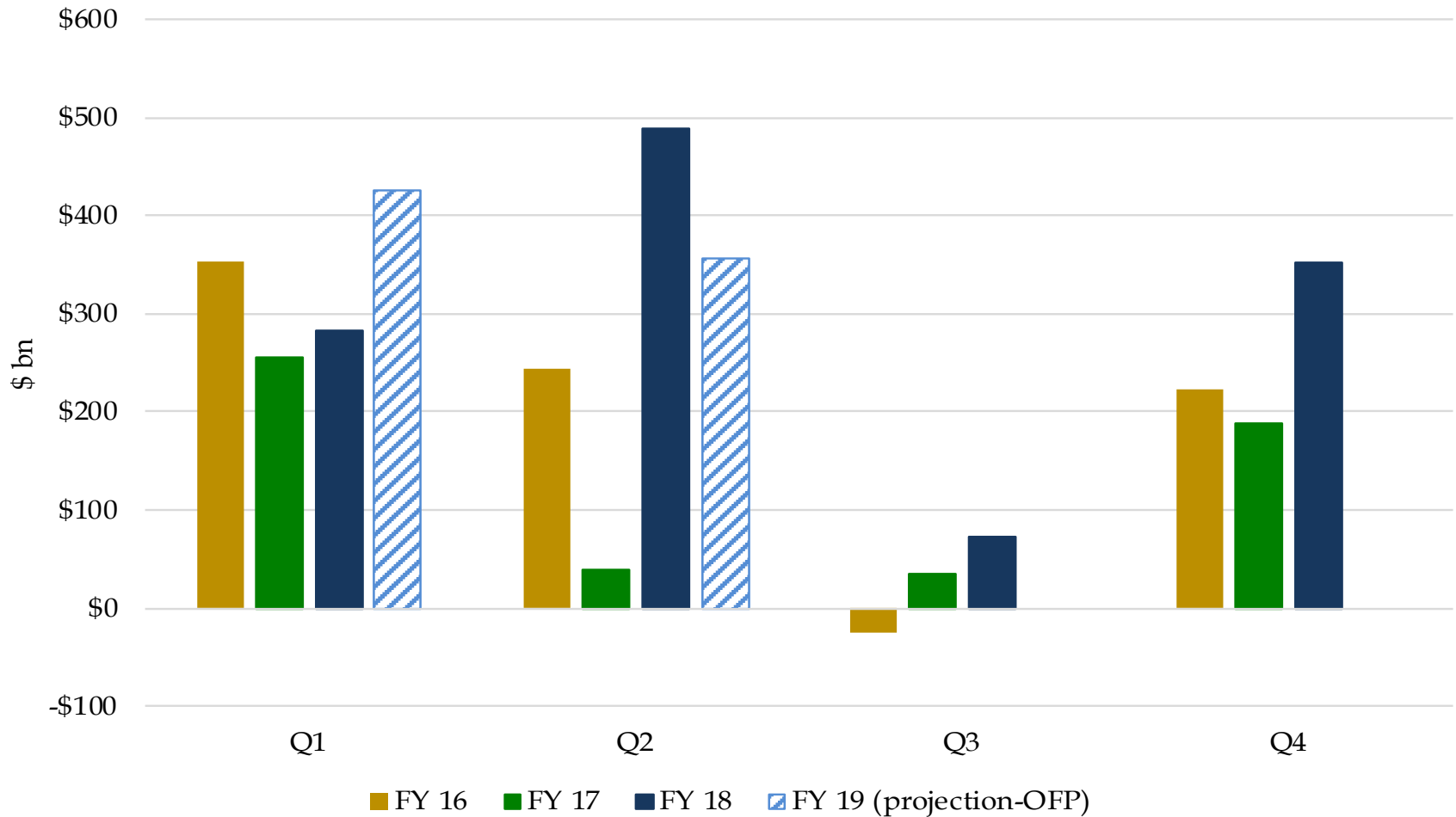
*Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.

Budget Surplus/Deficit



Projections are from OMB's Table S-11 of "Mid-Session Review, Fiscal Year 2019," July 2018.

Privately-Held Net Marketable Borrowing Outlook*



*Privately-held marketable borrowing excludes rollovers (auction “add-ons”) of Treasury securities held in the Federal Reserve’s System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.

Section III: Financing



Assumptions for Financing Section (pages 16 to 21)

- Portfolio and SOMA holdings as of 9/30/2018.
- Estimates assume an end date for SOMA capped redemptions at the end of CY2020. The assumption is based on the median case from “Statement Regarding the Annual Report on Open Market Operations during 2017,” Federal Reserve Bank of New York, April 2018.
- Estimates assume announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given changes made at the August 2018 refunding, while using a total of ~\$2.24 trillion of bills outstanding.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 9/30/2018.
- No attempt was made to account for future financing needs.



Sources of Privately-Held Financing in FY18 Q4*

July - September 2018	
Net Bill Issuance	82
Net Coupon Issuance	271
Subtotal: Net Marketable Borrowing	353
Ending Cash Balance	385
Beginning Cash Balance	333
Subtotal: Change in Cash Balance	52
Net Implied Funding for FY18 Q4**	301

Security	July - September 2018 Bill Issuance			Fiscal Year-to-Date Bill Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
4-Week	690	650	40	2,460	2,405	55
13-Week	645	624	21	2,466	2,334	132
26-Week	567	564	3	2,154	1,905	249
52-Week	78	60	18	302	260	42
CMBs	0	0	0	139	179	(40)
Bill Subtotal	1,980	1,898	82	7,521	7,083	438

Security	July - September 2018 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	52	41	11	187	164	23
2-Year	105	78	27	358	234	124
3-Year	102	72	30	345	294	51
5-Year	109	53	56	420	398	22
7-Year	91	69	22	348	224	124
10-Year	71	14	57	267	66	201
30-Year	47	0	47	171	3	168
5-Year TIPS	14	0	14	44	53	(9)
10-Year TIPS	24	16	8	70	33	37
30-Year TIPS	0	0	0	17	0	17
Coupon Subtotal	615	344	271	2,227	1,469	758

Total	2,595	2,242	353	9,748	8,552	1,196
-------	-------	-------	-----	-------	-------	-------

*Privately-held marketable borrowing excludes rollovers (auction “add-ons”) of Treasury securities held in the Federal Reserve’s System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.

**An end-of-September 2018 cash balance of \$385 billion versus a beginning-of-July 2018 cash balance of \$333 billion. By keeping the cash balance constant, Treasury arrives at the net implied funding number.

Sources of Privately-Held Financing in FY19 Q1*

October - December 2018	
Assuming Constant Coupon Issuance Sizes**	
Treasury Announced Net Marketable Borrowing***	425
Net Coupon Issuance	309
Implied Change in Bills	116

Security	October - December 2018 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	53	41	12	53	41	12
2-Year	151	104	47	151	104	47
3-Year	108	72	36	108	72	36
5-Year	155	94	61	155	94	61
7-Year	124	91	33	124	91	33
10-Year	72	27	45	72	27	45
30-Year	48	3	45	48	3	45
5-Year TIPS	14	0	14	14	0	14
10-Year TIPS	11	0	11	11	0	11
30-Year TIPS	5	0	5	5	0	5
Coupon Subtotal	741	432	309	741	432	309

*Privately-held marketable borrowing excludes rollovers (auction “add-ons”) of Treasury securities held in the Federal Reserve’s System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.

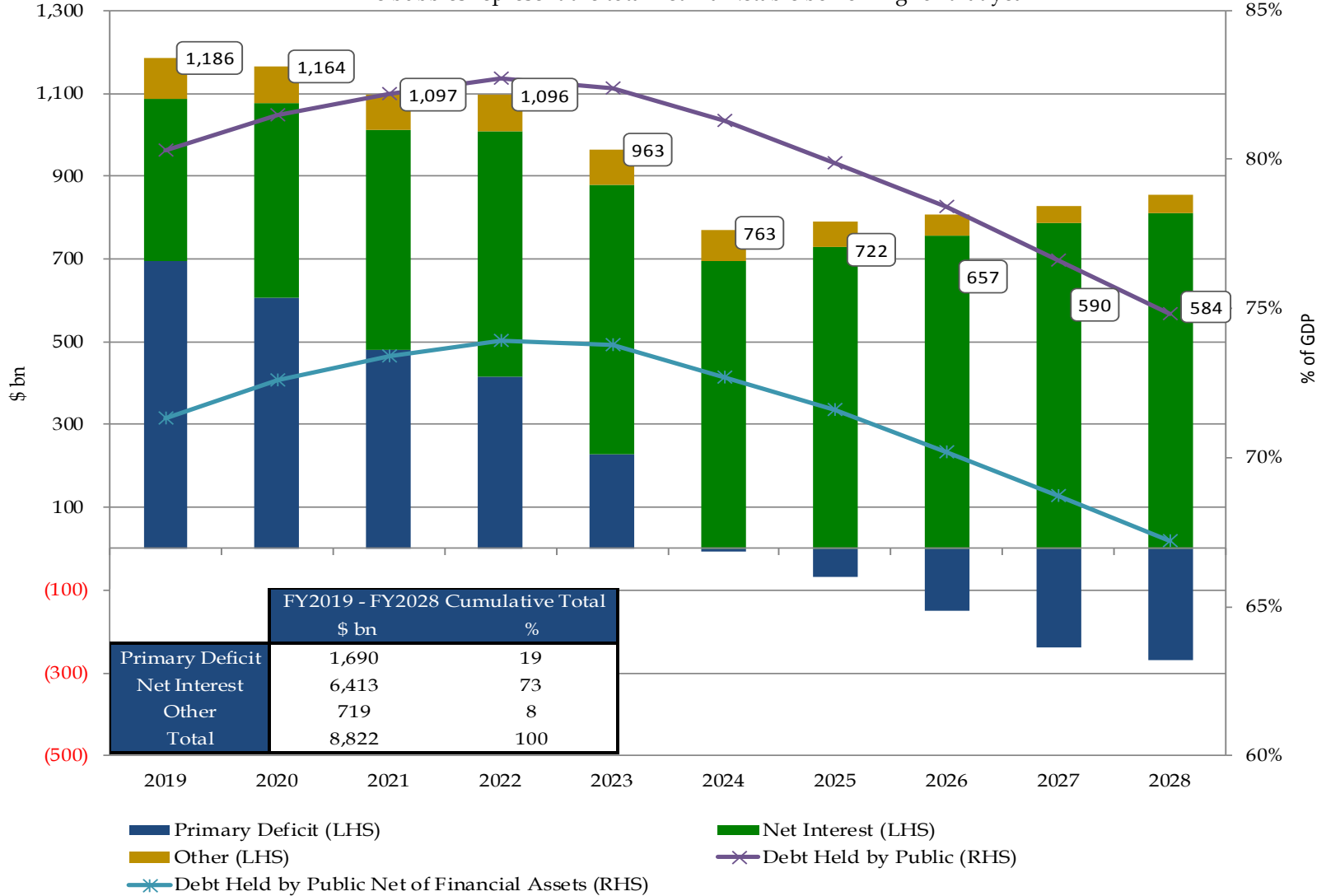
**Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made at the August 2018 refunding.

***Assumes an end-of-December 2018 cash balance of \$410 billion versus a beginning-of-October 2018 cash balance of \$385 billion.

Financing Estimates released by the Treasury can be found here: <http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx>

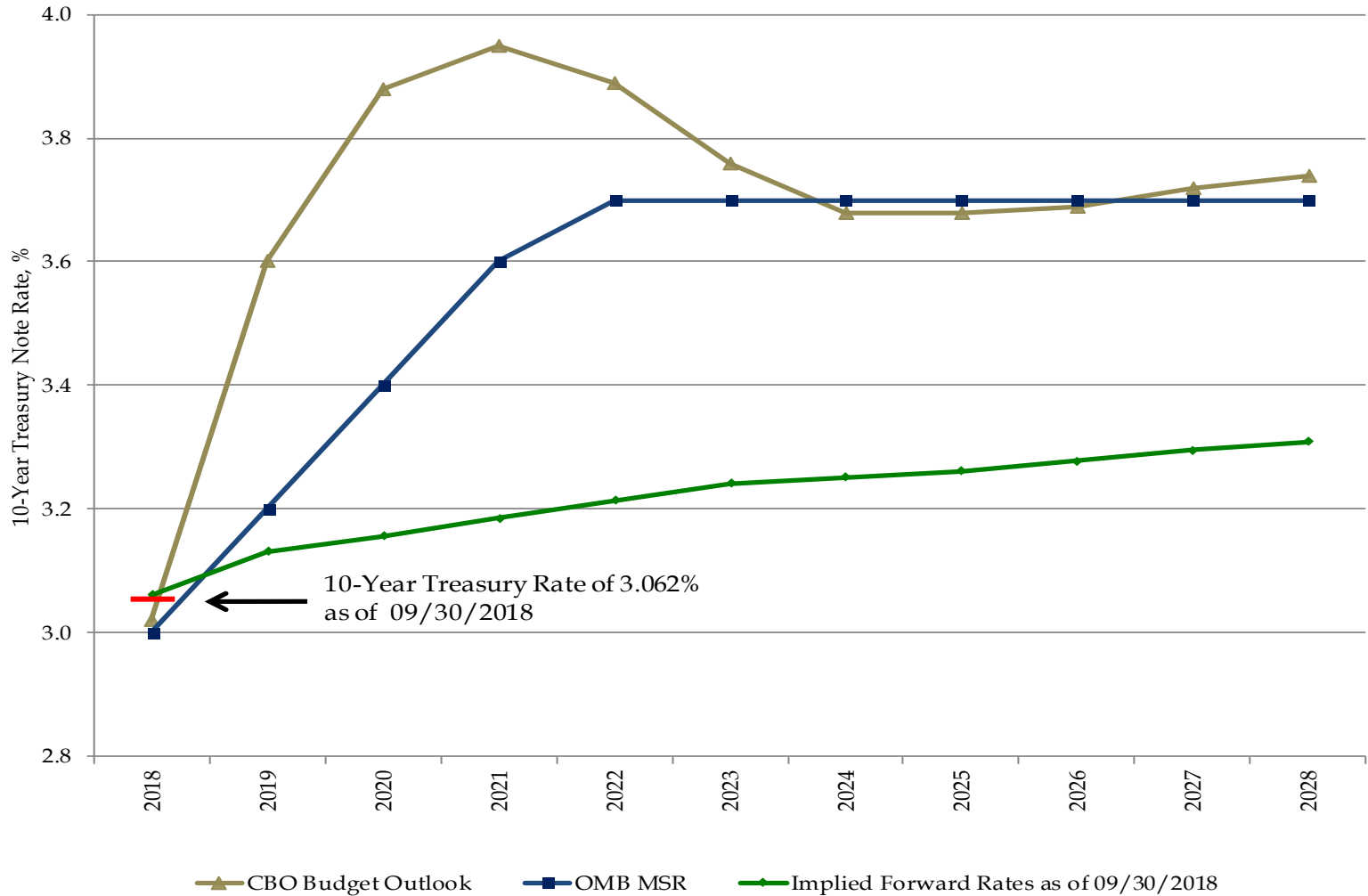
OMB's Projection of Borrowing from the Public

The bubbles represent the total net marketable borrowing for that year



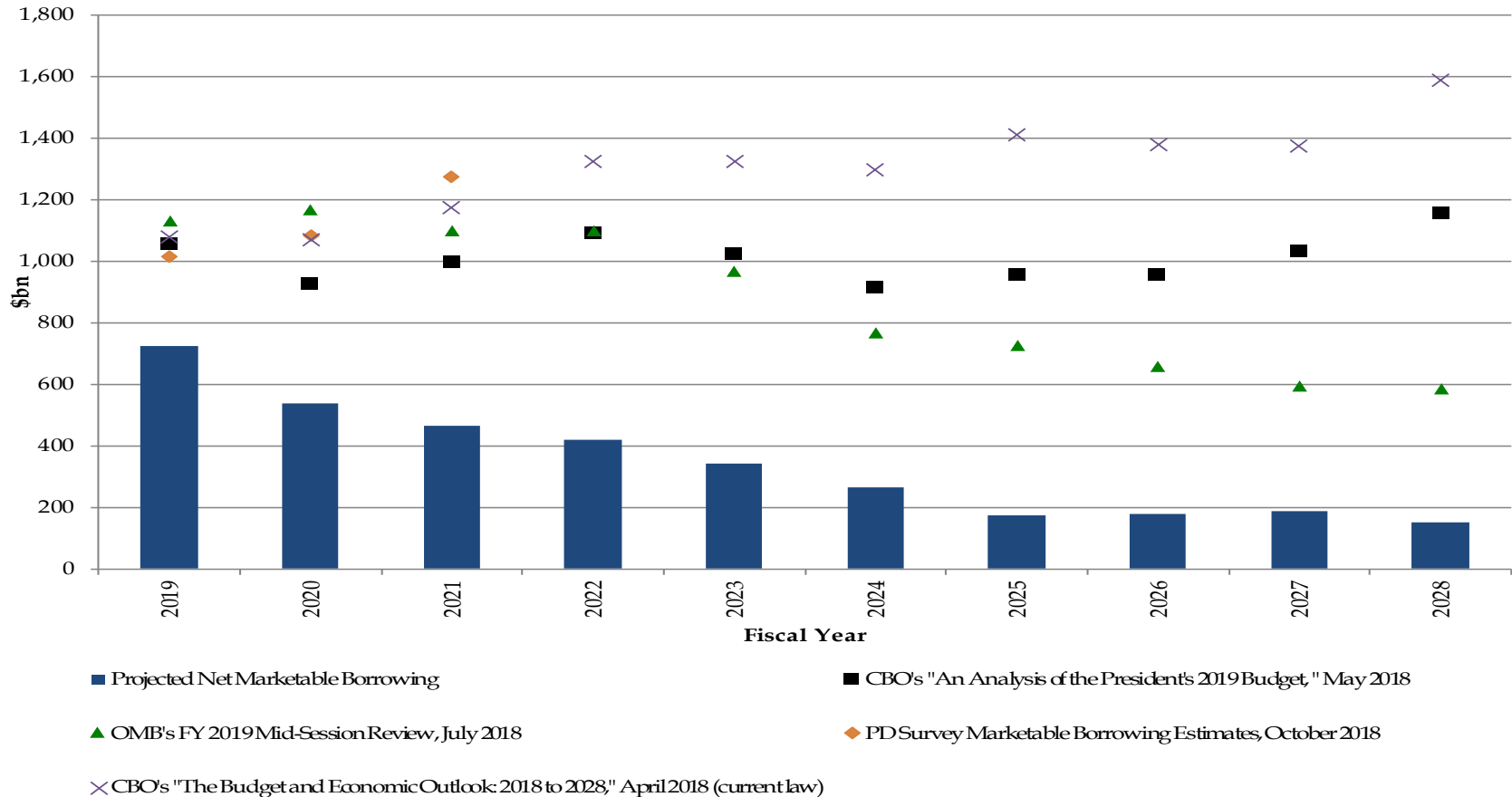
OMB's projections of the change in debt held by the public (borrowing) are from Table S-11 of "Mid-Session Review, Fiscal Year 2019," July 2018. "Other" represents borrowing from the public to provide direct and guaranteed loans.

Interest Rate Assumptions: 10-Year Treasury Note



OMB's economic assumption of the 10-Year Treasury Note rates are from Table 2 of OMB's "Mid-Session Review, Fiscal Year 2019," July 2018. CBO's economic assumption of the 10-Year Treasury Note rates are from Table D-1 of CBO's "The Budget and Economic Outlook: 2018 to 2028," April 2018. The forward rates are the implied 10-Year Treasury Note rates on September 30, 2018.

Projected Net Marketable Borrowing Assuming Future Issuance Remains Constant*



Treasury's October 2018 primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "Mid-Session Review, Fiscal Year 2019," July 2018. CBO's baseline budget projections of the change in debt held by the public are from Table 2 of "An Analysis of the President's 2019 Budget," May 2018. CBO's current law budget projections of the change in debt held by the public are from Summary Table 2 of "The Budget and Economic Outlook: 2018 to 2028," April 2018. See table at the end of this section for details.

*Projections reflect capped SOMA Treasury redemptions up until the end of CY 2020.

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

Fiscal Year	Bills	2/3/5	7/10/30	TIPS	FRN	Historical/Projected Net Borrowing Capacity	OMB's FY 2019 Mid-Session Review	CBO's "An Analysis of the President's 2019 Budget "	Primary Dealer Survey
2014	(119)	(92)	669	88	123	669			
2015	(53)	(282)	641	88	164	558			
2016	289	(82)	477	64	47	795			
2017	155	9	292	55	9	519			
2018	438	209	316	51	26	1,040			
2019	(0)	431	205	44	42	723	1,186	1,049	1,014
2020	0	263	241	14	15	535	1,164	924	1,080
2021	0	169	298	(2)	(0)	465	1,097	993	1,273
2022	0	106	323	(13)	3	418	1,096	1,085	
2023	0	148	199	(10)	5	342	963	1,018	
2024	0	(5)	282	(13)	1	265	763	911	
2025	0	(31)	261	(55)	(2)	173	722	951	
2026	0	(29)	257	(47)	(2)	180	657	952	
2027	0	(5)	233	(36)	(3)	189	590	1,027	
2028	0	(13)	223	(64)	3	149	584	1,149	

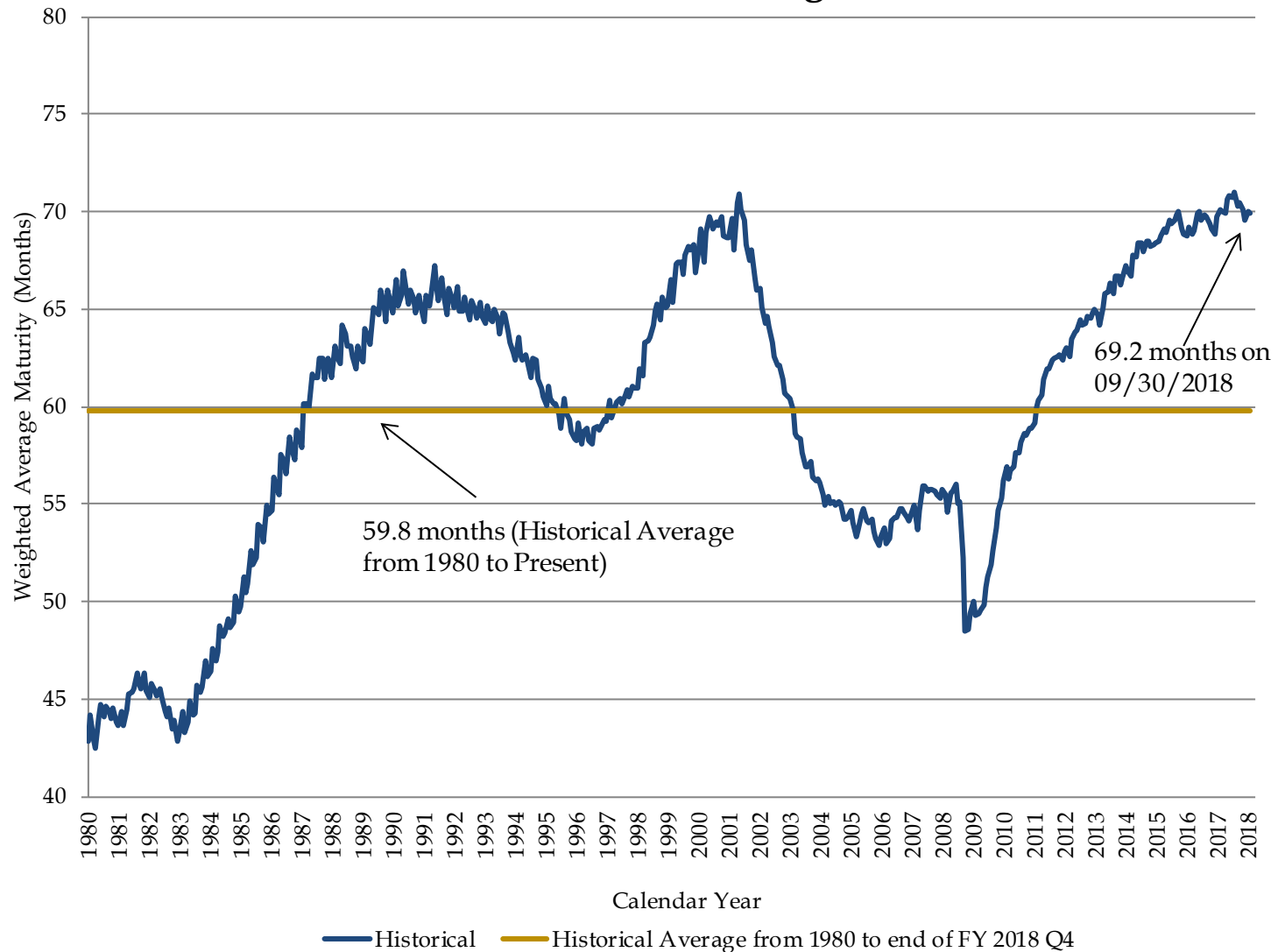
Net borrowing capacity reflects capped SOMA redemptions up until the end of CY 2020.

Treasury's October 2018 primary dealer survey estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-11 of "Mid-Session Review, Fiscal Year 2019," July 2018. CBO's baseline budget projections of the change in debt held by the public are from Table 2 of CBO's "An Analysis of the President's Budget," May 2018.

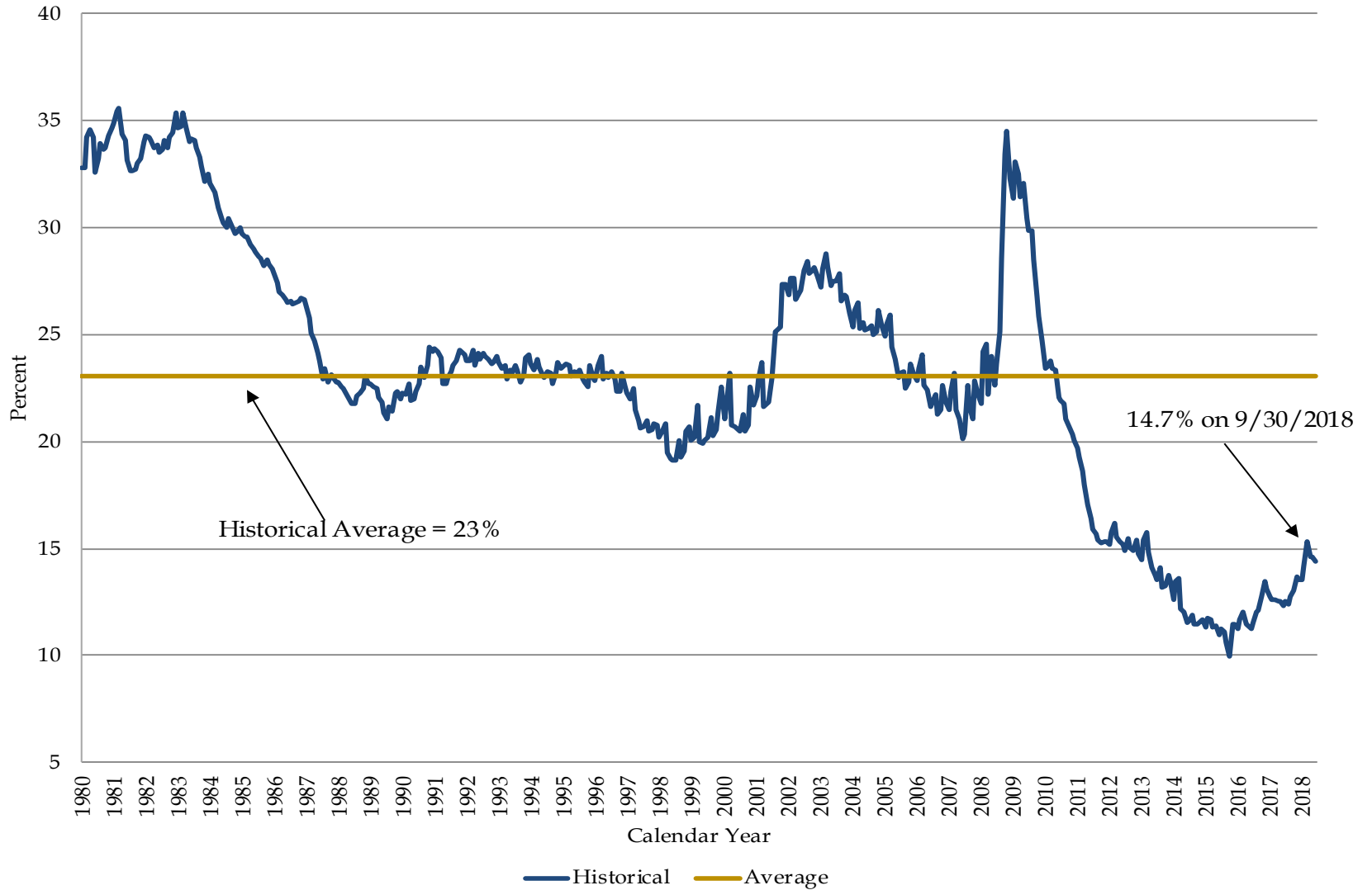
Section IV: Portfolio Metrics



Historical Weighted Average Maturity of Marketable Debt Outstanding



Bills Outstanding as a Percent of Portfolio



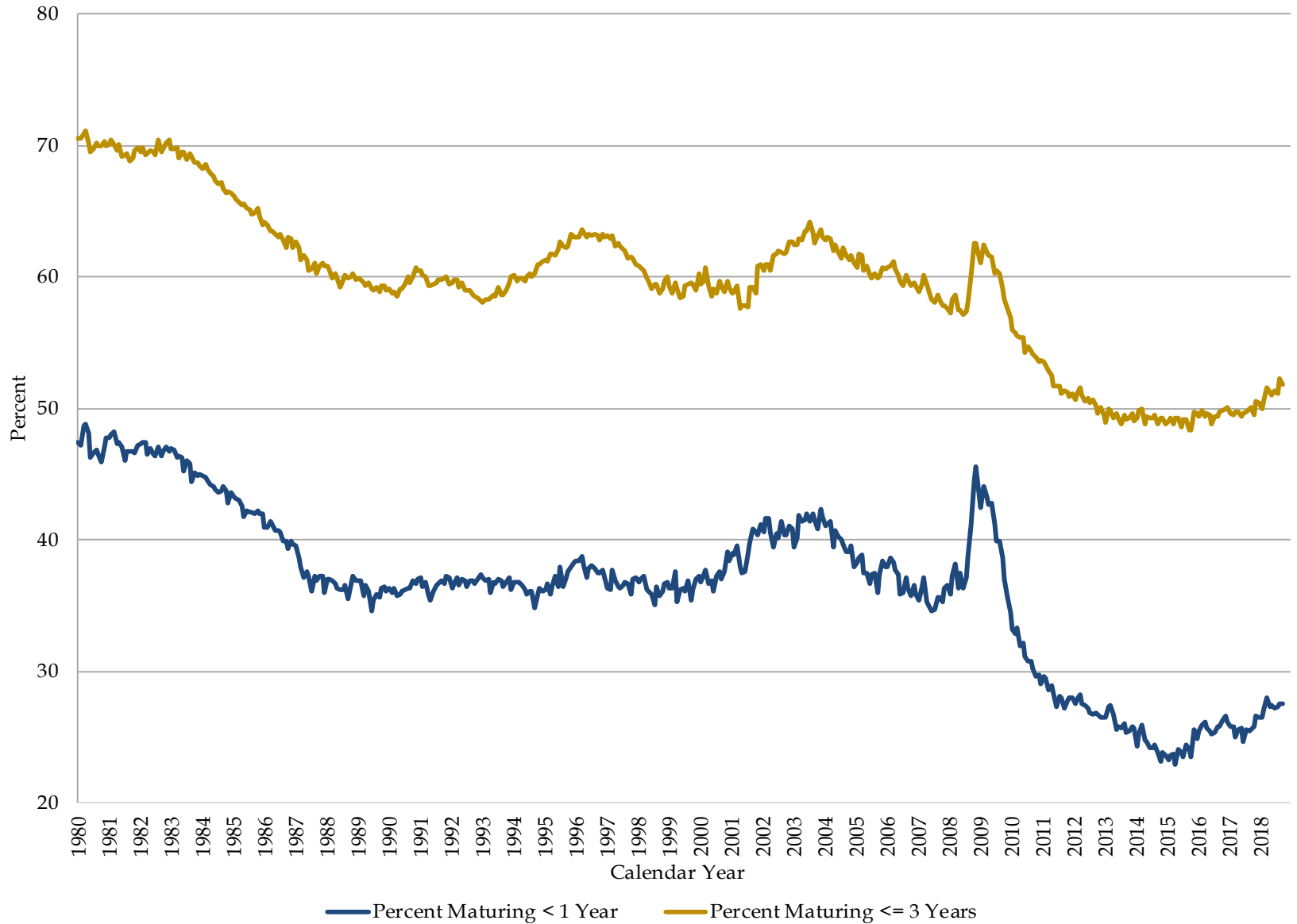
Recent Maturity Profile, \$ billions

Date	(0,1]	(1,2]	(2,3]	(3,5]	(5,7]	(7,10]	(10,30]	Total	(0,5]
Sep-11	2,620	1,334	980	1,541	1,070	1,053	1,017	9,616	6,476
Sep-12	2,951	1,373	1,104	1,811	1,214	1,108	1,181	10,742	7,239
Sep-13	2,939	1,523	1,242	1,965	1,454	1,136	1,331	11,590	7,669
Sep-14	2,935	1,739	1,319	2,207	1,440	1,113	1,528	12,281	8,199
Sep-15	3,097	1,775	1,335	2,382	1,478	1,121	1,654	12,841	8,589
Sep-16	3,423	1,828	1,538	2,406	1,501	1,151	1,800	13,648	9,195
Sep-17	3,631	2,027	1,504	2,433	1,466	1,180	1,946	14,188	9,596
Sep-18	4,299	2,076	1,603	2,472	1,531	1,209	2,077	15,268	10,450

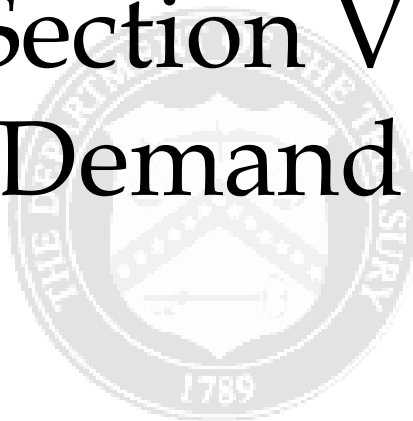
Recent Maturity Profile, percent

Date	(0,1]	(1,2]	(2,3]	(3,5]	(5,7]	(7,10]	(10,30]	(0,3]	(0,5]
Sep-11	27.2	13.9	10.2	16.0	11.1	10.9	10.6	51.3	67.3
Sep-12	27.5	12.8	10.3	16.9	11.3	10.3	11.0	50.5	67.4
Sep-13	25.4	13.1	10.7	17.0	12.5	9.8	11.5	49.2	66.2
Sep-14	23.9	14.2	10.7	18.0	11.7	9.1	12.4	48.8	66.8
Sep-15	24.1	13.8	10.4	18.5	11.5	8.7	12.9	48.3	66.9
Sep-16	25.1	13.4	11.3	17.6	11.0	8.4	13.2	49.7	67.4
Sep-17	25.6	14.3	10.6	17.1	10.3	8.3	13.7	50.5	67.6
Sep-18	28.2	13.6	10.5	16.2	10.0	7.9	13.6	52.3	68.4

Treasury Maturity Profile History



Section V: Demand



Summary Statistics for Fiscal Year 2018 Q4 Auctions

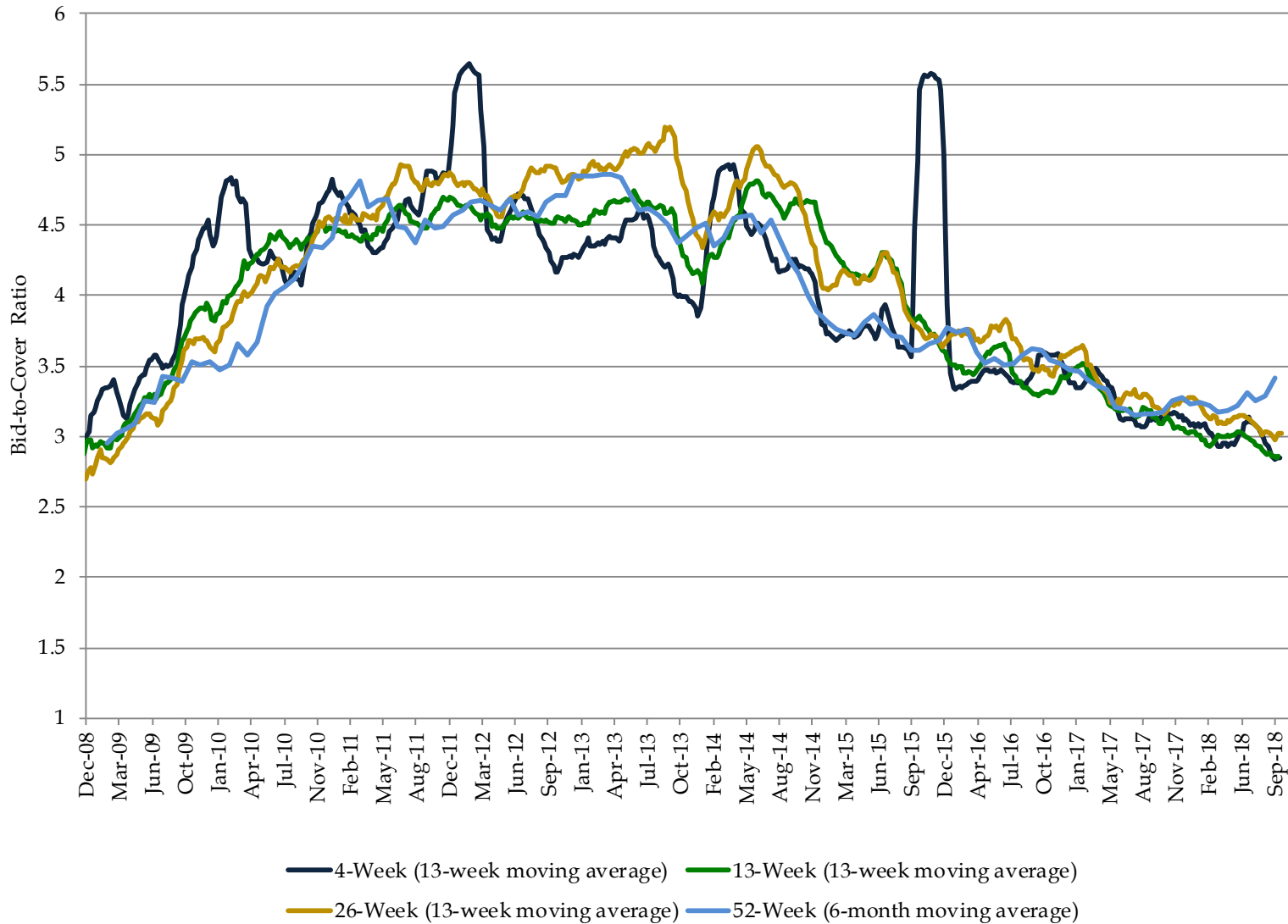
Security Type	Term	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$bn)	SOMA "Add-Ons" (\$bn)	10-Year Equivalent (\$bn)**
Bill	4-Week	1.926	2.8	676.8	54.4	9.2	36.4	13.2	0.0	6.1
Bill	13-Week	2.037	2.9	627.6	50.5	7.2	42.3	17.4	0.0	18.7
Bill	26-Week	2.191	3.0	550.0	45.4	4.6	50.0	17.0	0.0	32.8
Bill	52-Week	2.388	3.3	76.1	43.8	10.0	46.1	1.9	0.0	9.1
Coupon	2-Year	2.715	2.7	106.5	43.3	13.8	42.9	1.5	4.4	25.5
Coupon	3-Year	2.758	2.6	101.4	46.4	10.7	42.9	0.6	4.7	36.0
Coupon	5-Year	2.861	2.5	110.9	27.3	9.0	63.7	0.1	4.6	62.9
Coupon	7-Year	2.936	2.5	92.0	23.4	14.6	62.0	0.0	3.8	70.8
Coupon	10-Year	2.928	2.6	70.9	25.0	11.7	63.3	0.1	3.6	75.3
Coupon	30-Year	3.050	2.3	47.0	28.3	9.8	62.0	0.0	2.5	113.9
TIPS	5-Year	0.724	2.8	14.0	19.2	13.5	67.3	0.0	1.0	7.9
TIPS	10-Year	0.830	2.4	24.0	22.2	12.4	65.5	0.0	0.7	27.6
FRN	2-Year	0.047	2.9	51.9	42.9	7.6	49.5	0.1	2.2	0.0

Total Bills	2.056	2.9	1,930.5	50.1	7.3	42.6	49.5	0.0	66.7
Total Coupons	2.851	2.6	528.7	33.3	11.7	55.0	2.3	23.6	384.5
Total TIPS	0.791	2.5	37.9	21.1	12.8	66.1	0.1	1.7	35.5
Total FRN	0.047	2.9	51.9	42.9	7.6	49.5	0.1	2.2	0.0

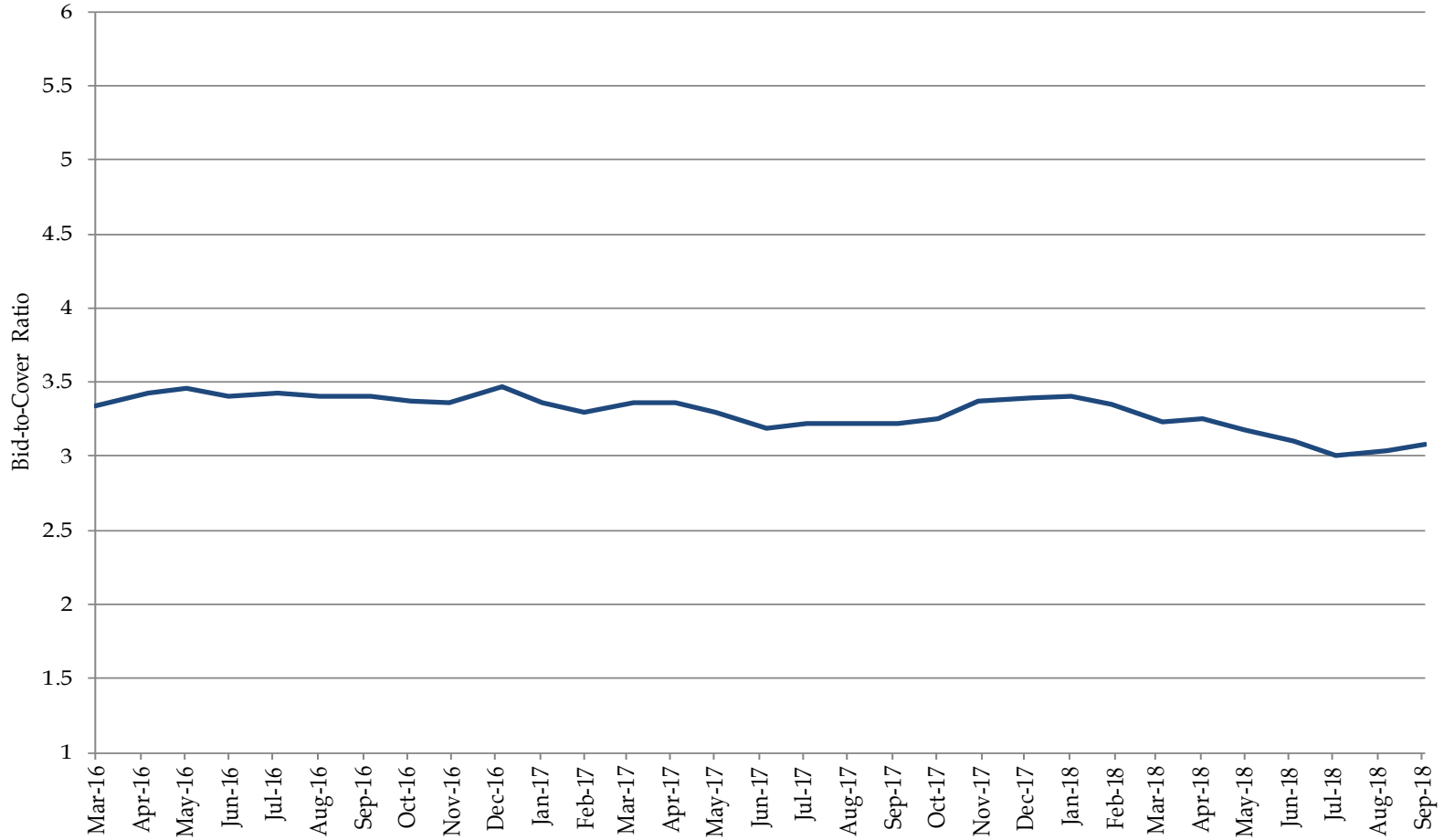
*Weighted averages of Competitive Awards. FRNs are reported on discount margin basis.

**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.

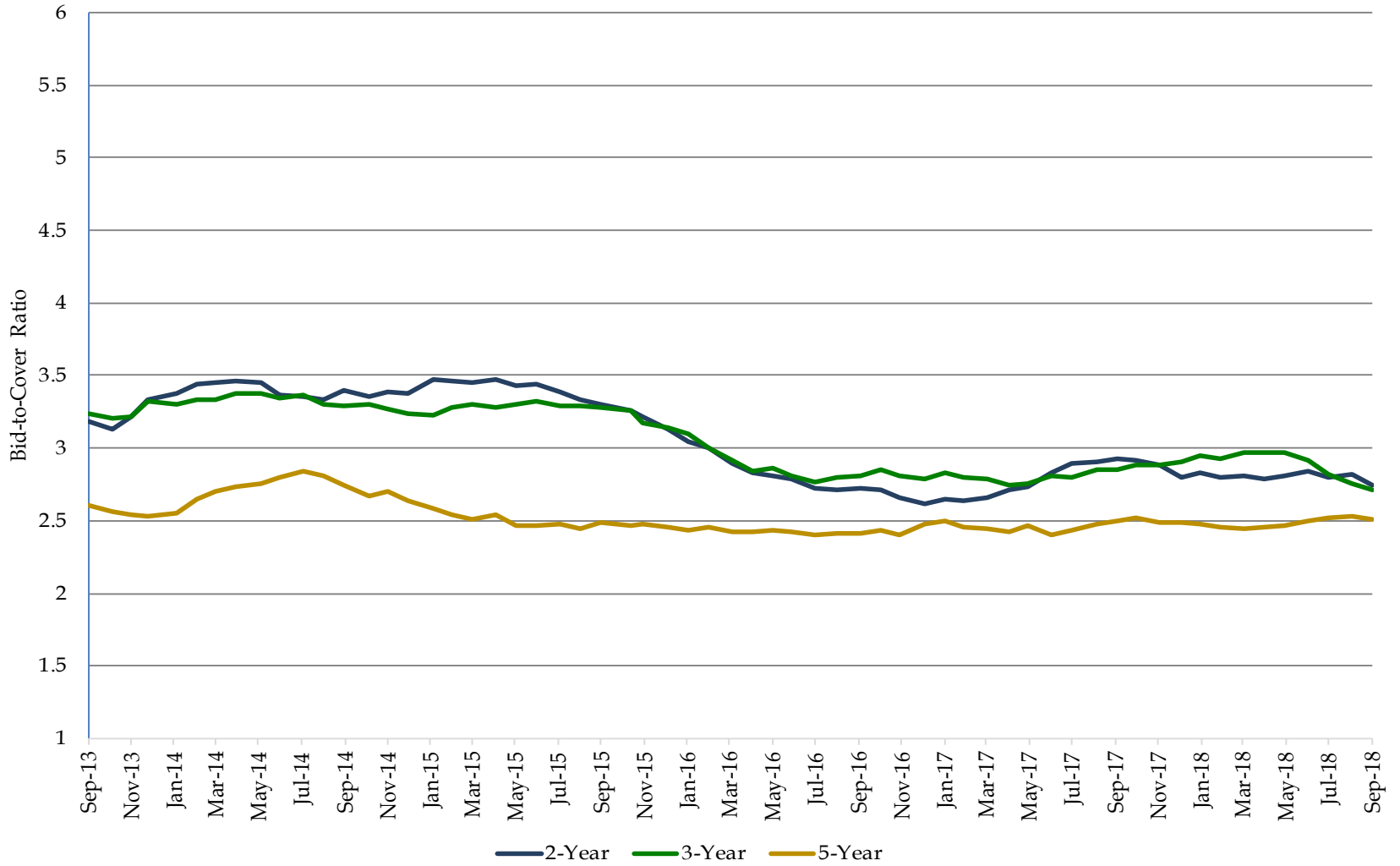
Bid-to-Cover Ratios for Treasury Bills



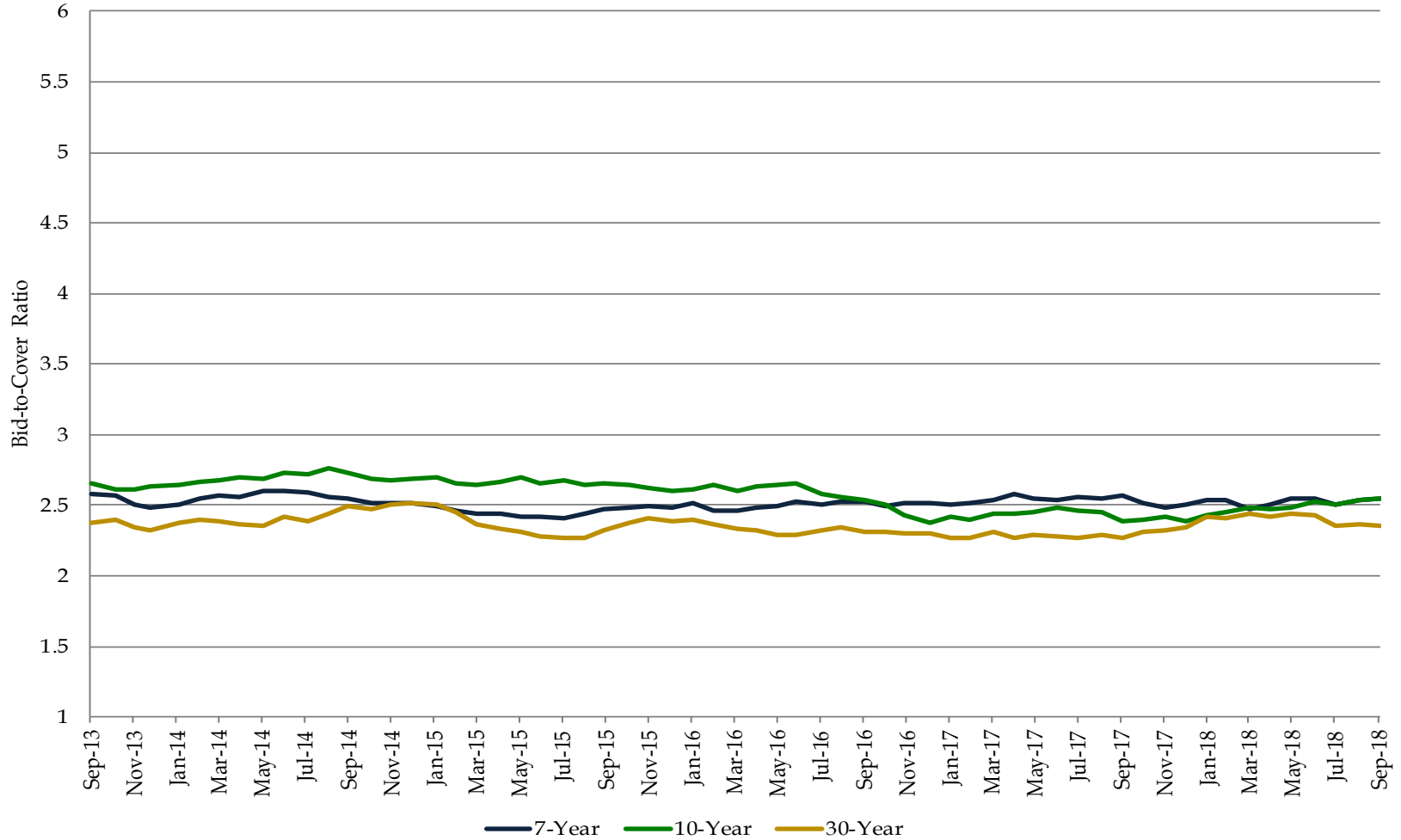
Bid-to-Cover Ratios for FRNs (6-Month Moving Average)



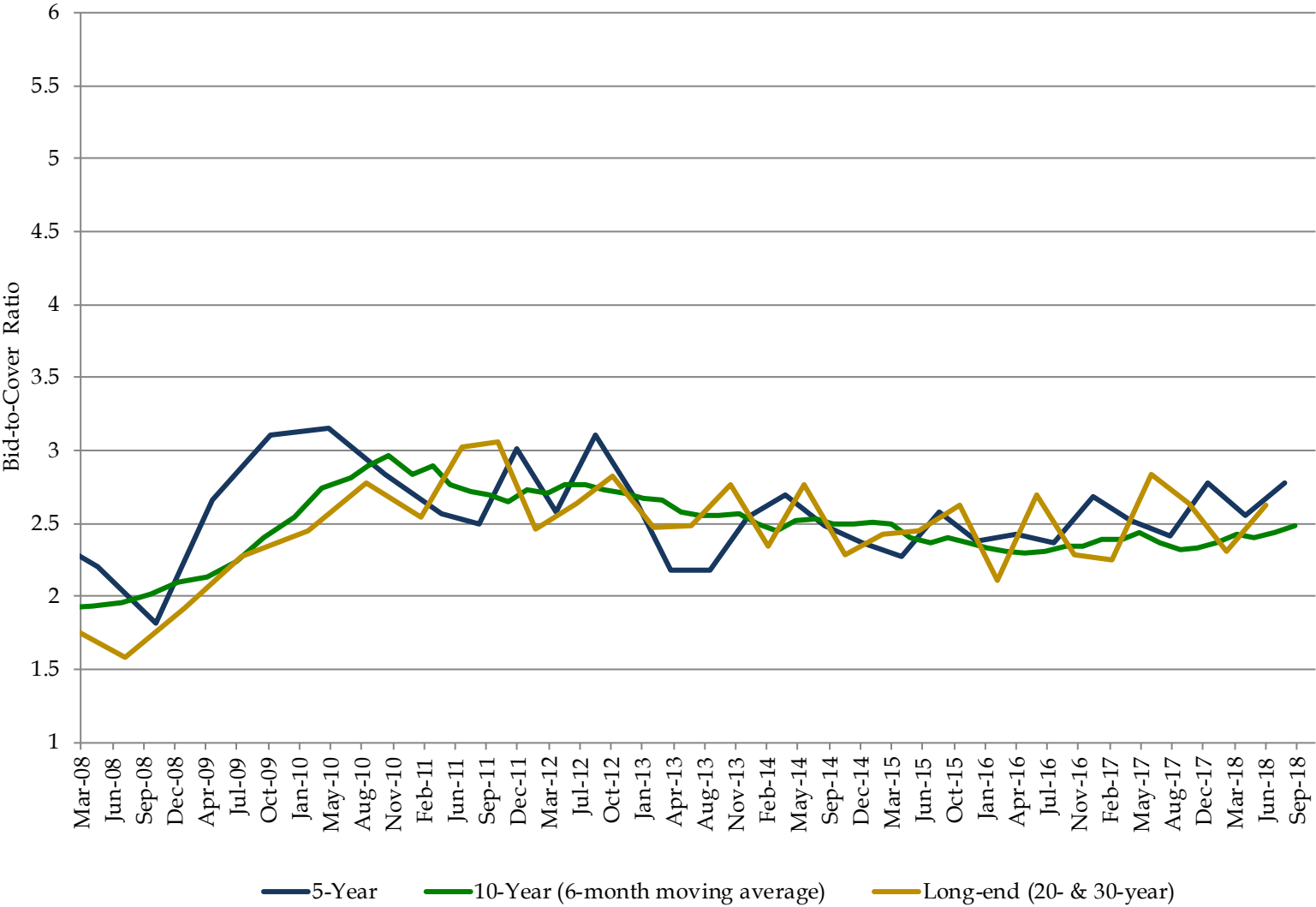
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



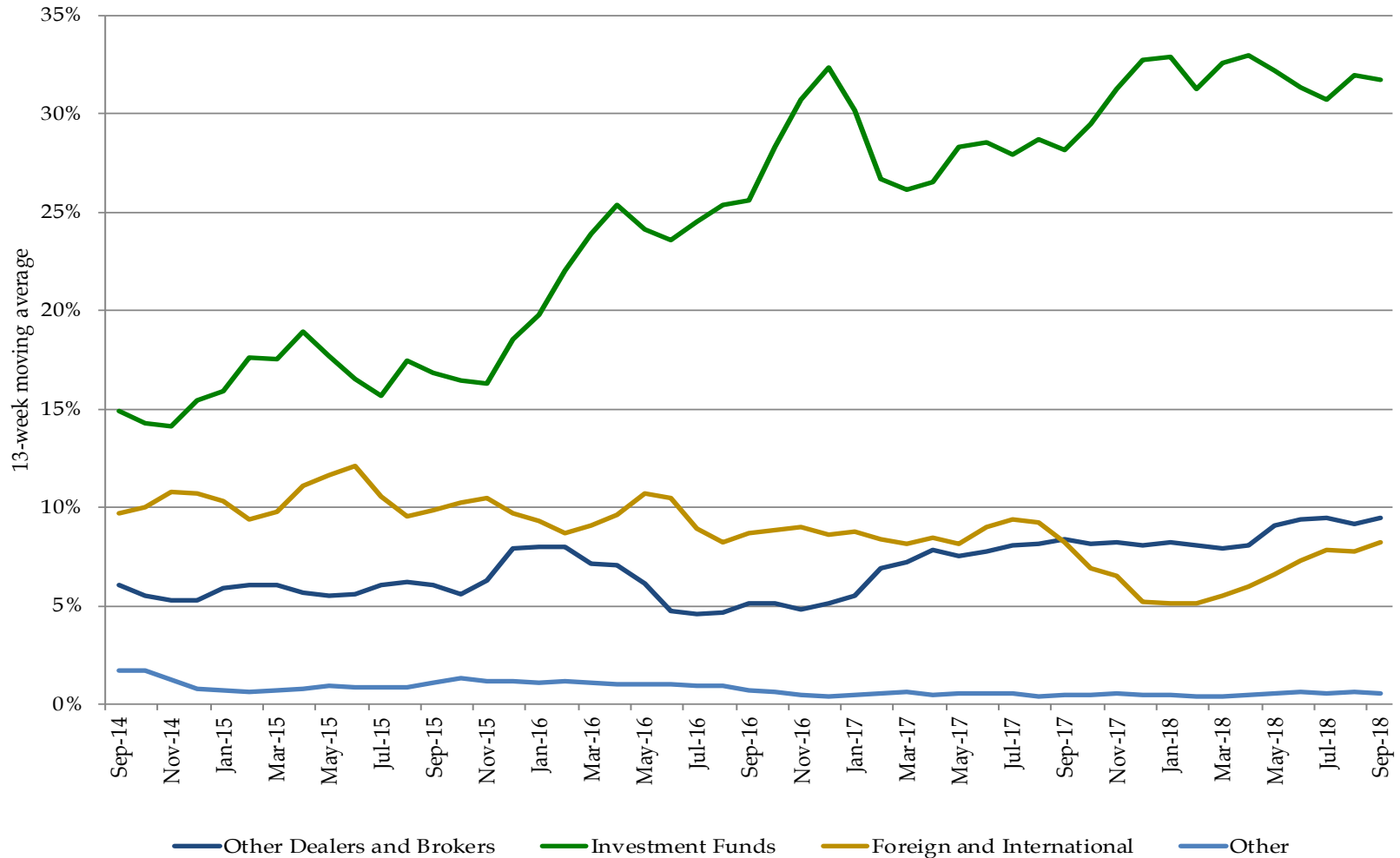
Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)



Bid-to-Cover Ratios for TIPS

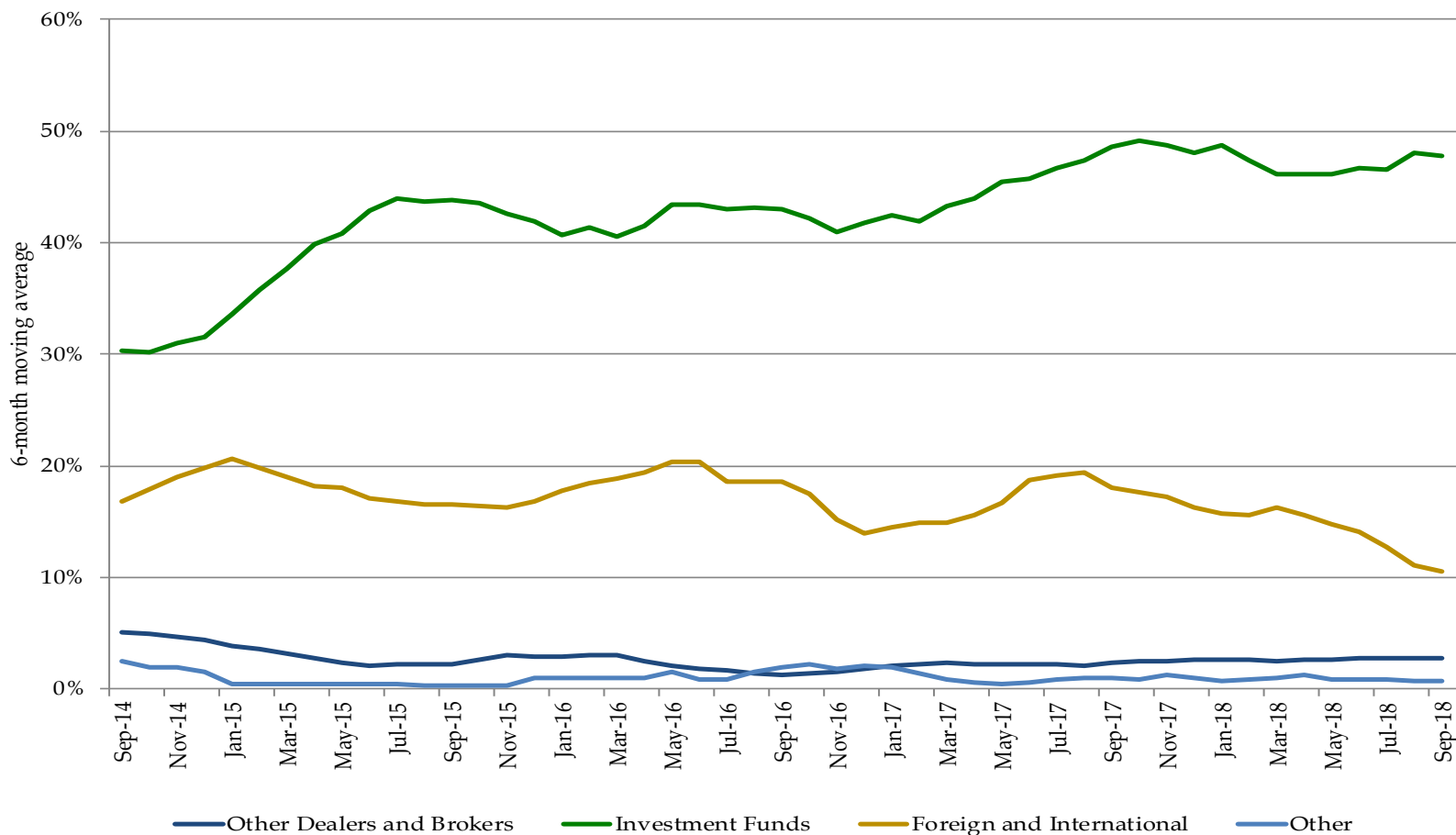


Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



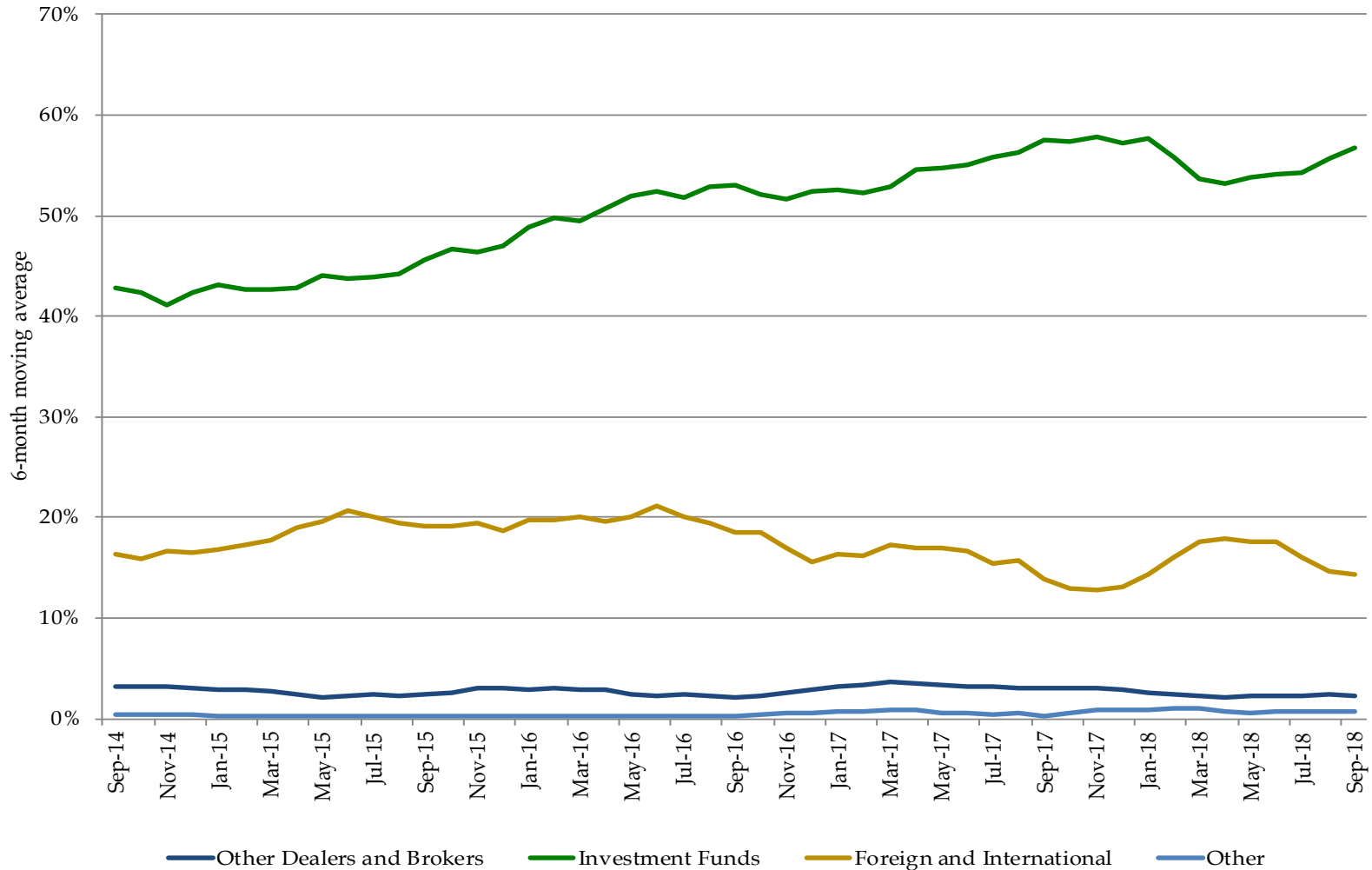
Excludes SOMA add-ons. The “Other” category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



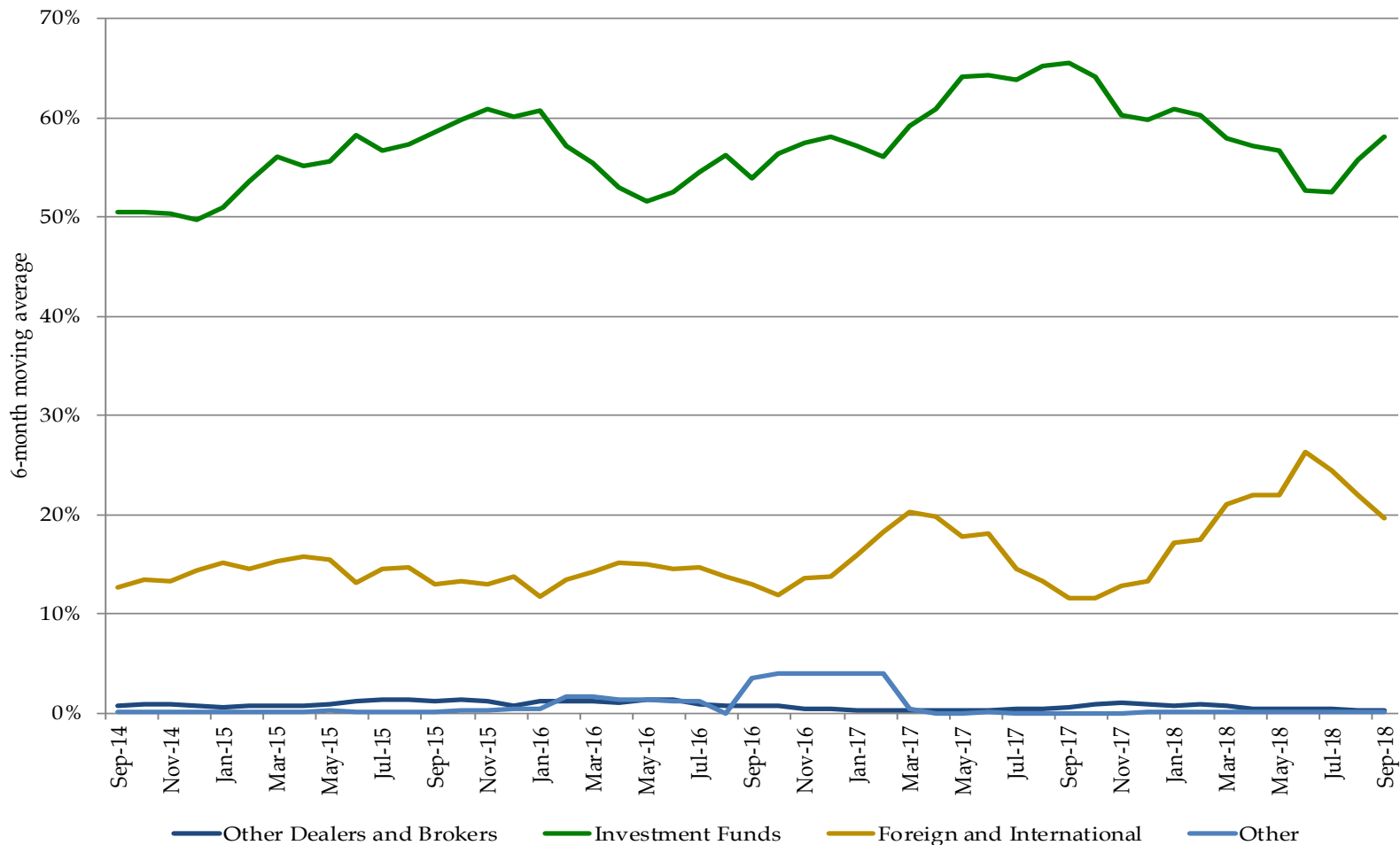
Excludes SOMA add-ons. The “Other” category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



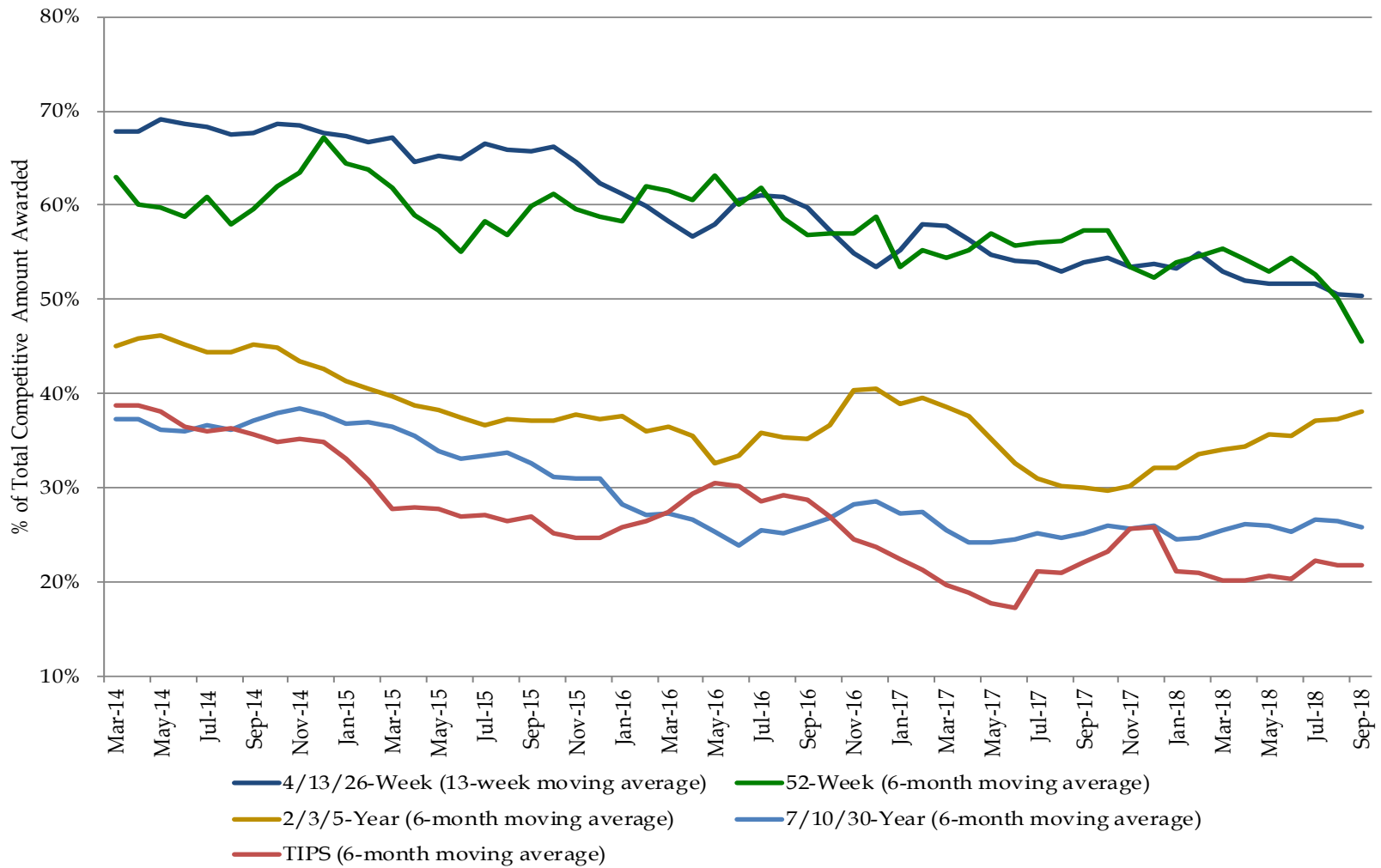
Excludes SOMA add-ons. The “Other” category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



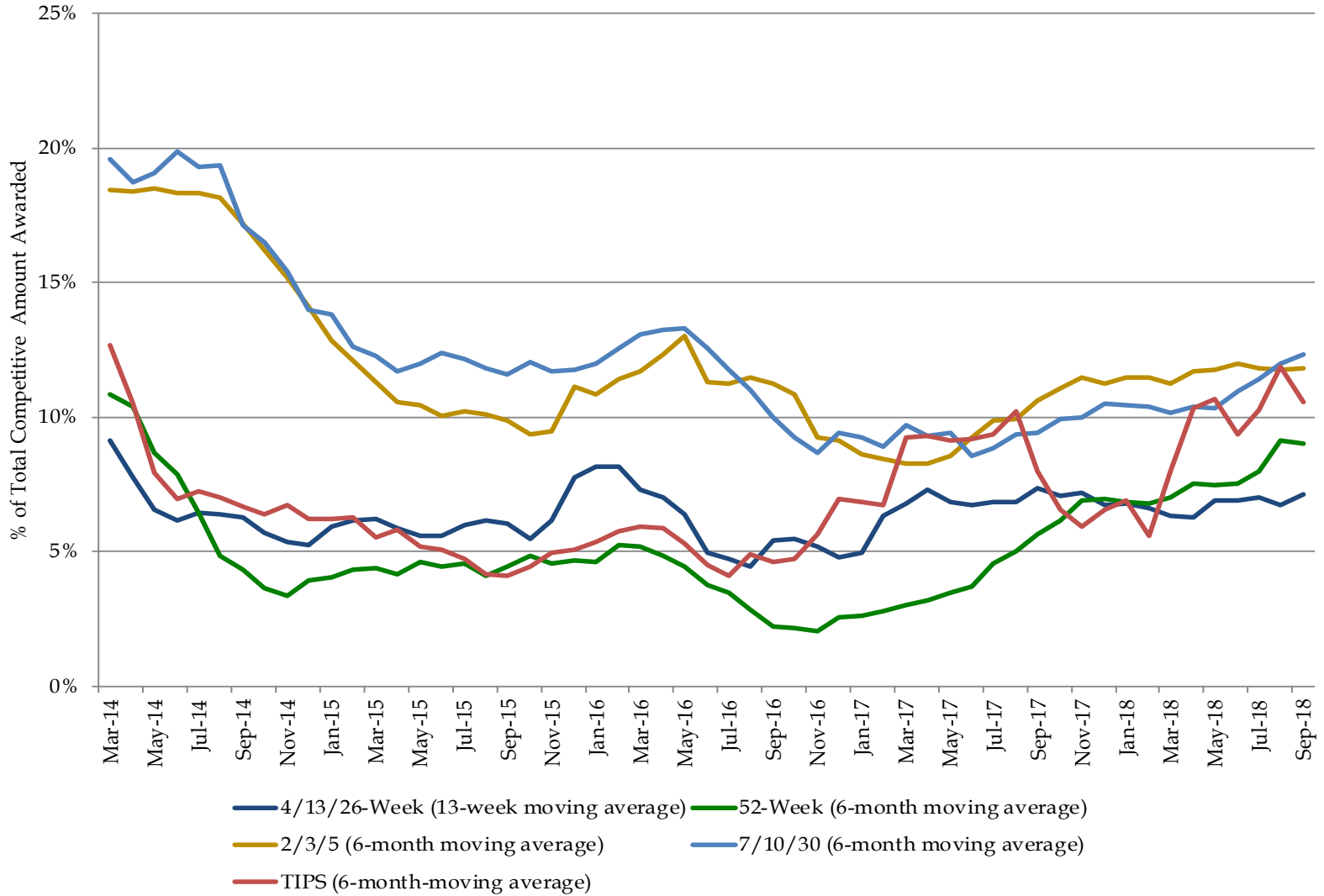
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

Primary Dealer Awards at Auction



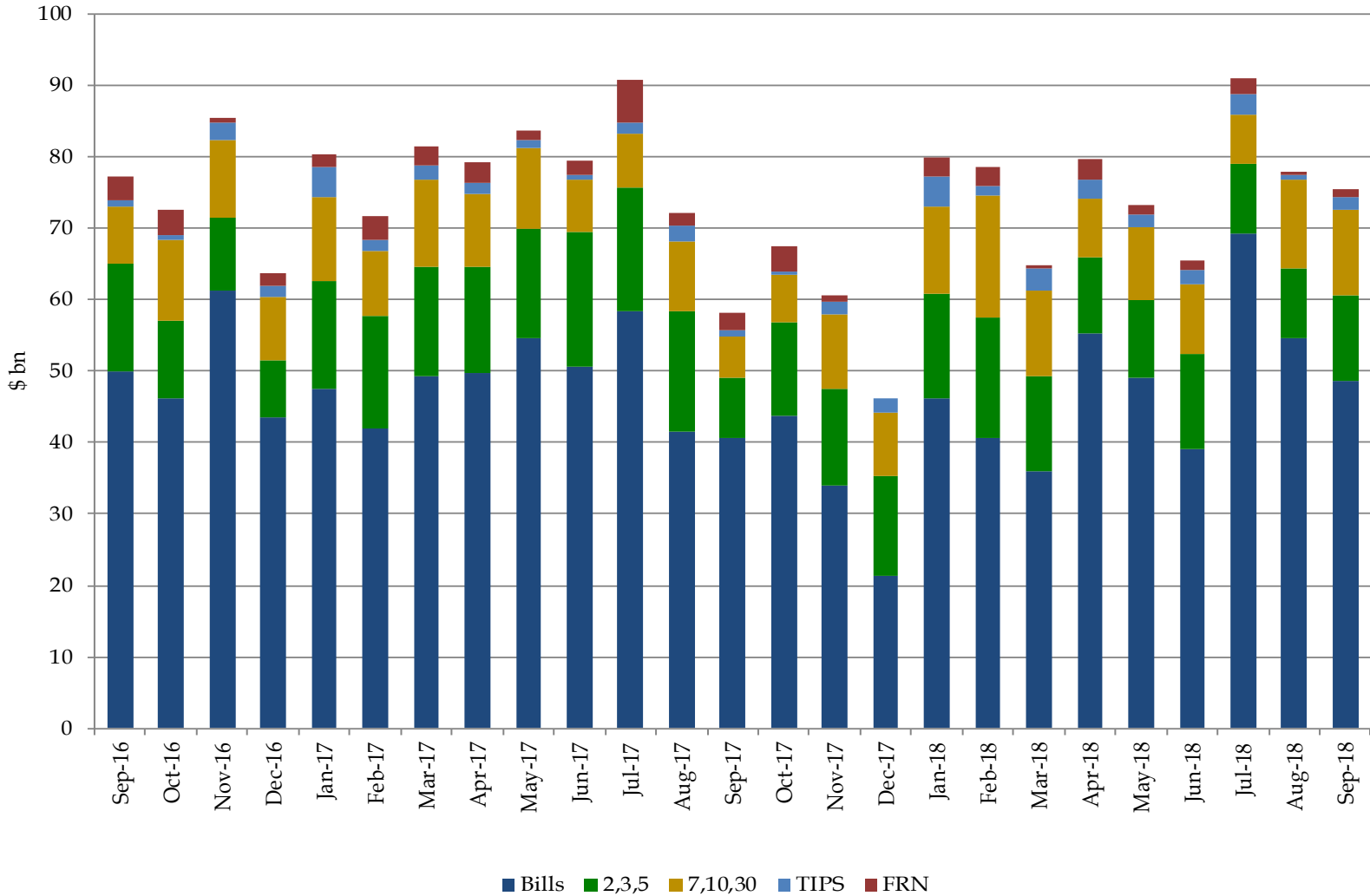
Excludes SOMA add-ons.

Direct Bidder Awards at Auction



Excludes SOMA add-ons.

Total Foreign Awards of Treasuries at Auction, \$ billions



Foreign includes both private sector and official institutions.

Appendix

The seal of the U.S. Department of the Treasury is centered behind the word "Appendix". The seal is circular and features a shield with a scale of justice, a sword, and a chevron with stars. The text "THE DEPARTMENT OF THE TREASURY" is written around the top inner edge of the seal, and "1789" is at the bottom.

Bills										
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-Year Equivalent (\$bn)*
4-Week	7/5/2018	1.860	2.45	34.2	75.4	6.5	18.1	0.8	0.0	0.3
4-Week	7/12/2018	1.850	3.16	34.1	58.6	8.8	32.5	0.9	0.0	0.3
4-Week	7/19/2018	1.880	2.91	44.2	59.7	10.5	29.8	0.8	0.0	0.4
4-Week	7/26/2018	1.880	2.84	54.2	45.6	12.6	41.8	0.8	0.0	0.5
4-Week	8/2/2018	1.910	2.70	64.1	55.3	7.6	37.1	0.9	0.0	0.6
4-Week	8/9/2018	1.905	2.65	69.1	47.8	10.2	42.0	0.9	0.0	0.6
4-Week	8/16/2018	1.910	2.66	69.1	55.4	8.4	36.2	0.9	0.0	0.6
4-Week	8/23/2018	1.910	2.80	69.1	51.2	7.3	41.5	0.9	0.0	0.6
4-Week	8/30/2018	1.930	2.77	64.0	59.7	10.2	30.1	1.0	0.0	0.6
4-Week	9/6/2018	1.970	2.68	53.8	57.4	6.4	36.3	1.2	0.0	0.5
4-Week	9/13/2018	1.975	2.97	43.9	49.0	11.5	39.5	1.1	0.0	0.4
4-Week	9/20/2018	2.020	3.38	38.8	39.2	8.6	52.2	1.2	0.0	0.4
4-Week	9/27/2018	2.080	3.05	38.1	60.9	12.0	27.1	1.9	0.0	0.4
13-Week	7/5/2018	1.940	2.62	47.1	52.1	4.1	43.9	0.9	0.0	1.4
13-Week	7/12/2018	1.945	2.85	47.1	47.8	7.3	44.9	0.9	0.0	1.4
13-Week	7/19/2018	1.980	2.76	49.6	42.8	10.5	46.7	1.4	0.0	1.5
13-Week	7/26/2018	1.970	2.92	49.1	42.6	11.8	45.6	1.9	0.0	1.5
13-Week	8/2/2018	2.000	2.87	49.6	57.6	6.6	35.8	1.4	0.0	1.5
13-Week	8/9/2018	2.010	2.54	49.7	51.8	9.7	38.5	1.3	0.0	1.5
13-Week	8/16/2018	2.030	2.83	49.6	52.5	6.6	40.9	1.4	0.0	1.5
13-Week	8/23/2018	2.035	2.96	49.8	50.6	5.7	43.7	1.2	0.0	1.5
13-Week	8/30/2018	2.080	2.90	49.0	53.3	5.6	41.1	2.0	0.0	1.5
13-Week	9/6/2018	2.095	2.88	47.0	50.8	4.9	44.2	1.0	0.0	1.4
13-Week	9/13/2018	2.110	3.02	47.0	56.8	5.6	37.7	1.0	0.0	1.4
13-Week	9/20/2018	2.125	2.94	46.7	49.4	4.4	46.2	1.3	0.0	1.4
13-Week	9/27/2018	2.180	3.01	46.1	48.4	10.6	41.0	1.9	0.0	1.4
26-Week	7/5/2018	2.085	2.83	40.8	47.6	3.9	48.5	1.2	0.0	2.4
26-Week	7/12/2018	2.100	2.78	40.7	53.3	4.1	42.6	1.3	0.0	2.4
26-Week	7/19/2018	2.140	2.98	43.7	44.7	3.2	52.2	1.3	0.0	2.6
26-Week	7/26/2018	2.140	2.90	43.2	46.6	12.0	41.4	1.8	0.0	2.6
26-Week	8/2/2018	2.160	3.14	43.9	45.8	4.8	49.4	1.1	0.0	2.6
26-Week	8/9/2018	2.180	2.66	43.7	42.2	4.4	53.4	1.3	0.0	2.6
26-Week	8/16/2018	2.180	3.25	43.7	32.3	3.7	64.1	1.3	0.0	2.6
26-Week	8/23/2018	2.185	3.11	43.9	45.1	3.3	51.5	1.1	0.0	2.6
26-Week	8/30/2018	2.210	3.06	43.3	49.4	3.8	46.8	1.7	0.0	2.6
26-Week	9/6/2018	2.240	3.03	41.0	47.9	3.2	48.9	1.0	0.0	2.4
26-Week	9/13/2018	2.265	3.14	41.0	46.3	4.0	49.7	1.0	0.0	2.4
26-Week	9/20/2018	2.290	3.09	40.9	51.9	3.0	45.1	1.1	0.0	2.4
26-Week	9/27/2018	2.320	3.28	40.3	37.8	6.0	56.2	1.7	0.0	2.5
52-Week	7/19/2018	2.335	3.03	25.4	47.8	10.0	42.2	0.6	0.0	3.0
52-Week	8/16/2018	2.365	3.21	25.3	50.7	12.7	36.6	0.7	0.0	3.1
52-Week	9/13/2018	2.465	3.76	25.4	33.0	7.4	59.6	0.6	0.0	3.0

*Weighted averages of competitive awards.

**Approximated using prices at settlement and includes both competitive and non-competitive awards.

Nominal Coupons										
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-Year Equivalent (\$bn)*
2-Year	7/31/2018	2.657	2.92	34.5	40.7	14.3	45.0	0.5	1.9	8.5
2-Year	8/31/2018	2.655	2.89	35.5	42.5	13.7	43.8	0.5	2.5	8.7
2-Year	10/1/2018	2.829	2.44	36.5	46.6	13.4	40.0	0.5	0.0	8.4
3-Year	7/16/2018	2.685	2.51	32.8	51.3	9.1	39.6	0.2	0.1	11.2
3-Year	8/15/2018	2.765	2.65	33.8	45.2	12.1	42.7	0.2	4.6	13.1
3-Year	9/17/2018	2.821	2.68	34.8	43.0	10.7	46.3	0.2	0.0	11.7
5-Year	7/31/2018	2.815	2.61	36.0	24.1	8.7	67.2	0.0	2.0	20.9
5-Year	8/31/2018	2.765	2.49	36.9	24.7	9.0	66.2	0.1	2.6	21.4
5-Year	10/1/2018	2.997	2.39	38.0	32.9	9.2	57.9	0.0	0.0	20.6
7-Year	7/31/2018	2.930	2.49	30.0	23.4	12.0	64.6	0.0	1.6	23.6
7-Year	8/31/2018	2.844	2.65	31.0	21.5	19.0	59.5	0.0	2.2	24.4
7-Year	10/1/2018	3.034	2.45	31.0	25.3	12.8	62.0	0.0	0.0	22.8
10-Year	7/16/2018	2.859	2.57	22.0	24.5	10.5	65.0	0.0	0.1	22.0
10-Year	8/15/2018	2.960	2.55	26.0	27.5	11.3	61.3	0.0	3.5	30.3
10-Year	9/17/2018	2.957	2.58	23.0	22.6	13.4	63.9	0.0	0.0	23.0
30-Year	7/16/2018	2.958	2.34	14.0	27.8	10.3	61.9	0.0	0.1	32.2
30-Year	8/15/2018	3.090	2.27	18.0	29.7	8.0	62.2	0.0	2.4	47.6
30-Year	9/17/2018	3.088	2.34	15.0	27.0	11.3	61.7	0.0	0.0	34.2
2-Year FRN	7/31/2018	0.043	2.79	18.0	42.3	6.3	51.4	0.0	1.0	0.0
2-Year FRN	8/31/2018	0.047	2.94	17.0	51.9	8.5	39.5	0.0	1.2	0.0
2-Year FRN	9/28/2018	0.050	3.06	17.0	34.4	8.0	57.5	0.0	0.0	0.0

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-Year Equivalent (\$bn)*
5-Year TIPS	8/31/2018	0.724	2.78	14.0	19.2	13.5	67.3	0.0	1.0	7.9
10-Year TIPS	7/31/2018	0.762	2.22	13.0	22.6	15.3	62.1	0.0	0.7	15.5
10-Year TIPS	9/28/2018	0.910	2.57	11.0	21.7	8.9	69.5	0.0	0.0	12.1

*Weighted averages of competitive awards. FRNs are reported on discount margin basis.

**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.