

Treasury Presentation to TBAC



Office of Debt Management



Fiscal Year 2019 Q1 Report

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Section I: Executive Summary



Highlights of Treasury's February 2019 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays

- Year-over-year, overall net receipts were up just \$17 billion (<1%) for Q1 FY 2019. Increases in social insurance taxes of \$16 billion (6%), excise taxes of \$10 billion (49%), and customs deposits of \$9 billion (96%) were mostly offset by declines in individual taxes of \$17 billion (-4%), corporate taxes of \$11 billion (-17%), and miscellaneous receipts of \$3 billion (-12%). Cuts in individual and corporate tax rates and increases to customs duties had impacts on these results.
- After calendar adjustments, FY 2019 year-to-date outlays were \$45 billion (4%) higher than the comparable period last year. Treasury outlays were \$16 billion (10%) higher, mainly due to increased interest on the public debt. Social Security and Veteran's Affairs expenditures were up \$11 billion (4%) and \$5 billion (9%), respectively, due to an increased number of beneficiaries and average benefit payment. Defense spending was \$11 billion (7%) higher mostly from increased operation and maintenance activities. Homeland Security expenditures were \$8 billion (32%) lower largely because spending for disaster relief was higher than usual in FY 2018.

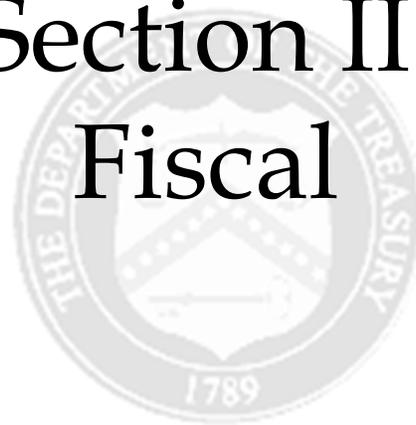
Projected Net Marketable Borrowing (FY 2019)

- Based on the quarterly borrowing estimate, Treasury's Office of Fiscal Projections (OFP) currently forecasts a net privately-held marketable borrowing need of \$365 billion for Q2 FY 2019, with an end-of-March cash balance of \$320 billion. For Q3 FY 2019, the net privately-held marketable borrowing need is projected to be \$83 billion, with an end-of-June cash balance of \$300 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.

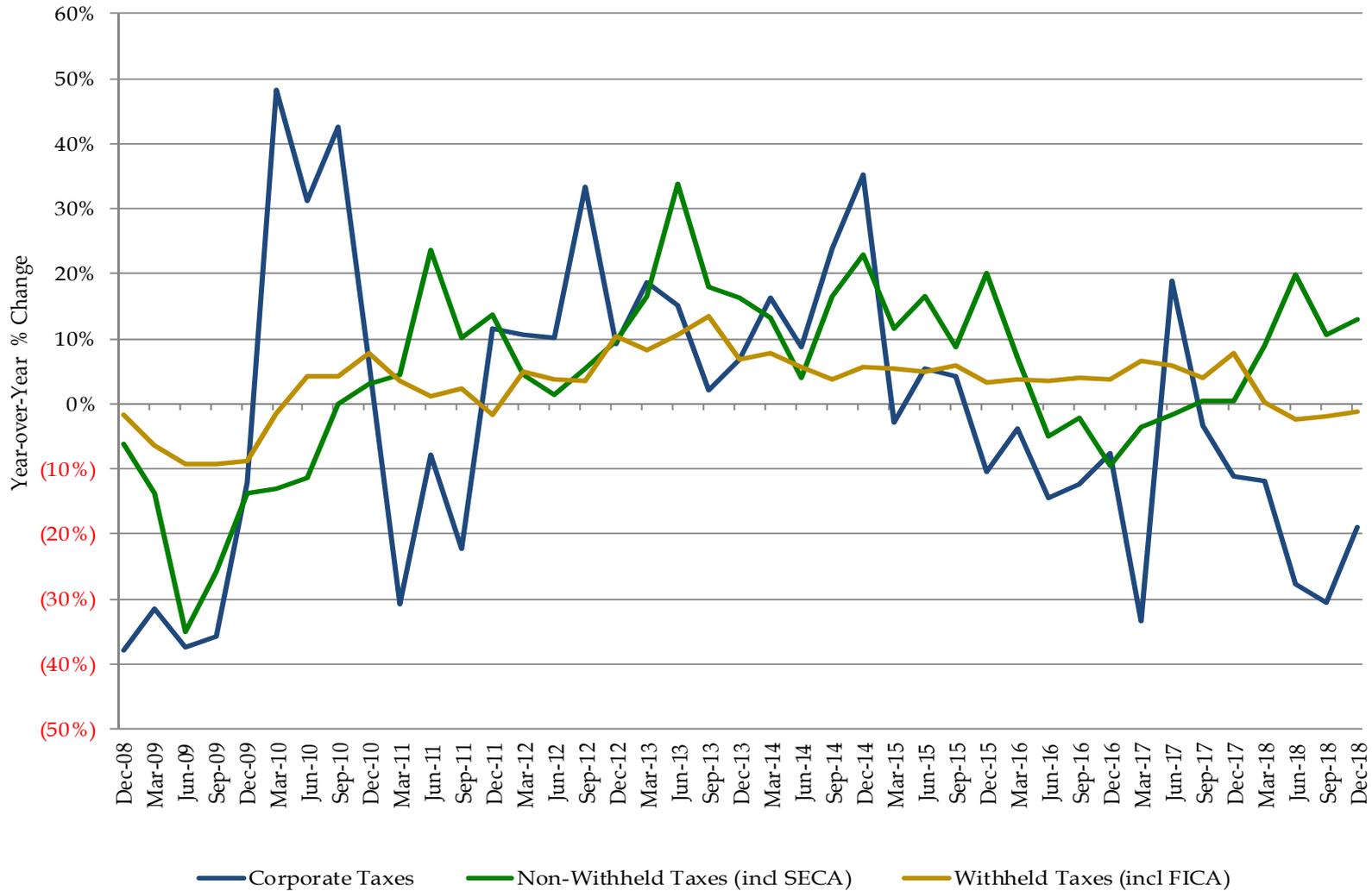
Demand for Treasury Securities

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

Section II: Fiscal



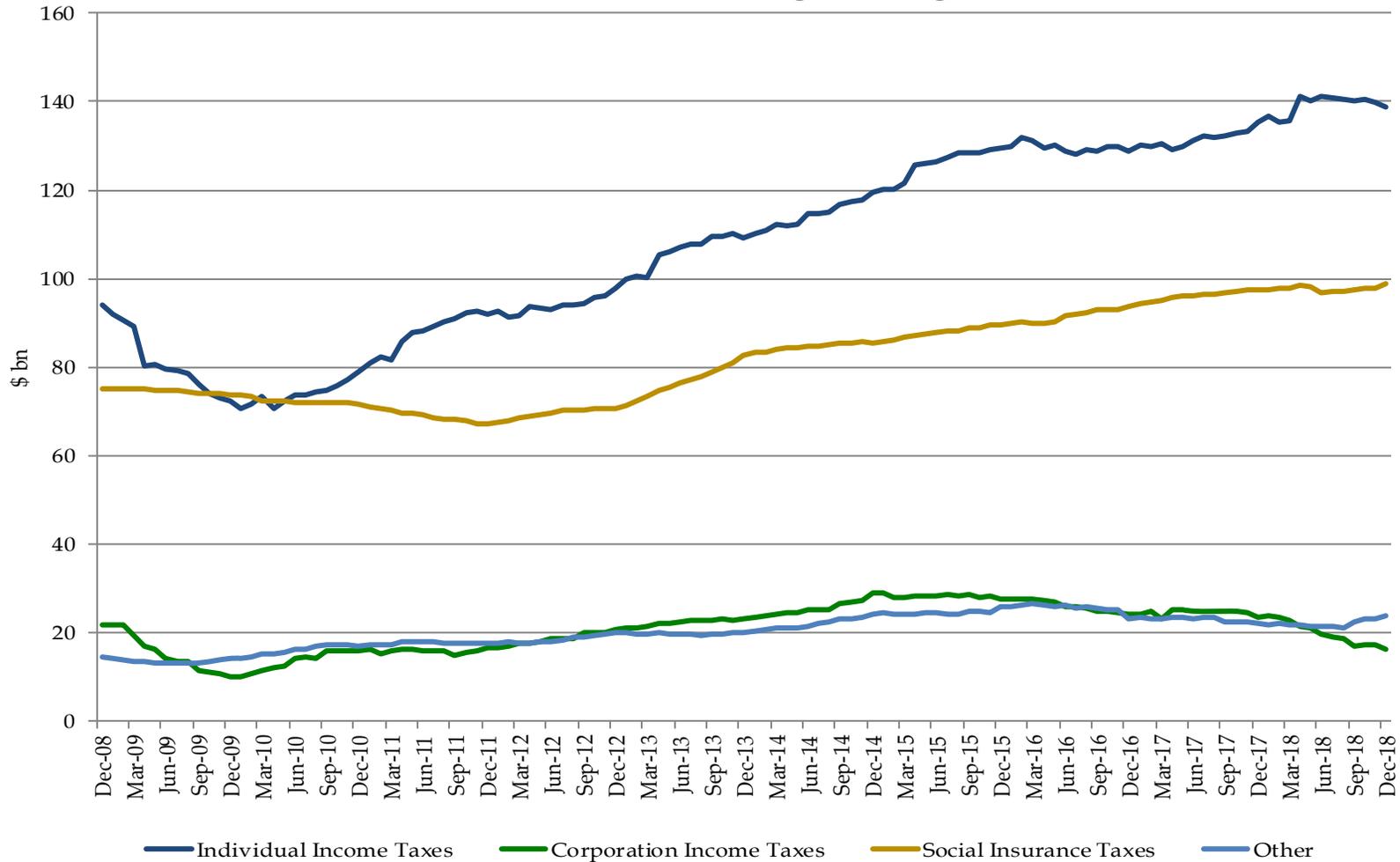
Quarterly Tax Receipts



Source: United States Department of the Treasury

Note: Budget results are not available for December as a result of the lapse in appropriations. December figures represent estimated budget results based on cash reporting in the Daily Treasury Statement. The revised publish date for the December 2018 budget results in the Monthly Treasury Statement will be February 13, 2019.

Monthly Receipt Levels (12-Month Moving Average)

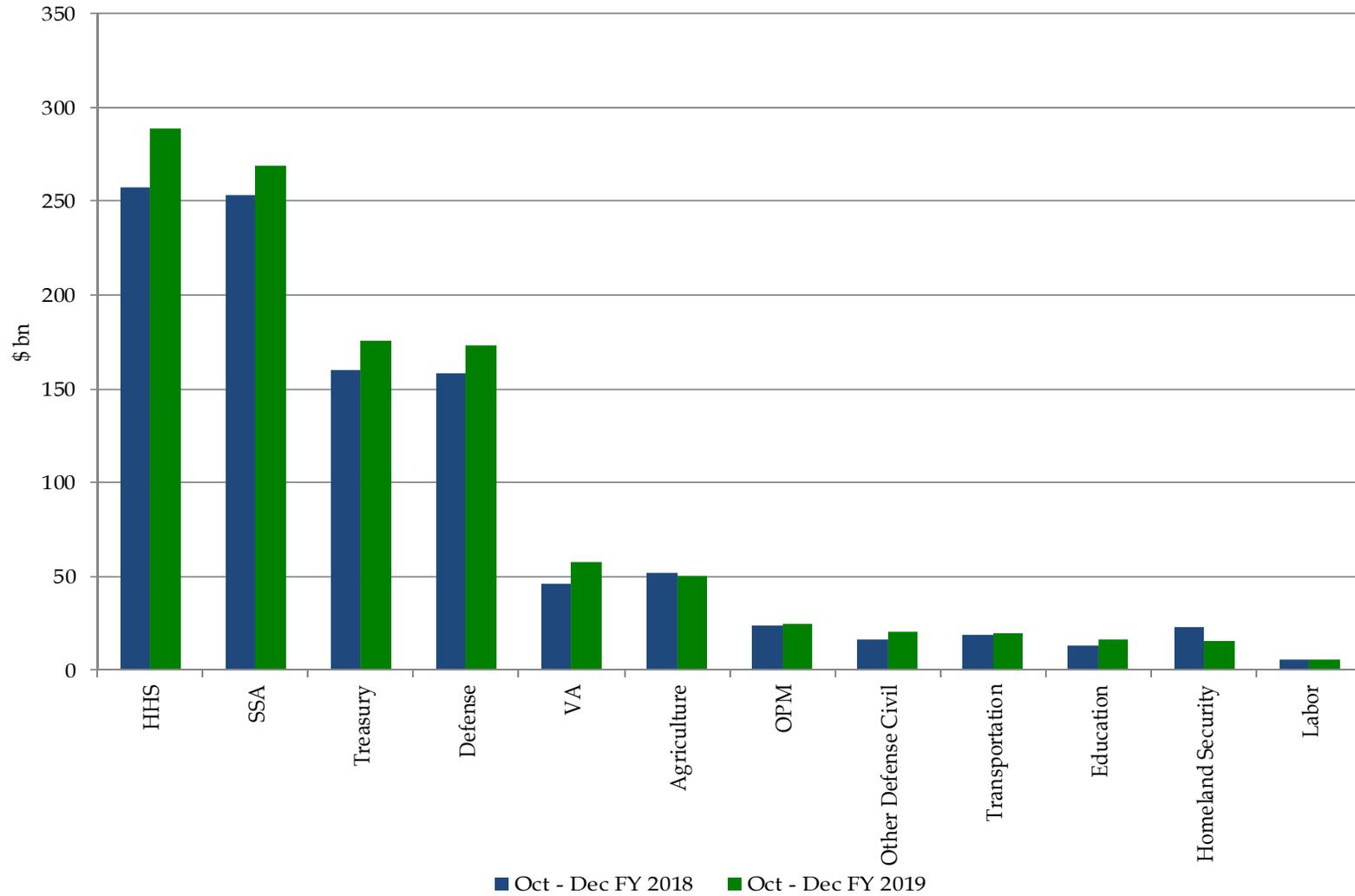


Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts.

Source: United States Department of the Treasury

Note: Budget results are not available for December as a result of the lapse in appropriations. December figures represent estimated budget results based on cash reporting in the Daily Treasury Statement. The revised publish date for the December 2018 budget results in the Monthly Treasury Statement will be February 13, 2019.

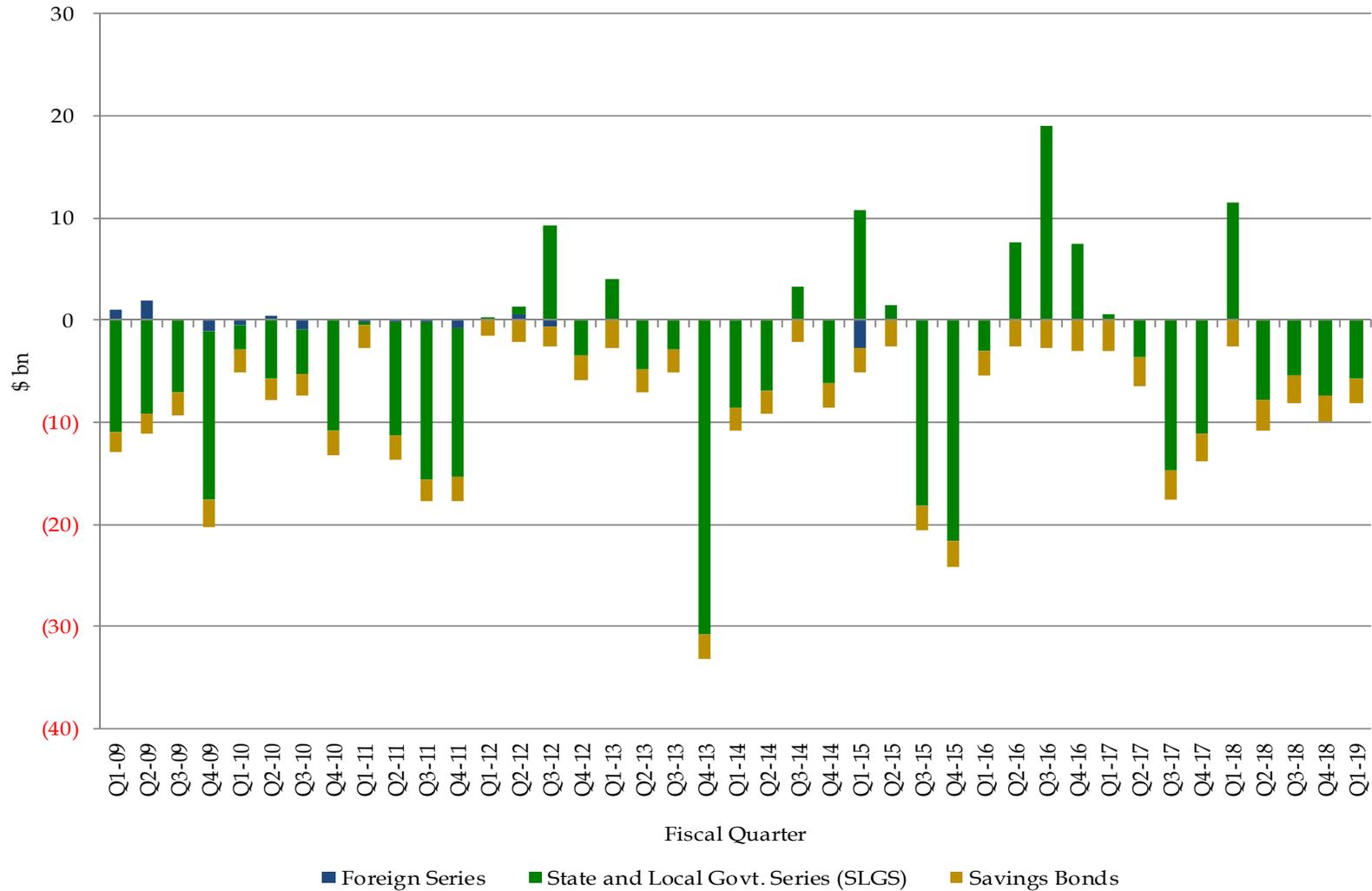
Largest Outlays



Source: United States Department of the Treasury

Note: Budget results are not available for December as a result of the lapse in appropriations. December figures represent estimated budget results based on cash reporting in the Daily Treasury Statement. The revised publish date for the December 2018 budget results in the Monthly Treasury Statement will be February 13, 2019.

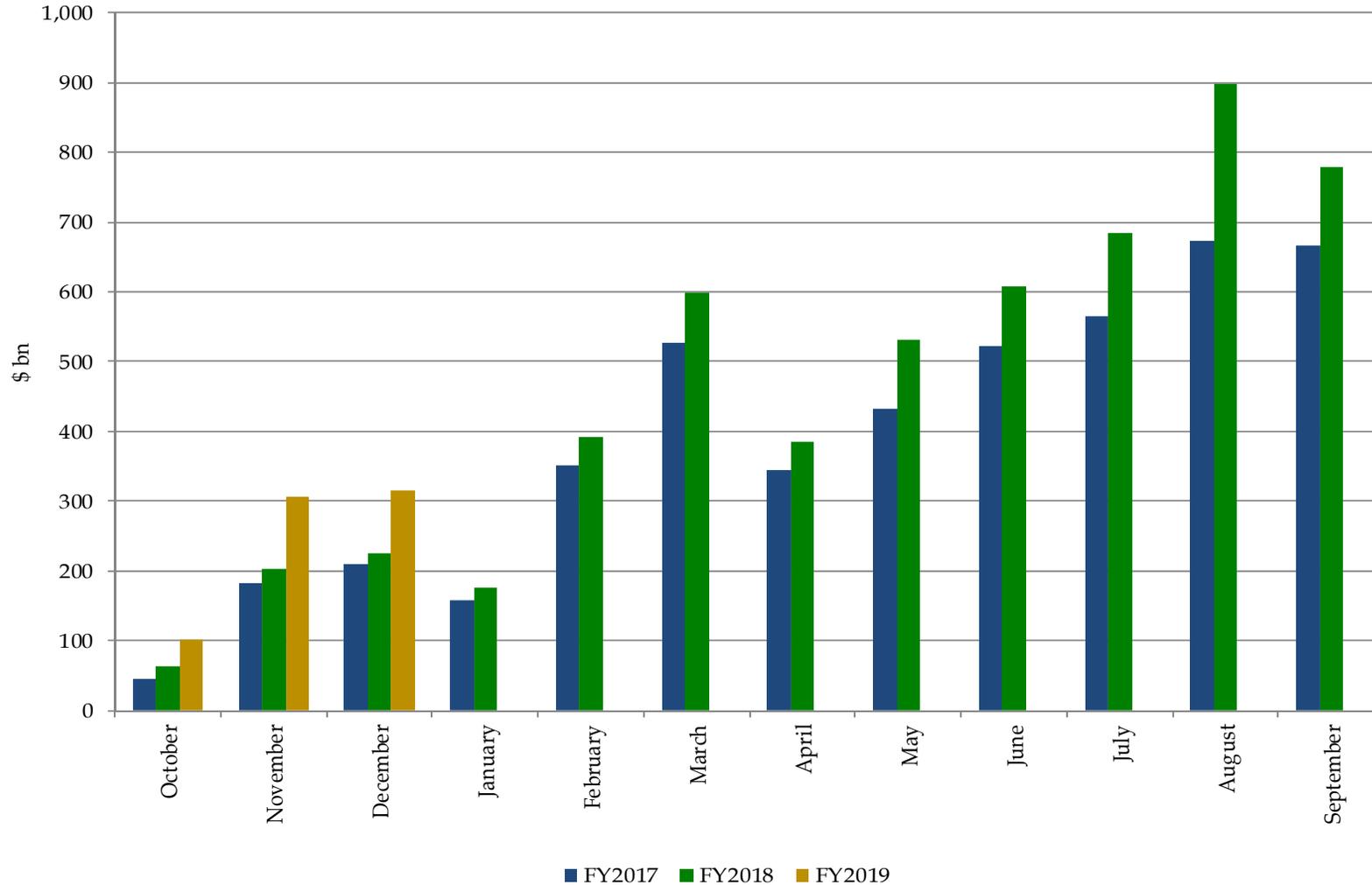
Treasury Net Nonmarketable Borrowing



Source: United States Department of the Treasury

Note: Budget results are not available for December as a result of the lapse in appropriations. December figures represent estimated budget results based on cash reporting in the Daily Treasury Statement. The revised publish date for the December 2018 budget results in the Monthly Treasury Statement will be February 13, 2019.

Cumulative Budget Deficits by Fiscal Year



Source: United States Department of the Treasury

Note: Budget results are not available for December as a result of the lapse in appropriations. December figures represent estimated budget results based on cash reporting in the Daily Treasury Statement. The revised publish date for the December 2018 budget results in the Monthly Treasury Statement will be February 13, 2019.

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

	Primary Dealers ¹	CBO ²	OMB ³	CBO ⁴
FY 2019 Deficit Estimate	1,000	897	1,086	955
FY 2020 Deficit Estimate	1,070	903	1,076	866
FY 2021 Deficit Estimate	1,156	974	1,010	945
FY 2019 Deficit Range	825-1,130			
FY 2020 Deficit Range	950-1,250			
FY 2021 Deficit Range	1,000-1,365			
FY 2019 Privately-Held Net Marketable Borrowing Estimate	1,345			
FY 2020 Privately-Held Net Marketable Borrowing Estimate	1,200			
FY 2021 Privately-Held Net Marketable Borrowing Estimate	1,225			
FY 2019 Privately-Held Net Marketable Borrowing Range	932-1,400			
FY 2020 Privately-Held Net Marketable Borrowing Range	975-1,554			
FY 2021 Privately-Held Net Marketable Borrowing Range	905-1,506			
FY 2019 SOMA Redemption Estimate	286			
FY 2020 SOMA Redemption Estimate	73			
FY 2021 SOMA Redemption Estimate	0			
FY 2019 Net Marketable Borrowing Estimate	1,059	885	1,186	1,049
FY 2020 Net Marketable Borrowing Estimate	1,127	965	1,164	924
FY 2021 Net Marketable Borrowing Estimate	1,225	1,025	1,097	993
Estimates as of:	Jan-19	Jan-19	Jul-18	May-18

¹Based on primary dealer feedback in January 2019. Estimates above are medians.

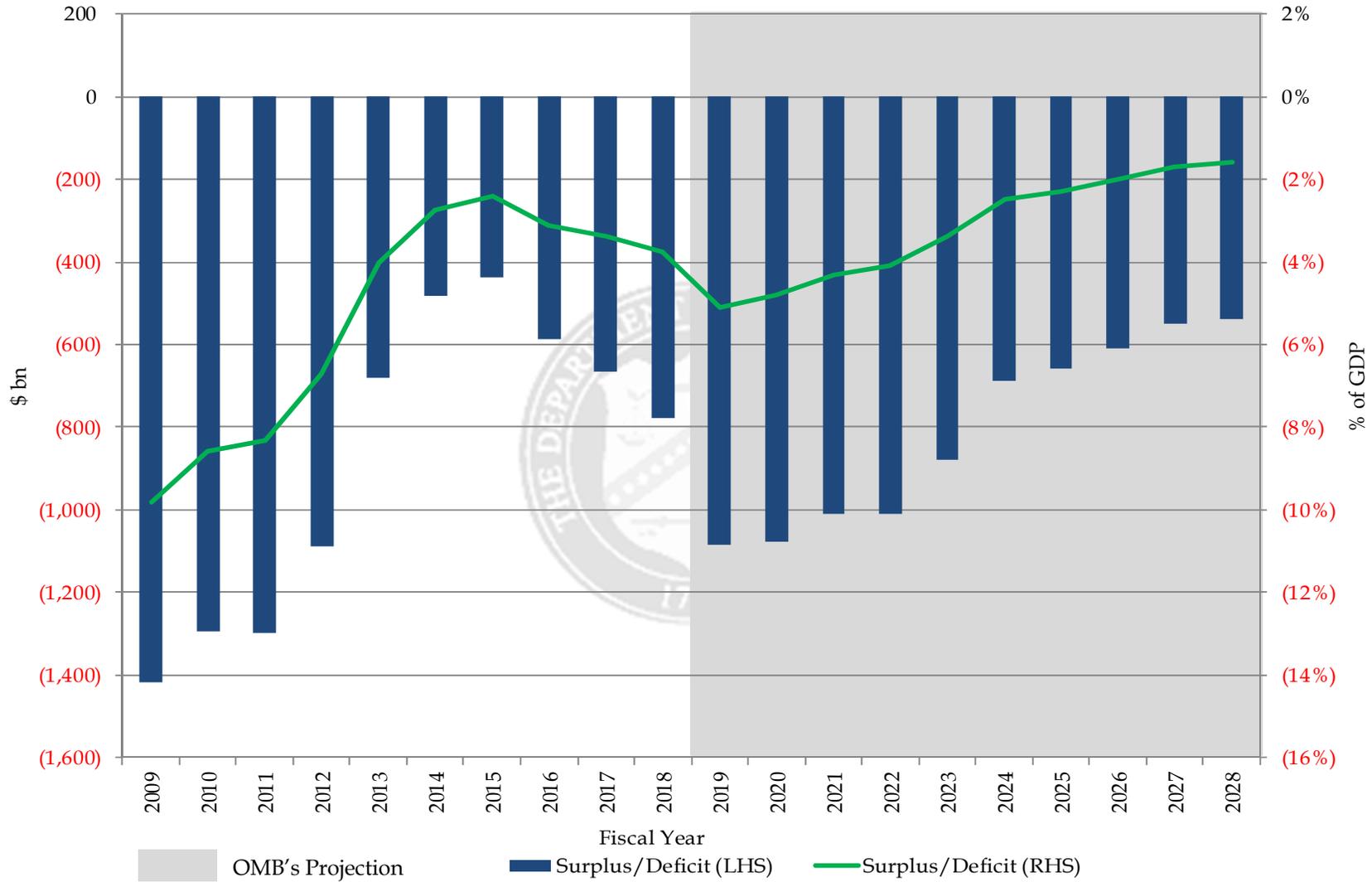
²Table 1-1 of CBO's "The Budget and Economic Outlook: 2019 to 2029," January 2019 (current law).

³Table S-11 of OMB's "Mid-Session Review, Fiscal Year 2019," July 2018.

⁴Table 2 of CBO's "An Analysis of the President's 2019 Budget," May 2018.

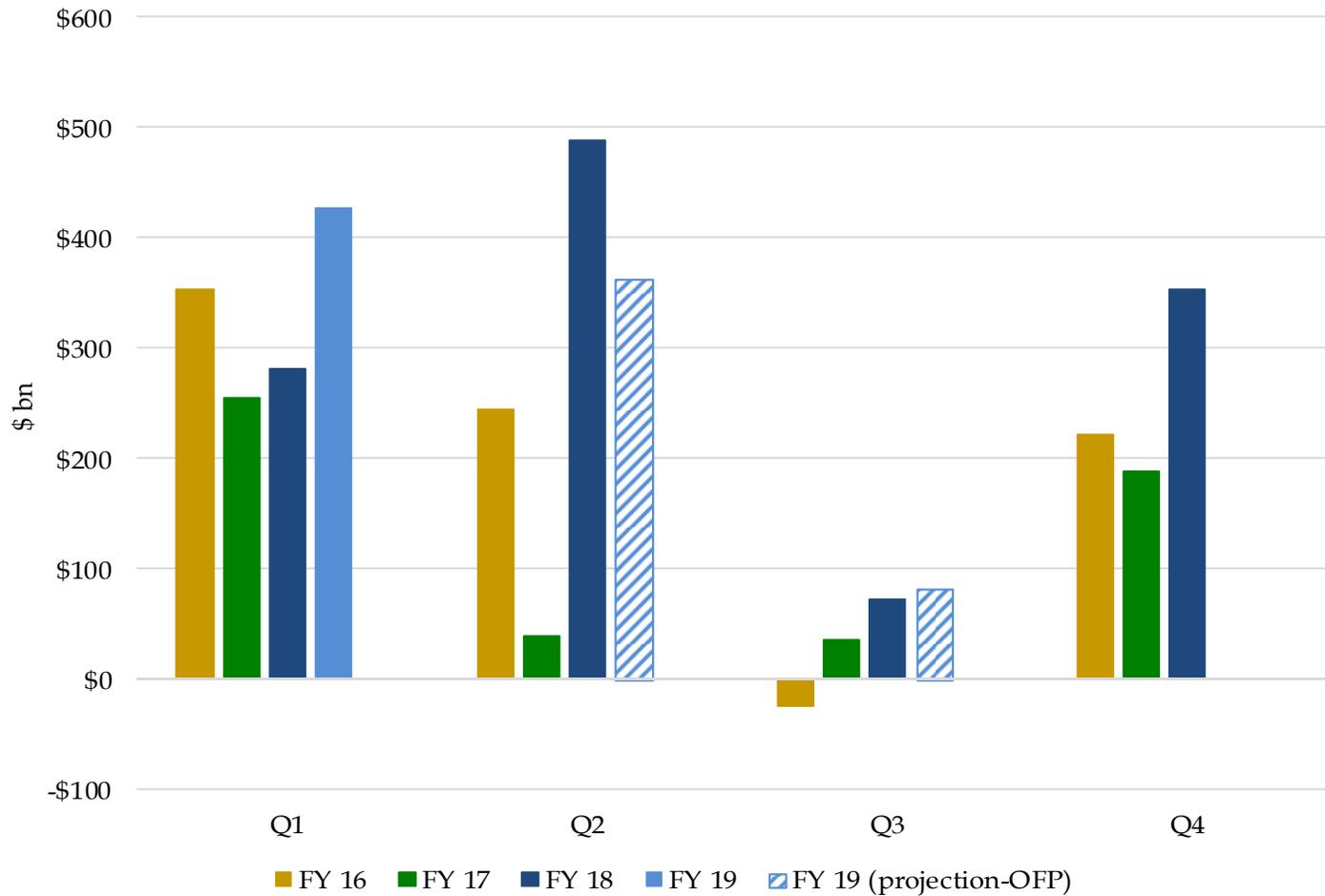
*Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA), but includes financing required due to SOMA redemptions.

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



Note: 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 12/31/2018.
- 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 November 2018 refunding, while using a total of ~\$2.34 trillion of bills outstanding.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 12/31/2018.
- No attempt was made to account for future financing needs.



Sources of Privately-Held Financing in FY19 Q1*

October - December 2018	
Net Bill Issuance	100
Net Coupon Issuance	326
Subtotal: Net Marketable Borrowing	426
Ending Cash Balance	402
Beginning Cash Balance	385
Subtotal: Change in Cash Balance	17
Net Implied Funding for FY19 Q1**	409

Security	October - December 2018 Bill Issuance			Fiscal Year-to-Date Bill Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
4-Week	565	585	(20)	565	585	(20)
8-Week	315	75	240	315	75	240
13-Week	558	645	(87)	558	645	(87)
26-Week	495	546	(51)	495	546	(51)
52-Week	78	60	18	78	60	18
CMBs	0	0	0	0	0	0
Bill Subtotal	2,011	1,911	100	2,011	1,911	100

Security	October - December 2018 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	55	41	14	55	41	14
2-Year	154	104	50	154	104	50
3-Year	111	72	39	111	72	39
5-Year	158	94	64	158	94	64
7-Year	126	91	35	126	91	35
10-Year	74	27	47	74	27	47
30-Year	50	3	47	50	3	47
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	758	432	326	758	432	326

*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-December 2018 cash balance of \$402 billion versus a beginning-of-October 2018 cash balance of \$385 billion. By keeping the cash balance constant, Treasury arrives at the net implied funding number.

Sources of Privately-Held Financing in FY19 Q2*

January - March 2019	
Assuming Constant Coupon Issuance Sizes**	
Treasury Announced Net Marketable Borrowing***	365
Net Coupon Issuance	233
Implied Change in Bills	132

Security	January - March 2019 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	56	41	15	111	82	29
2-Year	80	52	28	234	156	78
3-Year	114	72	42	225	144	81
5-Year	82	63	19	240	157	83
7-Year	64	47	17	190	138	52
10-Year	75	25	50	149	52	97
30-Year	51	6	45	101	9	92
5-Year TIPS	0	0	0	14	0	14
10-Year TIPS	24	15	9	35	15	20
30-Year TIPS	7	0	7	12	0	12
Coupon Subtotal	553	320	233	1,311	752	559

*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.

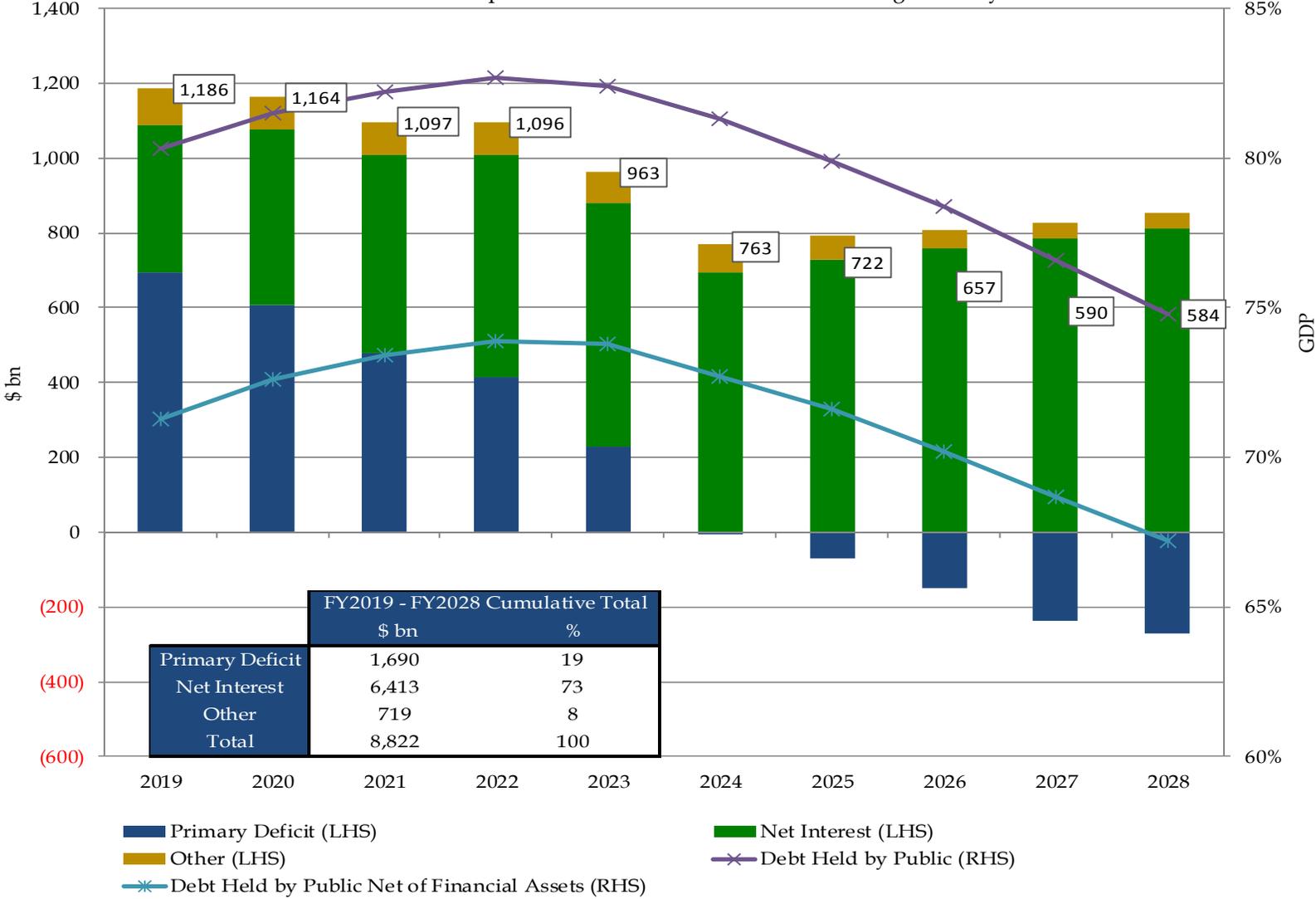
**Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made at the November 2018 refunding.

***Assumes an end-of-March 2019 cash balance of \$320 billion versus a beginning-of-January 2019 cash balance of \$402 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>

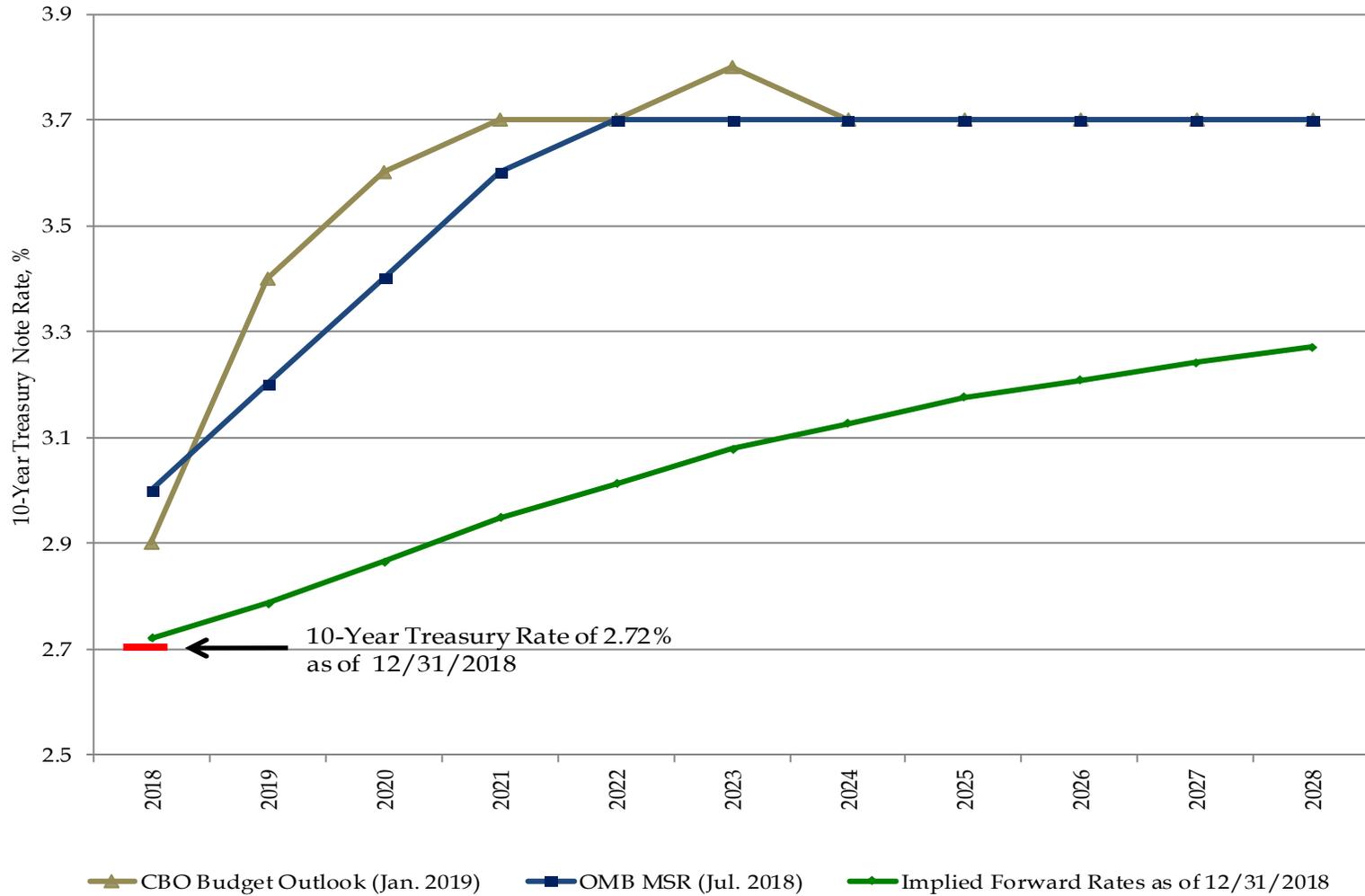
OMB's Projection of Borrowing from the Public

The bubbles represent the total net marketable borrowing for that year



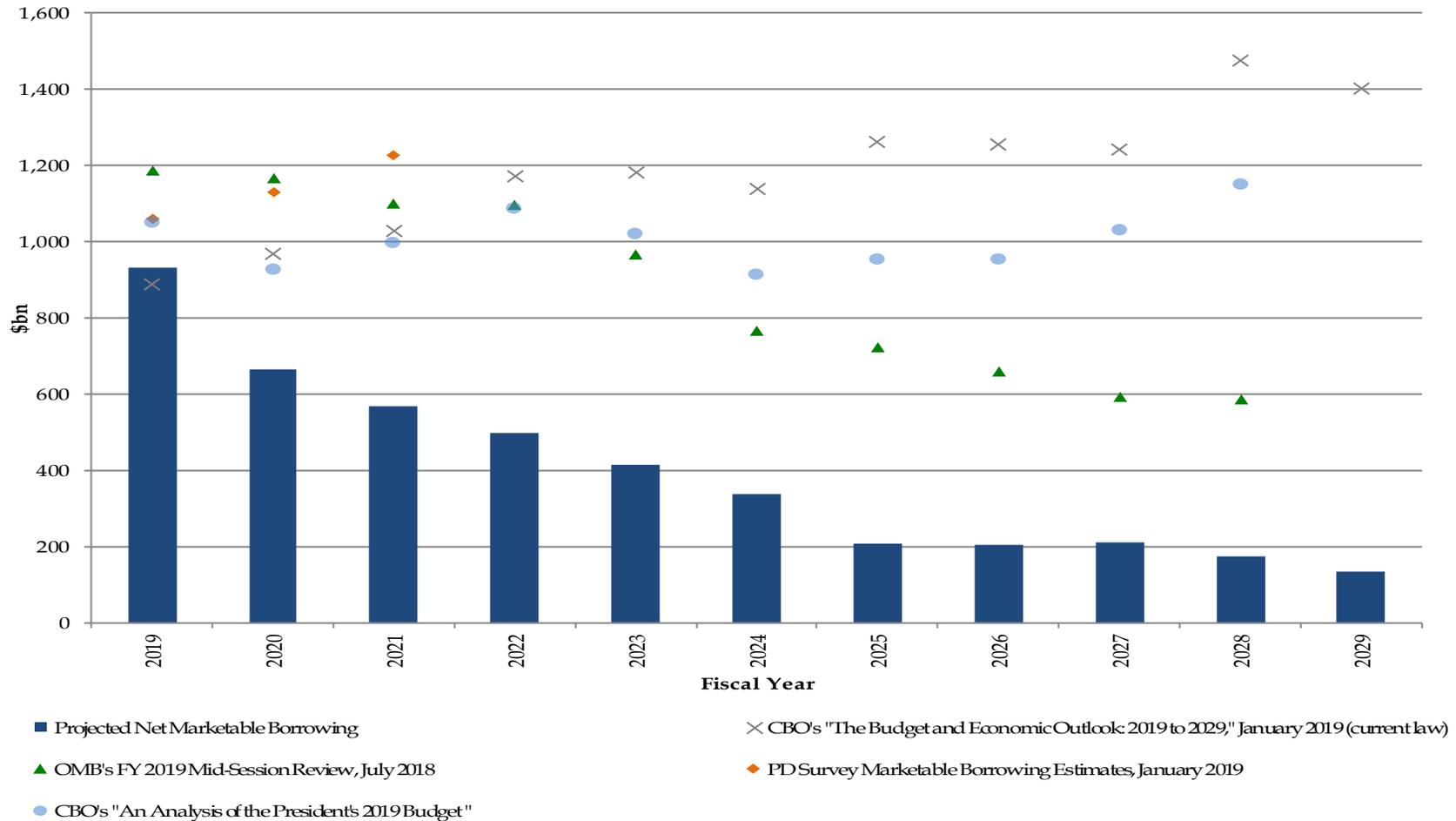
OMB's projections of the change in debt held by the public (borrowing) are from Table S-11 of "Mid-Session Review, Fiscal Year 2019," July 2018. "Other" represents borrowing from the public to provide direct and guaranteed loans.

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 E-1 of CBO's "The Budget and Economic Outlook: 2019 to 2029," January 2019. The forward rates are the implied 10-Year Treasury Note rates on December 31, 2018.

Projected Net Marketable Borrowing Assuming Future Issuance Remains Constant*



Treasury's latest 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 Table 1-1 of "The Budget and Economic Outlook: 2019 to 2029," January 2019. See table at the end of this section for details.

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

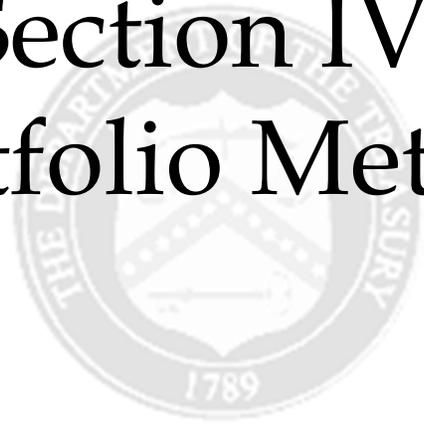
Historical Net Marketable Borrowing and Projected Net Borrowing Assuming Future Issuance Remains Constant, \$ billions

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 "The Budget and Economic Outlook: 2019 to 2029"	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	100	494	238	45	53	930	1,186	885	1,059
2020	0	336	277	28	27	668	1,164	965	1,127
2021	0	221	333	13	1	568	1,097	1,025	1,225
2022	0	133	358	2	3	497	1,096	1,169	
2023	0	171	233	5	5	415	963	1,181	
2024	0	0	319	18	1	338	763	1,136	
2025	0	(31)	297	(55)	(2)	208	722	1,260	
2026	0	(29)	282	(48)	(2)	203	657	1,253	
2027	0	(5)	257	(37)	(3)	211	590	1,241	
2028	0	(13)	246	(64)	3	172	584	1,472	

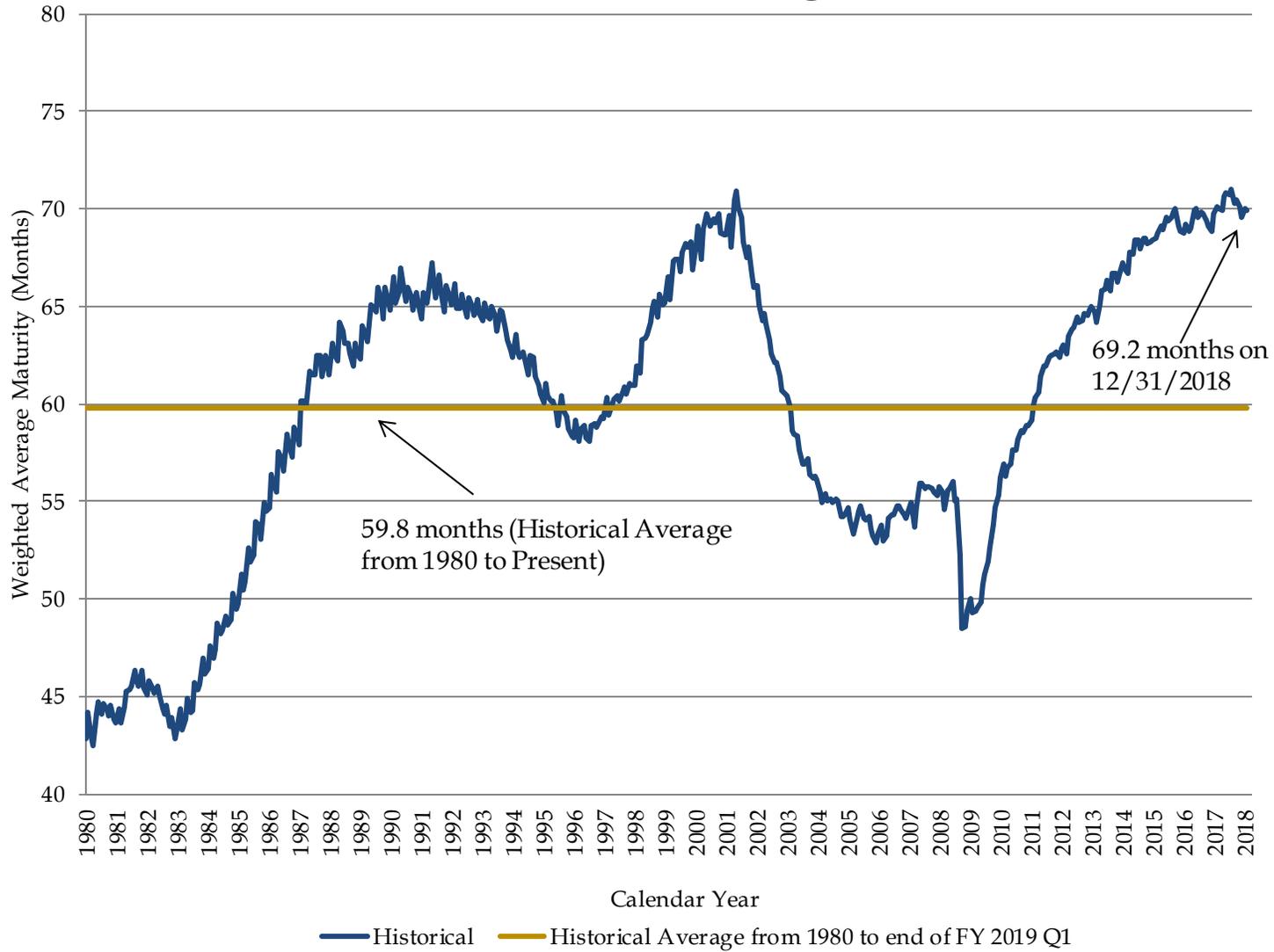
Net borrowing capacity reflects capped SOMA redemptions up until the end of CY 2020.

Treasury's latest 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 1-1 of CBO's "The Budget and Economic Outlook: 2019 to 2029," January 2019.

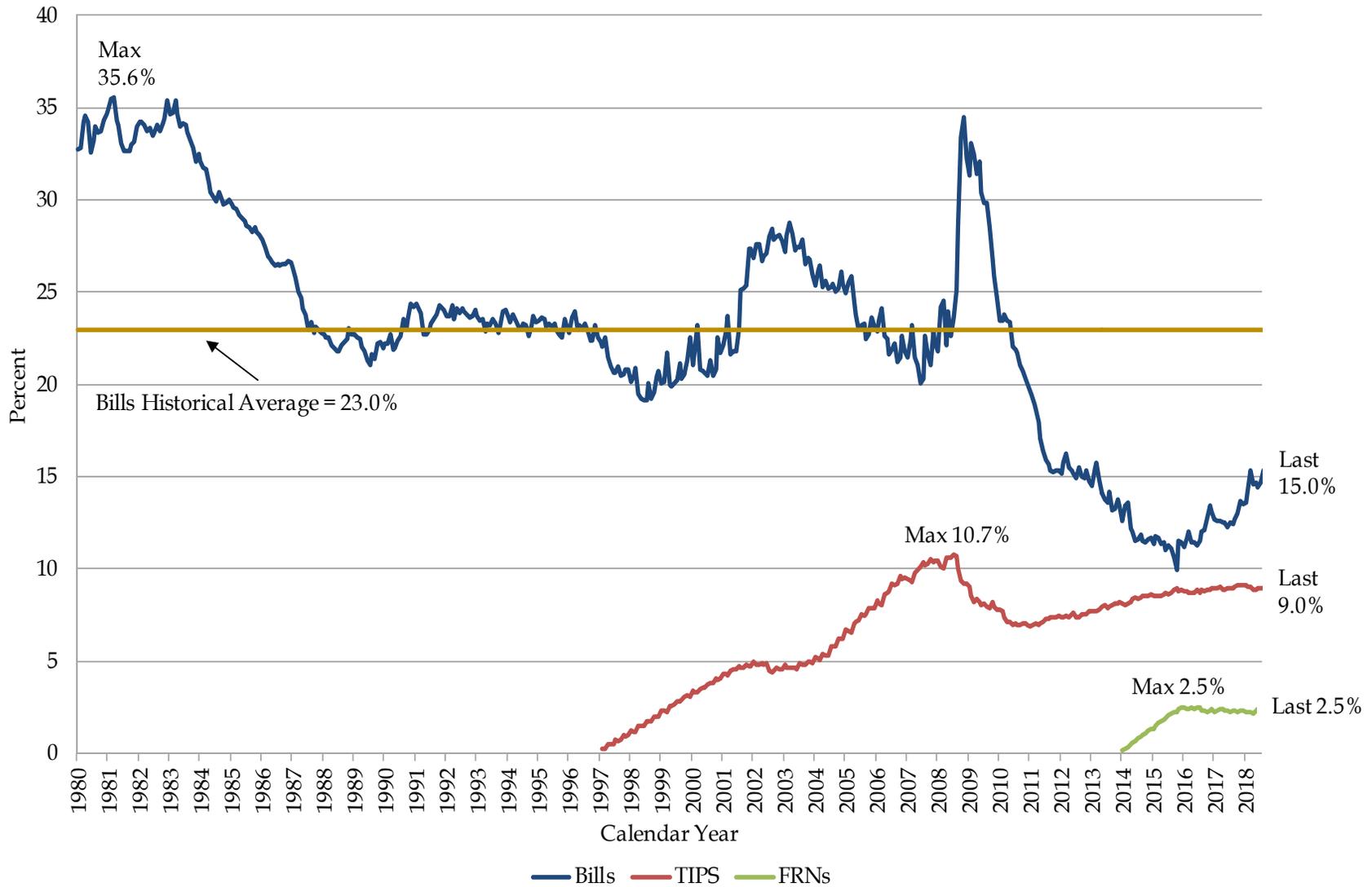
Section IV: Portfolio Metrics



Historical Weighted Average Maturity of Marketable Debt Outstanding



Bills, TIPS & FRNs Outstanding as a Percent of Marketable Debt Outstanding



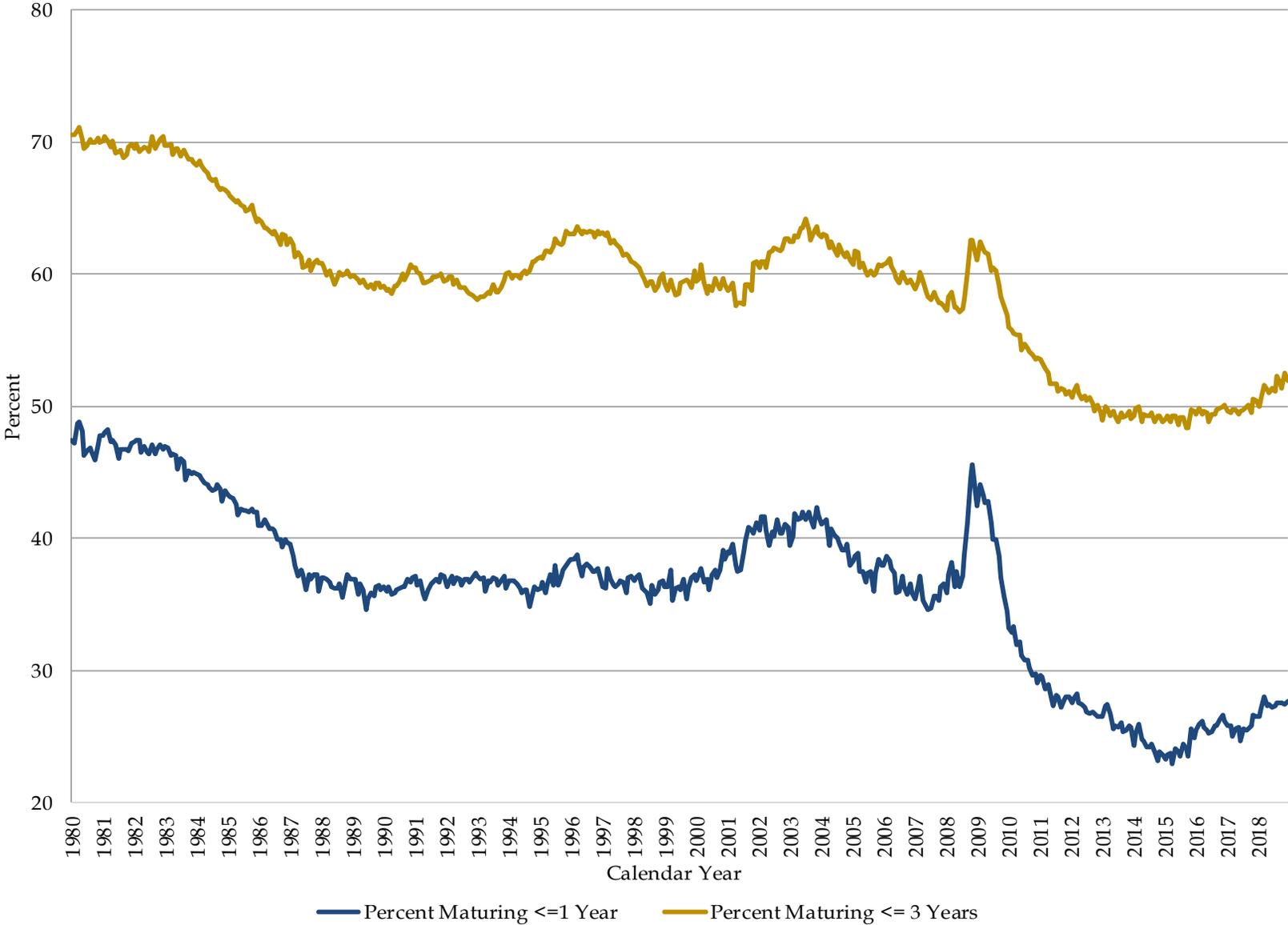
End of Fiscal Year Maturity Profile, \$ billions

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

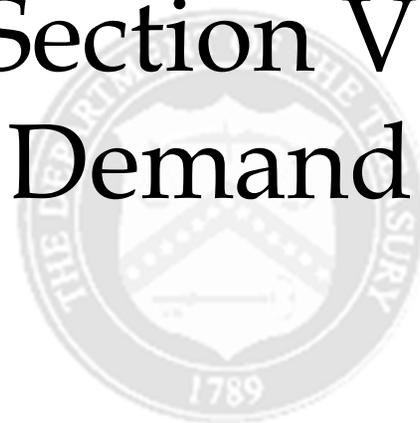
End of Fiscal Year Maturity Profile, percent

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 2019 Q1 Auctions

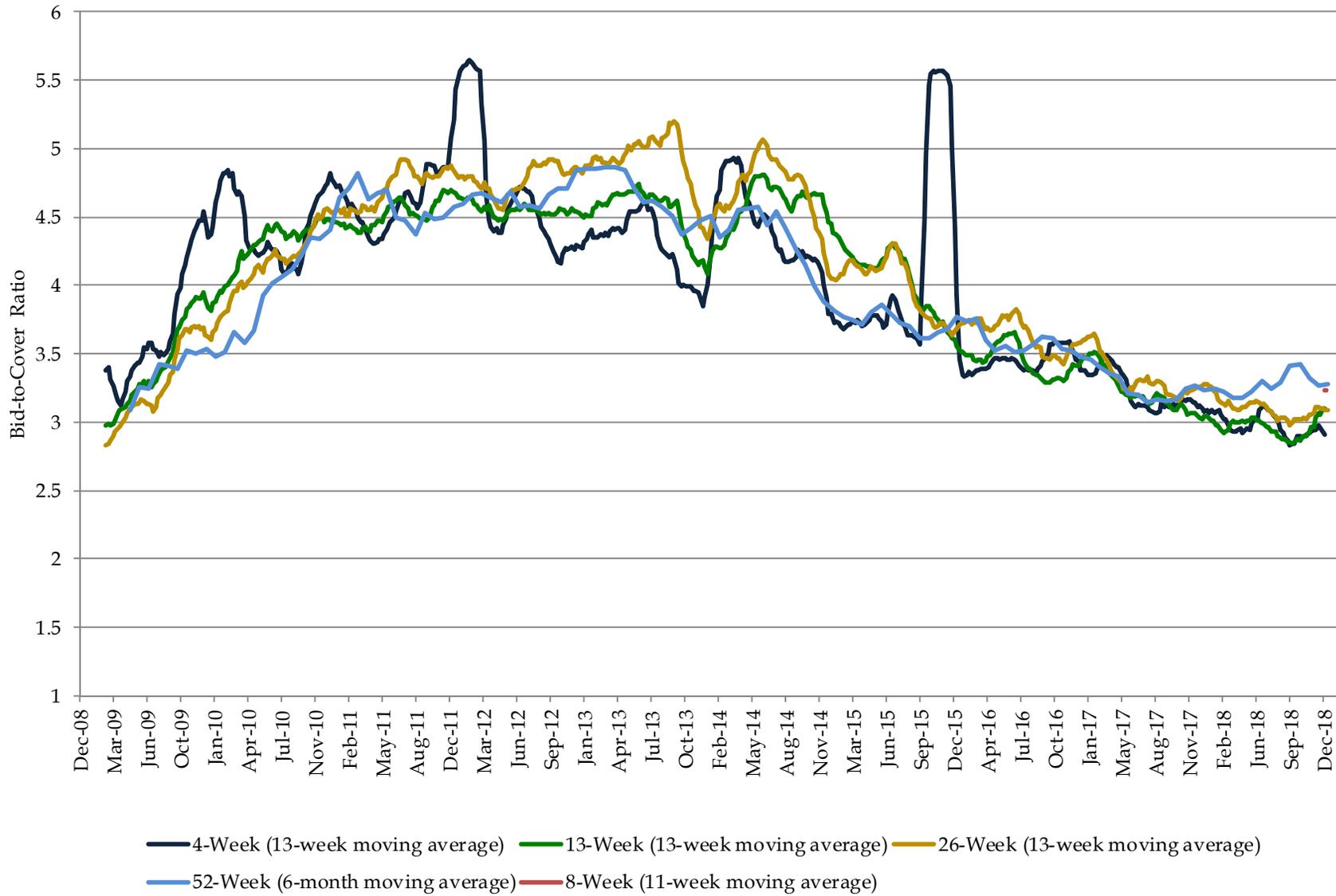
Security Type	Term	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$bn)	SOMA "Add-Ons" (\$bn)	10-Year Equivalent (\$bn)**
Bill	4-Week	2.239	2.9	589.2	60.4	8.8	30.8	15.8	0.0	5.3
Bill	8-Week	2.305	3.2	343.4	55.0	8.9	36.1	1.6	0.0	6.1
Bill	13-Week	2.326	3.1	576.5	52.7	8.1	39.2	20.5	0.0	17.5
Bill	26-Week	2.446	3.1	512.3	49.2	3.5	47.2	18.7	0.0	31.1
Bill	52-Week	2.601	3.2	101.4	46.2	6.8	46.9	2.6	0.0	12.1
Coupon	2-Year	2.776	2.5	115.6	41.6	11.0	47.4	1.4	3.4	27.5
Coupon	3-Year	2.904	2.6	110.2	42.7	8.5	48.9	0.8	7.5	40.1
Coupon	5-Year	2.833	2.3	119.7	35.2	7.3	57.5	0.3	3.5	67.7
Coupon	7-Year	2.908	2.5	94.9	21.4	15.7	62.9	0.1	2.8	72.9
Coupon	10-Year	3.119	2.4	73.9	27.0	5.6	67.4	0.1	5.5	80.0
Coupon	30-Year	3.315	2.2	50.0	28.4	8.6	63.0	0.0	3.9	120.8
TIPS	5-Year	1.129	2.8	14.0	12.6	6.7	80.8	0.0	0.0	7.0
TIPS	10-Year	1.109	2.6	11.0	19.8	12.1	68.1	0.0	1.0	13.0
TIPS	30-Year	1.235	2.3	5.0	23.3	0.9	75.7	0.0	0.0	14.9
FRN	2-Year	0.081	2.9	54.9	46.9	2.0	51.1	0.1	1.6	0.0

Total Bills	2.341	3.1	2,122.8	54.1	7.3	38.7	59.2	0.0	72.1
Total Coupons	2.928	2.4	564.3	34.0	9.6	56.4	2.7	26.7	408.9
Total TIPS	1.139	2.6	30.0	17.0	7.7	75.3	0.0	1.0	34.9
Total FRN	0.081	2.9	54.9	46.9	2.0	51.1	0.1	1.6	0.0

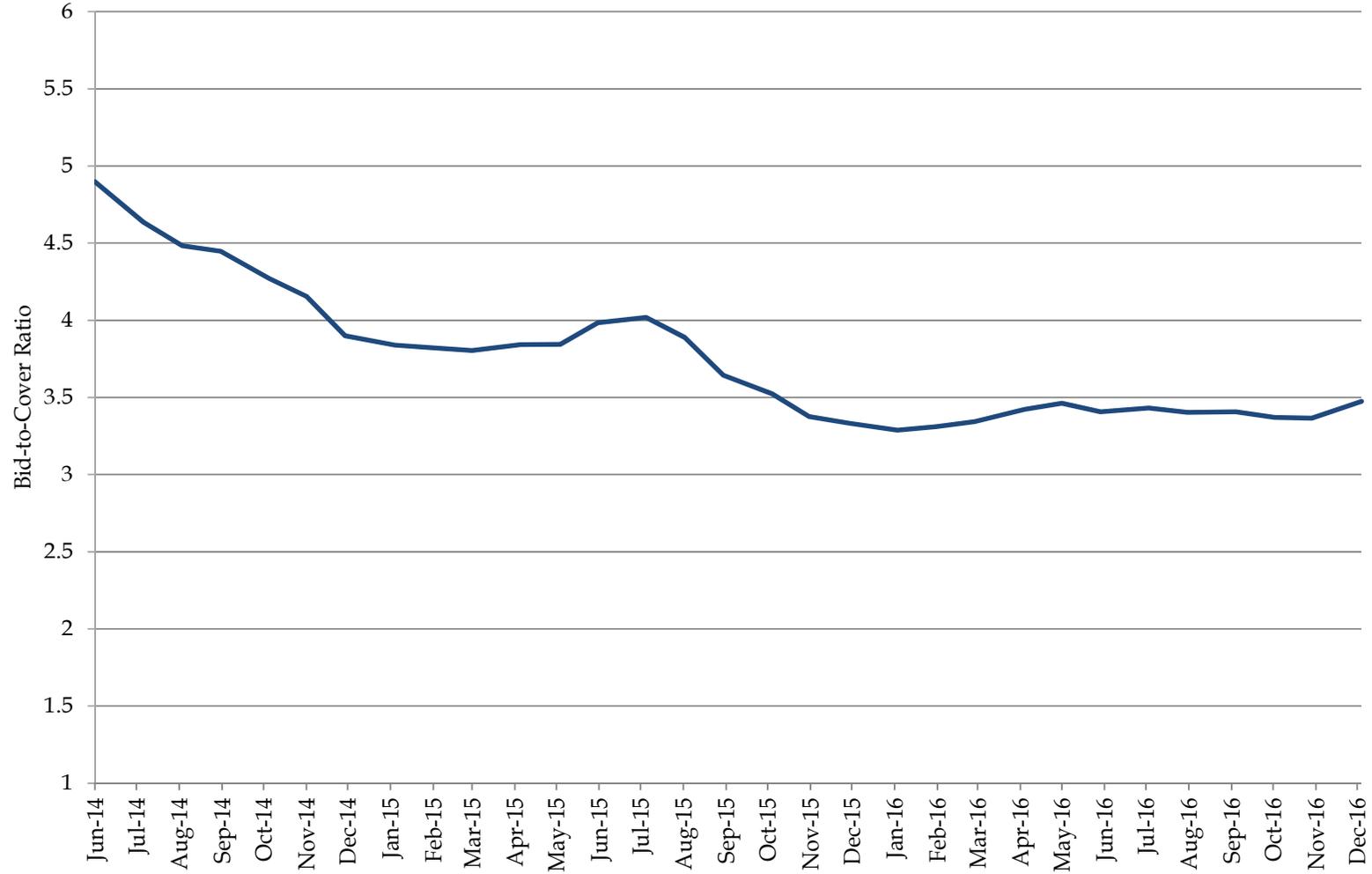
*Weighted averages of Competitive Awards. FRNs are reported on discount margin basis.

**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.

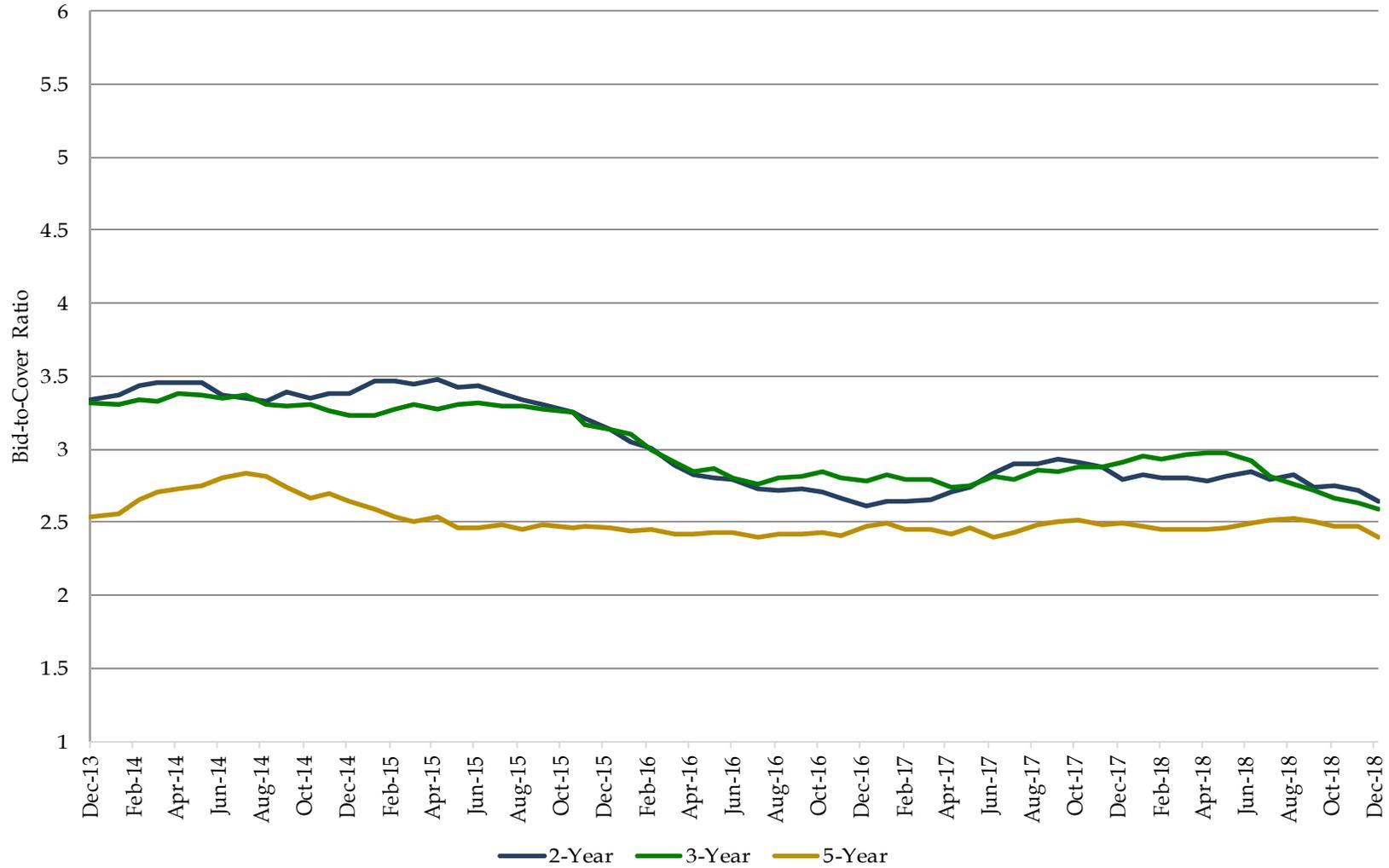
Bid-to-Cover Ratios for Treasury Bills



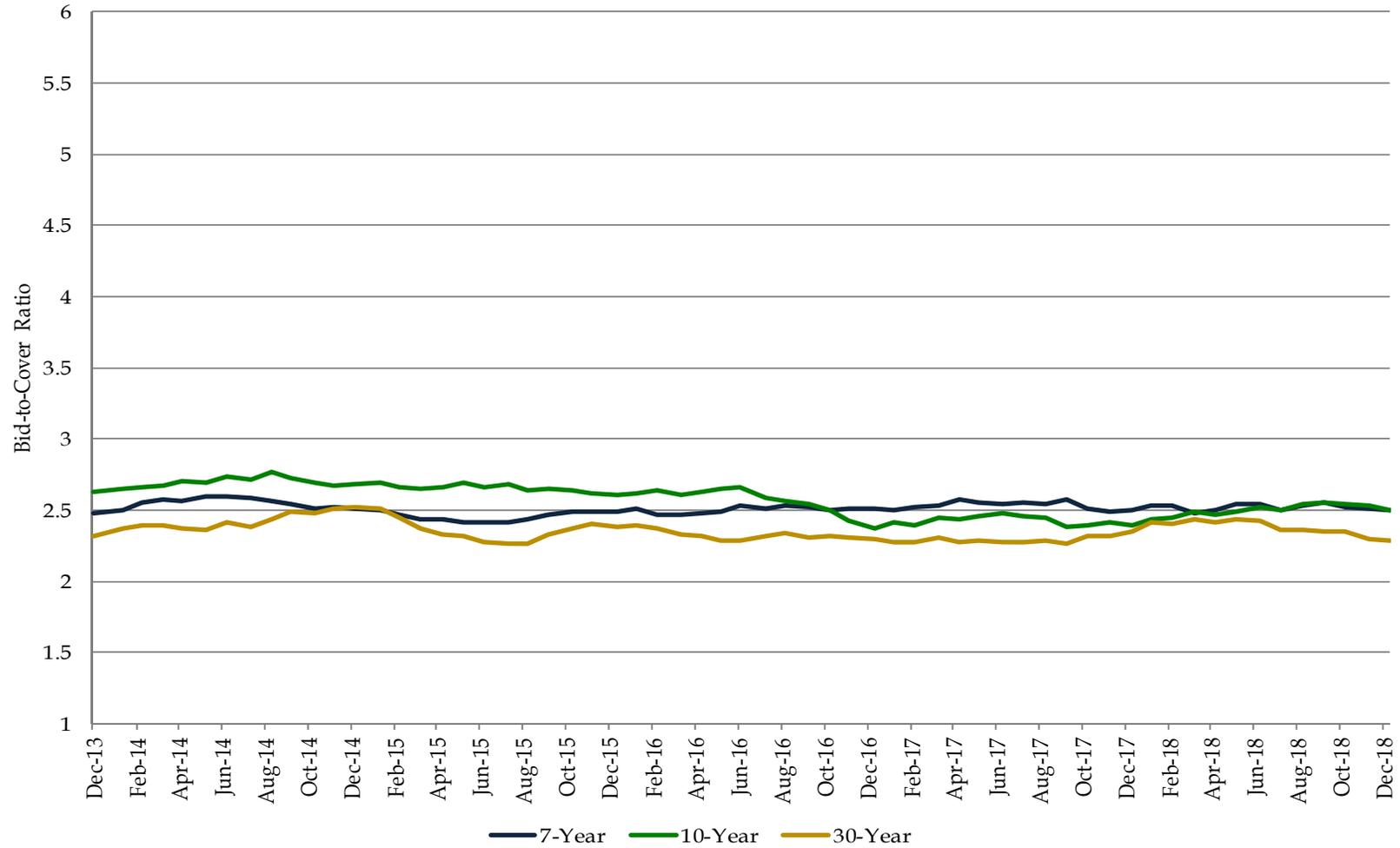
Bid-to-Cover Ratios for FRNs (6-Month Moving Average)



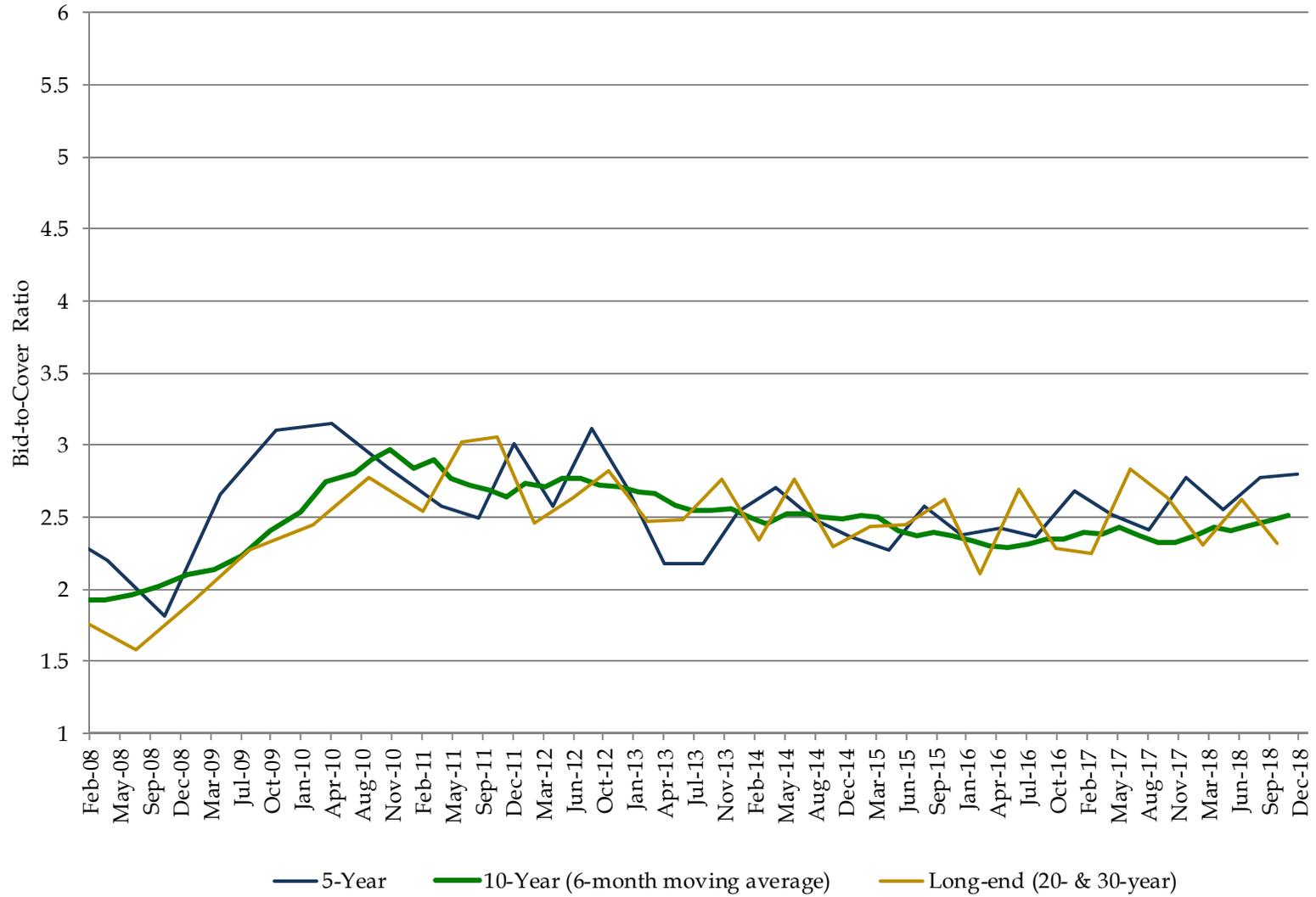
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



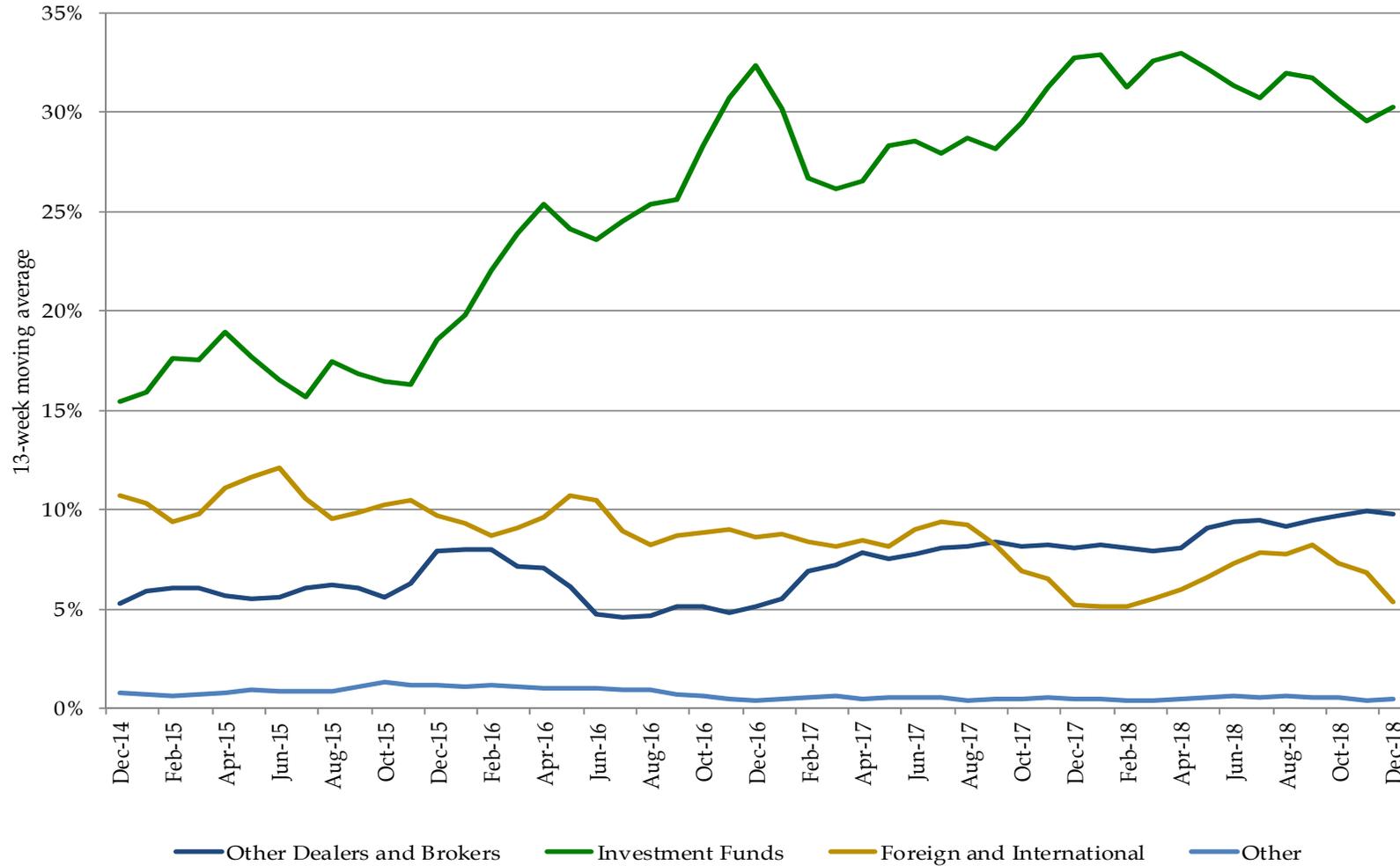
Bid-to-Cover Ratios for 7-, 10-, and 30-Year Nominal Securities (6-Month Moving Average)



Bid-to-Cover Ratios for TIPS

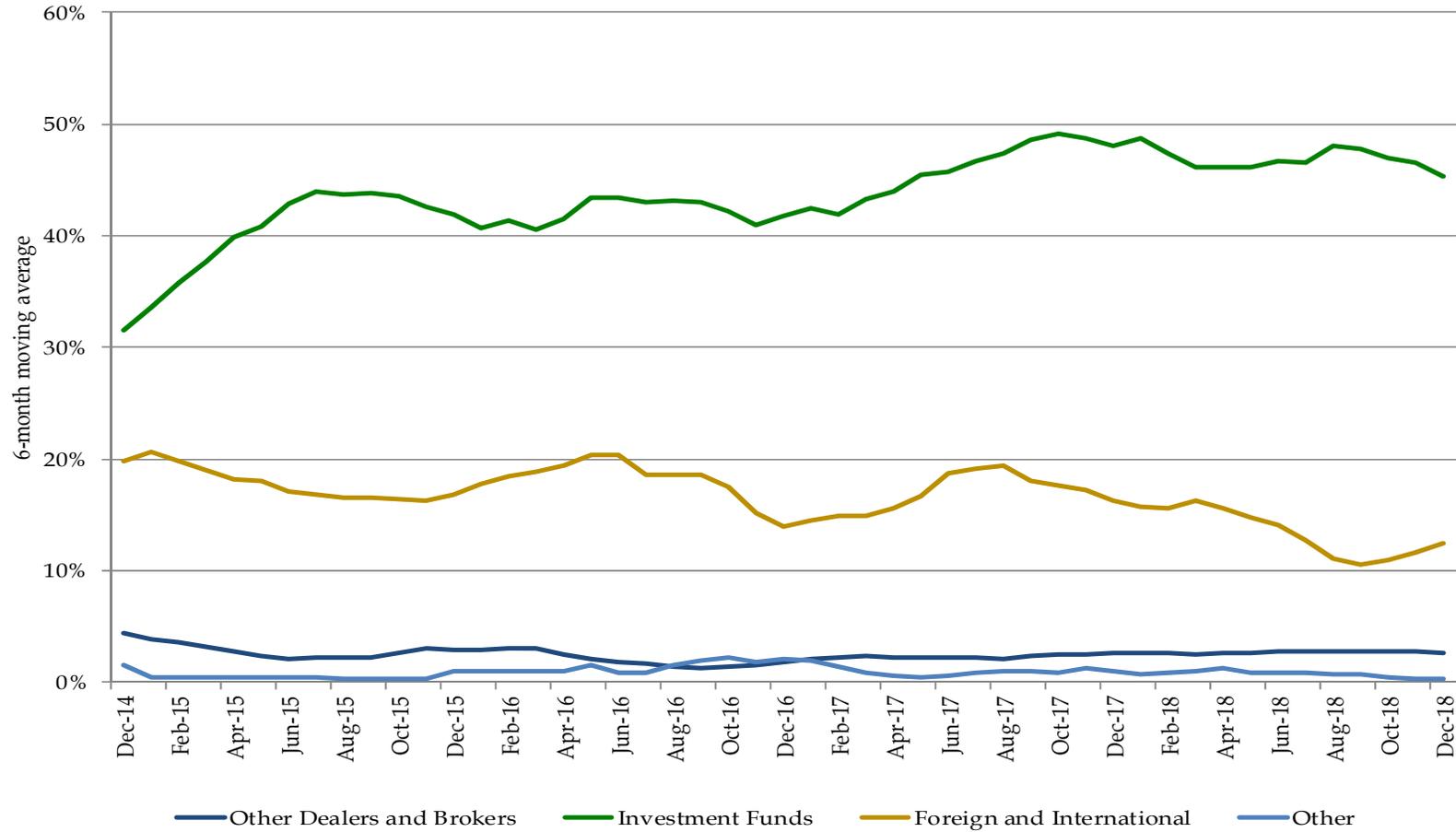


Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



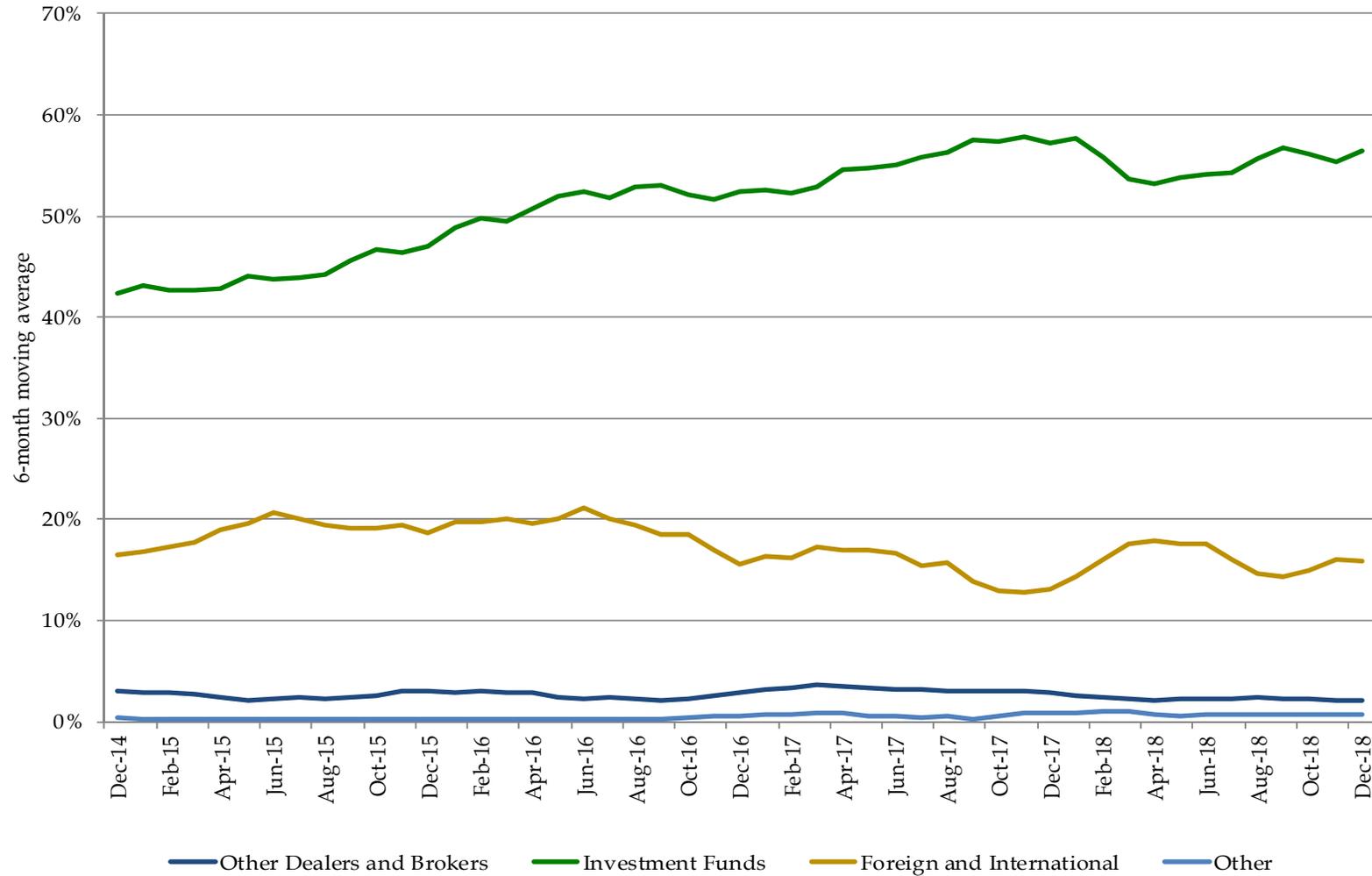
Excludes SOMA add-ons. The “Other” category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



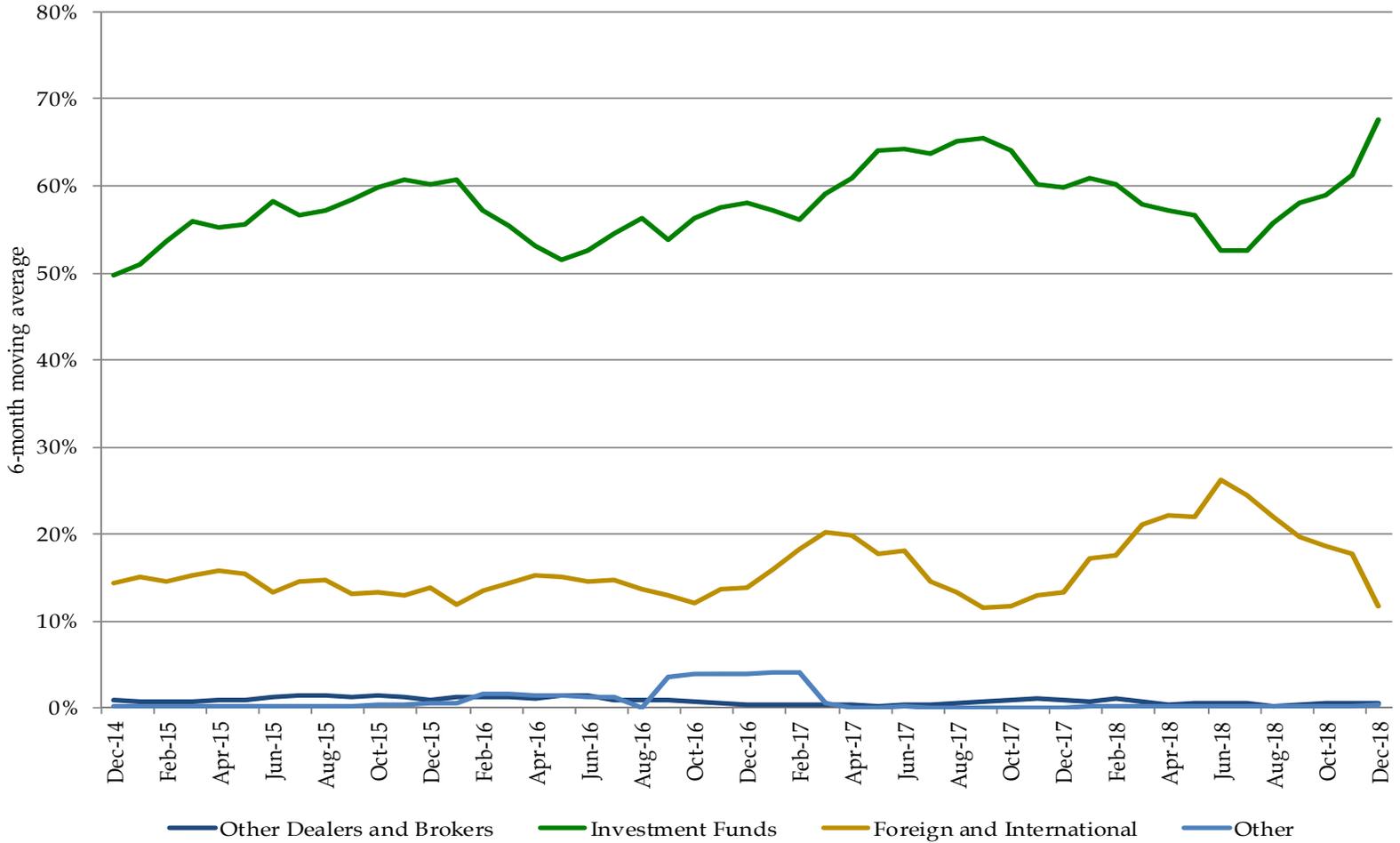
Excludes SOMA add-ons. The “Other” category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



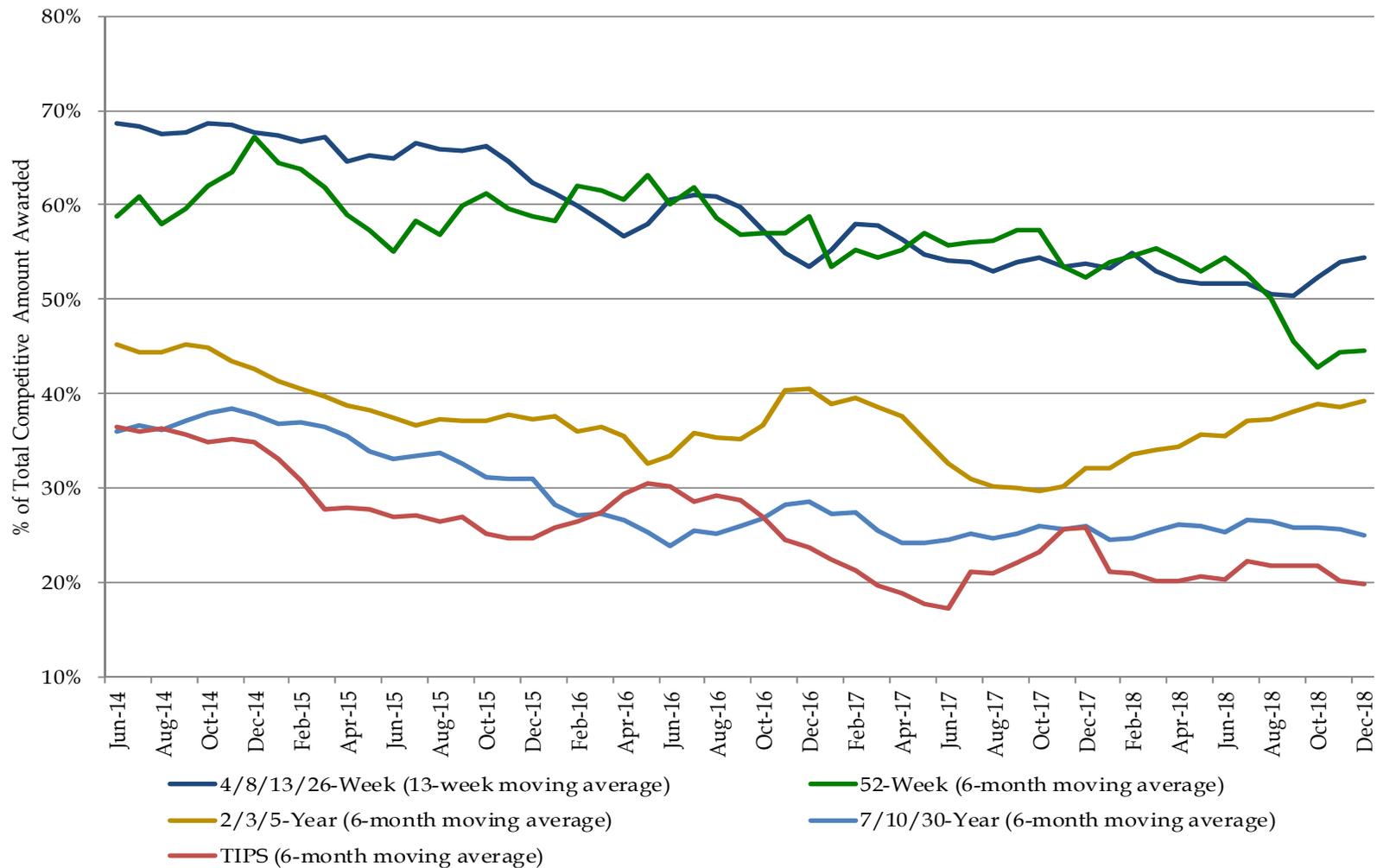
Excludes SOMA add-ons. The “Other” category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



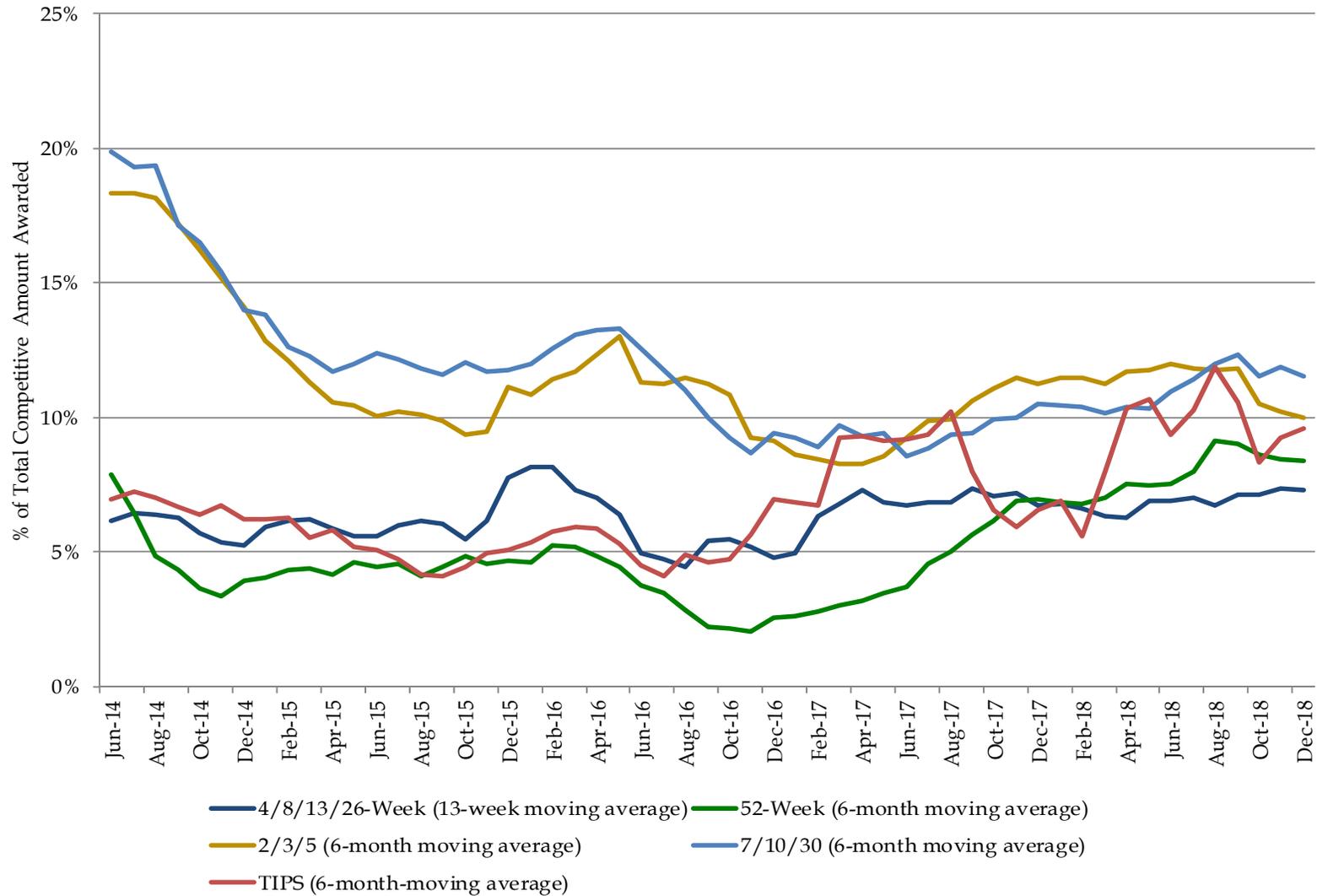
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

Primary Dealer Awards at Auction



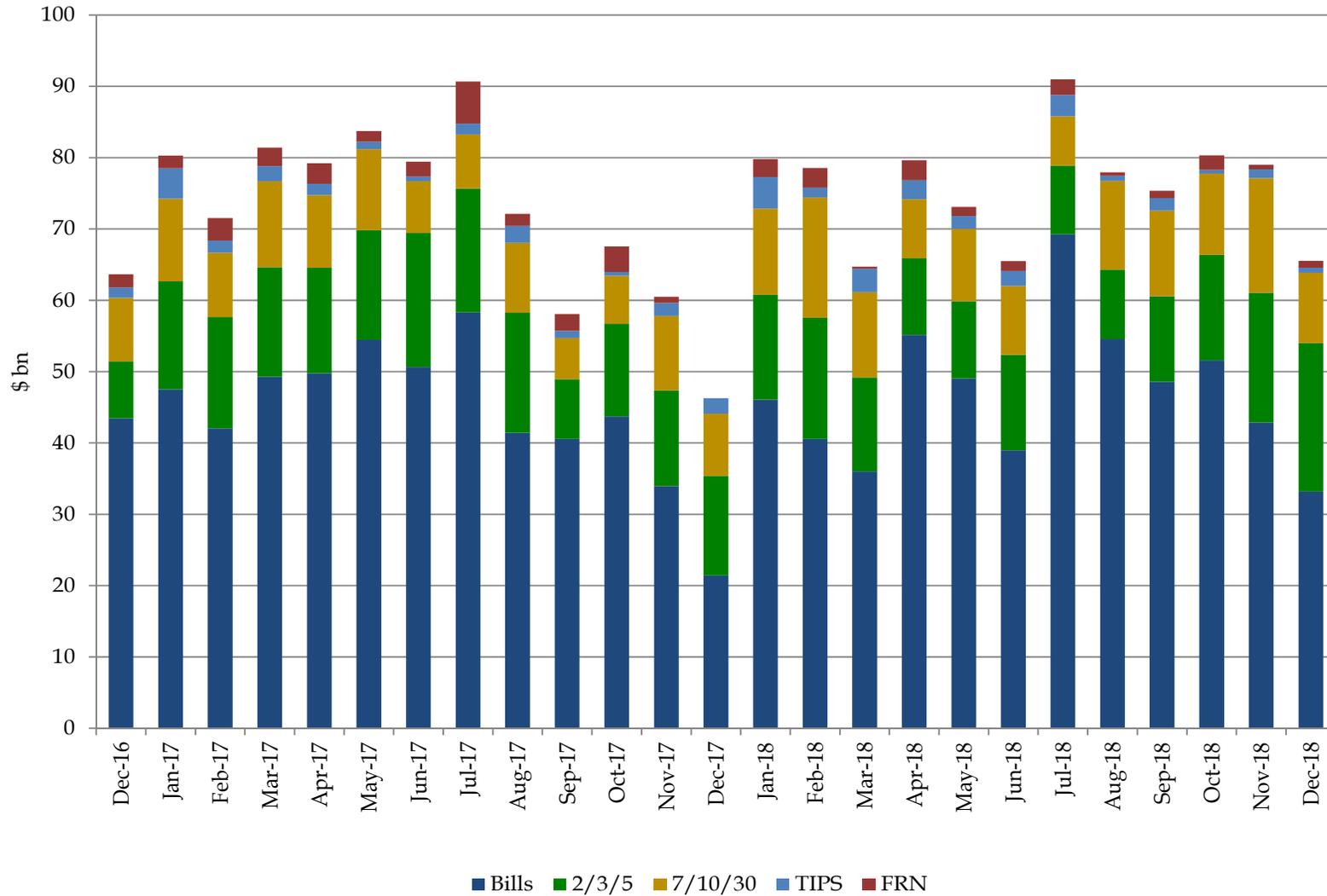
Excludes SOMA add-ons.

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 faintly visible in the background. It is a circular emblem with the text "THE DEPARTMENT OF THE TREASURY" around the top and "1789" at the bottom. The central shield features a scale of justice, a sword, and a chevron with stars.

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	10/4/2018	2.105	3.12	38.9	50.7	9.5	39.8	1.1	0.0	0.4
4-Week	10/11/2018	2.135	3.17	38.8	57.0	5.5	37.5	1.2	0.0	0.4
4-Week	10/18/2018	2.155	2.81	39.0	65.7	10.8	23.5	1.0	0.0	0.4
4-Week	10/25/2018	2.180	2.86	39.0	67.4	9.0	23.6	1.0	0.0	0.4
4-Week	11/1/2018	2.165	2.85	43.9	47.7	13.5	38.9	1.1	0.0	0.4
4-Week	11/8/2018	2.200	2.91	48.7	55.6	7.5	36.9	1.3	0.0	0.5
4-Week	11/15/2018	2.200	2.78	49.0	69.7	10.9	19.4	1.0	0.0	0.4
4-Week	11/23/2018	2.200	2.90	48.9	58.3	7.7	34.0	1.1	0.0	0.4
4-Week	11/29/2018	2.270	2.75	49.0	74.6	5.9	19.5	1.0	0.0	0.4
4-Week	12/6/2018	2.320	3.07	38.7	54.6	7.2	38.2	1.3	0.0	0.3
4-Week	12/11/2018	2.365	3.04	39.3	54.3	9.4	36.4	0.7	0.0	0.4
4-Week	12/18/2018	2.325	2.92	38.7	59.1	13.1	27.8	1.3	0.0	0.4
4-Week	12/26/2018	2.360	2.68	38.6	71.9	9.8	18.3	1.4	0.0	0.3
4-Week	1/2/2019	2.400	3.03	38.8	55.9	3.9	40.3	1.2	0.0	0.3
8-Week	10/18/2018	2.170	3.13	24.9	62.0	15.1	22.9	0.1	0.0	0.4
8-Week	10/25/2018	2.180	3.43	24.9	59.2	7.2	33.7	0.1	0.0	0.4
8-Week	11/1/2018	2.205	3.08	24.9	61.9	8.1	29.9	0.1	0.0	0.4
8-Week	11/8/2018	2.240	3.09	29.9	62.4	5.4	32.2	0.1	0.0	0.5
8-Week	11/15/2018	2.285	3.13	29.8	52.9	10.1	37.1	0.2	0.0	0.5
8-Week	11/23/2018	2.300	3.48	29.9	45.7	11.4	42.9	0.1	0.0	0.5
8-Week	11/29/2018	2.315	3.23	29.9	48.1	14.1	37.8	0.1	0.0	0.5
8-Week	12/6/2018	2.360	3.24	29.9	40.2	10.3	49.5	0.1	0.0	0.5
8-Week	12/11/2018	2.390	3.01	30.0	58.4	6.2	35.4	0.0	0.0	0.5
8-Week	12/18/2018	2.360	3.81	29.8	43.3	10.0	46.7	0.2	0.0	0.5
8-Week	12/26/2018	2.375	2.98	29.8	63.0	6.5	30.5	0.2	0.0	0.5
8-Week	1/2/2019	2.420	3.13	29.8	66.4	3.2	30.4	0.2	0.0	0.5

*Weighted averages of competitive awards.

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

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)*
13-Week	10/4/2018	2.175	2.93	46.4	59.1	8.8	32.1	1.6	0.0	1.4
13-Week	10/11/2018	2.220	2.72	46.2	71.6	6.8	21.6	1.8	0.0	1.4
13-Week	10/18/2018	2.270	2.96	43.6	60.9	6.3	32.8	1.4	0.0	1.3
13-Week	10/25/2018	2.300	3.06	42.9	53.3	6.0	40.8	2.1	0.0	1.3
13-Week	11/1/2018	2.305	2.90	43.3	45.8	17.5	36.8	1.7	0.0	1.3
13-Week	11/8/2018	2.320	3.07	43.7	53.6	9.2	37.2	1.3	0.0	1.3
13-Week	11/15/2018	2.340	3.14	43.6	49.6	9.4	40.9	1.4	0.0	1.3
13-Week	11/23/2018	2.345	3.06	40.6	52.8	6.4	40.8	1.4	0.0	1.2
13-Week	11/29/2018	2.370	3.74	37.1	42.0	8.0	50.1	1.9	0.0	1.1
13-Week	12/6/2018	2.365	3.26	37.7	42.8	7.1	50.1	1.3	0.0	1.1
13-Week	12/13/2018	2.375	2.95	37.8	50.4	9.6	40.0	1.2	0.0	1.1
13-Week	12/20/2018	2.375	3.52	37.8	44.8	9.5	45.7	1.2	0.0	1.1
13-Week	12/27/2018	2.415	2.94	37.7	53.3	4.3	42.4	1.3	0.0	1.1
13-Week	1/3/2019	2.465	2.81	38.0	51.7	3.7	44.6	1.0	0.0	1.1
26-Week	10/4/2018	2.335	2.89	40.7	57.6	4.1	38.3	1.3	0.0	2.4
26-Week	10/11/2018	2.380	2.79	40.6	57.8	3.8	38.4	1.4	0.0	2.5
26-Week	10/18/2018	2.415	2.87	37.7	59.1	3.0	37.9	1.3	0.0	2.3
26-Week	10/25/2018	2.425	3.13	37.1	46.6	2.6	50.8	1.9	0.0	2.3
26-Week	11/1/2018	2.430	3.01	37.8	46.5	5.0	48.5	1.2	0.0	2.3
26-Week	11/15/2018	2.465	3.26	37.9	52.0	3.8	44.3	1.1	0.0	2.3
26-Week	11/23/2018	2.455	3.16	34.8	54.7	3.8	41.5	1.2	0.0	2.1
26-Week	11/29/2018	2.475	3.61	34.6	36.1	5.2	58.8	1.4	0.0	2.1
26-Week	12/6/2018	2.495	3.05	34.8	58.6	2.8	38.6	1.2	0.0	2.1
26-Week	12/13/2018	2.480	3.07	34.9	43.2	3.9	52.9	1.1	0.0	2.1
26-Week	12/20/2018	2.485	3.13	34.9	42.7	3.7	53.7	1.1	0.0	2.1
26-Week	12/27/2018	2.480	3.04	34.2	32.1	1.2	66.7	1.8	0.0	2.1
26-Week	1/3/2019	2.505	2.92	34.3	46.8	2.8	50.4	1.7	0.0	2.1
52-Week	10/11/2018	2.580	3.48	25.3	35.8	7.1	57.1	0.7	0.0	3.0
52-Week	11/8/2018	2.645	3.05	25.3	51.6	6.5	41.9	0.7	0.0	3.1
52-Week	12/6/2018	2.635	3.05	25.4	45.4	5.9	48.7	0.6	0.0	3.0
52-Week	1/3/2019	2.545	3.13	25.4	52.1	7.8	40.1	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	10/31/2018	2.880	2.67	37.5	41.9	5.5	52.6	0.5	0.0	8.7
2-Year	11/30/2018	2.836	2.65	38.6	35.6	19.5	44.9	0.4	3.4	9.6
2-Year	12/31/2018	2.619	2.31	39.5	47.2	7.8	45.0	0.5	0.0	9.2
3-Year	10/15/2018	2.989	2.56	35.7	43.3	9.8	46.9	0.3	0.0	12.1
3-Year	11/15/2018	2.983	2.54	36.7	47.9	3.0	49.1	0.3	7.5	15.2
3-Year	12/17/2018	2.748	2.59	37.8	37.0	12.5	50.5	0.2	0.0	12.8
5-Year	10/31/2018	2.977	2.30	38.9	39.1	1.9	59.0	0.1	0.0	21.4
5-Year	11/30/2018	2.880	2.49	39.9	29.8	10.3	59.9	0.1	3.5	23.7
5-Year	12/31/2018	2.652	2.09	41.0	36.8	9.6	53.6	0.0	0.0	22.6
7-Year	10/31/2018	3.074	2.39	31.0	30.1	5.2	64.6	0.0	0.0	23.1
7-Year	11/30/2018	2.974	2.55	32.0	16.3	27.0	56.6	0.0	2.8	25.8
7-Year	12/31/2018	2.680	2.46	32.0	18.0	14.6	67.4	0.0	0.0	24.0
10-Year	10/15/2018	3.225	2.39	23.0	30.1	5.4	64.5	0.0	0.0	22.9
10-Year	11/15/2018	3.209	2.54	27.0	25.0	1.2	73.8	0.0	5.5	33.1
10-Year	12/17/2018	2.915	2.35	24.0	26.1	10.8	63.1	0.0	0.0	24.0
30-Year	10/15/2018	3.344	2.42	15.0	22.8	12.8	64.4	0.0	0.0	33.9
30-Year	11/15/2018	3.418	2.06	19.0	38.1	2.9	59.1	0.0	3.9	51.1
30-Year	12/17/2018	3.165	2.31	16.0	22.1	11.5	66.4	0.0	0.0	35.7
2-Year FRN	10/31/2018	0.045	3.32	19.0	48.0	0.1	51.9	0.0	0.0	0.0
2-Year FRN	11/30/2018	0.050	2.62	18.0	60.6	5.8	33.6	0.0	1.6	0.0
2-Year FRN	12/28/2018	0.150	2.71	18.0	32.2	0.1	67.7	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	12/31/2018	1.129	2.80	14.0	12.6	6.7	80.8	0.0	0.0	7.0
10-Year TIPS	11/30/2018	1.109	2.59	11.0	19.8	12.1	68.1	0.0	1.0	13.0
30-Year TIPS	10/31/2018	1.235	2.32	5.0	23.3	0.9	75.7	0.0	0.0	14.9

*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.