Treasury Presentation to TBAC

Office of Debt Management

Fiscal Year 2025 Q2 Report

Table of Contents*

*All sources are from Treasury unless otherwise specified

Section I:
Executive Summary

Highlights of Treasury's May 2025 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

*Receipts and Outlays through Q2 FY2025**

	$ billion	Change from same period last year ($ billion)	Change from same period last year (%)	As % of GDP	Change from same period last year (% GDP)
Total Receipts thru Q2 FY2025	$2,260	$72	3%	15.0%	-0.2%
Total Outlays thru Q2 FY2025	$3,567	$315	10%	23.6%	1.0%

*After adjusting FYTD 2025 receipts to account for the for the effects of FY2023 and FY2024 tax deferrals, the growth in receipts would have been $157 billion or 7 percent higher. Also, adjusting outlays to account for calendar impacts, the growth in outlays would have been $243 billion or only 7 percent.

*Treasury's Projected Privately-held Net Marketable Borrowing for the Current and Next Fiscal Quarters***

Treasury OFP Near Term Fiscal Projections	Privately Held Net Marketable Borrowing ($ billion)	Assumed End-of-Quarter Cash Balance ($ billion)
Q3 FY2025	$514	$850 (Jun)
Q4 FY2025	$554	$850 (Sep)

**The end-of-June and end-of-September cash balances assume enactment of a debt limit suspension or increase. Treasury's cash balance may be lower than assumed depending on several factors, including constraints related to the debt limit. If Treasury's cash balance for the end of either quarter is lower than assumed, and assuming no changes in the forecast of fiscal activity, Treasury would expect that borrowing would be lower by the corresponding amount(s).

*Projected Privately-held Net Marketable Borrowing for the Next Three Fiscal Years from Various Sources****

Fiscal Year	Primary Dealers, Median, April 2025 ($ billion)	OMB Estimates, July 2024 ($ billion)	CBO Estimates, January 2025 ($ billion)
2025	$2,150	$2,081	$2,048
2026	$2,100	$1,710	$1,759
2027	$2,130	$1,648	$1,717

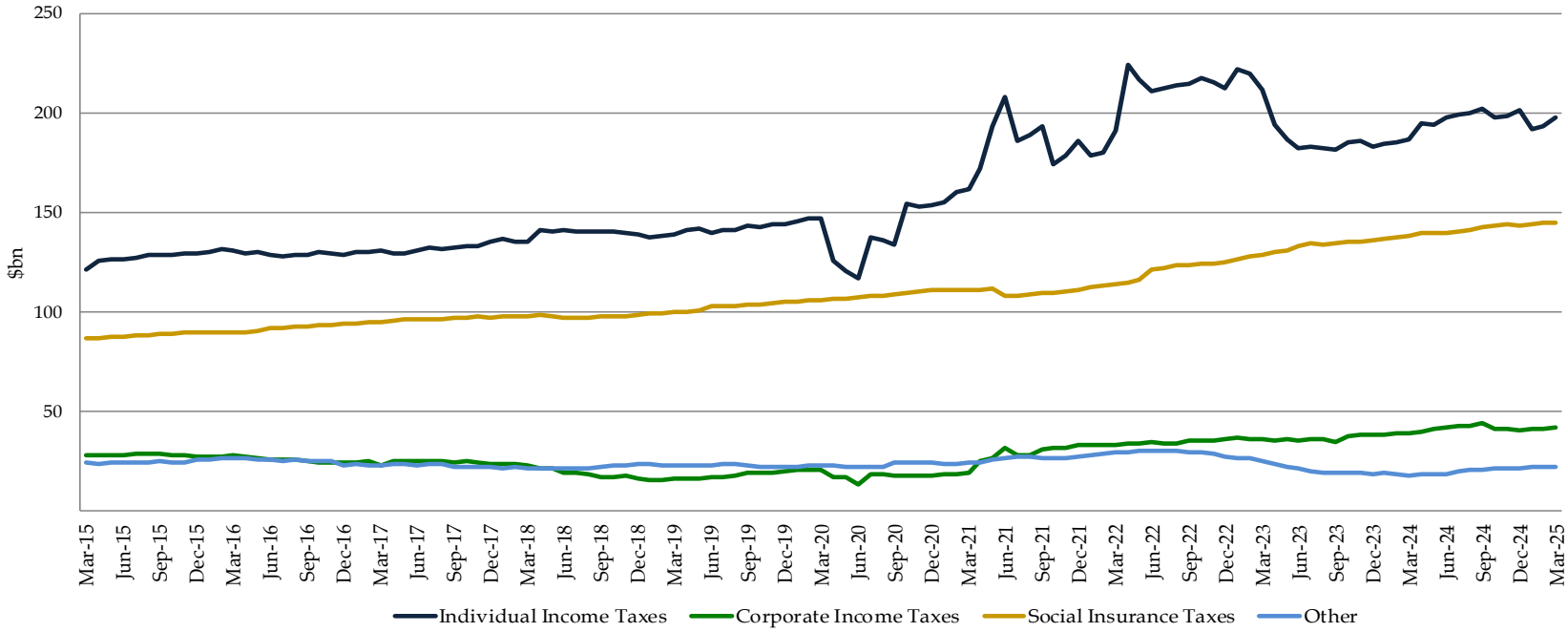
***All privately-held net marketable borrowing estimates are "normalized" with details from page 18. Uncertainty regarding future funding needs remains relatively high, reflecting a variety of views on the path of monetary policy, the duration of SOMA redemptions, and the outlook for the economy.

Latest Market Expectations for Treasury Financing in April 2025:

- Primary dealers expected no changes to nominal coupon or FRN issuance sizes at the May refunding.
- Regarding TIPS, nearly all dealers expect no changes to the auction size for the May 10-year reopening. The vast majority of dealers anticipate $1 billion increases in auction sizes for both the June 5-year reopening and the July 10-year new issue.

Section II:
Recent Fiscal Results
Receipts, Outlays, and Deficits

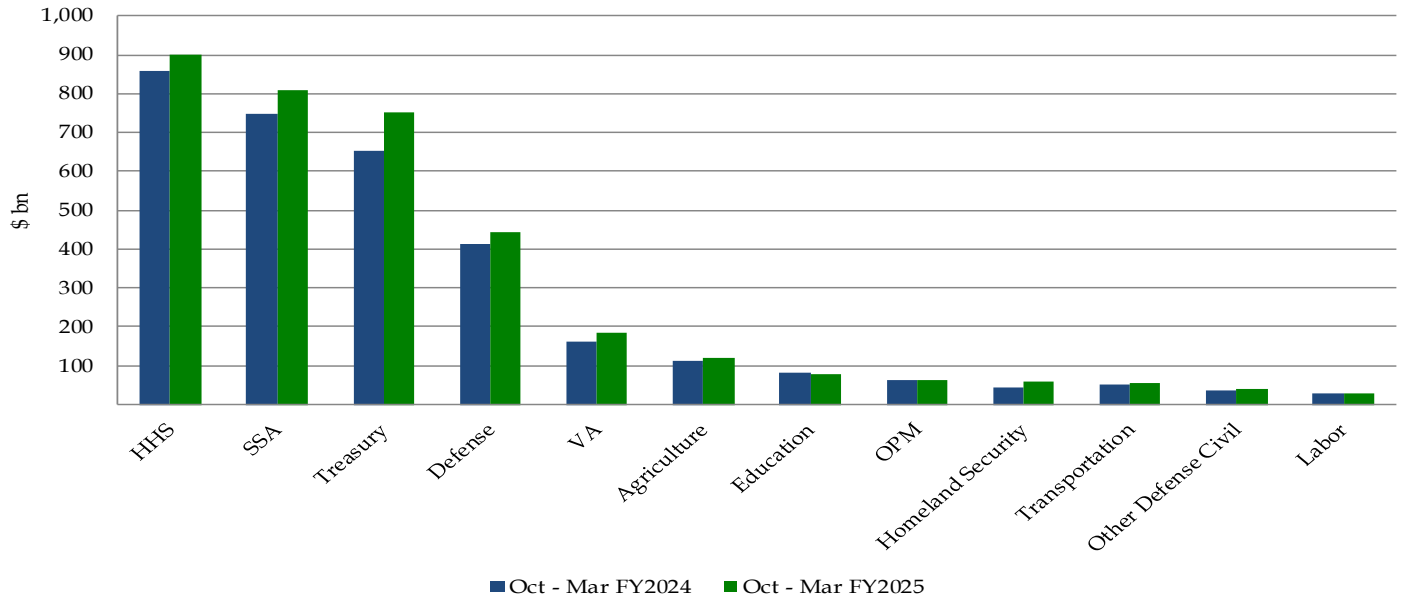
Monthly Receipt Levels
(12-Month Moving Average)



Notable Receipt Category	YoY change thru Q2 FY25 ($ billion)	YoY change thru Q2 FY25 (%)	Comments
Withheld & FICA Taxes	+$118	+7%	Increased due to wage and employment growth.
Gross Corporate Taxes	-$32	-15%	Mainly due to deferred taxes from FY 2023 to FY 2024.
Non-withheld and SECA Taxes	-$26	-8%	Mainly due to IRS extension of several major deadlines for some taxpayers, including those in California, from FY2023 into FY2024.

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.

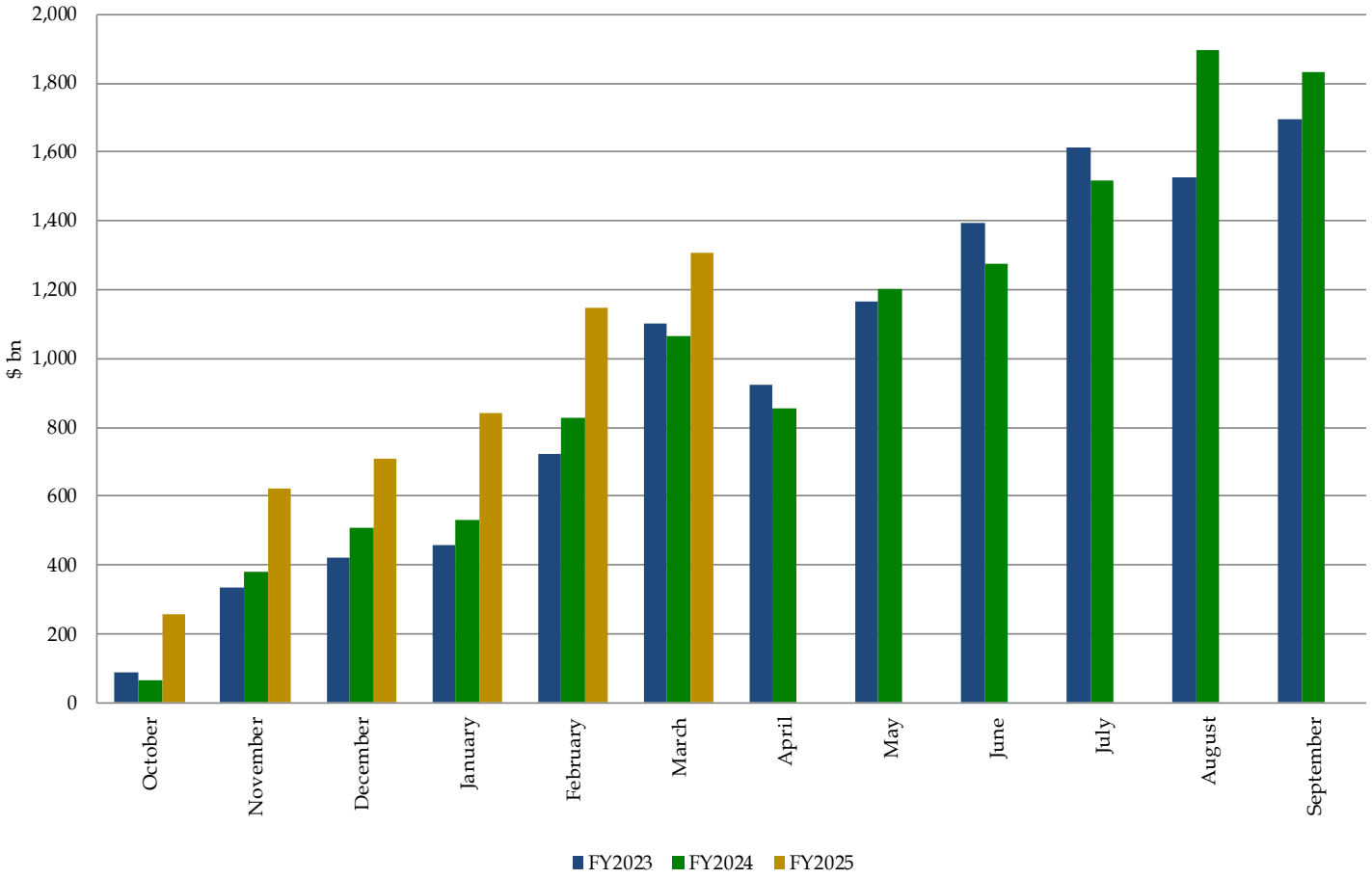
Largest Outlays



Notable Outlay Category	YoY change thru Q2 FY25 ($ billion)	YoY change thru Q2 FY25 (%)	Comments
Department of Treasury	+$97	+15%	Primarily due to increase in gross interest on the public debt, higher Affordable Care Act & Refundable Premium Tax Credits, Earned Income Tax Credit and Child Tax Credit, etc.
Health and Human Services (calendar adjusted)	+$45	+5%	Primarily due to increaes in Medicare and Medicaid spending.
Social Security Administration (calendar adjusted)	+$61	+8%	Due to implementation of the Social Security Fairness Act, increases from cost-of-living adjustments (COLA) and increased number of beneficiaries.
Department of Defense (calendar adjusted)	+$28	+7%	Due to higher outlays for operation, maintenance, procurement, research, development, test, and evaluation.
Department of Veterans Affairs (calendar adjusted)	+$22	+13%	Due to increased spending per person and veterans' increased use of health care facilities. The Promise to Address Comprehensive Toxics Act of 2022 (PACT Act) and the Fiscal Responsibility Act of 2023 are contributing to the increase in outlays.

Outlays in the chart above are on a calendar adjusted basis

Cumulative Budget Deficits by Fiscal Year



Section III:
Various Fiscal Forecasts

Primary Dealers, OMB, CBO

Recent Economic Forecasts

Primary Dealer Median Estimates April 2025

	CY2025	CY2026	CY2027
	% Change from Q4 to Q4		
GDP			
Real	0.6	1.7	2.0
Nominal	3.8	4.2	4.3
Inflation			
CPI Headline	3.4	2.5	2.4
CPI Core	3.7	2.7	2.4
	Fourth Quarter Levels		
Unemployment Rate (%)	4.6	4.5	4.2
	FY2025	FY2026	FY2027
Deficits ($bil)	$1,900	$2,000	$2,060

CBO Estimates January 2025

	CY2025	CY2026	CY2027
	% Change from Q4 to Q4		
GDP			
Real	1.9	1.8	1.8
Nominal	4.1	3.9	3.8
Inflation			
CPI Headline	2.3	2.4	2.3
	Fourth Quarter Levels		
Unemployment Rate (%)	4.3	4.4	4.4
	FY2025	FY2026	FY2027
Deficits ($bil)	$1,865	$1,713	$1,687

OMB Estimates July 2024

	CY2025	CY2026	CY2027
	% Change from Q4 to Q4		
GDP			
Real	2.1	2.0	2.0
Nominal	4.4	4.1	4.1
Inflation			
CPI Headline	2.3	2.3	2.1
	Fourth Quarter Levels		
Unemployment Rate (%)	3.8	3.8	3.8
	FY2025	FY2026	FY2027
Deficits ($bil)	$1,878	$1,601	$1,535

Note: OMB's Economic assumptions are from "Mid-Session Review Budget of The U.S. Government, Fiscal Year 2025," July 2024. Their forecast is based on information available as of May 28, 2024.
CBO's economic assumptions are from "The Budget and Economic Outlook: 2025 to 2035," January 2025. They reflect developments in the economy as of December 4, 2024.

Recent Deficit Forecasts

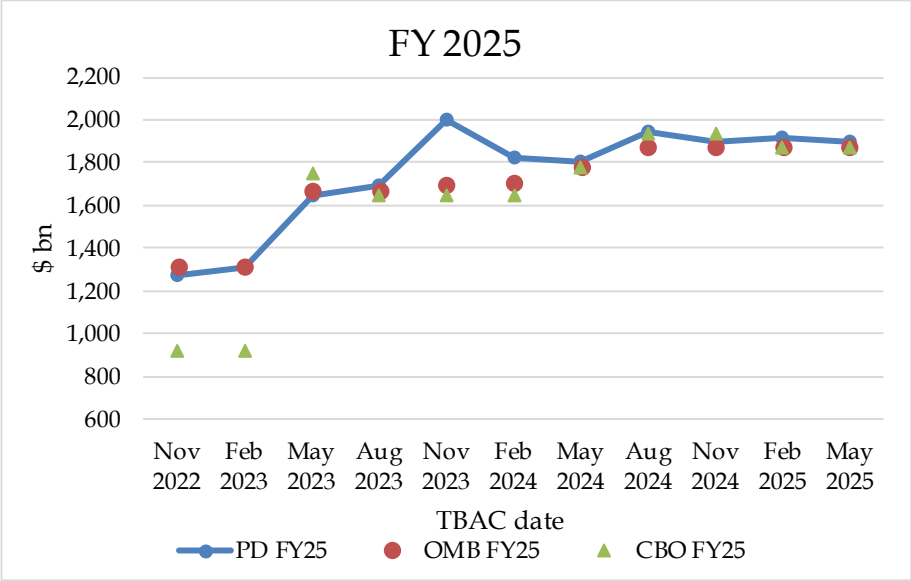
Primary dealers' median deficit estimates in April 2025 were virtually unchanged relative to estimates they provided in January 2025.

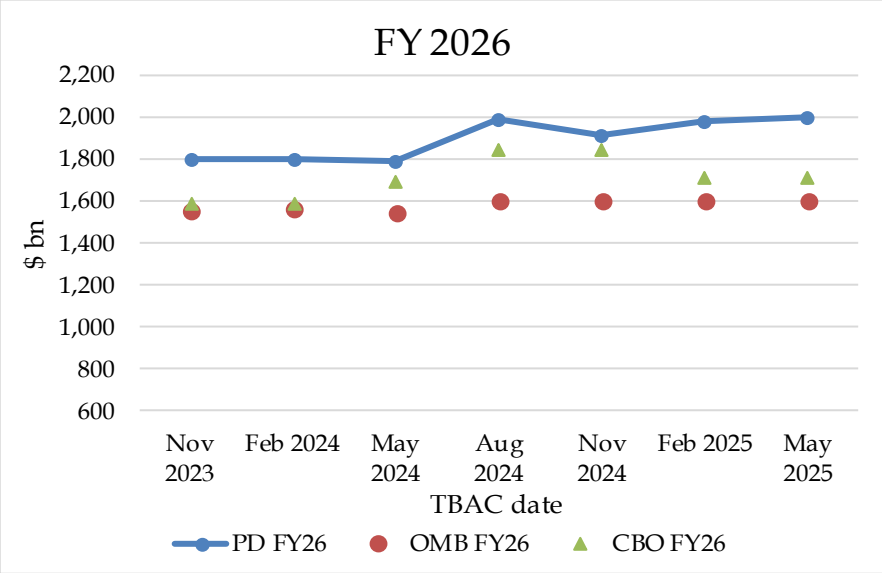
- The latest OMB and CBO estimates in the table below are provided for reference.

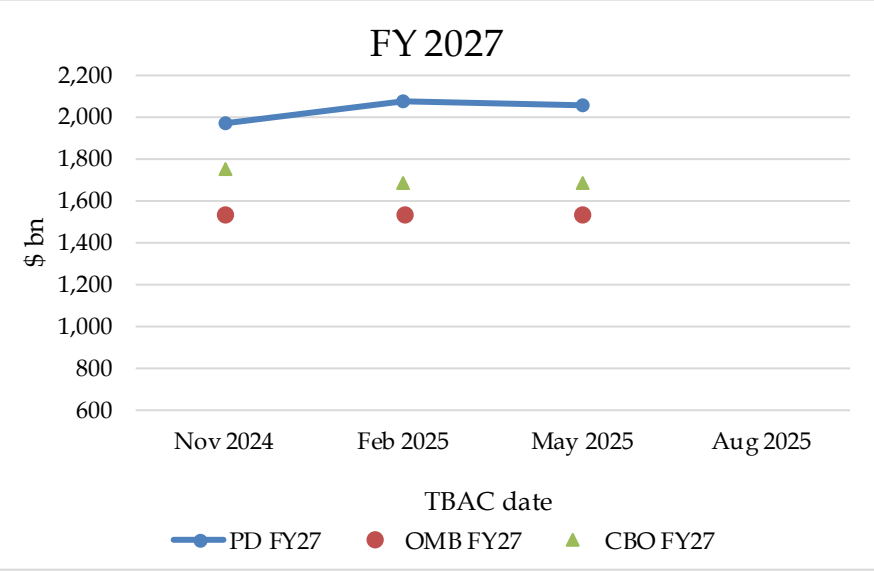
Deficit Estimates ($ billion)	PD 25th Percentile	Primary Dealers (Median)	PD 75th Percentile	Change from Prior Quarter (Median)	OMB	CBO
FY 2025	1,820	1,900	2,000	-18	1,878	1,865
FY 2026	1,900	2,000	2,112	25	1,601	1,713
FY 2027	1,943	2,060	2,139	-20	1,535	1,687
As of date	Apr-25	Apr-25	Apr-25		Jul-24	Jan-25

- OMB projections are using estimates are from Table S-3 of "Mid-Session Review Budget of The U.S. Government, Fiscal Year 2025," July 2024. CBO projections are using estimates are from "The Budget and Economic Outlook: 2025 to 2035," January 2025.

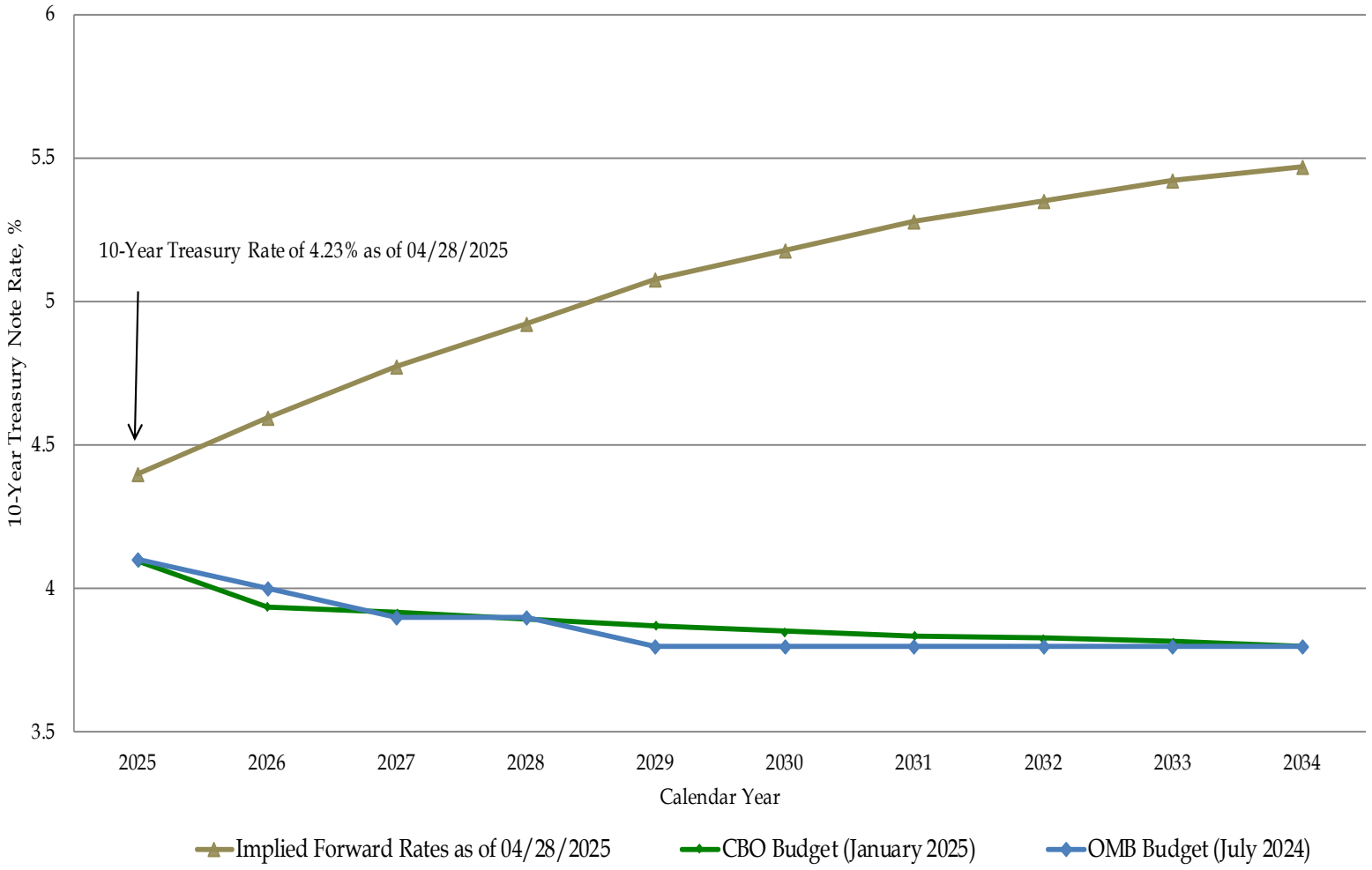
Evolution of Median Primary Dealer, OMB, and CBO Deficit Estimates







Interest Rate Assumptions: 10-Year Treasury Note

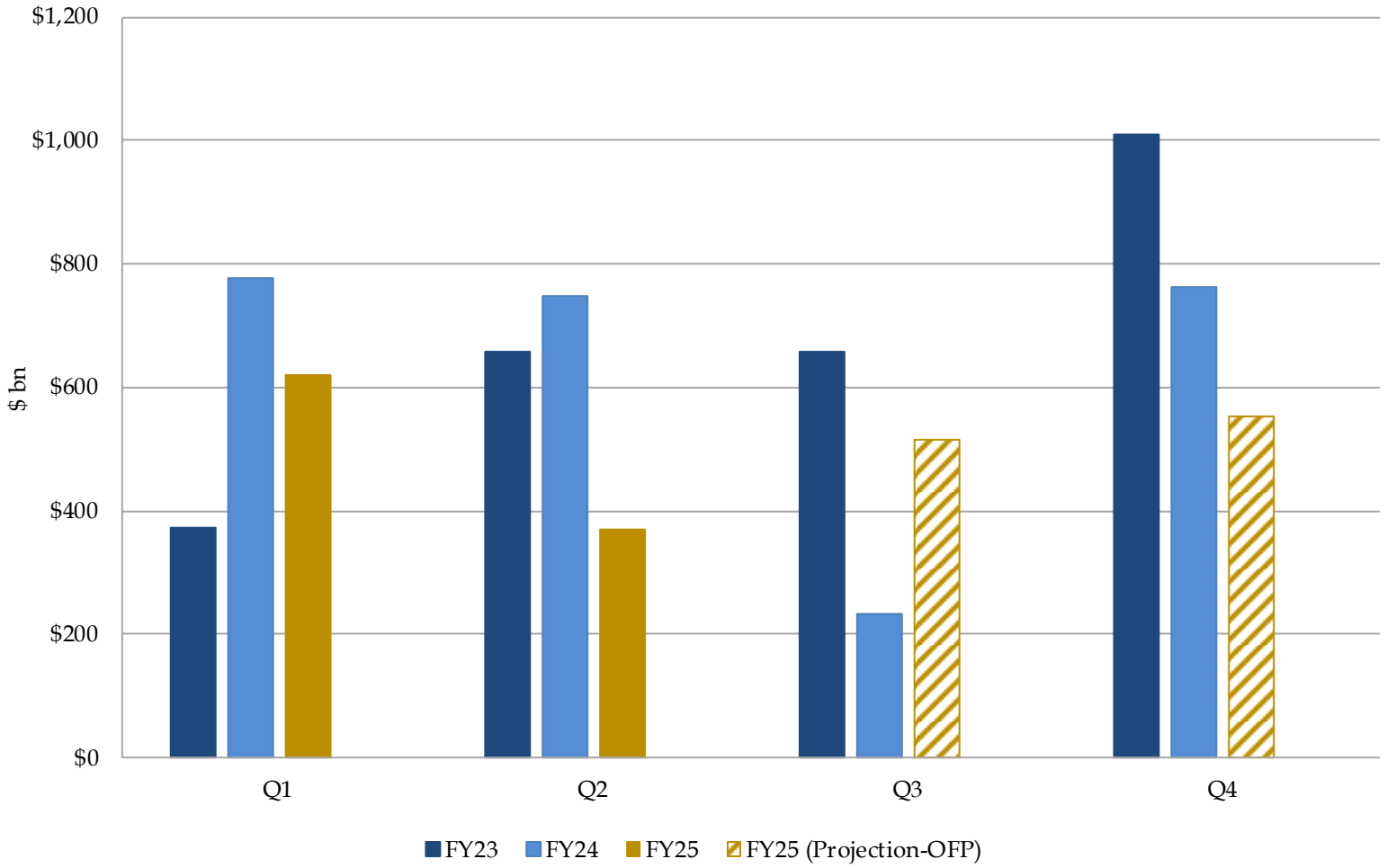


Section IV:
Estimated Borrowing Needs and Financing Implications

Assumptions for Financing Section (pages 16 to 20)

- Portfolio and SOMA holdings as of 03/31/2025, unless otherwise noted (see slide 20).
- Estimates assume privately announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given the issuance sizes in effect in April 2025, while using total bills outstanding of ~$6.16 trillion as of 03/31/2025, unless otherwise noted (see slide 20).
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 03/31/2025, unless otherwise noted (see slide 20).
- No attempt was made to account for future financing needs.
- **Privately-held marketable borrowing** excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change privately-held net marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, this would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount. These borrowing estimates are based upon current law and do not include any assumptions for the impact of additional legislation that may be passed. Additionally, buybacks are not expected to significantly affect privately-held net marketable borrowing as new issuance replaces securities that are bought back.

Privately-Held Net Marketable Borrowing Outlook



Implied Bill Funding for the Current and Next Quarters Based on Recent Borrowing Estimates

Sources of Privately-Held Financing in FY25 Q3

April - June 2025	
Assuming Constant Coupon Issuance Sizes[1]	
Treasury Announced Net Marketable Borrowing[2]	514
Net Coupon Issuance	507
Implied Change in Bills[3]	7

Sources of Privately-Held Financing in FY25 Q4

July - September 2025	
Assuming Constant Coupon Issuance Sizes[1]	
Treasury Announced Net Marketable Borrowing[2]	554
Net Coupon Issuance	467
Implied Change in Bills[3]	87

	April - June 2025 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance				July - September 2025 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
Security	Gross	Maturing	Net	Gross	Maturing	Net	Security	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	86	68	18	258	204	54	2-Year FRN	86	72	14	344	276	68
2-Year	207	126	81	621	377	244	2-Year	207	127	80	828	504	324
3-Year	174	134	40	522	449	73	3-Year	174	121	53	696	570	126
5-Year	210	125	85	630	321	309	5-Year	210	137	73	840	458	382
7-Year	132	64	68	396	202	194	7-Year	132	65	67	528	267	261
10-Year	120	50	70	360	163	197	10-Year	120	51	69	480	213	267
20-Year	42	0	42	126	0	126	20-Year	42	0	42	168	0	168
30-Year	69	0	69	207	7	200	30-Year	69	3	66	276	10	266
5-Year TIPS	48	32	16	94	71	23	5-Year TIPS	0	0	0	94	71	23
10-Year TIPS	18	0	18	73	40	33	10-Year TIPS	38	44	(6)	111	84	27
20-Year TIPS[4]	0	0	0	0	27	(27)	20-Year TIPS[4]	0	0	0	0	27	(27)
30-Year TIPS	0	0	0	9	0	9	30-Year TIPS	8	0	8	17	0	17
Coupon Subtotal	1,106	599	507	3,296	1,861	1,434	Coupon Subtotal	1,086	619	467	4,382	2,480	1,901

[1] Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs.
[2] Assumes end-of-June 2025 and end-of-September 2025 cash balances of $850 billion and $850 billion, respectively, versus end-of-March 2025 cash balance of $406 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
[3] Implied change in bills doesn't incorporate the effects of any buyback operations conducted during the specified periods.
[4] Treasury is currently not issuing 20-year TIPS.

Longer-Term Privately-Held Net Marketable Borrowing Estimates and SOMA Redemption Assumptions

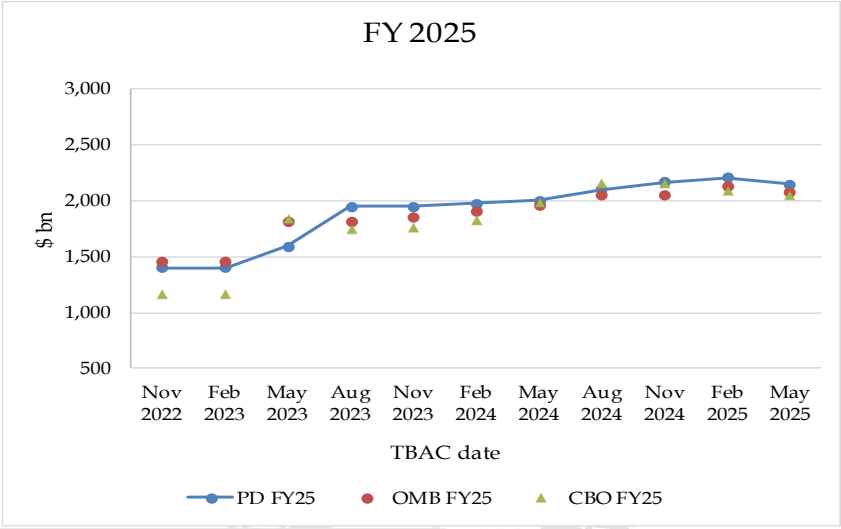
FY 2025-2027 Deficits and Privately-Held Net Marketable Borrowing Estimates, in $ billions

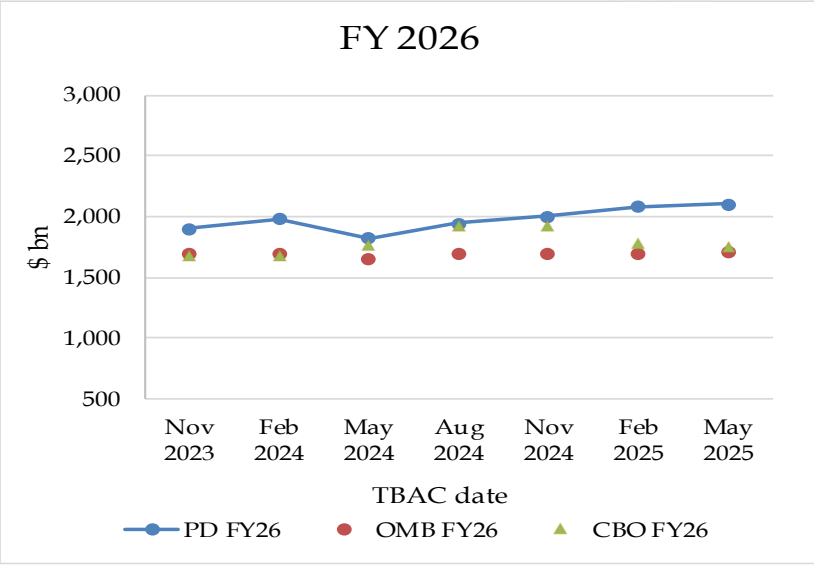
	Primary Dealer			OFP	OMB	CBO
	25th	Median	75th			
FY 2025 Deficit	1,820	1,900	2,000		1,878	1,865
FY 2026 Deficit	1,900	2,000	2,112		1,601	1,713
FY 2027 Deficit	1,943	2,060	2,139		1,535	1,687
FY 2025 SOMA Redemption	180	180	180	180		
FY 2026 SOMA Redemption	0	15	15			
FY 2027 SOMA Redemption	0	0	0			
FY 2025 Privately-Held Net Marketable Borrowing*	2,050	2,150	2,210	2,057	2,081	2,048
FY 2026 Privately-Held Net Marketable Borrowing*	1,900	2,100	2,216		1,710	1,759
FY 2027 Privately-Held Net Marketable Borrowing*	1,935	2,130	2,250		1,648	1,717
Estimates as of:		Apr-25		Apr-25	Jul-24	Jan-25

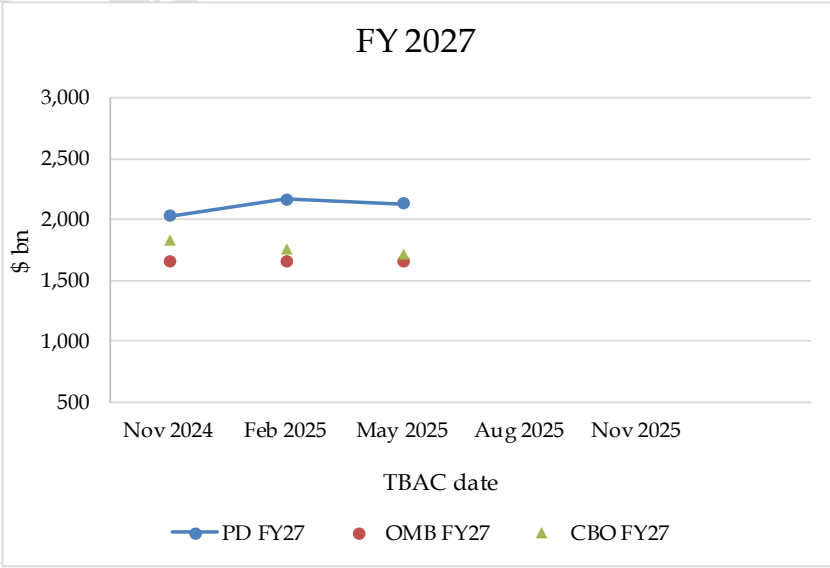
* All privately-held net marketable borrowing estimates are "normalized" using:
- 1) the median Primary Dealer's estimates for SOMA redemptions, and
- 2) assumed Fiscal Year 2025 cash balance of $850 billion, held constant in out years.

- OMB projections are using estimates are from Table S-3 of "Mid-Session Review Budget of The U.S. Government, Fiscal Year 2025," July 2024.
- CBO projections are using estimates are from "The Budget and Economic Outlook: 2025 to 2035," January 2025.

Evolution of Median Primary Dealer, OMB, and CBO Privately-Held Net Marketable Borrowing Estimates*



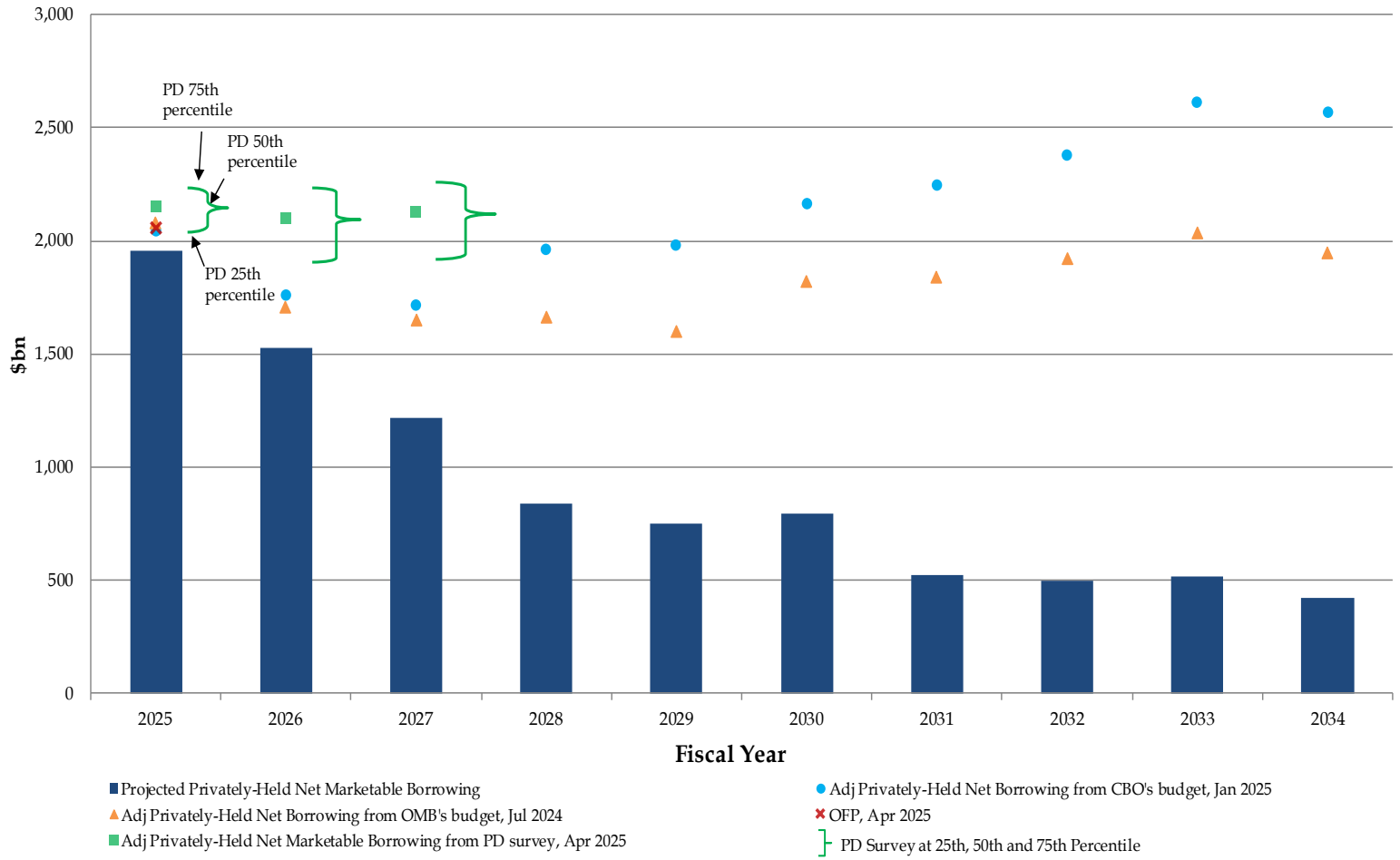




* Note that both the OMB and CBO privately-held net marketable borrowing estimates are calculated by adjusting their respective deficit estimates using dealer's median SOMA redemption estimates. In addition, all the PD, OMB and CBO privately-held borrowing estimates are normalized with the same cash balance changes. See slide 18 for details.

Projected Privately-Held Net Marketable Borrowing

Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant as of 4/30/2025*



*Treasury's latest primary dealer survey median/interquartile range estimates can be found on page 18. OMB projections are using estimates from Table S-3 of "Mid-Session Review Budget of The U.S. Government, Fiscal Year 2025," July 2024. CBO projections are using estimates from "The Budget and Economic Outlook: 2025 to 2035," January 2025. OMB and CBO borrowing estimates from FY25 to FY27 are normalized to privately-held net marketable borrowing after adding PD survey median SOMA redemption assumptions for FY25/26/27. In addition, all privately-held net marketable borrowing estimates are normalized with a cash balance assumption of $850 billion.

Section V:
Select Portfolio Metrics

Note: Several of the portfolio metric charts that follow include three years of projected metrics.

These projections are hypothetical and <u>are meant for illustrative purposes only</u>. The projections contained in these charts <u>should not</u> be interpreted as representing any future policy decisions regarding Treasury financing.

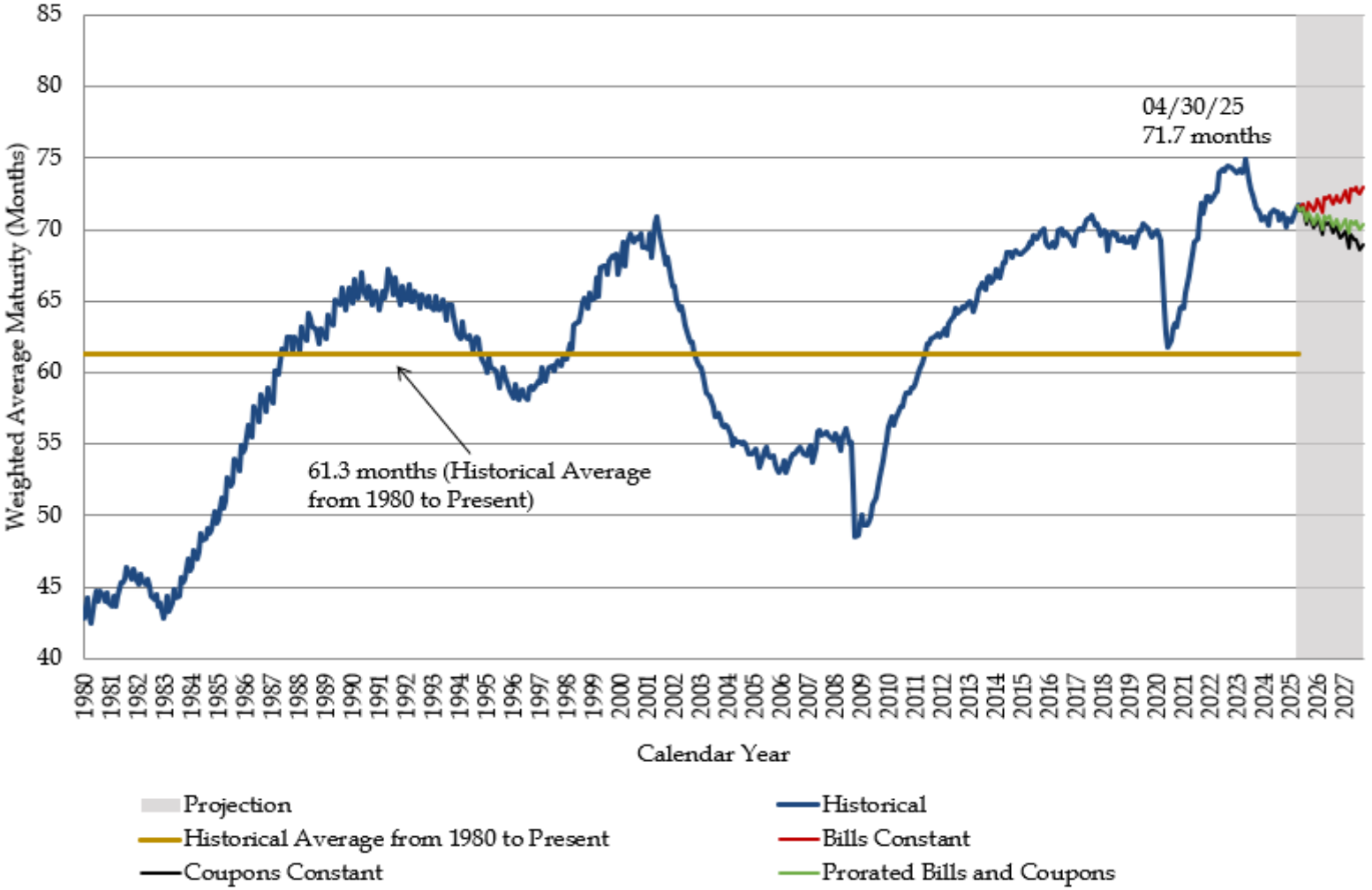
Projections illustrate how various portfolio metrics could evolve under three hypothetical financing scenarios. The scenarios were chosen to illustrate a potential range of portfolio metric outcomes based on hypothetical issuance choices.

The scenarios are:

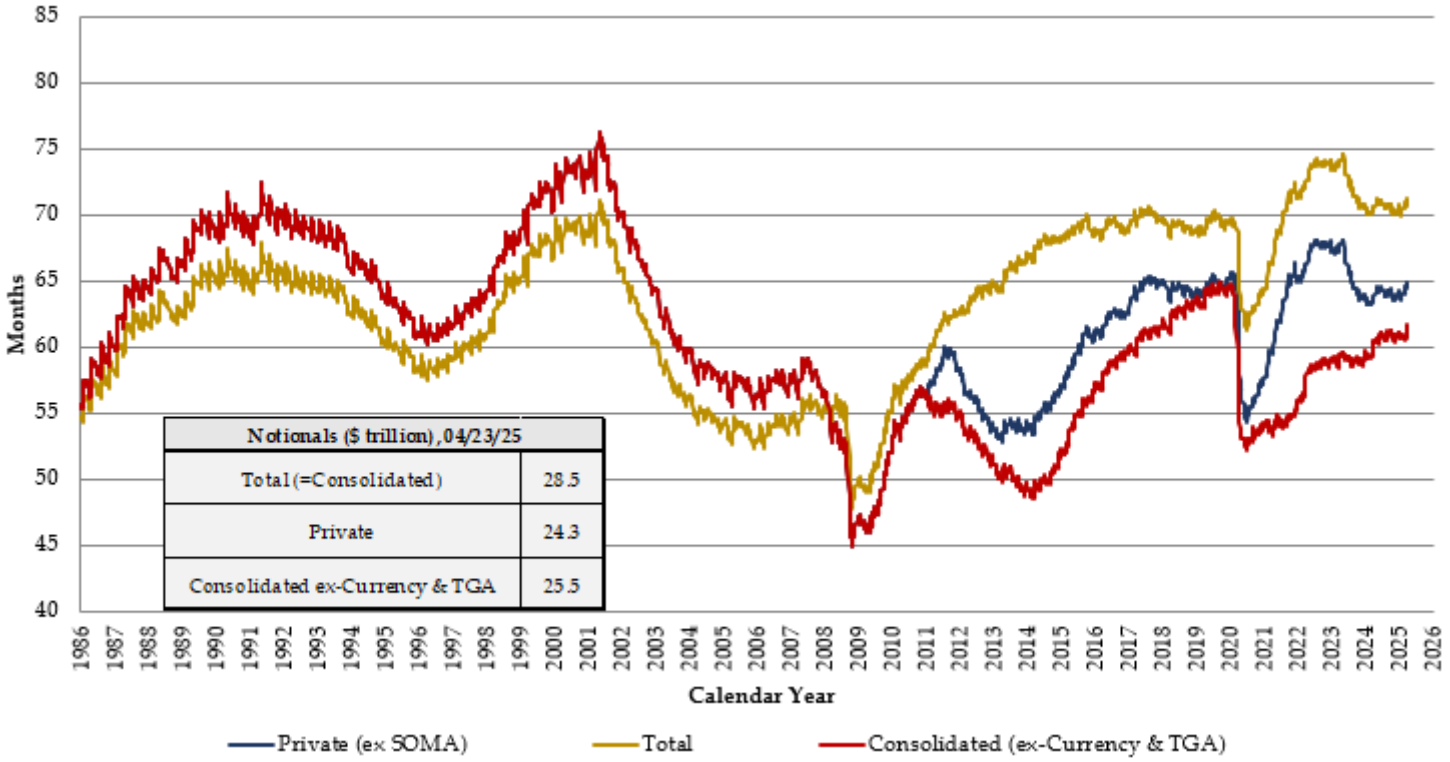
1) ***"Coupons Constant":*** Treasury maintains **coupon, FRN, and TIPS auction sizes constant** as of April 2025 and addresses any changes in financing needs by only increasing or decreasing T-bill auction sizes;
2) ***"Bills Constant":*** Treasury maintains **T-bills aggregate supply constant** at $6.1 trillion as of 4/30/2025 and increases or decreases coupon, FRN, and TIPS auction sizes in response to financing needs in a manner that maintains current issuance proportions going forward;
3) ***"Prorated Bills and Coupons":*** Treasury maintains **T-bills share constant** at 21.2% as of 4/30/2025 and addresses any changes in financing needs by pro rata increasing or decreasing coupon, FRN, and TIPS auction sizes.

Privately-held net marketable borrowing needs used in the projections section of these charts are proxied using median primary dealer estimates for FY25, FY26 & FY27 (see page 18).

Weighted Average Maturity of Marketable Debt Outstanding

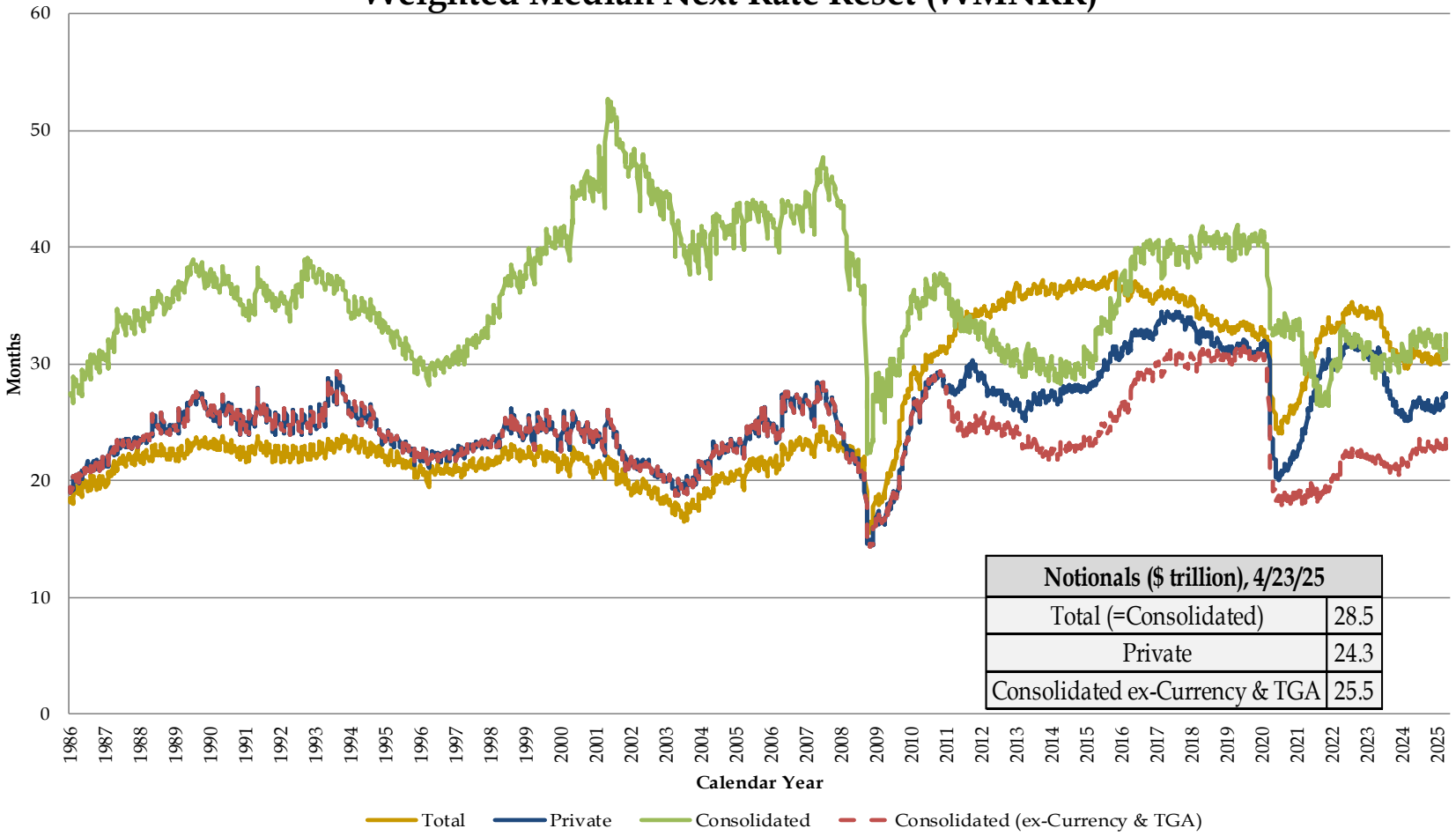


Consolidated **WANRR** Calculation*



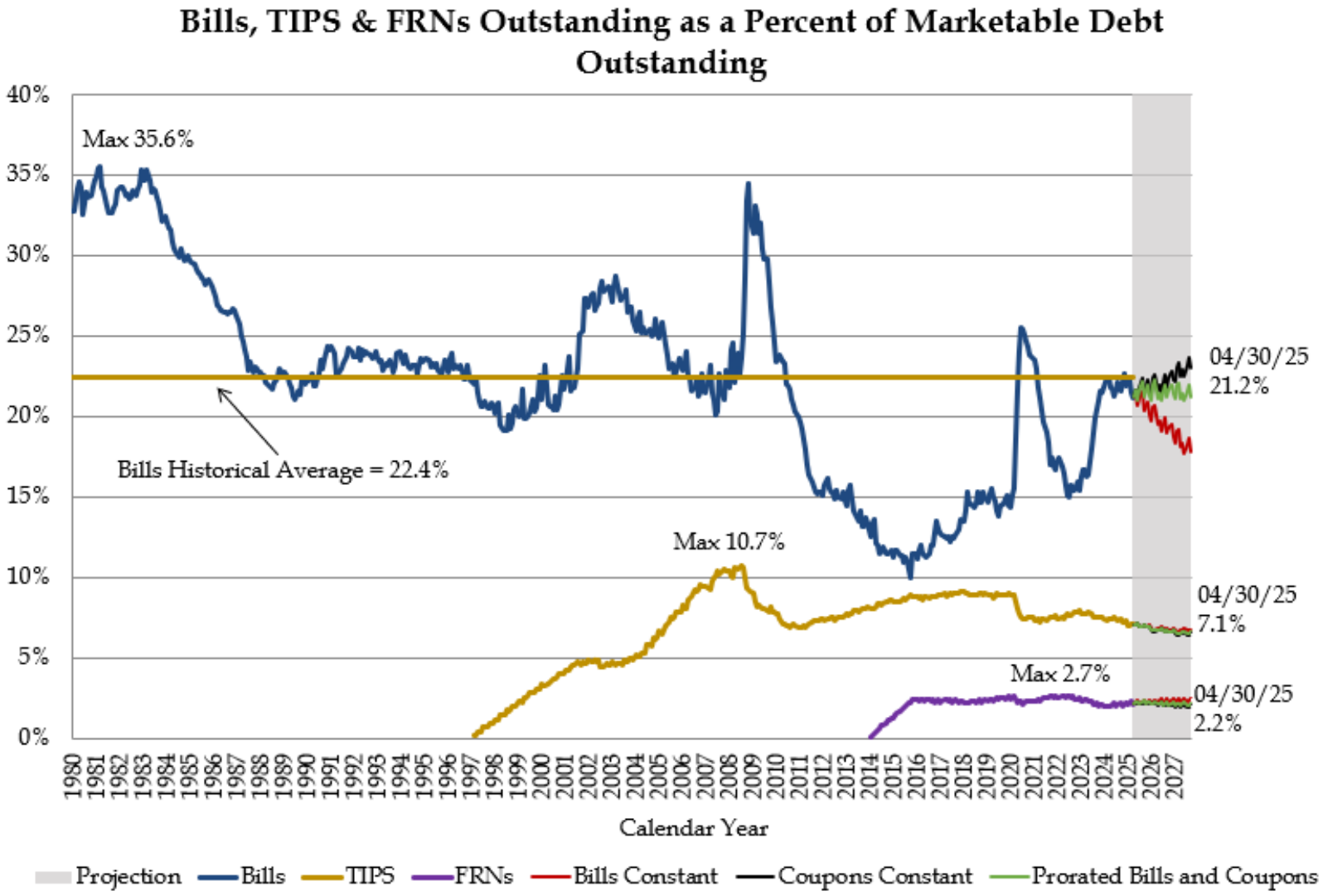
* Weighted Average Next Rate Reset (WANRR) is a "Weighted Average Maturity" metric that attempts to adjust for the floating rate aspect of some Treasury debt. The WANRR is the average time until the outstanding debt's interest rate is set to a new interest rate. For bills and fixed rate notes and bonds, the next rate reset is equal to the maturity date.
In contrast, for floating rate obligations, the time between the next rate reset date or maturity date is examined and the shorter period is used in the calculation.
The consolidated outstanding debt is defined as the private amount plus SOMA Treasury securities holdings less currency in circulation and the size of the Treasury General Account (TGA). In this calculation, SOMA Treasury holdings greater than the sum of the level of currency in circulation and the size of the TGA is treated as if it has a daily rate reset.

Weighted Median Next Rate Reset (WMNRR)*

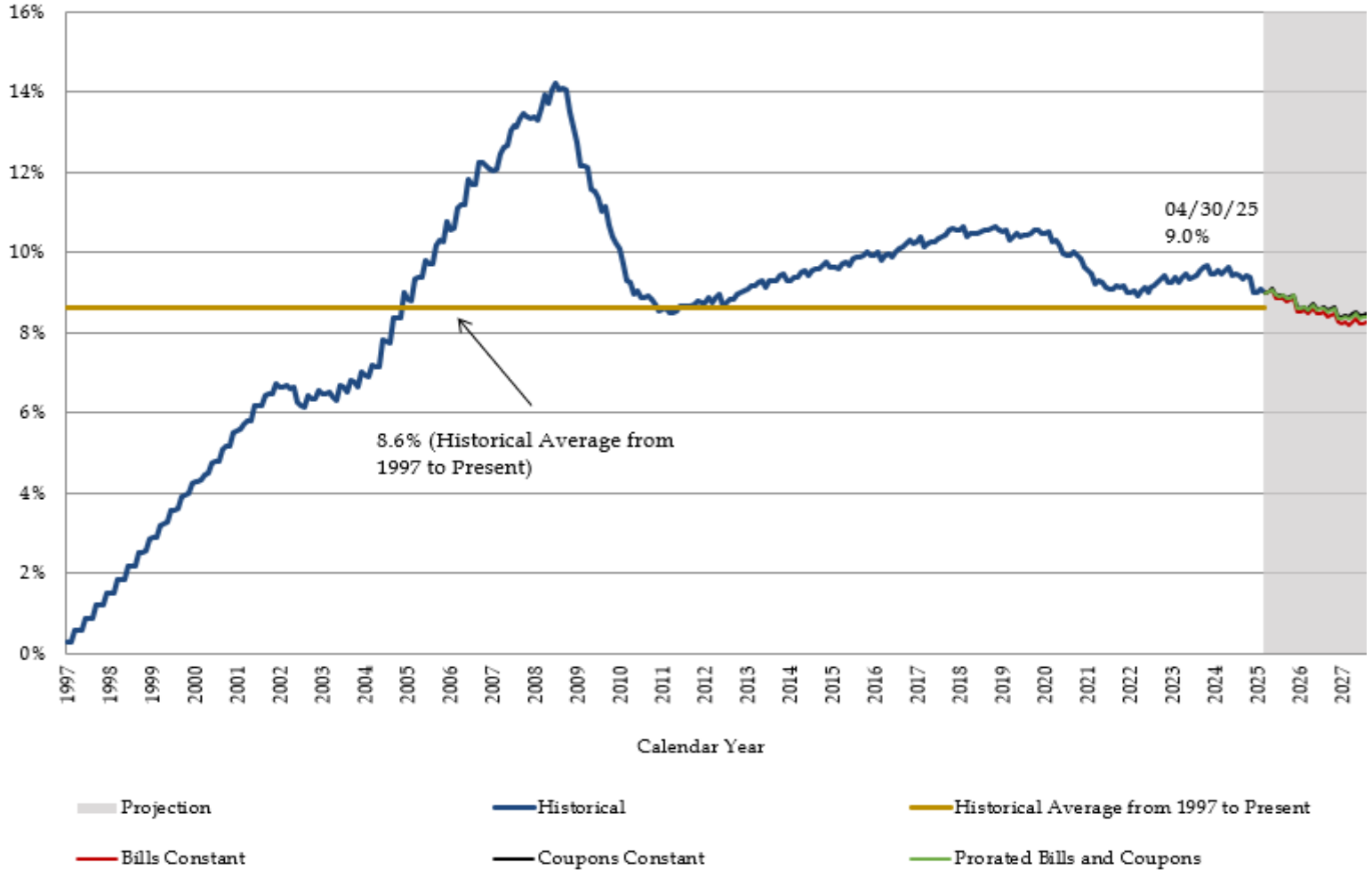


Notionals ($ trillion), 4/23/25	
Total (=Consolidated)	28.5
Private	24.3
Consolidated ex-Currency & TGA	25.5

*Weighted Median Next Rate Reset (WMNRR) of the Treasury portfolio (Total or Private) is the time, in months, by which half the portfolio by current-face is scheduled to mature (or be subject to rate-reset for FRNs). In most cases no existing tenor/coupon-date will demarcate exactly 50% of cumulative-notional; as such, linear interpolation between two nearest tenors is used.
WMNRR of the Consolidated portfolio is calculated in the same manner, but with SOMA Treasury holdings netted-out, against combined non-interest-bearing liabilities of currency in circulation & the size of the TGA (treated as having a de facto infinite next-reset date) and the remainder, as applicable, against reserve balances and RRP (considered to have a one-day next-reset). WMNRR Consolidated (ex-Currency & TGA) reflects the WMNRR of the consolidated portfolio but excluding that portion of SOMA Treasury holdings implicitly financed by the currency in circulation and the size of the TGA; this is equivalent to Privately-held Treasuries outstanding + SOMA Treasury holdings, less Currency & TGA balance.


Bills, TIPS & FRNs Outstanding as a Percent of Marketable Debt Outstanding
40%
35%
30%
25%
20%
15%
10%
5%
0%
Max 35.6%
Bills Historical Average = 22.4%
Max 10.7%
Max 2.7%
04/30/25
21.2%
04/30/25
7.1%
04/30/25
2.2%
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
Calendar Year
Projection
Bills
TIPS
FRNs
Bills Constant
Coupons Constant
Prorated Bills and Coupons

TIPS Outstanding as a Percentage of Total Coupon Bearing Securities



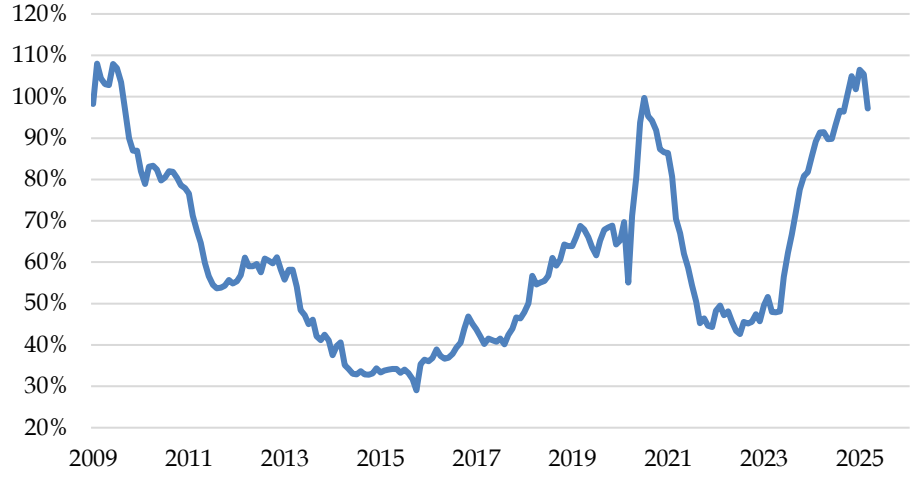
Measures of Treasury Bill Supply

Total Bills Outstanding/Nominal GDP

Total Bills Outstanding/Commercial Bank Deposits

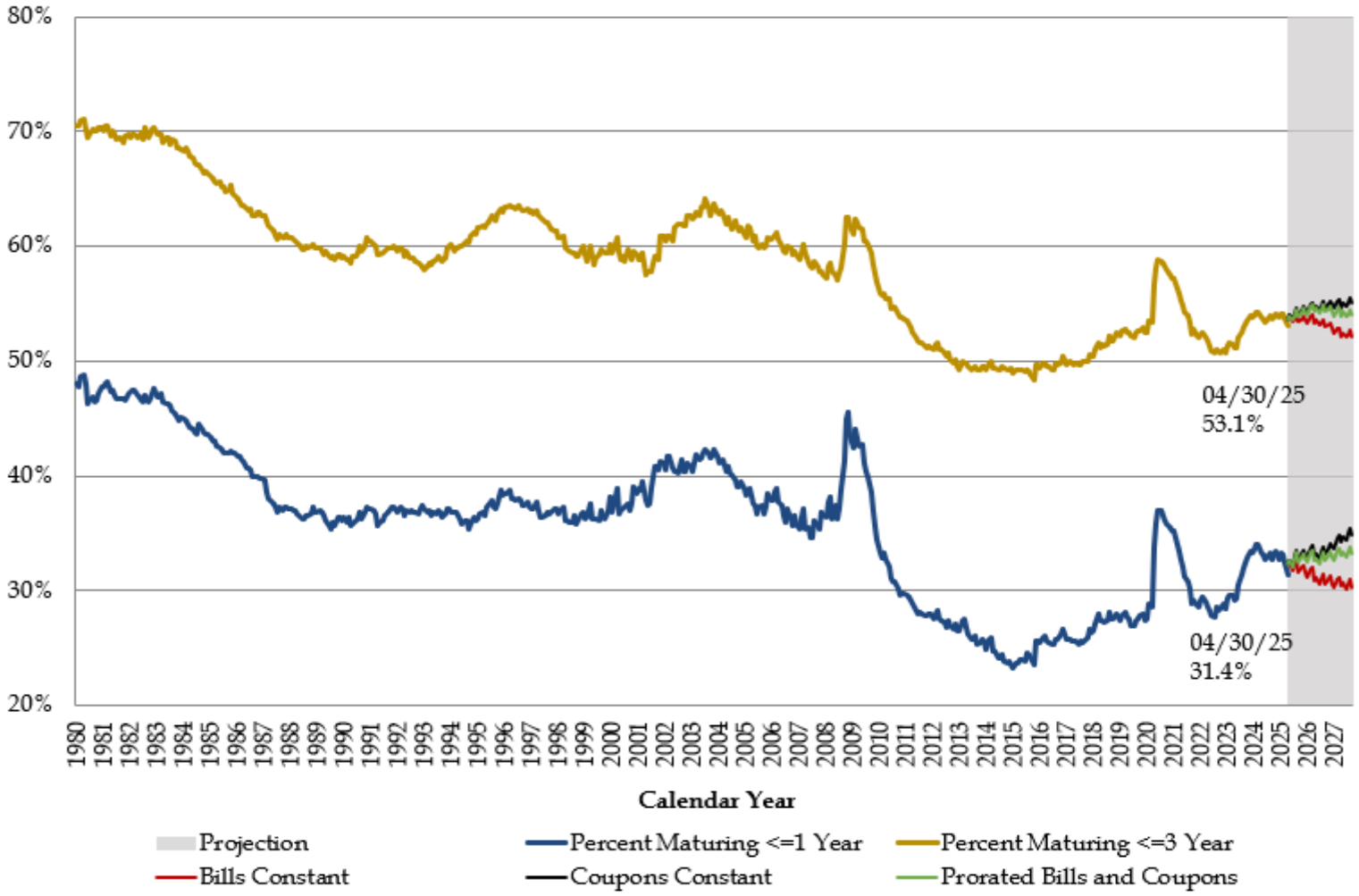
Total Bills Outstanding/Total MMF AUM

Total Bills Outstanding/Federal Reserve Liabilities ex. TGA



Source: Bloomberg and Treasury

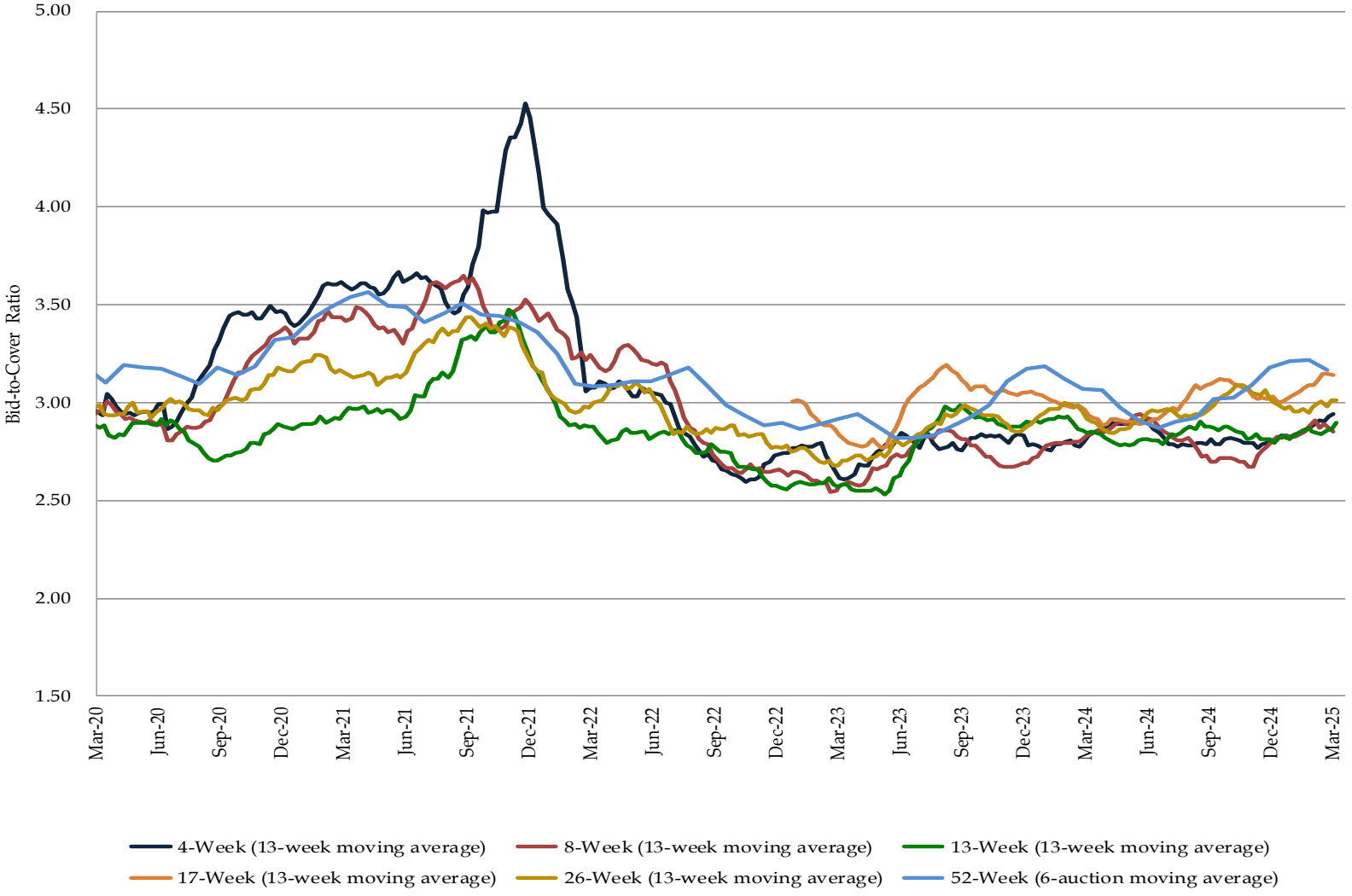
Treasury Maturity Profile



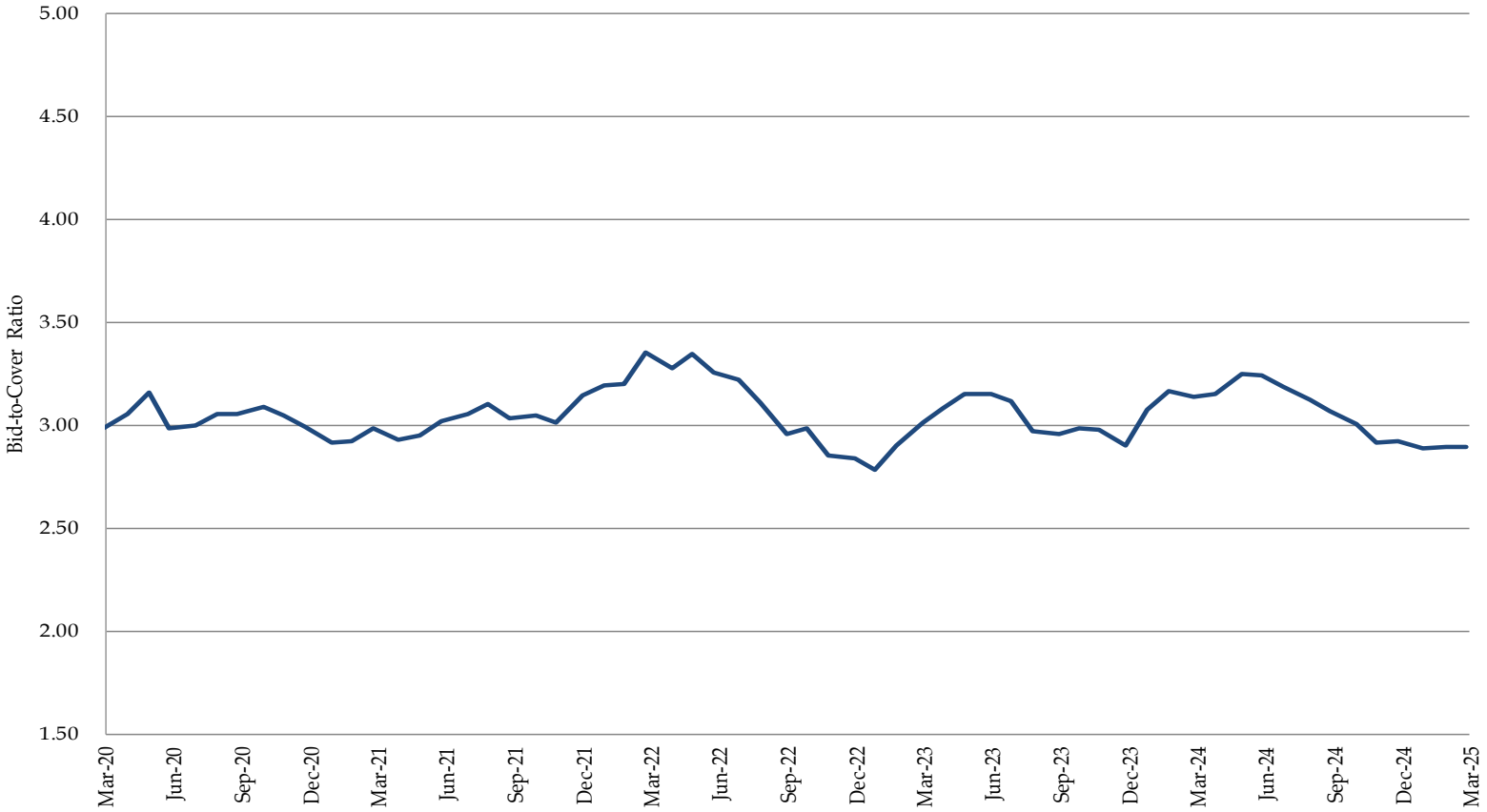
Section VI:
Select Demand Metrics

Bid-to-Cover Data, Investor Class Data,
Direct & Primary Dealer Awards, and Foreign Demand

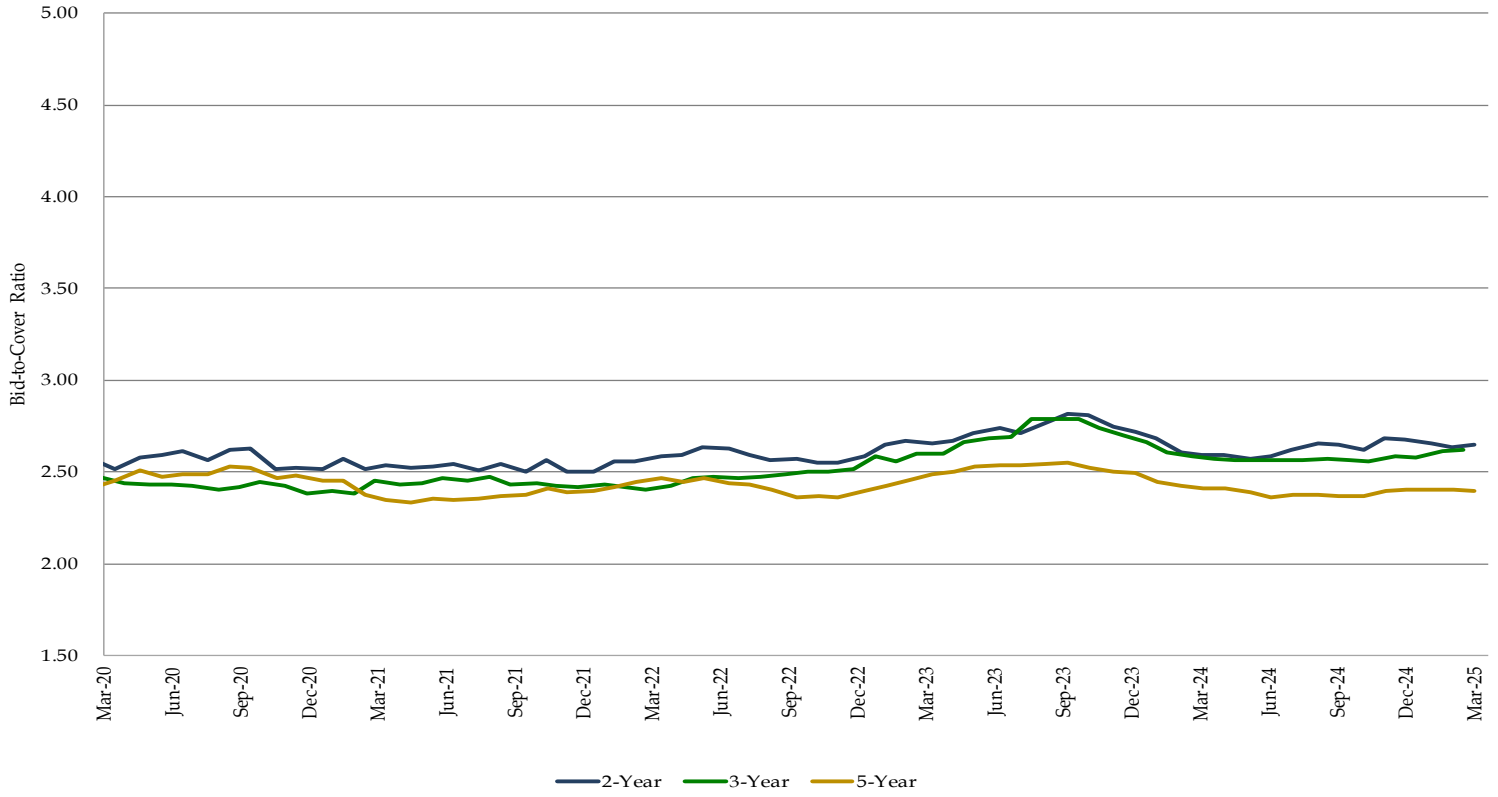
Bid-to-Cover Ratios for Treasury Bills



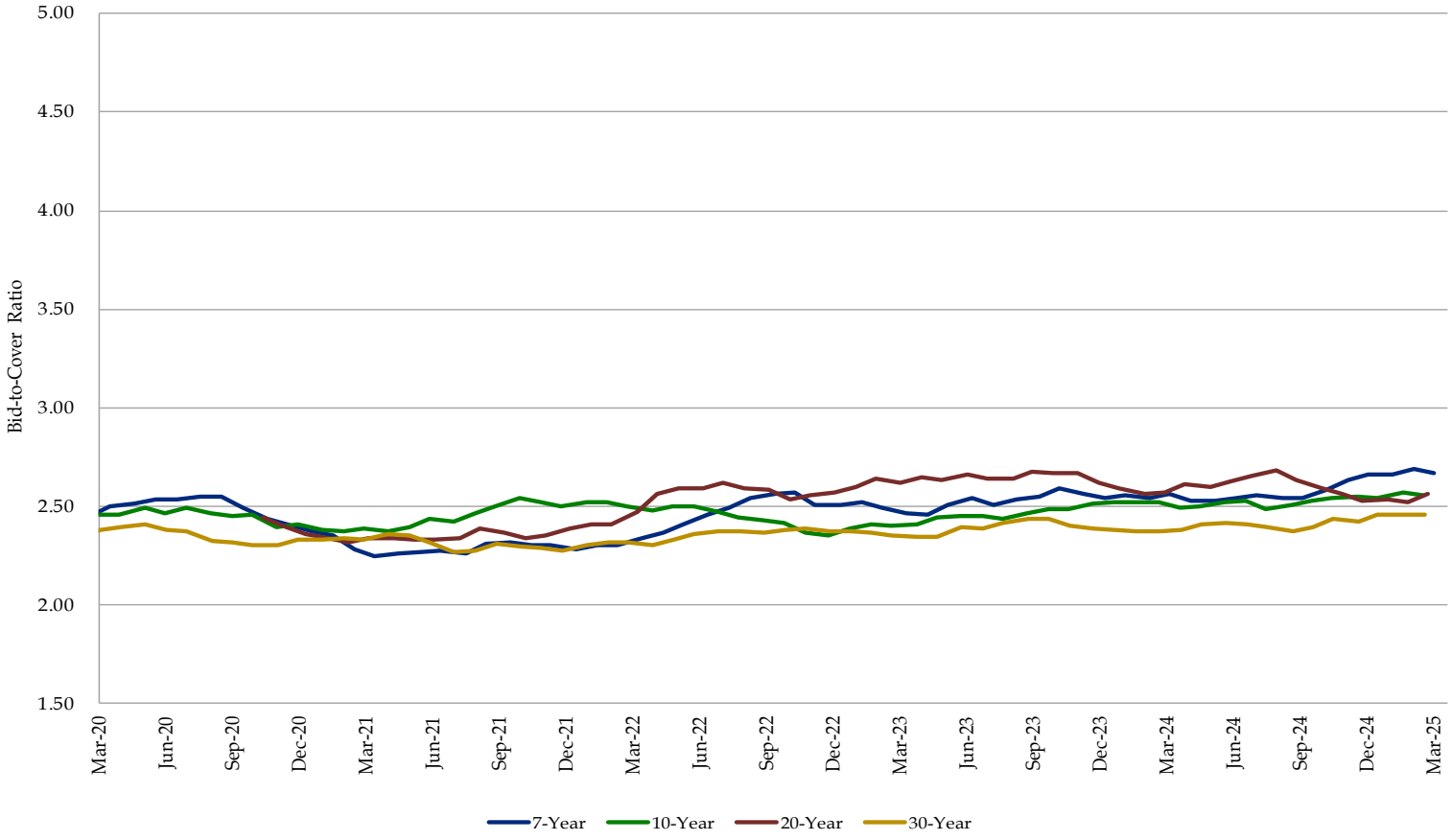
Bid-to-Cover Ratios for FRNs
(6-Month Moving Average)



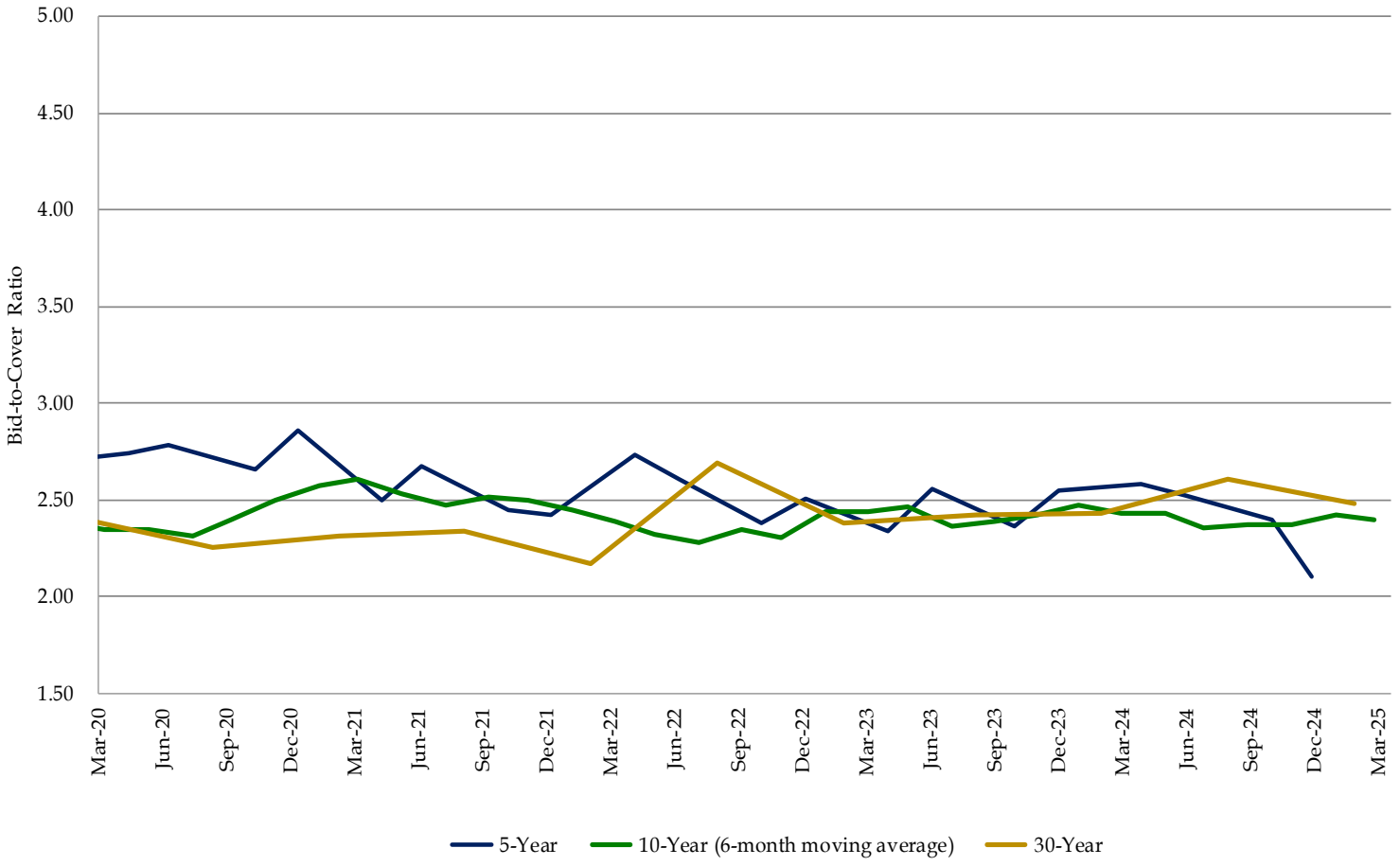
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities
(6-Month Moving Average)



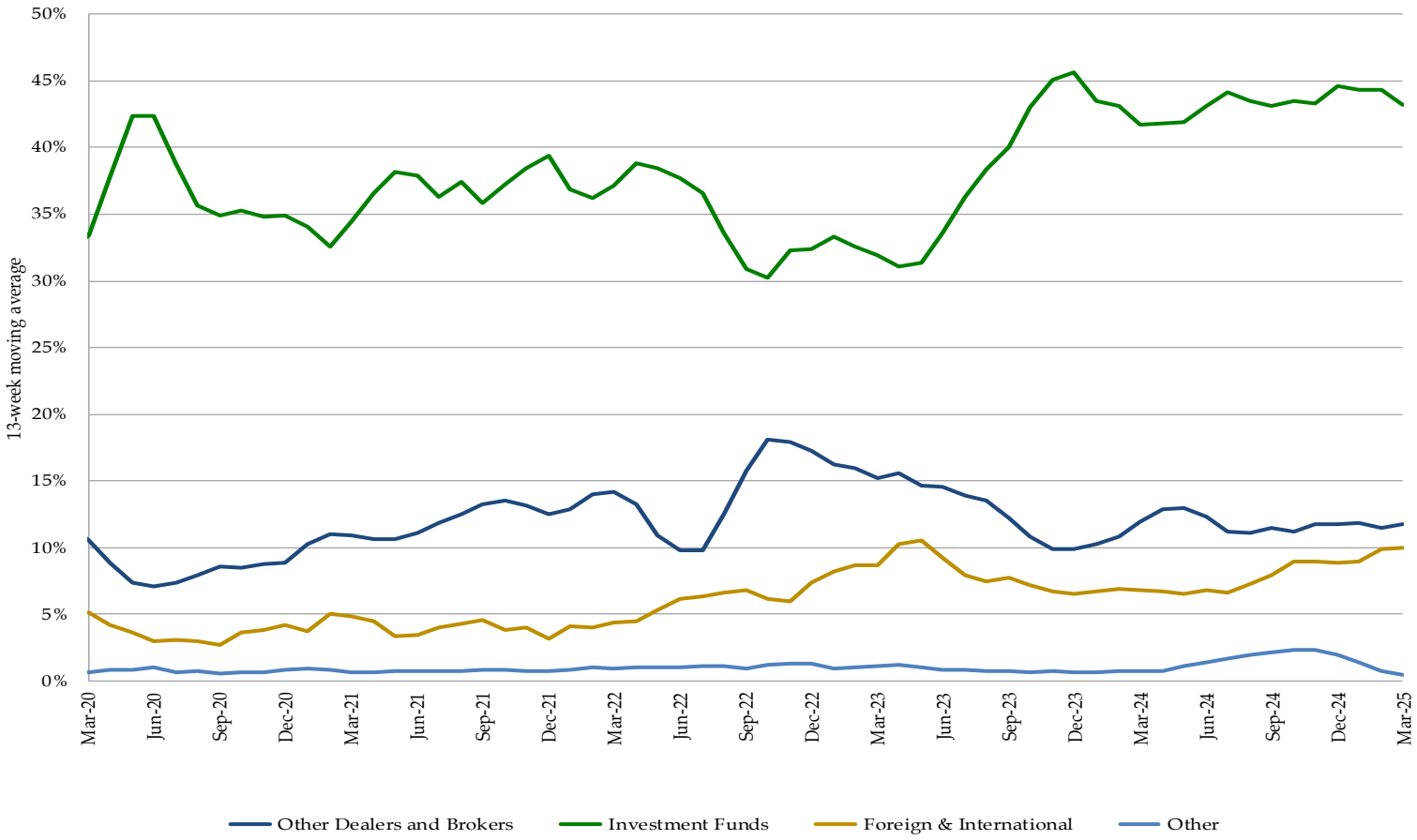
Bid-to-Cover Ratios for 7-, 10-, 20-, and 30-Year Nominal Securities (6-Month Moving Average)



Bid-to-Cover Ratios for TIPS

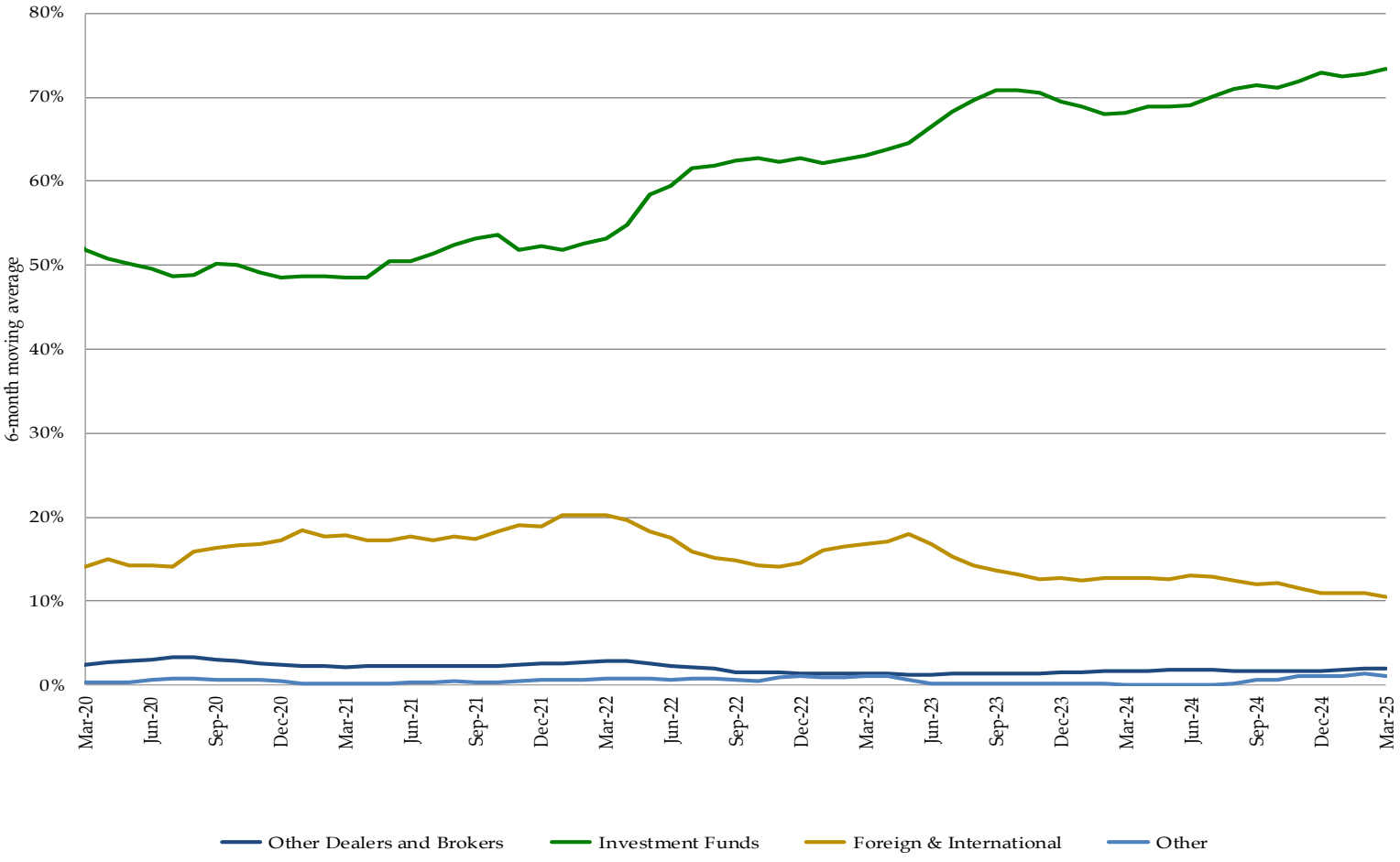


Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



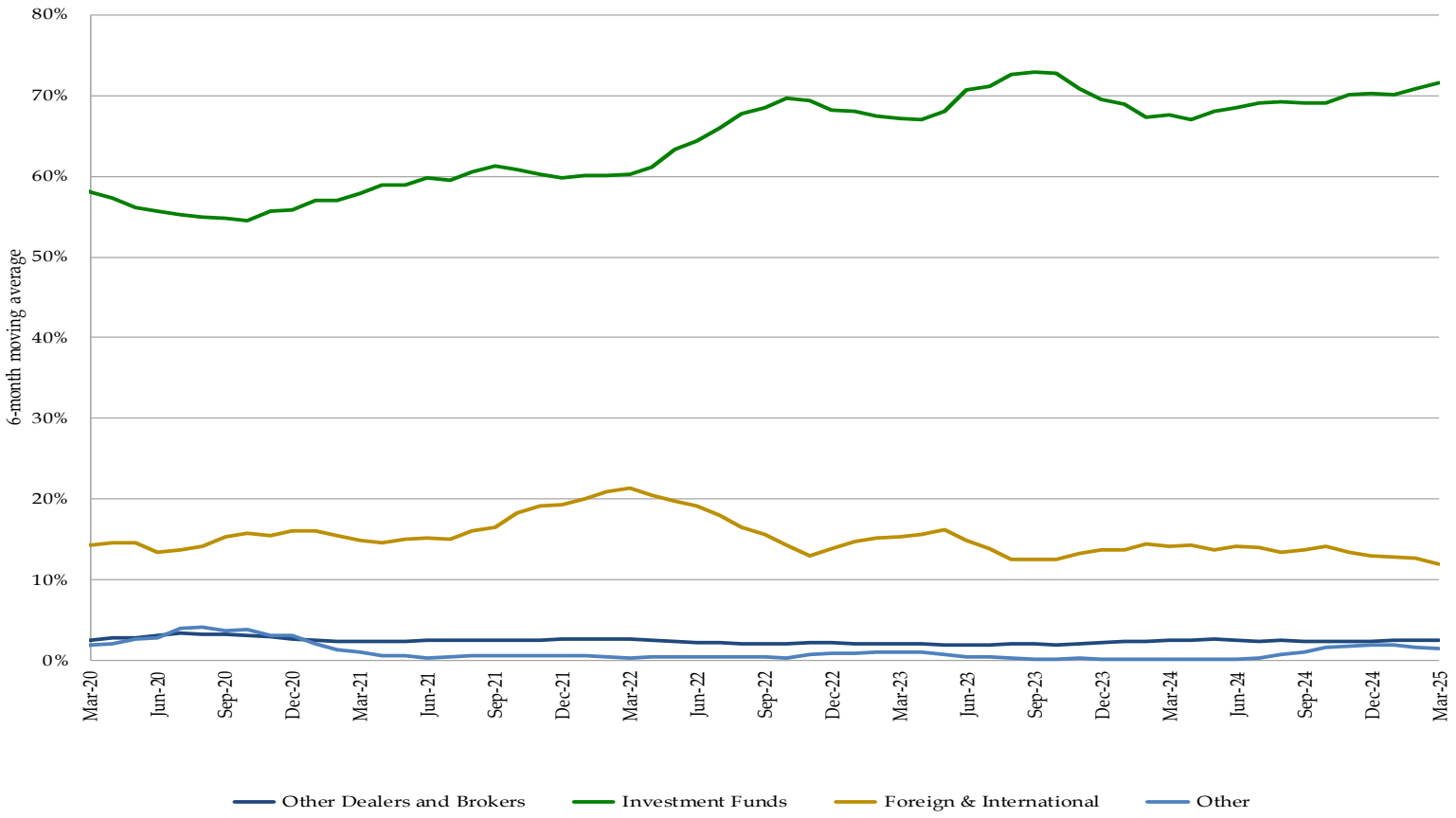
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



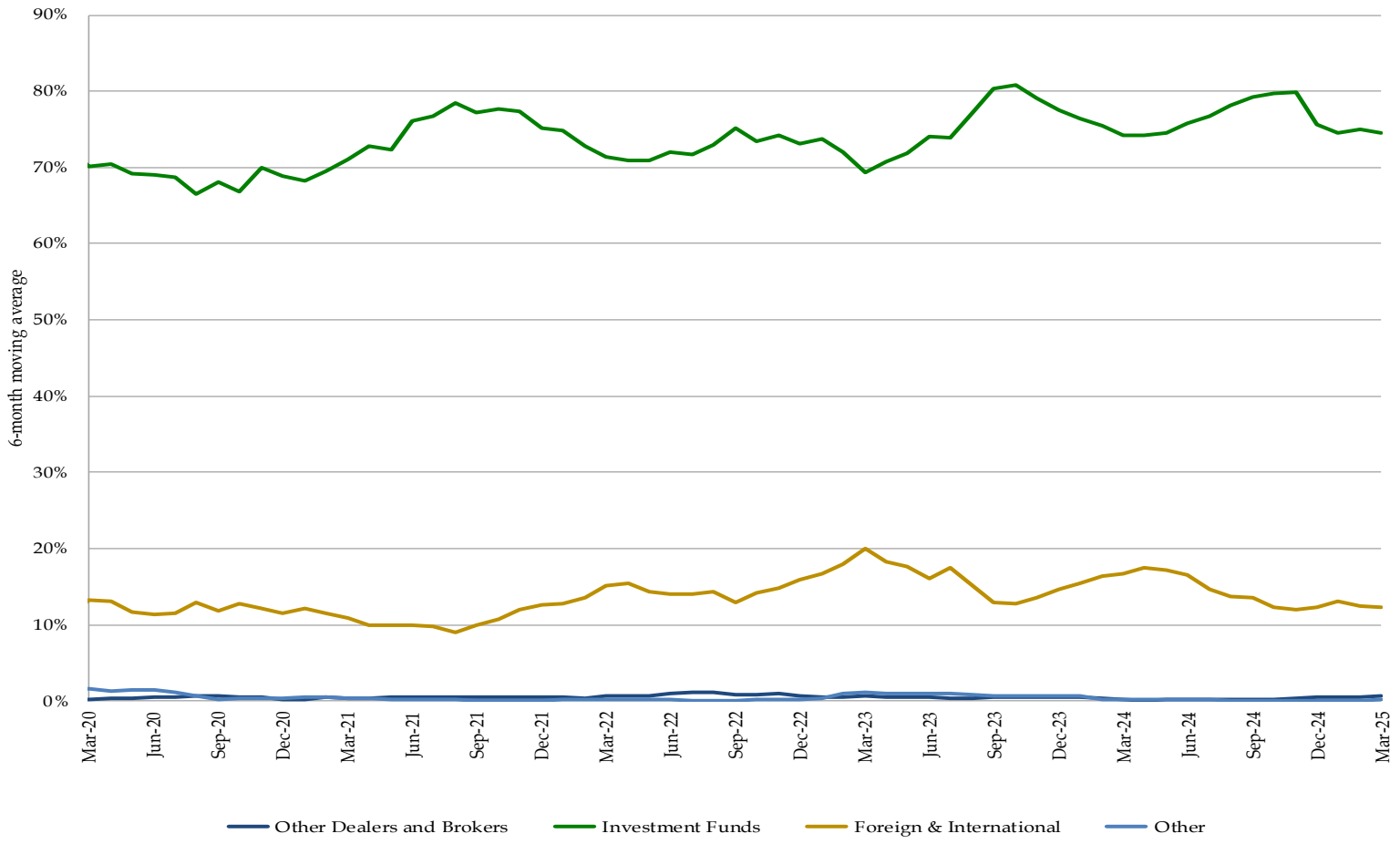
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

Percent Awarded in 7-, 10-, 20-, 30-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



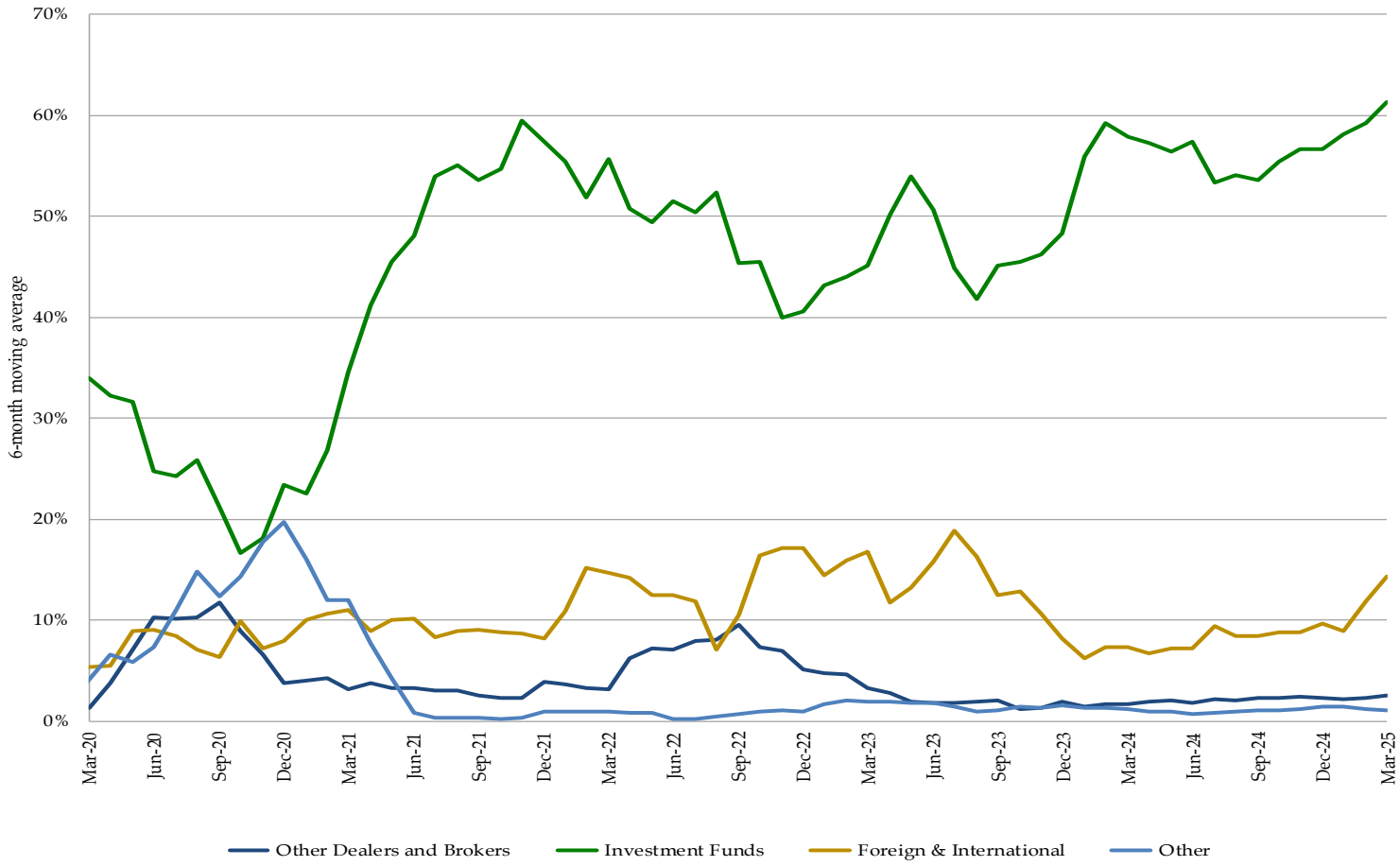
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



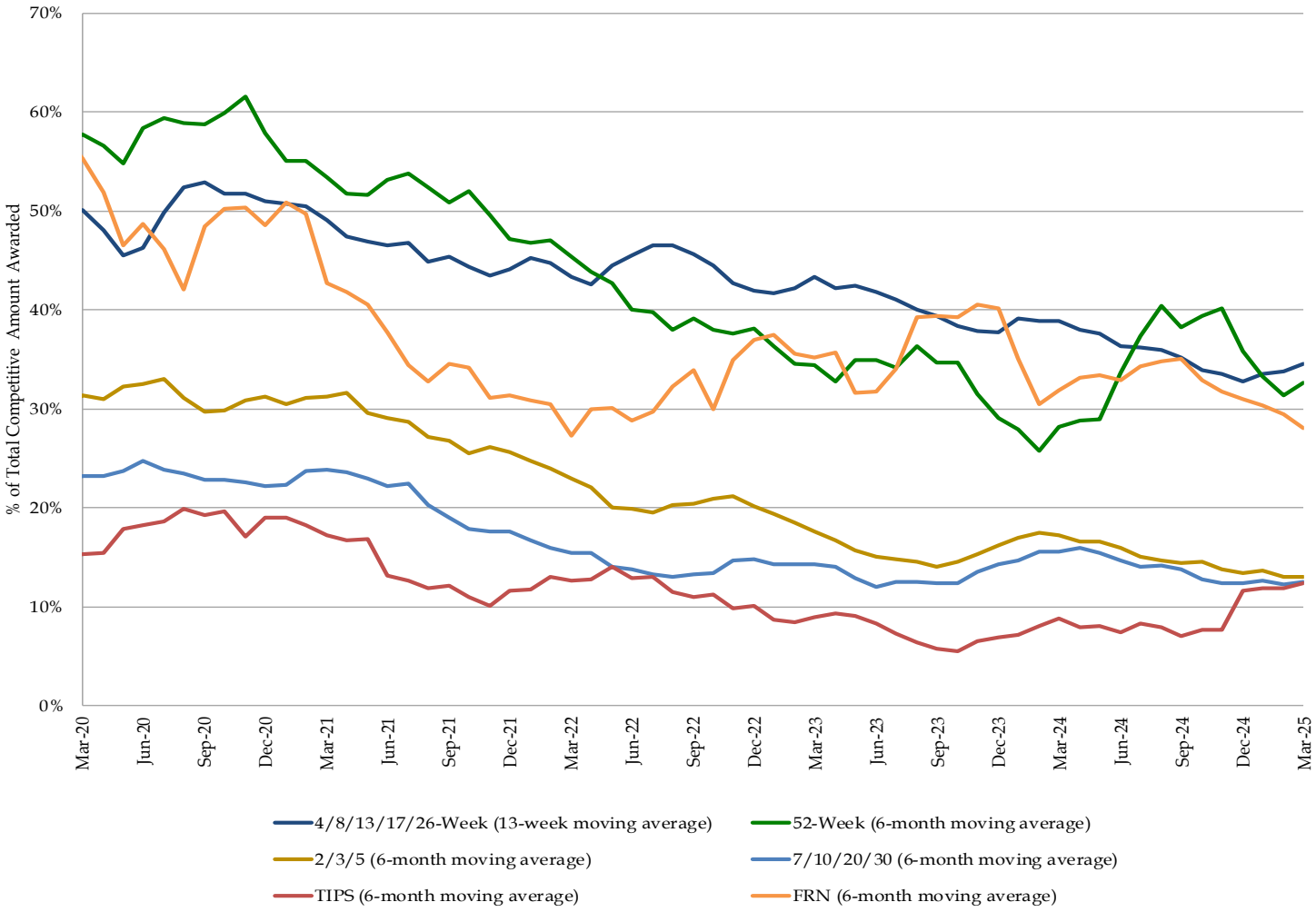
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



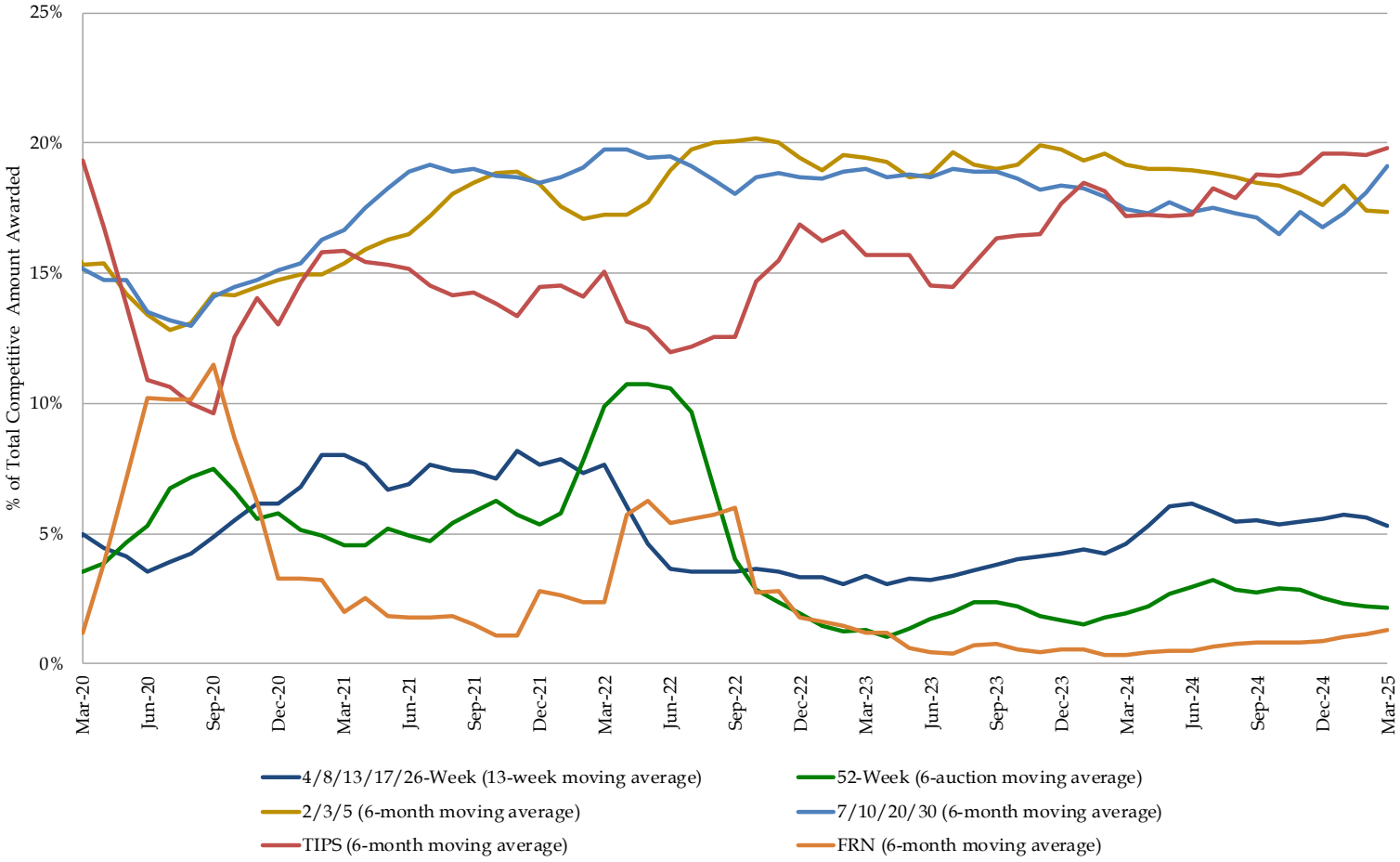
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

Primary Dealer Awards at Auction



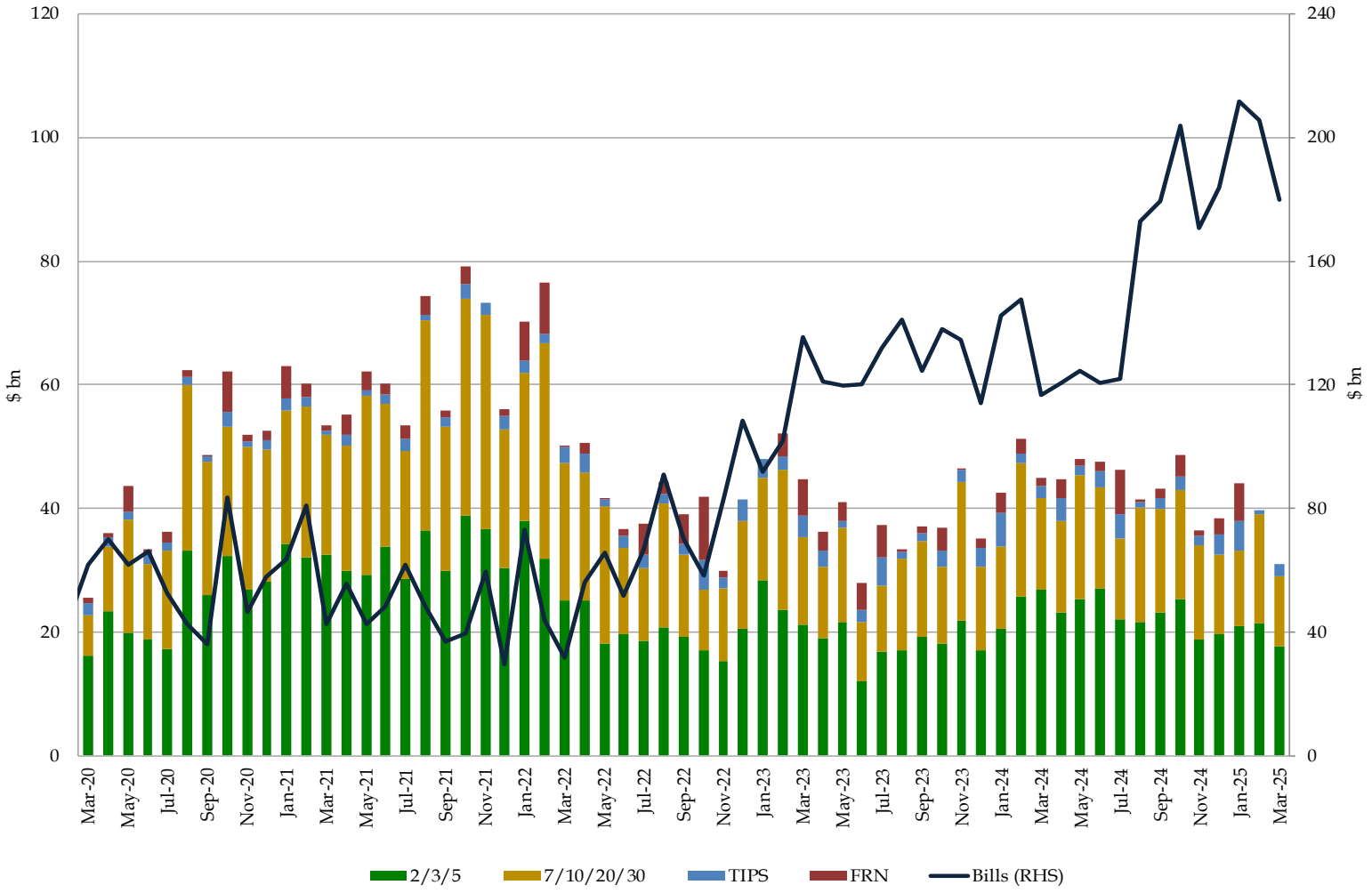
Competitive Amount Awarded excludes SOMA add-ons.

Direct Bidder Awards at Auction



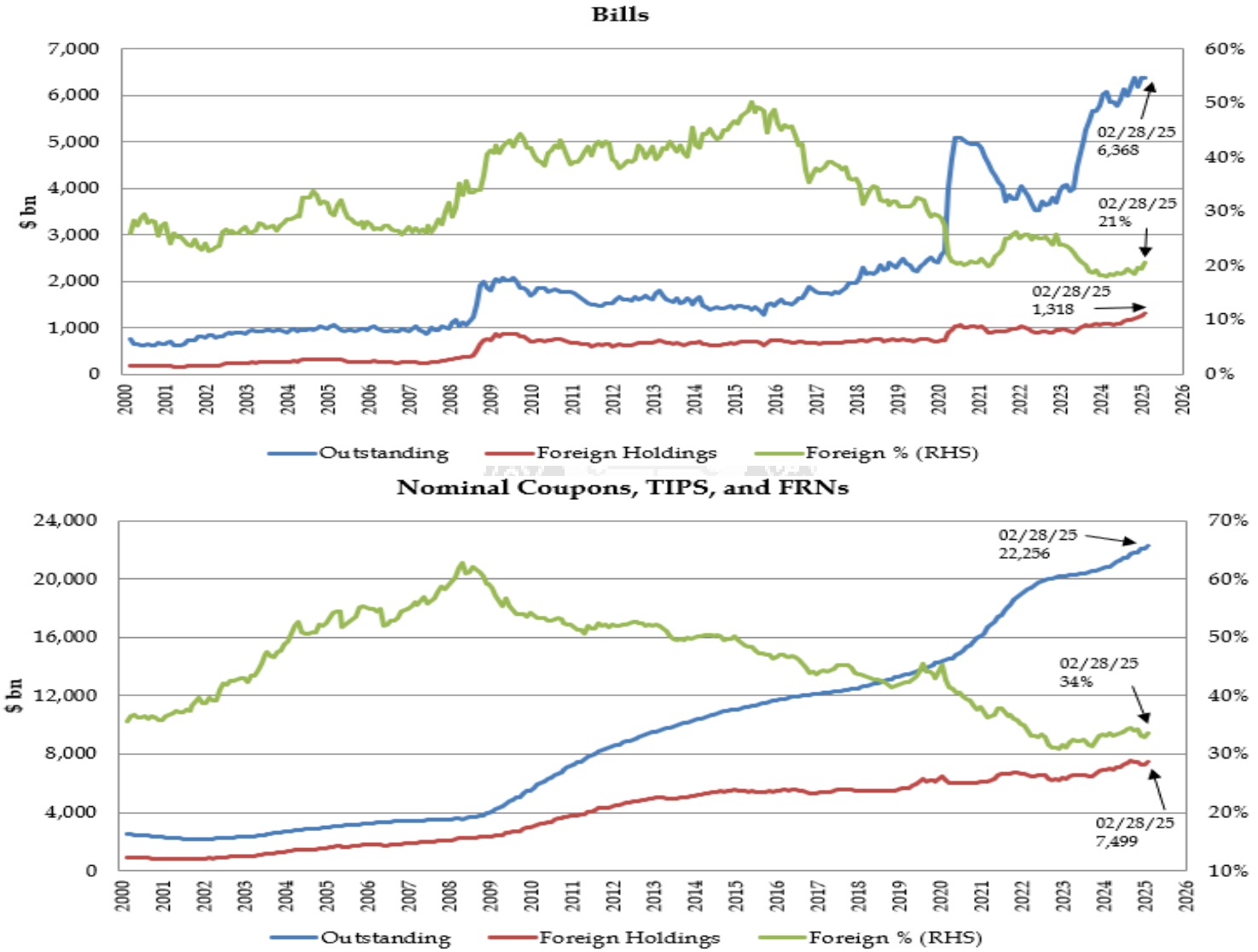
Competitive Amount Awarded excludes SOMA add-ons.

Total Foreign Awards of Treasuries at Auction, $ billions



Foreign includes both private sector and official institutions.

Total Foreign Holdings



Source: Treasury International Capital (TIC) System as of February 2025.
For more information on foreign participation data, including more details about the TIC data shown here, please refer to Treasury Presentation to TBAC "Brief Overview of Key Data Sources on Foreign Participation in the U.S. Treasury Securities Market" at the Treasury February 2019 Refunding.

Section VII:
Review of Treasury Buyback Results

CUSIP Concentration, Offer to Maximum Purchase Ratio, Buyback Amount, Buyback-Eligible and Purchased CUSIPs, etc.

The following applies to slides 47 to 55:

- The top left chart shows the total par amount purchased in each liquidity support buyback operation relative to the maximum purchase amount.
- Different colors within each bar correspond to the CUSIP-level purchase amounts.

- The top right chart shows the "offer to max" ratio for each liquidity support buyback.
- The "offer to max" ratio is the ratio of the total par amount offered (red bar) in a buyback operation to Treasury's maximum purchase amount (blue bar).

- The bottom left chart shows the count of eligible (red) and purchased (blue) CUSIPs for each liquidity support buyback operation as well as the ratio of purchased to eligible securities.
- Prior to August 2024, Treasury limited the buyback eligible population to at most 20 CUSIPs.

Summary of Treasury Buyback Results

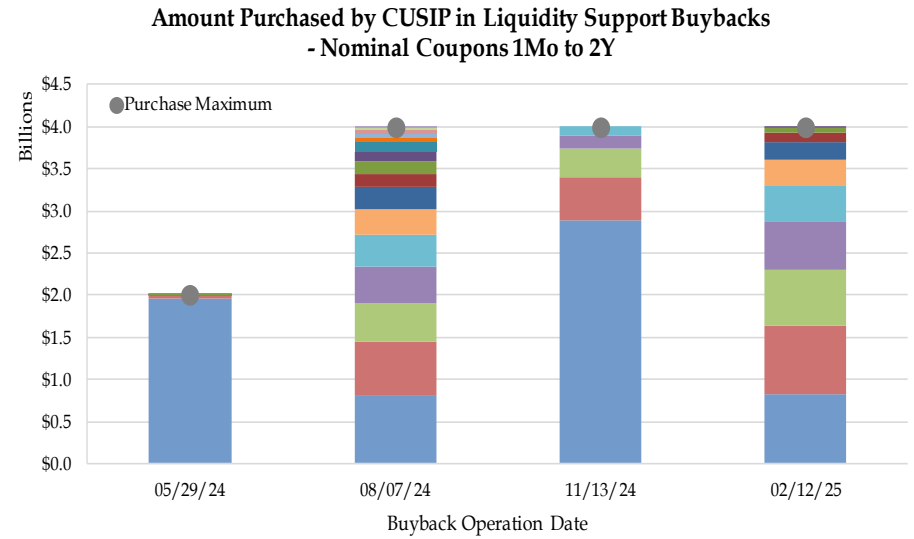
Treasury Buyback Results from 2/12/25 to 4/23/25 (Current Refunding Quarter) [1]								
Operation Type	Maturity Sector	Operation Size	Total Number of Operations	Total Par Amount Offered ($BN)	Total Purchase Maximum ($BN)	Total Par Amount Purchased ($BN)	Offer to Maximum	Buyback Ratio
Formula		**A**	**B**	**C**	**D = A * B**	**E**	**F = C / D**	**G = E / D**
Cash Management	1Mo to 2Y	$8.5 BN	7	$165.3	$59.5	$53.9	2.8	0.91
Liquidity Support	1Mo to 2Y	$4 BN	1	$27.8	$4.0	$4.0	6.9	1.00
	2Y to 3Y		1	$10.7	$4.0	$4.0	2.7	1.00
	3Y to 5Y		1	$14.0	$4.0	$4.0	3.5	1.00
	5Y to 7Y		1	$7.3	$4.0	$0.4	1.8	0.11
	7Y to 10Y		1	$4.9	$4.0	$1.0	1.2	0.25
	10Y to 20Y	$2 BN	1	$18.2	$2.0	$2.0	9.1	1.00
	20Y to 30Y		2	$21.2	$4.0	$4.0	5.3	1.00
	TIPS 1Y to 7.5Y	$500 MM	2	$7.3	$1.0	$1.0	7.3	1.00
	TIPS 7.5Y to 30Y		1	$2.0	$0.5	$0.4	4.1	0.81
Total			**18**	**$278.7**	**$87.0**	**$74.8**	**3.2**	**0.86**

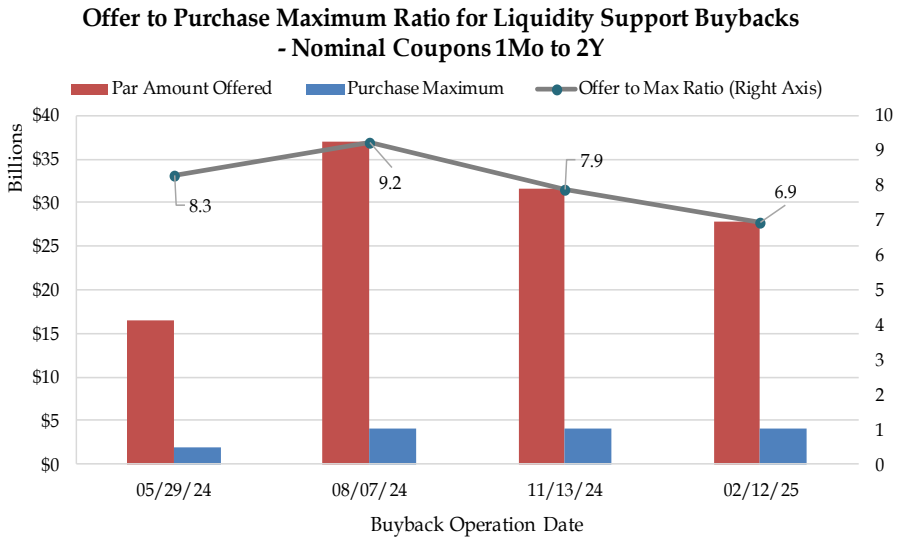
Treasury Buyback Results from 5/29/24 to 4/23/25 (All Buybacks)							
Operation Type	Maturity Sector	Total Number of Operations	Total Par Amount Offered ($BN)	Total Purchase Maximum ($BN)	Total Par Amount Purchased ($BN)	Offer to Maximum (Min | Avg | Max)	Buyback Ratio (Min | Avg | Max)
Formula			**C**	**D**	**E**	**F = C / D**	**G = E / D**
Cash Management	1Mo to 2Y	14	$299	$102	$93	1.4 | **3.0** | 5.2	0.3 | **0.9** | 1.0
Liquidity Support	1Mo to 2Y	4	$113	$14	$14	6.9 | **8.1** | 9.2	1.0 | **1.0** | 1.0
	2Y to 3Y	4	$35	$14	$11	1.8 | **2.7** | 4.4	0.6 | **0.8** | 1.0
	3Y to 5Y	4	$43	$14	$13	2.4 | **3.0** | 3.5	0.4 | **0.9** | 1.0
	5Y to 7Y	4	$26	$14	$7	1.2 | **2.0** | 3.2	0.1 | **0.6** | 0.9
	7Y to 10Y	4	$15	$14	$2	0.8 | **1.2** | 1.9	0.0 | **0.1** | 0.2
	10Y to 20Y	6	$66	$12	$12	3.2 | **5.5** | 10.2	1.0 | **1.0** | 1.0
	20Y to 30Y	7	$57	$14	$14	1.9 | **4.0** | 6.4	1.0 | **1.0** | 1.0
	TIPS 1Y to 7.5Y	7	$18	$4	$3	1.7 | **5.2** | 8.1	0.3 | **0.8** | 1.0
	TIPS 7.5Y to 30Y	6	$8	$3	$2	1.5 | **2.6** | 4.1	0.1 | **0.6** | 1.0
Total		**60**	**$679**	**$205**	**$169**		

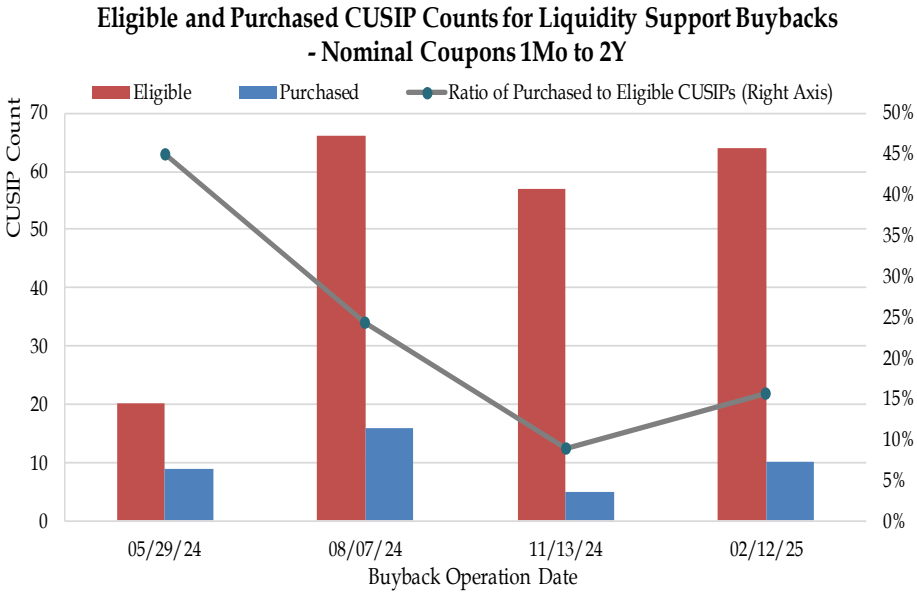
- Treasury bought back $74.8 BN of securities in the current refunding quarter and has repurchased $169 BN of securities since the buyback program launched in May 2024.
- In March and April of the current refunding quarter, Treasury conducted seven cash management buybacks for up to $8.5 BN each.
  - Treasury bought back the maximum par amount in six of the seven cash management buybacks for a total of $53.9 BN.
- Treasury also conducted 11 liquidity support buybacks between 2/12/25 and 4/23/25. Treasury bought back the maximum par amount in all but the 5Y to 7Y and 7Y to 10Y Nominal Coupons and 7.5Y to 30Y TIPS sectors.

(1) *Data as of 4/23/25. Liquidity support buybacks for 7.5Y to 30Y TIPS and 10Y to 20Y Nominal Coupons are scheduled for 5/1/25 and 5/6/25, respectively.*

Liquidity Support Buybacks – Nominal Coupons 1Mo to 2Y

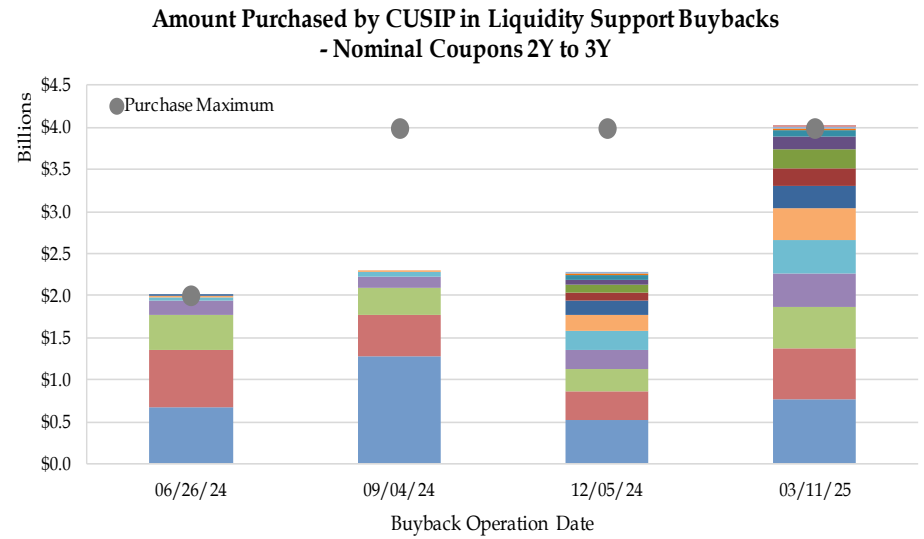


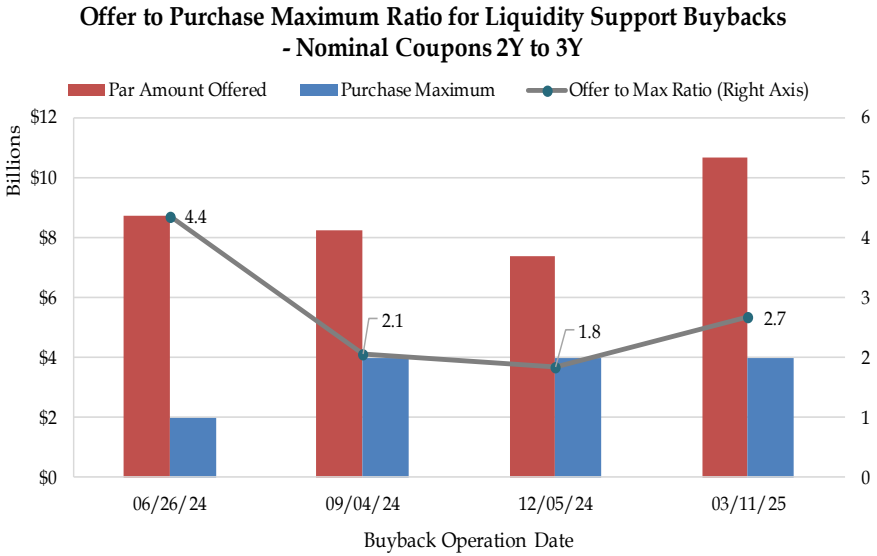


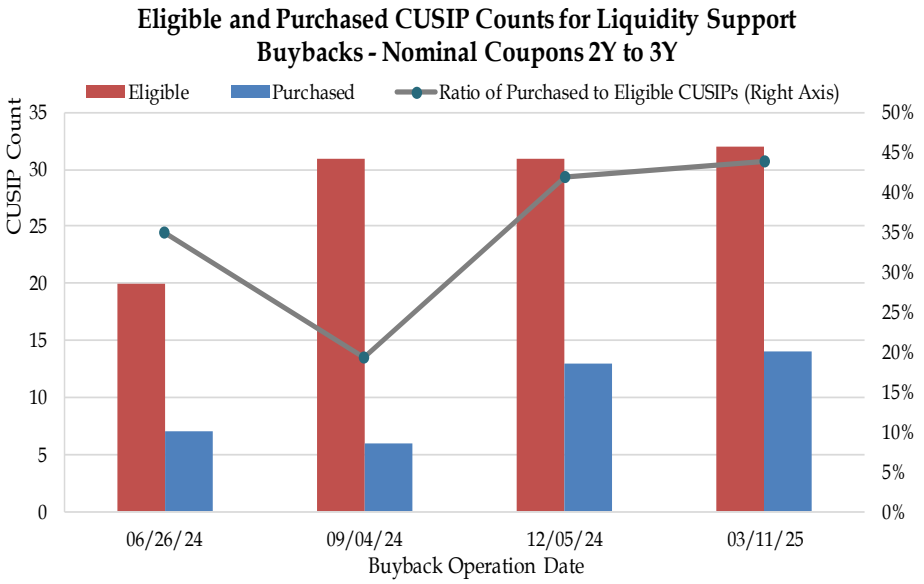


- Treasury has consistently bought back the maximum par amount in liquidity support buybacks in the 1Mo to 2Y maturity sector (top left).
- Buyback operations in this sector have been consistently oversubscribed with high offer to purchase maximum ratios (top right).

Liquidity Support Buybacks – Nominal Coupons 2Y to 3Y



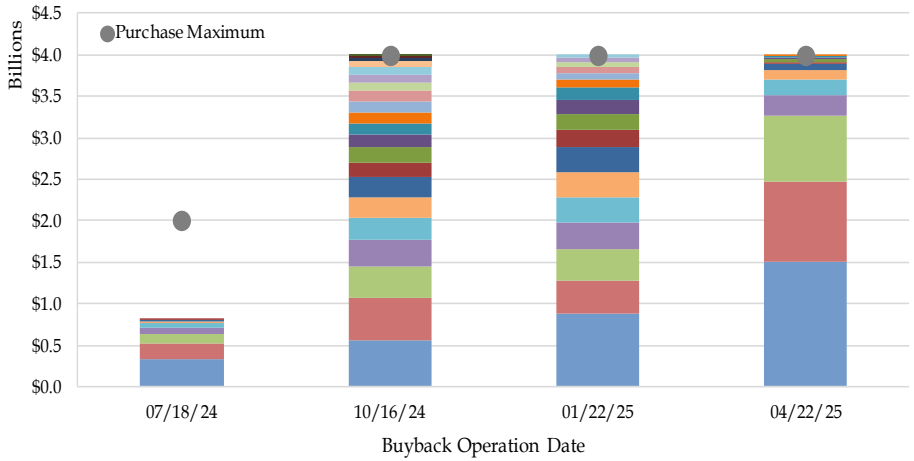




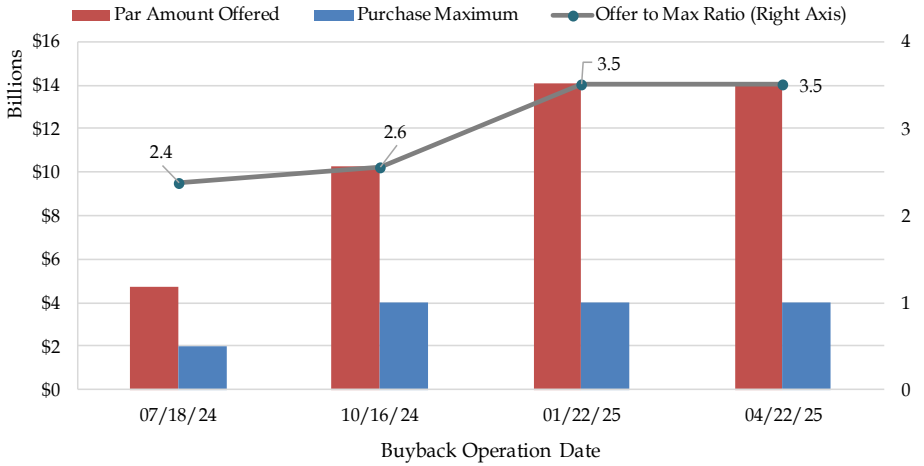
- This quarter, Treasury bought back the $4 billion maximum par amount in the 2Y to 3Y sector on 3/11/25 (top left) having received over $10 billion of offers for an offer to max ratio of 2.7 (top right).
- This quarter's buyback was Treasury's largest single-operation purchase in the 2Y to 3Y maturity sector. In the two previous quarters, Treasury bought back slightly over half of the $4 billion purchase maximum in this sector.

Liquidity Support Buybacks – Nominal Coupons 3Y to 5Y

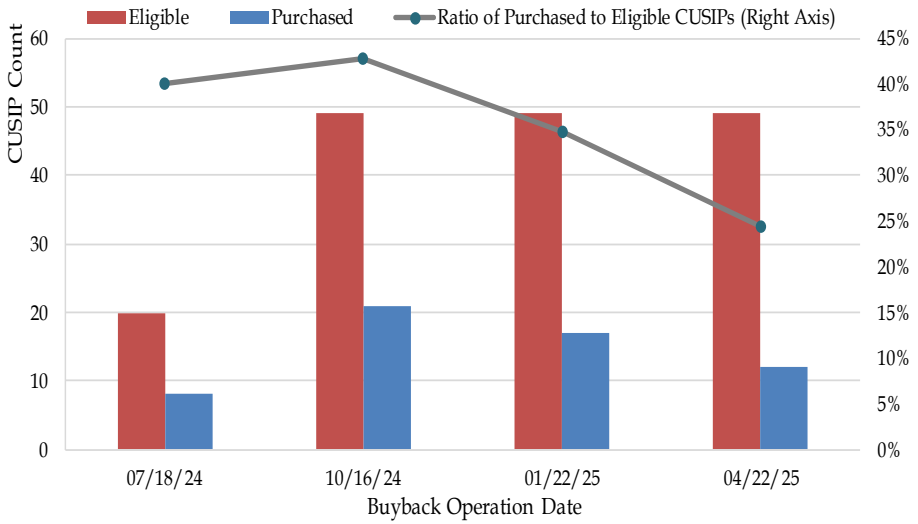
Amount Purchased by CUSIP in Liquidity Support Buybacks - Nominal Coupons 3Y to 5Y



Offer to Purchase Maximum Ratio for Liquidity Support Buybacks - Nominal Coupons 3Y to 5Y

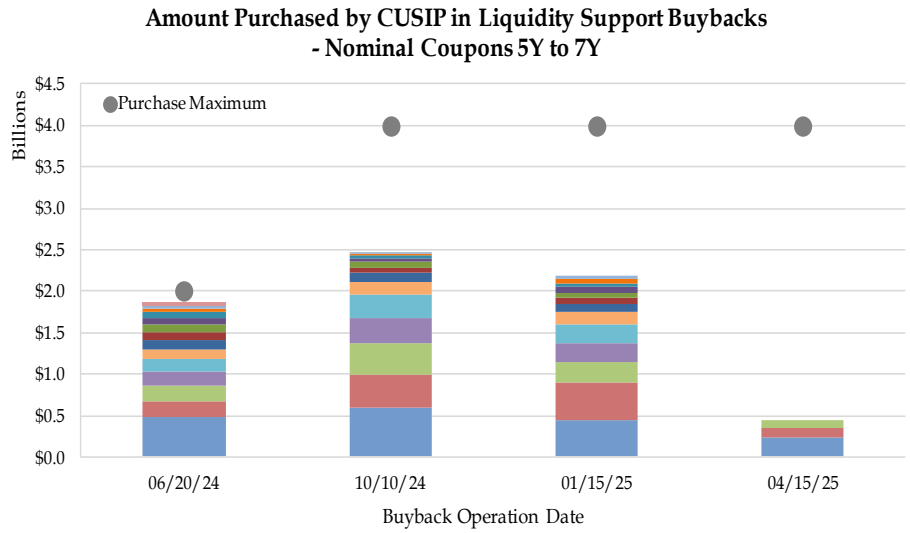


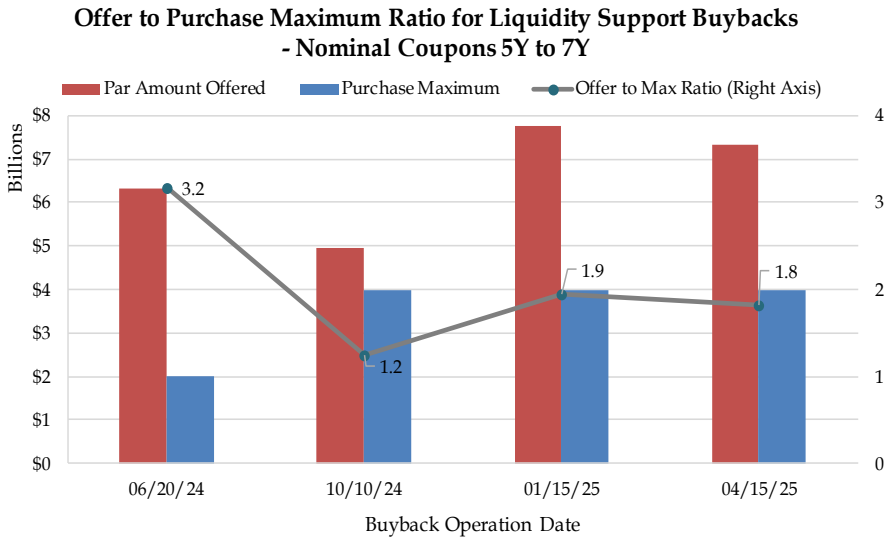
Eligible and Purchased CUSIP Counts for Liquidity Support Buybacks - Nominal Coupons 3Y to 5Y

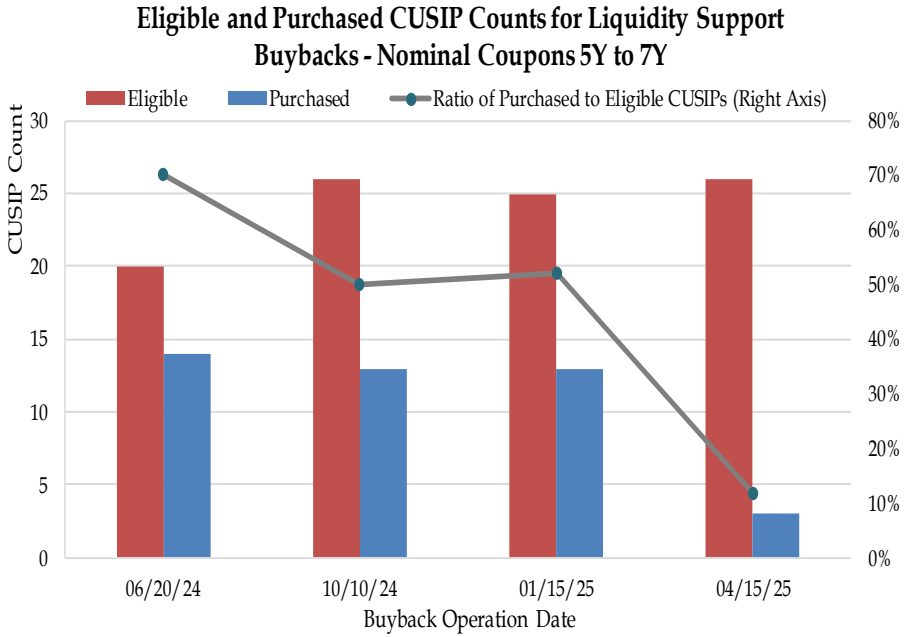


- Treasury bought back the $4 billion maximum par amount in the 3Y to 5Y sector for the third consecutive quarter (top left).

Liquidity Support Buybacks – Nominal Coupons 5Y to 7Y

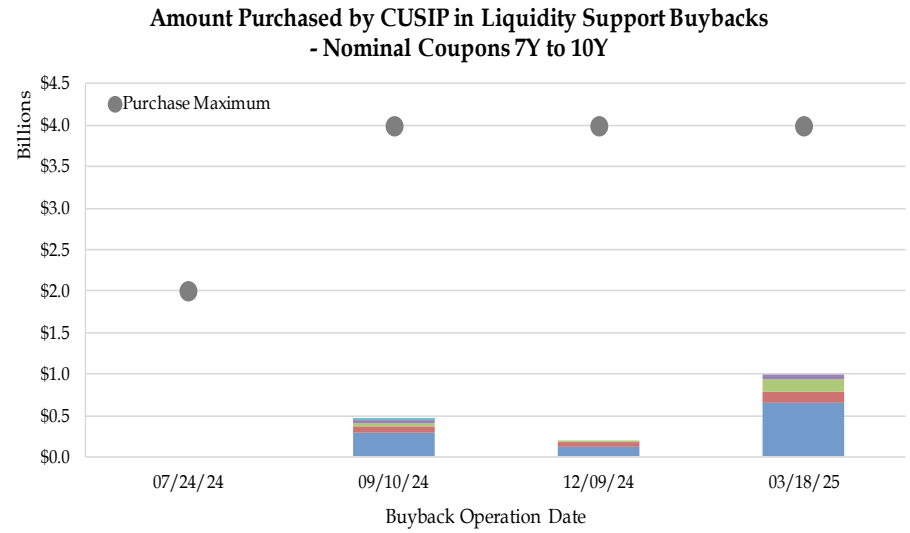


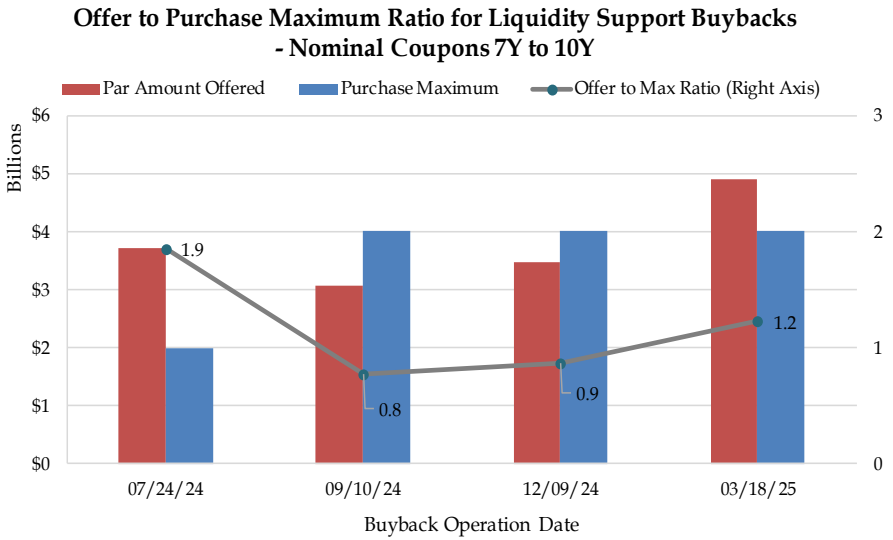


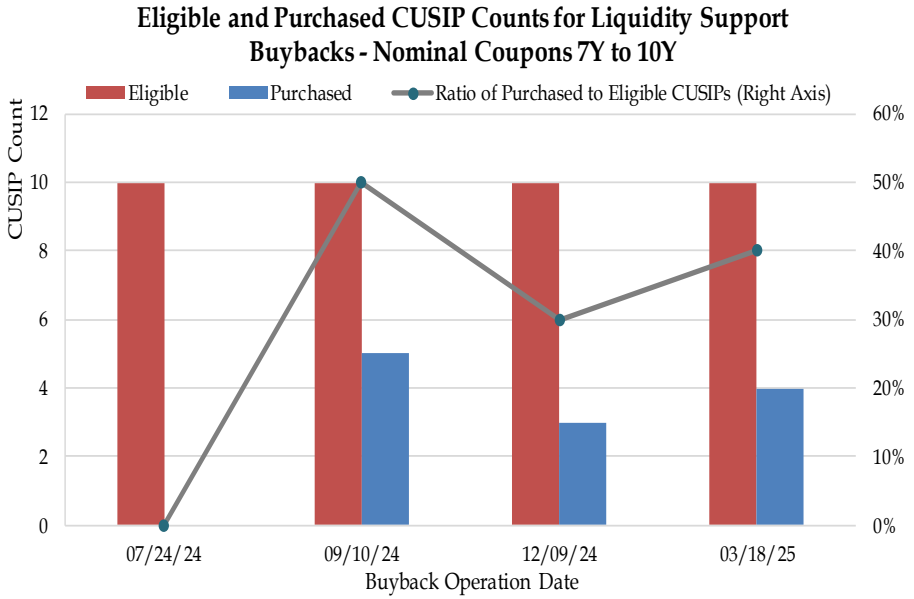


- On 4/15/25, Treasury purchased $433 million of the $4 billion purchase maximum in the 5Y to 7Y sector (top left).

Liquidity Support Buybacks – Nominal Coupons 7Y to 10Y



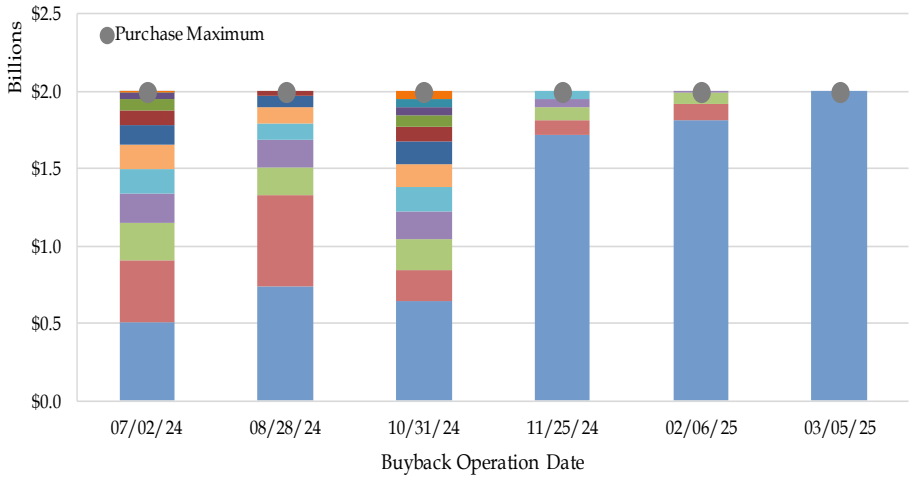




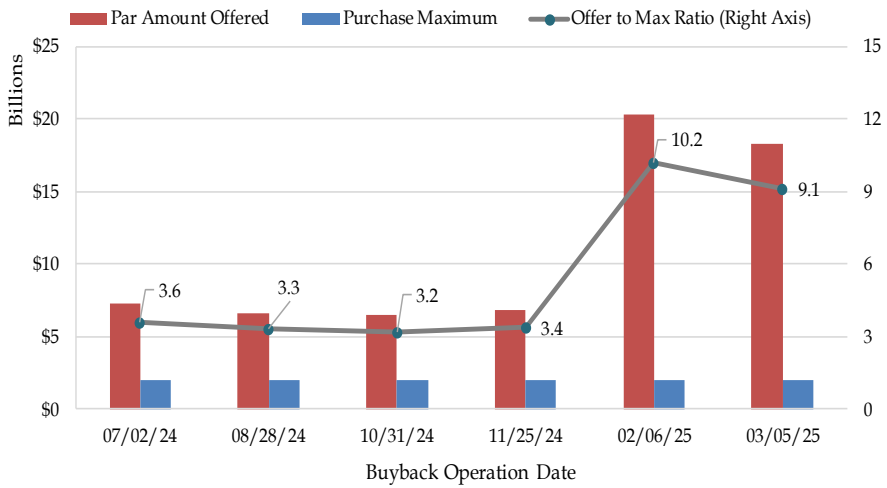
- On 3/18, Treasury purchased $985 million of the $4 billion purchase maximum in the 7Y to 10Y maturity sector (top left).
- This was Treasury's largest purchase to-date in the 7Y to 10Y sector.
- The offer to max ratio for the 3/18 buyback was 1.2, which was slightly higher than the previous two operations in this sector, but still much lower than recent operations in other buyback sectors.
- Treasury continues to buy back significantly less than the maximum purchase amount in the 7Y to 10Y sector.

Liquidity Support Buybacks – Nominal Coupons 10Y to 20Y

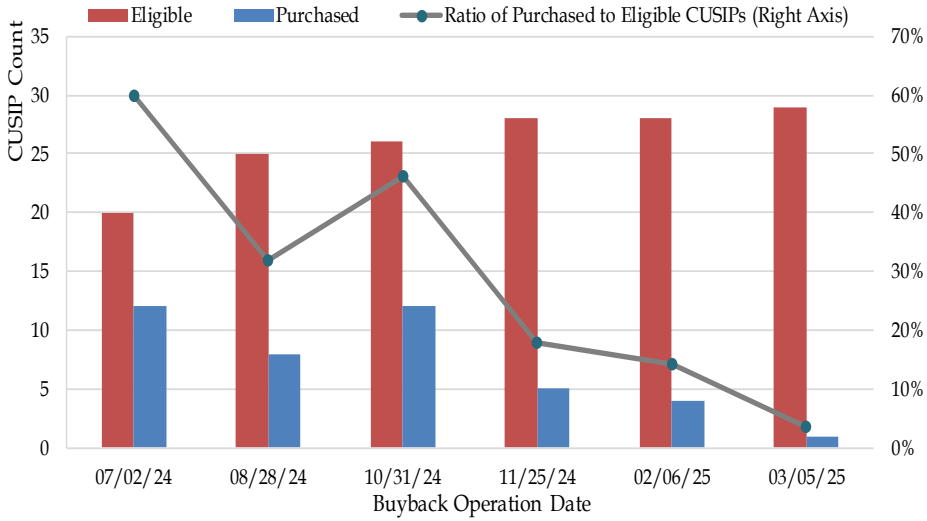
Amount Purchased by CUSIP in Liquidity Support Buybacks - Nominal Coupons 10Y to 20Y



Offer to Purchase Maximum Ratio for Liquidity Support Buybacks - Nominal Coupons 10Y to 20Y

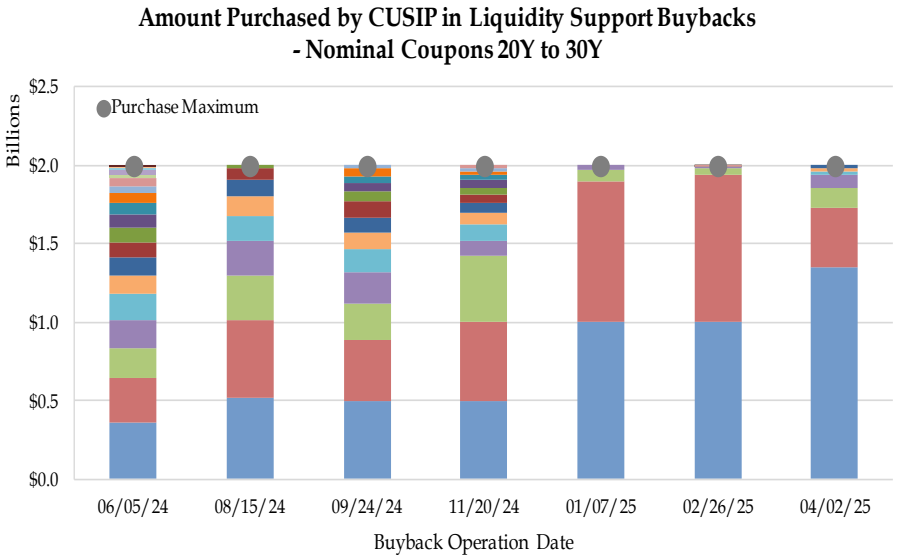


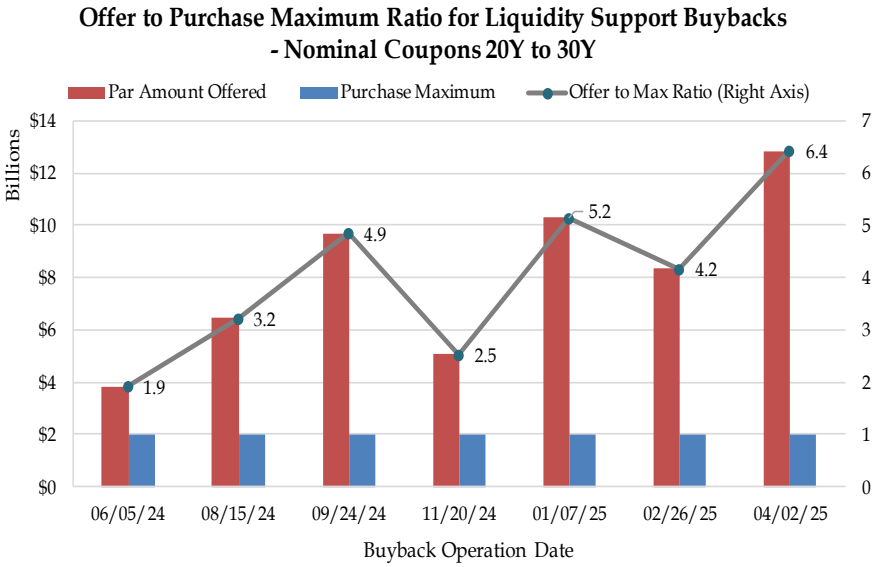
Eligible and Purchased CUSIP Counts for Liquidity Support Buybacks - Nominal Coupons 10Y to 20Y

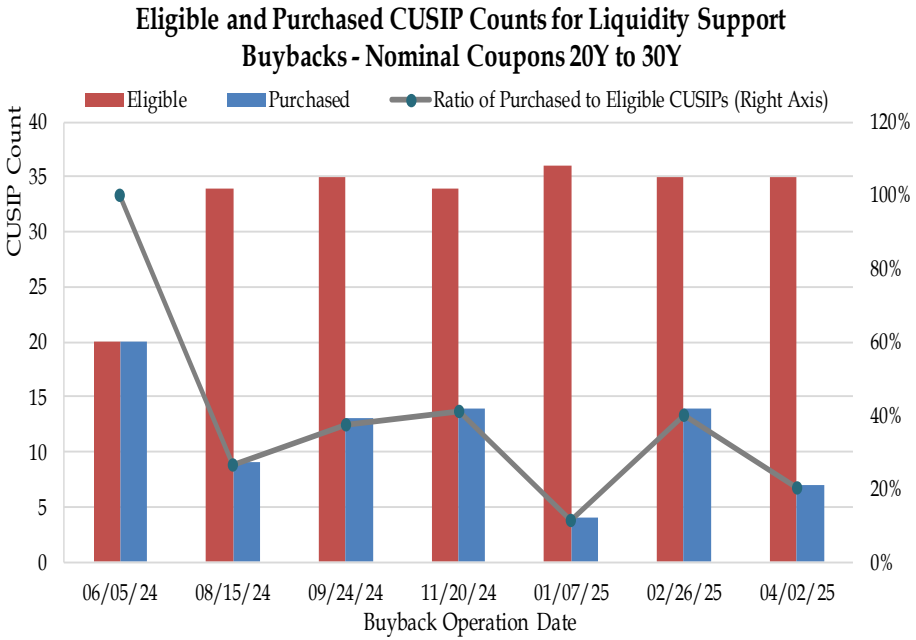


- Treasury continues to buy back the maximum par amount in the 10Y to 20Y sector.
- Both operations conducted during the previous quarter printed high offer to max ratios of 10.2 and 9.1 (top right).
- Treasury's recent purchases in the 10Y to 20Y sector are concentrated in certain securities (top left).
  - $1.72 billion of the 11/25 buyback was in the 2.25% coupon security maturing 5/15/41 (912810SY5).
  - $1.82 billion of the 2/6 buyback was again in the 2.25% coupon security maturing 5/15/41 (912810SY5).
  - All of the 3/5 buyback was in the 1.75% coupon security maturing 8/15/41 (912810TA6).

Liquidity Support Buybacks – Nominal Coupons 20Y to 30Y



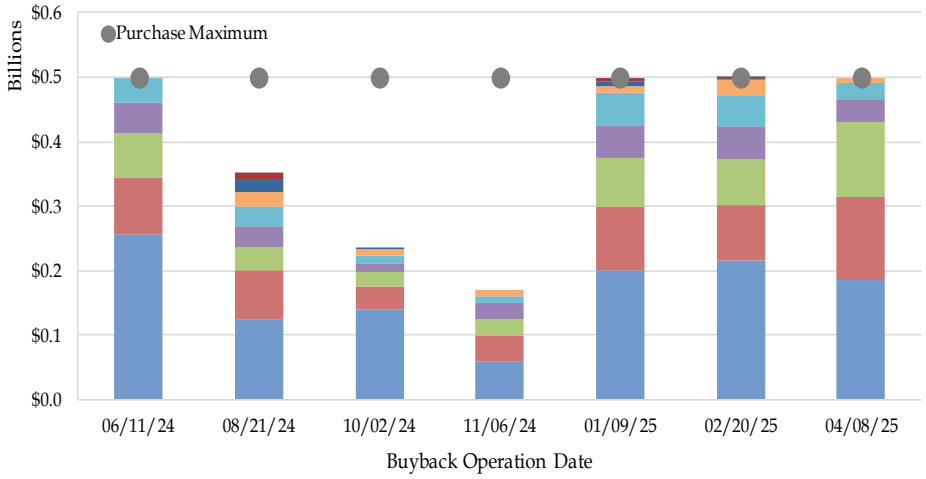




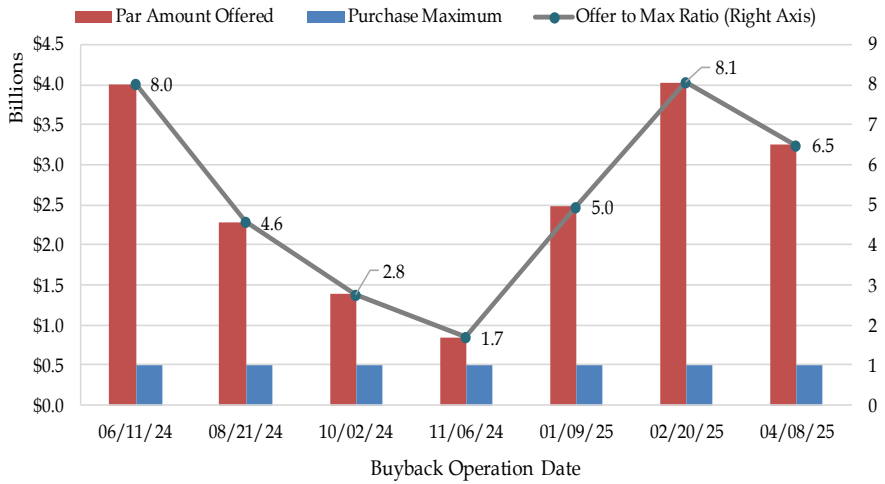
- Treasury has consistently bought back the maximum par amount in the 20Y to 30Y sector.
- The past three buybacks in this sector have printed relatively high offer to max ratios with purchases of $1 billion or more concentrated in single securities.
- The offer to max ratio for the most recent operation in this sector was a record high 6.4.

Liquidity Support Buybacks – TIPS 1Y to 7.5Y

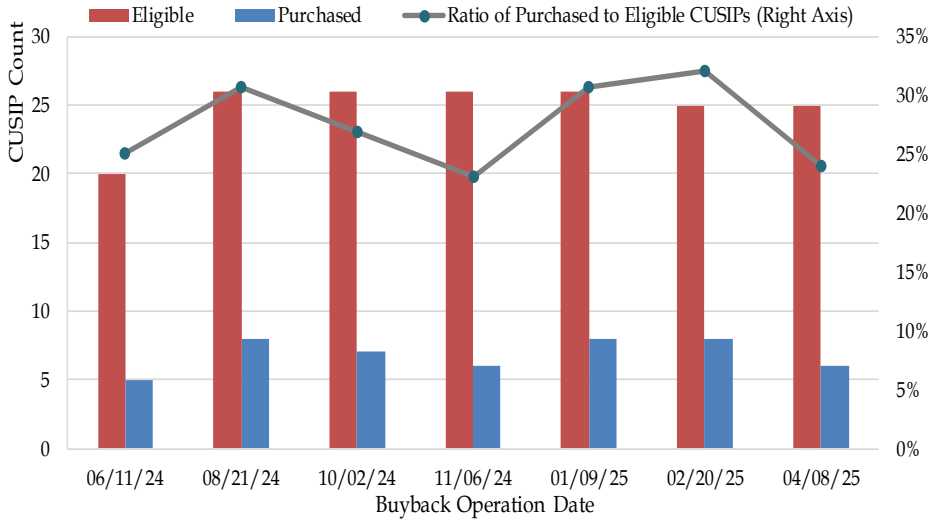
Amount Purchased by CUSIP in Liquidity Support Buybacks - TIPS 1Y to 7.5Y



Offer to Purchase Maximum Ratio for Liquidity Support Buybacks - TIPS 1Y to 7.5Y

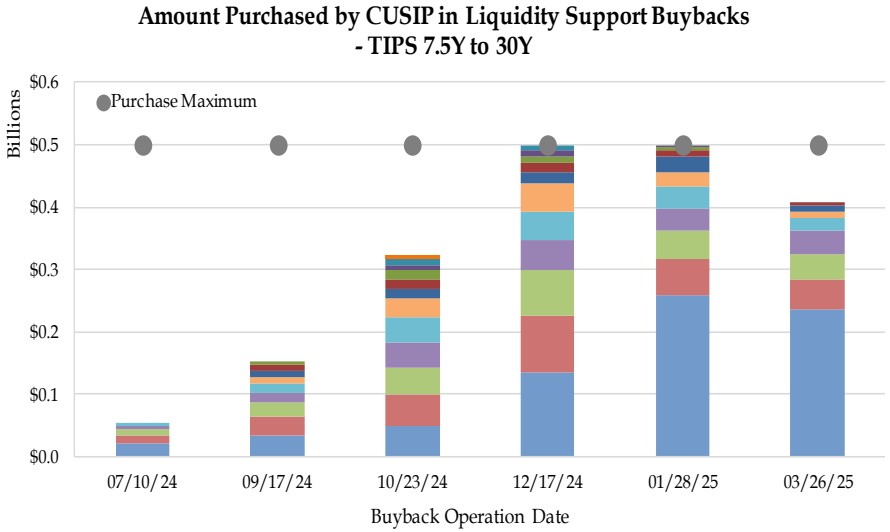


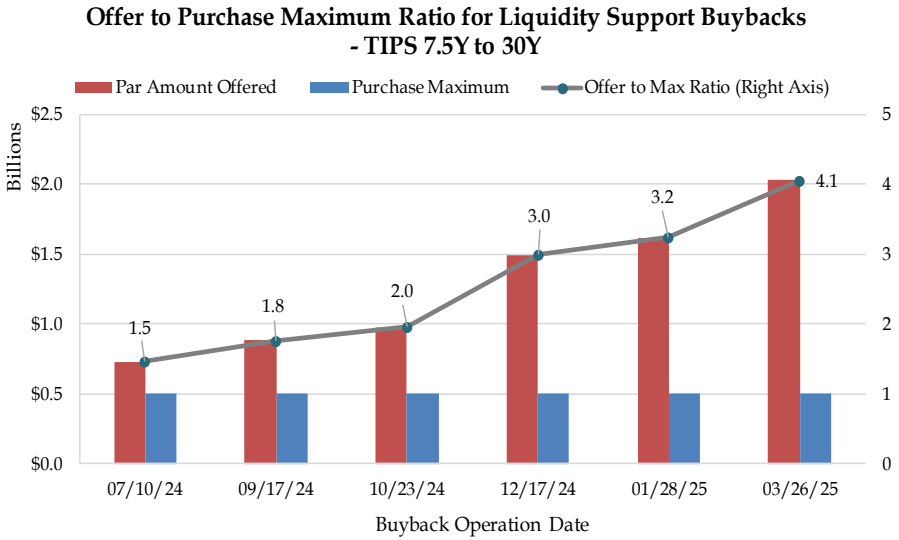
Eligible and Purchased CUSIP Counts for Liquidity Support Buybacks - TIPS 1Y to 7.5Y

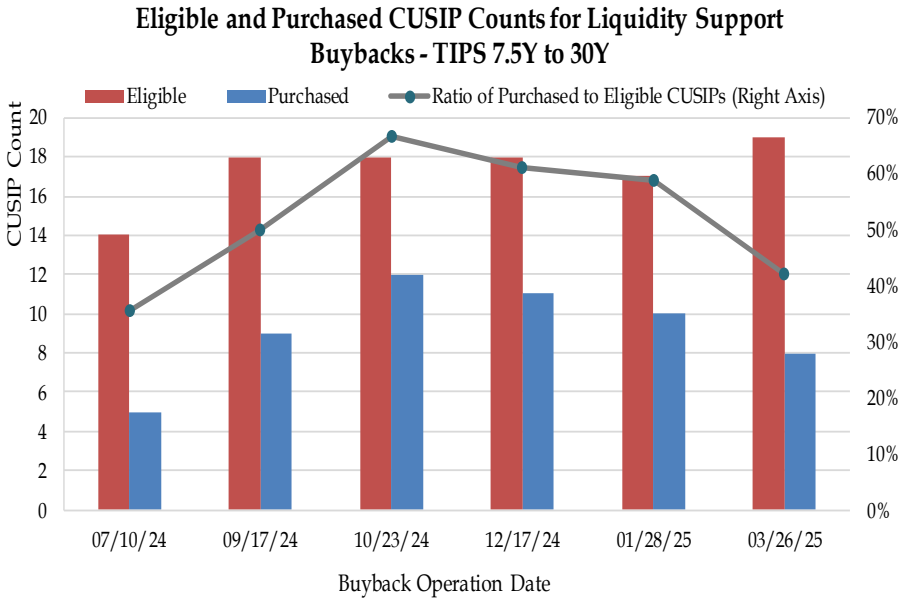


- Treasury bought back the maximum par amount in the last three short-end TIPS operations.
- Both par amount purchased and offer to max ratios for the short-end TIPS sector are up significantly from lows observed in November 2024.

Liquidity Support Buybacks –TIPS 7.5 to 30Y

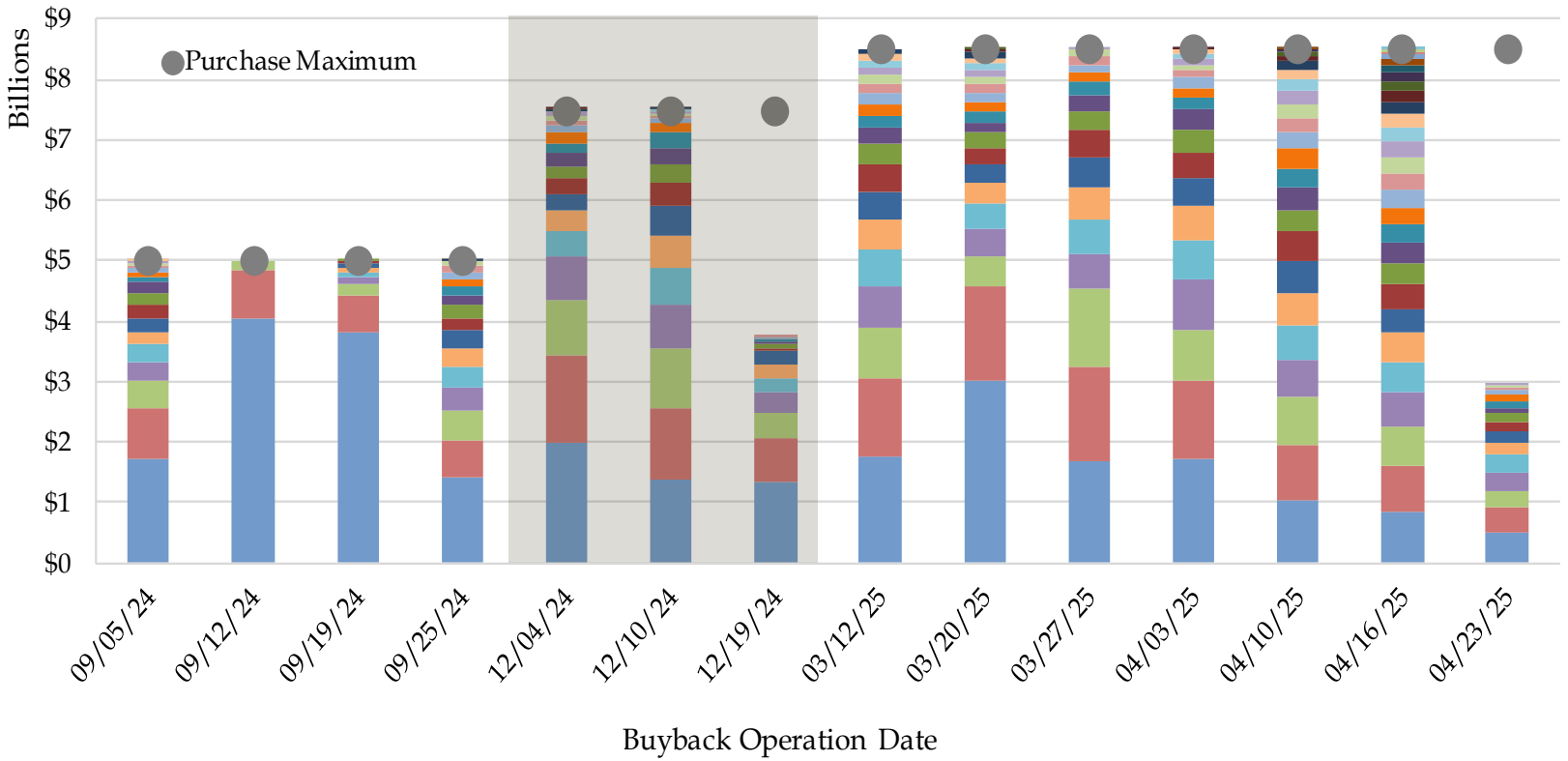




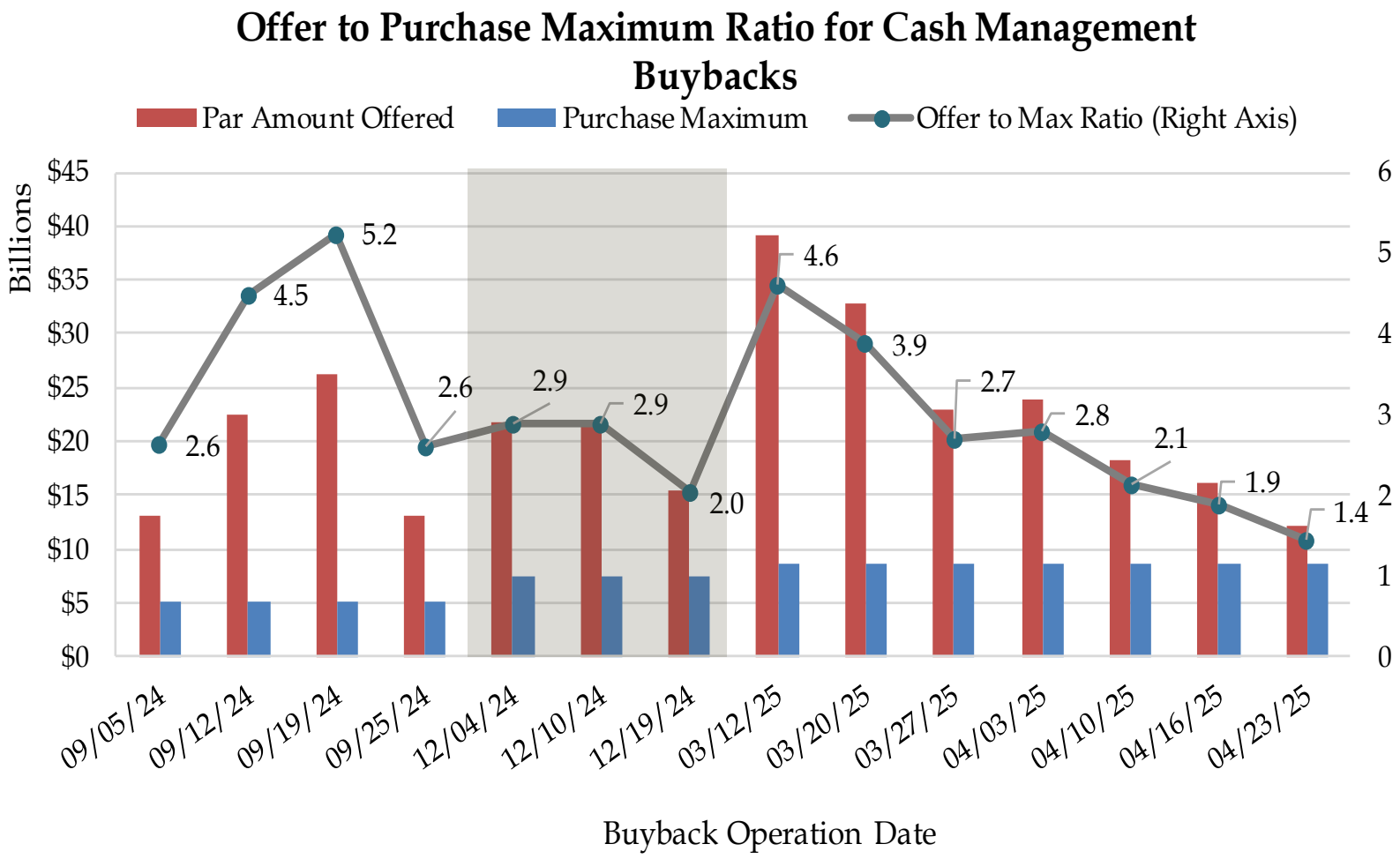


- In long-end TIPS, Treasury bought back the maximum par amount in two of the last three buyback operations.
- The offer to max ratio for long-end TIPS continues to steadily increase over time.

Amount Purchased by CUSIP in Cash Management Buybacks

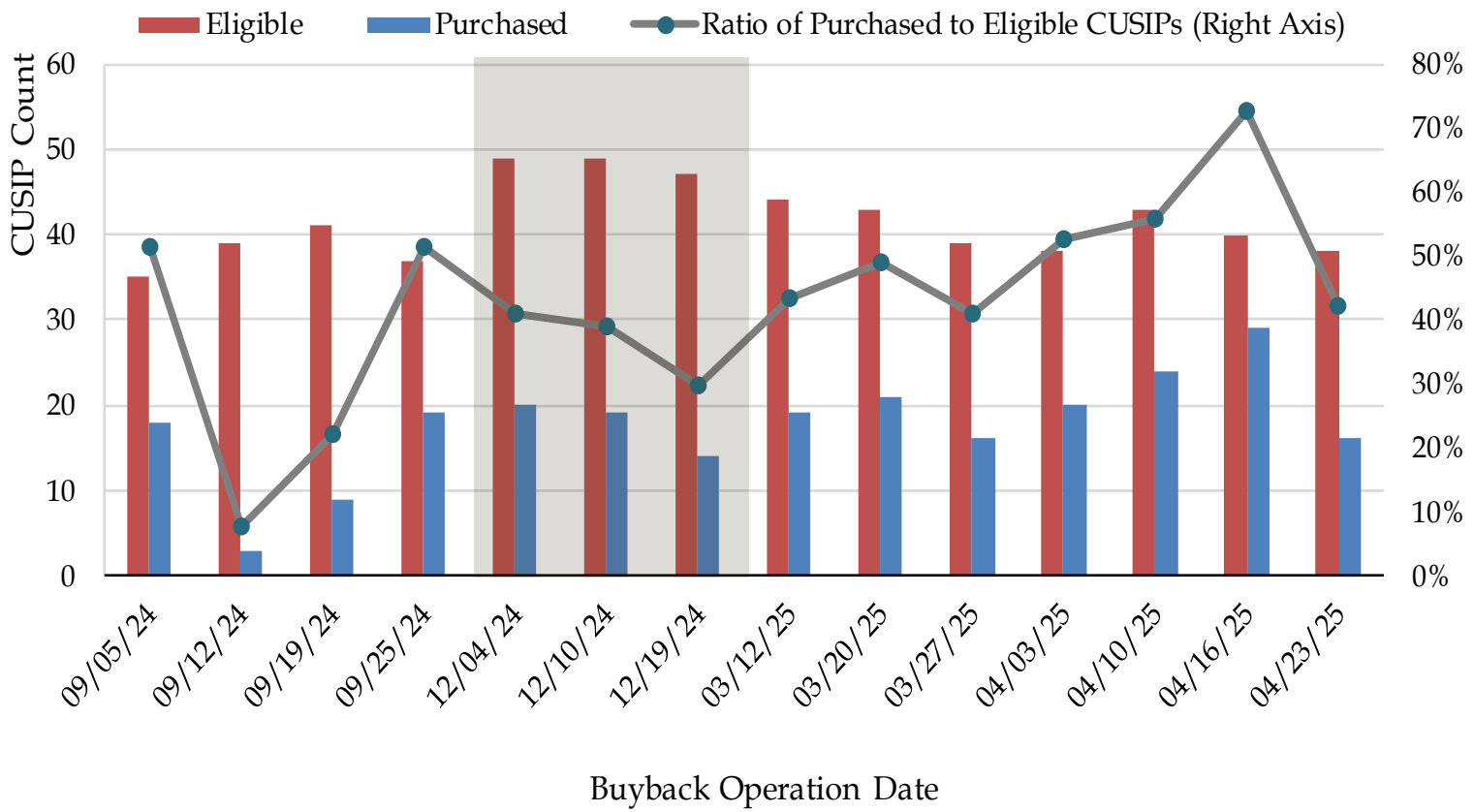


- Treasury conducted seven cash management buybacks for up to $8.5 billion each between mid-March and late-April. Treasury bought back the maximum par amount in six of the seven cash management buybacks this quarter. All cash management buybacks occur in the 1Mo to 2Y maturity sector.
    - The recent increase in both size and frequency of cash management buybacks is due to elevated fiscal inflows that coincide with the April tax season.



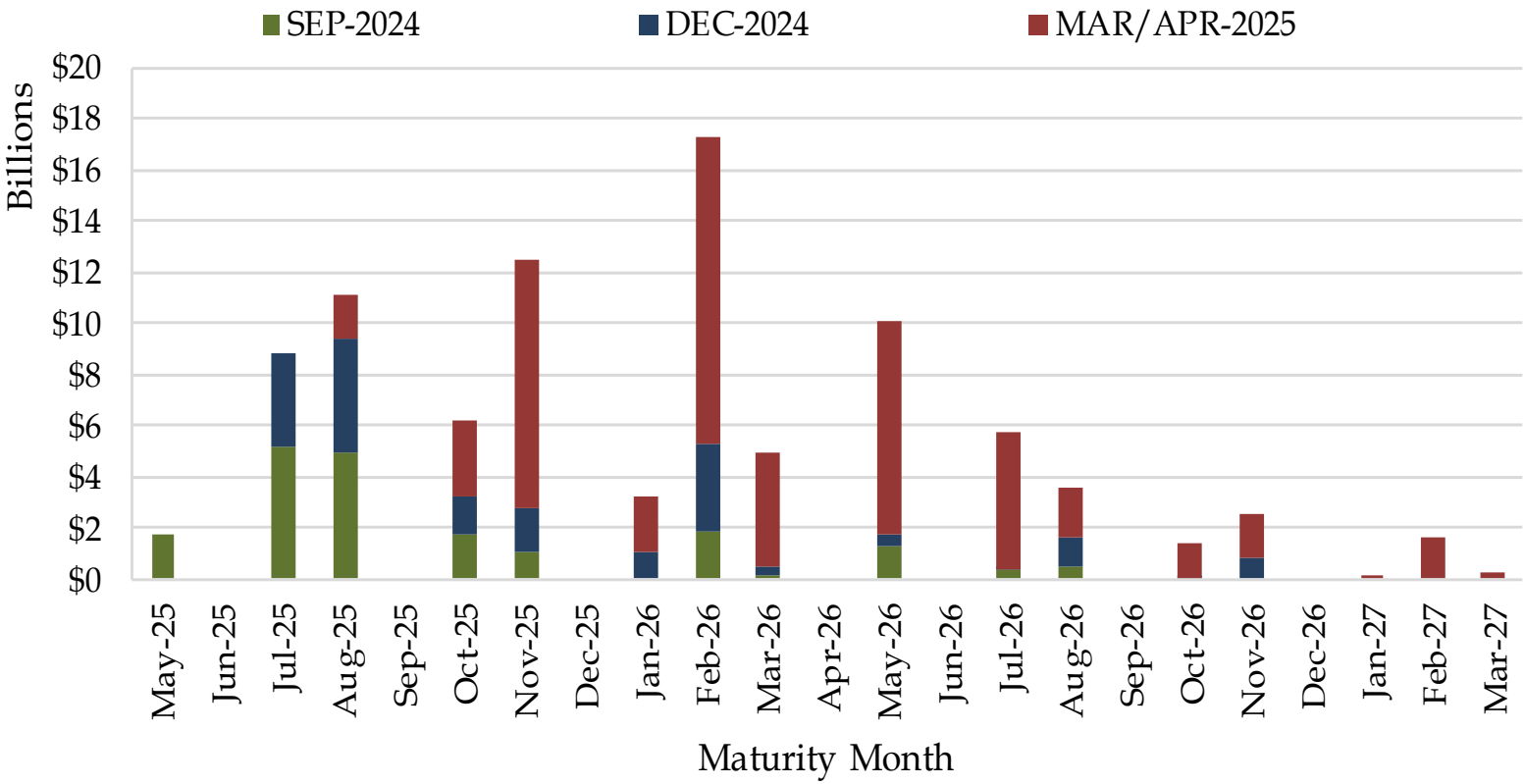
- The offer to max ratio for the March/April 2025 cash management buybacks steadily declined over time from a high of 4.6 on 3/12/25 to a low of 1.4 on 4/23/25.

Eligible and Purchased CUSIP Counts for Cash Management Buybacks



- The ratio of eligible CUSIPs that were actually purchased in a cash management buyback increased from a low of approximately 40% in late March to a high of approximately 75% on April 16.

Maturity Composition of Cash Management Buybacks

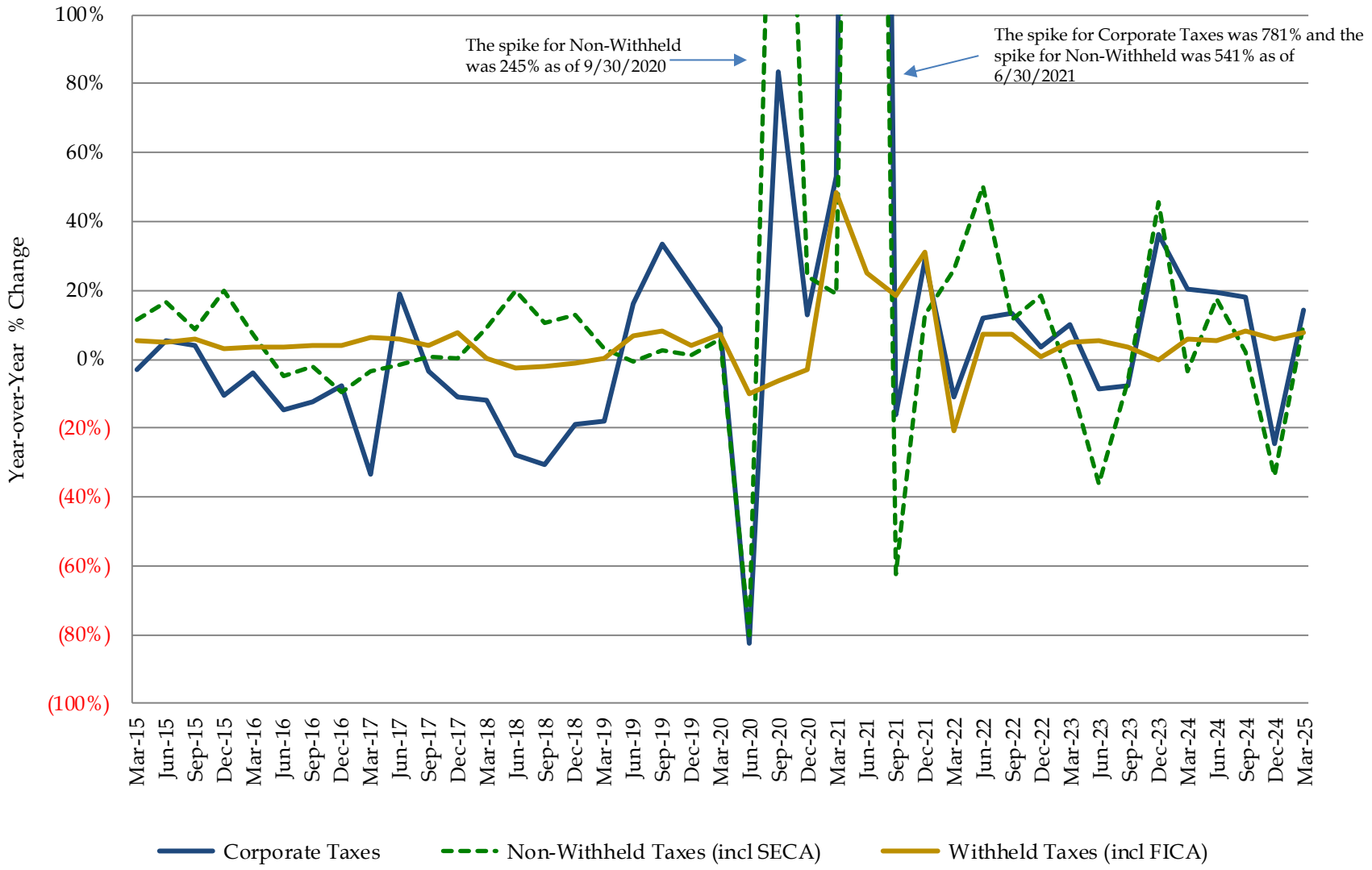


- Most of Treasury's cash management purchases in March/April 2025 were in securities maturing in November 2025, February 2026, and May 2026.

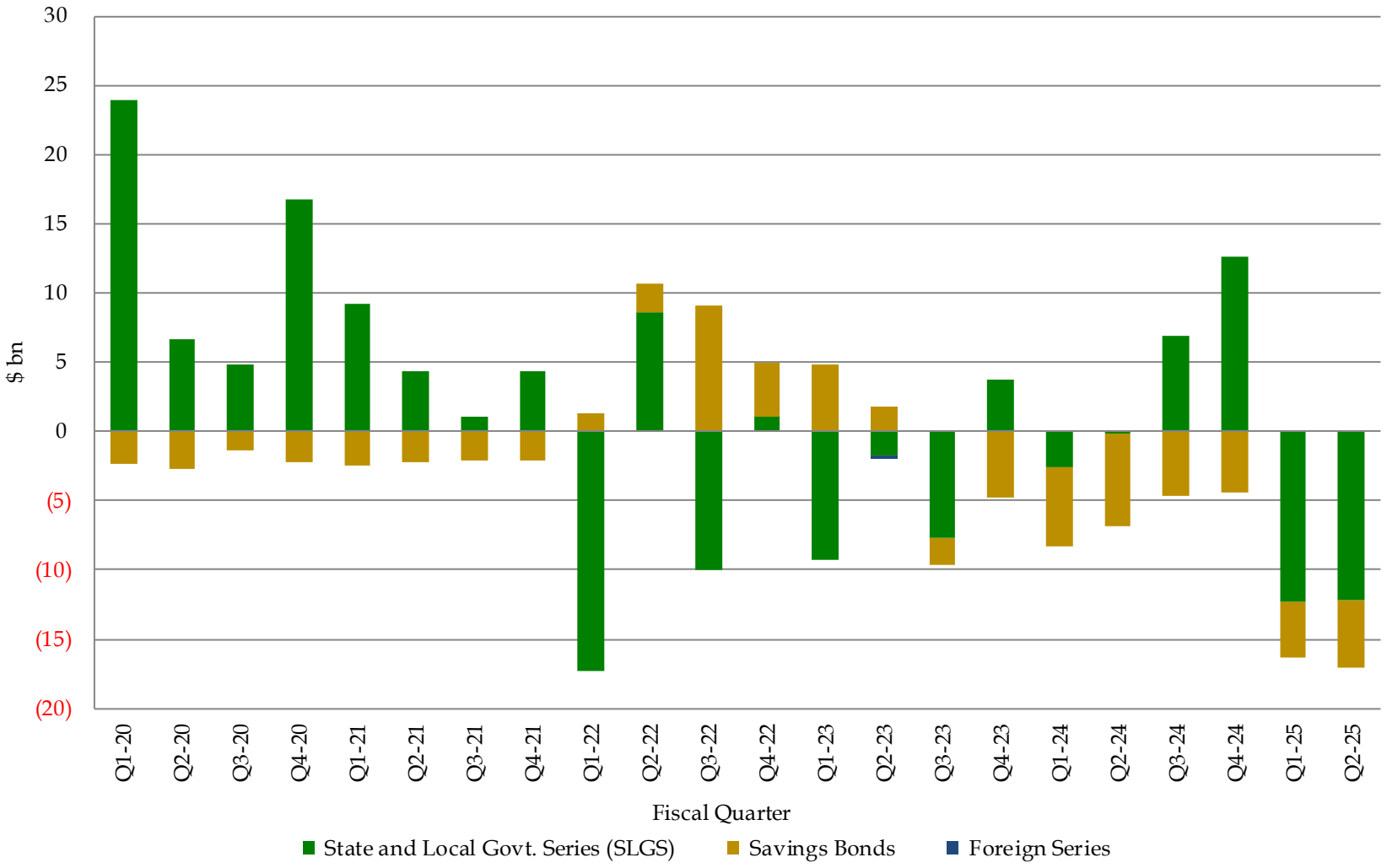
VIII. Appendix

Contents

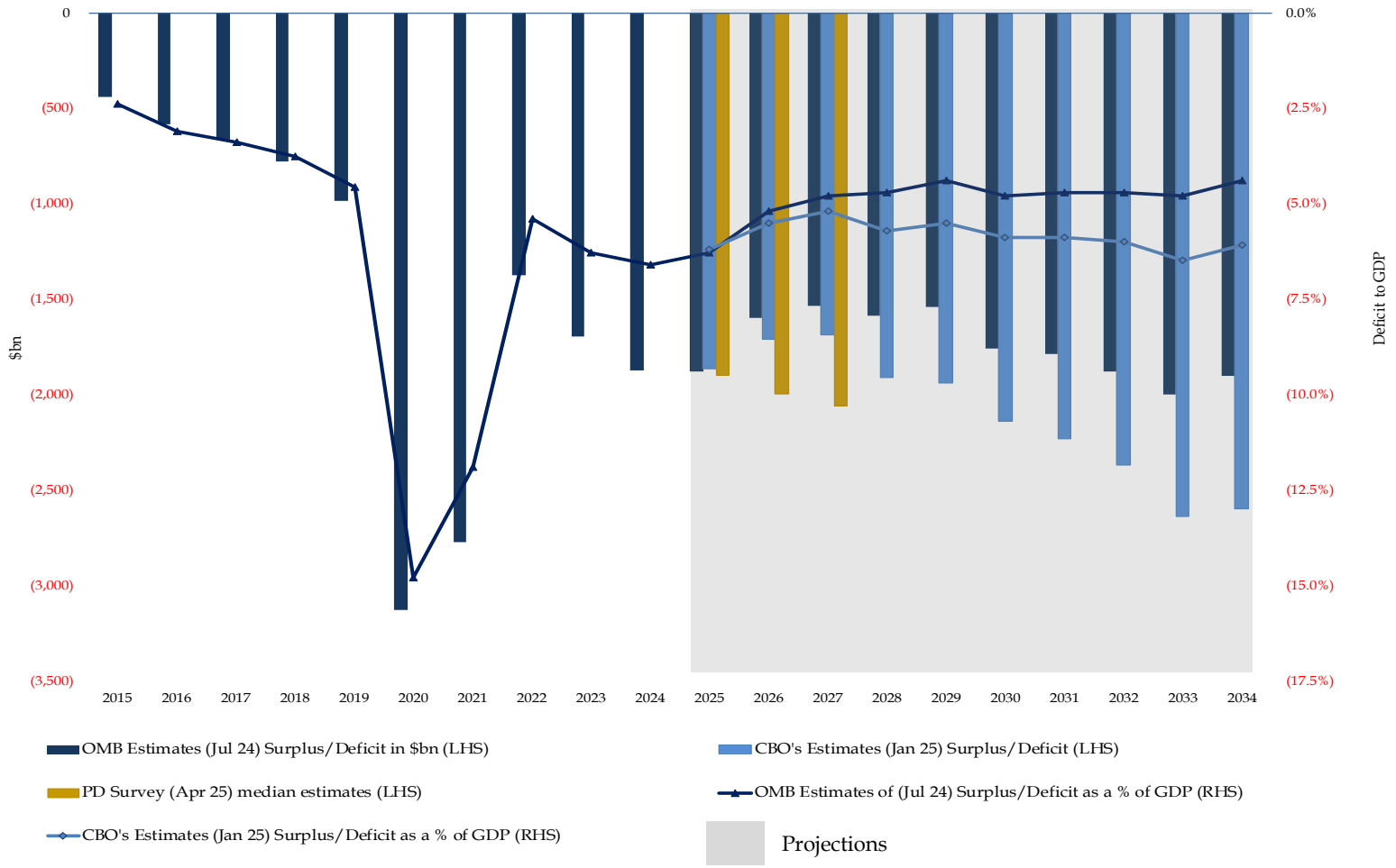
Quarterly Tax Receipts



Treasury Net Nonmarketable Borrowing



Budget Surplus/Deficit*



* OMB projections are using estimates are from Table S-3 of "Mid-Session Review Budget of The U.S. Government, Fiscal Year 2025," July 2024. CBO projections are using estimates are from "The Budget and Economic Outlook: 2025 to 2035," January 2025.

Sources of Privately-Held Financing in FY25 Q2

January - March 2025	
Net Bill Issuance	(31)
Net Coupon Issuance	451
Subtotal: Net Marketable Borrowing	420
Buyback	51
Ending Cash Balance	406
Beginning Cash Balance	722
Subtotal: Change in Cash Balance	(316)
Net Implied Funding for FY25 Q2*	685

1

Security	January - March 2025 Bill Issuance Gross	Maturing	Net	Fiscal Year-to-Date Bill Issuance Gross	Maturing	Net
4-Week	1,040	1,055	(15)	2,305	2,325	(20)
6-Week	435	0	435	435	0	435
8-Week	995	1,010	(15)	2,190	2,220	(30)
13-Week	1,048	1,051	(3)	2,099	2,036	63
17-Week	746	754	(8)	1,640	1,594	46
26-Week	914	910	4	1,850	1,820	30
52-Week	144	138	6	336	314	22
6-Week CMB	585	1,020	(435)	1,620	2,015	(395)
CMBs	105	105	0	145	145	(0)
Bill Subtotal	6,012	6,043	(31)	12,619	12,468	151

Security	January - March 2025 Coupon Issuance Gross	Maturing	Net	Fiscal Year-to-Date Coupon Issuance Gross	Maturing	Net
2-Year FRN	86	68	18	172	136	36
2-Year	207	126	81	414	251	163
3-Year	174	150	24	348	316	32
5-Year	210	100	110	420	196	224
7-Year	132	68	64	264	138	126
10-Year	120	53	67	240	112	128
20-Year	42	0	42	84	0	84
30-Year	69	3	66	138	7	131
5-Year TIPS	0	0	0	46	39	7
10-Year TIPS	38	40	(2)	55	40	15
20-Year TIPS**	0	27	(27)	0	27	(27)
30-Year TIPS	9	0	9	9	0	9
Coupon Subtotal	1,087	636	451	2,190	1,262	928
Buyback		51			90	

Total	7,099	6,730	369	14,809	13,820	989

* By adjusting the change in cash balance, Treasury arrives at the net implied funding number.
** Treasury is currently not issuing 20-year TIPS.

Privately-Held Net Marketable Borrowing Definition and Calculation Example

FY 2022 Actual Deficits and Privately-Held Net Marketable Borrowing, in $ billions

	FY 2022 Actual
FY 2022 Deficit	1,375
FY 2022 + Change in Cash Balance	421
FY 2022 + Other Means of Financing (e.g. Direct Loans)	-125
FY 2022 **= Total Net Marketable Borrowing**	1,671
FY 2022 + SOMA Redemption	150
FY 2022 **= Privately-Held Net Marketable Borrowing**	1,821

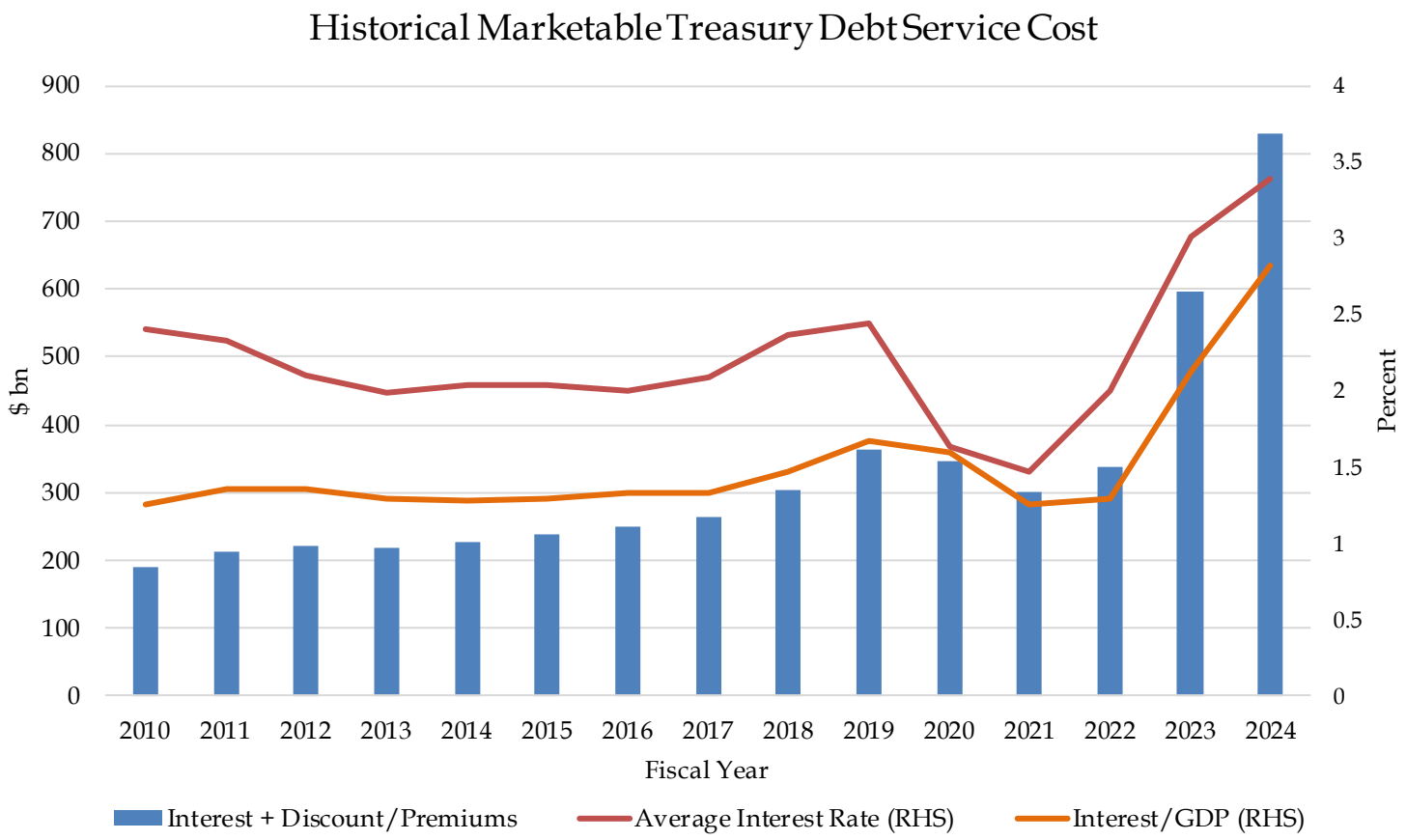
- Actual deficits are sourced from the Monthly Treasury Statement.
- Actual change in cash balance is sourced from the Daily Treasury Statement. Change in cash balance = cash balance of Sept 30, 2022 - cash balance of Sept 30, 2021
- Other Means of Financing include cash flows associated with federal credit programs, such as those related to student loans and loans to small businesses.
- Privately-Held Net Marketable Borrowing = Total Net Marketable Borrowing + SOMA Redemption
- SOMA redemption is the amount that the Federal Reserve redeems securities that Treasury has to replace with privately-held marketable borrowing. Actual SOMA redemptions amounts is from the Sources and Uses Reconciliation Table.
- Actual Privately-Held Net Marketable Borrowing is from the Sources and Uses Reconciliation Table.

FY 2025-2027 Deficits and Privately-Held Net Marketable Borrowing Estimates, in $ billions

	Primary Dealer			OFP	OMB	CBO
	25th	Median	75th			
FY 2025 Deficit	1,820	1,900	2,000		1,878	1,865
FY 2026 Deficit	1,900	2,000	2,112		1,601	1,713
FY 2027 Deficit	1,943	2,060	2,139		1,535	1,687
FY 2025 Change in Cash Balance	-286	-186	-36	-36	0	0
FY 2026 Change in Cash Balance	0	0	147		0	0
FY 2027 Change in Cash Balance	100	0	0		0	0
FY 2025 Total Net Marketable Borrowing					1,901	1,904
FY 2026 Total Net Marketable Borrowing					1,695	1,780
FY 2027 Total Net Marketable Borrowing					1,648	1,717
FY 2025 SOMA Redemption	180	180	180	180		
FY 2026 SOMA Redemption	0	15	15			
FY 2027 SOMA Redemption	0	0	0			
FY 2025 Privately-Held Net Marketable Borrowing*	2,050	2,150	2,210	2,057	2,081	2,048
FY 2026 Privately-Held Net Marketable Borrowing*	1,900	2,100	2,216		1,710	1,759
FY 2027 Privately-Held Net Marketable Borrowing*	1,935	2,130	2,250		1,648	1,717
Estimates as of:		Apr-25		Apr-25	Jul-24	Jan-25

* All privately-held net marketable borrowing estimates are "normalized" using:
- 1) the median Primary Dealer's estimates for SOMA redemptions, and
- 2) assumed fiscal year 2025 cash balance of $850 billion, held constant in out years.

- OMB projections are using estimates are from Table S-3 of "Mid-Session Review Budget of The U.S. Government, Fiscal Year 2025," July 2024.
- CBO projections are using estimates are from "The Budget and Economic Outlook: 2025 to 2035," January 2025.

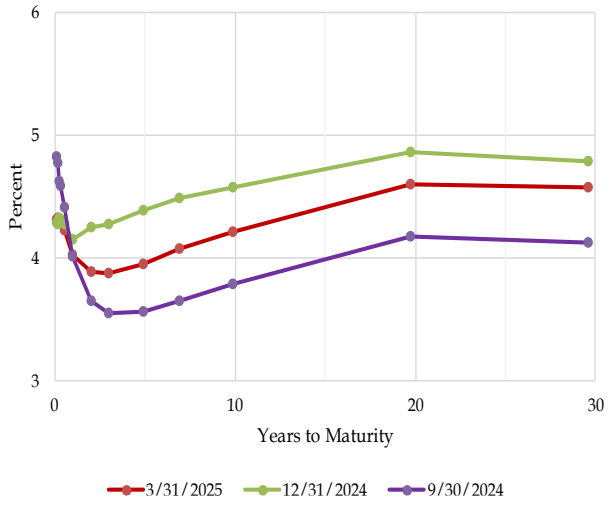


Source: https://fiscaldata.treasury.gov/datasets

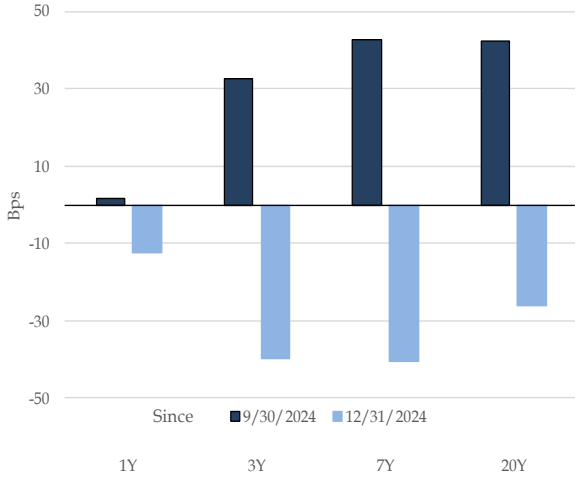
The average interest rates for total marketable debt do not include the Treasury Inflation-Indexed Securities and the Treasury Floating Rate Notes. However, they include securities from Federal Financing Bank. The average interest rates in the chart are as of corresponding fiscal year-end-dates.

Various Historical Treasury Interest Rate Metrics

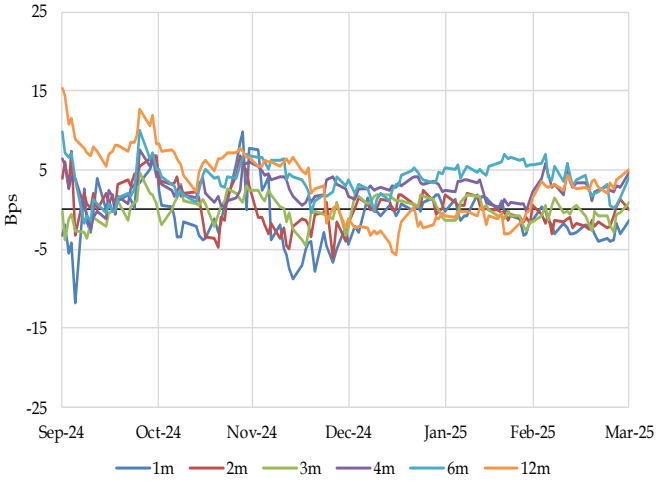
Treasury Nominal Yield Curve
as of specified dates



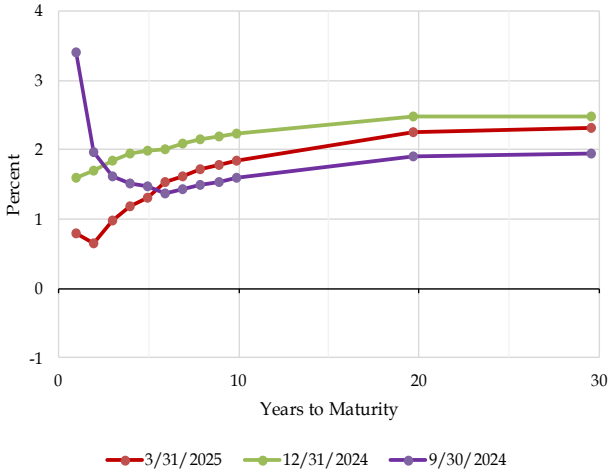
Nominal Yield Changes in Selected Tenors
Through the end of 03/31/25



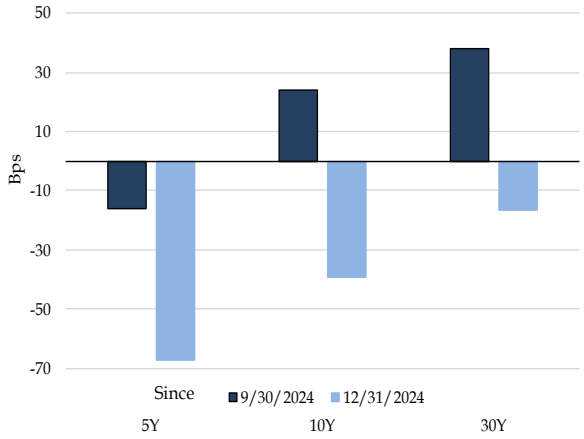
Bills-SOFR OIS spreads



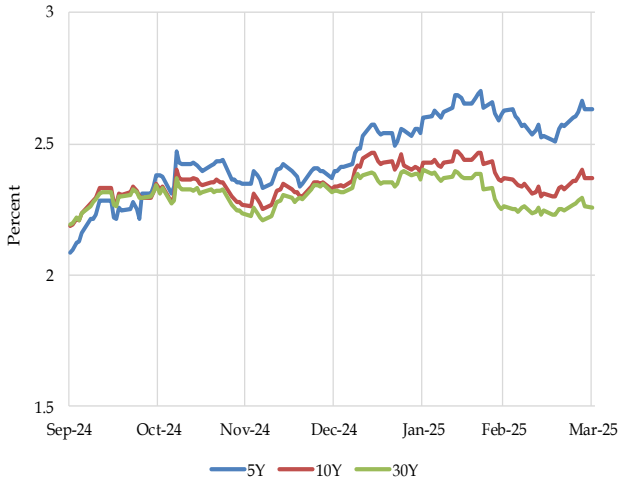
Treasury Real Yield Curve
as of specified dates



Real Yield Changes in Selected Tenors
Through the end of 03/31/25



Breakevens



Source: Bloomberg

Projected Privately-Held Net Marketable Borrowing
Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant as of 4/30/2025*

Fiscal Year	Bills	2/3/5	7/10/20/30	TIPS	FRN	Historical/Projected Net Borrowing Capacity
2020	2,652	538	724	46	55	4,015
2021	(1,315)	1,260	1,328	55	92	1,420
2022	(53)	744	1,027	61	42	1,821
2023	1,689	319	680	50	(38)	2,699
2024	789	737	902	87	52	2,567
2025	55	832	963	39	68	1,958
2026	0	492	967	59	10	1,528
2027	0	333	842	41	0	1,216
2028	0	296	520	20	0	837
2029	0	84	643	20	0	748
2030	0	70	701	27	0	798
2031	0	0	507	15	0	523
2032	0	0	508	(9)	0	499
2033	0	0	519	(2)	0	517
2034	0	0	438	(13)	0	425
2035	0	0	444	(24)	0	420

*Projections reflect only SOMA rollovers at auction of principal payments of Treasury securities. No adjustments are made for open-market outright purchases and subsequent rollovers.

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	1/7/2025	4.265	2.68	76.7	41.7	6.5	51.8	8.3	0.3	0.8
4-Week	1/14/2025	4.245	2.92	88.0	28.4	3.5	68.1	7.0	0.3	0.9
4-Week	1/21/2025	4.240	2.74	88.3	34.8	4.4	60.7	6.7	0.3	0.9
4-Week	1/28/2025	4.265	2.88	88.7	34.8	4.1	61.1	6.3	0.3	0.9
4-Week	2/4/2025	4.250	3.02	88.4	22.1	3.6	74.3	6.6	0.3	0.9
4-Week	2/11/2025	4.250	2.62	88.2	38.9	2.8	58.3	6.8	0.3	0.9
4-Week	2/18/2025	4.250	2.93	83.1	36.8	3.1	60.1	6.9	0.3	0.9
4-Week	2/25/2025	4.245	2.92	78.5	30.8	3.0	66.3	6.5	0.3	0.8
4-Week	3/4/2025	4.235	3.10	73.4	26.0	3.0	71.0	6.6	0.3	0.8
4-Week	3/11/2025	4.230	3.00	68.2	29.5	2.9	67.7	6.8	0.3	0.7
4-Week	3/18/2025	4.225	3.05	68.3	33.7	3.1	63.2	6.7	0.3	0.7
4-Week	3/25/2025	4.215	3.21	68.4	30.4	3.5	66.1	6.6	0.3	0.7
4-Week	4/1/2025	4.220	3.14	68.6	23.1	2.5	74.4	6.4	0.3	0.7
6-Week	2/20/2025	4.270	2.49	79.4	45.5	5.2	49.4	0.6	4.2	1.2
6-Week	2/27/2025	4.230	3.05	74.1	38.6	7.6	53.8	0.9	3.6	1.1
6-Week	3/6/2025	4.240	2.92	69.3	39.4	3.0	57.6	0.7	0.5	1.0
6-Week	3/13/2025	4.235	2.97	69.3	47.6	3.8	48.6	0.7	0.7	1.0
6-Week	3/20/2025	4.235	2.91	69.2	45.8	4.9	49.3	0.8	0.2	1.0
6-Week	3/27/2025	4.230	2.92	69.2	50.2	5.3	44.5	0.8	0.8	1.0
8-Week	1/7/2025	4.240	2.96	76.5	31.3	3.3	65.4	3.5	0.3	1.5
8-Week	1/14/2025	4.240	2.81	88.1	31.1	9.1	59.8	1.9	0.3	1.7
8-Week	1/21/2025	4.235	2.89	88.2	37.0	3.9	59.1	1.8	0.3	1.7
8-Week	1/28/2025	4.250	2.75	88.4	33.4	3.7	62.9	1.6	0.3	1.7
8-Week	2/4/2025	4.240	2.63	88.4	35.4	5.1	59.5	1.6	0.3	1.7
8-Week	2/11/2025	4.240	2.77	88.4	34.0	2.7	63.3	1.6	0.3	1.7
8-Week	2/18/2025	4.240	2.94	83.5	32.6	3.0	64.4	1.5	0.3	1.6
8-Week	2/25/2025	4.235	2.88	78.7	34.0	2.8	63.3	1.3	0.2	1.5
8-Week	3/4/2025	4.235	2.98	73.6	32.3	4.6	63.1	1.4	0.2	1.4
8-Week	3/11/2025	4.220	3.02	73.4	34.3	4.1	61.6	1.6	0.3	1.4
8-Week	3/18/2025	4.220	3.04	73.5	32.7	3.5	63.8	1.5	0.3	1.4
8-Week	3/25/2025	4.215	2.74	73.6	42.1	3.5	54.4	1.4	0.3	1.4
8-Week	4/1/2025	4.245	2.68	73.6	38.6	4.5	56.9	1.4	0.3	1.4

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

Bills (cont.)										
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	1/9/2025	4.205	3.01	81.6	40.4	5.5	54.1	2.4	4.5	2.7
13-Week	1/16/2025	4.225	3.09	81.5	33.9	8.2	57.9	2.5	4.8	2.7
13-Week	1/23/2025	4.215	2.80	81.6	37.9	6.9	55.2	2.4	4.6	2.7
13-Week	1/30/2025	4.195	3.18	81.7	28.0	5.5	66.4	2.3	8.3	2.8
13-Week	2/6/2025	4.220	2.65	81.8	46.4	5.6	48.0	2.2	6.5	2.8
13-Week	2/13/2025	4.225	3.01	81.7	35.4	5.3	59.2	2.3	7.4	2.8
13-Week	2/20/2025	4.225	2.81	77.9	38.2	8.0	53.8	2.1	4.2	2.6
13-Week	2/27/2025	4.195	2.90	74.0	30.6	4.8	64.6	2.0	3.6	2.4
13-Week	3/6/2025	4.210	2.77	74.0	38.8	8.8	52.4	2.0	0.6	2.4
13-Week	3/13/2025	4.200	2.82	73.9	38.5	5.7	55.8	2.1	0.8	2.4
13-Week	3/20/2025	4.205	2.89	73.8	36.8	7.0	56.2	2.2	0.2	2.4
13-Week	3/27/2025	4.190	2.96	73.7	29.1	8.2	62.6	2.3	0.9	2.4
13-Week	4/3/2025	4.205	2.74	74.0	38.4	5.7	55.9	2.0	4.8	2.5
17-Week	1/7/2025	4.195	3.04	63.3	38.2	3.8	58.0	0.7	0.2	2.6
17-Week	1/14/2025	4.190	3.24	63.4	35.3	5.6	59.1	0.6	0.2	2.6
17-Week	1/21/2025	4.210	3.19	63.4	41.1	4.2	54.7	0.6	0.2	2.6
17-Week	1/28/2025	4.205	3.28	63.4	35.3	4.2	60.5	0.6	0.2	2.6
17-Week	2/4/2025	4.190	3.10	63.4	33.5	7.4	59.2	0.6	0.2	2.6
17-Week	2/11/2025	4.205	2.99	63.4	35.9	3.0	61.1	0.6	0.2	2.6
17-Week	2/18/2025	4.230	3.38	61.4	38.5	2.9	58.6	0.6	0.2	2.5
17-Week	2/25/2025	4.215	3.33	59.5	29.8	11.9	58.3	0.5	0.2	2.4
17-Week	3/4/2025	4.200	2.78	59.4	49.0	5.1	45.9	0.6	0.2	2.4
17-Week	3/11/2025	4.180	3.42	59.5	26.0	2.8	71.1	0.5	0.2	2.4
17-Week	3/18/2025	4.175	3.29	59.5	27.5	3.3	69.2	0.5	0.2	2.4
17-Week	3/25/2025	4.195	2.99	59.5	37.8	2.9	59.4	0.5	0.2	2.4
17-Week	4/1/2025	4.200	2.78	59.5	36.6	3.1	60.3	0.5	0.2	2.4

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

Bills (cont.)										
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)*
26-Week	1/9/2025	4.110	3.20	70.0	21.6	8.0	70.5	2.0	3.9	4.7
26-Week	1/16/2025	4.180	2.81	70.1	31.5	11.7	56.8	1.9	4.2	4.7
26-Week	1/23/2025	4.165	3.04	69.8	25.0	12.8	62.2	2.2	3.9	4.7
26-Week	1/30/2025	4.140	2.92	70.0	31.3	8.1	60.6	2.0	7.1	4.9
26-Week	2/6/2025	4.155	3.04	69.9	24.9	7.2	67.9	2.1	5.5	4.8
26-Week	2/13/2025	4.185	2.86	70.2	33.8	10.0	56.2	1.8	6.4	4.8
26-Week	2/20/2025	4.220	2.63	67.9	36.6	11.7	51.7	2.1	3.7	4.5
26-Week	2/27/2025	4.180	3.05	65.8	23.3	14.1	62.6	2.2	3.3	4.4
26-Week	3/6/2025	4.135	3.27	65.9	23.5	7.7	68.8	2.1	0.5	4.2
26-Week	3/13/2025	4.075	3.03	66.2	25.3	8.0	66.6	1.8	0.7	4.2
26-Week	3/20/2025	4.100	3.01	66.2	26.3	7.0	66.7	1.8	0.2	4.2
26-Week	3/27/2025	4.085	3.27	66.2	20.7	5.6	73.7	1.8	0.8	4.3
26-Week	4/3/2025	4.070	2.99	66.4	23.2	4.7	72.1	1.6	4.3	4.5
52-Week	1/23/2025	4.025	3.14	46.5	29.5	1.8	68.7	1.5	2.6	6.2
52-Week	2/20/2025	4.050	3.03	46.7	31.8	1.7	66.6	1.3	2.5	6.2
52-Week	3/20/2025	3.945	3.13	46.8	40.0	2.0	58.0	1.2	0.1	5.9
6-Week CMB	1/9/2025	4.245	2.71	84.6	42.7	4.5	52.8	0.4	0.0	1.2
6-Week CMB	1/16/2025	4.240	2.92	84.6	35.6	4.4	60.0	0.4	0.0	1.2
6-Week CMB	1/23/2025	4.250	2.69	84.8	31.3	3.1	65.7	0.2	0.0	1.2
6-Week CMB	1/30/2025	4.260	2.71	84.7	34.5	4.5	61.1	0.3	0.0	1.2
6-Week CMB	2/6/2025	4.250	2.80	84.7	35.3	2.7	61.9	0.3	0.0	1.2
6-Week CMB	2/13/2025	4.260	2.91	84.7	38.7	3.1	58.2	0.3	0.0	1.2
CMB	1/23/2025	4.265	2.70	64.7	49.2	5.0	45.8	0.3	0.0	0.7
CMB	3/6/2025	4.260	3.84	39.9	49.3	4.8	45.9	0.1	0.0	0.2

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

Nominal Coupons & FRNs										
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	1/31/2025	4.211	2.66	68.1	13.7	21.3	65.0	0.9	3.8	17.5
2-Year	2/28/2025	4.169	2.56	68.4	6.9	7.6	85.5	0.6	7.0	18.2
2-Year	3/31/2025	3.984	2.66	68.5	10.6	13.6	75.8	0.5	2.0	17.1
3-Year	1/15/2025	4.332	2.62	57.7	19.4	19.7	61.0	0.3	12.7	24.9
3-Year	2/18/2025	4.300	2.79	57.5	10.2	15.8	74.0	0.5	15.9	26.1
3-Year	3/17/2025	3.908	2.70	57.8	11.5	26.0	62.5	0.2	1.0	20.8
5-Year	1/31/2025	4.330	2.40	69.6	11.1	26.1	62.8	0.4	3.9	41.6
5-Year	2/28/2025	4.123	2.42	69.8	10.6	14.5	74.9	0.2	7.1	43.5
5-Year	3/31/2025	4.100	2.33	69.8	13.2	11.0	75.8	0.2	2.1	41.0
7-Year	1/31/2025	4.457	2.64	43.8	9.9	23.1	67.1	0.2	2.4	35.1
7-Year	2/28/2025	4.194	2.64	43.9	8.8	25.2	66.1	0.1	4.4	36.7
7-Year	3/31/2025	4.233	2.53	43.9	12.7	26.1	61.2	0.1	1.3	34.6
10-Year	1/15/2025	4.680	2.53	38.9	15.6	23.0	61.4	0.1	8.6	47.5
10-Year	2/18/2025	4.632	2.48	41.8	14.8	13.6	71.5	0.2	11.5	54.0
10-Year	3/17/2025	4.310	2.59	38.9	13.1	19.5	67.4	0.1	0.7	39.6
20-Year	1/31/2025	4.900	2.75	12.9	10.4	20.1	69.5	0.1	0.7	21.9
20-Year	2/28/2025	4.830	2.43	15.9	17.5	19.5	63.0	0.1	1.6	28.4
20-Year	3/31/2025	4.632	2.78	12.9	8.8	22.4	68.8	0.1	0.4	21.5
30-Year	1/15/2025	4.913	2.52	22.0	12.7	20.7	66.6	0.0	4.8	53.5
30-Year	2/18/2025	4.748	2.33	25.0	16.3	18.6	65.1	0.0	6.9	64.2
30-Year	3/17/2025	4.623	2.37	22.0	16.9	22.7	60.5	0.0	0.4	45.2
2-Year FRN	1/31/2025	0.098	3.01	30.0	20.9	1.7	77.5	0.0	1.7	0.0
2-Year FRN	2/28/2025	0.090	2.72	28.0	32.1	1.8	66.1	0.0	2.8	0.0
2-Year FRN	3/28/2025	0.105	2.87	28.0	34.2	1.8	64.0	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)**
10-Year TIPS	1/31/2025	2.243	2.48	19.8	10.2	23.3	66.5	0.2	1.1	23.6
10-Year TIPS	3/31/2025	1.935	2.35	17.9	9.4	23.2	67.4	0.1	0.5	20.4
30-Year TIPS	2/28/2025	2.403	2.48	8.9	7.2	15.3	77.5	0.1	0.9	26.4

*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.

Treasury Borrowing Advisory Committee

April 30th, 2025

"Congress has acted to raise or suspend the statutory debt limit 78 times since 1960. Concerns about the debt limit (and the process involved in raising or suspending it) have increased Treasury's borrowing costs, disrupted financial markets, and resulted in downgrades to the US sovereign credit rating. In December 2024, GAO published a **report** *highlighting the severe consequences of a potential default and reiterating three options to improve the debt limit process: (1) Linking the debt limit to the budget process; (2) Providing the administration with the authority to increase the debt limit, subject to a congressional motion of disapproval; or (3) abolishing the debt limit and allowing Treasury to borrow amounts necessary for expenditures authorized by law. We would like the Committee to comment on the effect of the debt limit (and the process involved in raising or suspending it) on financial markets. Please also consider the options highlighted by GAO and their potential benefits and costs."*

Summary

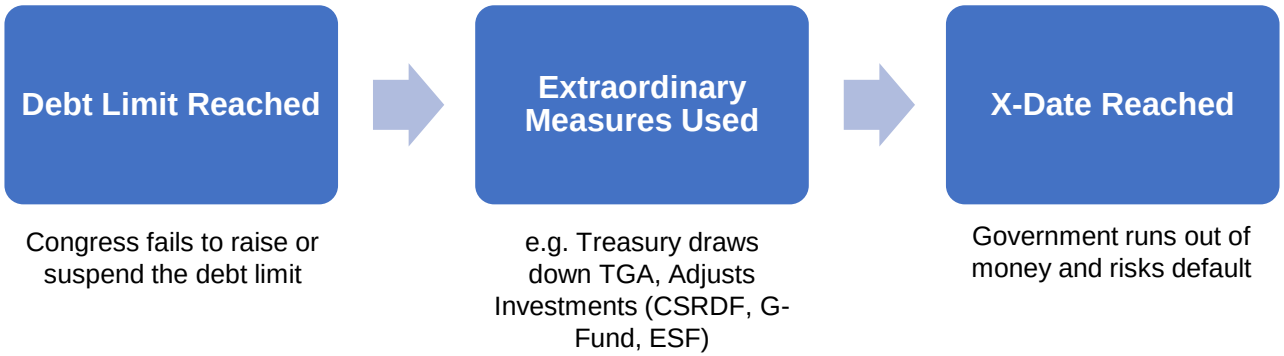
- The current approach to the debt limit has had a variety of negative impacts on the global financial system.
- The debt limit has not been an effective governor on national debt levels. In practice, recently it has been used to extract political negotiating leverage.
- Negative impacts on the financial system include higher debt servicing costs, ratings downgrades, increased risk of technical default, financial market disruption, and lost productivity.
- Some reform to the current approach is necessary and should be done alongside a commitment to a sustainable fiscal outlook and governance process.
- Markets would likely welcome reforms that reduce the risk of political brinksmanship while maintaining some oversight over national debt levels.

Review of Current Debt Limit Process and Market Impacts

Review of Current Debt Limit Process

- The debt limit is the total amount of money that the United States government is authorized to borrow to meet its existing legal obligations.[1]
  - The debt limit applies to total debt, as opposed to net debt owed to the public.[2]
  - As of March 2025, intragovernmental debt was approximately $7.2 tr (20% of total debt).[3]
- Congress sets the debt limit in a process that is *separate from (and does not regulate) spending decisions;* it simply limits Treasury's ability to borrow & act on those decisions.
- In theory, the debt limit should promote fiscal responsibility. In practice, more recently, it has been used as a negotiating tool, in part due to increased political polarization.
  - Likely at increased costs to the taxpayer.

What Happens When the Debt Limit is Reached?

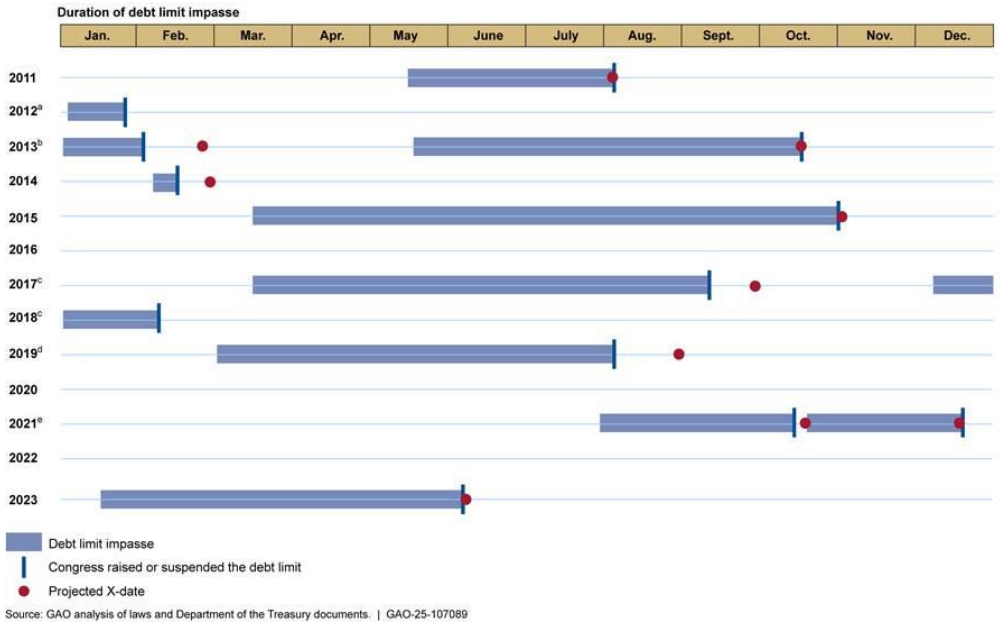


1. https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/debt-limit
2. *A small portion of total debt is excluded from the debt limit, for example, unamortized discounts on bills and zeros, old debt issued before 1917, old currency called United States Notes, and debt held by the Federal Financing Bank and Guaranteed Debt. Source: treasurydirect.gov*
3. https://fiscaldata.treasury.gov/datasets/monthly-statement-public-debt/summary-of-treasury-securities-outstanding

Review of Current Debt Limit Process

- While the debt limit has been used as a political tool on its own, at times it can be tied to the budget appropriations process as well, adding another layer of complexity and interaction with government shutdowns.
- Displayed below, in their report, the GAO reviewed recent debt limit impasses showing the duration and proximity to projected x-dates, many of which were very close.
  - Close calls with the x-date are bad for market functioning and likely increase costs for the taxpayer

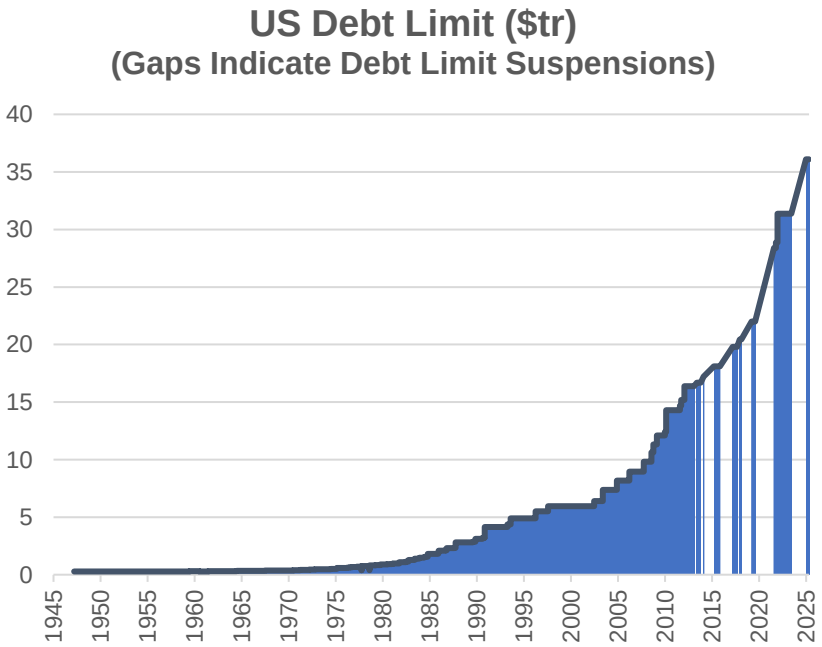
Recent Debt Limit Impasses[1]

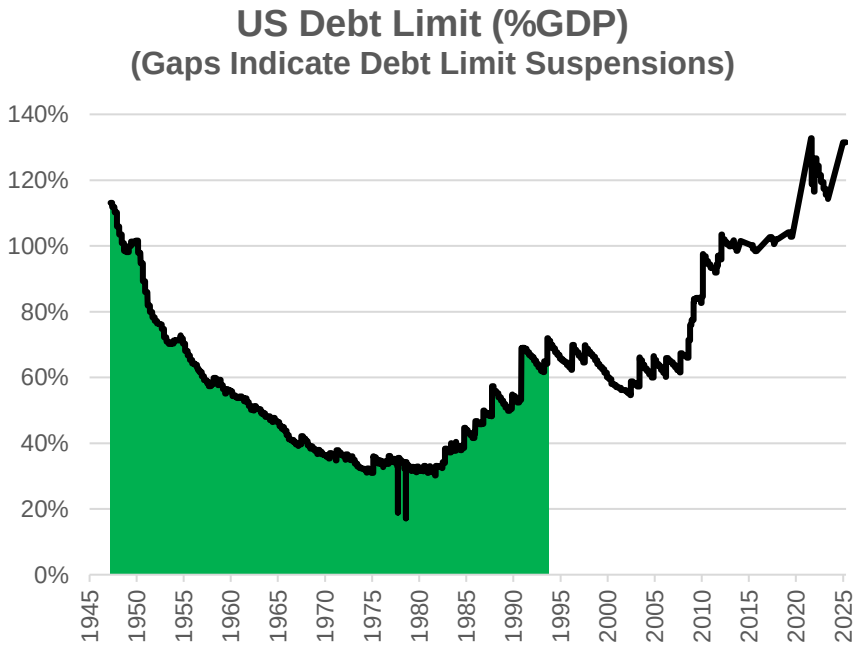


1. https://www.gao.gov/products/gao-25-107089

Review of Current Debt Limit Process

- Historically, the debt limit has always been raised or suspended temporarily
- As a percent of GDP, it reached a low of 30% in the 1980s and stands at 132% today.





1. Bloomberg, Presenter's Calculations

Current Debt Limit Process: Negative Impacts

- We see several negative impacts from the current debt limit approach:

1. **Increased Volatility in TGA Balance, Reserves, & Bill Issuance**
2. **Increased Debt Servicing Costs**
3. **Negative Impact on U.S. Credit Rating**
4. **Negative Impact on U.S. Reserve Status**
5. **Increased Risk of Technical Default**
6. **Waste of Resources in Public and Private Sector**

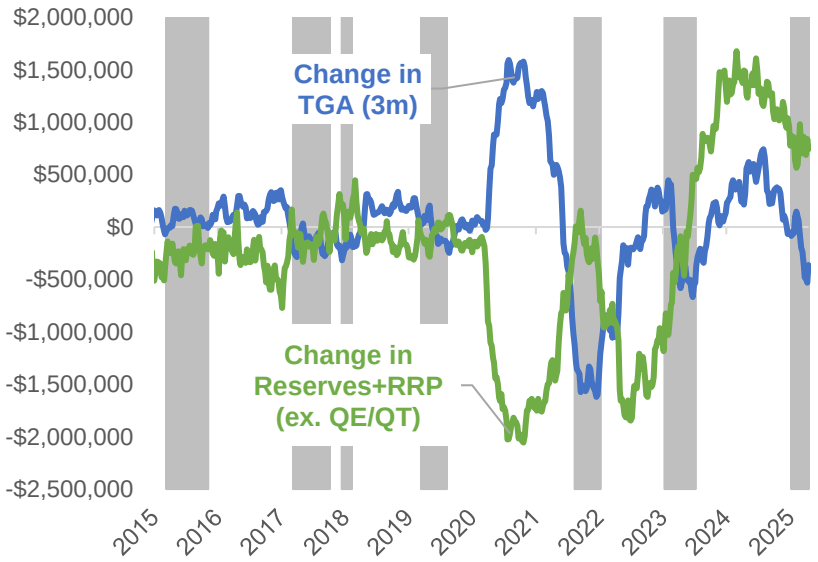
1. https://bipartisanpolicy.org/blog/debt-limit-2025-what-to-know/
2. https://www.federalreserve.gov/econres/feds/take-it-to-the-limit-the-debt-ceiling-and-treasury-yields.htm

Current Debt Limit Process: Impacts & Costs

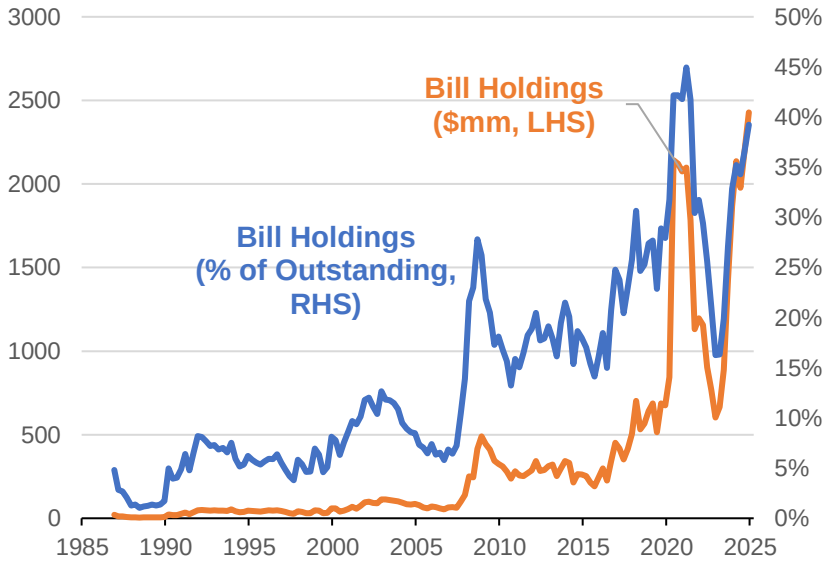
Impact #1: Increased Volatility in TGA Balance, Reserves, & Bill Issuance

- Large changes in the Treasury general account (TGA) can cause fluctuations in reserve balances, altering liquidity conditions in markets.
  - Concerns about the 2025 debt limit debate likely helped motivate the Fed to slow QT sooner than anticipated, to avoid potential funding market disruptions associated with rebuilding TGA.
- Volatility in Treasury bill issuance could create a more unpredictable supply/demand fluctuations for government money market funds, which hold 40% of bills. The overnight RRP is a helpful risk mitigation tool.

Changes in TGA and Reserves[1]
(Shaded Regions Indicate Debt Limit Impasses)



Money Market Funds Bill Holdings[1]

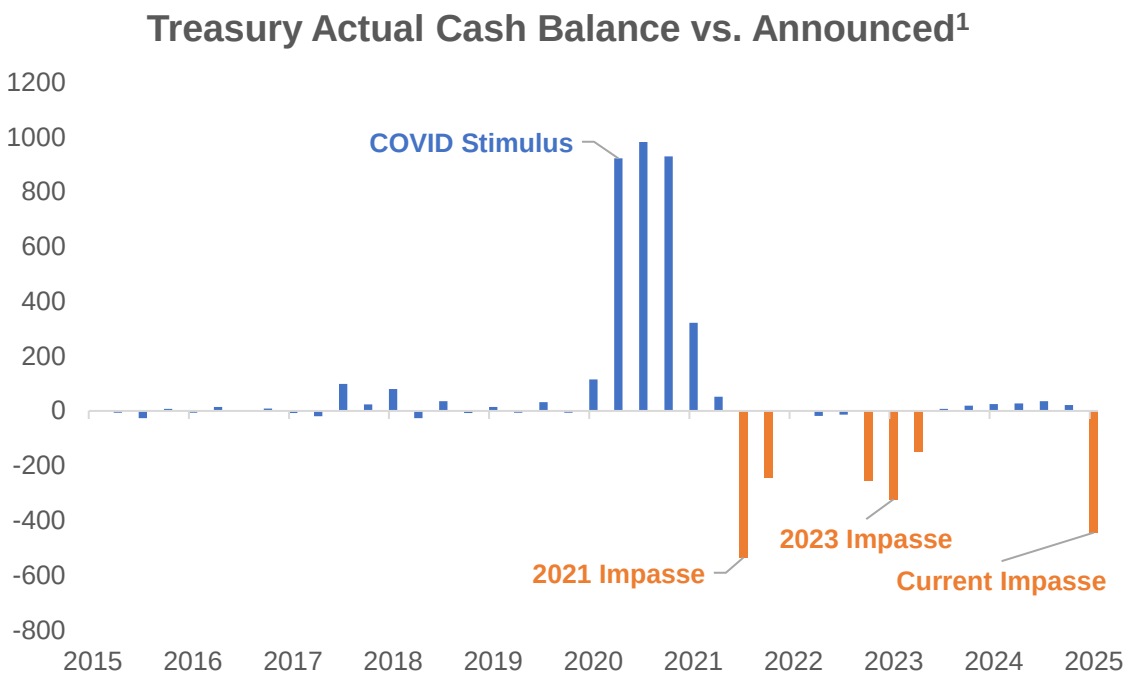


1. *Federal Reserve, Bloomberg*

Current Debt Limit Process: Impacts & Costs

<u>Impact #1</u>: Increased Volatility in TGA Balance, Reserves, & Bill Issuance

- A less predictable cash balance can increase Treasury's operational risk.
  - Recent debt limit impasses have reduced the TGA relative to policy established targets.
  - These reductions increase operational risk for Treasury if unexpected cash needs arise.
    - e.g. a natural disaster or a disruption to market access.



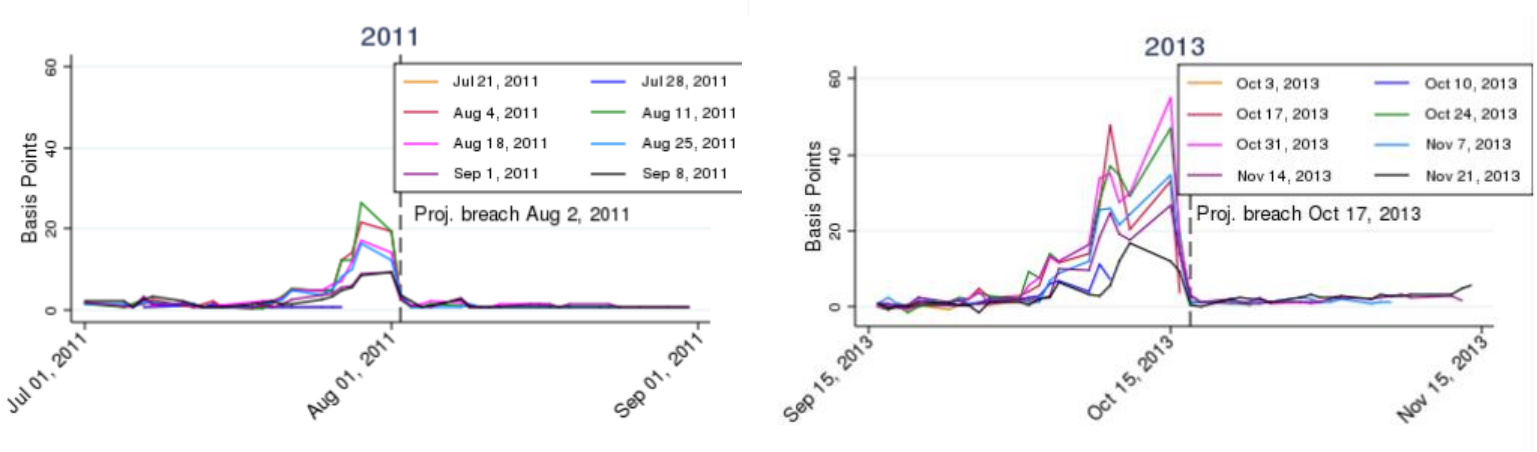
1. *US Treasury*

Current Debt Limit Process: Impacts & Costs

<u>Impact #2</u>: Increased debt servicing cost

- In a study released in 2017, the Federal Reserve examined the debt limit impasses in 2011 and 2013 and found that they may have increased borrowing costs by $500mm.[1]
  - Costs today are likely to be much larger, given debt outstanding has risen more than twofold ($16 tr).
- They observed large effects in Treasury bill yields, but also estimated impact to coupons.

Individual Treasury Bill Yields by Maturity Date[1]



1. https://www.federalreserve.gov/econres/feds/files/2017052pap.pdf

Current Debt Limit Process: Impacts & Costs

Impact #3: Negative impact on U.S. credit rating

- In 2011, S&P was the first of the credit ratings agencies to downgrade the U.S. government's credit rating, from AAA to AA+. Political brinksmanship played a role in the downgrade:
  - *"The **political brinkmanship** of recent months highlights what we see as America's governance and policymaking becoming less stable, less effective, and less predictable than what we previously believed. **The statutory debt ceiling and the threat of default have become political bargaining chips in the debate over fiscal policy.** Despite this year's wide-ranging debate, in our view, the differences between political parties have proven to be extraordinarily difficult to bridge, and, as we see it, the resulting agreement fell well short of the comprehensive fiscal consolidation program that some proponents had envisaged until quite recently. Republicans and Democrats have only been able to agree to relatively modest savings on discretionary spending while delegating to the Select Committee decisions on more comprehensive measures. It appears that for now, new revenues have dropped down on the menu of policy options. In addition, the plan envisions only minor policy changes on Medicare and little change in other entitlements, the containment of which we and most other independent observers regard as key to long-term fiscal sustainability."*

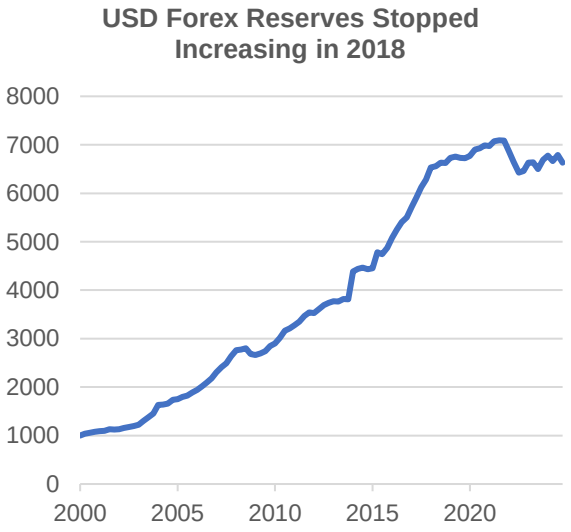
- Most recently, in August 2023, Fitch downgraded the U.S. government's credit rating to AA+ from AAA. One of the reasons cited in the report was the "erosion of governance."
  - ***"Erosion of Governance:** In Fitch's view, there has been a steady deterioration in standards of governance over the last 20 years, including on fiscal and debt matters, notwithstanding the June bipartisan agreement to suspend the debt limit until January 2025. **The repeated debt-limit political standoffs and last-minute resolutions have eroded confidence in fiscal management.** In addition, the government lacks a medium-term fiscal framework, unlike most peers, and has a complex budgeting process. These factors, along with several economic shocks as well as tax cuts and new spending initiatives, have contributed to successive debt increases over the last decade. Additionally, there has been only limited progress in tackling medium-term challenges related to rising social security and Medicare costs due to an aging population."*

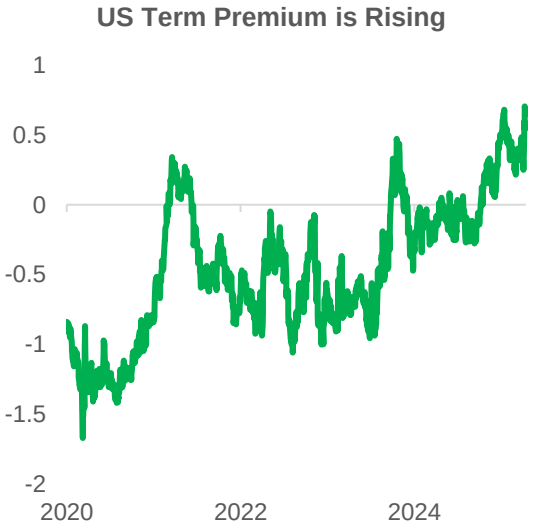
1. https://www.fitchratings.com/research/sovereigns/fitch-downgrades-united-states-long-term-ratings-to-aa-from-aaa-outlook-stable-01-08-2023
2. https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/6802837

Current Debt Limit Process: Impacts & Costs

<u>Impact #4</u>: Negative impact on US reserve status

- Further credit ratings downgrades, or nervousness about technical defaults, could negatively impact UST safe haven and reserve status, causing foreign buyers to step back from UST and pursue other reserve assets (gold, foreign government bonds).
- If market participants start to question foreign Treasury demand, and foreign buyers step back further, this would likely further increase term premium and debt service costs. We have seen a preview of this recently, as abrupt changes in trade policy have stoked demand concerns and contributed to increased volatility in long term Treasury yields.





1. *IMF, Bloomberg, Federal Reserve Bank of New York*

Current Debt Limit Process: Impacts & Costs

<u>Impact #5</u>: Increased risk of technical default

- Extensive work has been done thinking through risks of a technical default. The GAO report[1] went into some detail on this, citing numerous risks, including:

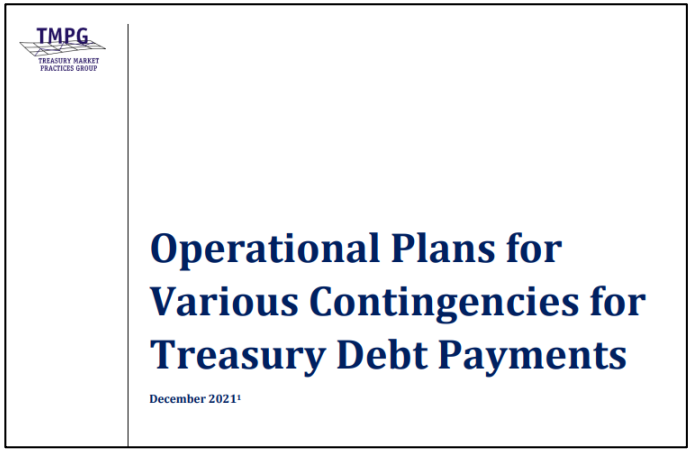
1. "Operational complexities may make default difficult to avoid."
   - Even in situations where the debt limit is raised last minute.
2. "Contingency plans to facilitate market functioning during a default are risky."
   - Discussed TMPG white paper.
   - Extending operational maturity dates.
   - Prioritizing principal and interest payments.
3. "Default could significantly harm financial markets and institutions."
   - Disruptions in short term funding markets.
   - Spread of financial distress to other markets.
   - Risks of runs on banks.
4. "Default could limit tools for protecting bank deposits and preventing runs."
5. "Default would likely reduce lending to households and businesses."
6. "Default could trigger a deep and long-lasting recession in the U.S…"

1. https://www.gao.gov/products/gao-20-561

Current Debt Limit Process: Impacts & Costs

Impact #6: Waste of resources in public and private sector

- A significant amount of time and energy has been put into analyzing each debt limit impasse. Much of this work could be avoided and redirected into more productive efforts.
  1. Major banks run various stress tests for debt limit impasses requiring significant time and effort.
     - Impact on liquidity metrics, margin posting, reviews of hundreds of individual credit support agreements.
     - Impact on margin posting at CCP's, discount window eligibility, standing repo facility.
  2. Bank portfolios and other investors sell securities that mature around x-dates and could be impacted by technical default.
     - Investing cash in other alternatives, like foreign government bonds.
     - Custom exclusions for impacted securities in margin posting agreements.
  3. Various research is done to estimate extraordinary measures and x-dates, as well as operational contingency plans.
     - 2021 TMPG white paper on contingency plans for Treasury debt payments.
     - Operational contingency plans are messy and complicated to deal with in payments systems and settlements.



1. *Bloomberg, Federal Reserve Bank of New York*

Analysis of the GAO's Alternative Debt Limit Approaches

GAO Alternative Debt Limit Approaches

- The GAO report[1] reiterated three alternative approaches to the debt limit (below).
- We note that the GAO also released another report in 2020 addressing *"Effective Use of Fiscal Rules and Targets"*[2]. They suggest integrating these rules into budget decisions as a more effective enforcement mechanism.
  - *"Congress should consider **establishing a long-term fiscal plan that includes fiscal rules and targets**, such as a debt-to-GDP target. In doing so, Congress should weigh the key considerations discussed in this report to help ensure proper design, implementation, and enforcement of those rules and targets."*

GAO Alternative Recommendations[1]

1. ***"Link action on the debt limit to the budget resolution."***

2. ***"Provide the administration with the authority to increase the debt limit, subject to a congressional motion of disapproval."***

3. ***"Delegate broad authority to the administration to borrow as necessary to finance laws enacted by Congress and the President."***

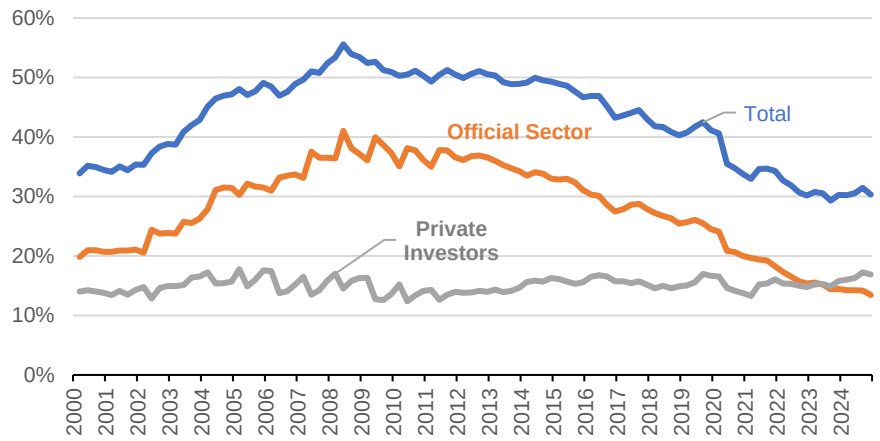
1. https://www.gao.gov/products/gao-25-107089
2. https://www.gao.gov/products/gao-20-561

Who Holds US Treasuries?

The marginal buyer of Treasuries has become more price sensitive. In assessing the impact of changes to the debt limit, its more important than ever to consider the Treasury investor base and potential reactions.

- Investors more exposed to risks of technical default would likely support changes to the debt limit approach.
  - Money market funds and banks in particular.
- All investors would likely welcome reduced risks of ratings downgrades and improved governance processes.
- Some investor classes, like foreign official holders and the US household, might have sensitivity to removing a perceived fiscal guardrail, which could impact term premium.

Foreign ownership of UST[1]



Treasury Holdings by Investor Type and Country[2]

	Amount ($)	% Share
Marketable Tsy outstanding	28.3 tn	
Domestic investors	**19.8 tn**	**70%**
Fed	4.3 tn	15%
Household	2.7 tn	9%
Mutual funds & ETFs	2.1 tn	8%
State & local govt	1.6 tn	6%
Banks	1.7 tn	6%
Money mkt funds	3.0 tn	11%
Pension (ex Fed retirement)	1.0 tn	3%
Insurance	0.6 tn	2%
Brokers & dealers	0.4 tn	1%
Other	2.3 tn	8%
Foreign investors	**8.5 tn**	**30%**
Japan	1.1 tn	4%
China mainland	0.8 tn	3%
UK	0.7 tn	3%
Luxembourg	0.4 tn	1%
Cayman	0.4 tn	1%
Ireland	0.3 tn	1%
Switzerland	0.3 tn	1%
Taiwan	0.3 tn	1%
Hong Kong	0.3 tn	1%
Singapore	0.2 tn	1%
Other	3.7 tn	13%
Appendix: China+HK+Lux+Belg	1.8 tn	6%

Foreign Treasury Holdings by Maturity[3]

	Foreign Holdings ($bn)	Total Outstanding ($bn)	Foreign % Ownership
US Treasuries	7,613	24,881	31%
Bill	974	4,467	22%
<1Y Coupon	864	2,998	29%
1-5Y Coupon	3,179	8,943	36%
5-10Y Coupon	1,681	4,169	40%
10-15Y Coupon	24	112	21%
15-20Y Coupon	369	1,689	22%
20-25Y Coupon	199	984	20%
25-30Y Coupon	323	1,519	21%

1. *Federal Reserve as of December 2024*
2. *Federal Reserve & Treasury as of December 2024*
3. *Federal Reserve as of June 2023*

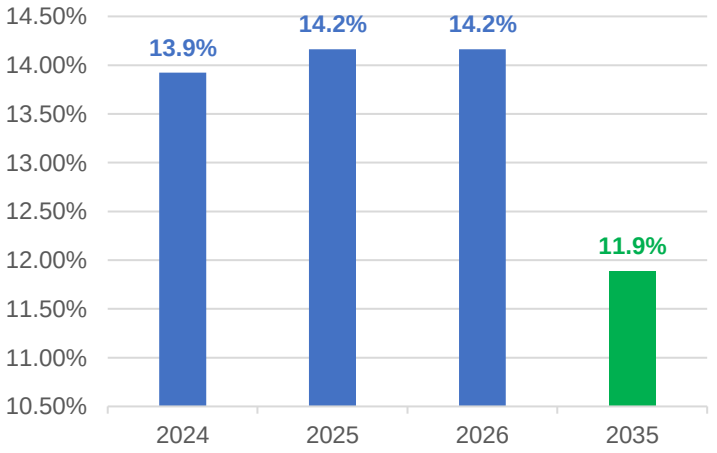
Perception Risk: Fiscal Responsibility

- **We also note that the timing of potential changes to the debt limit matters. In the current environment, markets are likely to be more sensitive to any perceived changes to fiscal responsibility.**
  - US publicly held debt/GDP ratio is around 100% and projected to increase to 119% in 2035.
  - In practice, the debt limit has not been an effective governor on US debt levels.
  - But to instill greater market confidence, it may make sense to attach changes to the debt limit process to a credible plan to get the deficit under control in the long term.
  - Non-defense discretionary spending is only 14% of revenue and projected to drop to 12% by 2035. Reductions in other categories of spending or tax changes may need to be considered.

Most Recent CBO Budget Forecasts[1]

		Percentage of GDP				Billions of dollars			
	Average, 1975–2024	Actual, 2024	2025	2026	2035	Actual, 2024	2025	2026	2035
Revenues	**17.3**	**17.1**	**17.1**	**17.8**	**18.3**	**4,918**	**5,163**	**5,580**	**8,031**
Individual income taxes	8.0	8.4	8.7	9.5	10.0	2,426	2,621	2,968	4,413
Payroll taxes	6.0	5.9	5.8	5.9	5.9	1,709	1,759	1,840	2,605
Corporate income taxes	1.8	1.8	1.7	1.6	1.2	530	524	495	517
Other	1.5	0.9	0.9	0.9	1.1	253	259	277	496
Outlays	**21.1**	**23.7**	**23.3**	**23.3**	**24.4**	**6,826**	**7,028**	**7,294**	**10,730**
Mandatory	11.1	14.3	14.0	14.0	15.1	4,130	4,228	4,386	6,626
Social Security	4.4	5.0	5.2	5.3	6.0	1,454	1,572	1,664	2,624
Major health care programs	3.5	5.8	5.8	5.8	6.7	1,669	1,754	1,832	2,949
Medicare	2.1	3.2	3.1	3.2	4.0	910	942	1,000	1,753
Medicaid, CHIP, and marketplace subsidies	1.3	2.6	2.7	2.7	2.7	759	812	831	1,196
Other mandatory	3.2	3.5	3.0	2.8	2.4	1,006	902	891	1,053
Discretionary	7.9	6.3	6.1	6.1	5.3	1,815	1,848	1,897	2,322
Defense	4.2	3.0	2.9	2.8	2.4	855	859	866	1,053
Nondefense	3.7	3.3	3.3	3.3	2.9	960	989	1,031	1,268
Net interest	2.1	3.1	3.2	3.2	4.1	881	952	1,010	1,783
Total deficit (-)	**-3.8**	**-6.6**	**-6.2**	**-5.5**	**-6.1**	**-1,907**	**-1,865**	**-1,713**	**-2,699**
Primary deficit (-)	-1.7	-3.6	-3.0	-2.2	-2.1	-1,026	-913	-703	-916
Debt held by the public at the end of each period	49.7	97.8	99.9	101.7	118.5	28,199	30,103	31,883	52,056

Non-Defense Discretionary Spending %Total Outlays[1]



1. *Congressional Budget Office*

Alternative 1: Link Action on the Debt Limit to the Budget Resolution

- **Impact on debt limit process:**
  - Modest improvement. A direct linkage to the budget process means that Treasury can borrow to meet the requirements of any spending legislation that is enacted. Reduces the ability for Congress to utilize the debt limit as leverage in budget negotiations.
  - Consideration would need to be given to how to handle spending needs that are not part of the annual appropriations process, such as interest on the debt, social security COLA adjustments.
    - Without such considerations, you could still have debt limit impasses
    - In the three years 2022, 2023, and 2024 quarterly borrowing exceeded Treasury's estimates by $74bn on average, with a standard deviation of about $160bn/quarter.[1]
    - Cumulatively over three years, borrowing exceeded preliminary estimates by roughly $1 trillion.

- **Impact on perceptions (fiscal responsibility):**
  - Minimal impact. The debt limit still exists, it's just attached to the legislative process on spending.
  - Congress maintains control over the debt limit.

- **Market & investor impact**
  - Would be a modest positive, likely to reduce the frequency of impasses.

1. *US Treasury Marketable Borrowing Estimates*

Alternative 2: Provide the Administration with the Authority to Increase Debt Limit, Subject to a Congressional Motion of Disapproval

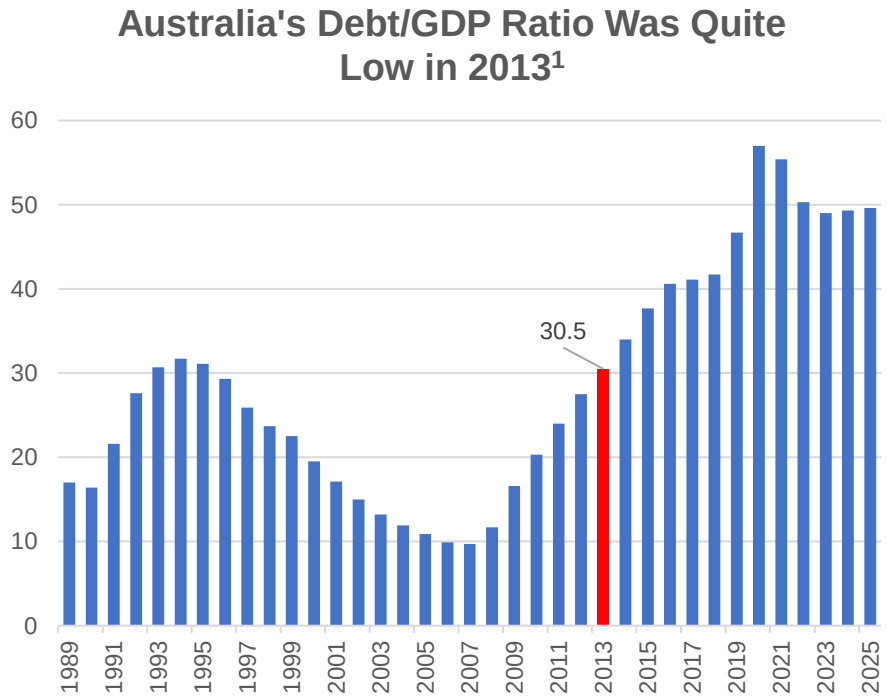
- **Impact on debt limit process:**
  - Improvement, would significantly reduce the ability of Congress to use the debt limit as leverage in budget negotiations.
  - A congressional motion of disapproval would require a majority in Senate and House, but could be vetoed.
  - Overriding a veto would be challenging (requires a two-thirds vote in Congress).
- **Impact on perceptions (fiscal responsibility):**
  - Would be perceived as weakening a fiscal guardrail, but motions of disapproval provide theoretical check & balance.
- **Market & investor impact**
  - Likely positive impact due to significantly reduced probability of impasses.
  - Modest negative impact from perceptions around fiscal responsibility.
  - Supportive of demand for Treasury Bills, front end securities, from MMFs and banks.

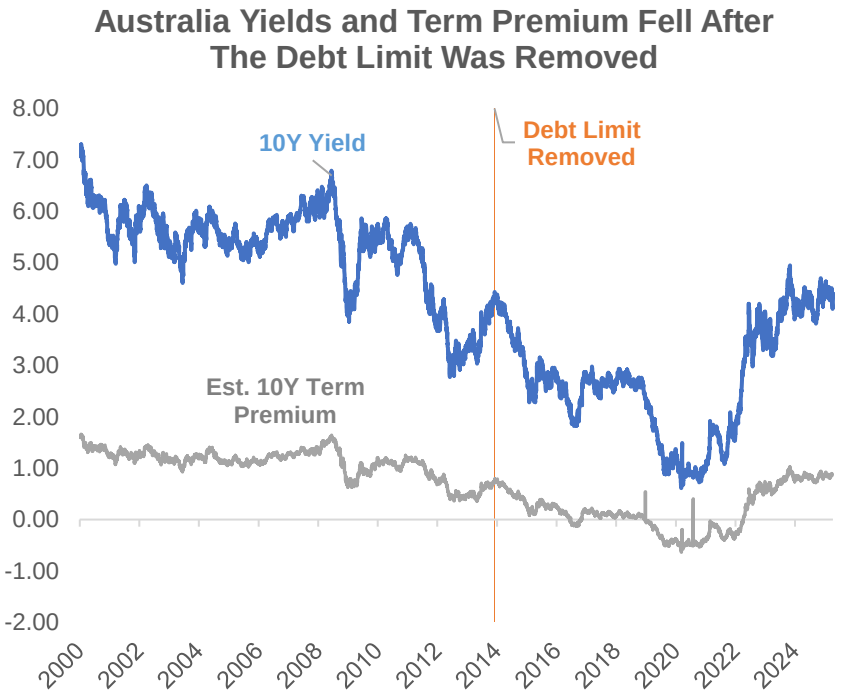
Alternative 3: Delegate Broad Authority to Administration to Borrow as Necessary to Finance Laws Enacted by Congress and President

- **Impact on debt limit process:**
  - Effectively eliminating the debt limit substantially removes risk of brinksmanship and impasses.
- **Impact on perceptions (fiscal responsibility):**
  - This is the riskiest of the three options from a perceptions standpoint.
- **Market & investor impact**
  - Likely positive impact since it fully eliminates impasses that could result in technical default.
  - Uncertain impact from perceptions around fiscal responsibility. Most likely it reduces a known risk around technical defaults and government disruption. But some investor types might fear unchecked fiscal spending. Could be more negative than usual given fiscal risks presented on slide 18.
  - Supportive of demand for Treasury Bills, front end securities, from MMFs and banks.

Case Study: Australia

- In 2013, Australia removed its debt limit in exchange for providing more fiscal transparency when debt increased by more than a specified amount ($50bn)
  - While we haven't done a controlled study, yields and term premium subsequently fell.
  - That said, we note three important differences to the US. (1) Australia debt/GDP ratio was 30% when the debt limit was removed, much lower than in US. (2) Australian government bonds are not a reserve asset (stakes lower). (3) The size of the Australian government bond market is small relative to US.





1. www.imf.org

Conclusions and Other Considerations

- The current approach to the debt limit has had a variety of negative impacts on the global financial system and has likely increased costs to the taxpayer.
- In practice, the debt limit hasn't restrained spending and eliminating it would reduce a variety of known negative impacts. But this comes with increased perceptions risk in the current economic environment.
- If Congress were to eliminate the debt limit, it would be beneficial to also introduce a process around fiscal rules and targets, as outlined in the 2020 GAO report.
- Other considerations for future analysis:
- Should the debt limit be quantified in %GDP terms?
  - As the economy grows, it stands to reason that the debt limit should grow as well.
  - While a change of this type wouldn't be a cure-all, it would contribute towards a smoother approach.
  - There would be some technical issues to resolve (including when GDP data is revised).
- Should the debt limit focus on debt held by the public?
  - US debt held by the government, for example debt that backs social security liabilities, could be excluded from the debt limit calculation.
  - When analyzing debt sustainability or the US fiscal situation, most analysts will focus on "debt held by the public" which excluded intragovernmental debt.
  - In practice this would also eliminate some extraordinary measures that involve temporary reductions of intragovernmental debt.

Digital Money

TBAC Presentation
April 30, 2025

Charge:
With the growth of the cryptocurrency and digital asset economy has come the expansion of the "stablecoin" market in the United States and abroad. As this asset class continues to grow, the distinctions between money funds and payment stablecoins has continued to converge. Some stablecoins are moving towards paying interest, money market funds are exploring tokenization, and Congress is considering explicitly defining what constitutes a collateralized dollar-backed payment stablecoin. Please articulate the terminal effects of interest-bearing stablecoins from a perspective of Treasury demand, USD hegemony, the expansion of dollar-backed payment stablecoins, and potential effects for insured depository institutions. Further, do tokenized money funds present a risk should they be allowed to compete with other payment or settlement instruments?

Executive Summary

1 Stablecoin Market Overview

- Stablecoins (market cap of ~$234bn[1]) are ubiquitously utilized as "cash on-chain," effectively serving as a new payment mechanism
- An emergence in tokenized MMFs has recently created an alternative option to stablecoins, primarily given their yield-bearing feature
- Evolving market dynamics has the potential to accelerate stablecoins' trajectory to reach ~$2tn in market cap by 2028[2]

2 US Regulatory & Dollar Dynamics

- USD-pegged stablecoins dominate the stablecoin market (>99% in market cap[1]), driving near-term focus on potential legislation
- **Within currently proposed legislation (the GENIUS Act)[4] there are several factors that are still being determined, which influences the pace at which demand may grow**

Therefore, stablecoins could catalyse structural changes across the following areas – the extent of which is likely contingent on the ultimate requirements of U.S. regulated stablecoins and the corresponding growth of the stablecoin market in response

3 What are the Potential Impacts on Bank Deposits?

- The potential impact on bank deposits **may depend on whether stablecoins are yield-bearing or if they offer other operational payment features relative to the yield and functionality offered by other products**
- In light of potentially exacerbated competition, **banks may be required to increase interest rates to maintain funding or find alternative funding sources (i.e., expand their wholesale funding activity)**

4 What are the Potential Consequences for the Treasury Market?

- Two main potential impacts of deposits moving to stablecoins:
  1. **An overall increase in the demand for Treasuries**
     - Reserve requirements outlined in proposed stablecoin legislation[3] **will provide an additional and growing source of demand for Treasuries**
  2. **An overall shift to the front-end of the curve**
     - Legislation would **require stablecoin issuers to hold <93d T-bills[3], driving a concentration of Treasury holdings to the front-end**

5 What are the Potential Implications on Monetary Supply?

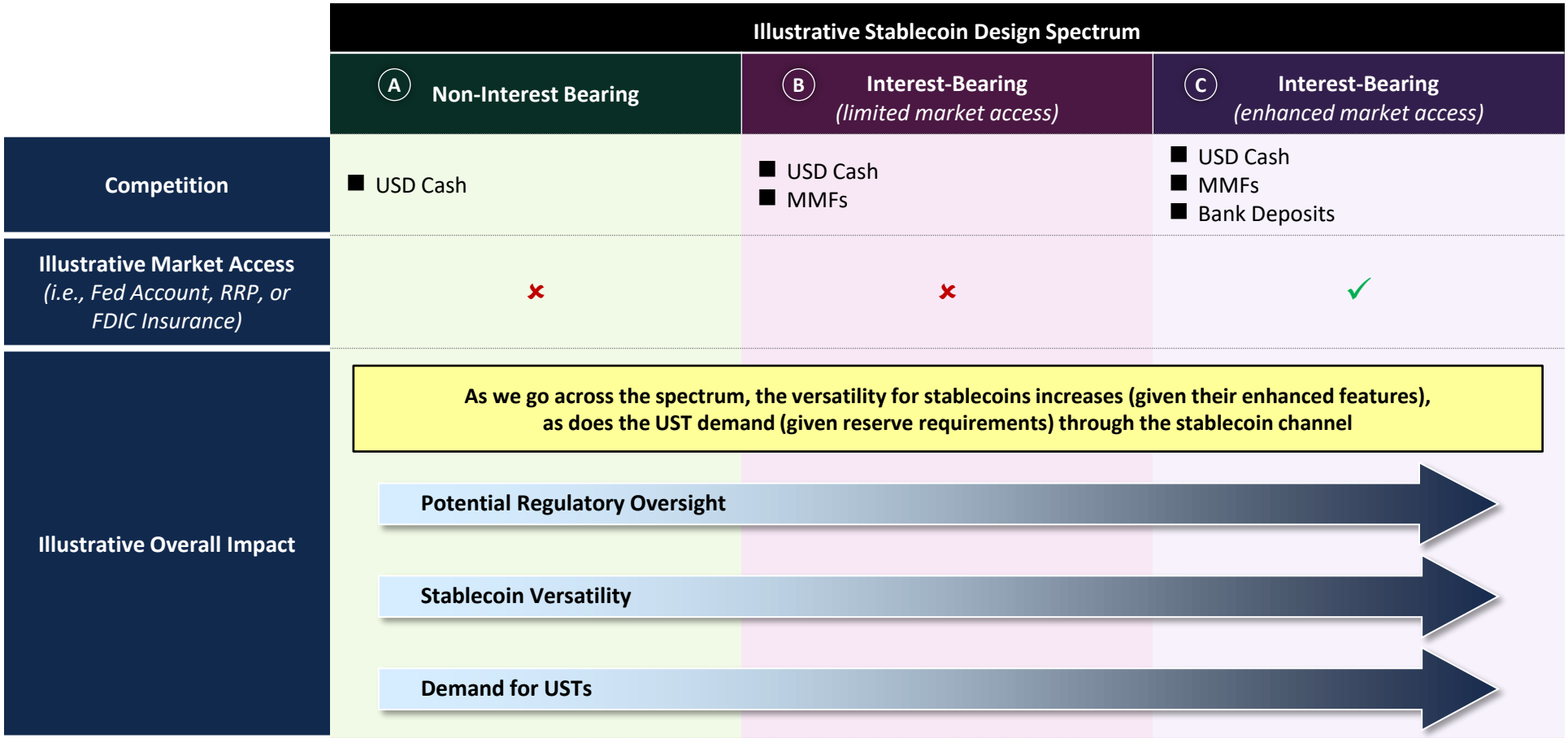
- Demand in stablecoins could have a net neutral impact on the U.S. money supply, however the attractiveness of USD-pegged stablecoins could drive currently non-USD liquidity holdings into USD

6 How Could this Potentially Affect Existing Market Structures?

- Currently proposed legislation doesn't provide a path to accessing a master account if the issuer doesn't already qualify
- **The inability for stablecoin issuers to access the FED has the potential to exacerbate periods of stress / volatility** that stablecoins may experience
- However, the specific reserve requirements contemplated by current legislation could mitigate potential stablecoin de-pegs and the need for such forms of enhanced access

[1] DeFi Lama as of 14-Apr-2025. [2] Standard Chartered: "Stablecoins, USD Hegemony, and UST Bills" (15-Apr-25). [3] GENIUS Act.

Conceptual Spectrum of Stablecoins' Impact



There is a Wide Spectrum of Digital Money Implementations

Today's Focus

Digital money refers to any form of value that exists purely in digital form.
It is typically stored, exchanged and transacted electronically, taking shape in many forms.

Privately Sector Issued *(Commercial Bank B/S)*

Tokenised Deposits
Tokenised commercial bank money

- Representation of a deposit liability at a commercial bank on blockchain

Private Sector Issued *(Central Bank B/S)*

Tokenised Money Market Funds
MMFs as tokens on DLT

- Representation of a MMF as a token on blockchain

Stablecoins
Privately Issued Digital Money

- Representation of cash on blockchain with price stability achieved by 1:1 backing with reserve assets
- Can be interest or non-interest bearing

Private or Public Sector Issued

Cryptocurrencies

- Virtual currencies that operate on decentralized networks, based on blockchain technology

Central Bank Issued *(Central Bank B/S)*

Trigger Solutions
Connectivity into RTGS Systems

- Connectivity of blockchain directly into Central Bank RTGS systems

Central Bank Digital Currency (CBDC)

- Representation of cash on blockchain issued directly by a Central Bank and regulated by their monetary authority

Snapshot of Current Initiatives & Trends

Tokenised Deposits

J.P.Morgan
Already live with own blockchain-based deposit solution for payments and repo activity[1]

citi
Already live with own blockchain-based deposit solution for payments activity[2]

Tokenised Money Market Funds

BlackRock
BUIDL, tokenized MMF, attracted over $240mm in investments within first week[3]

FRANKLIN TEMPLETON
BENJI tokens, which represent 1 share of the FOBXX MMF, issued on blockchains like Stellar, Polygon and Ethereum[4]

Stablecoins

Major Issuers

Dominated by major cap issuers like Tether and Circle. Total stablecoin market capitalization currently sits at ~$234bn[5]

Major banks and FinTechs like Standard Chartered, PayPal and Stripe have entered the market

Cryptocurrencies

Top Cryptocurrencies by Market Cap:[6]

Bitcoin = $1.7tn
Ethereum = $191bn
XRP = $123bn
USDT = $145bn
Binance = $82bn

Total Market Cap is near $3tn

Trigger Solutions

DEUTSCHE BUNDESBANK EUROSYSTEM

The Bundesbank Trigger Solution[7] is a mechanism designed to facilitate the settlement of tokenized assets in central bank money. It acts as a bridge between blockchain platforms and traditional payment systems, ensuring secure and efficient transaction settlement without CBDCs

CBDC

Of 134 Countries and Currency Unions tracked for CBDC development…[8]

2% of Central Banks have launched a CBDC

33% are in Pilot phase

14% are in Development

[1] JP Morgan. [2] Citi. [3] BUIDL. [4] FOBXX. [5] DeFi Lama. [6] CoinMarketCap. [7] Bundesbank. [8] The Atlantic Council.
Note: Market data as of 14-Apr-2025.

Current State of the Stablecoin Market

($ in billions)

The stablecoin market is rapidly evolving amid renewed institutional interest, the evolution of global regulatory frameworks, and the development of broader on-chain applications / use cases.

Historical Stablecoin Market Cap[1] – Last 4 Years

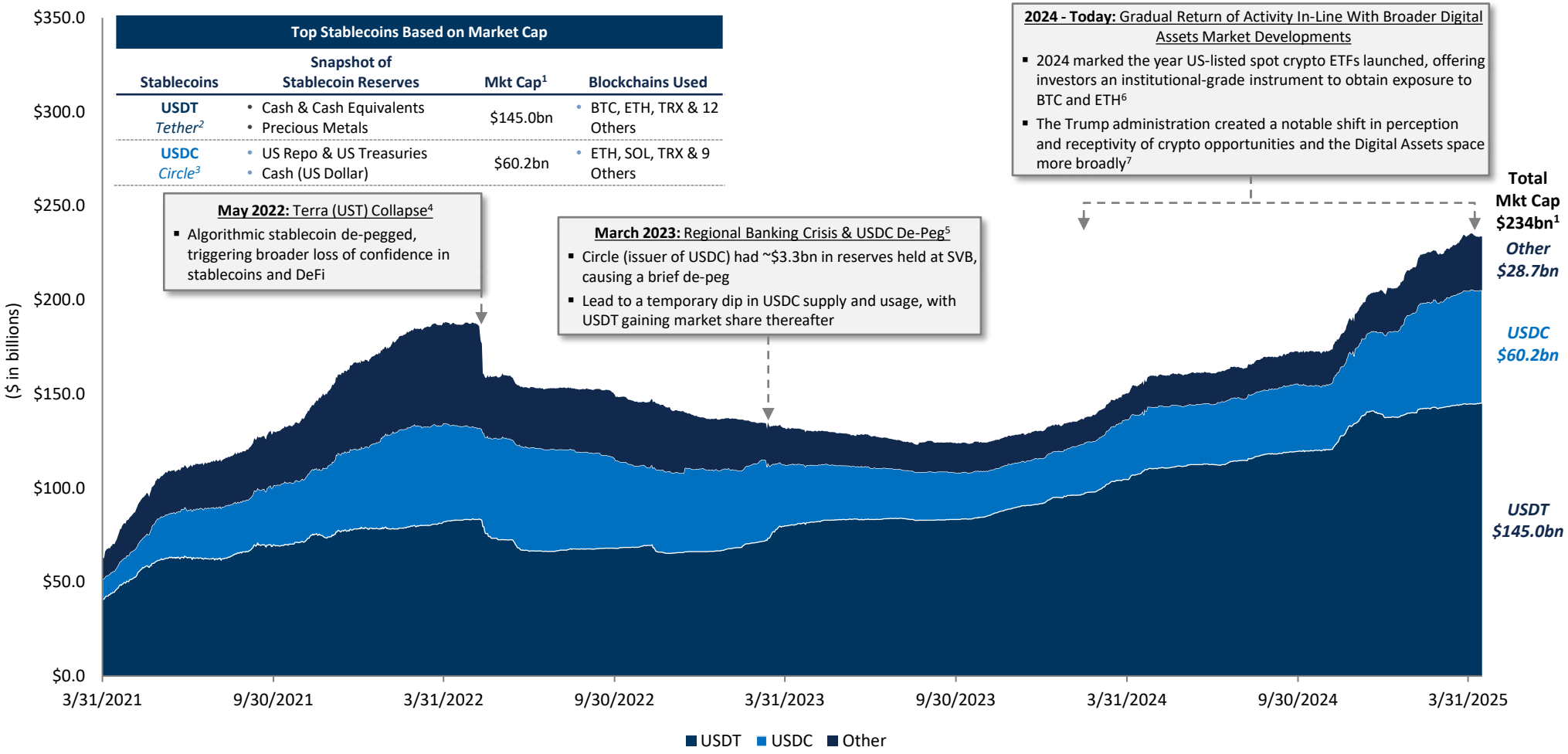
Top Stablecoins Based on Market Cap

Stablecoins	Snapshot of Stablecoin Reserves	Mkt Cap[1]	Blockchains Used
USDT *Tether*[2]	• Cash & Cash Equivalents • Precious Metals	$145.0bn	• BTC, ETH, TRX & 12 Others
USDC *Circle*[3]	• US Repo & US Treasuries • Cash (US Dollar)	$60.2bn	• ETH, SOL, TRX & 9 Others

May 2022: Terra (UST) Collapse[4]
- Algorithmic stablecoin de-pegged, triggering broader loss of confidence in stablecoins and DeFi

March 2023: Regional Banking Crisis & USDC De-Peg[5]
- Circle (issuer of USDC) had ~$3.3bn in reserves held at SVB, causing a brief de-peg
- Lead to a temporary dip in USDC supply and usage, with USDT gaining market share thereafter

2024 - Today: Gradual Return of Activity In-Line With Broader Digital Assets Market Developments
- 2024 marked the year US-listed spot crypto ETFs launched, offering investors an institutional-grade instrument to obtain exposure to BTC and ETH[6]
- The Trump administration created a notable shift in perception and receptivity of crypto opportunities and the Digital Assets space more broadly[7]



[1] DeFi Lama. [2] Tether. [3] Circle. [4] Harvard Law School. [5] CNBC. [6] Reuters. [7] Coinbase.

Note: Market data as of 14-Apr-2025.

Rapid Growth in Digital MMFs Has Catalyzed an Alternative Stablecoin Narrative, Despite Obvious Differences

Similarities can be drawn between the use cases of Tokenized Money Market Funds (MMFs) and stablecoins, however a key differentiator between them is that stablecoins cannot be yield-bearing under the current proposed GENIUS Act.

	Tokenized Money Market Funds	Stablecoins
Target Users / Holders	■ On-chain investors, including retail / accredited / qualified investors, institutions, and corporates	■ On-chain investors, including retail, institutions, and corporates ■ Limited use from BHC's / financial institutions due to lack of regulatory clarity
Select Use Cases	■ A way for on-chain investors to access a yield-generating product with low-risk government assets and repo collateral ■ Enables efficient management of short-term liquidity and instant collateral transfers. In turn, provides a way to seamlessly free tied-up capital during clearing and to reduce intra-day exposure banking fees	■ Primarily utilized as a form of cash across on-chain applications
Payment Tool	■ Technically feasible to transfer immediately ■ Most near-term use cases focus on use of tokenized MMFs as collateral	■ Intentionally designed to provide an on-chain version of cash, enabling instant payments on blockchain rails
Underlying Assets	■ Consistent with traditional MMFs, are either registered '40 Government MMFs or funds investing in USTs, repos, other short-term debt instruments, or cash or cash equivalents	■ Stablecoins can be backed by a variety of assets (as noted on page 4), but are commonly backed by assets that maintain a stable reference to a fiat currency or a commodity
Redemption Model	■ Depends on the fund prospectus and protocol utilized, although holders can typically redeem at a rate of 1:1 to the USD against the protocol / distributor ■ Distributors of tokenized MMFs can redeem tokens through authorized broker-dealers or the asset manager (typically at NAV) during a fixed time-frame outlined in the prospectus	■ Holders of stablecoins currently have two options to redeem stablecoins: — Redeem against the issuer directly at a fixed price of $1 — Sell the stablecoin on exchange in the secondary market ■ Users often split into two categories, some having access to redeem against the issuer and sell on the exchange, some can only sell on exchange
Issuers	■ Regulated asset managers, such as Franklin Templeton (BENJI) and Blackrock (BUIDL), have partnered with tokenization platforms / protocols to implement the tokenization process	■ Private companies, such as Tether (USDT) and Circle (USDC)
Transferability	■ Transfer can occur instantaneously on blockchains (most tokenized MMFs have been issued on public blockchains) and are typically mediated by smart contract rules	■ Stablecoins *can* be transferred peer-to-peer
Yield Bearing	■ Tokenized MMFs earn returns based on the underlying assets and are yield-bearing instruments for end-investors	■ Under the proposed GENIUS Act stablecoins cannot be yield-bearing instruments

What the "Art of the Possible" of Stablecoin Use Cases Could Look Like for Financial Institutions

There are several hypothetical angles to how a financial institution could participate in the stablecoin market. These are highly illustrative and would be subject to the respective institutions' internal approvals as well as applicable legal and regulatory frameworks.

Functionality Enabled by Blockchain Rails and Stablecoins…

- Instantaneous settlement with precision to the nearest minute
- Single set of rails for multiple currencies or the same rails securities are issued on
- Programmable payments
- Extended cut-off times

…Has the Potential to Unlock New Ways of Conducting Business…

- ✓ Simultaneous exchange of cash and collateral
- ✓ 24/7, cross-border, cross-currency payments
- ✓ Instantaneous settlement of digital securities
- ✓ Intraday interest on deposits and charging on overdrafts

…Leading to a Wide Cross-Section of Commercial and Internal Optimization Use Cases

1. Issuing a Stablecoin
2. Settle On-Chain Digital Securities Transactions
3. Managing Stablecoin Reserves
4. Enhanced Treasury and Collateral Management
5. Cross-Border Payments & Cross Currency Swaps
6. Trading vs. Stablecoin Reserves
7. Serve as a Banking Partner for Stablecoin Providers and Managing Reserves

Stablecoins Could Witness Exponential Growth in Response to Market and Regulatory Breakthroughs

Evolving market dynamics, structures, and incentives have the potential to accelerate stablecoins' trajectory to reach ~$2tn in market cap by 2028[1].

Potential Growth Enablers That Could Prompt Rapid Stablecoin Adoption

Adoption Enablers

Financial Market Service Providers and Institutions
(Recent all-time highs of activity and open interest in crypto products on the CME[2], launch of spot BTC, ETH ETFs[3] and options[4])

Migration of Wholesale Market Transactional Activities On-Chain
(Strong business fundamentals and structural changes suggest a clear path for tokenization with the tokenization market (excluding stablecoins and tokenized deposits) forecasted to reach $6.4tn by 2033[5])

Merchant Integrations
(Stablecoins continue to grow as a mechanism for payment, with some merchants and platforms (e.g., PayPal) offering stablecoins as an option[6])

Economic Enabler

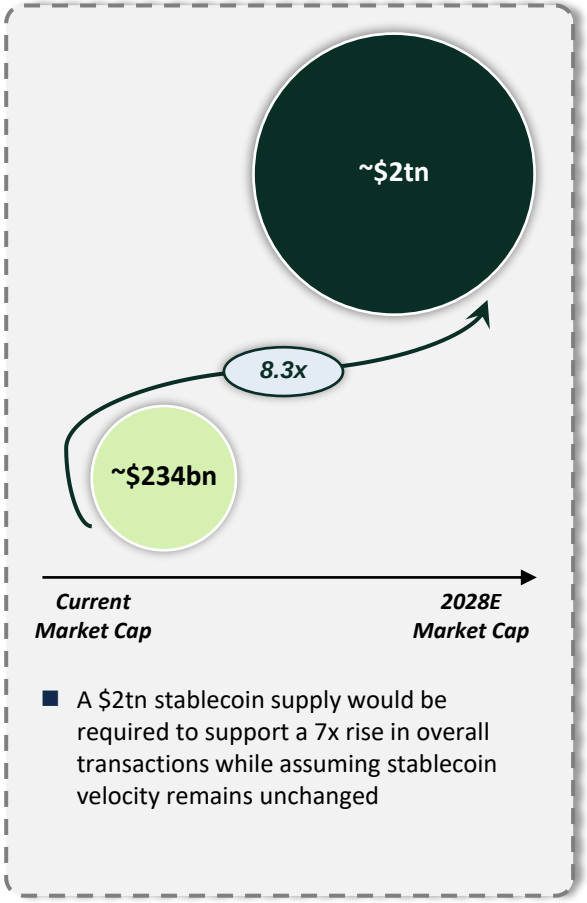
Interest-Bearing Stablecoins[7]
(Expectation that the store of value narrative of stablecoins becomes more appealing and unlocks a yield generating opportunity for holders)

Regulatory Enablers

Designated Capital and Liquidity Treatment of Stablecoins
(Would establish potential inclusion of stablecoins in liquidity management strategies)

Bank Holding Company (BHC) Permissibility of Public Blockchains
(Would provide a clearer path for banks being able to access and services customers' activity on public blockchains, on which most stablecoin activity occurs)

Stablecoin Supply Projections[1]



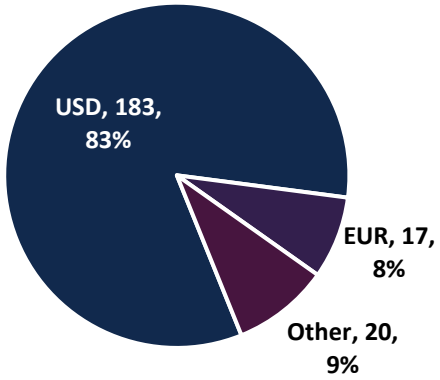
- A $2tn stablecoin supply would be required to support a 7x rise in overall transactions while assuming stablecoin velocity remains unchanged

[1] Standard Chartered: "Stablecoins, USD Hegemony, and UST Bills" (15-Apr-25). Assumes the passage of the GENIUS Act and thus a 7x total increase in stablecoin transactions from 700bn a month to ~USD 6tn by the end of 2028. This assumes a lift in stablecoin transactions to 10% of FX spot-market transactions, from around 1% at present. Assuming stablecoin velocity is unchanged, this would require the outstanding supply of stablecoins to ~$2tn by 2028E. [2] CME. [3] Reuters. [4] CoinDesk. [5] Ledger Insights, BCG / Ripple. [6] PayPal. [7] Not currently contemplated under the GENIUS Act.

USD Stablecoins Dominate the Market, Driving a Near-Term Focus on Potential Legislative Frameworks

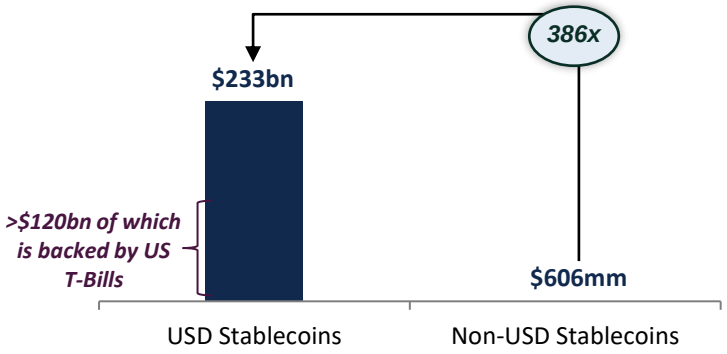
The currently proposed GENIUS Act (2025) is the latest of three former bills on US stablecoins (none have become law). Given the dominance of USD-pegged stablecoins in the market, the enactment of such a bill is likely to impact the USD stablecoin market's future direction of travel.

Quantity of Fiat-Pegged Stablecoins by Currency Type[1]



Current Market Cap of USD vs. Non-USD Stablecoins[1]

USD stablecoins have consistently represented **more than 99%** of the overall stablecoin market cap



Current US Legislative Stablecoin Framework Proposal[2]

On March 13, 2025, the US Senate Banking Committee voted in favor of the GENIUS Act. The bill, introduced by **Senator Bill Hagerty (R), establishes a regulatory framework for US issued stablecoins and creates a definition for the term "payment stablecoin"**

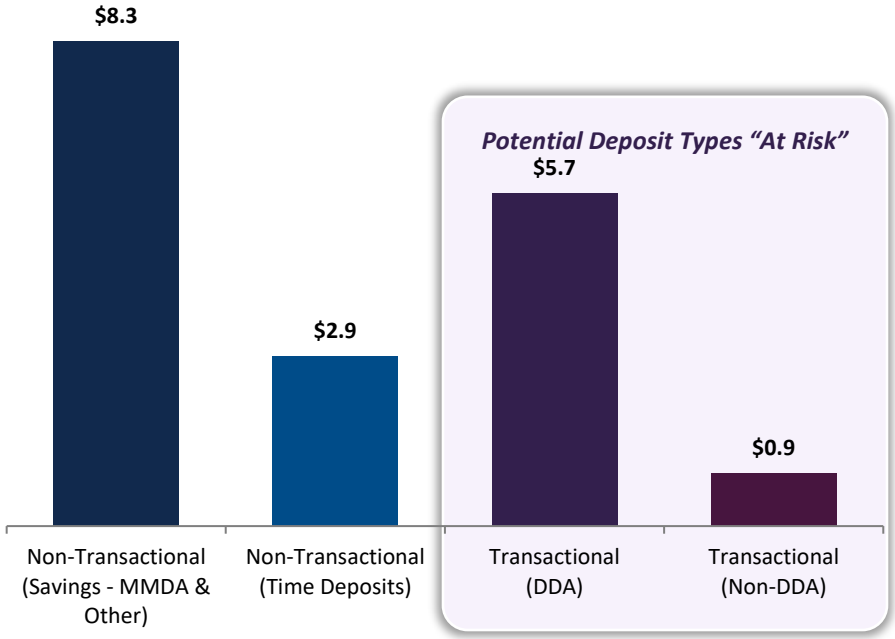
Definition	■ **Definition**: A digital asset designed to be used as a means of payment, which the issuer is obligated to redeem for fixed amount, and which represents (or creates reasonable expectation) that it will maintain a stable value relative to a fixed amount ■ **Exclusions**: cannot offer yield or interest, not a national currency, security, commodity, or a deposit (including a blockchain-based deposit)
Issuer	■ **Regulatory Authority**: **Federal or State** (but Federal regulators determine licensing process for all issuers). Can be approved as a: — **Subsidiary of a bank,** or — **Non-bank** issuer (Fed or State regulated if less than $10bn M/C)
Reserves	■ **1:1 backing**: USD coins and currency (including Federal reserve notes); funds held in demand deposits, treasury bills, notes or bonds with a remaining / issued with maturity of 93 days or less; repurchase agreements with maturity of 7 days or less backed by T-Bills with a maturity of 90 days or less; reverse repurchase agreements with maturity of 7 days or less collateralized by Treasury notes, bills or bonds; money market funds that invest in the aforementioned; or central bank reserve deposits ■ **Monthly disclosure requirements**
Blockchain	■ **Public blockchains** only
Other	■ **Legal control:** Issuers must be able to freeze, burn or prevent transfer of stablecoins if required by law ■ **All permitted issuers are subject to Fed laws applicable to financial intuitions for the purposes of Bank Secrecy Act** and are required to establish BSA/AML compliant programs
Implications for Compliant Stablecoins	■ The GENIUS Act would provide a clear framework for "payment stablecoins," eliminating ambiguity of applicable regulation

[1] DeFi Llama. *Includes fiat-backed stablecoins only.* [2] GENIUS Act.
Note: Market data as of 14-Apr-2025.

What are the Potential Impacts of Stablecoin Growth on Bank Deposits?

While current regulatory proposals do not consider stablecoins being interest-bearing, the ultimate design of stablecoins will likely dictate the potential magnitude of impact to bank deposit flows.

Total US Deposits as of 4Q'24[1] ($tn)



Characterizing "At-Risk" Deposit Types

- Current transactional deposit types are already non-interest bearing
- Unlike savings or time deposits, transactional deposits are primarily utilized for daily activities and can be easily transferred to other accounts
- More broadly uninsured deposits can leave holders to rationalize where to park deposits opportunistically or during periods of uncertainty (as evidenced in past migrations to MMFs during periods of stress)[2]

Hypothetical Design Components That Could Influence Market Behaviour

Potential Impact

1 Non-Interest Bearing Stablecoins

- Potential rotation from stablecoins into tokenized MMF overnight in order to capture yield
- As stablecoins are already non-interest bearing today, growth will likely be a continued function of payment utility and overall Digital Assets market activity

2 Interest Bearing Stablecoins[4]

- Potential rotation from traditional deposits into stablecoins, which may offer more usability or competitive rates[3]
- Reinforces global attractiveness of USD-pegged stablecoins, particularly for existing on-chain holders and for those utilizing USD-pegged stablecoins as a store of value

Lowest — **Potential Magnitude of Impact** — *Highest*

[1] Quarterly Reports of Condition and Income (call reports) filed with US Federal Deposit Insurance Corporation (FDIC) as of 4Q24. Data represents U.S. domestic deposits only and includes both external and affiliate deposits. [2] SEC – "Charting the Course: A Systematic Exploration of Influences Shaping Money Market Fund Growth". [3] Assuming limited movement in deposit rates. [4] This is a hypothetical design feature that is not currently contemplated by the GENIUS Act.

What are the Potential Consequences of Stablecoin Growth on the Treasury Market?

With an expectation that stablecoins will continue being backed by fiat assets and that tokenized MMFs will continuing serving as an attractive investment product for investors, the portion of USTs held by such issuers is likely to be correlated with overall instrument growth.

Key Takeaways

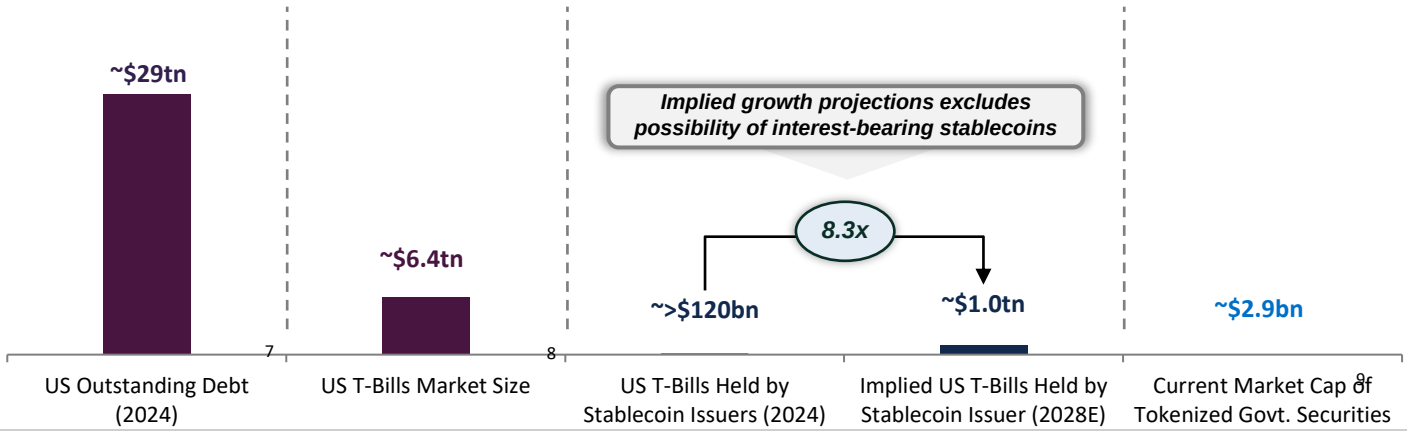
- Based on the publicly available reserve filings of the dominant stablecoins in the market, **stablecoin issuers are estimated to currently hold >$120bn in T-bills**
- Rapid growth in stablecoins, as well as market volatility, could lead to a materially heightened demand for or supply in USTs, with an implied incremental demand of ~$900bn for T-Bills
- If stablecoins experienced exponential growth, the demand for USTs should be correlated, likely at the expense of bank deposits
- These shifts in market dynamics could be potentially exacerbated in moments where there is a loss in confidence in stablecoins or if a stablecoin de-pegs

Comparison of Self-Reported Stablecoin Issuers' Reserves (As of Dec-2024)

	Tether[1]	*Circle*[2]	*Ripple*[3]	*PayPal*[4]
Stablecoin Issued	**USDT**	**USDC**	**RLUSD**	**PYUSD**
Reserve Composition:	*(as of Dec-2024)*	*(as of 17-Apr-2025)*	*(as of Dec-2024)*	*(as of Dec-2024)*
Reverse Repo	$17.2bn / (12.0%)	-	-	$488.0mm / (95.8%)
Money Market Funds	$6.5bn / (4.5%)	$53.3bn[5] / (88.8%)	$30.1mm / (36.3%)	-
Cash	$0.1bn / (0.1%)	$6.7bn / (11.2%)	$23.0mm / (27.5%)	$21.4mm / (4.2%)
US T-Bills	$94.5bn / (65.7%)	-	$30.1mm / (36.2%)	-
Other	$25.4bn / (17.7%)	-	-	-
Avg. T-Bill Residual Duration	Less than 90 days[6]	Less than 12 days[6]		

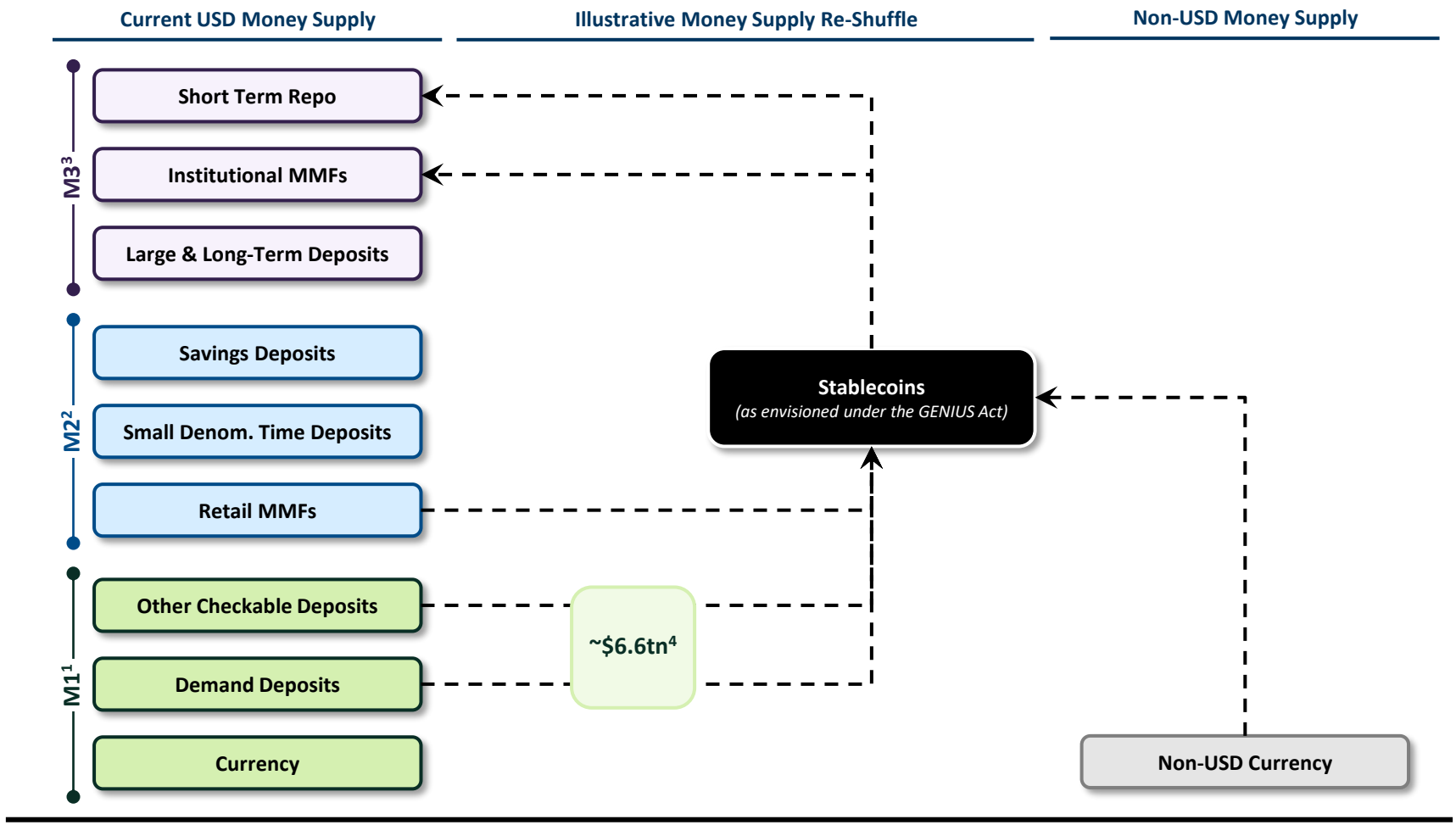
Market Sizing

Stablecoin issuers' demand for T-Bills is expected, to in some part, be impacted by the requirements of the GENIUS Act on treasuries with short-dated maturities.



[1] Tether. [2] Circle. [3] Ripple. [4] Paxos. *Note: These reserve compositions are self-reported and were not independently verified by TBAC or Treasury. Note: Overall WAM for reverse repo agreements and cash backing PYUSD is 2 days.* [5] *USDC Reserves are held in the USDC Reserve Fund which invests in T-Bills, Cash and Repo transactions.* [6] *Standard Chartered: "Stablecoins, USD Hegemony, and UST Bills" (15-Apr-25).* [7] Fiscal Data. *Reflects debt held by the public.* [8] OFR. [9] The Block.

What are the Implications of Stablecoin Growth on the Monetary Supply?



Potentially generates no net change to the US money supply, but a catalyzes a potential shift of funds away from M1 / M2.
Stablecoins may gain momentum as a store of value and way to access USD for non-USD holders – in turn, increasing inflows to the US money supply .

[1] FRB. [2] FRB. [3] FRB. [4] Reflects transactional deposits only. Quarterly Reports of Condition and Income (call reports) filed with US Federal Deposit Insurance Corporation (FDIC) as of 4Q24. Data represents U.S. domestic deposits only and includes both external and affiliate deposits.

How Could Stablecoin Growth Potentially Affect Existing Market Structures?

Historical stablecoin de-pegs have highlighted run-risk and the potential need for stablecoin issuers to have more access to markets (akin to banks). However, the narrow reserve requirements proposed by current legislation resembles MMF regulatory reforms aimed at mitigating "break-the-buck" scenarios.

Historical Stablecoin De-Pegs

- Moody's defines a de-peg as a stablecoin fluctuating by more than 3% in a day against their fiat currency peg. De-pegs can be driven by macro, coin-specific, or economic factors[1]
  - In 2022, there were **2,347 de-pegs** and **1,914 de-pegs up to Nov-2023**[1]
- These de-pegs demonstrate what a "run on the bank" could look like for stablecoins and the corresponding volatility stablecoin issuers need to navigate during periods of stress
  - One of the more notable de-pegs was USDC in Mar-2023[2], which highlighted the interconnectivity between the traditional banking and Digital Assets markets
- A major de-pegging event has the potential to create a loss of confidence and trigger withdrawals. In turn, this could lead to potentially dampening crypto market liquidity, triggering automated liquidations, impairing crypto trading platforms' ability to meet redemptions, and potentially having a broader contagion effect on the financial system[4]

Illustrative Remediation Solutions for Stablecoin Issuers in Periods of Stress

FED Access?	Deposit Insurance?	Access to 24/7 Repo Markets?

Could Stablecoin Regulation Draw Inspiration from MMF Reform to Mitigate Future De-Pegs?

- In 2010, reforms focused on the maturity limits, credit quality, and the liquidity of MMFs was implemented as a response to "break-the-buck" instances in 2008[5]
- A regulatory framework for stablecoins that already encapsulates the learnings from such a reform has the potential to mitigate stablecoin de-pegs and the potential need for stablecoin issuers to have enhanced access to the markets

Evolution MMF Regulation[6]

	Before 2010 Reforms	Post 2010 Reforms (Select New Requirements)
Liquidity Requirements	▪ No minimum liquidity mandates ▪ <10% of fund in illiquid assets	▪ > 10% of assets must be in cash, USTs, or securities that convert into cash within one day ▪ >30% of assets in cash, USTs, certain other government securities with remaining maturities of 60 days or less, or securities that convert into cash within one week ▪ <5% of fund in illiquid assets
Maturity Limits	▪ No Weighted Average Life maturity limit ▪ Weighted Average Maturity of 90 days	▪ Weighted Average Life < 120 days ▪ Weighted Average Maturity < 60 days
Stress-Testing	No stress test requirements	▪ Required periodic stress testing for redemption shocks, credit events, and rate movements
Reporting	"Shadow" NAV reported twice a year with a 60-day lag	▪ Monthly disclosure of portfolio holdings, including "shadow" NAV

Currently proposed US stablecoin regulatory frameworks take a reserve requirement approach that is more in-line with those imposed on MMFs post the 2010 reforms

[1] Moody's. [2] CNBC. [3] Citi. [4] Congress – Money Market Mutual Funds: A Financial Stability Case Study. [5] SEC and SEC.

Key Takeaways

1. **Stablecoins could grow to ~$2tn by 2030[1] in response to continued market and regulatory breakthroughs**

2. **The stablecoin market is primarily comprised of USD-pegged stablecoins, driving near-term focus on potential US regulatory frameworks and the accelerated impact legislation could have on stablecoin growth**

3. **Stablecoins could disrupt traditional banks by drawing away deposits. However, they also present chances for banks and financial institutions to create innovative services and to benefit from the use of blockchain technology.**

4. **The ultimate design and adoption of stablecoins will drive the magnitude of impact that stablecoins have to the traditional banking system, as well as the demand for US Treasuries**

[1] *Standard Chartered: "Stablecoins, USD Hegemony, and UST Bills" (15-Apr-25).*

Appendix

What are Stablecoins and How are They Used Today?

Stablecoins are digital assets designed to maintain a stable value by pegging their worth to a reserve asset, such as fiat currency (USD). The intended stability of stablecoins has made them a key enabler for payments and as a store of value in on-chain ecosystems.

Types of Stablecoins

Backed by Traditional Assets

1 Cash and US Treasury Backed Coins

- Reserves include USTs, UST Reverse Repo and MMFs

Select Examples Include: USDC, RLUSD, PYUSD

2 Diversified Asset Backed Coins

- Reserves primarily include a combination of deposits, USTs, private credit, gold and/or Bitcoin

Select Examples Include: USDT, XAUt, KAU

Backed by Crypto

3 Crypto Collateralized Stablecoins

- Reserves involve other cryptocurrencies that are deposited by stablecoin users to collateralize the stablecoin. Reliant on smart contracts for value stabilization

Select Examples Include: DAI, sUSD, LUSD

4 Algorithmic Stablecoins

- Reserves usually do not exist as stablecoins are not collateralized. Reliant on smart contracts for value stabilization

Select Examples Include: USDD, AMPL, CUSD

Stablecoin Use Cases

1 Payment Tool

Used for payments as a medium of exchange, disintermediating the need for traditional payment processors

2 Store of Value

Used for value purposes, given a peg to the value of an asset ensures price stability (as many stablecoins are backed *fully* by HQLAs)

Illustrative Real-World Applications

Cross-Border Transfers
Serves as a more cost effective and accessible alternative to traditional remittance processes

On-Chain Settlement
Facilitates trading, lending, and other settlement-based activities across CeFi and DeFi

Merchant Payments
Allows businesses to transact directly with consumers, bypassing traditional payment networks

Collateral
Given the intended price and/or underlying reserve stability, stablecoins can be posted as collateral and utilized for on-chain borrowing

Dollar Access
Stablecoins can allow individuals in emerging markets to get access to both USD and the yield on USD (if yield bearing), acting like a savings account

Jurisdictional Comparison on Proposed Stablecoin Regulations

The table below compares features across selected proposed/active stablecoin regulations in the US, Singapore, EU, and Hong Kong.

	US GENIUS ACT (2025)[1]	MAS Stablecoin Regulatory Framework (2023)[2]	MiCA (2023)[3]	Hong Kong Stablecoins Bill (2024)[4]
Jurisdiction	■ US	■ Singapore	■ EU	■ Hong Kong
Definition	■ A digital asset designed to be used as a means of payment, which the issuer is obligated to redeem for fixed amount, and maintains a stable value relative to a peg	■ **Single-Currency Stablecoin ("SCS")**: stablecoin pegged to a single currency ■ **MAS-Regulated Stablecoin**: SCS pegged to the SGD or G10 currencies issued in Singapore, and fulfil requirements set out by MAS	■ **Asset Referenced Tokens ("ARTs"):** A crypto-asset that is not an EMT and maintains a stable value by being linked to one or more assets ■ **Electronic Money Tokens (EMTs):** A crypto-asset that purports to maintain a stable value by referencing the value of one official currency	■ **Specified Stablecoin**: A digital representation of value that purports to maintain a stable value, with reference to one or more currencies or other HKMA-specified units of account
Issuer	■ Authorised by Federal or State (but Federal regulators determine licensing process for all issuers) ■ Can be approved as a: — Subsidiary of a bank, — Non-bank issuer (Fed or State regulated if less than $10bn market cap)	■ Must obtain a license from MAS to carry out Stablecoin Issuance Service ("SIS") ■ Can be approved as a: — Non-bank entity (subject to market cap requirements)	■ **ART Issuer:** Defined as a legal person or other undertaking (subject to certain criteria) established in the EU ■ **EMT Issuer:** Defined as an authorized credit institution or an electronic money institution (subject to certain criteria)	■ Must obtain a licence from the HKMA ■ Can be approved as a: — Hong Kong incorporated company — Authorized Institution incorporated outside of Hong Kong with certain personnel based in Hong Kong
Reserves	■ USD coins, currency and funds held in demand deposits ■ Treasury securities with maturity of 93 days or less ■ Repo with maturity of 7 days or less backed by T-Bills ■ Reverse repo with maturity of 7 days or less MMFs ■ Central Bank reserve deposits	■ Denominated in the currency of the stablecoin peg and held in cash, cash equivalents or debt securities ■ Debt securities have an up to 3-month residual maturity and is issued by either a government or international organization with a minimum credit rating of "AA-"	■ Investment guidelines: — At least 30 % of the funds received is always deposited in separate accounts in credit institutions — The remaining funds are invested in HQLA assets with minimal market, credit and concentration risk, and are denominated in the same official currency as the one referenced by the EMT	■ Reserve assets must be HQLA with minimal investment risks ■ Except with prior written approval of the HKMA[5], reserve assets must be held in the same reference asset for each Specified Stablecoins. ■ No algorithmic stablecoins
Blockchain	■ Public blockchains only	■ Public or Private	■ Public or Private	■ Public or Private
Yield	■ Non-interest bearing	■ Non-interest bearing	■ Non-interest bearing	■ Non-interest bearing

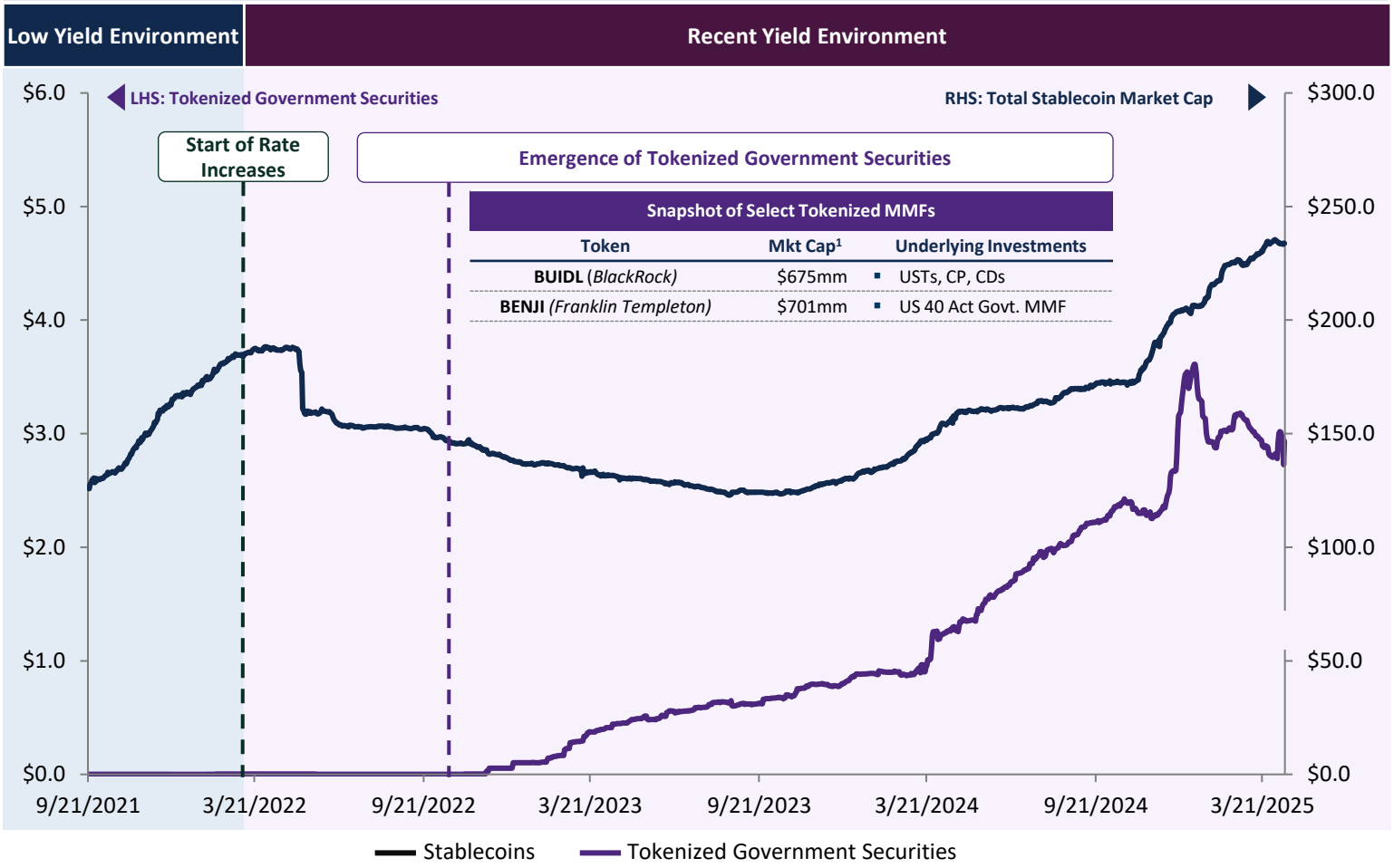
[1] GENIUS Act. [2] MAS. [3] MiCA. [4] Hong Kong Stablecoins Bill. [5] HKMA.

Emergence of Tokenized Government Securities

($ in billions)

Tokenization is the process of using blockchain technology to create digital representations of underlying assets. The rise of tokenized government securities (including MMFs) swiftly proved product market fit – enabling investors to access the benefits of the traditional security, while remaining in the Digital Assets ecosystem

Evolution of Tokenized Government Securities[1]



Key Takeaways[2]

- The digital assets market cycle during the low yield environment saw experimentation with decentralized finance (DeFi) and the use of stablecoins
- The emerging participation of well-established financial service providers contributed to the development and launch of tokenized government securities and other fixed income products
- **These product solutions swiftly proved a market-fit – catering for investors' yield-seeking behavior in the Digital Assets ecosystem and the ability to optimize their cost of capital with instant settlement**

[1] DeFi Lama and The Block.
Note: Market data as of 14-Apr-2025.