Treasury Presentation to TBAC

Office of Debt Management

Fiscal Year 2026 Q4 Report

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*All sources are from Treasury unless otherwise specified

Section I:
Executive Summary

Highlights of Treasury's November 2026 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays through Q4 FY2026

	$ 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 Q4 FY2026	$5,403	+$169	3%	16.8%	-0.4%
Total Outlays thru Q4 FY2026	$7,396	+$386	6%	23.0%	0.0%

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)
Q1 FY2027	$618	$850 (Dec)
Q2 FY2027	$800	$1,000 (Mar)

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

Fiscal Year	Primary Dealers, Median, October 2026 ($billion)	CBO Estimates, February 2026 ($billion)
2027	$2,118	$1,974
2028	$2,218	$2,088
2029	$2,220	$2,010

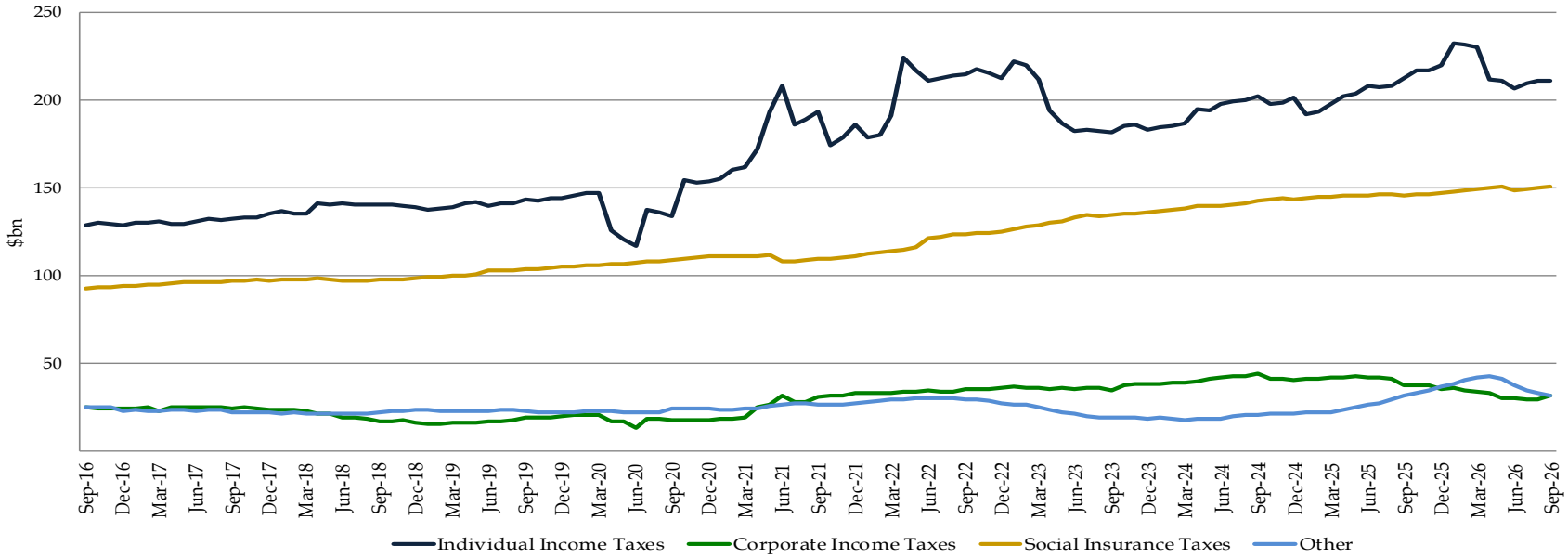
*All privately-held net marketable borrowing estimates are "normalized" with details from page 18. Uncertainty regarding future funding needs remains relatively high, reflecting a variety of views on the path of monetary policy and the outlook for the economy.

Latest Market Expectations for Treasury Financing in October 2026

- Nearly all primary dealers expected no changes to nominal coupon, TIPS, or FRN issuance sizes at the November refunding.

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

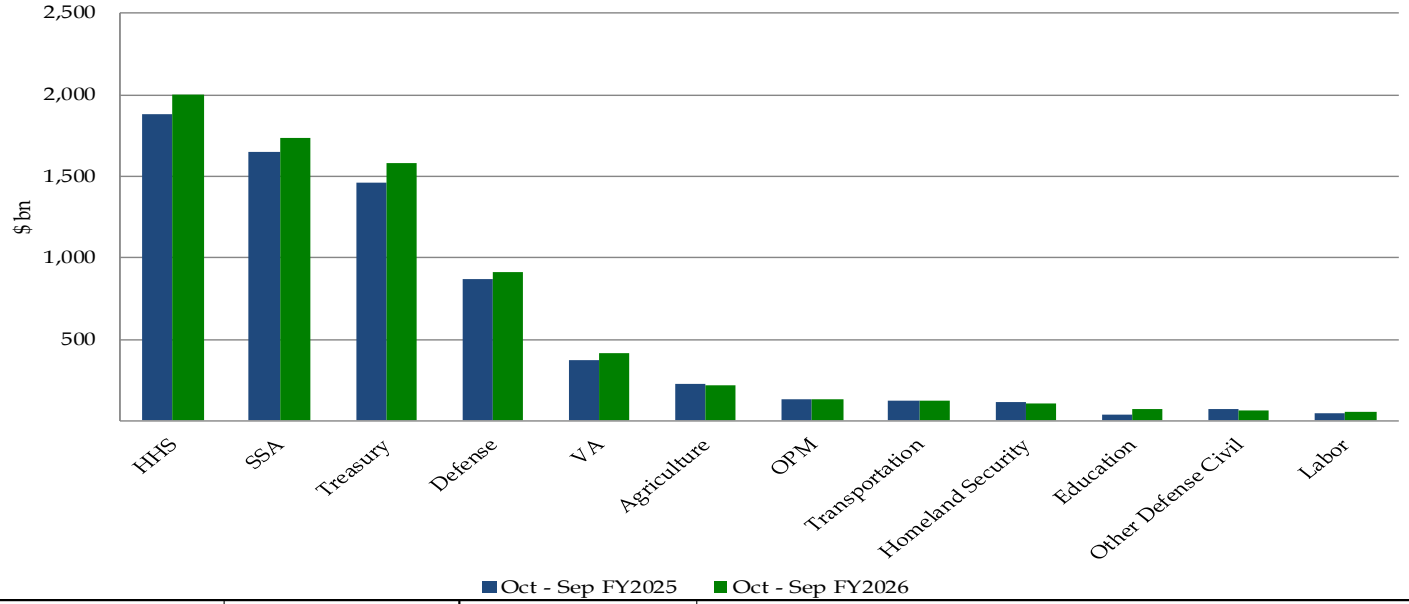
Monthly Receipt Levels
(12-Month Moving Average)



Notable Receipts Category	YoY change FY 2026 ($ billion)	YoY change FY 2026 (%)	Comments
Adjusted Withheld and FICA Taxes	+$159	+5%	Increased due to wage growth.
Customs Deposits	+$115	+57%	Increased due to higher tariff receipts.
Non-Withheld and SECA Taxes	+$103	+9%	This FY contained extended due dates for Los Angeles due to county wildfires.
Customs Refunds (-)	+$137	NM	Increased due to IEEPA refunds which began in May 2026.
Gross Corporate Taxes	-$43	-9%	Decreased due to legislative provision changes from the One Big Beautiful Bill.
Corporate Refunds (-)	+$27	+79%	One Big Beautiful Bill provisions have led to increases in refunds this season.

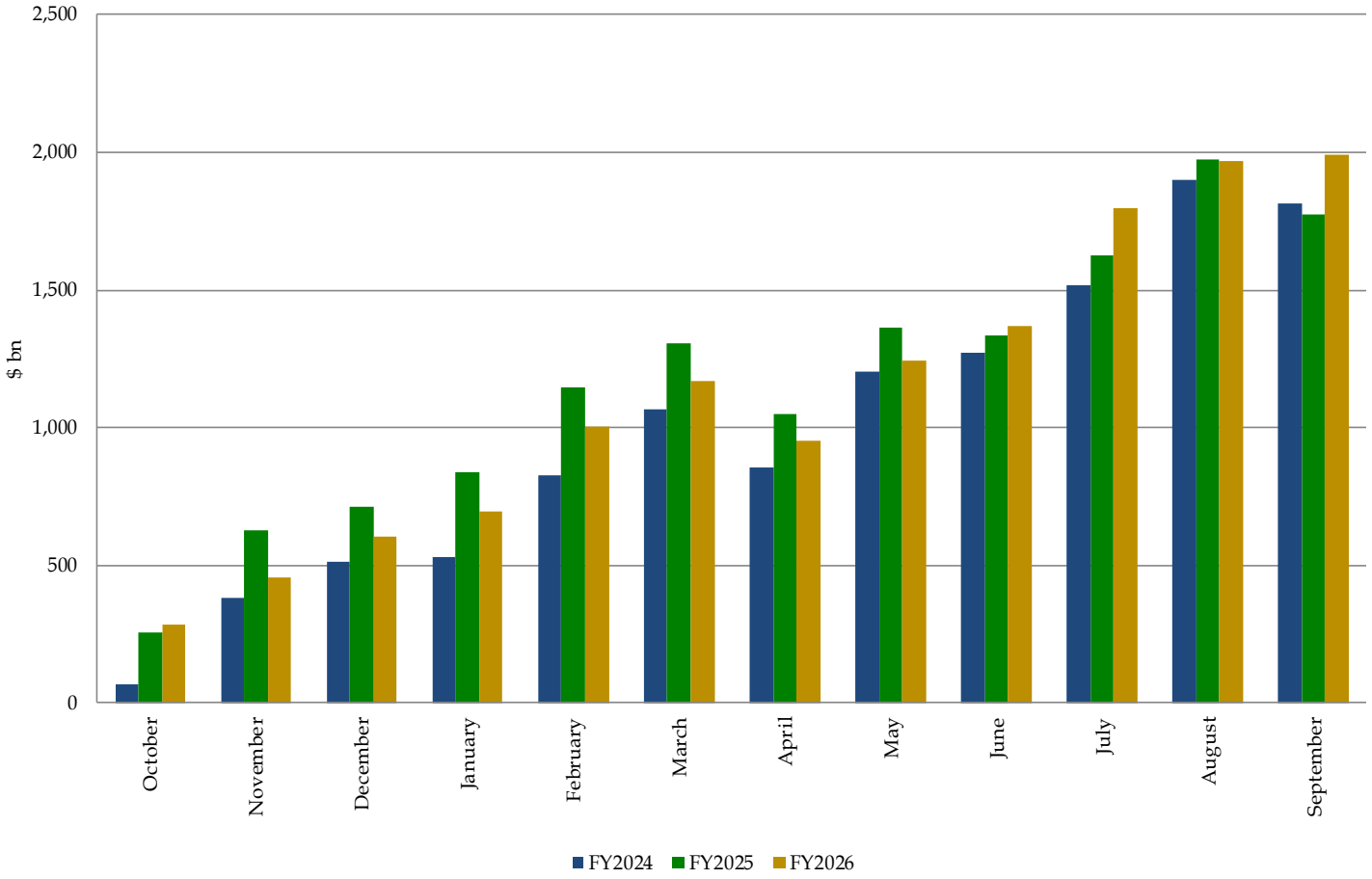
- NM represents "Not Meaningful."
- Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts.

Largest Outlays



Notable Outlay Category	YoY change FY 2026 ($ billion)	YoY change FY 2026 (%)	Comments
Department of Treasury	+$122	+8%	Increased due to higher gross interest primarily as a result of higher levels of debt outstanding and higher interest rates.
Health and Human Services	+$120	+6%	Increased due to Medicare and Medicaid spending.
Social Security Administration	+$87	+5%	Higher due to implementation of the Social Security Fairness Act, increases from cost-of-living adjustments (COLA), and increased number of beneficiaries.
Military Programs	+$48	+6%	Increased due to military personnel, procurement, and research and development.
Department of Education	+$41	+117%	Increased due to a $131 billion downward modification that was booked last year as part of the One Big Beautiful Bill repayment plan modifications.
Department of Veterans Affairs	+$39	+10%	Higher due to compensation and pension as well as increased spending per person and use of health care facilities.
Other	-$71	-10%	Decreased due to lower EPA disbursements, lower Commerce outlays, lower Agriculture outlays, and higher receipts for interest received for trust funds.

Cumulative Budget Deficits by Fiscal Year



Section III:
Various Fiscal Forecasts

Primary Dealers, OMB, CBO

Recent Economic Forecasts

Primary Dealer Median Estimates October 2026

	CY2026	CY2027	CY2028
	% Change from Q4 to Q4		
GDP			
Real	2.5	2.1	2.0
Nominal	6.2	4.5	4.3
Inflation			
CPI Headline	3.9	2.3	2.2
CPI Core	2.7	2.5	2.3
	Fourth Quarter Levels		
Unemployment Rate (%)	4.2	4.2	4.2
	FY2026	**FY2027**	**FY2028**
Deficits ($bil)	$2,056	$2,220	$2,200

CBO Estimates February 2026

	CY2026	CY2027	CY2028
	% Change from Q4 to Q4		
GDP			
Real	2.2	1.8	1.8
Nominal	4.8	4.1	3.9
Inflation			
CPI Headline	2.8	2.4	2.3
	Fourth Quarter Levels		
Unemployment Rate (%)	4.6	4.5	4.4
	FY2026	**FY2027**	**FY2028**
Deficits ($bil)	$1,887	$2,080	$2,020

OMB Estimates April 2026

	CY2026	CY2027	CY2028
	% Change Year over Year		
GDP			
Real	3.5	3.1	3.1
Nominal	5.7	5.2	5.2
Inflation			
CPI Headline	2.3	2.3	2.2
	Fourth Quarter Levels		
Unemployment Rate (%)	3.7	3.7	3.7
	FY2026	**FY2027**	**FY2028**
Deficits ($bil)	$2,172	$2,157	$1,993

- Note: OMB's economic assumptions are from Table 1-1 of "Budget of the U.S. Government Analytical Perspectives Fiscal Year 2027," April 2026.
- CBO's economic assumptions are from Table 2-1 of "The Budget and Economic Outlook: 2026 to 2036," February 2026.

Recent Deficit Forecasts

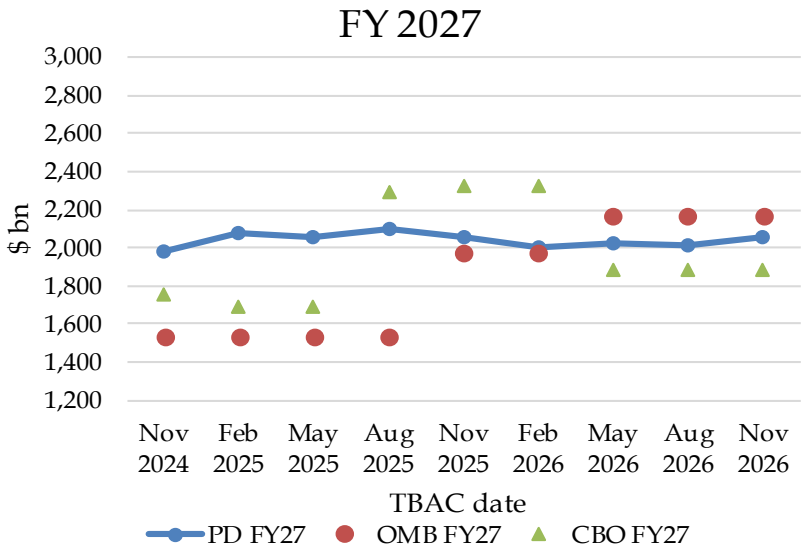
Primary dealers' median deficit estimates in October 2026 were slightly higher relative to estimates they provided in July 2026, increasing by $169 billion in aggregate over the FY27-FY28 period.

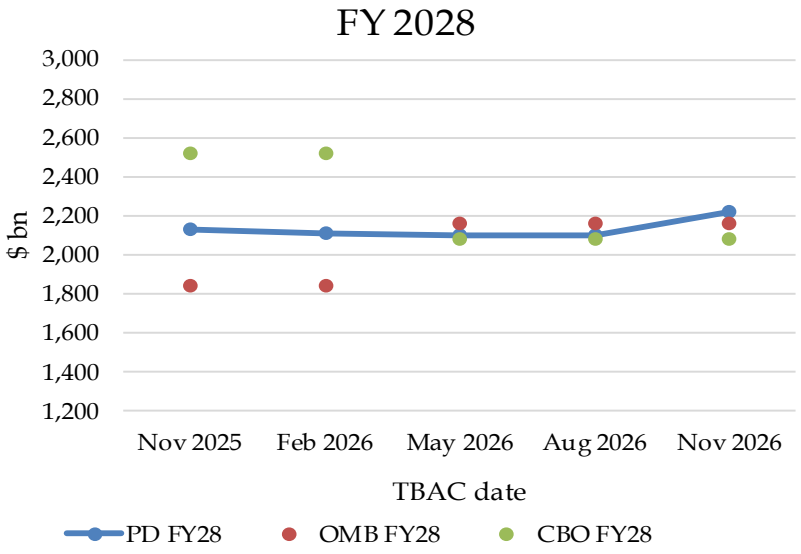
- The latest OMB and CBO estimates in the table below are provided for reference.

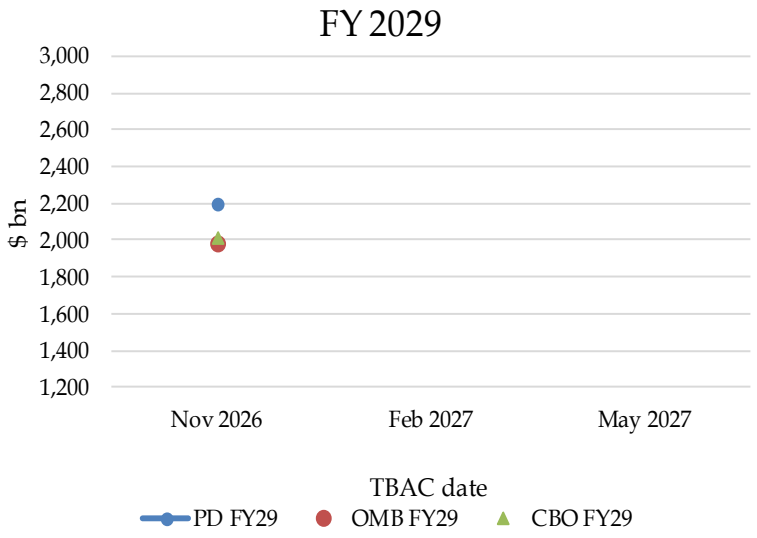
Deficit Estimates ($ billion)	PD 25th Percentile	Primary Dealers (Median)	PD 75th Percentile	Change from Prior Quarter (Median)	OMB	CBO
FY 2027	2,000	2,056	2,125	49	2,172	1,887
FY 2028	2,098	2,220	2,272	120	2,157	2,080
FY 2029	2,100	2,200	2,297	NA	1,993	2,020
As of date	Oct-26	Oct-26	Oct-26		Apr-26	Feb-26

- OMB's deficit projections are derived from Table 8-1 and Table 15-1 of "Budget of the U.S. Government Analytical Perspectives Fiscal Year 2027," April 2026.
- CBO's deficit projections are from Table 1-3 of "The Budget and Economic Outlook: 2026 to 2036," February 2026.

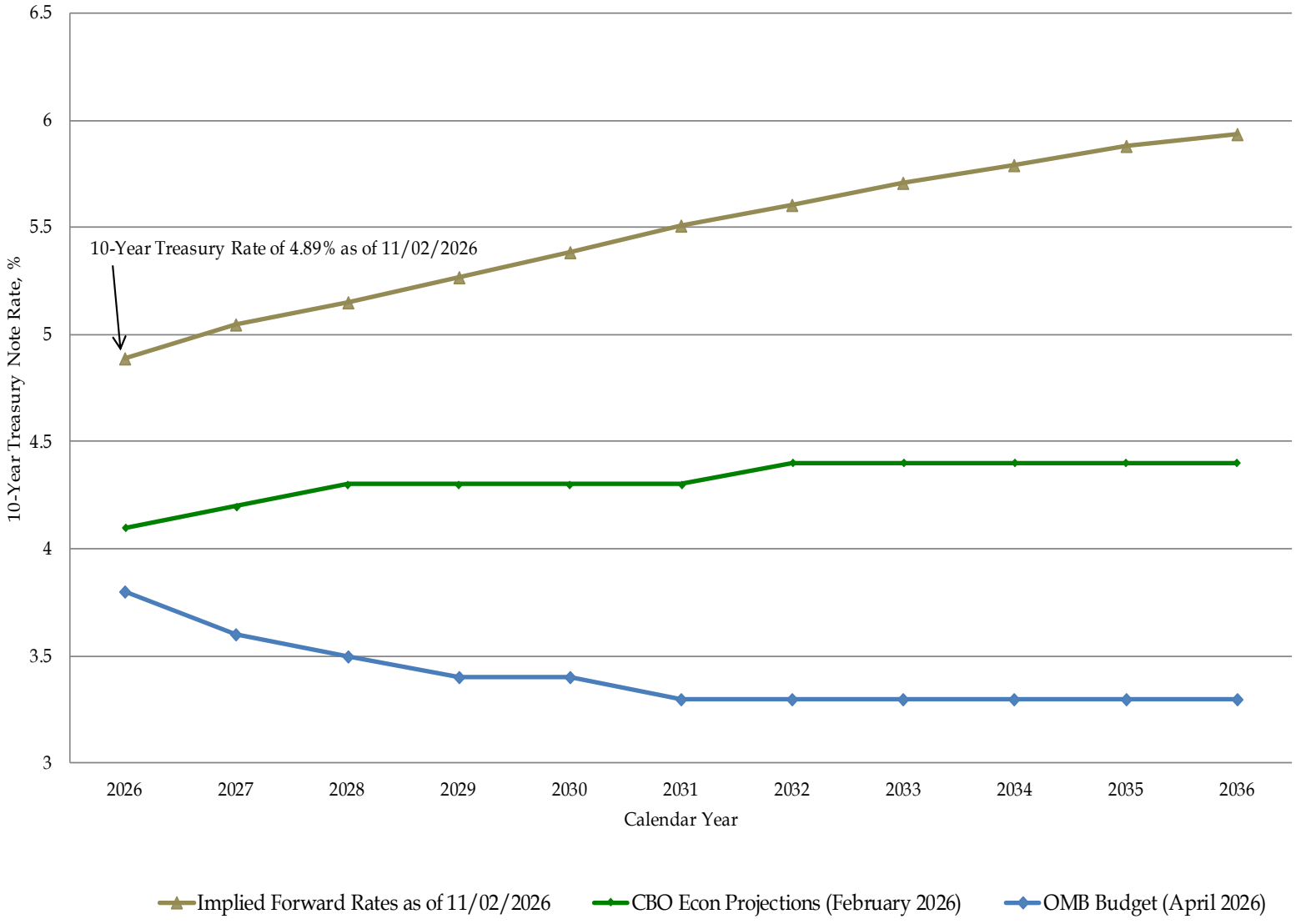
Evolution of Median Primary Dealer, OMB, and CBO Deficit Estimates







Interest Rate Assumptions: 10-Year Treasury Note

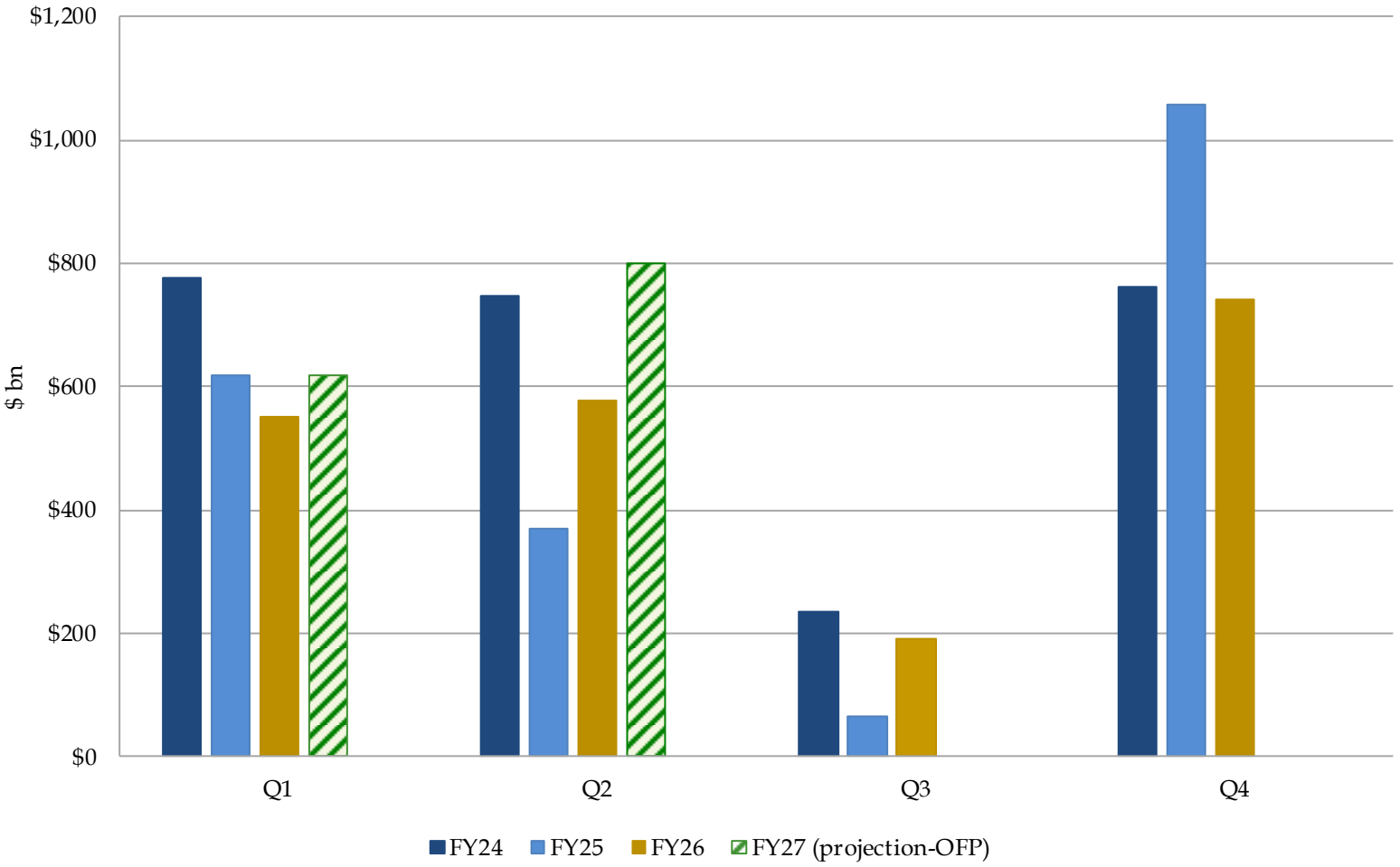


Section IV:
Estimated Borrowing Needs and Financing Implications

Assumptions for Financing Section (pages 16 to 20)

- Portfolio and SOMA holdings as of 9/30/2026, 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 October 2026, while using total bills outstanding of ~$7.12 trillion as of 9/30/2026, 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 9/30/2026, 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.
- Liquidity support buybacks are assumed to be the same as actual liquidity support purchases from the previous calendar quarter. Cash management buybacks are also assumed to be the same as the most recent comparable calendar quarter. Since cash management buyback sizes vary from quarter to quarter due to changes in fiscal flows, the choice of the most recent comparable calendar quarter also varies.

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 FY27 Q1

October - December 2026	
Assuming Constant Coupon Issuance Sizes[1]	
Treasury Announced Net Marketable Borrowing[2]	618
Net Coupon Issuance	361
Assumed Buybacks[3]	75
Implied Change in Bills	332

Sources of Privately-Held Financing in FY27 Q2

January - March 2027	
Assuming Constant Coupon Issuance Sizes[1]	
Treasury Announced Net Marketable Borrowing[2]	800
Net Coupon Issuance	348
Assumed Buybacks[3]	80
Implied Change in Bills	532

Security	October - December 2026 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	86	86	0	86	86	0
2-Year	207	194	13	207	194	13
3-Year	174	139	35	174	139	35
5-Year	210	169	41	210	169	41
7-Year	132	66	66	132	66	66
10-Year	120	46	74	120	46	74
20-Year	42	0	42	42	0	42
30-Year	69	4	65	69	4	65
5-Year TIPS	50	44	6	50	44	6
10-Year TIPS	19	0	19	19	0	19
20-Year TIPS[4]	0	0	0	0	0	0
30-Year TIPS	0	0	0	0	0	0
Coupon Subtotal	1,109	748	361	1,109	748	361

Security	January - March 2027 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	86	86	0	172	172	0
2-Year	207	198	9	414	392	22
3-Year	174	154	20	348	292	56
5-Year	210	97	113	420	266	154
7-Year	132	109	23	264	175	89
10-Year	120	41	79	240	87	153
20-Year	42	0	42	84	0	84
30-Year	69	3	66	138	7	131
5-Year TIPS	0	0	0	50	44	6
10-Year TIPS	40	35	5	59	35	24
20-Year TIPS[4]	0	18	(18)	0	18	(18)
30-Year TIPS	9	0	9	9	0	9
Coupon Subtotal	1,089	741	348	2,198	1,489	709

[1] Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs.
[2] Assumes end-of-December 2026 and end-of-March 2027 cash balances of $850 billion and $1,000 billion, respectively, versus end-of-September 2026 cash balance of $984 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] Assumed buyback amounts for liquidity support are based on the most recent actuals (Aug26 to Oct26). Assumed buyback amounts for cash management are based on Dec25 actuals for FY27 Q1 and Mar26 actuals for FY27 Q2.
[4] Treasury is currently not issuing 20-year TIPS.

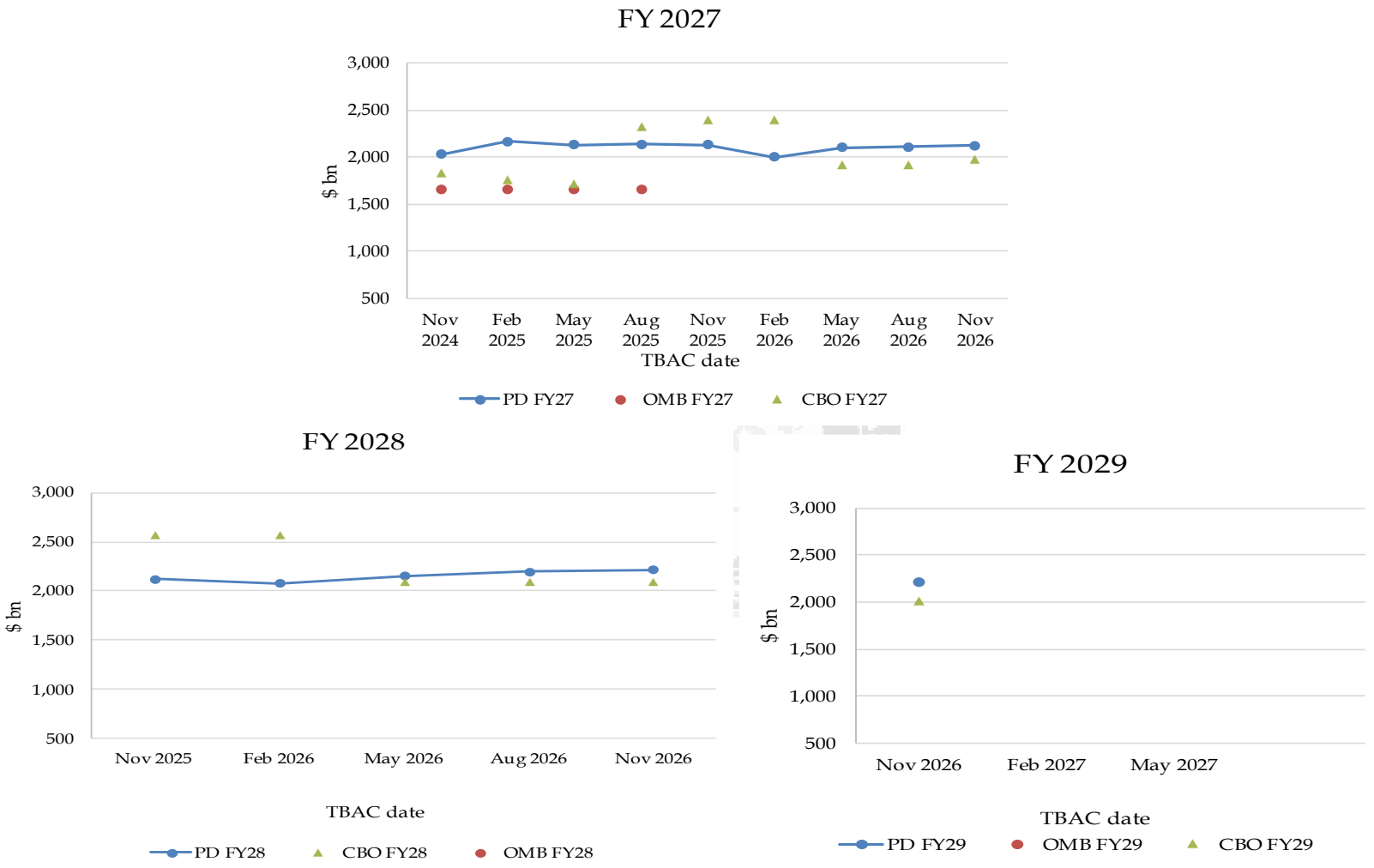
Longer-Term Privately-Held Net Marketable Borrowing Estimates

FY 2027-2029 Deficits and Privately-Held Net Marketable Borrowing Estimates, in $ billions

	Primary Dealer			OMB	CBO
	25th	Median	75th		
FY 2027 Deficit	2,000	2,056	2,125	2,172	1,887
FY 2028 Deficit	2,098	2,220	2,272	2,157	2,080
FY 2029 Deficit	2,100	2,200	2,297	1,993	2,020
FY 2027 Privately-Held Net Marketable Borrowing*	2,001	2,118	2,179		1,974
FY 2028 Privately-Held Net Marketable Borrowing*	2,154	2,218	2,253		2,088
FY 2029 Privately-Held Net Marketable Borrowing*	2,173	2,220	2,300		2,010
Estimates as of:		Oct-26		Apr-26	Feb-26

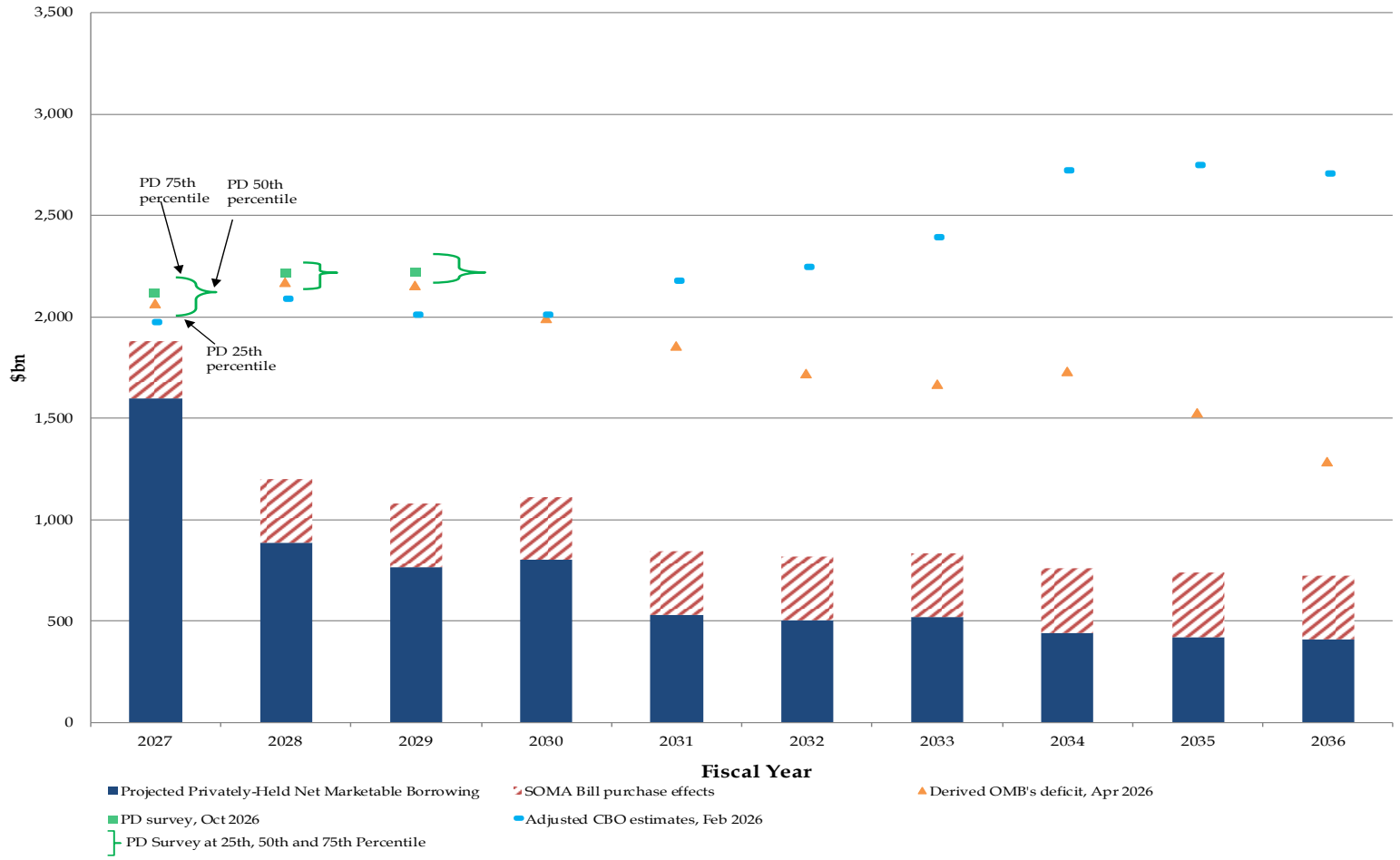
- All privately-held net marketable borrowing estimates are "normalized" using assumed Fiscal Year 2027 cash balance of $950 billion, held constant in out years.
- OMB's deficit projections are derived from Table 8-1 and Table 15-1 of "Budget of the U.S. Government Analytical Perspectives Fiscal Year 2027," April 2026. OMB's borrowing estimates are not available for this refunding.
- CBO's projections are from Table 1-3 of "The Budget and Economic Outlook: 2026 to 2036," February 2026.

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



- OMB's borrowing estimates are not available for this refunding.
- CBO's deficit projections are from Table 1-3 of "The Budget and Economic Outlook: 2026 to 2036," February 2026.

Projected Privately-Held Net Marketable Borrowing
Assuming Private Coupon Issuance & Privately-Held Bills Outstanding Remain Constant as of 10/31/2026*



*Treasury's latest primary dealer survey median/interquartile range estimates can be found on page 18. CBO's projections are from Table 1-3 of "The Budget and Economic Outlook: 2026 to 2036," February 2026. OMB's deficit projections are derived from Table 8-1 and Table 15-1 of "Budget of the U.S. Government Analytical Perspectives Fiscal Year 2027," April 2026. OMB's borrowing estimates are not available for this refunding. In addition, all privately-held net marketable borrowing estimates are normalized with a cash balance assumption of $950 billion. SOMA purchase effects are estimated based on MBS principal payments and reserve management purchase assumptions from the Survey of Market Expectations published in September 2026 by Federal Reserve Banks of New York.

Section V:
Select Portfolio Metrics

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

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.

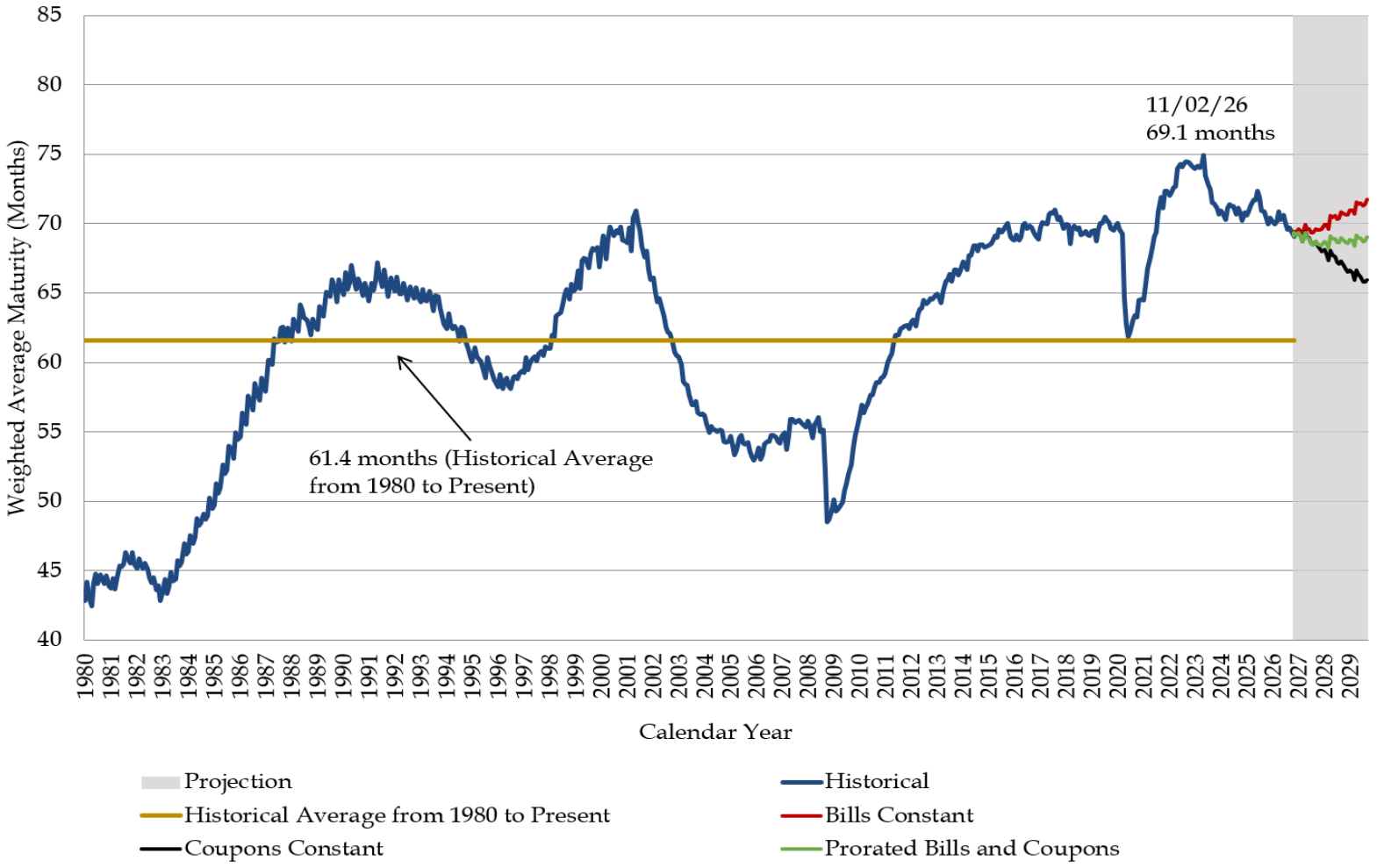
The scenarios are:

1) ***"Coupons Constant":*** Treasury maintains **coupon, FRN, and TIPS auction sizes constant** as of 11/2/2026 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 $7.4 trillion as of 11/2/2026 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 23.0% as of 11/2/2026 and addresses any changes in financing needs by pro rata increasing or decreasing coupon, FRN, and TIPS auction sizes.

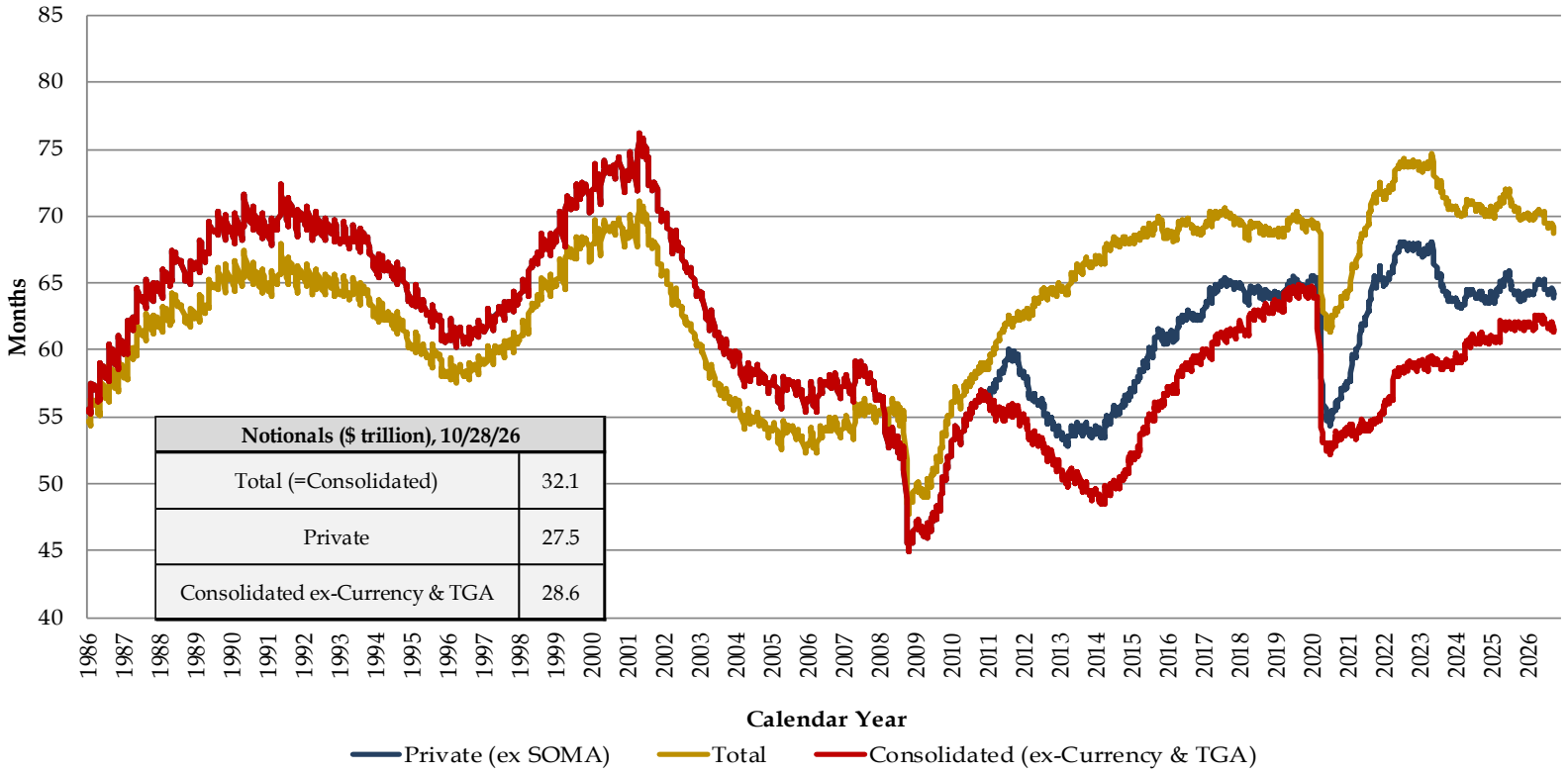
Privately-held net marketable borrowing needs used in the projections section of these charts are proxied using median primary dealer estimates for FY27, FY28 & FY29 (see page 18).

Buybacks are not included in these projections using the same assumptions as Section IV.

Weighted Average Maturity of Marketable Debt Outstanding

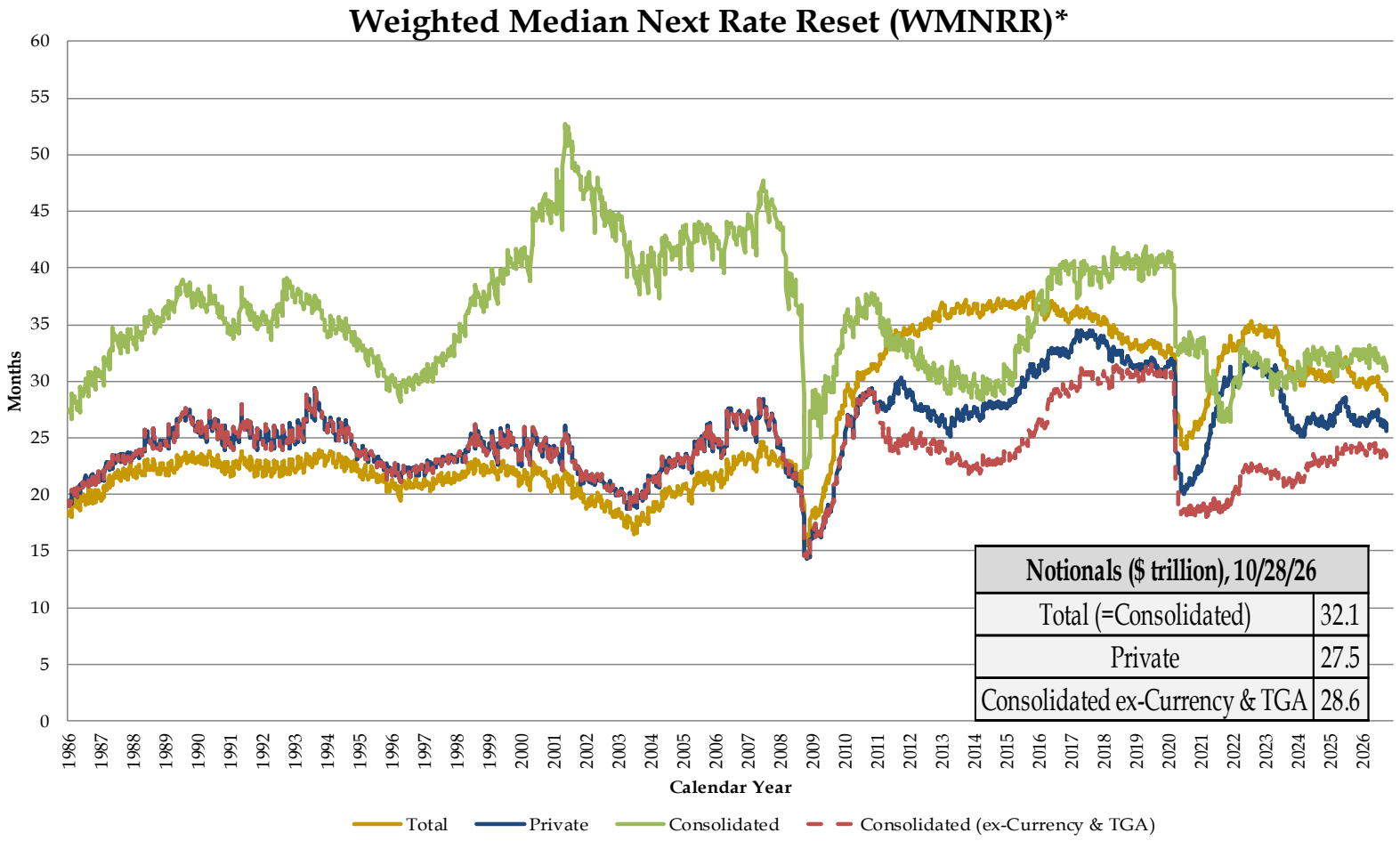


Consolidated **WANRR** Calculation*

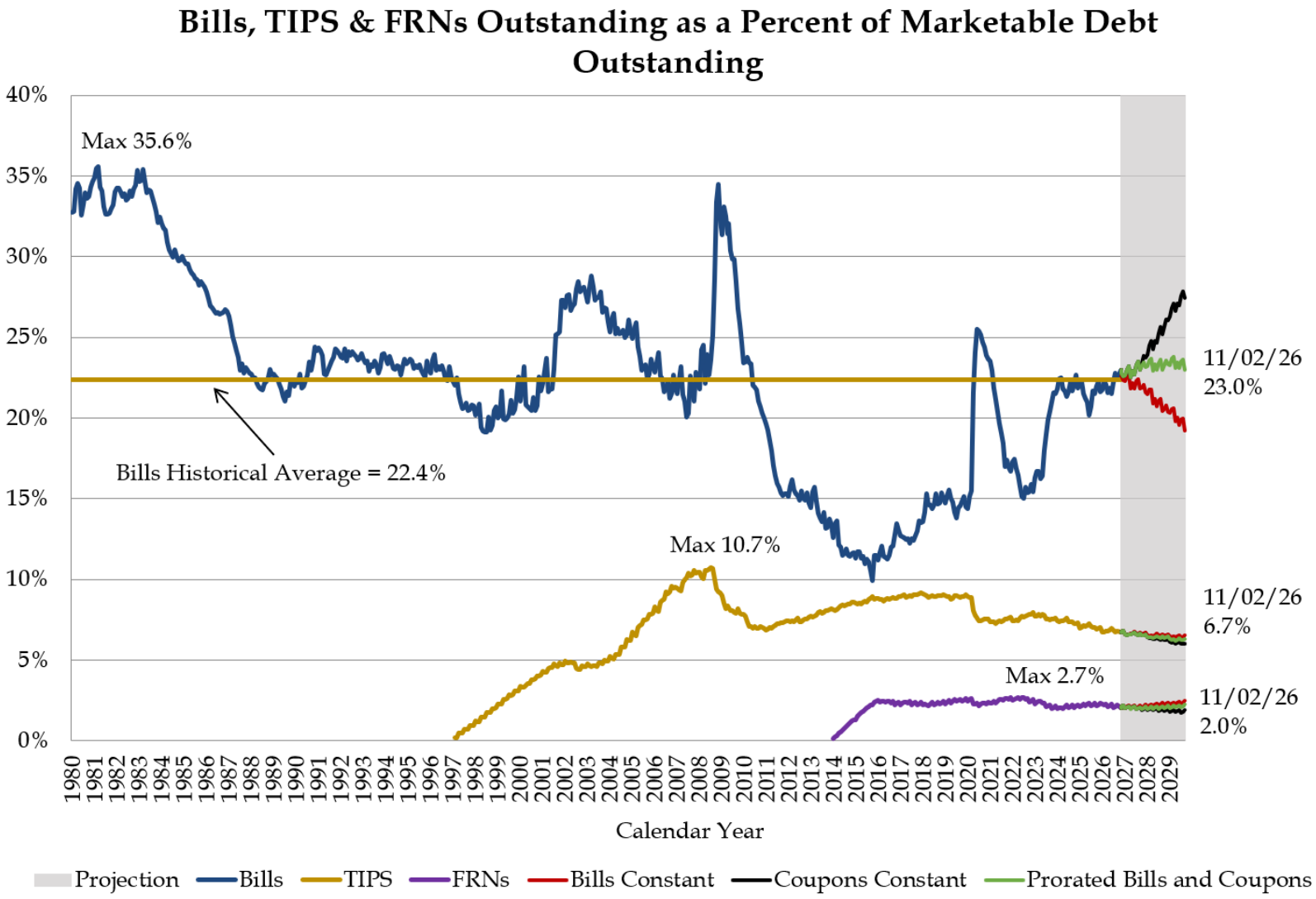


Notionals ($ trillion), 10/28/26	
Total (=Consolidated)	32.1
Private	27.5
Consolidated ex-Currency & TGA	28.6

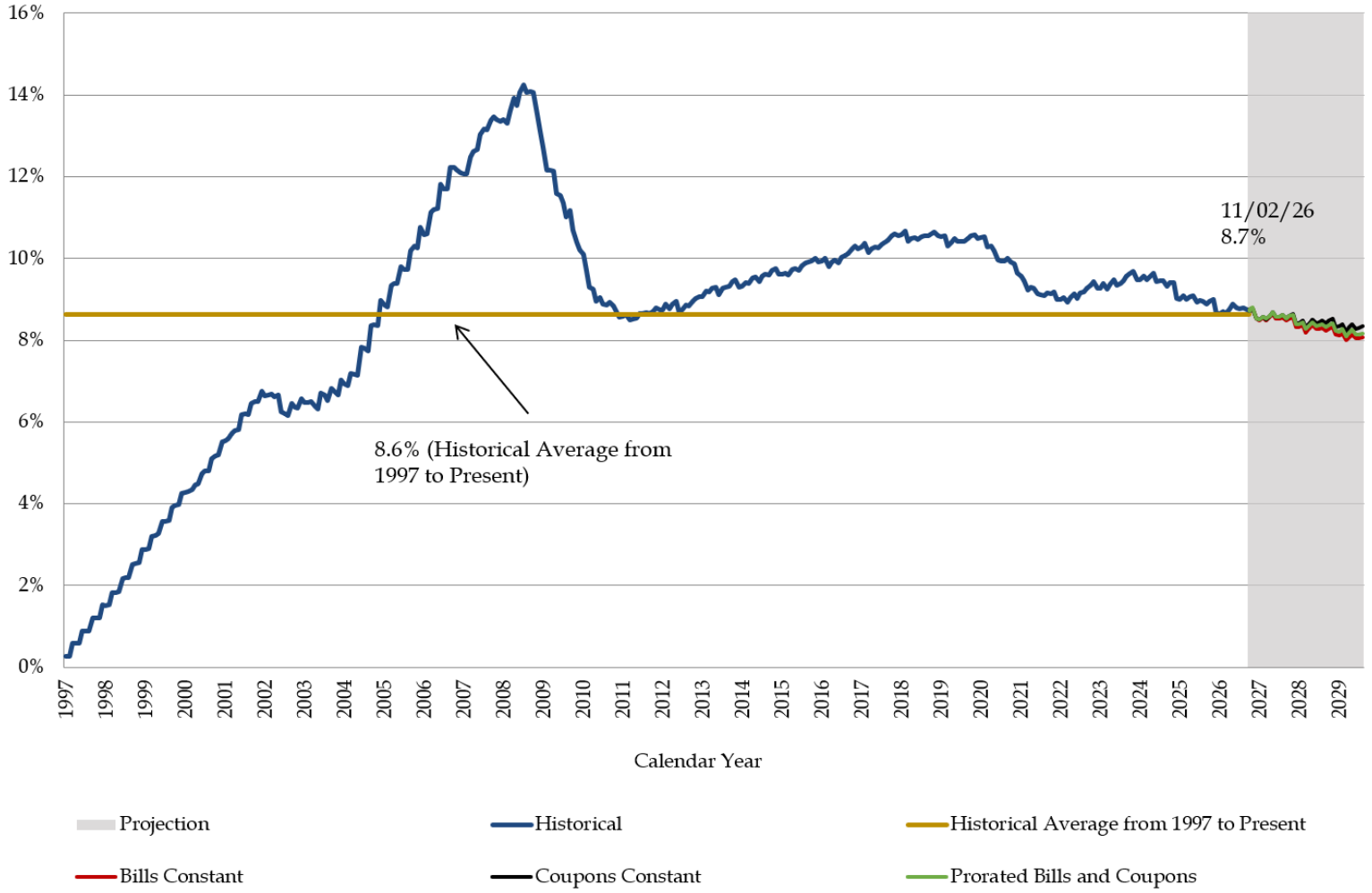
* Weighted Average Next Rate Reset (WANRR) is a "Weighted Average Maturity" metric that attempts to adjust for the floating rate aspect of some Treasury debt. The WANRR is the average time until the outstanding debt's interest rate is set to a new interest rate. For bills and fixed rate notes and bonds, 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 are treated as if they have a daily rate reset.



*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%
11/02/26
23.0%
11/02/26
6.7%
11/02/26
2.0%
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 2028 2029
Calendar Year
Projection
Bills
TIPS
FRNs
Bills Constant
Coupons Constant
Prorated Bills and Coupons

TIPS Outstanding as a Percentage of Total Coupon Bearing Securities

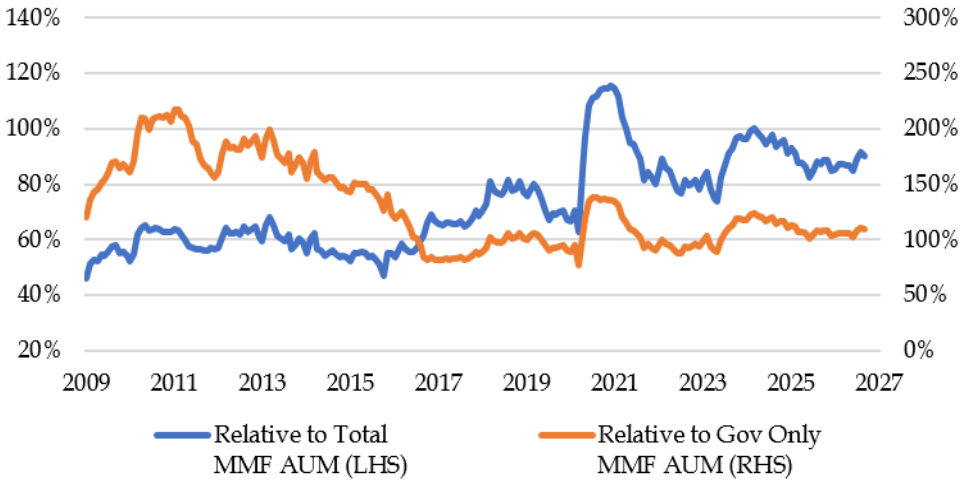


Measures of Treasury Bill Supply

Total Bills Outstanding/Nominal GDP

Total Bills Outstanding/Commercial Bank Deposits

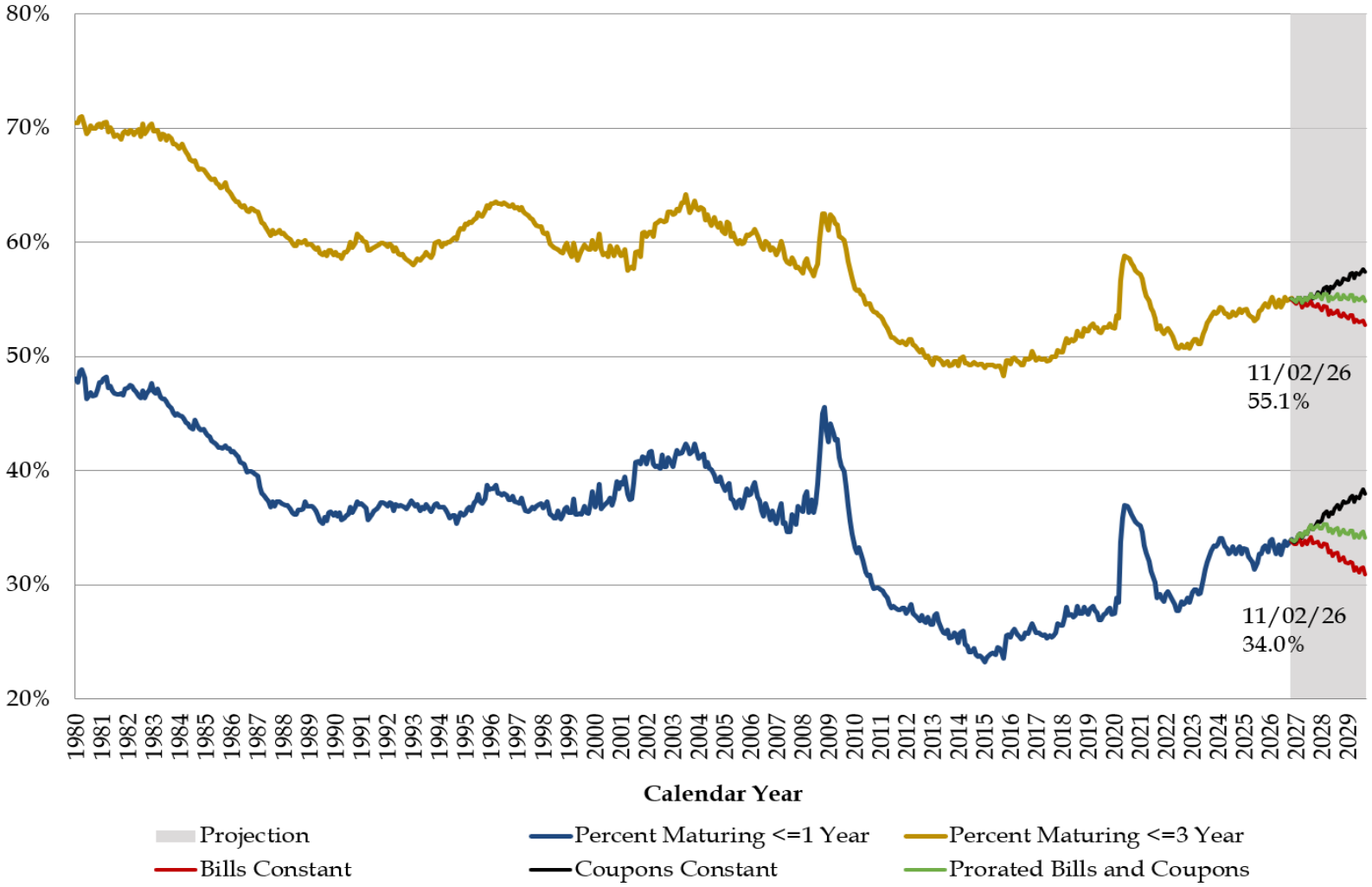
Total Bills Outstanding Relative to Money Fund AUM



Total Bills Outstanding/Federal Reserve Liabilities ex. TGA

Source: Bloomberg and Treasury

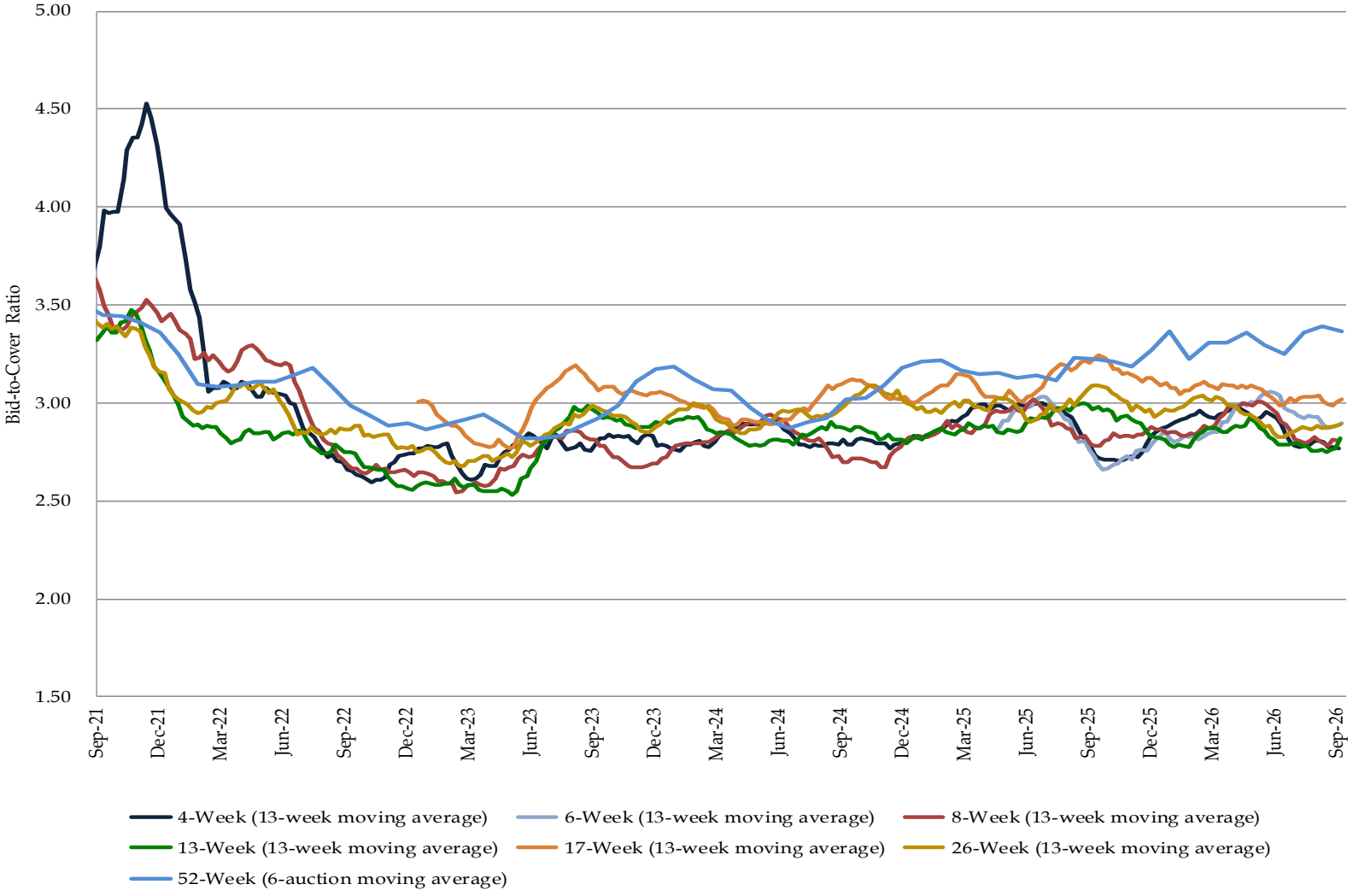
Treasury Maturity Profile



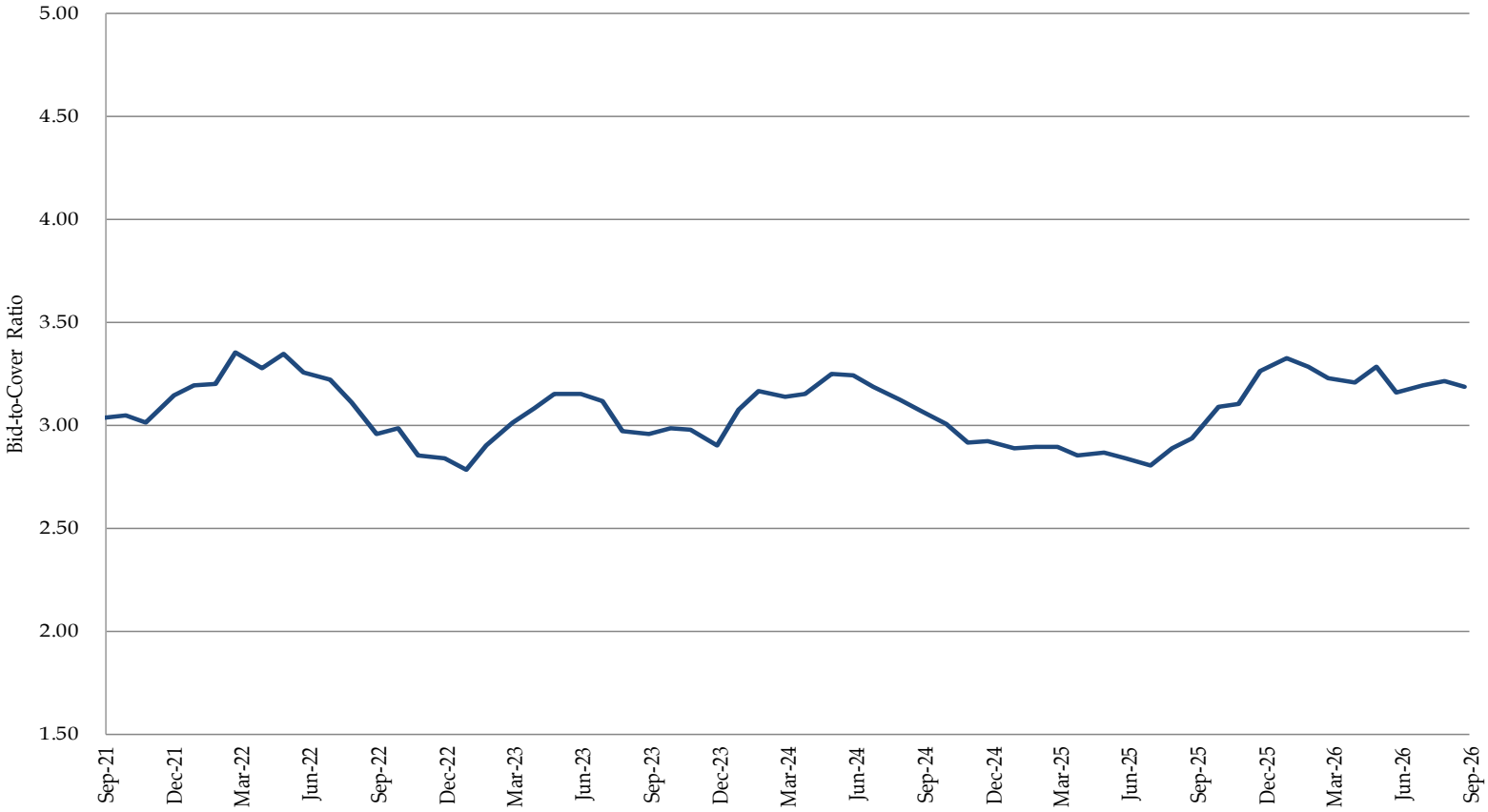
Section VI:
Select Demand Metrics

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

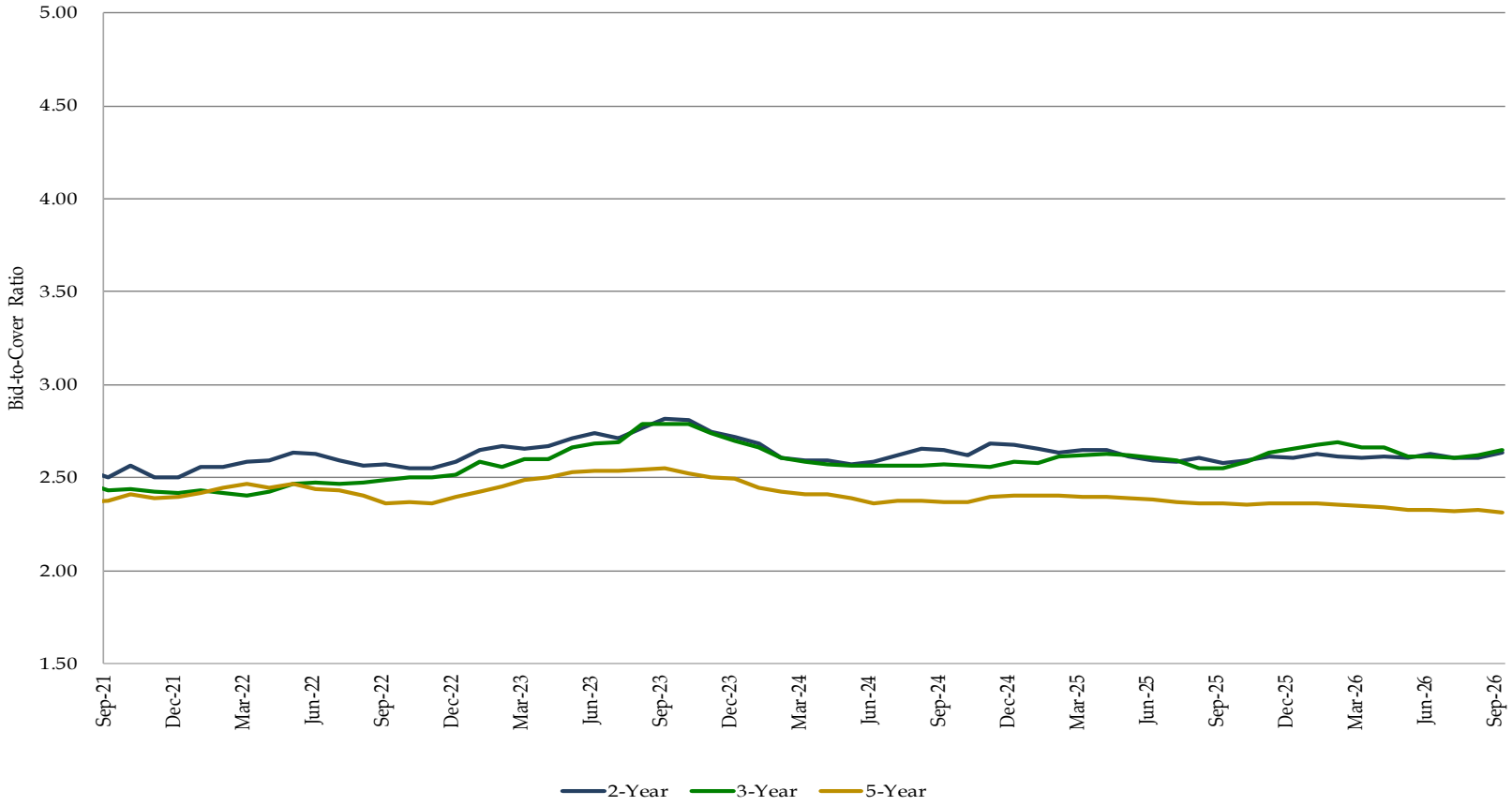
Bid-to-Cover Ratios for Treasury Bills



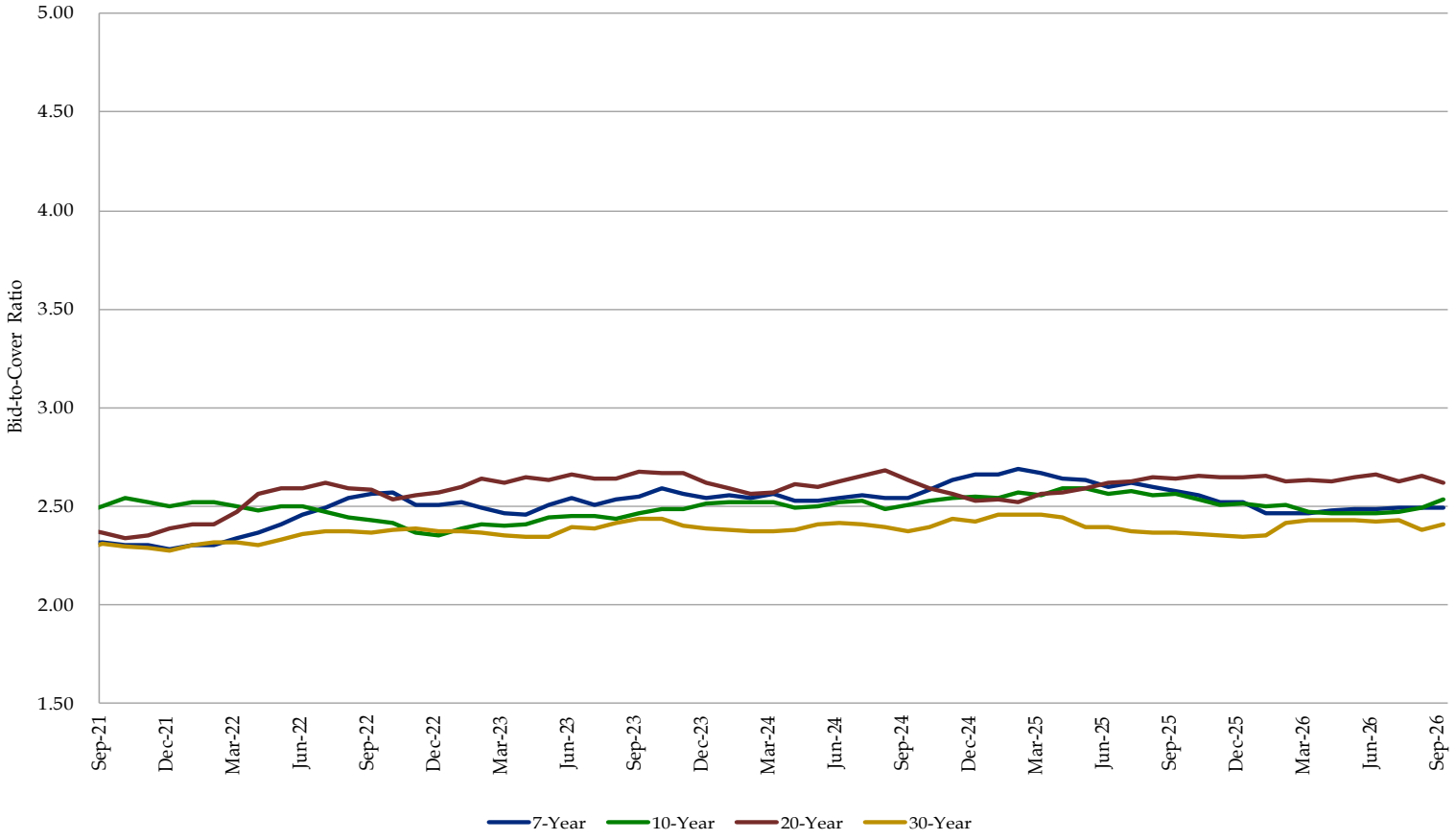
Bid-to-Cover Ratios for FRNs
(6-Month Moving Average)



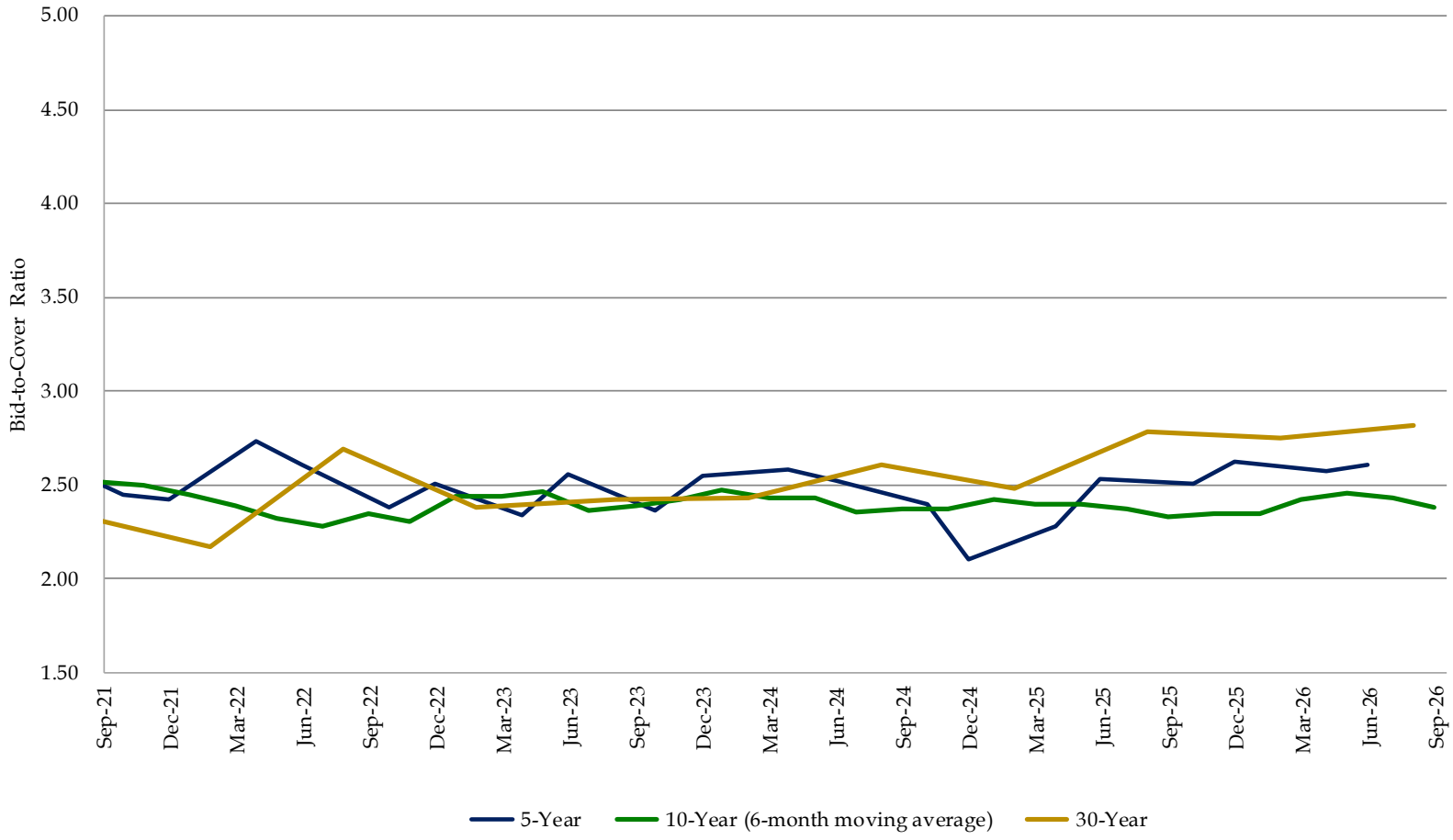
Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)



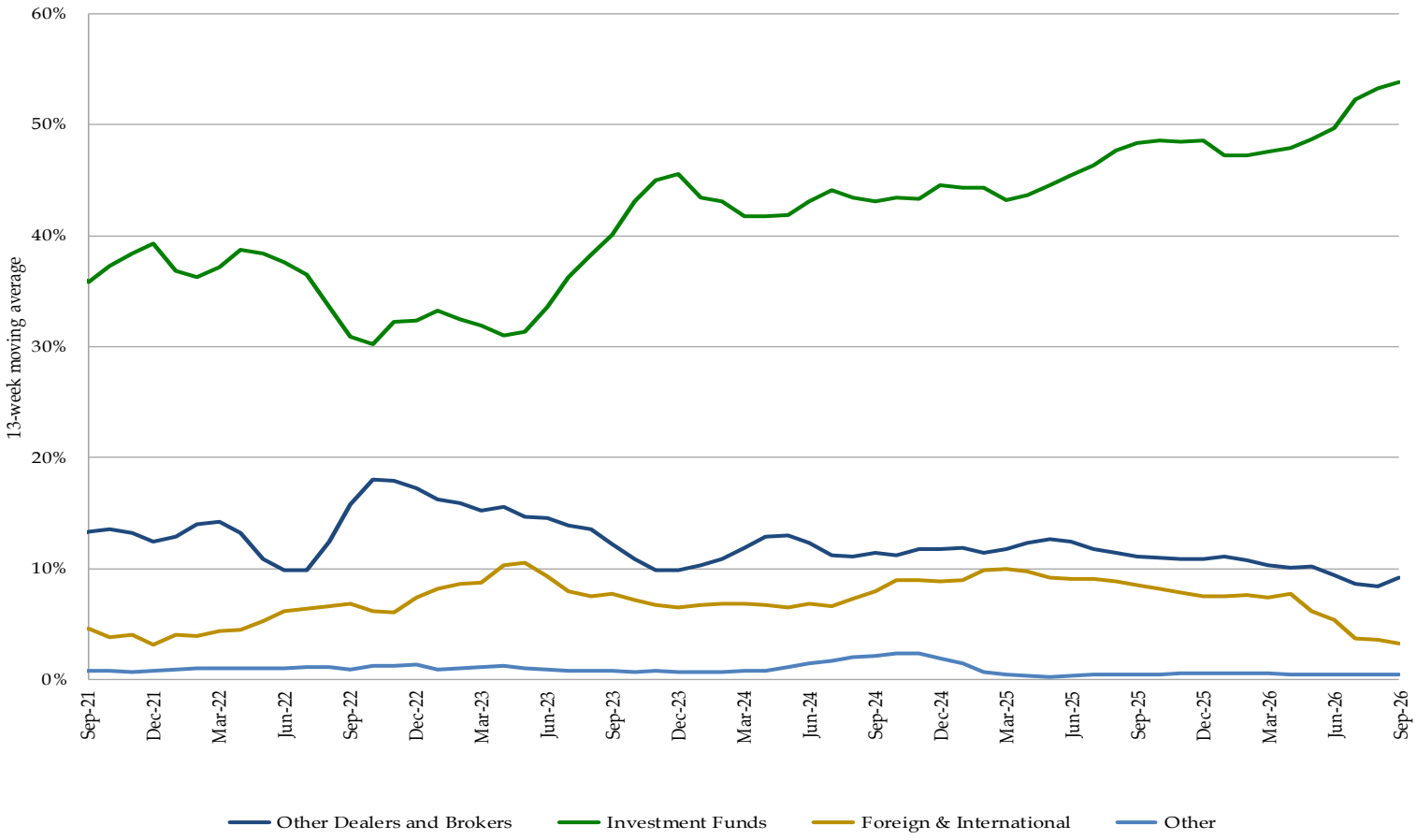
Bid-to-Cover Ratios for 7-, 10-, 20-, and 30-Year Nominal Securities (6-Month Moving Average)



Bid-to-Cover Ratios for TIPS

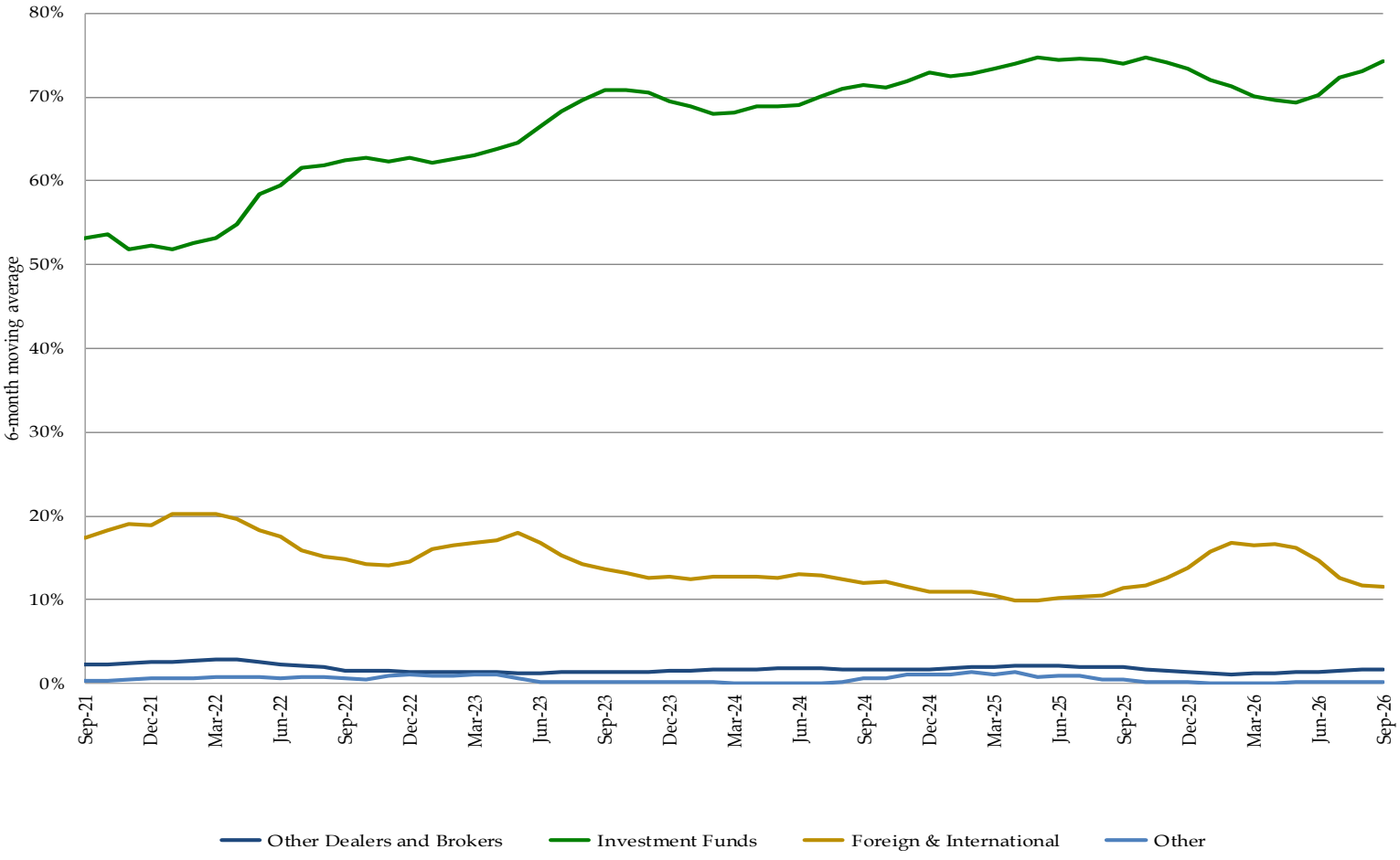


Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



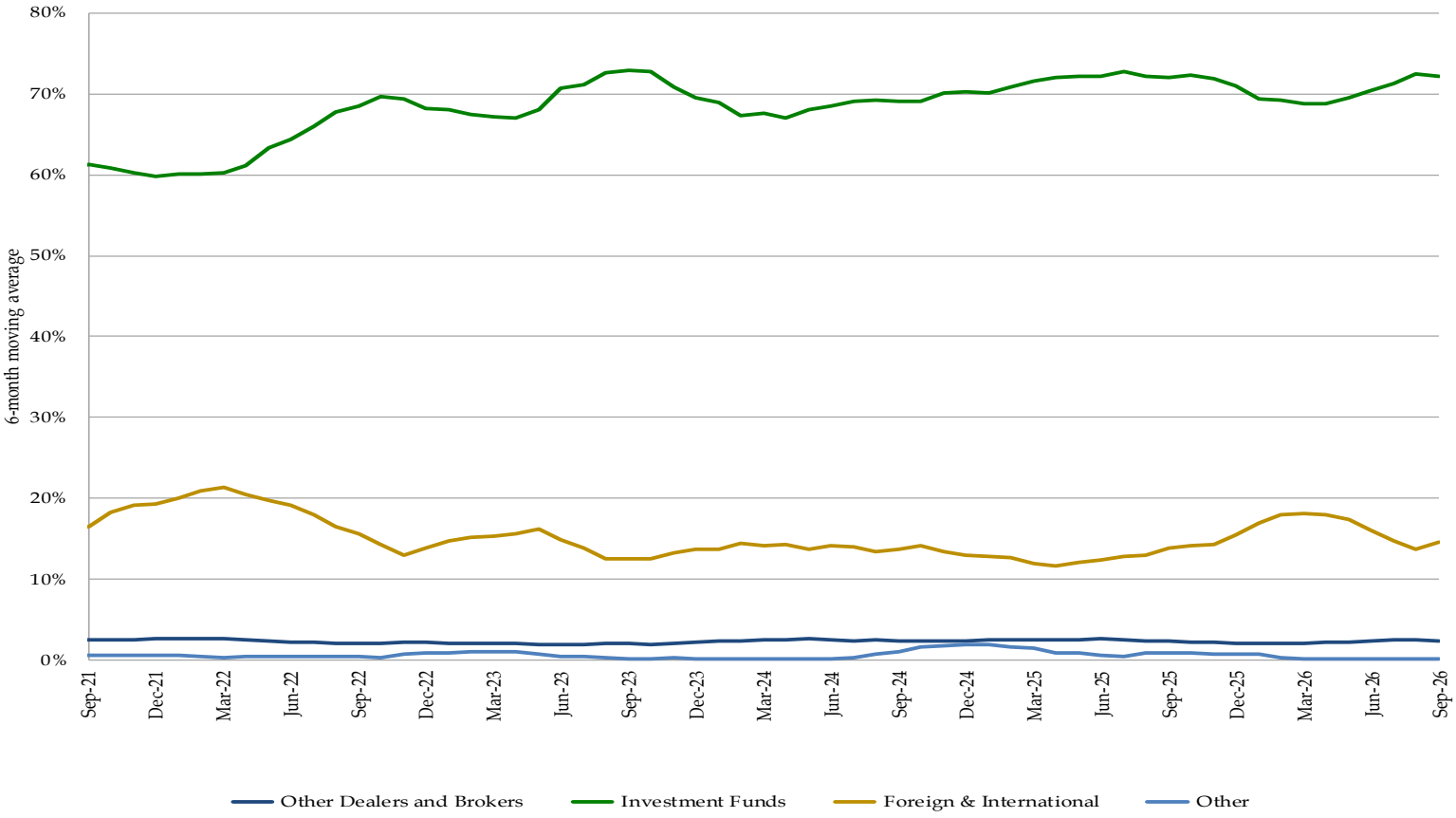
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



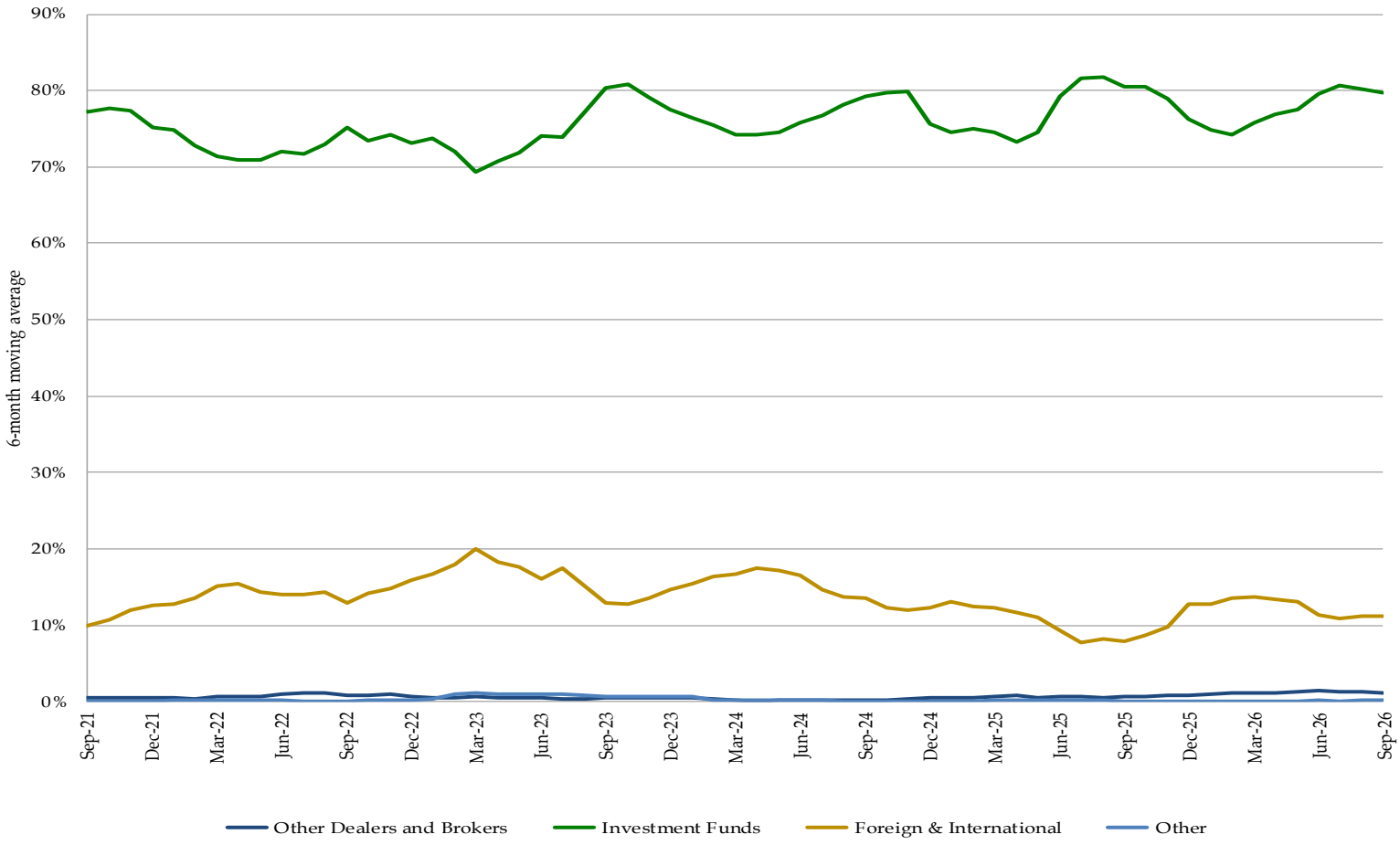
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



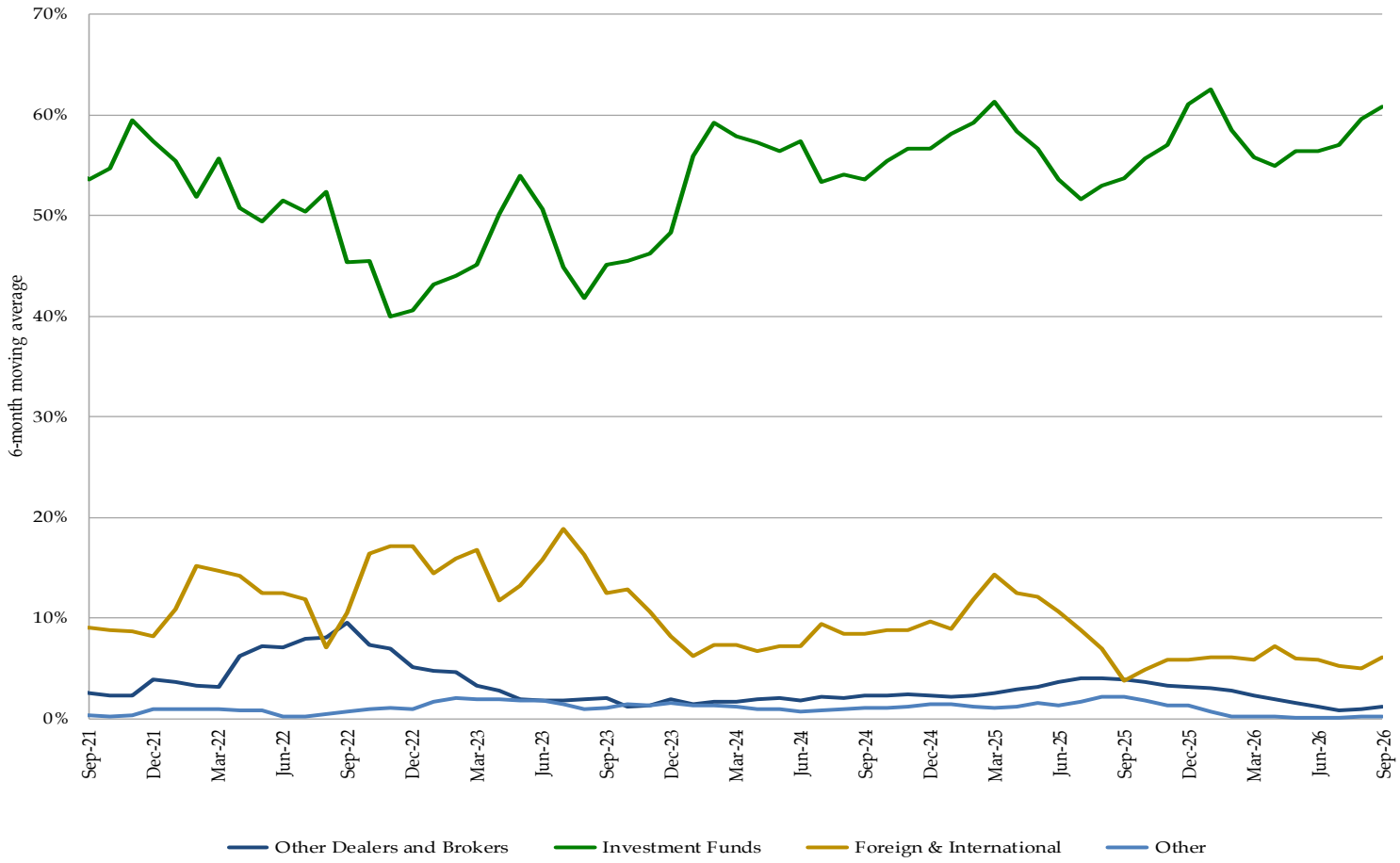
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



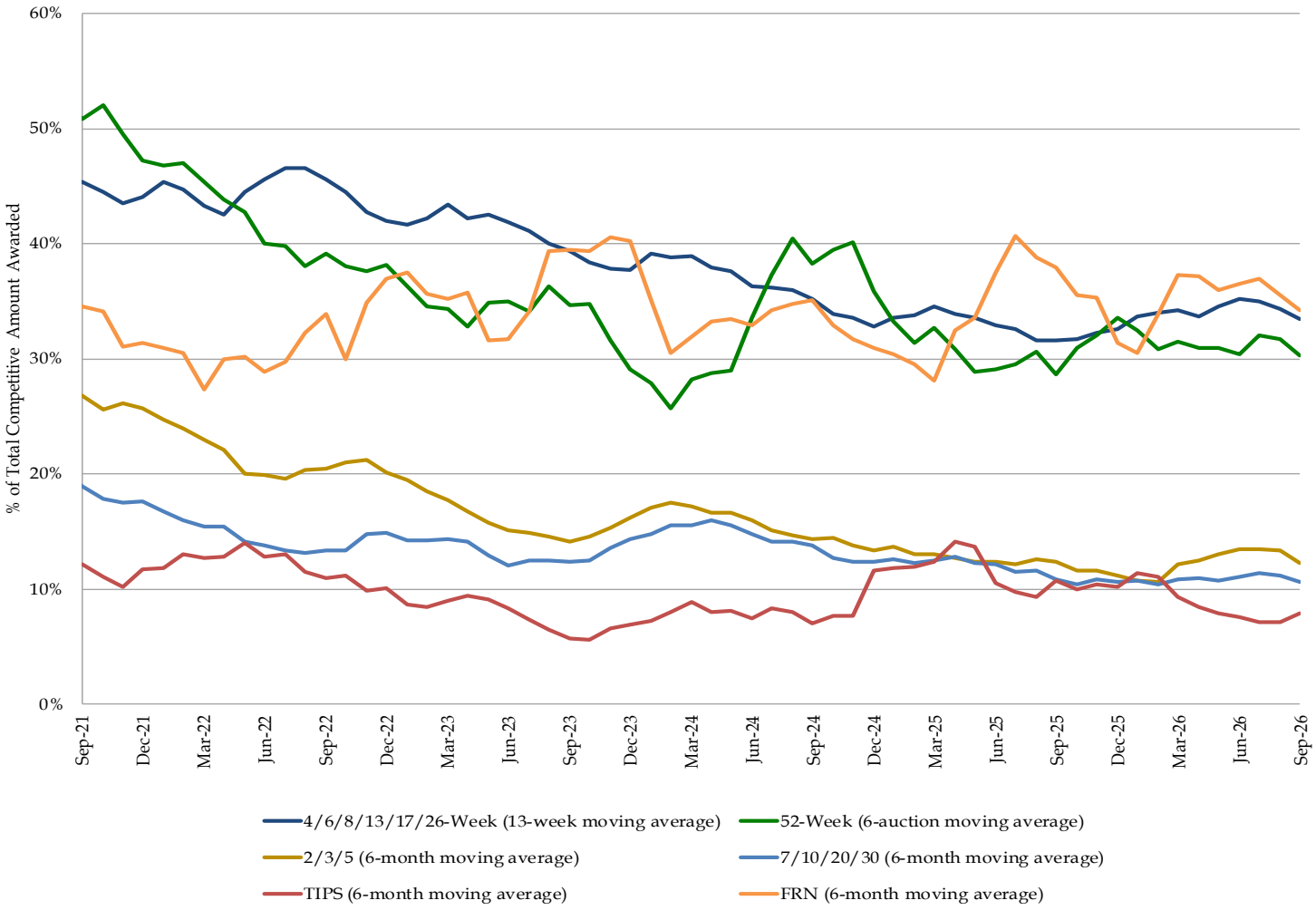
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

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



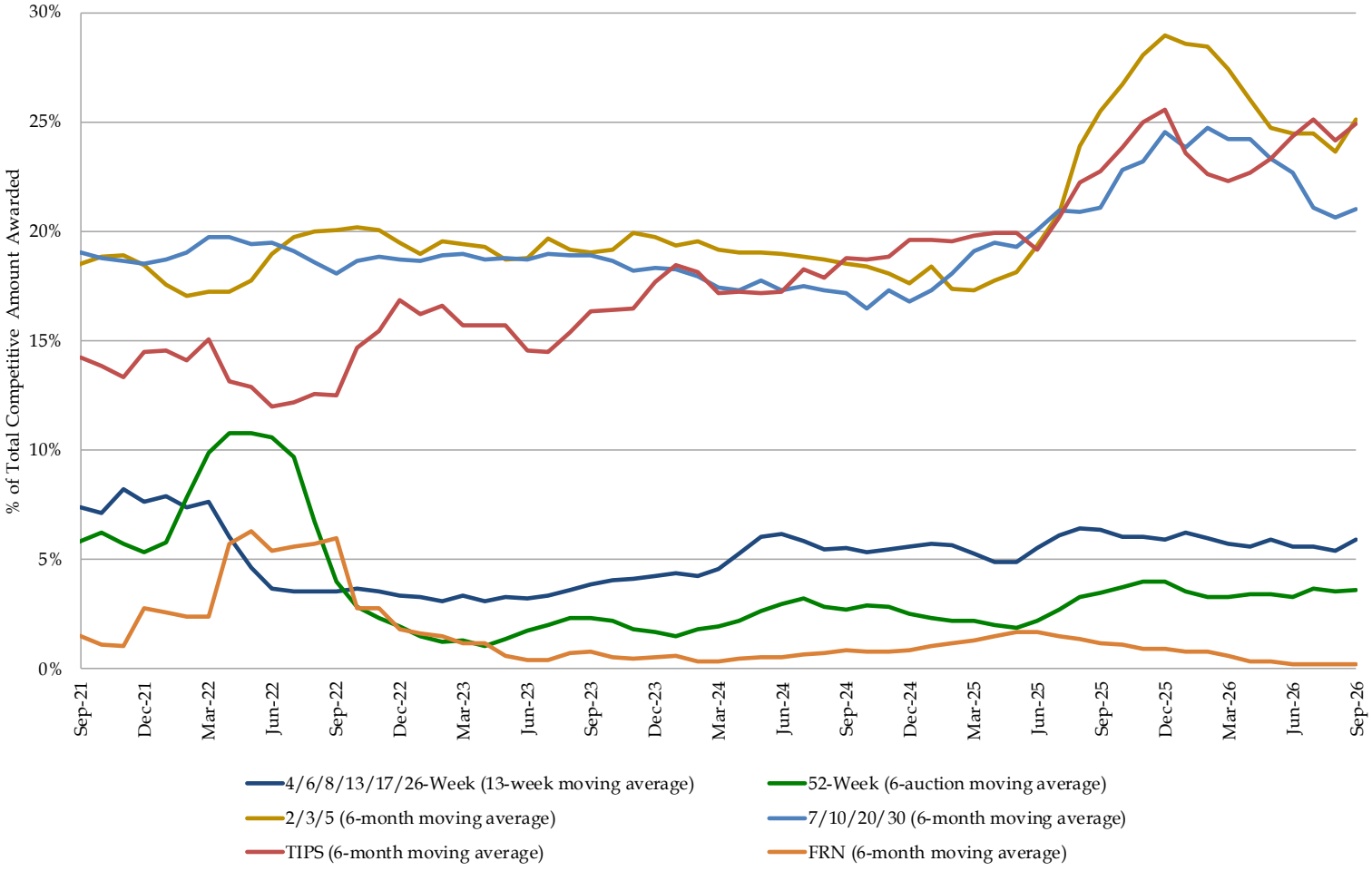
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

Primary Dealer Awards at Auction



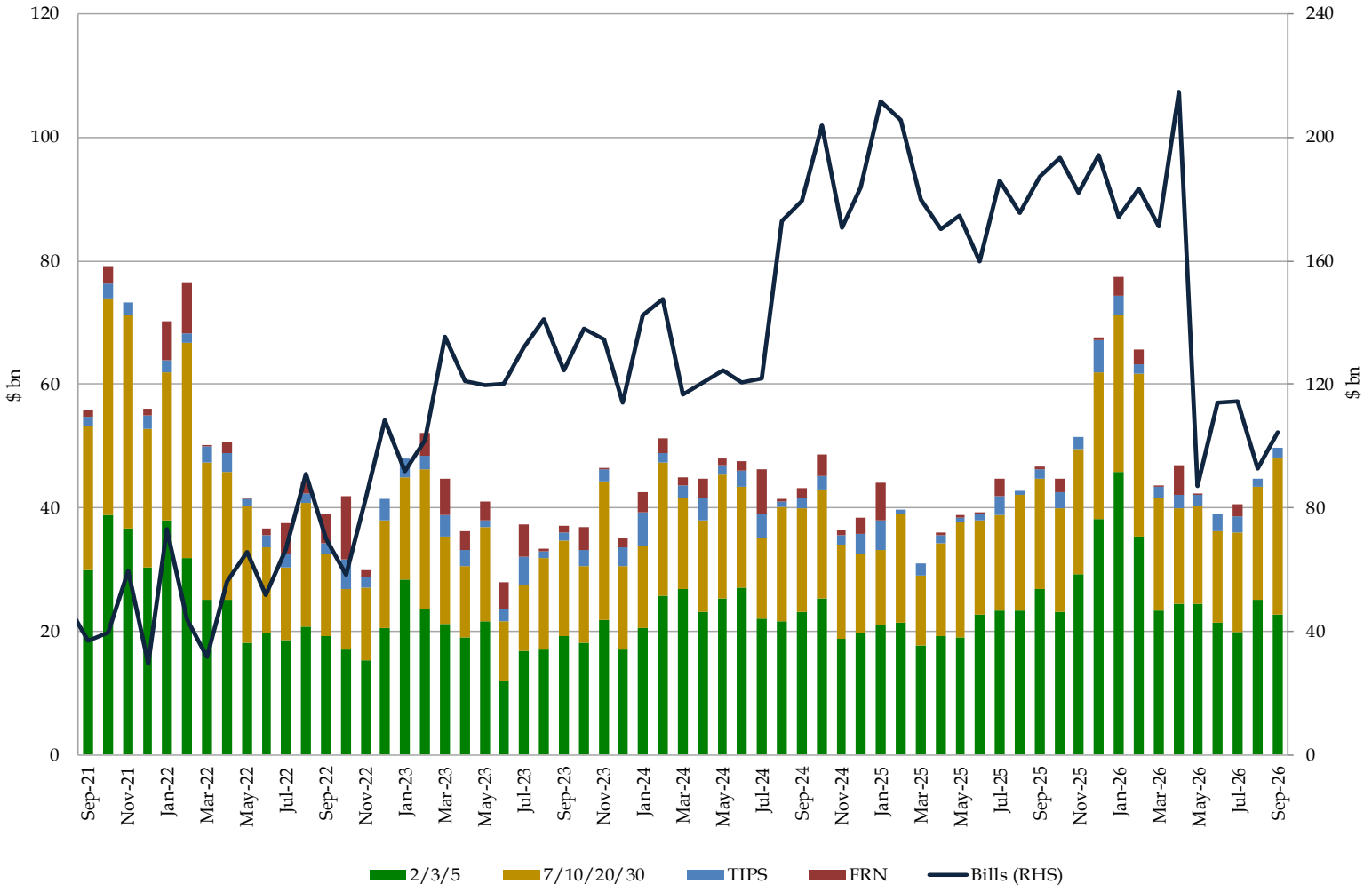
Competitive Amount Awarded excludes SOMA add-ons.

Direct Bidder Awards at Auction



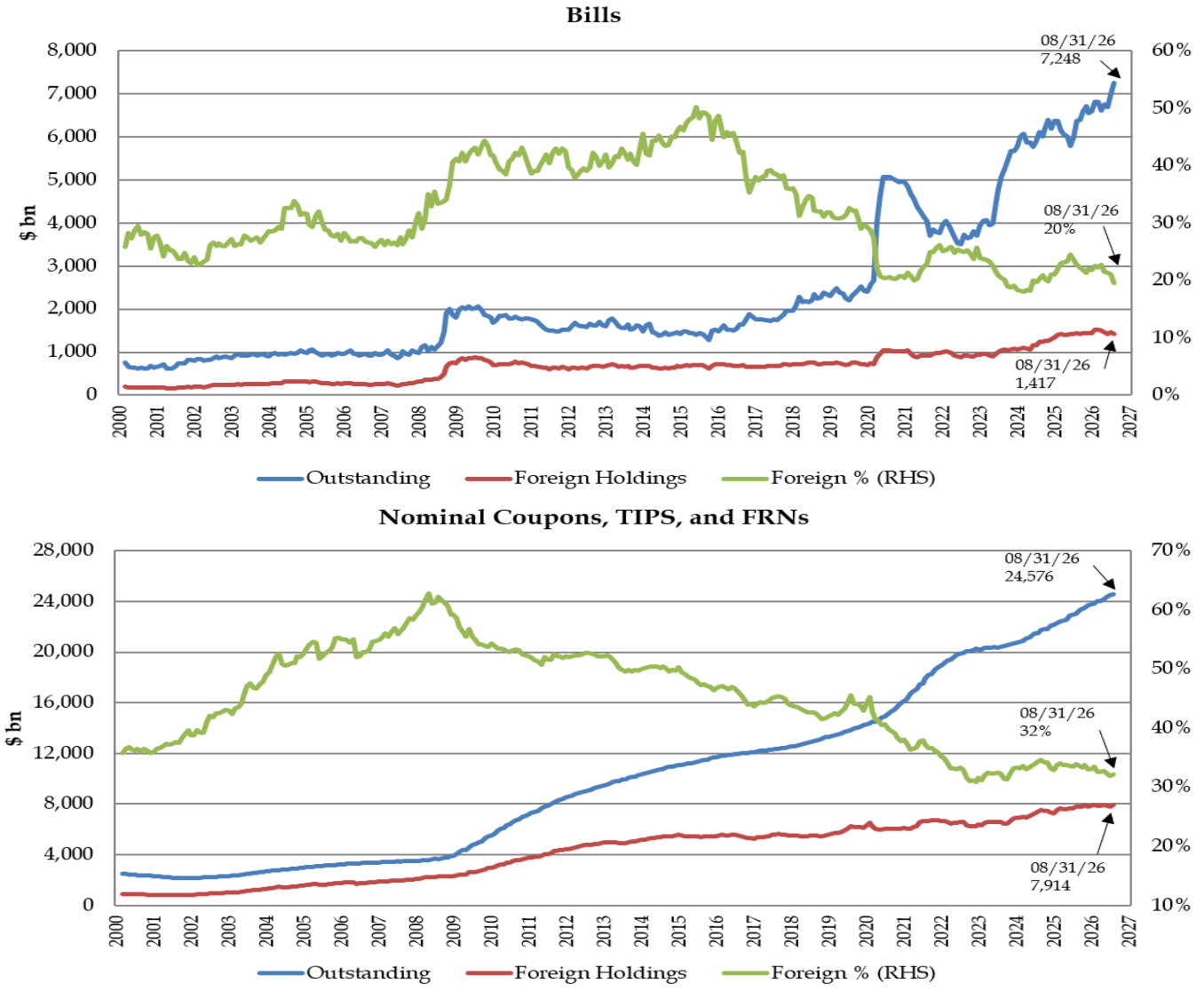
Competitive Amount Awarded excludes SOMA add-ons.

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 August 2026.
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

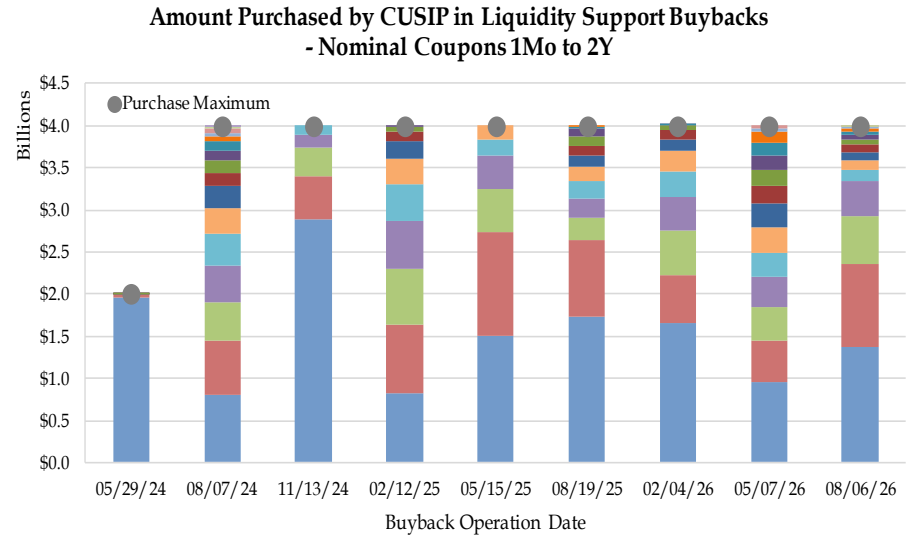
Treasury Buyback Results from 8/18/26 to 10/27/26 (Current Refunding Quarter)[1]								
Operation Type	Maturity Sector	Operation Size	Total Number of Operations	Total Par Amount Offered ($BN)	Total Purchase Maximum ($BN)	Total Par Amount Purchased ($BN)[2]	Offer to Maximum	Buyback Ratio
Formula		**A**	**B**	**C**	**D = A * B**	**E**	**F = C / D**	**G = E / D**
Cash Management	1Mo to 2Y	$12.5 BN	2	$56.3	$25.0	$25.0	2.25	1.00
Liquidity Support	1Mo to 2Y	$4 BN	-	-	-	-	-	-
	2Y to 3Y		1	$14.8	$4.0	$1.3	3.7	0.3
	3Y to 5Y		1	$10.2	$4.0	$1.9	2.5	0.5
	5Y to 7Y		1	$8.4	$4.0	$1.2	2.1	0.3
	7Y to 10Y		1	$9.7	$4.0	$2.4	2.4	0.6
	10Y to 20Y	$ 6 BN	3	$97.7	$18.0	$17.2	5.4	1.0
	20Y to 30Y[3]		4	$56.0	$20.0	$18.1	2.8	0.9
	Short TIPS	$750 MM	2	$8.7	$1.5	$1.4	5.8	0.9
	Long TIPS	$500 MM	1	$2.1	$0.5	$0.5	4.2	1.0
Total			**16**	**$263.9**	**$81.0**	**$68.9**	3.5	0.7

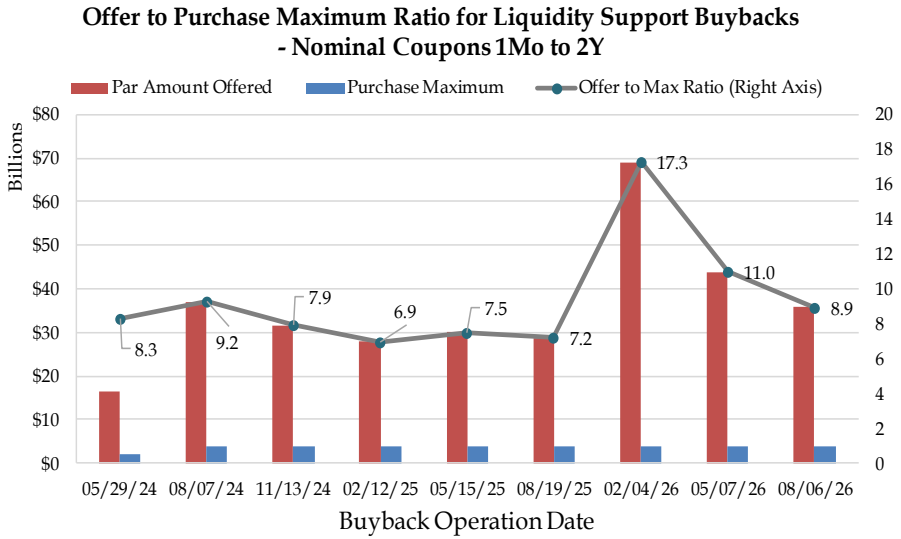
Treasury Buyback Results from 5/29/24 to 10/27/26 (All Buybacks)							
Operation Type	Maturity Sector	Total Number of Operations	Total Par Amount Offered ($BN)	Total Purchase Maximum ($BN)	Total Par Amount Purchased ($BN)	Offer to Maximum (Min | Avg |Max)	Buyback Ratio (Min | Avg |Max)
Formula			**A**	**B**	**C**	**D = A / B**	**E = C / B**
Cash Management	1Mo to 2Y	27	$729.4	$272.0	$261.9	1.4 | 2.8 | 5.2	0.3 | 1.0 | 1.0
Liquidity Support	1Mo to 2Y	9	$320.2	$34.0	$34.0	6.9 | 9.4 | 17.3	1.0 | 1.0 | 1.0
	2Y to 3Y	10	$91.8	$38.0	$20.8	1.2 | 2.5 | 4.4	0.1 | 0.6 | 1.0
	3Y to 5Y	10	$111.4	$38.0	$29.4	2.3 | 2.9 | 3.7	0.4 | 0.8 | 1.0
	5Y to 7Y	10	$64.4	$38.0	$16.1	0.9 | 1.8 | 3.2	0.1 | 0.4 | 0.9
	7Y to 10Y	10	$53.7	$38.0	$6.1	0.8 | 1.4 | 2.6	0.0 | 0.2 | 0.6
	10Y to 20Y	28	$579.3	$68.0	$67.2	1.7 | 9.2 | 18.0	0.9 | 1.0 | 1.0
	20Y to 30Y	29	$565.3	$70.0	$65.1	1.7 | 9.3 | 18.2	0.1 | 0.9 | 1.0
	Short TIPS	19	$65.3	$12.0	$10.7	1.7 | 5.4 | 8.7	0.3 | 0.9 | 1.0
	Long TIPS	14	$18.5	$7.0	$4.1	1.5 | 2.6 | 4.2	0.1 | 0.6 | 1.0
Total		**166**	**$2,599.2**	**$615.0**	**$515.3**		

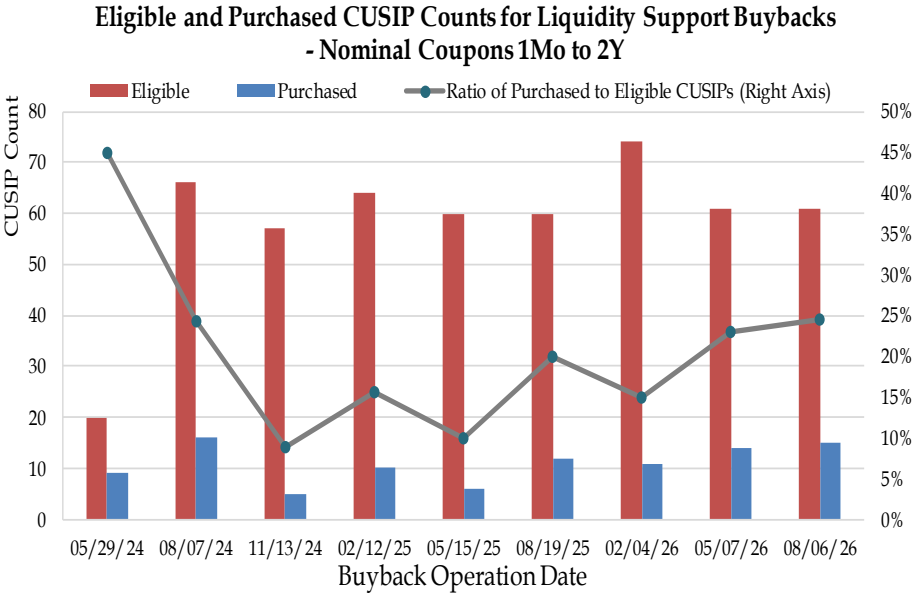
- Treasury has bought back about $43.9 BN of securities for liquidity support purposes and $25.0 BN of securities for cash management purposes in the current refunding quarter thus far, with two more liquidity support operations scheduled in early November.
- Through October 2026 Treasury has bought back $515.3BN in total par amount, including $253.4BN for liquidity support purposes and $261.9BN for cash management purposes.

(1) Data as of 10/27/26. Liquidity support buybacks for 10Y to 20Y and 1Mo to 2Y Nominal Coupons are scheduled for 11/4/26 and 11/5/26, respectively.
(2) Original par amount.
(3) The 20Y to 30Y Nominal Coupons buyback operation on 8/18/26 had a purchase maximum of $2 billion.

Liquidity Support Buybacks – Nominal Coupons 1Mo to 2Y

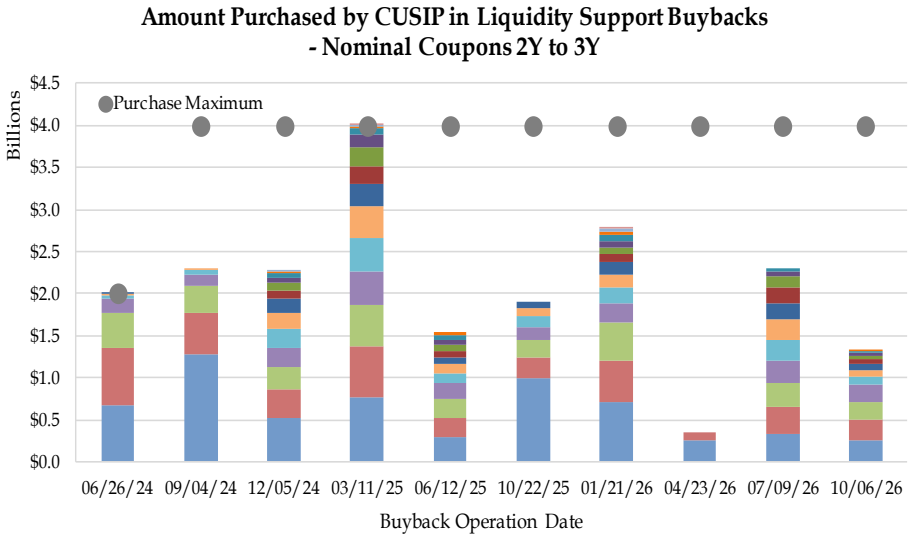


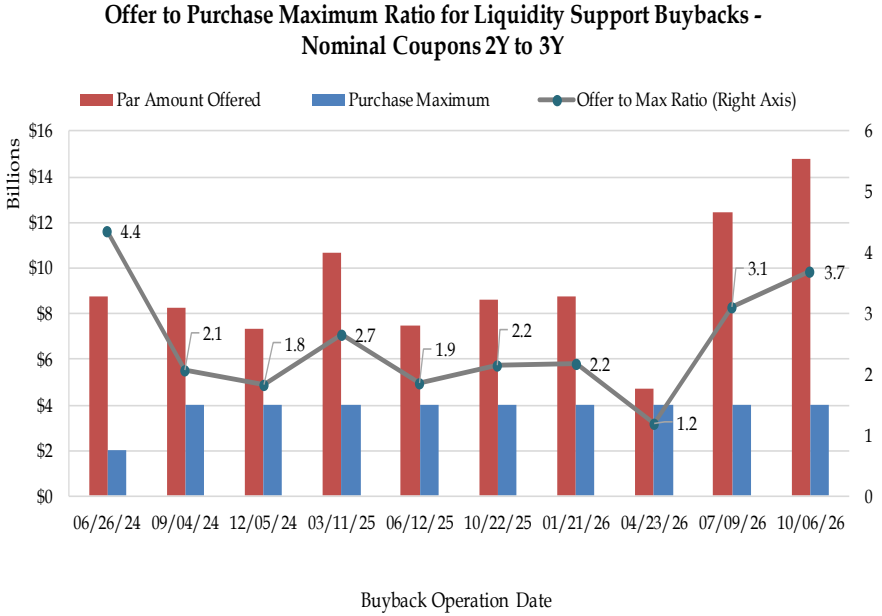


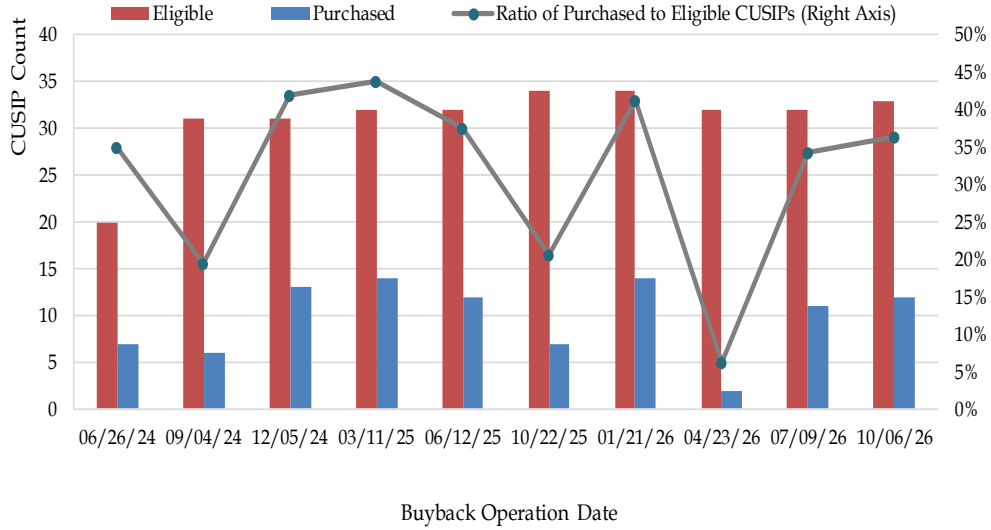


- Treasury has consistently bought back the maximum par amount in liquidity support buybacks in the 1Mo to 2Y maturity sector (top left).
- Buyback operations in this sector have been consistently oversubscribed with high offer to purchase maximum ratios (top right).

Liquidity Support Buybacks – Nominal Coupons 2Y to 3Y



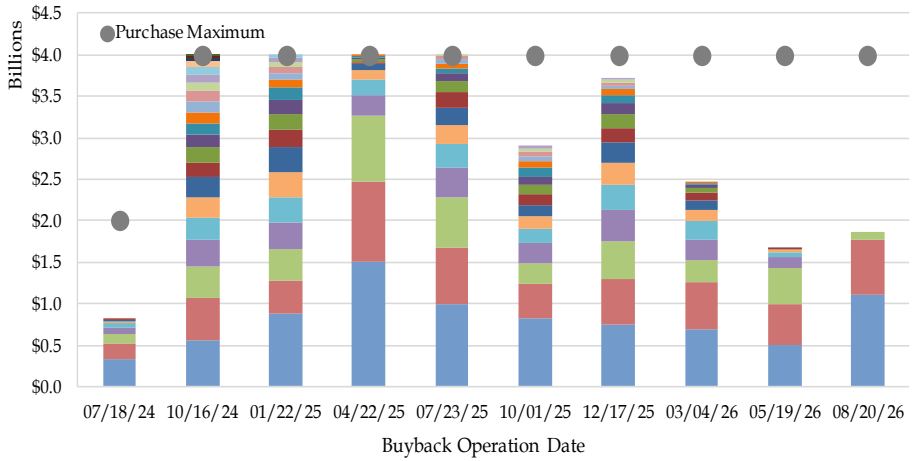




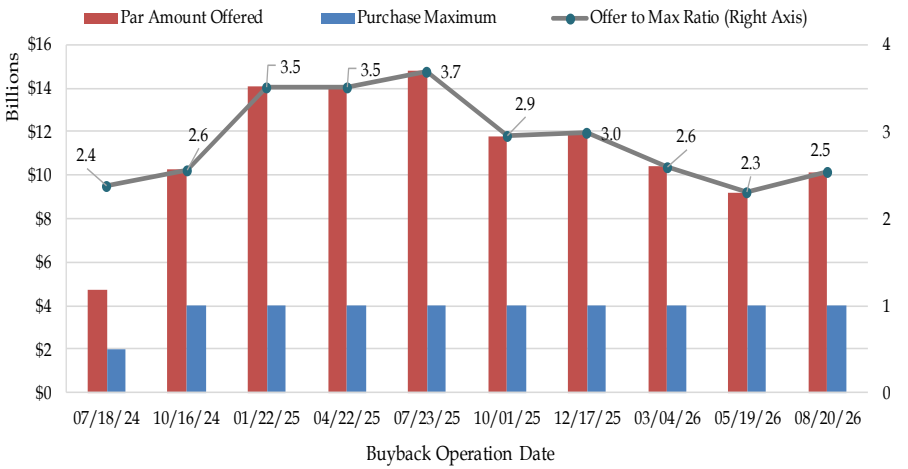
- Treasury has consistently bought back less than the maximum par amount in this maturity sector except for the operation on 3/11/25 (top left).

Liquidity Support Buybacks – Nominal Coupons 3Y to 5Y

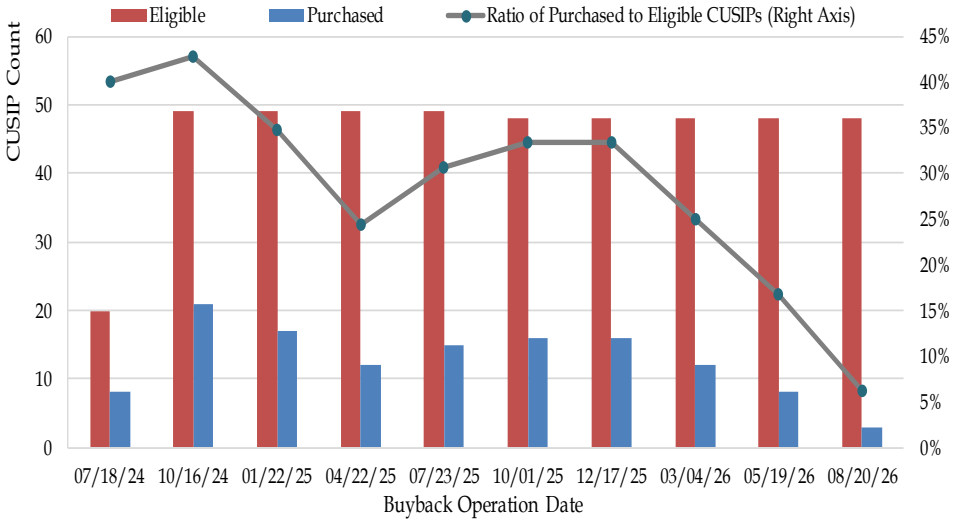
Amount Purchased by CUSIP in Liquidity Support Buybacks - Nominal Coupons 3Y to 5Y



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

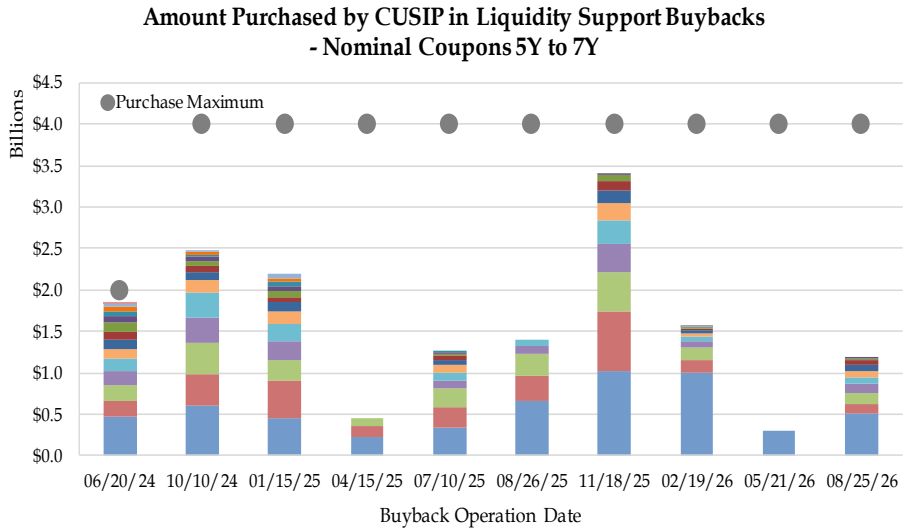


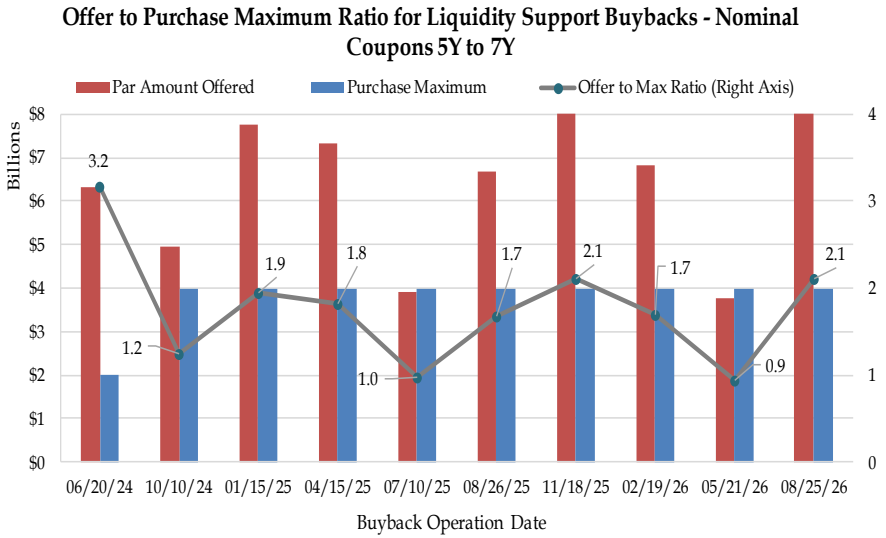
Eligible and Purchased CUSIP Counts for Liquidity Support Buybacks - Nominal Coupons 3Y to 5Y

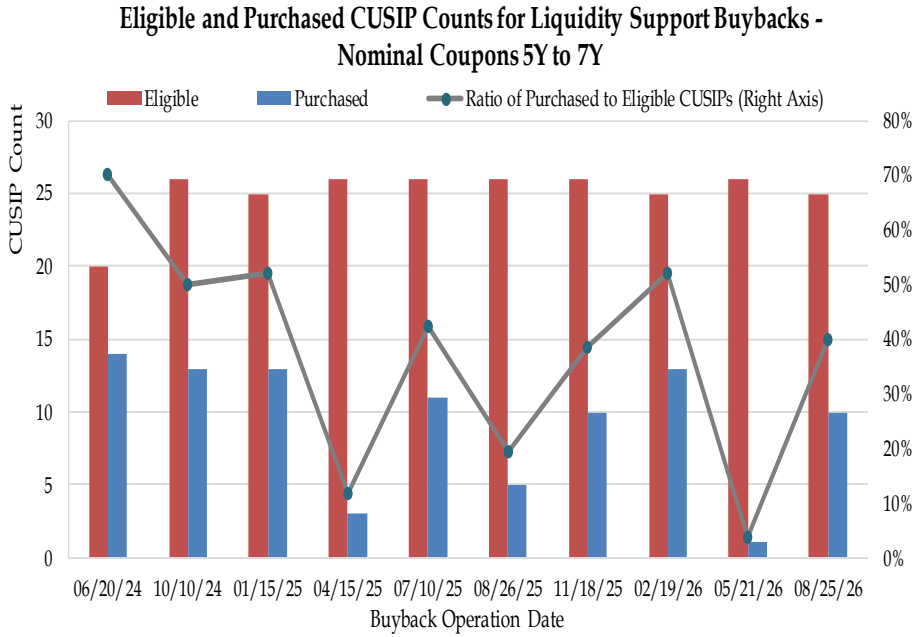


- This quarter, Treasury continued to buy back less than the $4 billion maximum par amount in the 3Y to 5Y sector.

Liquidity Support Buybacks – Nominal Coupons 5Y to 7Y

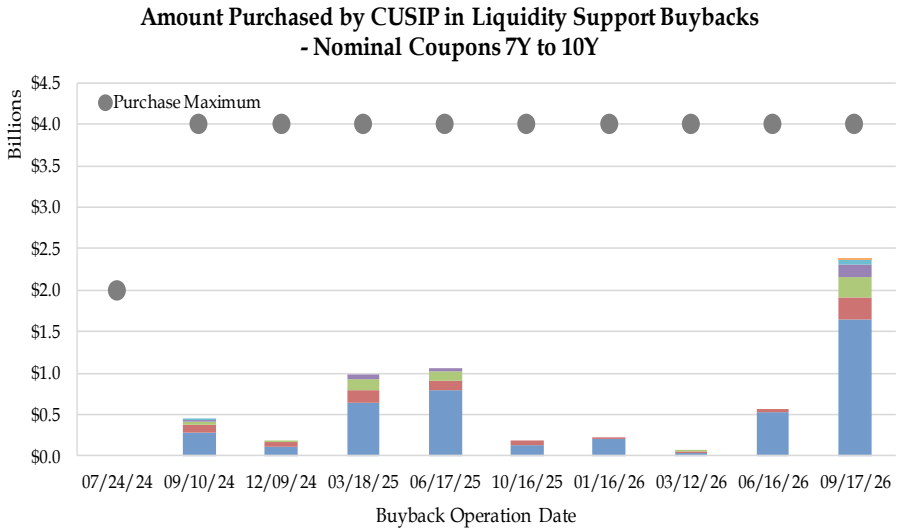


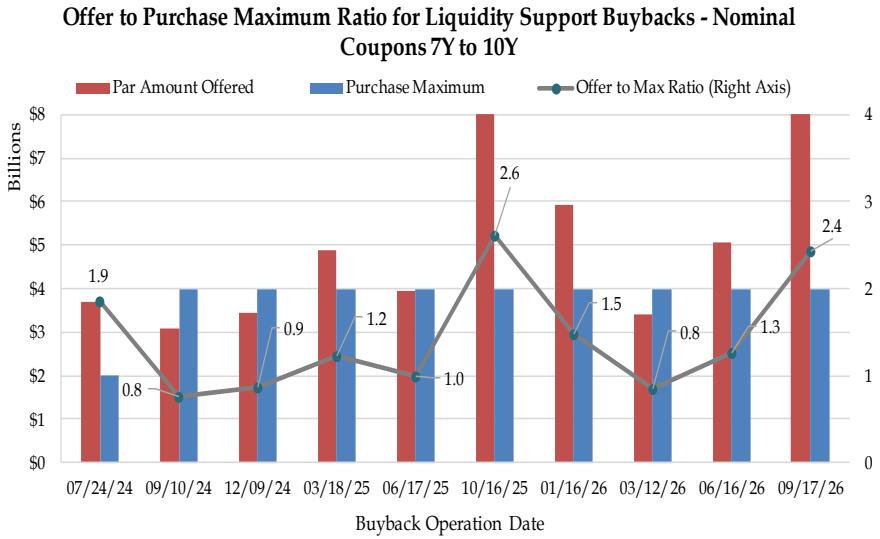


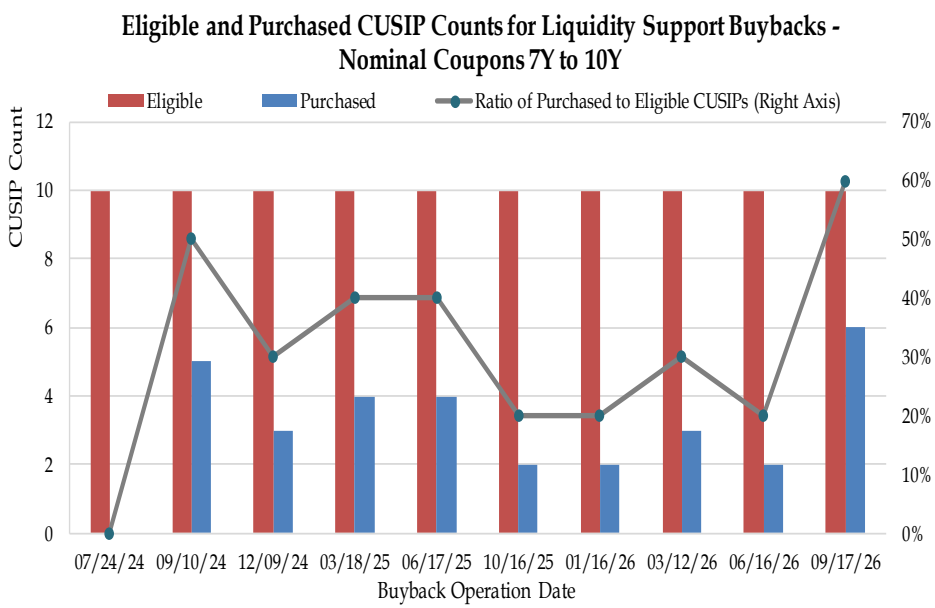


- Treasury has never purchased the maximum par amount in this sector.

Liquidity Support Buybacks – Nominal Coupons 7Y to 10Y

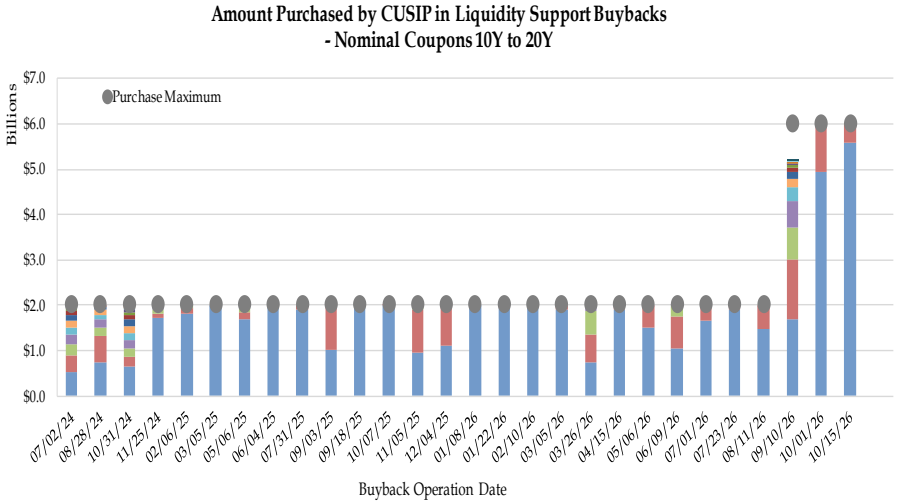


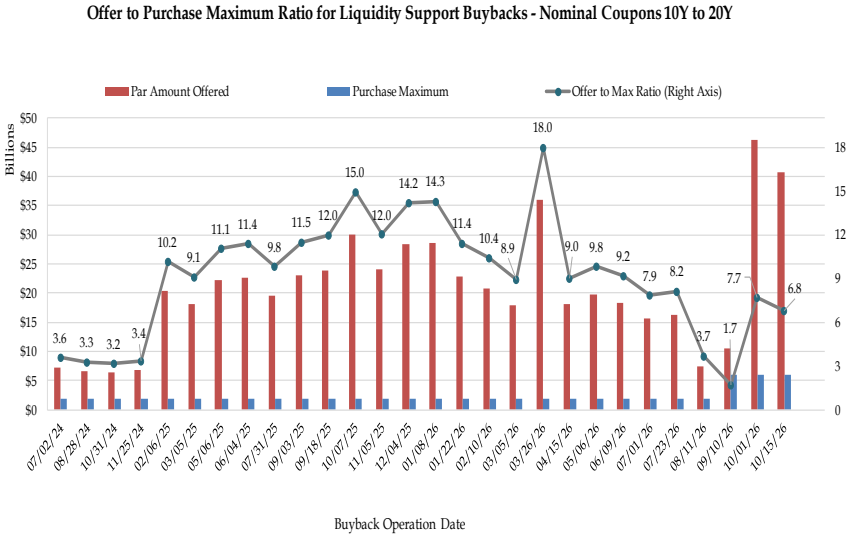


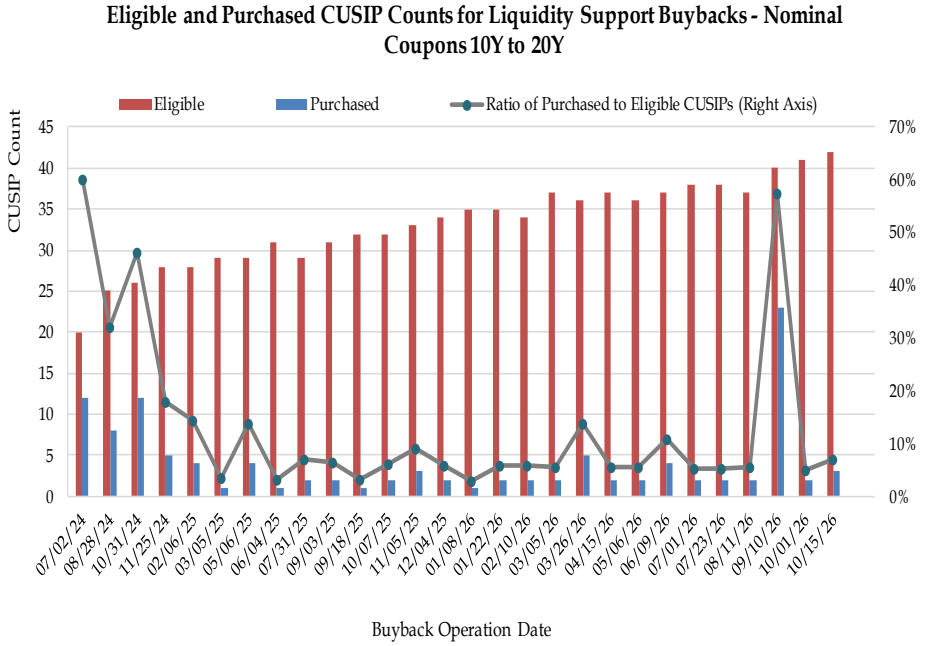


- Treasury continues to buy back significantly less than the maximum purchase amount in the 7Y to 10Y sector.

Liquidity Support Buybacks – Nominal Coupons 10Y to 20Y

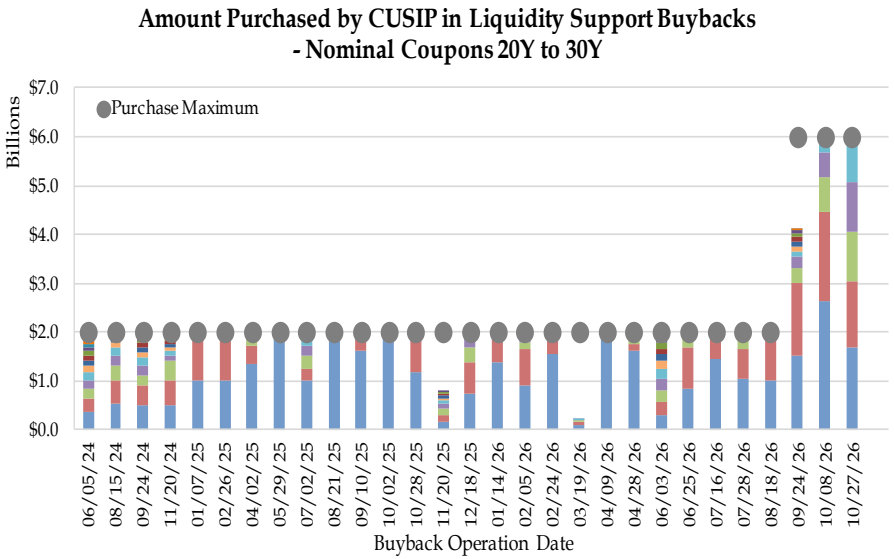


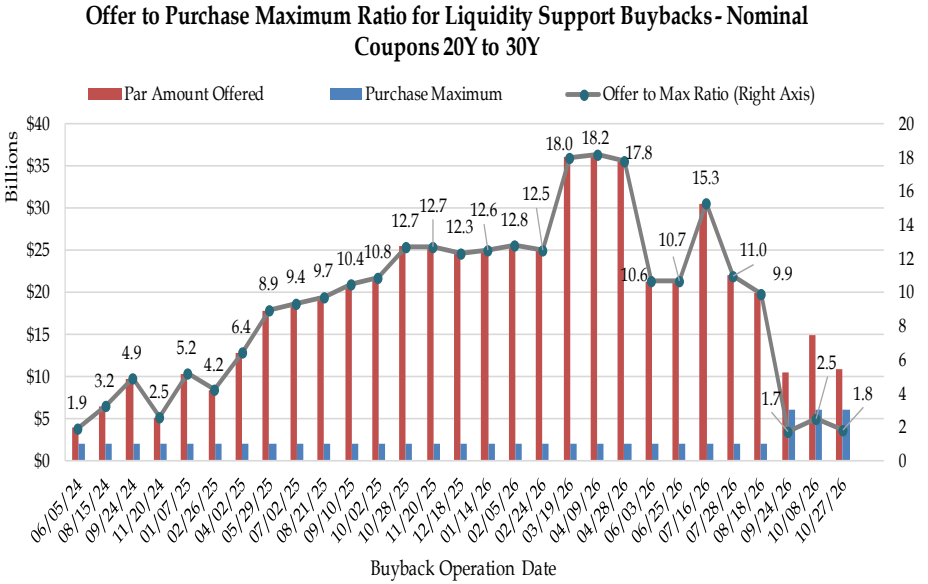


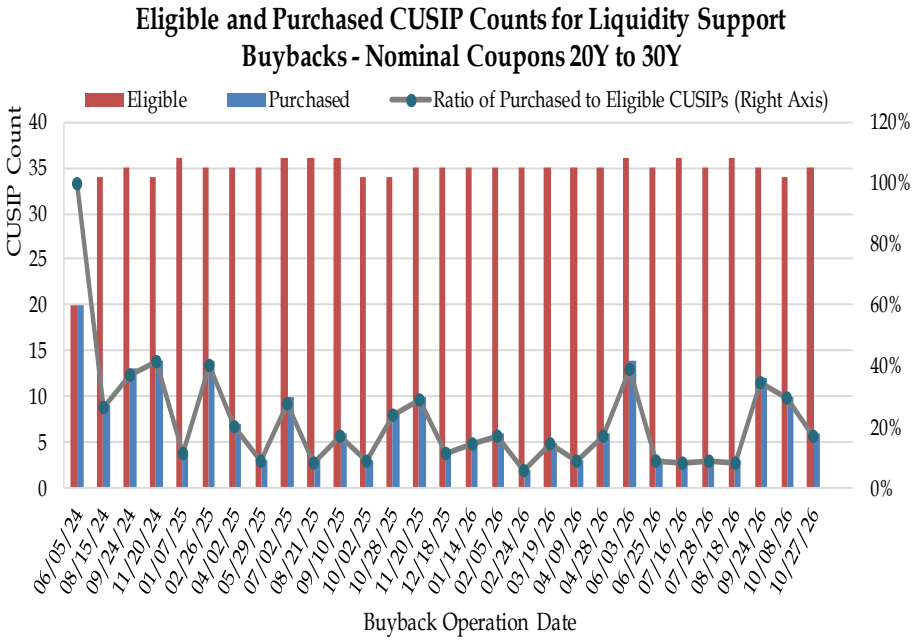


- The maximum purchase amount in this sector was increased to $6 billion in September 2026.

Liquidity Support Buybacks – Nominal Coupons 20Y to 30Y

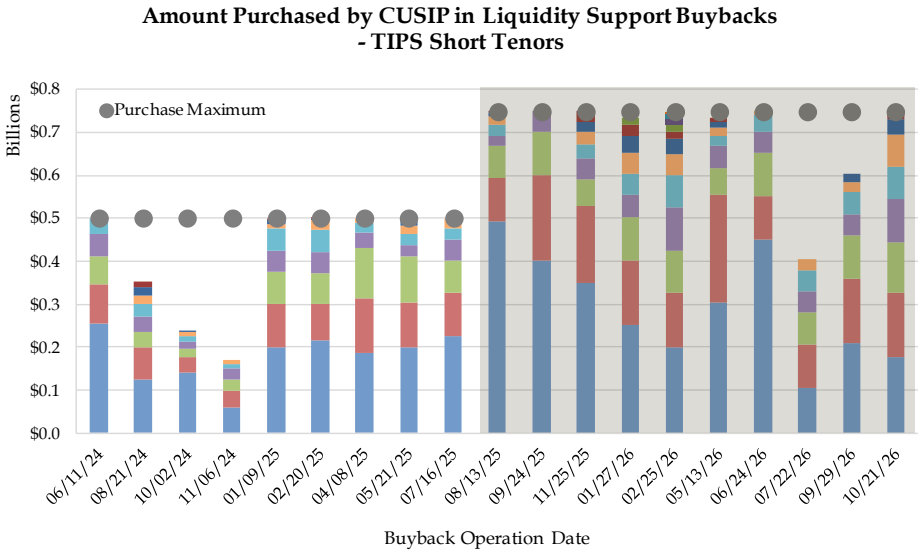


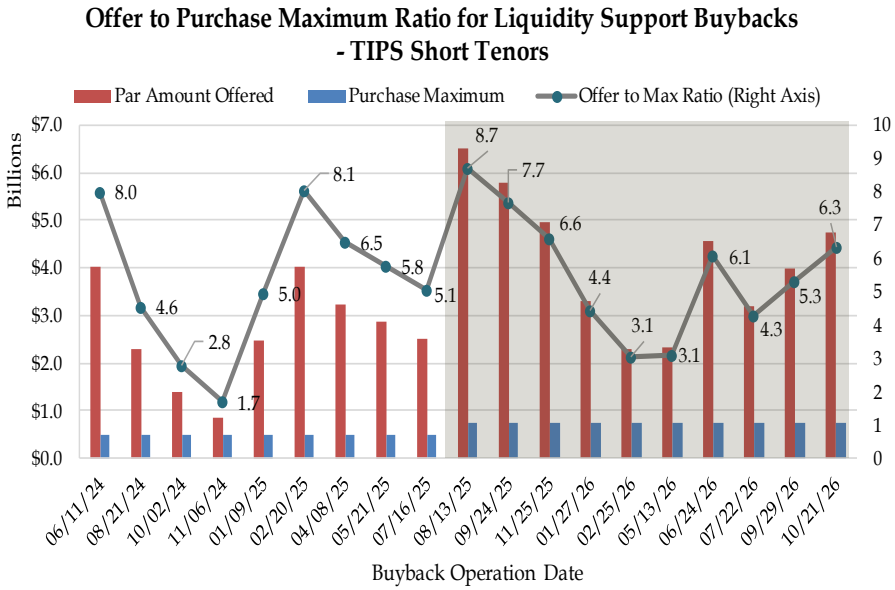


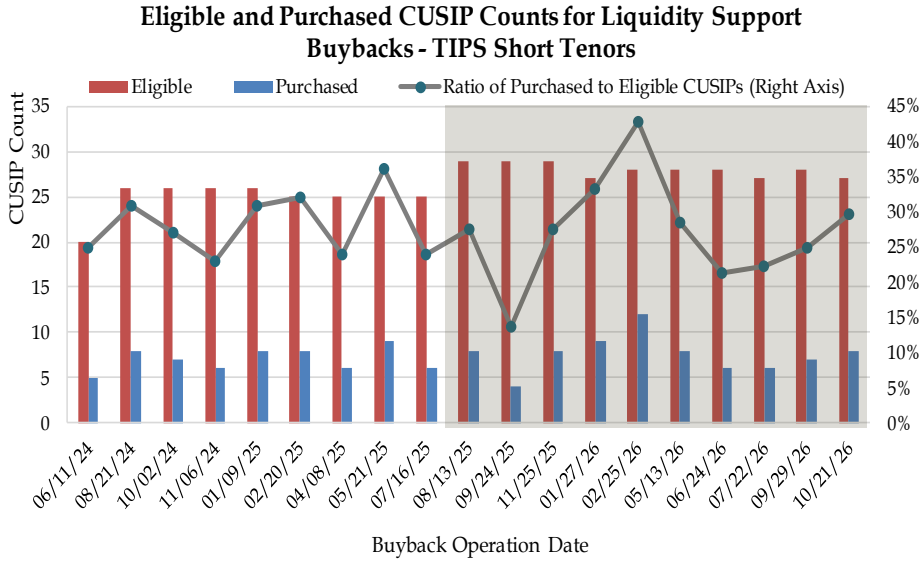


- The maximum purchase amount in this sector was increased to $6 billion in September 2026.

Liquidity Support Buybacks – TIPS Short Tenors

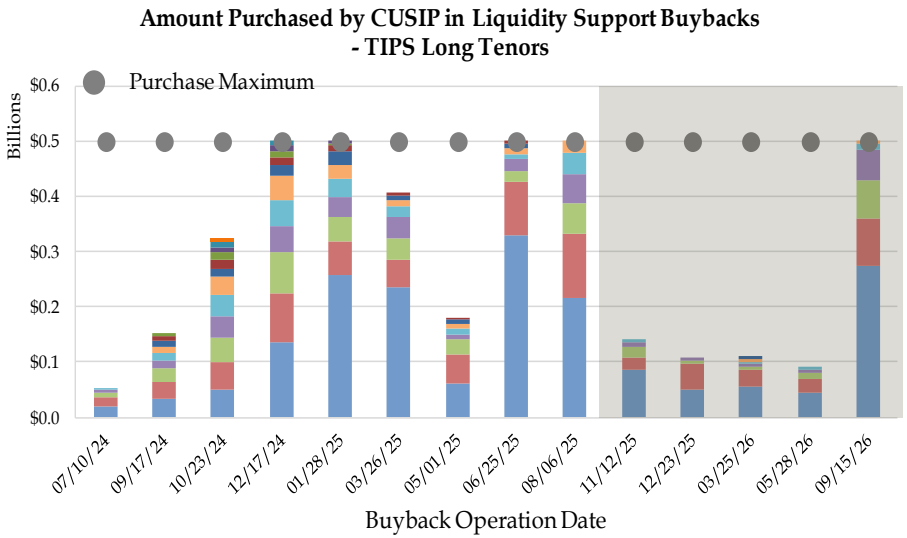


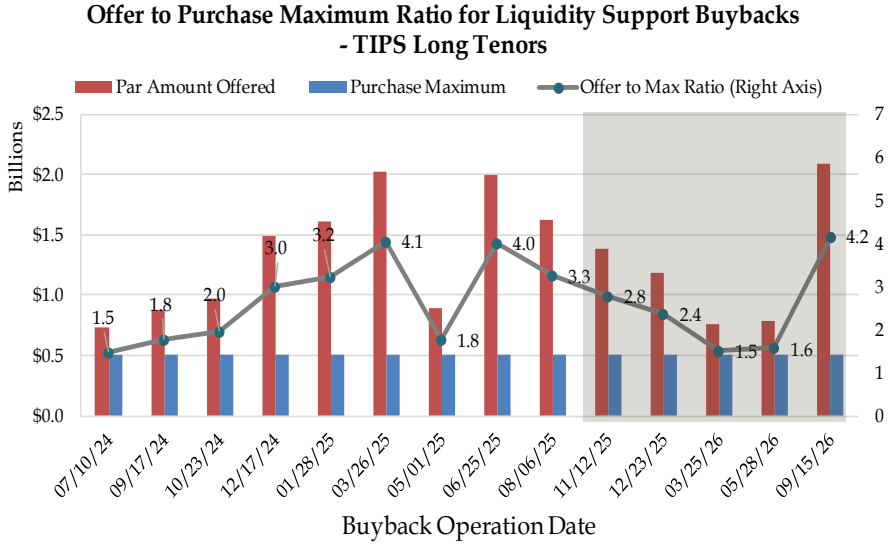


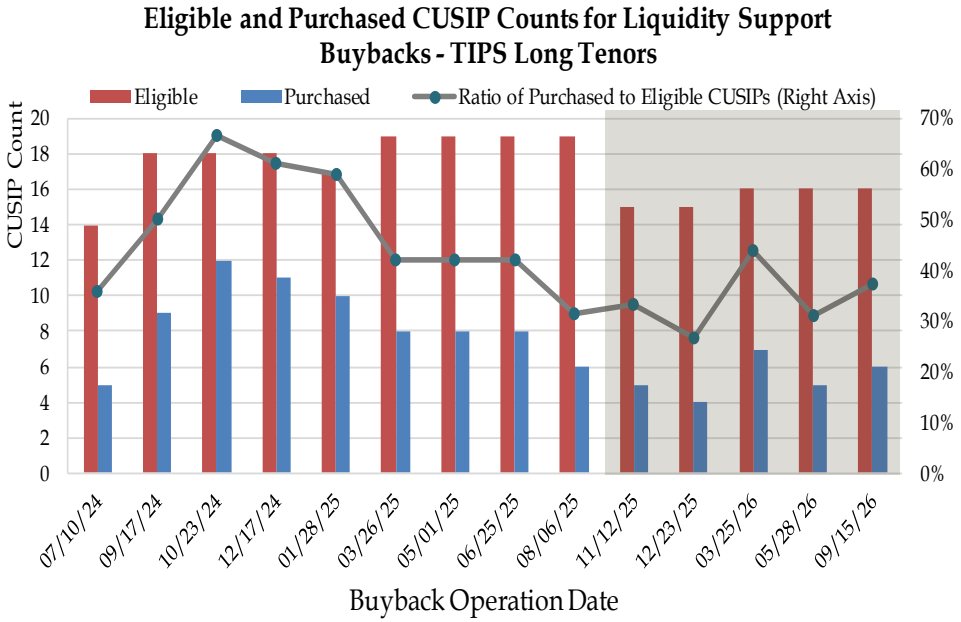


- At the August 2025 refunding, Treasury announced that it would adjust the TIPS buyback buckets by introducing a 1Y to 10Y TIPS buyback bucket to replace the existing 1Y to 7.5Y TIPS bucket. Treasury also increased the max operation size for the short-end TIPS bucket from $500 to $750 million. The shaded area represents the operations in the new 1Y to 10Y TIPS bucket.

Liquidity Support Buybacks –TIPS Long Tenors



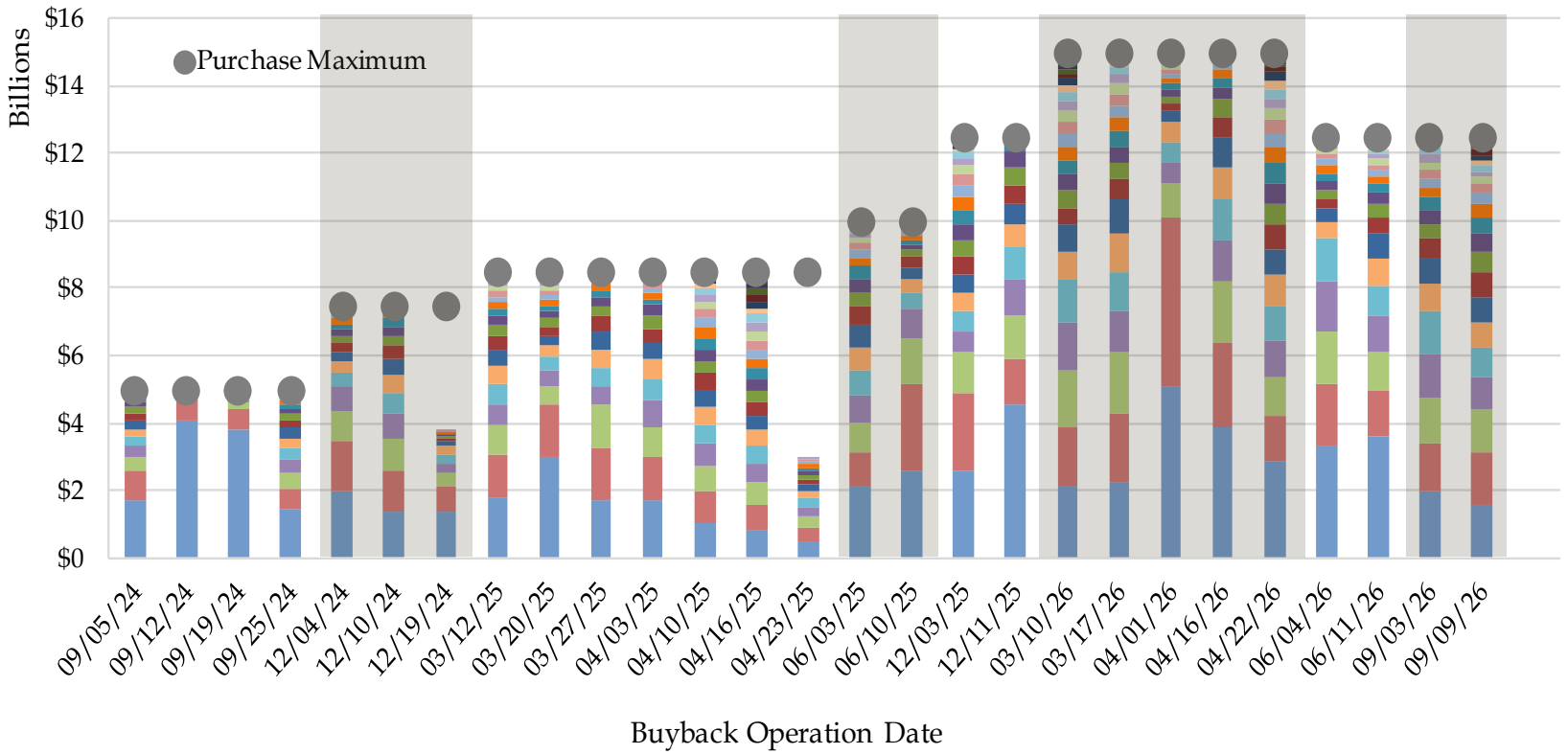




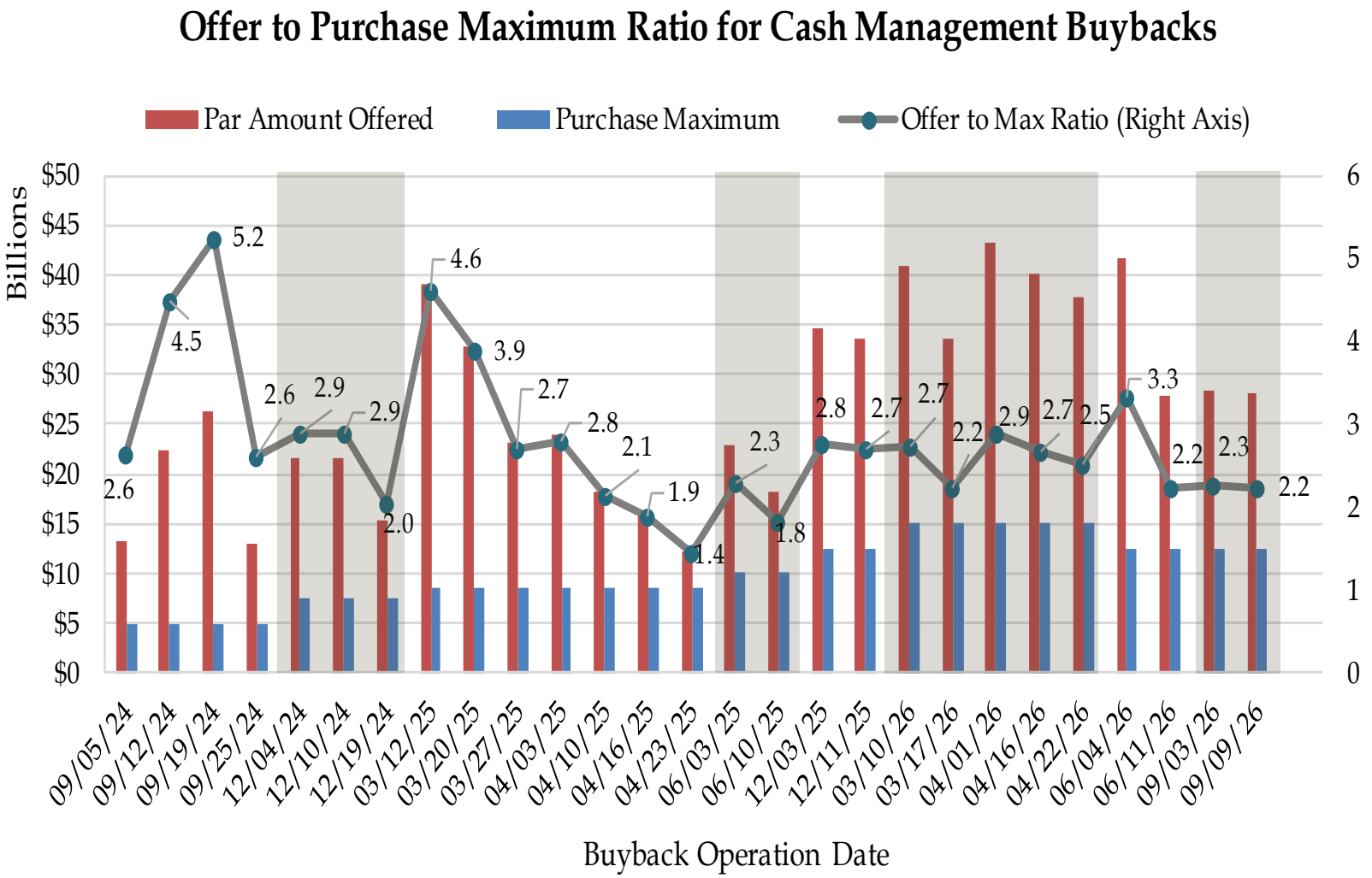
- At the August 2025 refunding, Treasury announced that it would adjust the TIPS buyback buckets by introducing a 10Y to 30Y TIPS buyback bucket to replace the existing 7.5Y to 30Y TIPS bucket. Treasury also reduced the frequency of long-end TIPS buybacks while maintaining the $500 million per operation maximum. The shaded area represents the operations in the new 10Y to 30Y TIPS bucket.

- This quarter, Treasury bought back the max purchase amount in this sector.

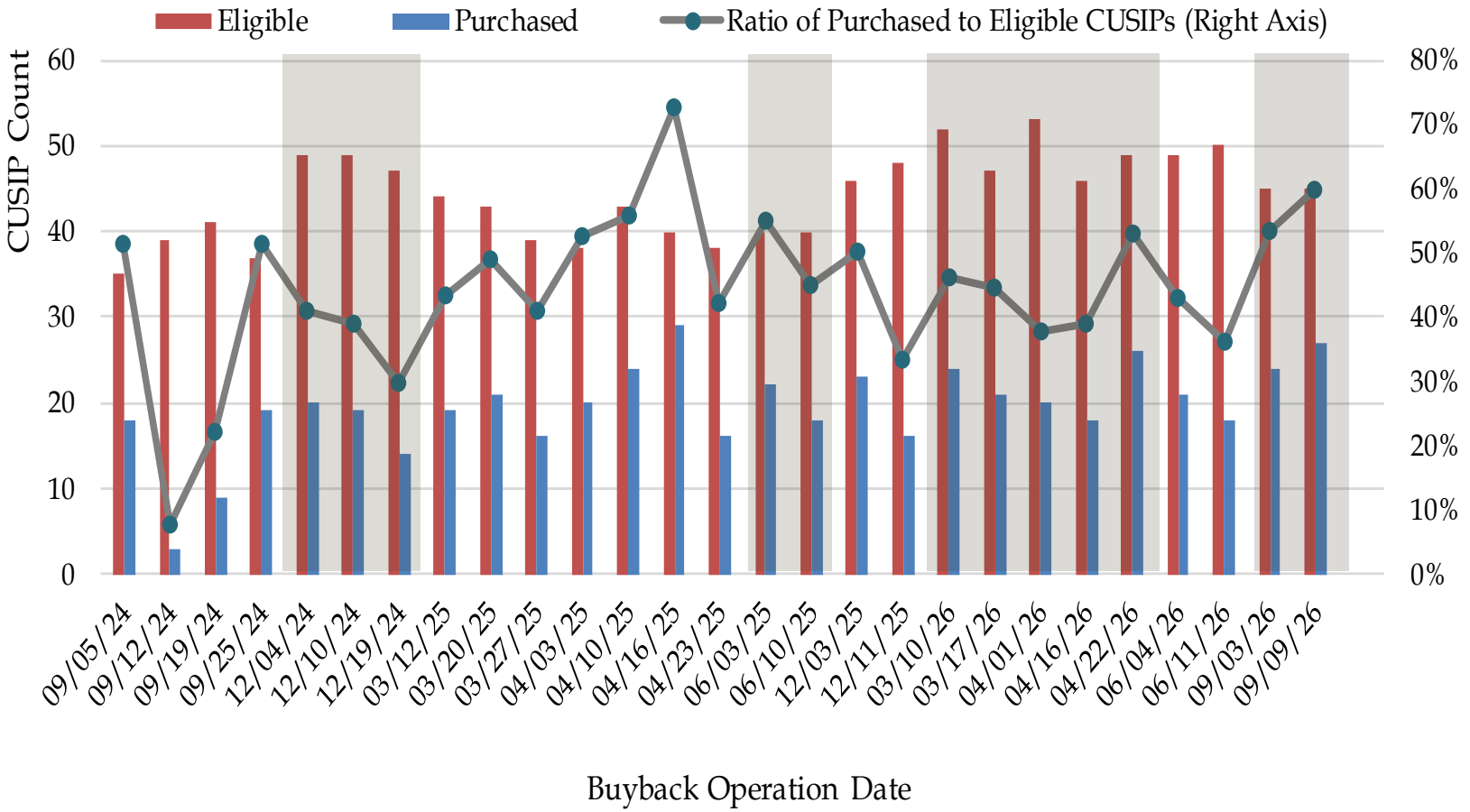
Amount Purchased by CUSIP in Cash Management Buybacks

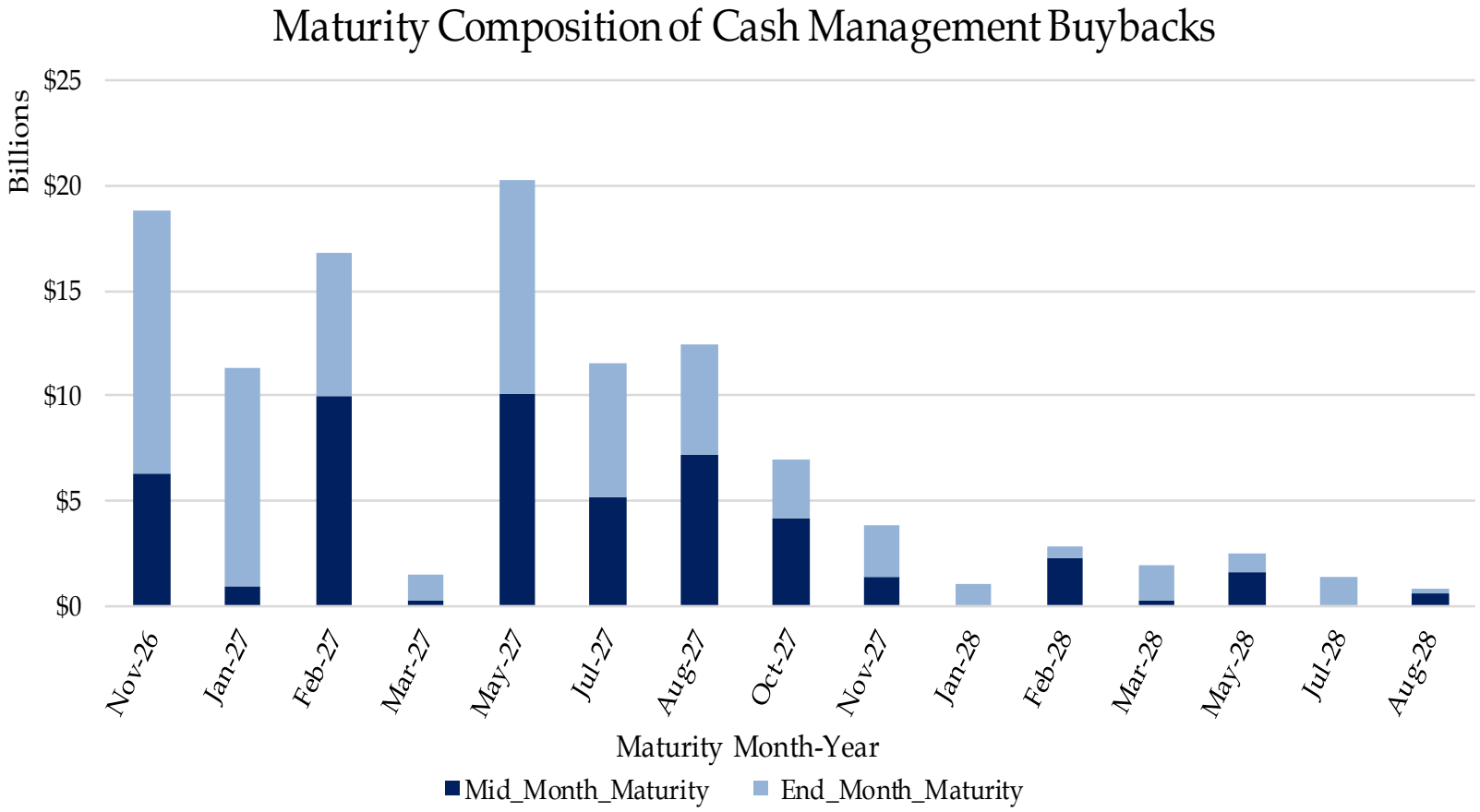


- All cash management buybacks occur in the 1Mo to 2Y maturity sector.
- In this quarter, Treasury conducted two cash management buybacks with a purchase limit at $12.5 billion per operation.


Offer to Purchase Maximum Ratio for Cash Management Buybacks
Par Amount Offered
Purchase Maximum
Offer to Max Ratio (Right Axis)
Billions
$50
$45
$40
$35
$30
$25
$20
$15
$10
$5
$0
6
5
4
3
2
1
0
2.6
4.5
5.2
2.6
2.9
2.9
2.0
4.6
3.9
2.7
2.8
2.1
1.9
1.4
2.3
1.8
2.8
2.7
2.7
2.2
2.9
2.7
2.5
3.3
2.2
2.3
2.2
09/05/24
09/12/24
09/19/24
09/25/24
12/04/24
12/10/24
12/19/24
03/12/25
03/20/25
03/27/25
04/03/25
04/10/25
04/16/25
04/23/25
06/03/25
06/10/25
12/03/25
12/11/25
03/10/26
03/17/26
04/01/26
04/16/26
04/22/26
06/04/26
06/11/26
09/03/26
09/09/26
Buyback Operation Date

Eligible and Purchased CUSIP Counts for Cash Management Buybacks





The chart above represents cumulative amounts purchased in all previous cash management buyback operations, grouped by the maturity date of the Treasury security that was purchased (for yet-to-mature securities).

VIII. Appendix

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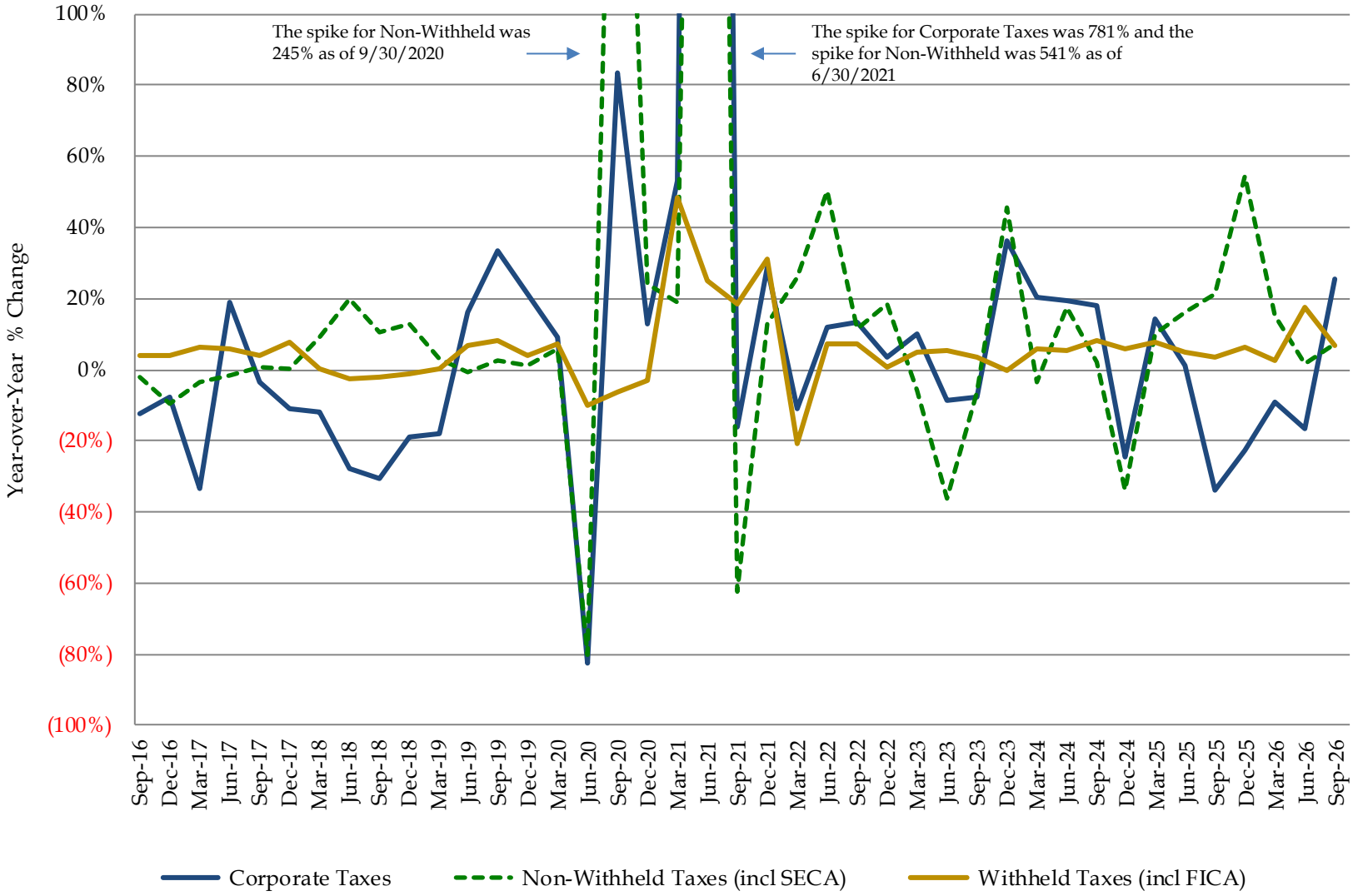
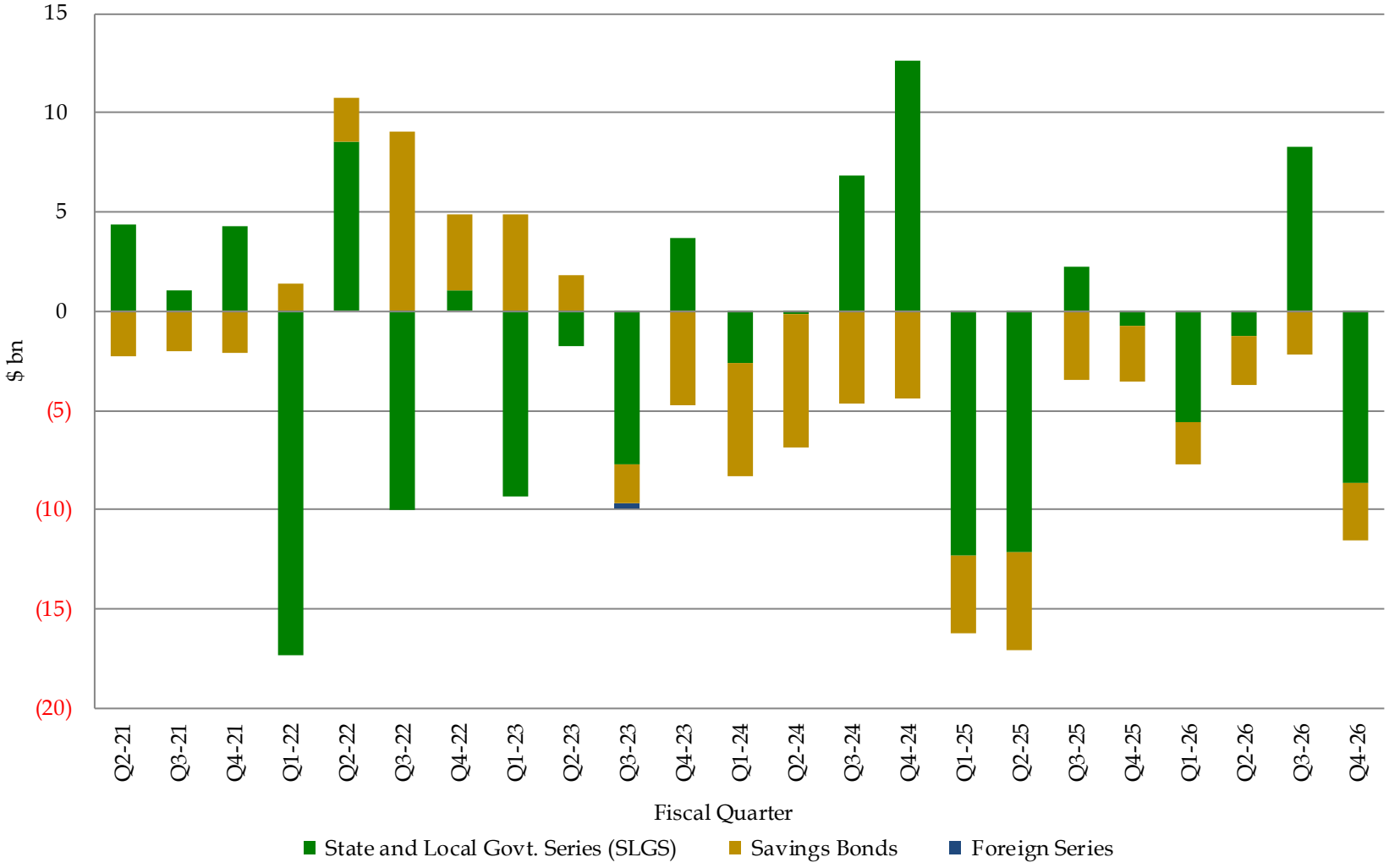
I. Projected Privately-Held Net Marketable Borrowing Table p. 69
J. Auction Statistics Tables p. 70-73

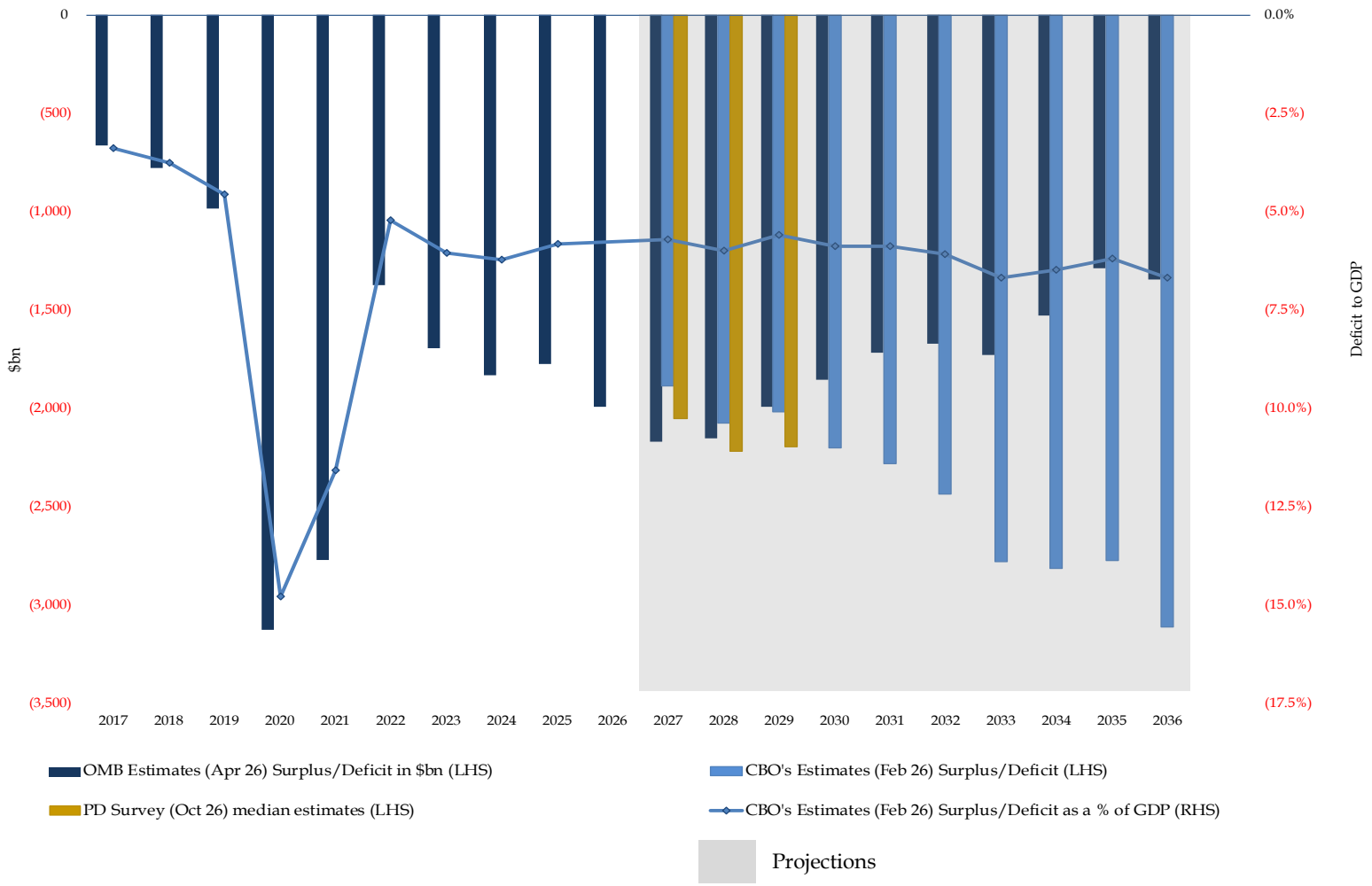
Quarterly Tax Receipts



Treasury Net Nonmarketable Borrowing



Budget Surplus/Deficit



- OMB's deficit projections are derived from Table 8-1 and Table 15-1 of "Budget of the U.S. Government Analytical Perspectives Fiscal Year 2027," April 2026. OMB's deficit as a percentage of GDP estimates are not available for this refunding.
- CBO's deficit projections are from "The Budget and Economic Outlook: 2026 to 2036," February 2026.

Sources of Privately-Held Financing in FY26 Q4

July - September 2026	
Net Bill Issuance	427
Net Coupon Issuance	375
Subtotal: Net Marketable Borrowing	802
Buyback	60
Ending Cash Balance	984
Beginning Cash Balance	919
Subtotal: Change in Cash Balance	65
Net Implied Funding for FY26 Q4*	677

	July - September 2026 Bill Issuance			Fiscal Year-to-Date Bill Issuance		
Security	Gross	Maturing	Net	Gross	Maturing	Net
4-Week	1,305	1,230	75	4,939	4,979	(40)
6-Week	1,145	1,085	60	4,330	4,340	(10)
8-Week	1,210	1,135	75	4,570	4,519	51
13-Week	1,196	1,157	39	4,613	4,468	145
17-Week	936	821	115	3,625	3,349	276
26-Week	1,027	981	46	4,024	3,774	250
52-Week	156	138	18	656	605	51
CMBs	0	0	0	25	25	0
Bill Subtotal	6,975	6,547	427	26,782	26,061	721

	July - September 2026 Coupon Issuance			Fiscal Year-to-Date Coupon Issuance		
Security	Gross	Maturing	Net	Gross	Maturing	Net
2-Year FRN	86	86	0	344	334	10
2-Year	207	192	15	828	713	115
3-Year	174	118	56	696	466	230
5-Year	210	160	50	840	636	204
7-Year	132	60	72	528	261	267
10-Year	120	54	66	480	208	272
20-Year	42	0	42	168	0	168
30-Year	69	4	65	276	10	266
5-Year TIPS	0	0	0	100	71	29
10-Year TIPS	40	39	1	118	77	41
**20-Year TIPS	0	0	0	0	18	(18)
30-Year TIPS	8	0	8	17	0	17
Coupon Subtotal	1,088	713	375	4,395	2,794	1,601
Buyback		60			262	

Total	8,063	7,320	742	31,177	29,118	2,059

* By adjusting for the change in cash balance and buybacks, 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

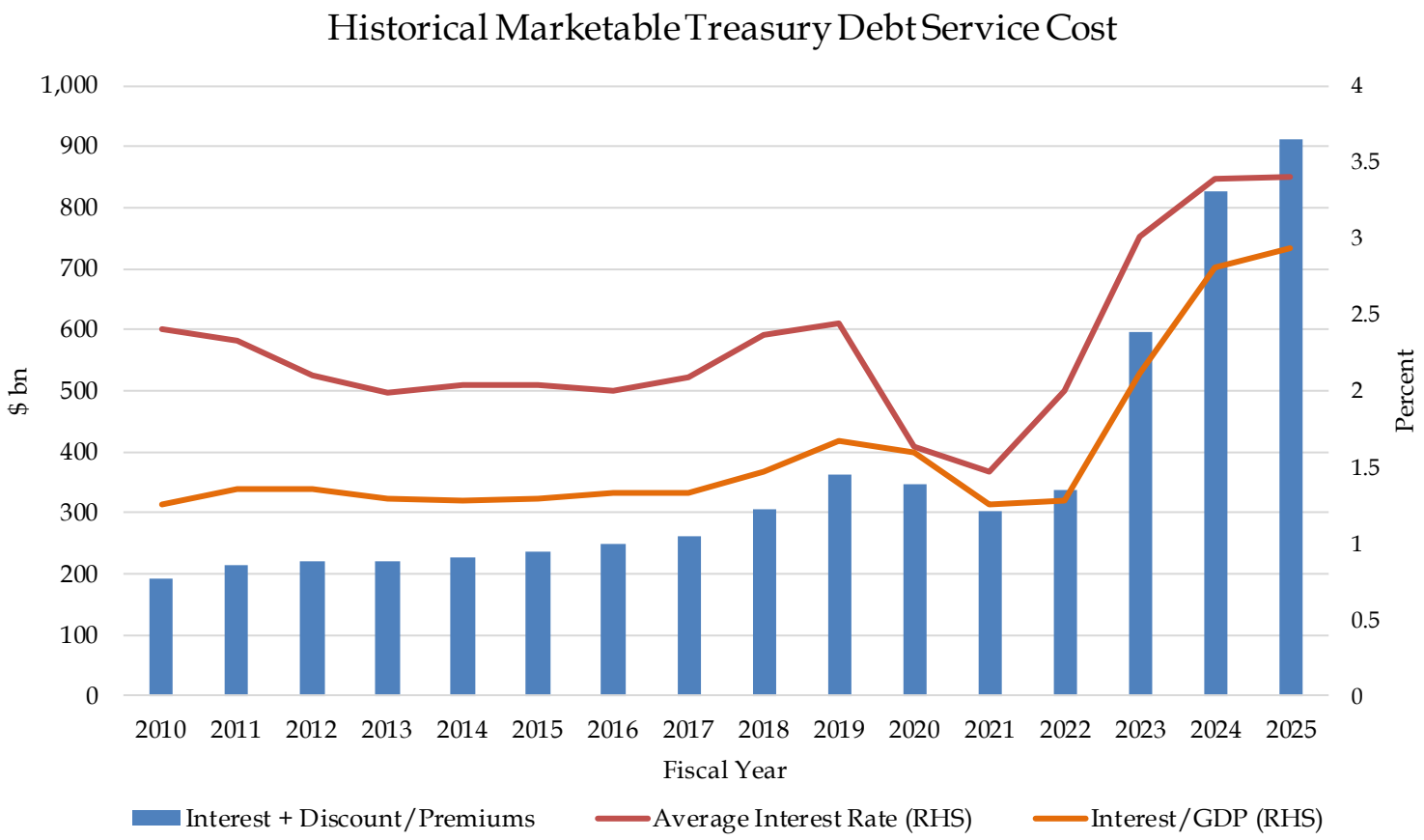
- Actual deficits are sourced from the Monthly Treasury Statement.
- Actual change in cash balance is sourced from the Daily Treasury Statement. Change in cash balance = cash balance of Sept 30, 2022 - cash balance of Sept 30, 2021
- Other Means of Financing include cash flows associated with federal 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 2027-2029 Deficits and Privately-Held Net Marketable Borrowing Estimates, in $ billions

	Primary Dealer			OMB	CBO
	25th	Median	75th		
FY 2027 Deficit	2,000	2,056	2,125	2,172	1,887
FY 2028 Deficit	2,098	2,220	2,272	2,157	2,080
FY 2029 Deficit	2,100	2,200	2,297	1,993	2,020
FY 2027 Change in Cash Balance	-84	-34	-3		
FY 2028 Change in Cash Balance	0	30	50		
FY 2029 Change in Cash Balance	0	1	50		
FY 2027 Total Net Marketable Borrowing					
FY 2028 Total Net Marketable Borrowing					
FY 2029 Total Net Marketable Borrowing					
FY 2027 Privately-Held Net Marketable Borrowing*	2,001	2,118	2,179		1,974
FY 2028 Privately-Held Net Marketable Borrowing*	2,154	2,218	2,253		2,088
FY 2029 Privately-Held Net Marketable Borrowing*	2,173	2,220	2,300		2,010
Estimates as of:		Oct-26		Apr-26	Feb-26

* All privately-held net marketable borrowing estimates are "normalized" using assumed Fiscal Year 2027 cash balance of $950 billion, held constant in out years.

- OMB's deficit projections are derived from Table 8-1 and Table 15-1 of "Budget of the U.S. Government Analytical Perspectives Fiscal Year 2027," April 2026. OMB's borrowing estimates are not available for this refunding.
- CBO's projections are from Table 1-3 of "The Budget and Economic Outlook: 2026 to 2036," February 2026.

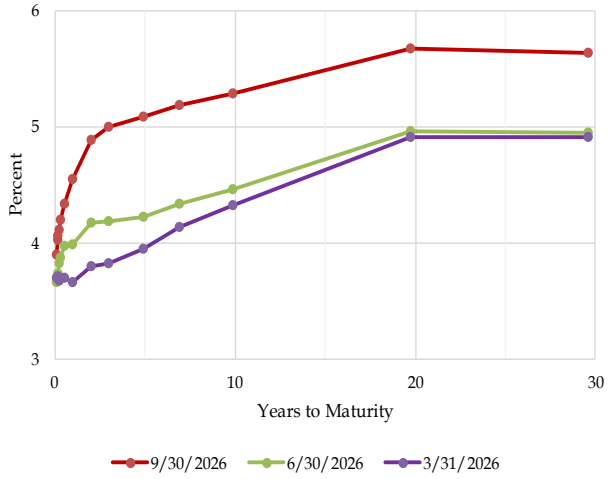


Source: https://fiscaldata.treasury.gov/datasets

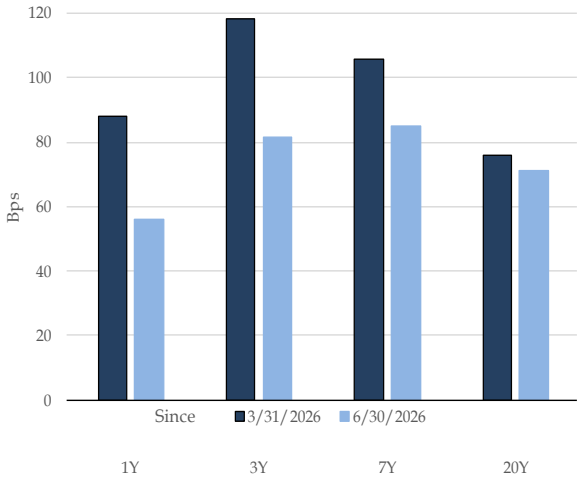
The average interest rates for total marketable debt do not include the Treasury Inflation-Indexed Securities and the Treasury Floating Rate Notes. However, they include securities from Federal Financing Bank. The average interest rates in the chart are as of corresponding fiscal year-end-dates.

Various Historical Treasury Interest Rate Metrics

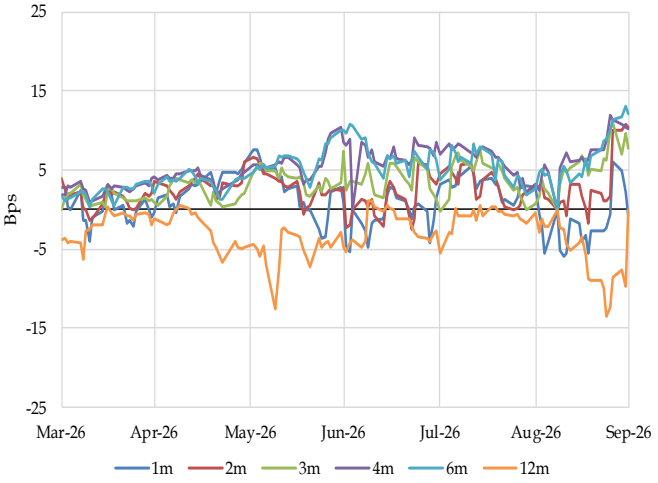
Treasury Nominal Yield Curve
as of specified dates



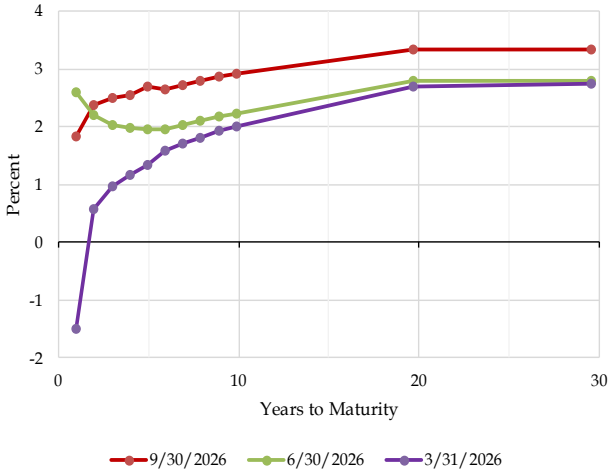
Nominal Yield Changes in Selected Tenors
Through the end of 09/30/26



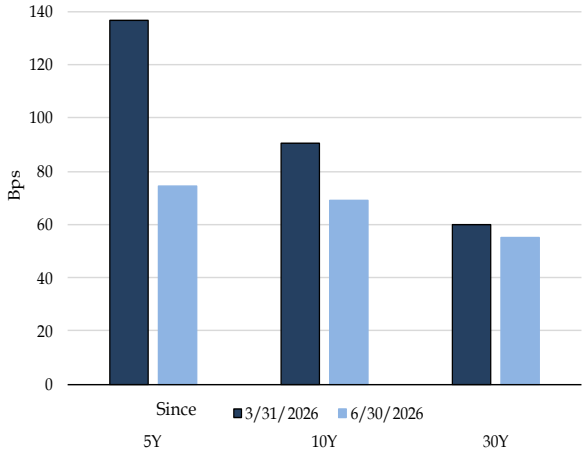
Bills-SOFR OIS spreads



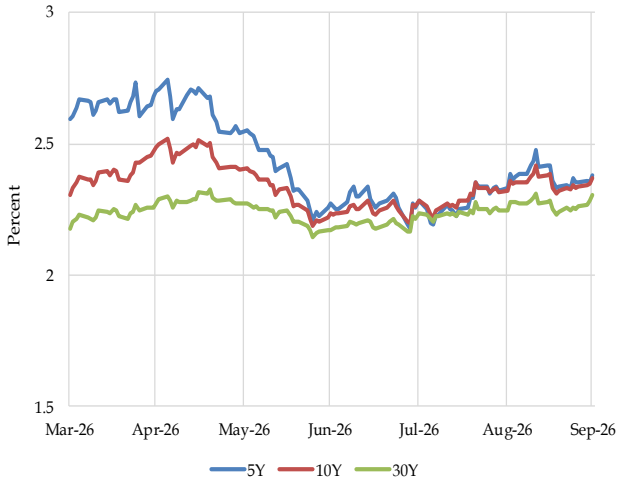
Treasury Real Yield Curve
as of specified dates



Real Yield Changes in Selected Tenors
Through the end of 09/30/26



Breakevens



Source: Bloomberg

Projected Privately-Held Net Marketable Borrowing
Assuming Private Coupon Issuance & Privately-Held Bills Outstanding Remain Constant as of 10/31/2026*

Fiscal Year	Bills*	2/3/5	7/10/20/30	TIPS	FRN	Historical/Projected Net Borrowing Capacity
2022	(53)	744	1,027	61	42	1,821
2023	1,689	319	680	50	(38)	2,699
2024	789	713	881	85	52	2,522
2025	394	741	878	32	68	2,113
2026	429	412	854	63	10	1,767
2027	548	415	865	51	0	1,879
2028	313	315	543	29	0	1,200
2029	313	88	651	30	0	1,080
2030	312	71	693	37	0	1,112
2031	312	1	515	17	0	845
2032	313	0	511	(5)	0	819
2033	315	0	520	1	0	836
2034	318	0	453	(11)	0	760
2035	319	0	444	(25)	0	738
2036	318	0	436	(28)	0	726
2037	0	0	433	(27)	0	405

*SOMA purchase effects are estimated based on MBS principal payments and reserve management purchase assumptions from the Survey of Market Expectations published in September 2026 by Federal Reserve Banks of New York.

Bills										
Issue	Settle Date	Stop Out Rate (%)	Bid-to-Cover Ratio	Competitive Awards ($bn)	% Primary Dealer	% Direct	% Indirect	Non-Competitive Awards ($bn)	SOMA "Add Ons" ($bn)	10-Year Equivalent ($bn)*
4-Week	7/7/2026	3.605	2.72	77.3	29.2	3.8	67.0	7.7	3.2	0.8
4-Week	7/14/2026	3.630	2.64	92.2	38.8	4.6	56.6	7.8	6.2	1.0
4-Week	7/21/2026	3.660	2.57	102.3	40.8	5.5	53.7	7.7	6.4	1.1
4-Week	7/28/2026	3.730	2.79	102.4	29.8	4.7	65.5	7.6	6.6	1.1
4-Week	8/4/2026	3.630	2.80	102.4	31.0	4.0	65.0	7.6	6.0	1.1
4-Week	8/11/2026	3.640	2.68	102.1	40.1	4.0	55.8	7.9	5.1	1.1
4-Week	8/18/2026	3.625	2.77	102.2	35.0	7.9	57.1	7.8	8.2	1.1
4-Week	8/25/2026	3.640	2.84	102.5	31.3	3.3	65.5	7.5	7.0	1.1
4-Week	9/1/2026	3.650	2.73	92.3	31.5	2.5	66.0	7.7	8.5	1.0
4-Week	9/8/2026	3.700	2.97	82.2	29.0	3.4	67.6	7.8	5.4	0.9
4-Week	9/15/2026	3.775	2.81	82.3	24.3	3.9	71.8	7.7	7.1	0.9
4-Week	9/22/2026	3.820	3.02	82.4	27.0	3.1	69.9	7.6	7.6	0.9
4-Week	9/29/2026	3.850	2.61	82.4	50.4	3.4	46.2	7.6	7.4	0.9
6-Week	7/9/2026	3.635	2.74	86.8	33.8	2.7	63.5	3.2	4.8	1.3
6-Week	7/16/2026	3.640	2.84	91.6	25.9	1.7	72.4	3.4	3.9	1.4
6-Week	7/23/2026	3.650	2.79	91.7	26.4	2.6	71.0	3.3	5.8	1.4
6-Week	7/30/2026	3.700	2.93	91.8	22.8	4.5	72.7	3.2	6.7	1.5
6-Week	8/6/2026	3.640	2.93	91.8	34.8	3.8	61.4	3.2	7.5	1.5
6-Week	8/13/2026	3.670	2.93	91.6	25.6	3.2	71.3	3.4	5.8	1.4
6-Week	8/20/2026	3.645	2.97	91.9	29.7	4.7	65.5	3.1	6.9	1.5
6-Week	8/27/2026	3.650	2.71	91.6	33.1	1.7	65.2	3.4	4.3	1.4
6-Week	9/3/2026	3.735	2.85	81.8	28.9	3.4	67.7	3.2	5.1	1.3
6-Week	9/10/2026	3.740	2.93	71.8	33.2	3.8	63.0	3.2	5.8	1.2
6-Week	9/17/2026	3.850	3.16	71.7	28.1	3.1	68.8	3.3	6.7	1.2
6-Week	9/24/2026	3.870	3.03	71.7	28.6	5.4	66.0	3.3	5.1	1.1
6-Week	10/1/2026	3.970	2.82	81.7	27.8	5.1	67.2	3.3	8.1	1.3

*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)*
8-Week	7/7/2026	3.650	2.70	81.9	34.4	3.9	61.7	3.1	3.2	1.7
8-Week	7/14/2026	3.635	2.95	91.9	21.0	4.5	74.6	3.1	5.9	1.9
8-Week	7/21/2026	3.650	2.84	96.8	28.4	3.9	67.6	3.2	5.9	2.0
8-Week	7/28/2026	3.795	2.31	96.9	55.6	4.6	39.7	3.1	6.0	2.0
8-Week	8/4/2026	3.675	2.74	97.5	33.1	4.0	62.9	2.5	5.5	2.0
8-Week	8/11/2026	3.710	2.74	97.3	39.3	6.3	54.4	2.7	4.7	2.0
8-Week	8/18/2026	3.665	2.85	97.7	37.4	6.1	56.5	2.3	7.4	2.1
8-Week	8/25/2026	3.655	3.06	96.9	30.7	2.7	66.7	3.1	6.4	2.0
8-Week	9/1/2026	3.670	2.77	87.7	39.3	3.4	57.3	2.3	7.7	1.9
8-Week	9/8/2026	3.750	3.02	82.8	25.2	4.6	70.2	2.2	5.1	1.7
8-Week	9/15/2026	3.845	2.82	82.4	27.7	6.0	66.3	2.6	6.7	1.8
8-Week	9/22/2026	3.920	2.94	82.2	32.8	4.8	62.4	2.8	7.2	1.8
8-Week	9/29/2026	3.990	2.76	81.7	35.2	6.0	58.8	3.3	7.0	1.8
13-Week	7/9/2026	3.735	2.58	88.6	43.8	7.7	48.5	3.4	4.9	3.0
13-Week	7/16/2026	3.760	2.84	88.7	35.0	8.2	56.8	3.3	3.7	3.0
13-Week	7/23/2026	3.730	3.00	89.0	37.4	6.8	55.8	3.0	5.6	3.0
13-Week	7/30/2026	3.815	3.06	89.8	27.2	5.9	66.9	2.2	6.5	3.1
13-Week	8/6/2026	3.750	2.61	89.1	39.5	6.3	54.1	2.9	7.3	3.1
13-Week	8/13/2026	3.735	2.88	89.4	36.0	6.8	57.2	2.6	5.6	3.0
13-Week	8/20/2026	3.715	2.86	89.4	39.4	6.8	53.8	2.6	6.7	3.0
13-Week	8/27/2026	3.715	3.08	89.9	32.9	8.0	59.2	2.1	4.1	3.0
13-Week	9/3/2026	3.770	2.77	89.4	40.5	7.5	52.0	2.6	5.5	3.0
13-Week	9/10/2026	3.800	2.61	89.7	40.0	8.1	51.9	2.3	7.1	3.1
13-Week	9/17/2026	3.970	2.64	89.9	38.1	6.8	55.1	2.1	8.2	3.1
13-Week	9/24/2026	4.015	2.77	88.7	37.6	8.3	54.1	3.3	6.2	3.1
13-Week	10/1/2026	4.110	2.99	91.6	26.3	7.1	66.6	3.4	9.1	3.3

*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)*
17-Week	7/7/2026	3.795	2.66	70.4	38.2	6.6	55.2	1.6	2.7	3.0
17-Week	7/14/2026	3.790	3.41	70.4	25.9	4.5	69.6	1.6	4.5	3.1
17-Week	7/21/2026	3.745	3.35	70.9	33.8	6.1	60.0	1.1	4.2	3.1
17-Week	7/28/2026	3.845	2.76	71.4	41.3	5.6	53.1	0.6	4.3	3.1
17-Week	8/4/2026	3.875	3.04	71.3	33.9	8.4	57.6	0.7	3.9	3.1
17-Week	8/11/2026	3.785	3.19	71.2	29.3	6.2	64.6	0.8	3.4	3.1
17-Week	8/18/2026	3.755	3.16	71.4	31.1	6.6	62.3	0.6	5.3	3.1
17-Week	8/25/2026	3.750	3.35	71.1	32.9	6.3	60.8	0.9	4.6	3.1
17-Week	9/1/2026	3.750	3.09	71.4	32.6	7.1	60.3	0.6	6.1	3.2
17-Week	9/8/2026	3.855	2.78	70.9	42.1	6.7	51.2	1.1	4.3	3.1
17-Week	9/15/2026	3.895	2.73	71.4	48.1	8.2	43.7	0.6	5.6	3.1
17-Week	9/22/2026	4.030	2.72	71.4	42.3	5.3	52.4	0.6	6.1	3.2
17-Week	9/29/2026	4.135	2.81	70.7	34.7	10.1	55.1	1.3	6.0	3.2
17-Week	10/6/2026	4.115	2.89	73.9	36.2	6.0	57.8	1.1	3.8	3.2
26-Week	7/9/2026	3.830	3.05	76.5	30.5	9.6	59.8	2.5	4.2	5.1
26-Week	7/16/2026	3.860	3.11	76.1	25.4	8.1	66.5	2.9	3.2	5.1
26-Week	7/23/2026	3.835	2.94	76.7	30.6	11.0	58.4	2.3	4.8	5.2
26-Week	7/30/2026	3.945	3.12	76.7	29.6	10.6	59.7	2.3	5.6	5.2
26-Week	8/6/2026	3.855	2.98	76.7	32.7	10.3	57.0	2.3	6.3	5.3
26-Week	8/13/2026	3.830	2.85	77.2	36.7	8.9	54.5	1.8	4.8	5.2
26-Week	8/20/2026	3.780	2.97	77.0	24.6	10.5	64.9	2.0	5.8	5.2
26-Week	8/27/2026	3.790	3.05	76.9	28.6	11.2	60.2	2.1	3.6	5.1
26-Week	9/3/2026	3.885	2.63	77.1	43.4	9.3	47.3	1.9	4.8	5.2
26-Week	9/10/2026	3.890	2.88	76.8	27.1	8.5	64.4	2.2	6.1	5.3
26-Week	9/17/2026	4.060	2.74	77.1	33.1	6.2	60.8	1.9	7.1	5.3
26-Week	9/24/2026	4.155	2.62	76.9	33.4	11.7	54.9	2.1	5.3	5.2
26-Week	10/1/2026	4.285	2.64	80.0	30.2	9.5	60.3	2.0	7.8	5.6
52-Week	7/9/2026	3.860	3.14	50.9	35.3	4.6	60.1	1.1	2.8	6.8
52-Week	8/6/2026	3.880	3.62	50.6	27.0	2.3	70.8	1.4	4.1	7.0
52-Week	9/3/2026	3.980	3.61	50.5	21.4	3.3	75.2	1.5	3.1	6.8
52-Week	10/1/2026	4.400	3.07	52.6	24.6	4.6	70.9	1.4	5.2	7.4

*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	7/31/2026	4.315	2.66	67.8	9.4	34.1	56.6	1.2	7.6	18.5
2-Year	8/31/2026	4.204	2.60	68.1	10.9	23.1	66.0	0.9	8.9	18.7
2-Year	9/30/2026	4.787	2.63	67.7	13.2	29.0	57.8	1.3	10.4	19.2
3-Year	7/15/2026	4.179	2.60	57.8	7.7	24.8	67.5	0.2	6.0	22.6
3-Year	8/17/2026	4.291	2.71	57.4	11.7	24.0	64.2	0.6	14.7	25.8
3-Year	9/15/2026	4.474	2.72	57.6	10.9	26.9	62.1	0.4	0.0	20.5
5-Year	7/31/2026	4.408	2.28	69.8	13.5	27.2	59.2	0.2	7.7	43.9
5-Year	8/31/2026	4.393	2.37	69.8	10.0	28.4	61.5	0.2	9.0	44.5
5-Year	9/30/2026	5.033	2.21	69.7	15.8	29.9	54.3	0.3	10.5	45.1
7-Year	7/31/2026	4.473	2.49	43.9	13.0	16.9	70.1	0.1	4.9	37.0
7-Year	8/31/2026	4.512	2.50	43.9	12.3	27.0	60.8	0.1	5.7	37.4
7-Year	9/30/2026	5.085	2.42	43.5	12.5	30.3	57.2	0.5	6.6	37.9
10-Year	7/15/2026	4.580	2.59	38.9	7.8	10.7	81.5	0.1	4.1	43.0
10-Year	8/17/2026	4.683	2.53	41.8	8.6	14.7	76.7	0.2	10.6	53.1
10-Year	9/15/2026	4.834	2.71	38.9	4.3	16.5	79.2	0.1	0.0	38.9
20-Year	7/24/2026	5.163	2.64	12.9	14.7	16.2	69.1	0.1	0.0	20.2
20-Year	8/31/2026	5.204	2.53	15.8	12.5	24.6	62.9	0.2	2.1	27.8
20-Year	9/18/2026	5.420	2.57	12.9	16.9	30.7	52.5	0.1	0.0	20.2
30-Year	7/15/2026	5.058	2.44	22.0	10.1	12.2	77.7	0.0	2.3	46.3
30-Year	8/17/2026	5.216	2.39	24.9	11.5	21.6	66.8	0.1	6.3	58.8
30-Year	9/15/2026	5.308	2.61	22.0	2.2	18.3	79.5	0.0	0.0	41.5
2-Year FRN	7/31/2026	0.050	3.37	30.0	36.8	0.0	63.2	0.0	3.3	0.0
2-Year FRN	8/28/2026	0.055	3.14	28.0	33.1	0.4	66.6	0.0	0.0	0.0
2-Year FRN	9/25/2026	0.040	2.63	28.0	40.9	0.0	59.1	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	7/31/2026	2.438	2.30	20.9	9.9	25.0	65.2	0.1	2.3	25.8
10-Year TIPS	9/30/2026	2.653	2.24	18.9	12.2	28.7	59.1	0.1	2.9	23.9
30-Year TIPS	8/31/2026	2.973	2.82	7.9	2.1	13.4	84.4	0.1	1.0	22.8

*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.

Charge

SI-related issuance:

- Please summarize recent trends in corporate bond issuance related to super intelligence and associated businesses.
- How much of such issuance has occurred to date and is projected for the future?
- What types of investors are the primary buyers of such debt?
- To what extent does such debt issuance compete with Treasury securities for investor demand?
- What other potential effects on fixed income markets should Treasury be monitoring?

Executive summary

We observe a large tech financing cycle, but no clear evidence of broad crowding out to date. Higher Treasury yields primarily reflect growth, policy expectations and energy, not an issuance-driven supply shock.

1	**Financing needs are large and broadening.**	Nearly $600 billion of tech-related debt is projected in 2026 and more than $700 billion in 2027, with upside risk and a growing role for equity.
2	**Tech borrowers retain capacity and incentive to invest.**	Aggregate net leverage for the tech ecosystem is 0.28x versus 1.3x for the S&P excluding financials; expected returns support continued spending, although individual borrowers remain vulnerable.
3	**Capital is becoming selective, not broadly unavailable.**	Lenders are demanding stronger terms and secured structures within tech; Treasury auction results and resilient non-tech spreads show no clear evidence of broader crowding out.
4	**The investor base can expand.**	Insurers, pensions, households and foreign investors provide multiple sources of demand; modest reallocations from cash and equities could finance a meaningful share of projected borrowing.
5	**Capex-driven growth has been the principal transmission channel to rates, not overwhelming supply.**	Growth, policy expectations and energy best explain higher Treasury yields; the analysis finds little independent explanatory power from tech issuance.

- How much tech-related issuance has occurred to date and is projected for the future?

- Please summarize recent trends in corporate bond issuance related to super intelligence and associated businesses.

An accounting of the capital raising to date and forecasts through 2027.

Capex & Cash Flow ($bn)	2025 Actual	2026E	2027E
Tech Ecosystem Capex	514	1,000	1,700
Cash Flow from Operations	607	804	1,078

Debt Issuance ($bn)	2025 Actual	2026E	2027E
Hyperscaler Unsecured	136	327	360
Other Tech IG	20	20	50
IG GPU Financing		107	200
Total IG	156	454	610
HY & Loans	17	100	50
Securitized	28	32	75
Total Debt Issuance	**201**	**586**	**735**
Cumulative Debt Issuance	**201**	**787**	**1,522**

Equity Issuance ($bn)	2025 Actual	2026E	2027E
Total Hyperscaler Equity		130	100
Other Public Equity	2	61	200
Convertibles	30	60	60
Private Equity	70	250	200
Total Equity Issuance	**102**	**501**	**560**
Cumulative Equity Issuance	**102**	**603**	**1,163**

Total Issuance ($bn)	2025 Actual	2026E	2027E
Total Issuance	**303**	**1,087**	**1,295**
Total Cumulative Issuance	**303**	**1,390**	**2,685**

- **Demonstrable shortage of contracted compute is fueling upward revisions for 2027 capex.**

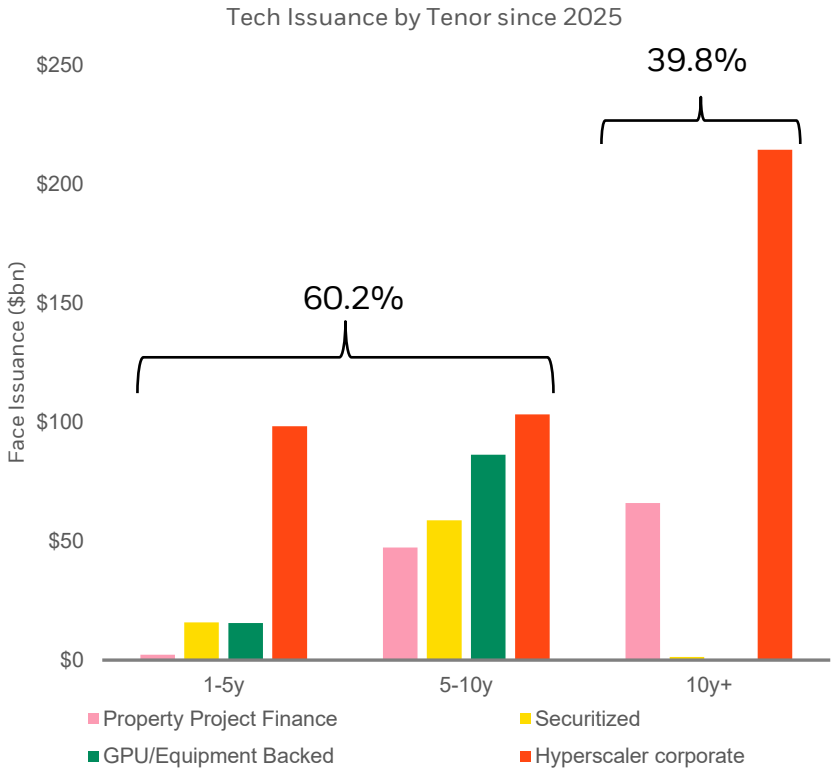
- **Tech-related free cash flow (FCF) turned negative in 2026; the expected 2027 funding gap is over $600 billion.**
- **2027 tech debt issuance estimated at $735 billion.**
- **Total 2027 capital raising estimated at ~$1.3 trillion.**
- **Secured financing is becoming an increasingly important funding tool.**
- **Equity raising (particularly IPOs) remains an integral part of ecosystem financing plans.**
- ***Planned capital raising that exceeds estimated funding gap, plus large existing cash balances, suggests concern exists about ongoing capital availability.***

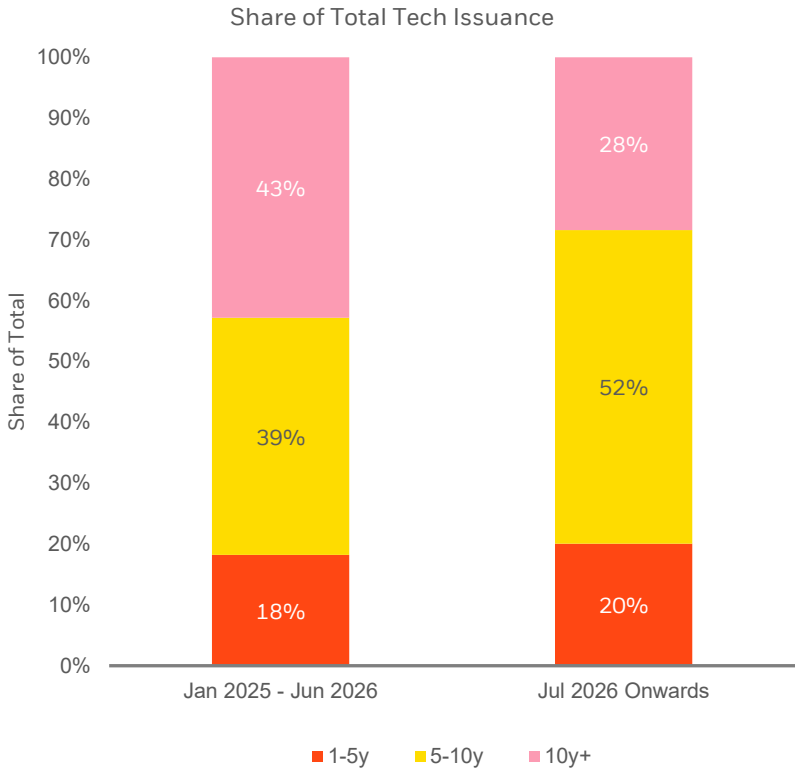
Source: Company Filings, Presenter's Calculations.

Tech debt issuance is broadening beyond long-dated corporate bonds, as secured and asset-backed structures increasingly bring financing inside 10 years.

Hyperscaler issuance has relied on the back-end of the curve but short and intermediate borrowing for the tech ecosystem as a whole, has been notionally larger than in longer tenors.

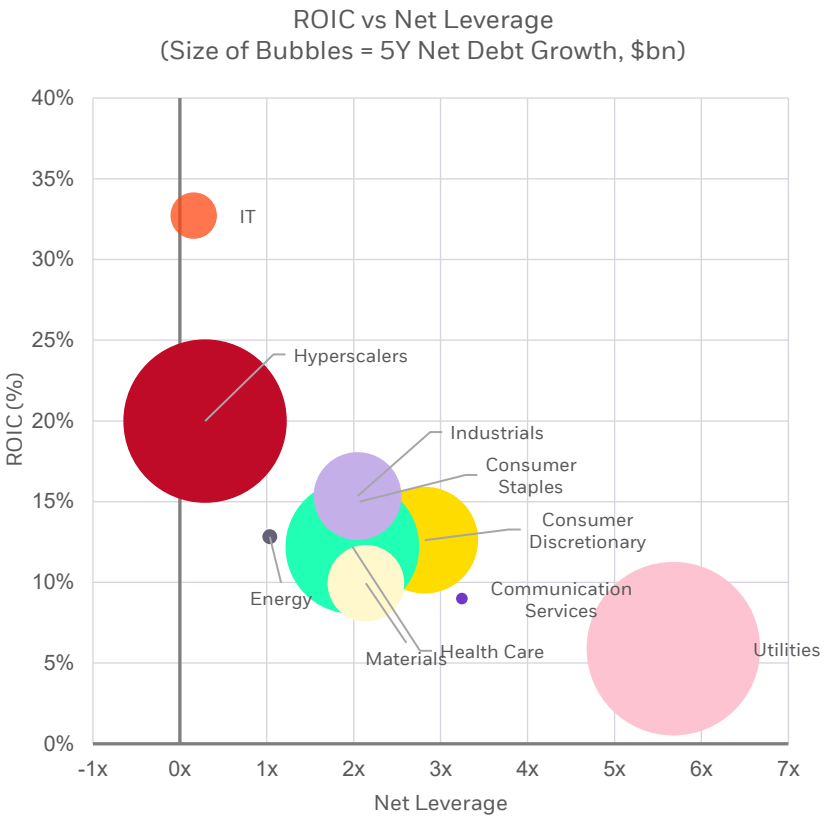
While issuance has recently shifted toward shorter maturities, additional long-dated borrowing is forecast. GPU-backed and other project debt is becoming a larger part of the mix, which has shortened the tenor of more recent issuance.

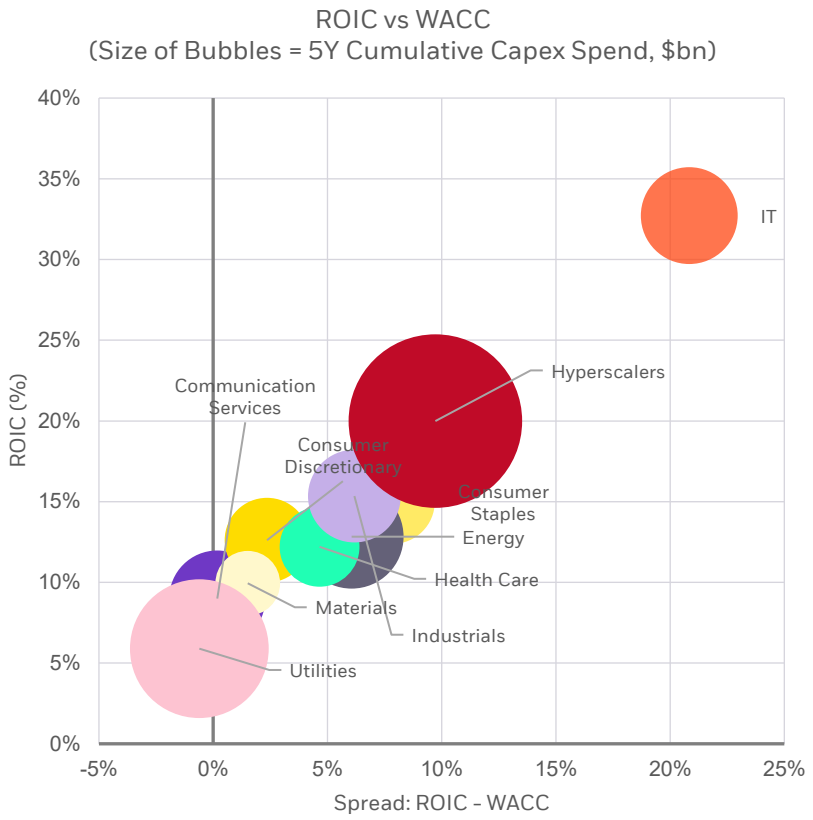




Source: Bloomberg, Securities and Exchange Commission, Dealers.

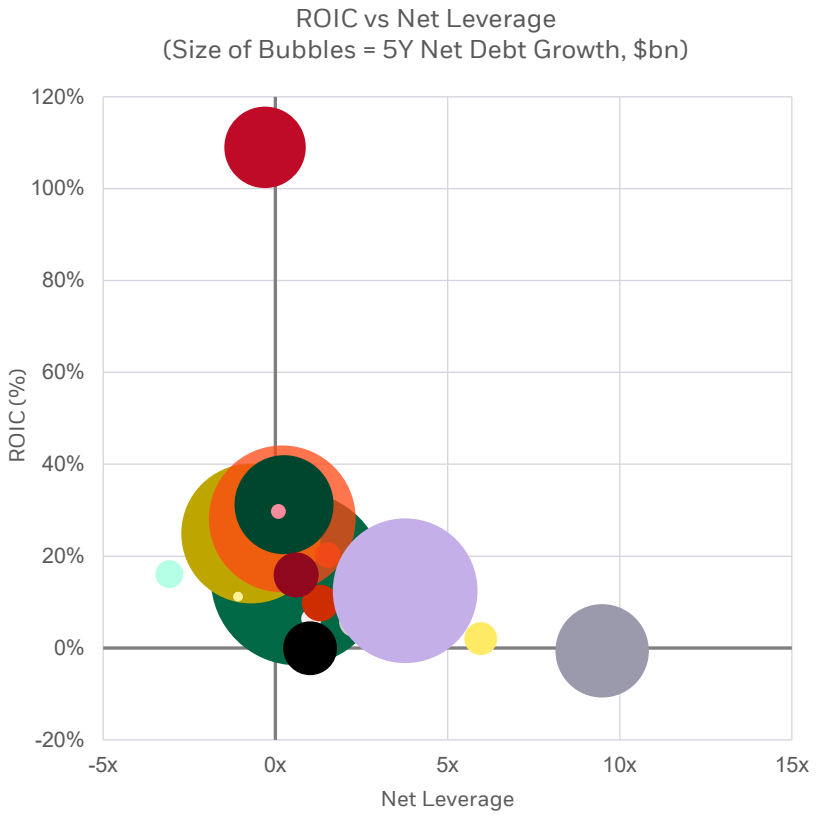
Viewed as a single ecosystem, the technology sector has both the capacity and the incentive to continue borrowing and investing.

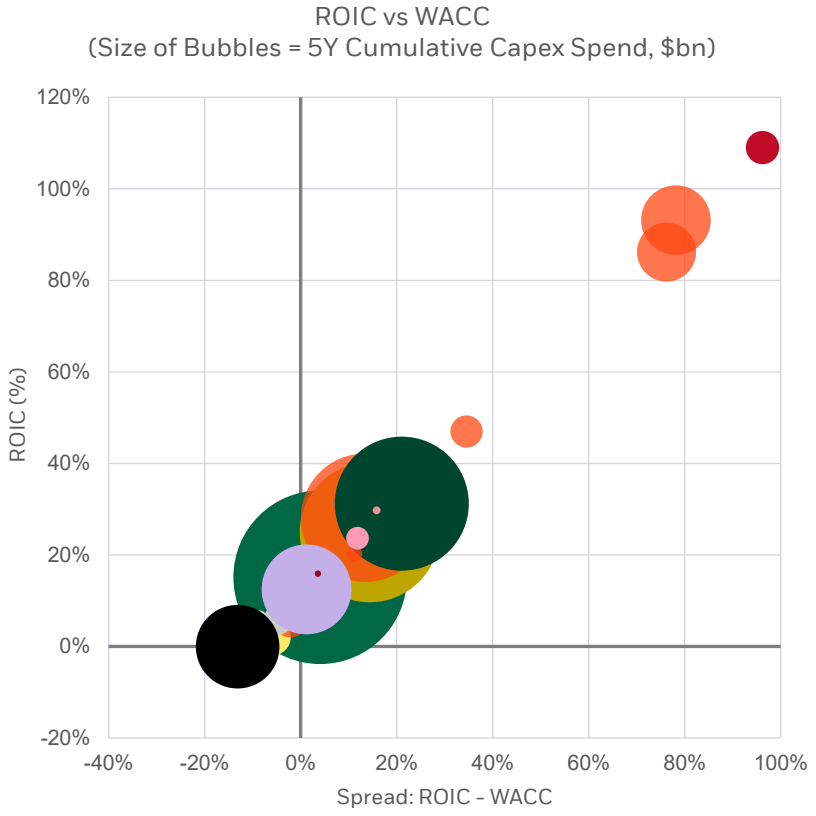




Source: Bloomberg, Company Filings, Presenter's Calculations.

A deeper dive within the broader cohort reveals a much greater rate sensitivity for many of the constituents.





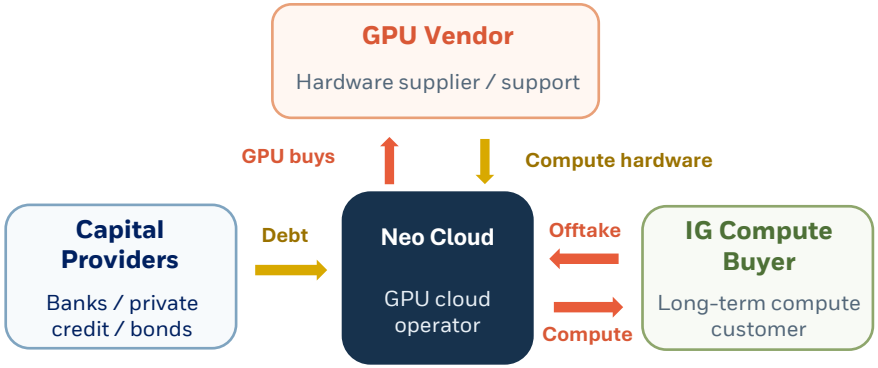
Some of the constituents are already constrained by leverage, and many are far more sensitive to rising capital costs than the largest members of the cohort.

Source: Bloomberg, Company Filings, Presenter's Calculations.

The balance sheet of the broader ecosystem provides important support for the existing and incremental compute infrastructure.

A strong ecosystem balance sheet and structural compute deficit create incentive to sustain existing compute infrastructure while new capacity comes online. While some individual compute operators might not remain viable, the physical infrastructure will continue to find demand.

Circular Financing is a feature

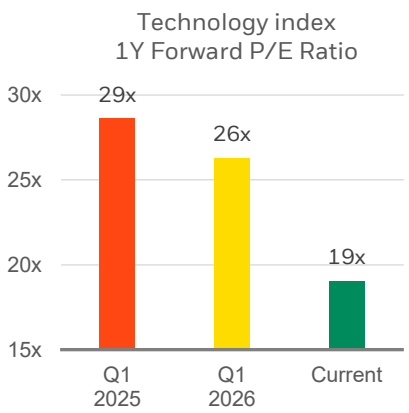


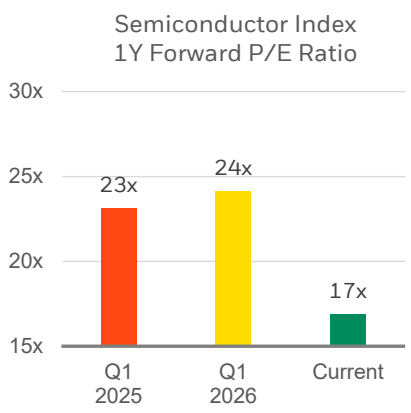
Tech 25 Totals	Q2 2026	Change Since 9/1/2025
EBITDA ($bn)	1,334	407
Cash & marketable securities	998	313
Net Debt ($bn)	373	152
Net Debt / EBITDA	0.3x	0.04x
Net Debt / EBITDA for S&P 500 ex Fins	1.3x	-0.26x

Despite the strength of the broader ecosystem, the market's increasingly discerning capital provisioning instincts are a healthy signal.

Project / Market	October 2026 Outcome
Large data center IPO candidate APAC	Withdrawn
Data center REIT IPO APAC	Postponed
Tech infrastructure IPO APAC	-32% day one
Listed data center operator APAC	-42% share price
HY neocloud	Unsecured debt trading at "distressed" levels

Equity valuations have rerated lower

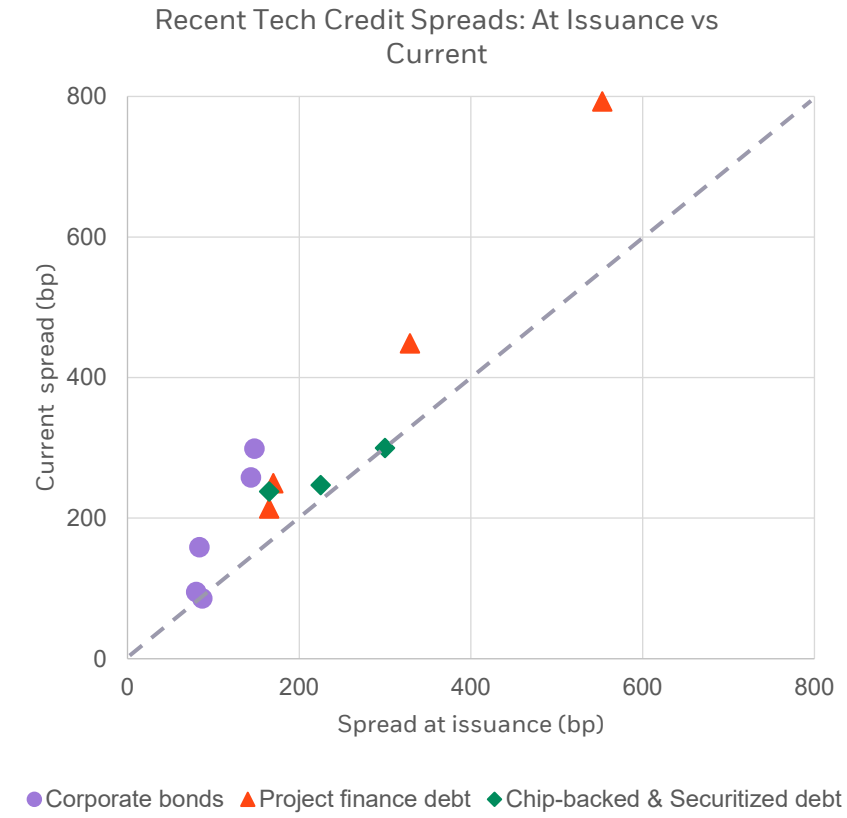




Source: Bloomberg, Company Filings and Press Releases.

As credit markets become more selective, issuance is adjusting in structure, maturity, and price to better align with lenders' demands.

Rapid spread widening of new deals in the secondary market is driving larger new issue concessions in a recurring cycle. Lenders are not only demanding more yield they're demanding more attractive structures as well.



Recent chip-backed deals introduce a different financing model, converting contracted compute demand into investment-grade debt backed by physical assets.

IG Compute Customer

Signs a long-term compute capacity / offtake agreement.

Secured Lenders

Debt backed by contracted revenue and physical collateral with rapid principal repayment.

Contracted payments

Debt proceeds

Project Company (SPV)

Owns the hardware (10,000+ GPUs) and receives contracted customer payments. Funded through debt and equity.

Buys equipment

Repayment waterfall

Hard asset Collateral

Leading-edge GPUs/TPUs, physical servers, equipment and related contractual rights.

Debt Service & Equity Incentive

Contracted revenue funds operating costs, debt service, and reserves; equity receives residual distributions.

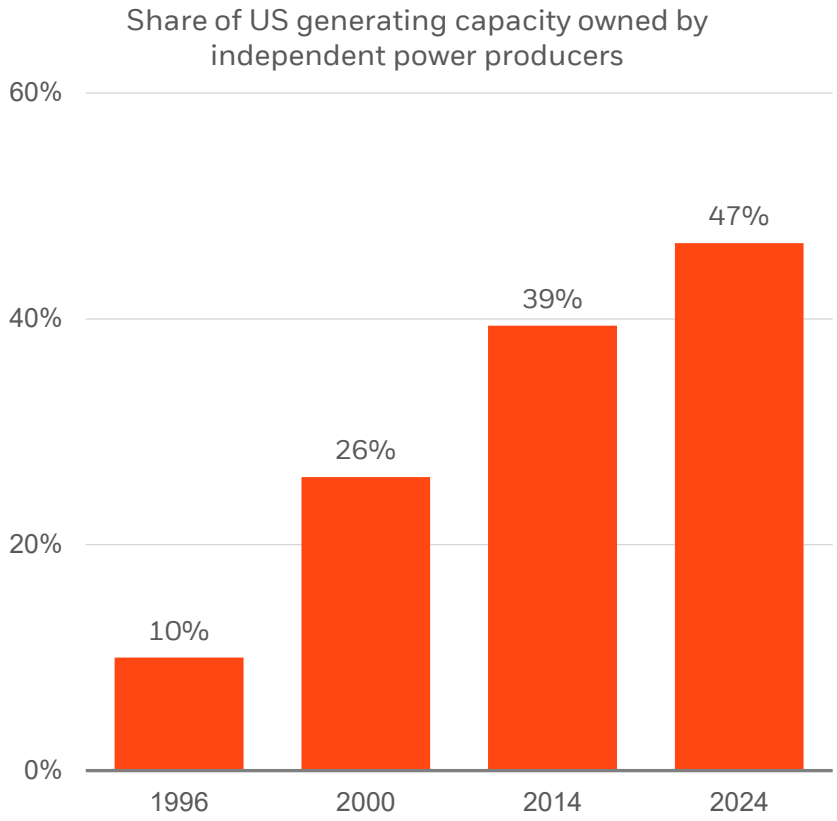
$100+ billion of chip deals moved to close during the week of October 26, 2026. Each was indicated at a significant concession to existing indebtedness.

Chip-backed structures account for 60% of the forecast increase in 2027 investment-grade tech borrowing, signaling a meaningful change in the composition of forward supply. These structures expand the investor base while allowing borrowers to continue financing investment, without relying exclusively on traditional corporate debt markets.

Source: Bloomberg, Dealers, Company Filings.

A traded market for compute could unlock new sources of financing, much as hedging markets did for merchant power.

In response to private sector calls for a liquid tradable market for compute, the Commodity Futures Trading Commission is exploring a regulatory compute trading framework, while exchanges are proposing standardized futures linked to GPU rental prices.



Why this matters for compute financing

Why it worked for power:

Liquid hedging markets made future revenues more predictable, allowing lenders to finance independent power projects.

How does it work for compute today?

GPU lenders rely heavily on creditworthy offtakers given uncertain utilization, compute prices and hardware depreciation.

What could change?

Standardized pricing and liquid, longer-dated hedges could reduce revenue risk and broaden the pool of willing lenders.

The opportunity is not simply cheaper financing, but a broader investor base able to underwrite compute assets independently.

Source: US Energy Information Administration, Congressional Research Service report RL32728, Bloomberg.

- What types of investors are the primary buyers of such debt?

Who are the main investors in US corporate credit securities?

Who owns the market today?

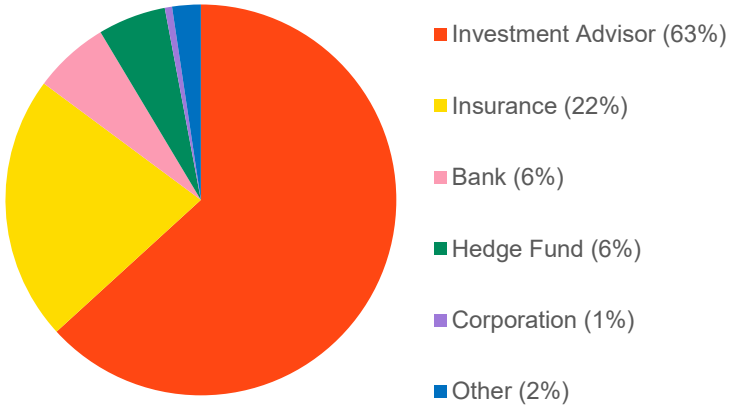
% Ownership Share by Investor Type:
Treasuries and Corporate Credit Outstanding

	US Treasuries	US Corporate Credit
Rest of World	**32%**	**29%**
Insurance	2%	**27%**
Mutual funds & ETFs	**9%**	**24%**
Pension	4%	**9%**
Banks & Credit Unions	**7%**	**6%**
Other Financial Companies	4%	3%
State & Local government	**6%**	2%
Households & Nonprofits	**10%**	1%
Fed	**14%**	0%
Money market funds	**11%**	0%
Non-fin businesses	1%	0%

89%

Who is buying the tech debt?

% Disclosed Ownership Share by Investor Type*:
Tech bonds issued since September 2025



Where could incremental demand come from?

Insurers
have the lowest allocation to fixed income in 50 years.

Pensions
are overfunded, which incentivizes shifting from equities to fixed income.

Households
have the lowest allocation to fixed income since 1973. Active ETFs are broadening access.

Foreign Investors
have sought the depth and breadth of US debt markets.

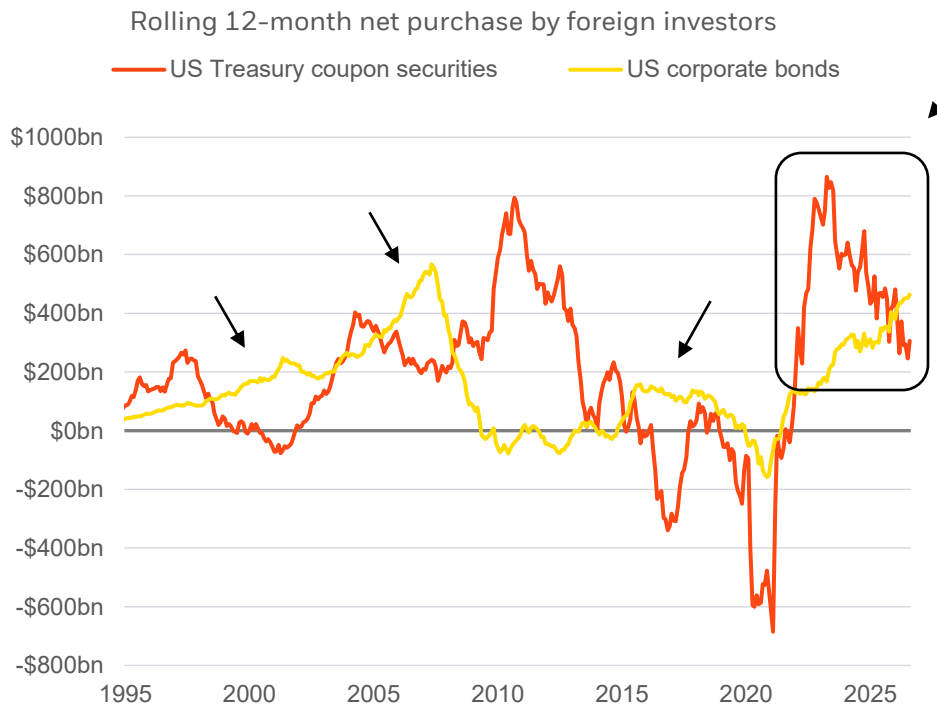
Source: Federal Reserve (Z1 data), Bloomberg, Company Filings, Presenter's Calculations.
*Note: % Disclosed ownership share represents the share of identified bond holdings attributable to each investor type, based on publicly available CUSIP-level holdings disclosures compiled by Bloomberg and aggregated by Presenter. Data do not capture holdings of investors that do not publicly disclose CUSIP-level positions. Classification of investor type is based on the reporting firm, which may not reflect the ultimate end-investors.

Foreign buyers of US fixed-income assets have accelerated purchases this year. Buyers are choosing higher-yielding credit securities over Treasuries at the margin.

Annual net purchase of US fixed income by foreign investors ($bn)

2018	2019	2020	2021	2022	2023	2024	2025	2026 YTD (as of 8/31)	2026 YTD annual-ized
292	182	-225	544	1222	1100	877	877	671	1006

Foreign net purchases of US fixed income are accelerating in 2026.



We are seeing a 2026 reduction of Treasury purchases against an increase in corporate bond purchases from foreign investors.

This is consistent with other periods of strong growth and likely reflects a reaction to recent performance more than issuance.

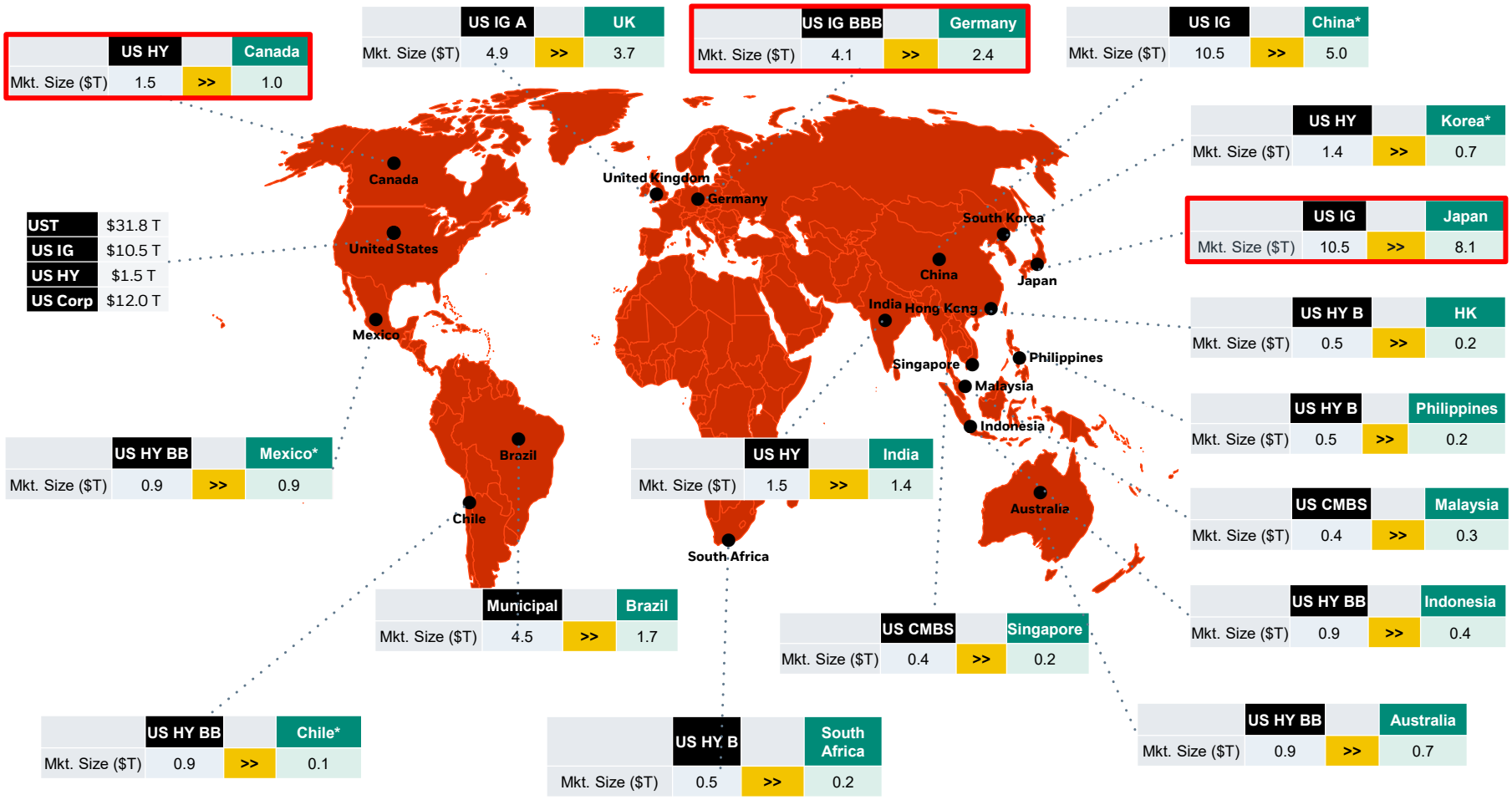
We saw this same type of flow in the 1990s, the 2000s, and the mid-2010s briefly, alongside a concurrent rise in risk-free rates.

Return since 12/31/2020 (through 9/30/26)	
7-10Y US Treasury Index	-12.3%
1-5Y US Treasury Index	+6.9%
1-5Y US IG Credit	+12.6%
1-10Y US IG Credit	+6.6%
US HY Credit	+24.8%

Source: Bloomberg, US Department of the Treasury (TIC data), Presenter's Calculations.
Note: Net purchase of US fixed income securities comprises Treasury notes and bonds, US government corporations and Federal agency bonds, and US corporate bonds.

Foreign investors seek the breadth and depth of US fixed-income opportunities that simply do not exist elsewhere.

The scale of US fixed income markets is unmatched globally, with individual corporate credit segments larger than entire sovereign bond markets.

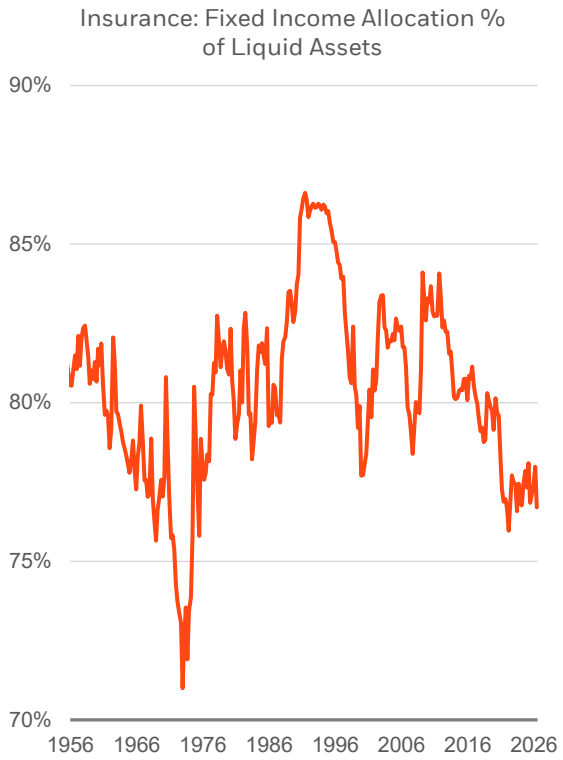


Source: Bloomberg, S&P, SIFMA.

Pensions and insurance companies together hold $32 trillion in liquid assets.

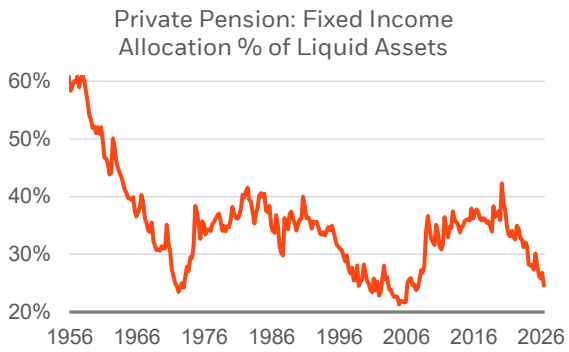
Insurance companies hold $10 trillion in liquid assets.

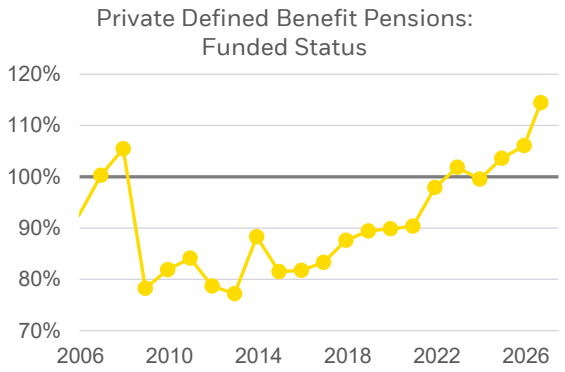
Insurance companies have the lowest allocation to fixed income in a generation.



Private pension plans hold $14 trillion in liquid assets.

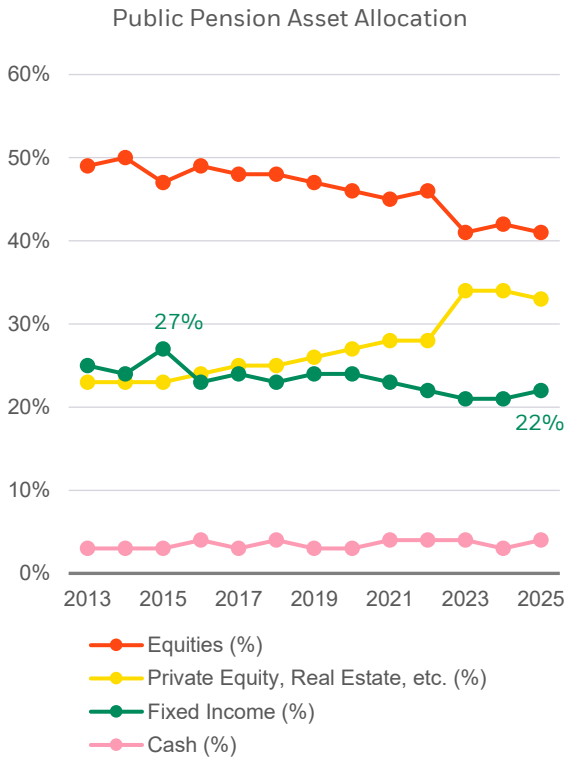
For private defined benefit pension plans, an improved funded ratio may encourage a higher fixed income allocation.





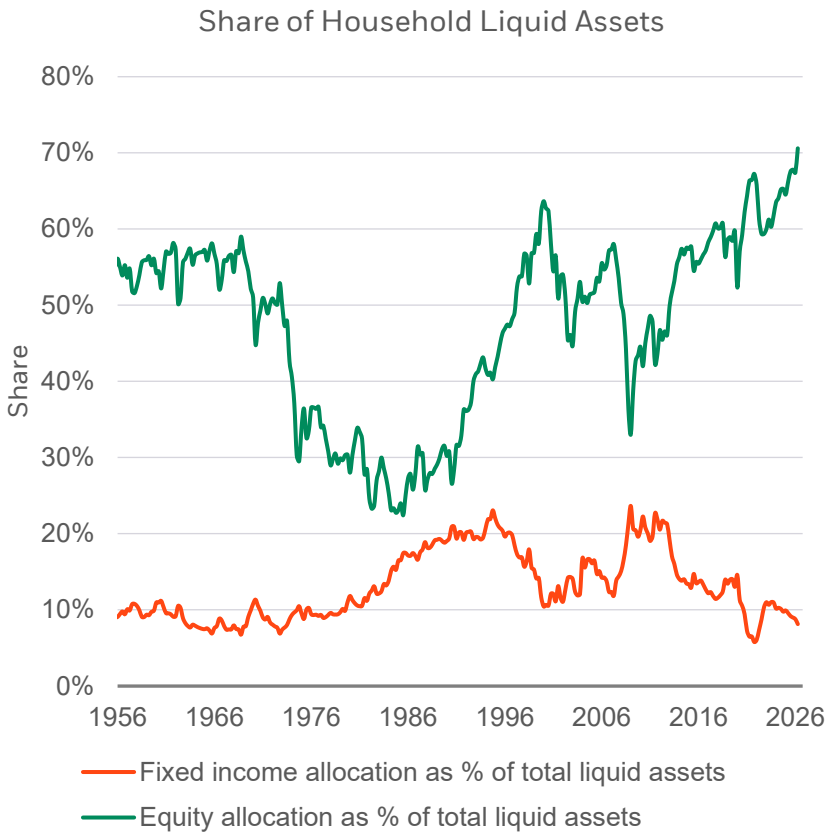
Public pension plans hold $8 trillion in liquid assets.

Public pension plans' fixed income allocation is also near the low end of the observations over the past decade.



Source: Federal Reserve (Z1 data), Milliman, Presenter's Calculations.
Note: Liquid assets include cash, deposits, money market holdings, debt securities, corporate equities, and investment fund shares. Investment fund holdings are allocated proportionally between fixed income and equities based on the relative value of reported debt securities and corporate equity holdings.

The Household liquid balance sheet is another potential funding source for large future fixed income issuance.



US Household Liquid Assets are $95 trillion
(relative to a $10 trillion US IG market).

Fixed Income is 8% of Liquid Assets,
the lowest since 1973. It was around 24% in 1994 and the early 2010s; the 1990s and 2010s averaged around 15%.

Equities are 71%, a record high.

Source: Federal Reserve (Z1 data), Presenter's Calculations.
Note: Liquid assets include cash, deposits, money market holdings, debt securities, corporate equities, and investment fund shares based on Z1 data (Table S1M.s). Investment fund holdings are allocated proportionally between fixed income and equities based on the relative value of reported debt securities and corporate equity holdings. This does not include the look-through from households' pension and insurance assets.

A reallocation of liquid assets from cash and equities into bonds could be impactful on borrowing costs. Interest received is another potential source of wherewithal.

A 1% reallocation of assets from cash and/or equities and into bonds would raise $2 trillion.

	Assets	Hypothetical $ Demand from a 1% Incremental Allocation to Fixed Income	Pro-Forma Fixed Income Allocation for a 1% Incremental Allocation to Fixed Income
US Households	$95 tn	**$1.0 tn**	9%
Rest of OECD*	$70 tn	**$0.7 tn**	22%
US Pension & Insurance	$32 tn	**$0.3 tn**	42%
Total	**$197 tn**	**$2.0 tn**	19%

Annual coupon received by debt investors has doubled since the 2010s.

Source: Federal Reserve, Bloomberg.
*Note: 2024 OECD data use look-through. 2024 OECD household financial assets, excluding the US. Pension entitlements, life insurance/annuities and investment fund shares are allocated 60% to equities and 40% to fixed income. Non-life insurance is excluded to avoid double counting.

Household access to credit markets has improved dramatically.

Before 2002 there were no public trade prints; even after, the odd-lot buyer still paid an onerous toll to invest directly in this sector.

1.4%

round-trip cost on a $20,000 corporate bond trade vs 0.08% on $5 million block (2003-05)

0.66%

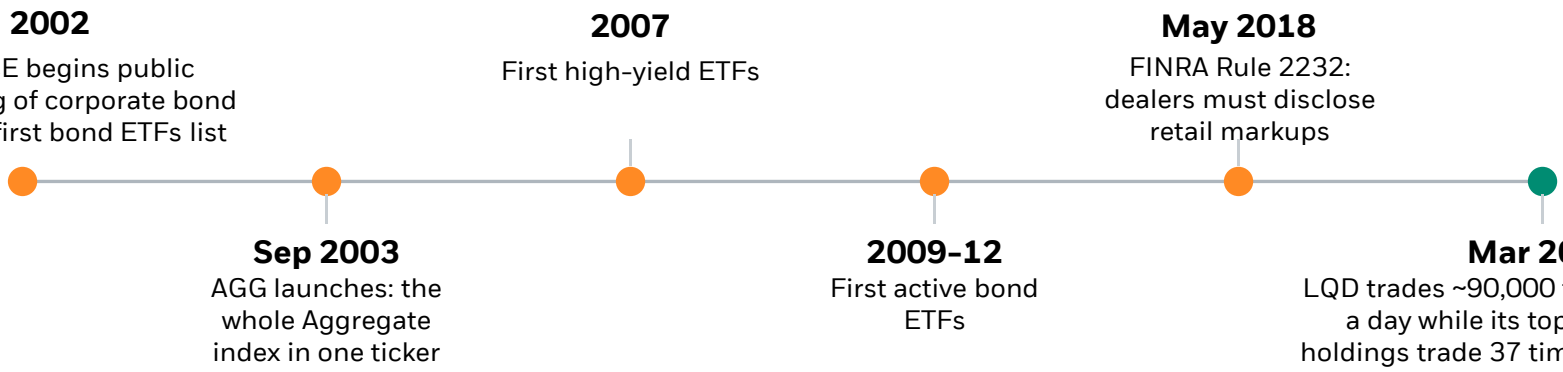
median dealer markup on retail-size IG trades, 95th percentile 2.15% (2014)

<1%

of 21,000 registered corporate bonds trade on a given day (2019)

$0.56 vs $0.18

Odd-lot vs block effective bid-offer spreads (2023-24)



Households have dramatically reduced their direct corporate bond holdings: direct holdings fell from 8.5% of corporate bonds outstanding in 2000 to 1.2% in 2025, while ETFs went from zero to 8.0% and mutual funds from 7.4% to 15.1%.

Active ETFs have broadened access to non-benchmark assets that sit at the heart of the contemporary financing.

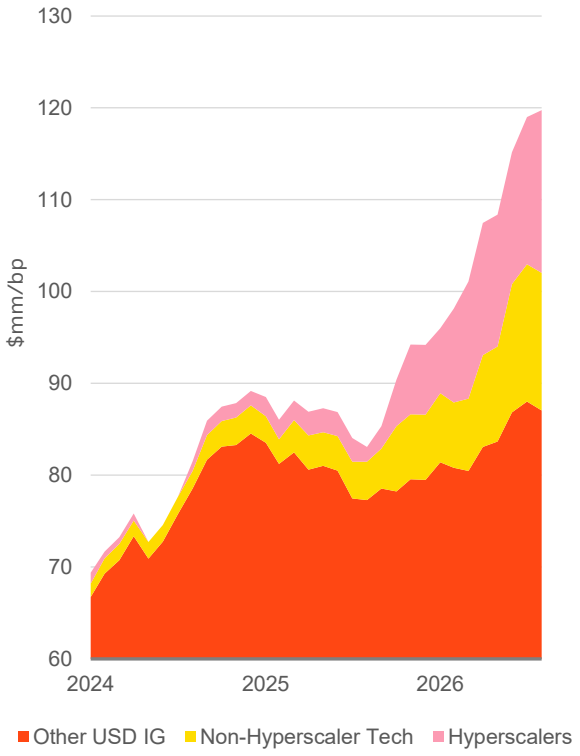
Source: FINRA, Bloomberg, Federal Reserve.

- To what extent does such debt issuance compete with Treasury securities for investor demand?

Putting the pace and scale of issuance in perspective.

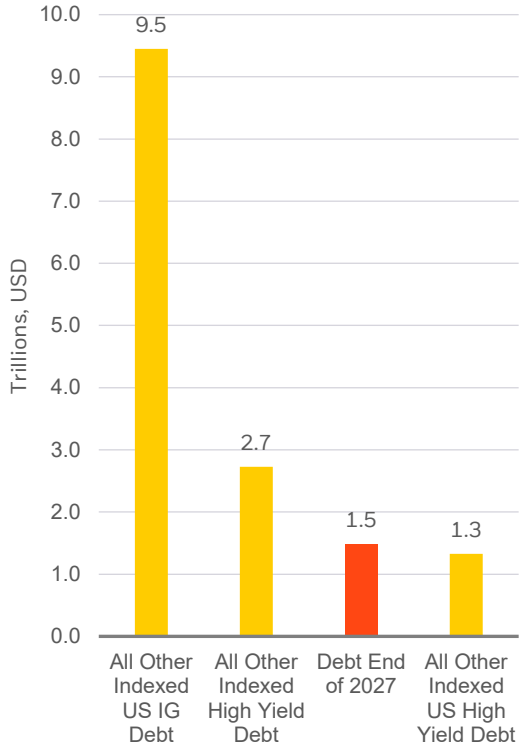
Tech accounts for 70% of the increase in IG issuance since 2024 and may exceed 50% of total notional IG issuance in 2027.

Trailing 1Y Average Monthly US IG Issuance DV01



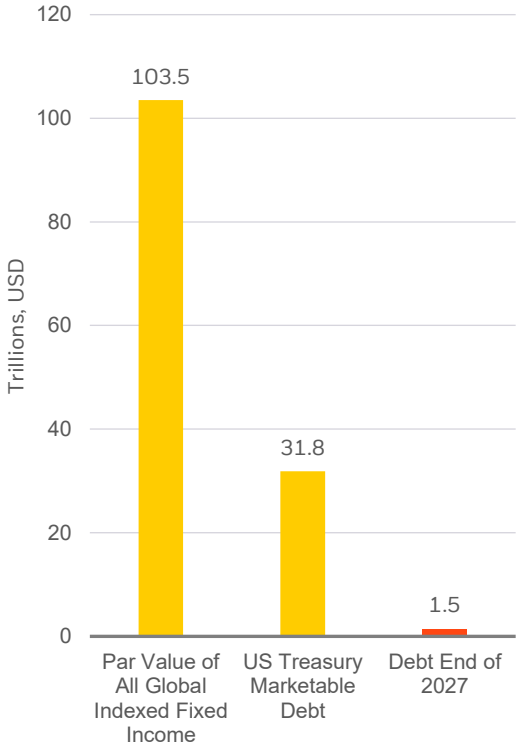
By the end of 2027, outstanding tech debt will be larger than the entire US HY index market cap.

Tech-related Debt Outstanding relative to Corporate Markets



Even after large 2027 tech debt issuance, overall tech debt will be a small fraction of broader global Fixed-Income markets.

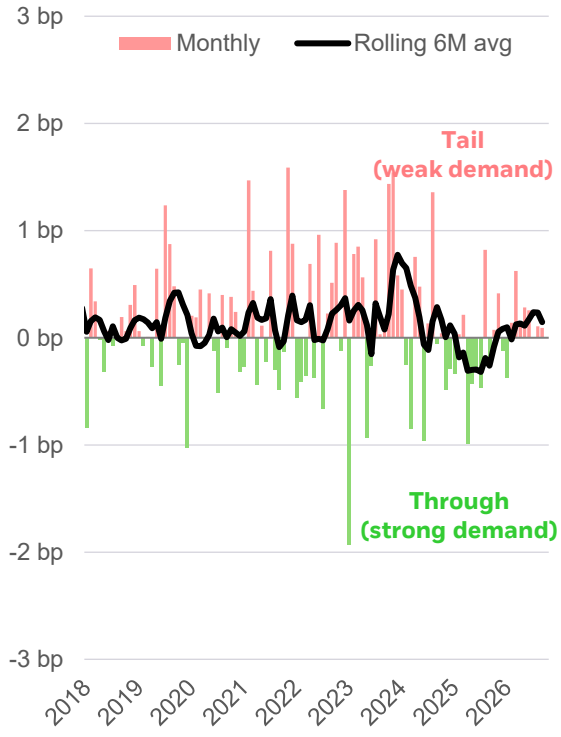
New Tech-related Debt relative to Broader Markets



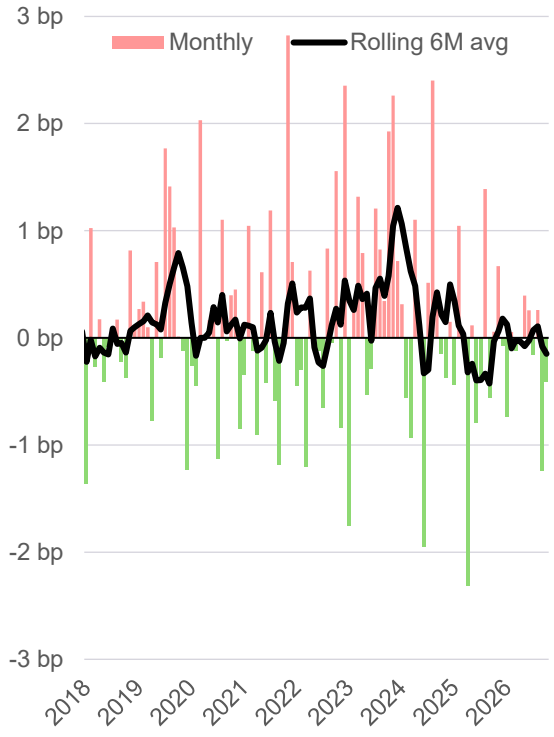
Source: Bloomberg, Dealers.

Treasury auction results do not show 2026 tech-related issuance crowding out Treasury demand at the long-end.

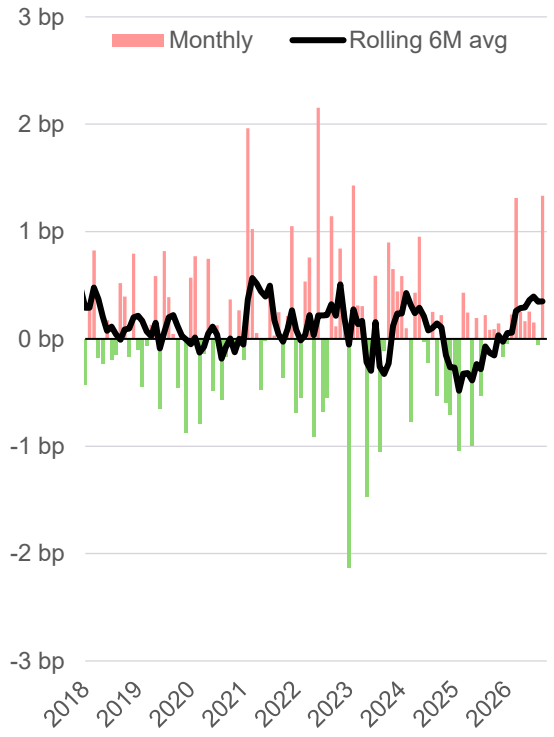
All nominal coupon Treasuries:
auction tail vs through



10-30Y nominal Treasuries:
auction tail vs through



2-7Y nominal Treasuries:
auction tail vs through



Source: Bloomberg.
Note: Bars show the DV01-weighted average auction result (bp of tail vs through) for auctions that occurred during each month

Tech issuance has little independent explanatory power for Treasury yield movements.

A regression analysis of 10y Treasury yield moves suggests tech issuance does not have a statistically significant effect on daily moves of Treasury yields after accounting for front-end yield moves, oil price moves, and Treasury supply.

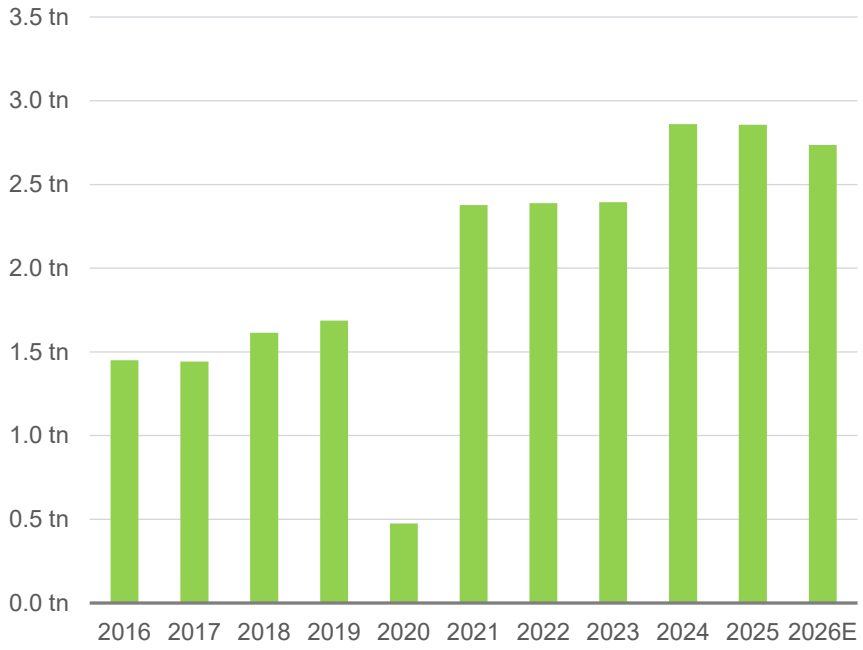
Regression of 3-day change in 10y Treasury yield against the following variables. Sample is January 2026 to present.

	Statistical significance*		
3-day change in 2-year Treasury yield	Highly Significant	T = 14	Growth and Fed expectations are clearly the dominant drivers of yield moves. These explain the majority of the yield moves.
3-day change in Oil price	Significant	T = 2.0	Energy market volatility is also a relevant factor.
US Treasury issuance dv01 (3-day sum)	Marginally Significant	T = 1.8	Treasury auctions marginally impact post-auction valuations.
Tech credit issuance dv01 (3-day sum)	Not Significant	T = -0.5	Tech credit issuance does not explain a statistically significant move in Treasury yields beyond the above-mentioned factors.

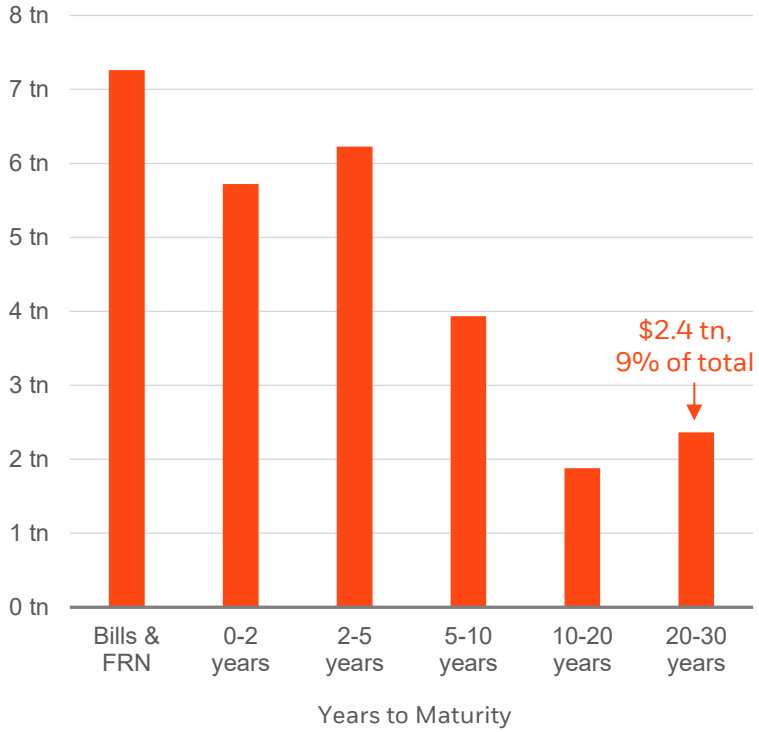
Source: Bloomberg, US Department of the Treasury, Presenter's Calculations.
*Note: Characterization of statistical significance is based on the absolute value of t-stat: highly significant (greater than 2.58), significant (1.96–2.58), marginally significant (1.65–1.96), and not significant (less than 1.65).

Treasury duration supply has not increased since 2024; 20+ year marketable Treasury debt is $2.4 trillion. Technicals in long-dated Treasuries are structurally sound.

Annual duration net supply from Treasuries that the market needs to absorb* (in 10-year Treasury equivalents)

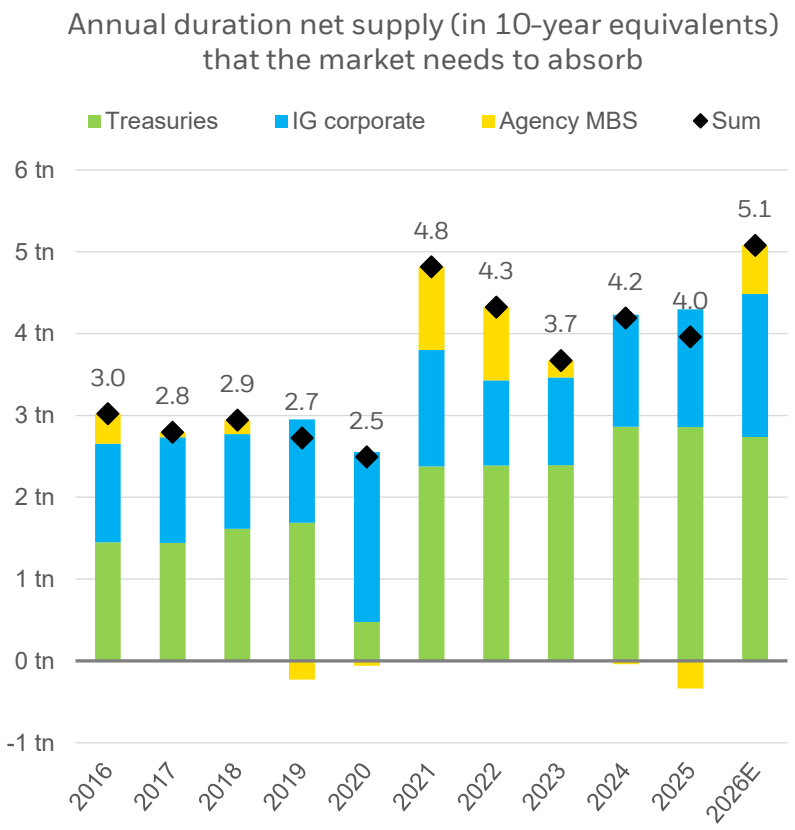


Marketable Treasuries outstanding excluding Fed's holdings by years-to-maturity buckets



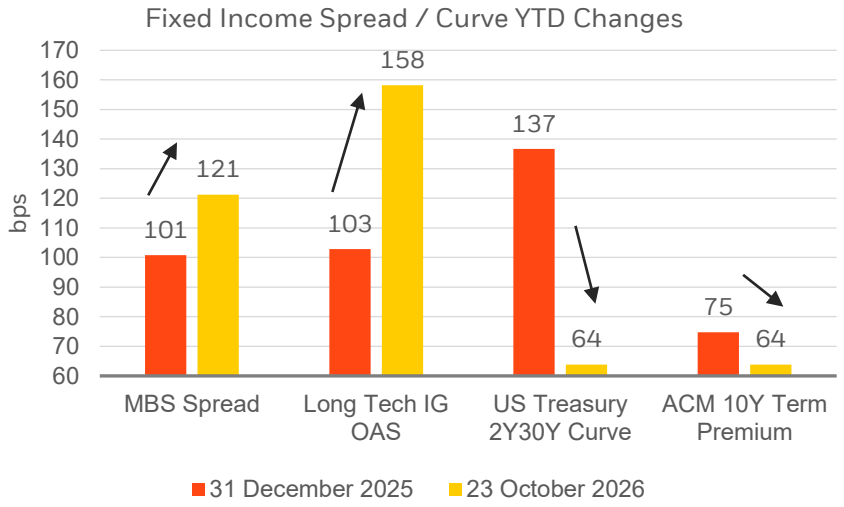
Source: US Department of the Treasury, Federal Reserve, Presenter's Calculations.
*Note: 2026 estimate assumes the following for the remainder of the year: 1) a continuation of roughly $6bn per long-end buyback operation; 2) no change in auction sizes of Treasury coupon securities.

Duration supply has increased in IG and MBS, which is where we have seen re-pricing (in spreads).



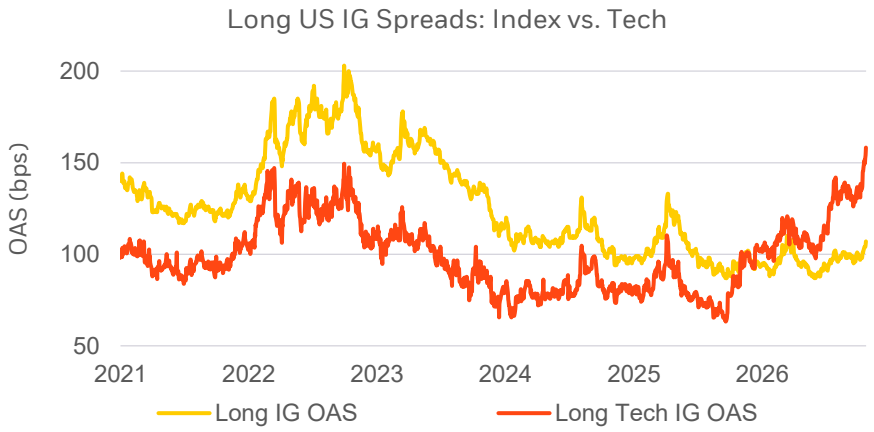
Duration supply from the US fixed income market (in 10-year Treasury equivalents): <u>5.1tn in 2026 versus 4.0tn in 2025.</u>

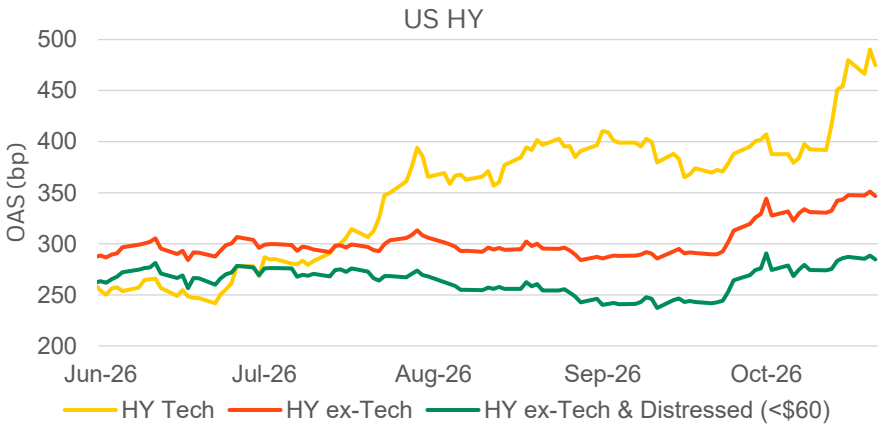
- **Tech IG and MBS accounted for the entirety of the increase - this is where we've seen spread widening.**
- This duration supply might have put some marginal upward pressure on Treasury yields but it hasn't been the primary driver of the rates selloff YTD.

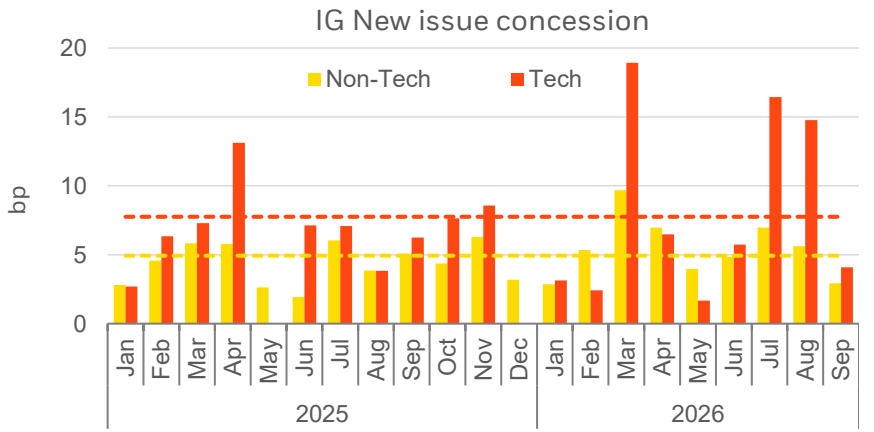


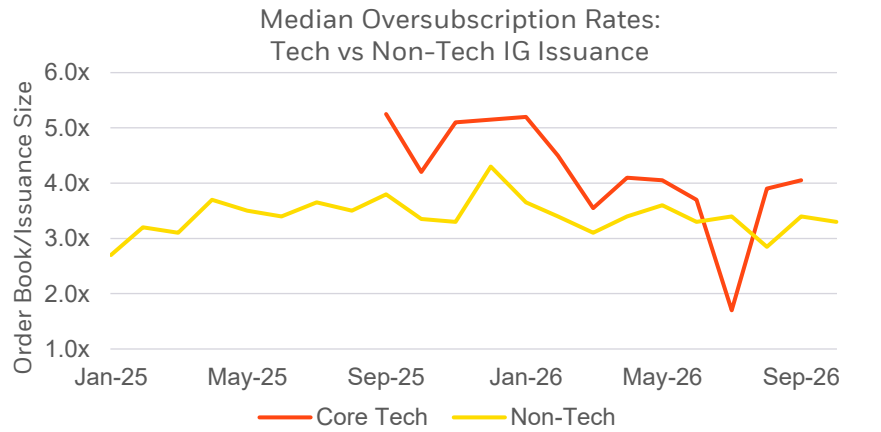
Source: Bloomberg, US Department of the Treasury, Dealers, Presenter's Calculations.
*Note: Treasuries and Agency MBS numbers adjust for Fed's holdings as well as Treasury's buybacks so they represent the supply that the market needs to absorb. Treasury supply estimates for 2026 assume no changes to current policy: approximately $6bn buyback per long-end buyback operation and unchanged Treasury coupon auction sizes through year-end. Agency MBS numbers include organic supply as well as duration extension/contraction from agency MBS held by convexity-hedgers (assume 40% of agency MBS is held by convexity-hedgers ex Fed), and do not adjust for GSE purchases.

There are no clear signs yet of crowding out within the broader credit market from tech issuance.









Secondary spread widening has been mostly contained to tech debt, with some residual widening in rate-sensitive credits.

Unusually large new issue concessions have been largely contained within the tech sector.

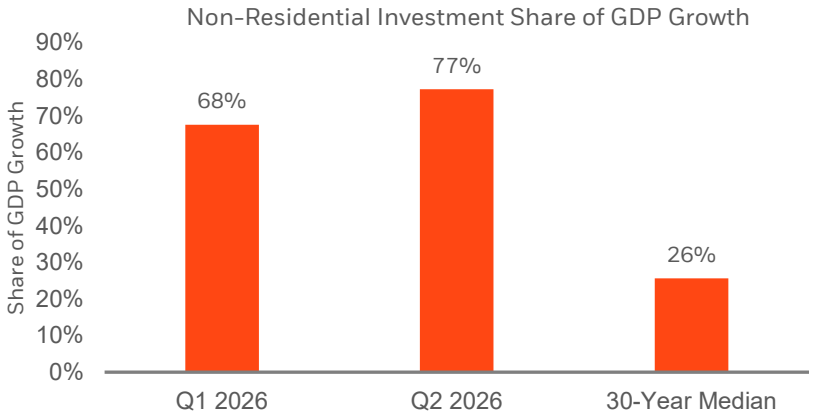
Demand for non-tech credit new issuance as measured by order book-to-deal-size ratios has been steady throughout 2026.

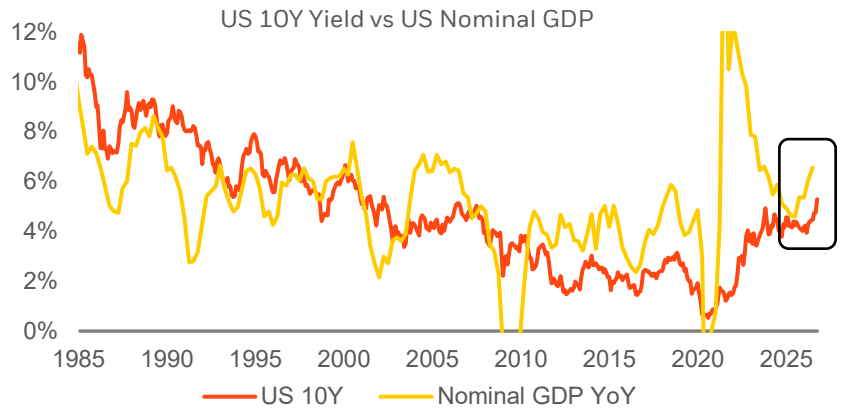
Source: Bloomberg, Dealers.

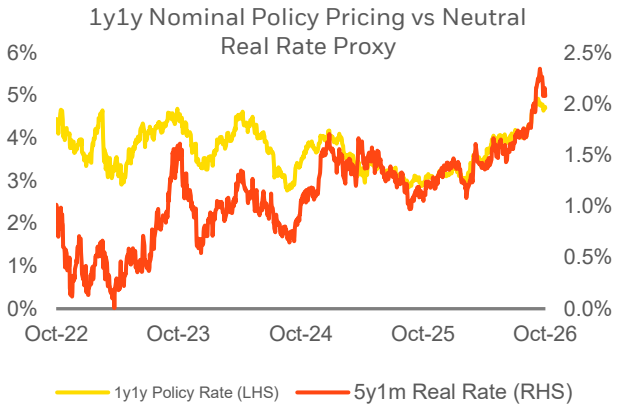
- What other potential effects on fixed income markets should Treasury be monitoring?

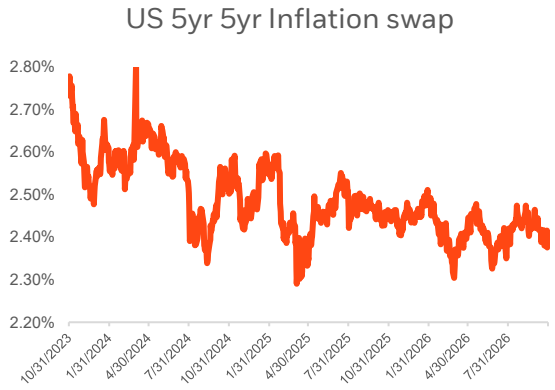
The tech impact on rates is from higher growth, not crowding out. The repricing has been in policy expectations and real rates, not an isolated long-end supply shock.

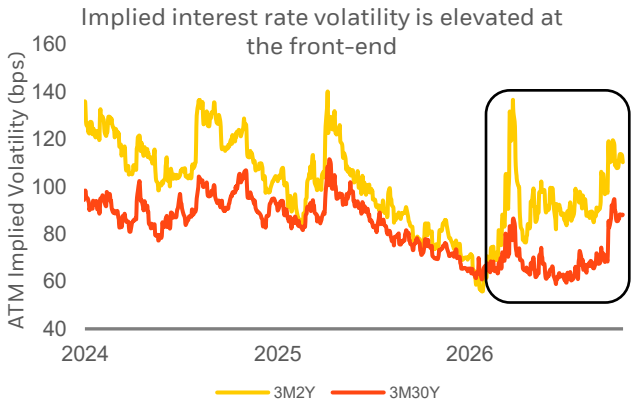
Tech investment is contributing disproportionately to economic growth, lifting real rates and financing costs through the growth channel rather than direct crowding out. Repricing of rates has come primarily at the front-end and looks consistent with stronger growth alongside anchored inflation expectations.











Source: BEA, Bloomberg.

Conclusions

The capex financing cycle is large, accelerating, and broadening. Tech-related debt issuance is projected to rise from approximately **$586 billion in 2026 to $735 billion in 2027**, with upside risk and an increasing role for secured borrowing and equity. Intentions to raise excess capital above projected funding gaps may suggest concern over eventual capital scarcity.

The technology ecosystem retains both the capacity and the incentive to invest. Low aggregate leverage and expected returns above the cost of capital support continued borrowing and spending, but the strength of the overall cohort should not obscure the vulnerabilities of individual borrowers.

Capital provisioning is becoming more discerning, not yet broadly unavailable. Lenders are demanding more favorable terms and secured structures, while lower-rated borrowers face greater scrutiny; crowding out is most evident within the technology ecosystem rather than across the broader Fixed Income markets.

The investor base has capacity to finance the next phase. Insurers, pensions, households, and foreign investors provide multiple sources of demand, while even modest reallocations from cash and equities into fixed income could finance a meaningful share of projected borrowing.

There is no clear evidence to date that tech issuance is crowding out Treasuries or non-tech credit. Treasury auction results and resilient non-tech credit spreads suggest that markets are absorbing the financing wave, with supply-related repricing concentrated within the technology ecosystem rather than impairing access to capital more broadly.

Higher Treasury yields are primarily a growth, policy-expectations, and energy story, not an issuance-driven supply shock. The analysis finds little independent explanatory power from tech issuance; the durability of capex-led growth remains more important for the rates outlook than financing volumes alone.

Treasury Derivatives

Treasury Borrowing Advisory Committee

November 4th, 2026

Please comment on the growth in the use of Treasury derivatives, in particular swaps and futures.
How has use of these derivatives evolved?
Who are the primary users and what factors have driven their usage?
How do these derivatives affect demand for cash Treasury securities?
What effects do these derivatives have on Treasury repo markets?
Does the use of derivatives by investors reduce the size of the Treasury repo market?
Should Treasury consider any policy initiatives to increase demand for cash Treasury securities relative to Treasury derivatives?

Executive summary

Since the 2022 rise in yields, asset managers have built synthetic Treasury exposure through futures, and LDI investors (pension funds and insurers) have used rate swaps for duration, while heavy government and credit issuance have weighed on cash Treasuries.

The reasons for expressing duration through derivatives are many:

- Futures bring simplicity in execution (no repo infrastructure or counterparty lines). They are a versatile and liquid duration management tool (weekly volume is 1.5-2x the open interest and comparable to cash Treasury volume), anonymous (all-to-all central limit order books) and low maintenance (one roll a quarter) for deploying U.S. duration. Their usage leaves cash available for higher-yielding assets and avoids higher fund expense ratios (repo interest is booked as an expense).
- Swaps have been standardized in execution and clearing since the 2013/2014 clearing/SEF mandates but remain customizable (matched to liability cashflows, low initial margin, can extend beyond 30y), carry no roll, can be collateralized with securities, and hedge liabilities that are themselves discounted on swap curves.
- Historically, dealers would intermediate these positions directly. However, leverage ratio rules and balance-sheet constraints have led to reduced participation from that cohort and that gap has been filled by hedge funds.

Derivatives do not remove the underlying demand for Treasuries, they change who ends up holding them. They also broaden market access and add intermediation capacity.

Use of derivatives increases the size of repo market. Also, the availability of repo affects the pricing of derivatives which in turn influences the size of the derivatives market. The cash demand derivatives generate through leveraged, repo-funded positions is pro-cyclical and weakens when funding or margin tightens.

Policies that curb derivatives risk disrupting today's market structure. Treasury could consider policy initiatives that make cash Treasuries easier to hold and finance relative to derivatives: easing regulation that restricts balance sheet usage, making repo financing easier to access, improving the availability of term repo financing, opening repo market making to new entrants.

Together, these initiatives could help build a more diversified and robust base of cash Treasury holders and keep Treasury demand steady.

Usage of U.S. rates derivatives and evolution over time

1980s-2007: *Pre-Great Financial Crisis, dealer-centric and over-the-counter (OTC for short) markets*

- Swaps were a dealer product sold to banks (Asset and Liability Management or ALM for short) and corporates (fixed to floating). End users mostly received fixed while dealers paid fixed, hedged in cash Treasuries on repo and warehoused the residual. This flow, combined with LIBOR credit risk, kept swap spreads positive.
- Inter-dealer trades peaked at 66% of OTC IRD (Interest Rate Derivatives) turnover in 2001 (Bank for International Settlements or BIS for short)[2].
- Hedge funds were present at the long end as spread convergence traders (see Long-Term Capital Management and swap spreads in 1998).

2008-2015: *Post-Great Financial Crisis, displacement of inter-dealer markets by buy-side participants*

- Inter-dealer trade share dropped to 44% in 2010 and 35% in 2013 (BIS)[2].
- Issuer swap demand faded with lower rates and pension funds and insurers (LDI for short) became the structural receivers of fixed. The 30y swap spread turned negative in 2008.
- Clearing/SEF mandates in 2013-14 standardized swap markets.
- GSE (Government-Sponsored Enterprises) swap usage shrank after conservatorship, removing a major structural payer of fixed (synthetic fixed-rate funding and convexity hedging of retained Mortgage-Backed Security - or MBS for short - portfolios).

2015-2020: *Regulations, balance sheet constraints and dealer wind-down of warehousing*

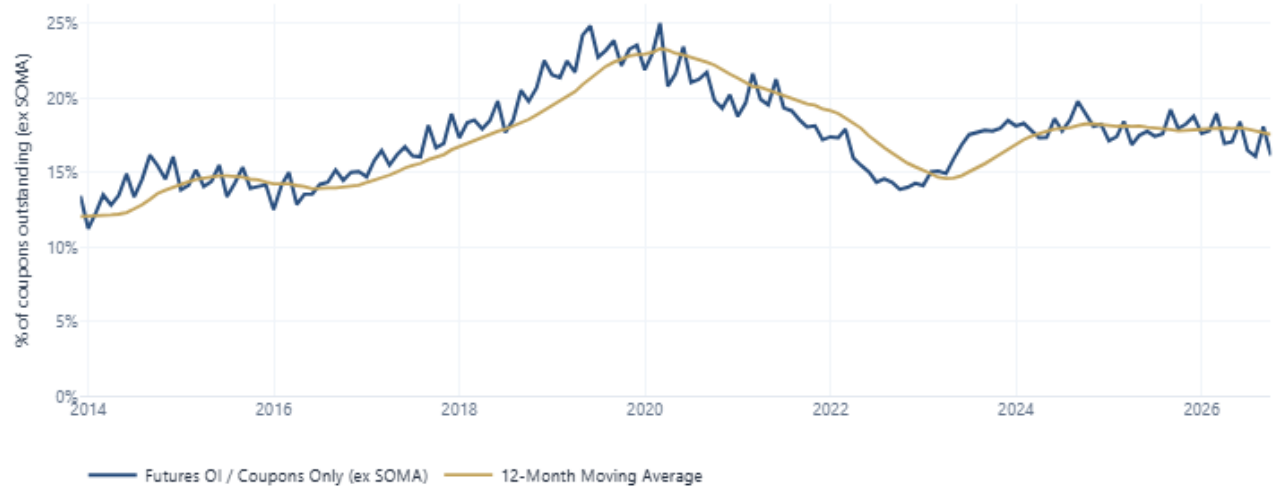
- Negative swap spreads and leverage ratio regulation pushed warehousing from dealers to hedge funds. The basis trade picked up before seeing a large unwind in March 2020 (Covid).

2020-2026: *Asset managers and leveraged funds/dealers mirrored positioning*

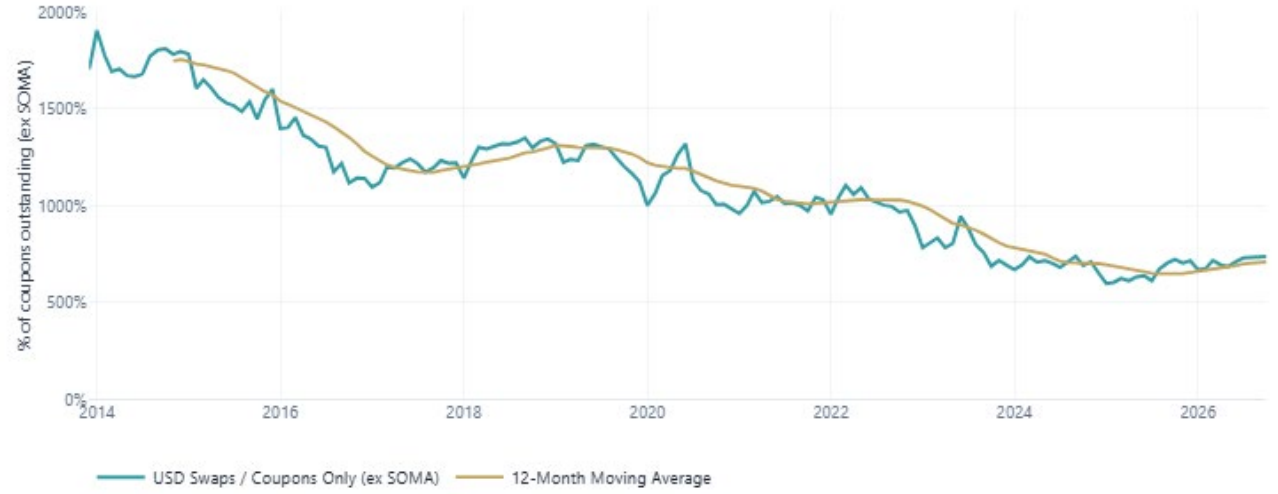
- Asset managers' futures long have roughly quadrupled since the end of 2021 and the leveraged funds (and dealer) community has seen a close to identical increase in their shorts (according to the Commodity Futures Trading Commission Traders in Financial Futures data - or CFTC TFF for short).

Growth and evolution of U.S. rates derivatives usage (futures and swaps)

Treasury futures OI % of coupons outstanding (ex SOMA)



USD swaps OI % of coupons outstanding (ex SOMA)



* Sources: CFTC Weekly Swaps Report; US Treasury MSPD; NY Fed SOMA.

The open interest in Treasury futures has increased in line with the stock of U.S. public debt/marketable (share hovering between 12% and 25%, peaking right before the deleveraging of March 2020).

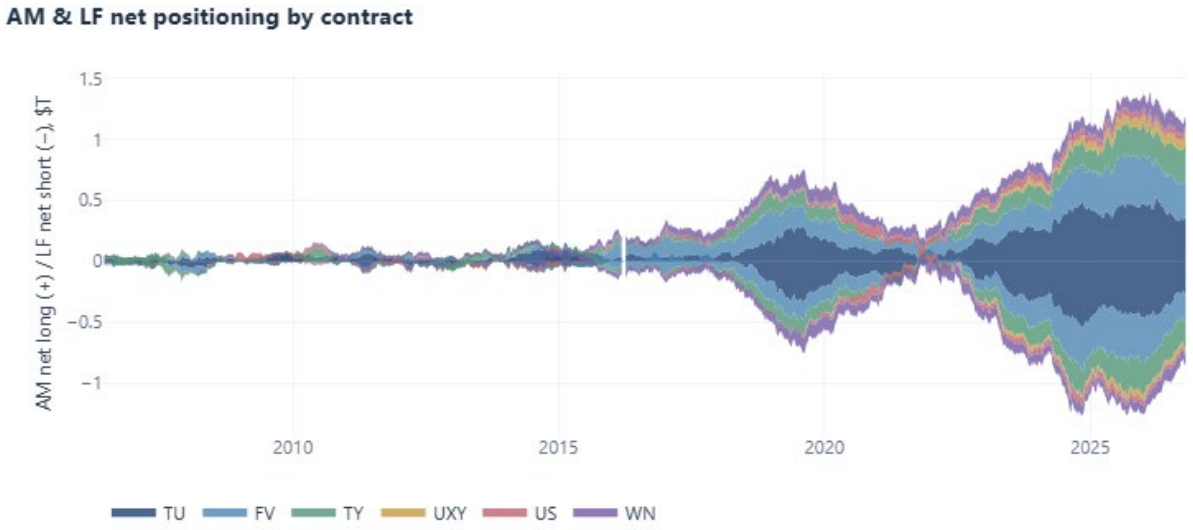
It has recently stabilized at around 18% of the stock of coupons.

Swaps open interest used to be much larger than the stock of debt and that ratio has compressed from ~18x coupons ex System Open Market Account (or SOMA for short) in 2014 to ~7x (CFTC Weekly Swaps Report).

Gross USD swap notional has ranged between $85tn and $135tn for about a decade (compression, then the SOFR conversion kept notional down) while coupons ex SOMA grew 2.5x, so the falling ratio reflects notional efficiency and fiscal expansion and QT rather than a retreat from swaps.

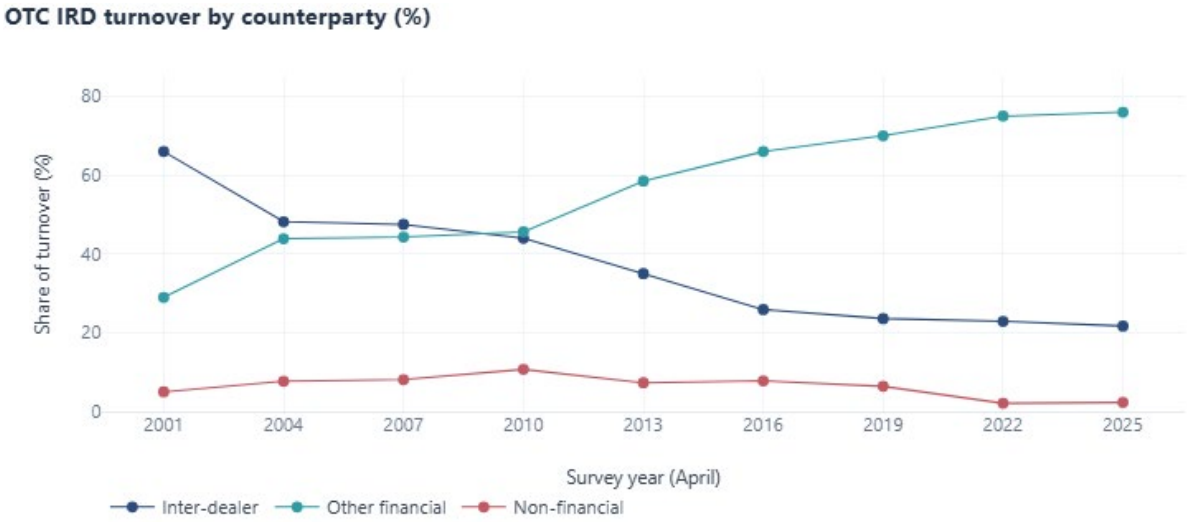
In terms of volumes, cash Treasury and futures volumes on a 13-week moving-average basis are similar at above $4tn a week. Swap volumes have run higher, at $6-7tn a week on the same basis, with the latest week above $8tn (see figure on slide 17).

Asset managers' longs vs leveraged funds' shorts breakdown by contract



* Source: CFTC TFF data, market-value notional.

Composition of global OTC IRD daily turnover by counterparty type[2,3]



* Source: BIS Triennial Central Bank Survey (2001–2025).

USD swaps open interest and counterparty composition

As mentioned in slide 4, two episodes reduced outstanding notional in swaps without impacting activity:

- Compression took the open interest down 37% in 2014-16 as the leverage ratio and G-SIB (Global Systemically Important Bank) surcharge (both keyed to gross notional) made redundant line items a capital cost.
- The SOFR transition then replaced LIBOR fixed-float swaps with SOFR OIS, now ~$100tn outstanding.

Since 2025 notional has grown again, with OIS up $27tn, putting the total back around its 2014 level.

The non-dealer share of outstanding USD interest rate swap counterparty sides has roughly doubled, from about 15% in 2014 to about 31% in 2026 (CFTC Weekly Swaps Report participant tables). The remaining two-thirds are swap-dealer sides, which include inter-dealer trades and dealers' own hedges. The CFTC reporting-method changes in 2019 and 2022 each reset the level lower (indicated on the chart), so the trend within each regime is the more useful signal to interpret this data.

USD swaps notional outstanding

* Source: CFTC Weekly Swaps Report. SOFR swaps are classified under OIS; USD LIBOR swaps were classified under Fixed-Float.

Non-dealer share of IRS notional

* Source: CFTC Weekly Swaps Report.

Positions by user cohort today

Cohort	Instruments used	Usage	Why? (see slide 8-13 for details)	Position today	Scale anchor
Asset Managers (Mutual Funds, ETFs, SMAs)	Long TSY & SOFR futures, some cleared swaps	Duration overlay to track benchmark, liquidity, synthetic TSY exposure	Futures give duration without a repo desk and without rolling overnight financing. The financing cost sits in the futures price and does not appear as an expense-ratio line. Futures gains are taxed 60/40 under Section 1256. The 40 Act caps fund borrowing at one-third of assets, while SEC Rule 18f-4 lets futures run under a VaR limit	Structural net long of $1.14tn, mirrored by a $1.15tn net short at leveraged funds and dealers	Net long $1.14tn (CFTC TFF, Oct 2026). Mutual funds hold $455bn of long TSY futures ($314bn net) and futures are 43% of their TSY exposure (Fed, N-PORT data, Q4 2023)[5]
Leveraged Funds(RV, Multi-manager, macro, CTAs)	Short TSY futures and pay-fixed SOFR swaps vs cash TSY, SOFR futures	Cash/futures basis, swap spreads, asset swaps, curve RV, policy views	Positions are the other side of asset-manager futures longs and of receive-fixed demand from insurers and pensions. Leverage comes from futures margin, cleared swaps and FICC sponsored repo. The Fed traces the basis trade largely to Cayman-domiciled funds[8], outside the tax frictions that apply to US investors	Net short $0.83tn in TSY futures against cash TSY financed in repo	Fed estimates from Form PF[6], Sept 2025: $2.4tn long and $1.6tn short gross exposure, about $2.15tn of it in cash TSY (estimate), repo cash borrowing $3.1tn. Basis trade $832bn (Fed). Swap-spread trade $305bn (Fed) to $631bn (BIS upper bound, Q2 2025)[7]
Dealers/banks	Futures, swaps, swaptions, market-making books, futures hedging of inventory	Market making, client flow recycling, ALM, inventory hedging	The leverage ratio, G-SIB surcharge and NSFR charge capital and stable funding against cash TSY inventory and matched-book repo. Cleared derivatives and FICC-netted sponsored repo use far less balance sheet	As of Apr 2025, Inter-dealer trades are 21% of IRD turnover, down from 66% in 2001[2]. Dealer net short in TSY futures is $0.32tn	$205.9tn of interest rate derivatives at insured US banks, 68.5% of all derivatives, with four banks holding 80.2% (OCC, Q2 2026)[9]. Inter-dealer share 21% of global IRD turnover (BIS, Apr 2025)[3] and 31% of US-booked turnover (NY Fed, 2025)[4]. 36 FICC sponsoring members intermediate $1.7-2tn a day of sponsored repo (DTCC, 2025)[10]
Pensions/insurers (LDI)	Long dated receiver swaps, swaptions, ultra bond futures, STRIPS	Liability hedging while assets stay in credit. 95% of insurers' derivatives are designated as hedges	Liabilities are valued on swap or credit curves rather than Treasuries, and run beyond the 25-30 year maturity of the longest futures. Bilateral swaps can be collateralized with securities, futures require daily cash margin. Swaps qualify for hedge accounting against the liability. For pension trusts, repo borrowing creates taxable UBTI, derivatives do not	Direction is not reported in US filings. Where it is measured, it is receive-fixed: UK LDI funds £167bn net (BoE, Sept 2022)[15], over 70% of Dutch pension funds (DNB, 2024)[16]	Insurers' derivatives notional $3.0tn at YE2021, 98% life companies, 51% swaps, 95% hedging. Interest rate swaps $1.12tn, 73% of swap notional (NAIC)[11]. Life sector $3.1tn at YE2023 (S&P GMI)[13]. No US aggregate exists for pension funds' derivatives
Mortgage investors/servicers/GSEs/FHLBs	Swaps, swaptions, 10y/ultra 10y futures, caps	Fixed-to-floating conversion of debt and advances (FHLBanks), convexity and MSR hedging	Fixed-rate debt and advances swapped to floating qualify for fair-value hedge accounting. Negative convexity is hedged with options (swaptions, caps) rather than linear instruments.	GSE books grew sharply in 2025: Fannie Mae's risk-management derivatives up 43%, Freddie Mac's swaps up 46% (2025 10-Ks)[17]	Fannie Mae and Freddie Mac: $1.27tn of interest rate risk-management derivatives at YE2025, up 22% in a year, of which $1.0tn swaps (2025 Forms 10-K)[17]. FHLBanks: $1.17tn of interest rate swaps at YE2025 (FHLBanks Office of Finance, Combined Financial Report Q1 2026)[18]. Housing-GSE complex ≈ $2.45tn (sum of the above)
Corporate/SSA issuers	Receive-fixed swaps (fixed issuance to floating), pay-fixed swaps and rate locks (floating to fixed, pre-issuance)	Funding cost management	Hedge accounting under ASC 815 is simplest with a swap matched to the debt's terms, which can use the shortcut method; futures are eligible but need ongoing effectiveness testing, quarterly re-designation on roll and hedge-ratio rebalancing, so issuers use them mainly for short pre-issuance hedges.	Small and stable share of turnover, 2.1% in 2022 and 2.3% in 2025. Growing as a duration-supply source through S.I.-related issuance	Non-financial customers are 2.3% of global OTC IRD turnover (BIS, Apr 2025)[3] and 0.4% of US-booked turnover (NY Fed, 2025)[4]. AI-related hedging: about $50bn of 10y-equivalent pay-fixed in Q4 2025 (Dallas Fed, Feb 2026)[19]
Foreign official/SWFs/Retail	Futures (reserve/duration management)	Marginal	Reserve mandates require cash holdings, retail reaches futures only through funds	Marginal	Not identifiable in swap data. In TSY futures, the CFTC "other reportables" net position is about 1% of TY open interest (Oct 2026)

Primary users of Treasury futures

Consistent with a previous TBAC charge (TBAC Charge, Q1 2024[1]), the CFTC data show that since 2015 (with a near-full unwind between 2020 and late 2021 after rates bottomed), asset managers have built a large net long position in Treasury futures of ~$1.15tn notional (peaking at ~$1.4tn in February 2026).

In lockstep, leveraged funds, followed by dealers more recently (coinciding with de-regulation developments such as the SLR (Supplementary Leverage Ratio) relaxation in 2020-21 and eSLR reform of 2026), have taken a mirrored position in short futures. Other cohorts have maintained negligible positions throughout the period.

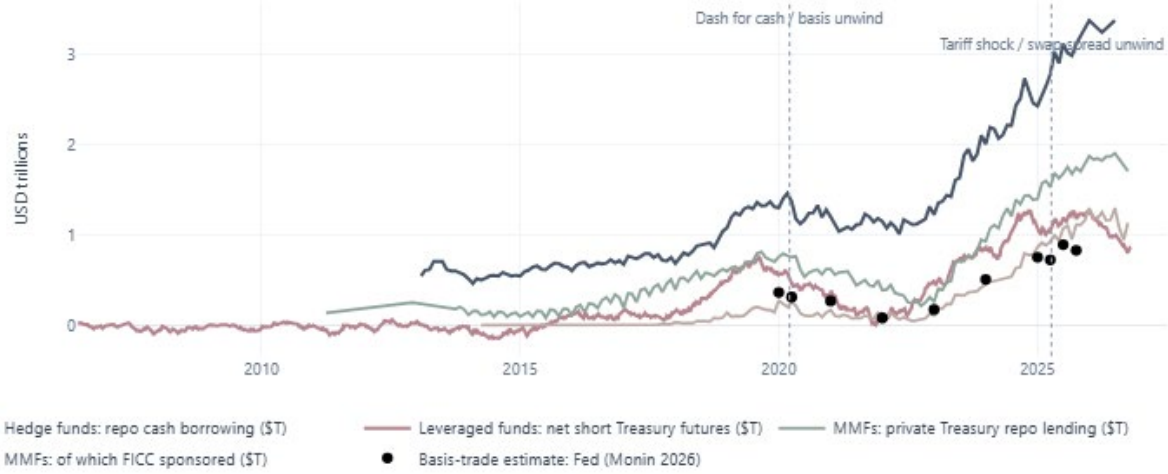
Since the end of 2022, hedge-fund repo borrowing is up $1.9tn (Form PF)[6], leveraged funds' net short Treasury futures $0.7tn (CFTC) and MMF (Money Market Funds) lending through FICC sponsored repo $1.0tn (OFR). These three series moving together since 2018 are evidence of the basis trade financing chain.

The size of the basis trade is estimated at $0.8-1.2tn depending on the methodology used (see slide 15)[6,22].

Treasury futures net positioning by cohort

* Source: CFTC TFF data, market-value notional.

Basis-trade triangulation



* Sources: Fed, Monin 2026 (Figures 1 & 3, SEC Form PF) and OFR; CFTC TFF data, market-value notional; OFR Money Market Fund Monitor.

Primary users of interest rate swaps

Insurers (U.S. life companies)

- The latest published aggregates (National Association of Insurance Commissioners or NAIC for YE2021[11], S&P Global Market Intelligence for YE2023[13]) put U.S. insurers' derivatives at about $3tn of notional, half of it swaps across all asset classes. 95% of the total is designated as hedging and 98% is held by life companies. The latest NAIC industry report covers YE2021.
- Interest rate swaps have been the largest swap type in every NAIC report we reviewed since 2010: $911bn at YE2017[12] (80% of swap notional) and $1.12tn at YE2021 (73%)[11], with life companies alone at $1.16tn by Q4 2022 (Risk.net, Q4 2022)[14]. On the data released, the book roughly tripled from 2010 to 2018 and has grown more slowly since, to $1.1-1.2tn.
- The swaps lengthen asset duration against annuity and other long-dated liabilities while the assets stay in credit. NAIC's published aggregates do not give direction, but the liability structure makes insurers receivers of fixed, and the one filings-based aggregation that reports it (Risk.net, Q4 2022) finds just over half the book received-fixed.
- Futures are marginal (5.8% of notional, NAIC YE2021).

Pension funds/LDI

- U.S. corporate defined benefit (DB) plans discount liabilities on AA corporate yields (ASC 715), so their LDI is largely physical long credit and STRIPS, with swaps and futures in completion overlays. There is no U.S. aggregate of their derivatives. Public plans discount at expected return (GASB 67/68) and hedge little.
- Where we can observe direction, it is one-way: UK LDI and pension funds held £167bn net receive-fixed interest rate swaps and £57bn inflation swaps in September 2022[15]. More than 70% of Dutch pension funds hedge liabilities as net fixed receivers in long-dated swaps[16], because the FTK (Dutch regulatory financial assessment framework) values liabilities off the swap curve. De Nederlandsche Bank (DNB) and market participants expect the Dutch pension reform (2026-28) to reduce that long-end receive demand.

SOFR swap spreads (synthetic before July 2018)

* Source: J.P. Morgan DataQuery. Pre-2018-07-01 synthetic SOFR spreads follow J.P. Morgan (2022) methodology.

Primary users of interest rate swaps (continued)

Negative swap spreads and hedge fund positioning

- A cleared swap costs a bank very little in leverage ratio terms while a repo-financed Treasury position costs capital. Swap rates are therefore pushed below Treasury yields, most of all at the long end, where receiving demand is deepest and duration supply heaviest. The 30y spread has averaged -73bp this year and touched -97bp on 8 April 2025, the widest since SOFR spreads began trading in 2018. At the front end, where futures carry little delivery optionality, the same balance-sheet cost shows up in the futures basis: the 2y swap spread and TU futures richness have moved together since 2018 (see chart at top right)
- Hedge funds take the other side (long cash Treasuries on repo, pay fixed). The Fed's Form PF decomposition (Monin, 2026)[6] puts the swap-spread trade at $305bn in September 2025 (see chart at bottom right), which is about ten times its end-2022 size. The BIS's upper-bound method gives $631bn at Q2 2025 and when applied to the Fed's September 2025 aggregates it gives about $750bn (our calculation).
- Like the basis trade, it is a levered short on the dealer balance-sheet constraint, which is why it loses and de-levers when that constraint binds (March 2020 and April 2025, when the BIS measure contracted 11% between March and June 2025).

* Source: J.P. Morgan DataQuery. Futures richness is the 21-day moving average over non-roll trading days (days to first delivery ≥ 15), connected across contract rolls.

Hedge funds' estimated swap-spread trade positions

* Source: Fed, Monin 2026 (Figure 5, SEC Form PF).

Supporting evidence of swap use by insurers and pension funds/LDI

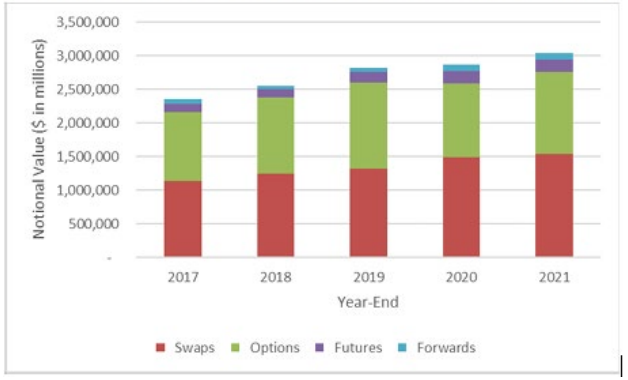
Supporting charts for the statements made on slide 9. Note that the direction of the swap positions is not published for U.S. insurers (NAIC aggregates) while it is for UK and Dutch pension funds.

NAIC Schedule DB aggregates (YE2017 to YE2021[11]) show that the insurance derivatives book grew from $2.4tn to $3.0tn, with swaps the largest type over the entire period. Table 2 below gives the YE2021 breakdown by type and filer: options 40.1%, futures 5.8%, forwards 3.5% and life companies 98.3% of the total.

Table 2: Total U.S. Insurance Industry Derivatives Exposure by Derivatives Type, Year-End 2021 (Notional $ in millions)

Statement Type	Swaps	Options	Futures	Forwards	Total	% of Total
Life	1,523,760	1,195,280	174,291	101,181	2,994,512	98.3%
P/C	17,482	25,039	3,169	5,262	50,952	1.7%
Health	209	-	281	79	569	0.0%
Total	**1,541,451**	**1,220,319**	**177,742**	**106,521**	**3,046,033**	**100%**
% of Total	50.6%	40.1%	5.8%	3.5%	100%	

Chart 1: U.S. Insurance Industry Derivatives Exposure, 2017–2021 (Notional $ in millions)



Bottom left: Gilt repo is the larger leverage channel for UK LDI and pension funds (September 2022[15]). The interest rate swaps are net received-fixed (negative bars in the authors' convention) and inflation swaps net paid.

Chart 1: Net notional of outstanding swap positions (by contract maturity) and net repo borrowing (by collateral maturity) as of 22 September 2022 [(a)]

Sources: SMMD and EMIR TR data, and Bank calculations.

Bottom center and right: the share of Dutch pension funds[16] using swaps rose from about 75% in 2012 to over 90% by 2022, and their net Euribor swap positions are concentrated as receivers in the 15-year-plus buckets, opposite to banks at the short end.

(a) Swap usage by Dutch pension funds

(b) Net notional Euribor interest rate swaps Dutch counterparties

Source: DNB Working Paper 801[16]

Why do users gravitate towards derivatives?

Operational hurdles: asset managers, corporates, pensions

- Levering Treasuries in cash form requires financing them in repo, which means having a functional repo desk, counterparty lines and documentation, collateral management and settlement infrastructure.
- That set-up cost is borne regardless of position size. Derivatives deliver the equivalent exposure without these hurdles.
- Futures are the lightest route: one exchange-traded contract per curve point, central clearing, anonymity, no documentation beyond a futures commission merchant (FCM for short). Asset managers and anyone without a financing desk start here.
- Similarly, swaps are standardized from a product standpoint yet customizable in their details and can match liabilities precisely.
- While not as demanding as setting up repo trading infrastructure, the set-up required to trade swaps is heavier, involving an ISDA (International Swaps and Derivatives Association) agreement, clearing-broker relationships, swap trading platforms and collateral operations. Pensions, insurers, GSEs and corporates accept that cost because only a swap can be matched to a liability or a bond issue, which a future cannot.

Funding certainty: asset managers, pensions, insurers

- Repo-financed Treasuries must be rolled continuously (mostly overnight to one week), exposing the holder to rate and availability risk at every roll date.
- Derivatives embed the availability of term financing (but not its rate): a future locks it to the delivery date at the implied repo rate (three months, rolled quarterly) while a swap funds at SOFR for the life of the trade with no roll required, but at whatever rate SOFR prints. Bilateral swaps can be collateralized with securities rather than daily cash.
- Someone still has to carry the cash bond and roll the repo. That is the role hedge funds and dealers play through the basis and swap-spread trades: they have the infrastructure and provide the term financing the end users have outsourced.

Why do users gravitate towards derivatives? (continued)

Classification bias: asset managers, insurers, GSEs, corporates

- Fund accounting treats repo interest as an explicit expense: it raises the reported expense ratio and reduces net investment income available for distribution, both of which matter to the end investor and therefore the managers.
- The identical financing cost inside a future or swap is netted within the instrument's price and never appears as a fund expense. Economically equivalent leverage is therefore presented asymmetrically, biasing fund managers toward derivatives.
- Section 18 of the 1940 Act caps fund borrowing, including repo, at one-third of assets, while under SEC Rule 18f-4 (2020) derivatives are governed by a VaR limit that permits far more exposure.
- Hedge accounting pulls the liability hedgers towards swaps: a swap whose terms match the debt or liability qualifies cleanly under ASC 815 (FASB), IFRS 9 (IASB) or SSAP 86 (NAIC), whereas a futures hedge must be re-designated at every roll and tested for effectiveness each period.

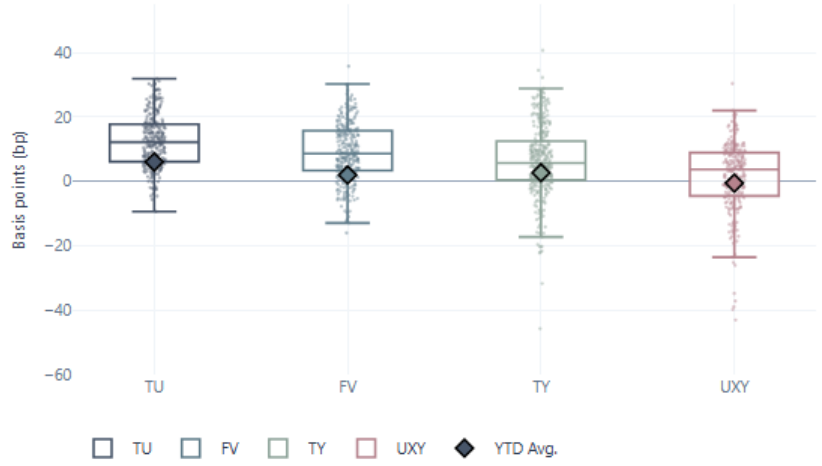
Tax implications: tax-exempt investors, taxable individuals

- For tax-exempt investors such as pensions, endowments and foundations, financing cash Treasuries with repo makes the bonds' income partly taxable as unrelated business taxable income (UBTI) and requires a Form 990-T filing. Treasury futures and swaps give the same leveraged duration without borrowing, so their gains generally stay tax-exempt. This pushes these investors toward futures rather than owning cash Treasuries on repo, unless they invest through a corporate blocker such as a mutual fund or offshore feeder fund.
- For taxable U.S. investors, futures gains are 60/40 long- and short-term capital gains under U.S. Internal Revenue Code Section 1256 while repo interest is an ordinary deduction limited by Section 163(d) (the same leverage is cheaper after tax in futures).

Futures basis

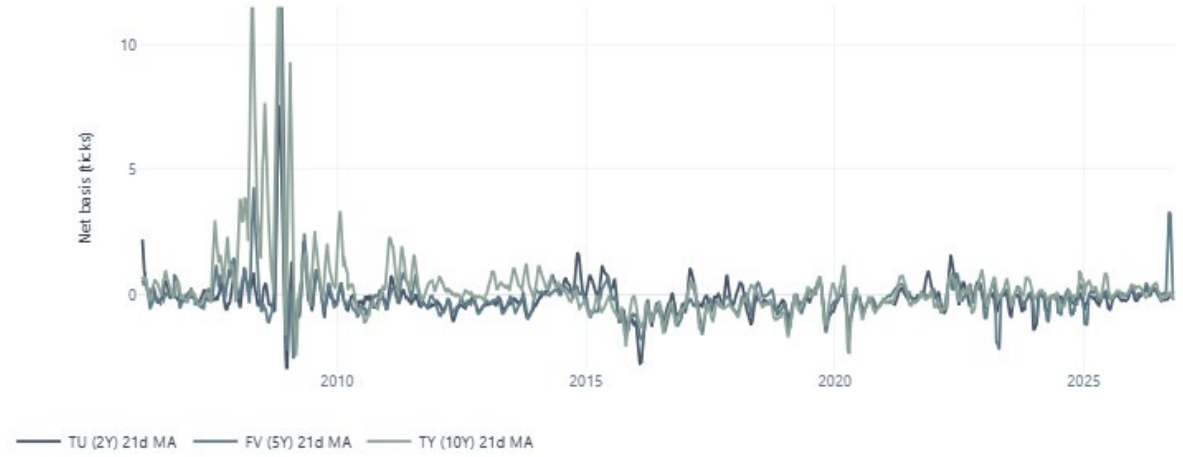
- Futures have traded fair to slightly rich to the replicating cash-plus-repo position for most of the post-2008 period[21]. Over the last two years, the implied repo on TU, FV, TY and UXY ran roughly 0-15bp above matched SOFR OIS, highest in TU and FV (Morgan Stanley, Sept. 2026)[22].
- Net basis equals gross basis less carry to the assumed delivery date, where carry reflects coupon and accrued interest income less the cost of funding the cheapest-to-deliver (CTD) issue in the term repo market.
- Term repo generally trades at a 5-15bp premium (higher in rate) to SOFR OIS to the same date. In addition, CTDs trade special occasionally, which benefits basis-trade holders by lowering funding costs.
- As a result, futures that screen fair to term repo carry a positive margin when financing is rolled overnight.
- Hedge-fund basis positions are financed through a mix of overnight cleared repo and term uncleared repo. The positive carry pick-up applies to the overnight-financed portion, in exchange for daily roll risk.
- Per OFR Brief 26-01[20], about one-third of the $2.4tn hedge fund repo book (~$800bn as of Q3 2024) is cleared through FICC sponsored repo, which is mostly overnight. The rest is largely uncleared bilateral repo, which runs at longer tenors.
- Recent spikes in US and WN net basis reflect embedded optionality and reveal less about implied funding conditions.

Implied repo rate less equivalent SOFR rate: YTD vs last 2 years (bp)



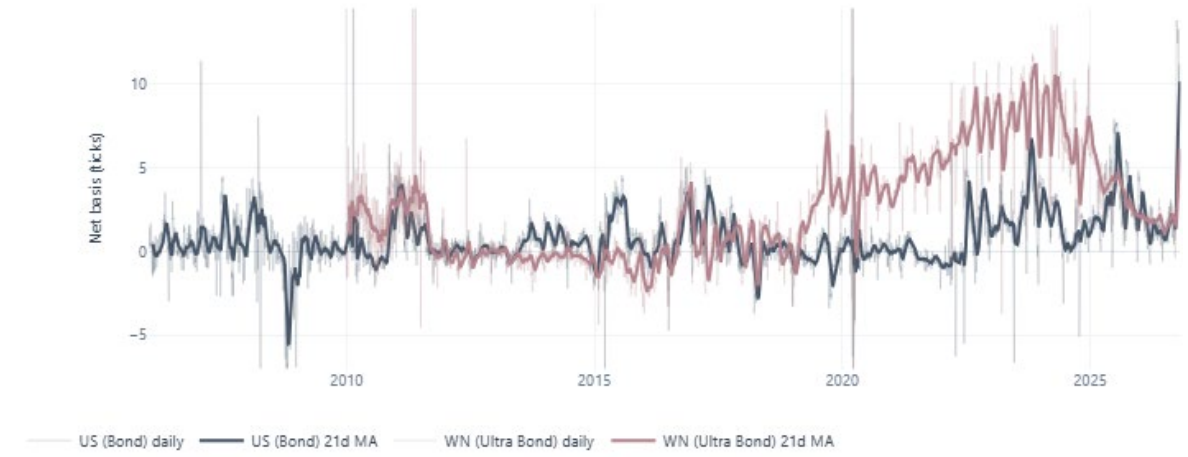
* Sources: Morgan Stanley, Sep 2026 (Exhibit 5); J.P. Morgan DataQuery.

Treasury futures CTD net basis · TU / FV / TY (21-day MA, ticks)



* Source: J.P. Morgan DataQuery.

Treasury futures CTD net basis · US / WN (daily & 21-day MA, ticks)

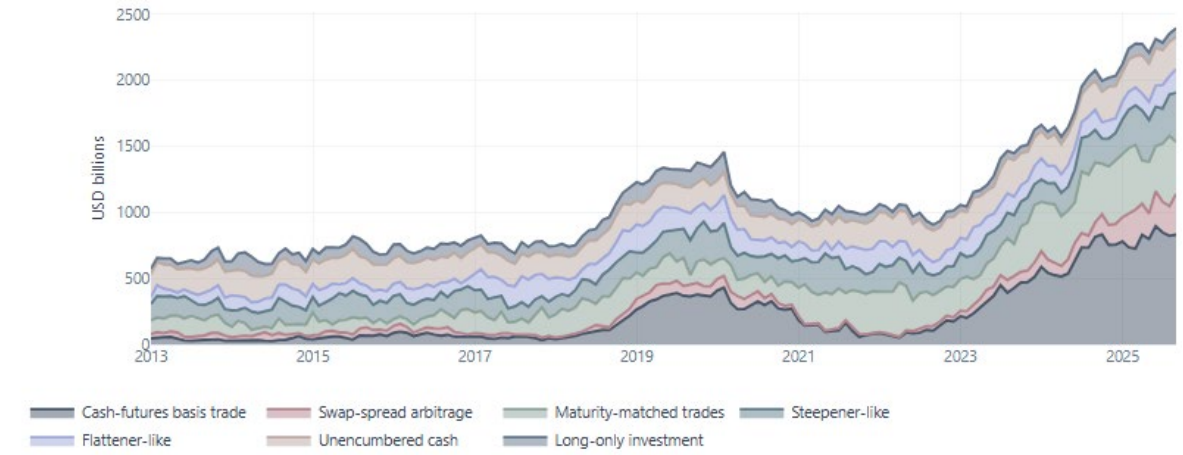


* Source: J.P. Morgan DataQuery.

Sizing up the basis and swap-spread trades

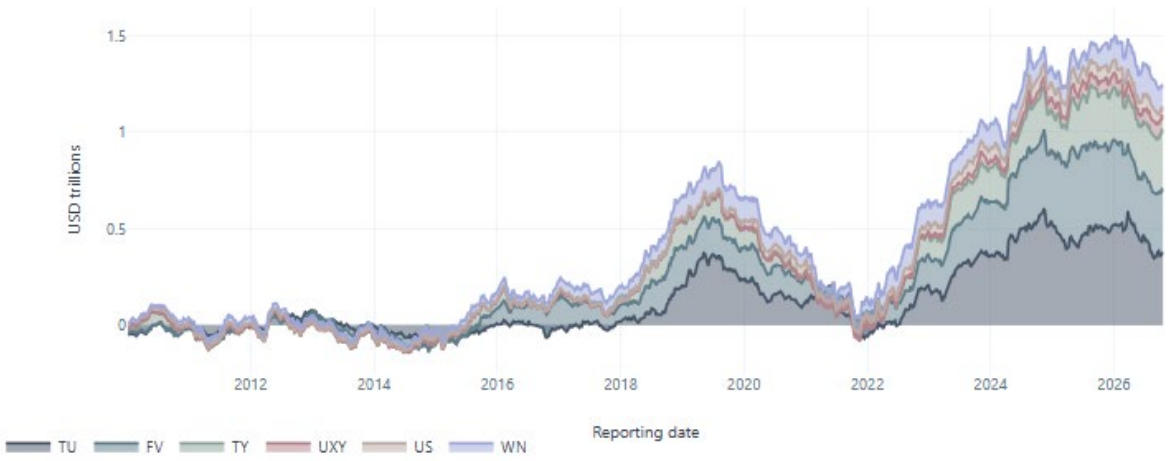
- Fed (Monin, 2026[6]) estimates the basis trade at about $830bn and swap-spread trade at about $305bn as of September 2025.
- Morgan Stanley[22] puts the basis trade at about $1.2tn as of late September 2026 (about $1.35tn in late May and a $1.5tn peak in January).
- The BIS upper-bound method puts the swap-spread trade at $631bn at Q2 2025 (Box B, BIS Quarterly Review, Dec 2025[7]).

Hedge fund long Treasury decomposition



* Source: Fed, Monin 2026 (Figure 3, SEC Form PF).

Basis size by Treasury futures tenor ($T)



* Source: Reproduced from CFTC TFF data and Bloomberg following Morgan Stanley's Jan 2026 methodology (Exhibit 5).

End-user derivative exposure creates cash Treasury and repo demand through intermediaries

Derivatives broaden and deepen demand for cash treasuries –

- by expanding market access: lower operational barriers have doubled the number of reportable traders in TU/FV/TY since 2008 (CFTC, TFF)
- by providing capital efficient access to leverage.
- by adding hedging capacity that helps the market absorb and redistribute issuance.

Long derivative exposure increases repo demand through leveraged cash intermediation, which:

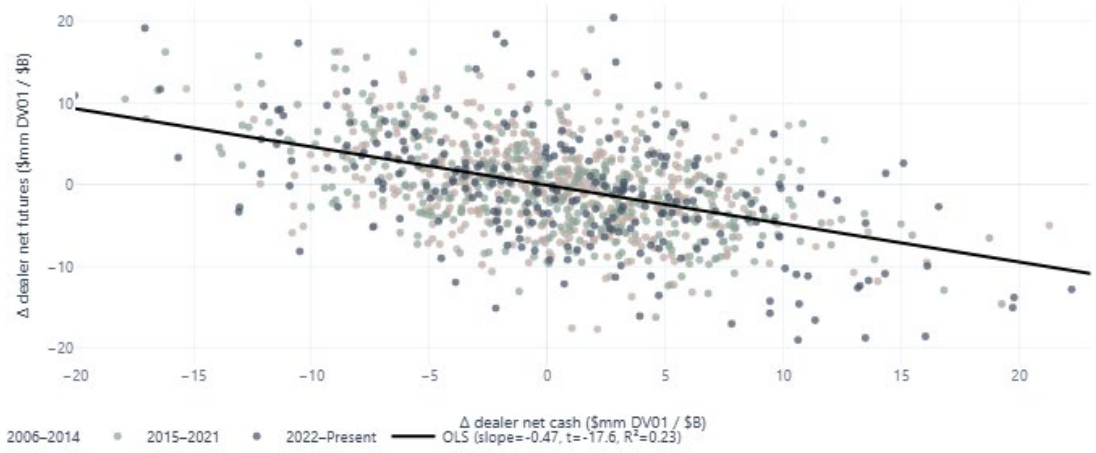
- creates pro-cyclical intermediation risk.
- concentrates cash demand among hedge funds and, increasingly, dealers, who offset about half of each week's change in their cash Treasury inventory with futures
- weakens when funding or margin tightens.
- can unwind precisely when the cash market needs buyers (March 2020).
- requires wider basis and swap spreads to compensate intermediaries for scarce balance sheet and repo capacity.

Derivatives increase market access and intermediation capacity, in the process reshape who holds treasuries. The associated cash Treasury demand becomes less reliable when leverage is scarce.

Reportable traders per US Treasury futures contract (4-week MA)

* Source: CFTC TFF data.

Weekly change: dealer futures vs dealer cash Treasuries



* Sources: NY Fed Primary Dealer Statistics (FR 2004); CFTC TFF data.

Investors' derivative longs become hedge-fund and dealer cash Treasuries financed in repo

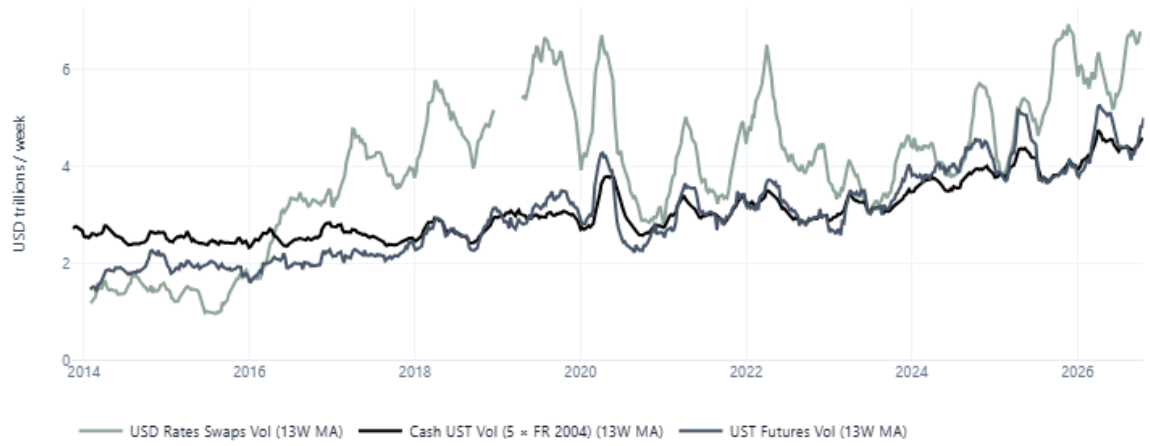
Indirectly through hedge funds and dealers, the usage of derivatives for leverage expands the demand for cash Treasuries as it gives access to Treasury exposure for investor cohorts that might otherwise be unable to participate directly (by lowering operational barriers and enabling efficient leverage).

An increase in long derivative positions by the structural participants therefore raises repo usage, since hedge funds intermediate by buying Treasuries on a levered basis. That intermediation rests mainly with hedge funds, with dealers stepping in more recently as balance-sheet constraints eased.

Importantly, a reduction in the structural longs (a return of rates towards zero, as in 2020-21, could be one trigger) could lead to an unwind of the basis and swap-spread trades and the paired long Treasury holdings of hedge funds and dealers.

Derivatives pricing is tied to repo availability: scarcer or costlier repo means hedge funds and dealers demand more to provide liquidity, widening the basis and swap spreads. Conversely, easier repo compresses them.

Weekly trading flow ($T / week)



* Sources: NY Fed Primary Dealer Statistics (FR 2004); CFTC Weekly Swaps Report; CME Group via Bloomberg.

AM futures positioning vs rates (2010–present)

* Sources: CFTC TFF data, market-value notional; US Treasury 5Y par yield; NY Fed EFFR.

Policy initiatives: strengthen cash Treasuries through repo

Policies that curb derivatives risk disrupting today's market structure. A more durable approach is to make cash Treasury financing broader, cheaper and more reliable.

Robust repo access reinforces what makes Treasuries unique: depth, liquidity, resilience and global benchmark status

- Broaden repo participation by incentivizing institutions to build repo infrastructure.
- Encourage new intermediaries that can aggregate and consolidate repo flows and offer repo services to end users that lack direct market access.
- Expand access to the Fed's Standing Overnight Repo Operations (SRP) beyond primary dealers and banks.
- Preserve seven-day put structures in sponsored repo to maintain MMF participation in term financing.
- Assess potential trade-offs between higher MMF liquidity buffers and term repo market depth.
- Develop deeper term liquidity in cleared repo.

Reduce operational frictions associated with Treasury settlement

- Streamline Fedwire settlement, fails management and intraday liquidity processes to lower participant burden.
- Improve matching of receives and deliveries to reduce operational and funding costs.
- Automate pair-off and exception management to cut the manual resources required.

Reduce balance-sheet constraints

- Exempt Treasuries from the supplementary leverage ratio and re-evaluate the Tier 1 leverage ratio.
- Recognize pre-positioned discount-window collateral in liquidity metrics, freeing capacity for Treasury holdings and intermediation.

Reduce onboarding friction through greater standardization of repo and clearing documentation

- Consolidate the multiple legal agreements needed before market participation into a single, streamlined framework.
- Standardize terms on industry templates to limit bespoke negotiation.
- Shorten and standardize onboarding to encourage participation in cash Treasury and repo markets.

Leveling the playing field between repo and derivatives

- Fund expenses: Exempt interest on Treasury-collateralized repo from the operating expense ratio, with a separate disclosure of financing costs, so that levered cash Treasury positions aren't penalized relative to futures.
- Tax exempt investors: Clarify or, if necessary, amend the tax rules so that short-term, cleared Treasury repo doesn't create taxable income for tax-exempt investors.
- Registered funds: Raise awareness of the Rule 18f-4 option to treat repo as a derivative, with risk limits and disclosure.

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