## Treasury Presentation to TBAC

## Office of Debt Management



Fiscal Year 2022 Q3 Report

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## Section I: <br> Executive Summary

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# Highlights of Treasury's August 2022 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC) 

## Receipts and Outlays through Q3 FY2022

- Through Q3 FY2022, receipts were $\$ 3.835$ trillion, $\$ 779$ billion $(26 \%)$ higher than the same period last year. Withheld \& FICA taxes were up $\$ 334$ billion ( $17 \%$ ) due to rising wages and employment, the required repayment by early January 2022 of $50 \%$ of the employer portion of the FICA taxes deferred under the CARES Act between March and December 2020, and the impact of the deferral lowering FY2021 FICA taxes received in October through December of 2020. Non-withheld and SECA taxes were $\$ 312$ billion ( $42 \%$ ) higher, buoyed by an exceptionally large final payment of 2021 tax liabilities in April that include elevated liabilities on realized capital gains as well as other factors. Gross corporate taxes were $\$ 41$ billion ( $14 \%$ ) higher due to higher corporate profits. Federal Reserve earnings were $\$ 24$ billion ( $35 \%$ ) higher. Miscellaneous and other social insurance was $\$ 19$ billion ( $24 \%$ ) higher due primarily to large Unemployment Trust Fund deposits. Customs duties were up $\$ 16$ billion ( $25 \%$ ) due to the recovery in international commerce. Gross excise taxes were $\$ 9$ billion ( $17 \%$ ) higher than last year with the largest difference stemming from highway excise taxes. Fiscal-year-to-date, receipts were $20.7 \%$ of GDP, compared to $18.2 \%$ for the same period last year.
- Through Q3 FY2022, outlays were $\$ 4.350$ trillion, $\$ 944$ billion ( $-18 \%$ ) lower than the same period last year. Department of Treasury outlays were $\$ 447$ billion ( $-32 \%$ ) lower due to lower Economic Impact Payments and Covid relief payments of $\$ 702$ billion, partially offset by tax credits increasing by $\$ 123$ billion and higher interest on the public debt of $\$ 102$ billion. Department of Labor outlays were $\$ 286$ billion ( $-87 \%$ ) lower due to the reduction in unemployment and expiration of expanded benefits attributable to the COVID-19 pandemic. Small Business Administration outlays were $\$ 303$ billion ( $-93 \%$ ) lower primarily due to the recognition of higher subsidy costs in FY2021 than in FY2022. Health and Human Services outlays were $\$ 106$ billion ( $10 \%$ ) higher mainly due to increases in Medicare and Medicaid. Social Security Administration outlays were $\$ 59$ billion ( $7 \%$ ) higher due to increases in the number of beneficiaries and in the average benefit amount. Department of Education outlays were $\$ 25$ billion $(20 \%)$ higher due to increased spending on emergency grants to the Education Stabilization Fund to support K-12 and postsecondary education. Other outlays were $\$ 95$ billion ( $-24 \%$ ) lower due to lower net outlays for the Federal Communications Commission Spectrum Auctions ($\$ 77$ billion). Fiscal-year-to-date, outlays were $23.5 \%$ of GDP, compared to $31.6 \%$ for the same period last year.


## Projected Net Marketable Borrowing

- Treasury's Office of Fiscal Projections (OFP) currently forecasts a net privately-held marketable borrowing need of $\$ 444$ billion for Q4 FY2022, with an end-of-September cash balance of $\$ 650$ billion. For Q1 FY2023, OFP forecasts a net privately-held marketable borrowing need of $\$ 400$ billion and end-of-December cash balance of $\$ 700$ billion. These borrowing estimates are based upon current law and do not include any assumptions for the impact of additional legislation that may be passed.


## Demand for Treasury Securities

- Bid-to-cover ratios for all securities were within historical ranges over the last quarter.
- Foreign demand remained stable.


## Section II:

Fiscal

## Quarterly Tax Receipts



Quarterly tax receipts for Q4 FY2020 reflect the adjustment of April and June 2020 tax deadlines to July $15^{\text {th }}, 2020$.
Source: United States Department of the Treasury

## Monthly Receipt Levels

 (12-Month Moving Average)

Quarterly tax receipts for Q4 FY2020 reflect the adjustment of April and June 2020 tax deadlines to July $15^{\text {th }}, 2020$. Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts.
Source: United States Department of the Treasury

## Largest Outlays



[^0]Treasury Net Nonmarketable Borrowing


[^1]Cumulative Budget Deficits by Fiscal Year


Source: United States Department of the Treasury

## Privately-Held Net Marketable Borrowing Definition and Calculation Example

## FY 2018 Actual Deficits and

Privately-Held Net Marketable Borrowing, in \$ billions

|  | FY 2018 Actual |
| :--- | :---: |
| FY 2018 Deficit | 779 |
| FY 2018 + Change in Cash Balance | 225 |
| FY 2018 + Other Means of Financing (e.g. Direct Loans) | 35 |
| FY 2018 = Total Net Marketable Borrowing | 1,039 |
| FY 2018 + SOMA Redemption | 156 |
| FY 2018 = Privately-Held Net Marketable Borrowing | 1,195 |

- 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 28, 2018 - cash balance of Sept 29, 2017
- 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 2022-2024 Deficits and Privately-Held Net Marketable Borrowing Estimates*, in \$ billions

|  | Primary Dealer ${ }^{1}$ |  |  | $\mathrm{OFP}^{2}$ | $\mathrm{OMB}^{3}$ | $\mathrm{CBO}^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25th | Median | 75th |  |  |  |
| FY 2022 Deficit | 800 | 916 | 1,000 |  | 1,415 | 1,036 |
| FY 2023 Deficit | 900 | 1,000 | 1,060 |  | 1,154 | 984 |
| FY 2024 Deficit | 900 | 965 | 1,083 |  | 1,200 | 1,056 |
| FY 2022 Change in Cash Balance | 435 | 435 | 485 | 435 | 535 | 350 |
| FY 2023 Change in Cash Balance | -75 | 0 | 0 |  | 0 | 0 |
| FY 2024 Change in Cash Balance | 0 | 0 | 0 |  | 0 | 0 |
| FY 2022 Total Net Marketable Borrowing |  |  |  | 1,658 | 2,552 | 1,889 |
| FY 2023 Total Net Marketable Borrowing |  |  |  |  | 1,197 | 1,020 |
| FY 2024 Total Net Marketable Borrowing |  |  |  |  | 1,238 | 1,024 |
| FY 2022 SOMA Redemption | 150 | 150 | 180 | 150 |  |  |
| FY 2023 SOMA Redemption | 720 | 720 | 720 |  |  |  |
| FY 2024 SOMA Redemption | 113 | 405 | 590 |  |  |  |
| FY 2022 Privately-Held Net Marketable Borrowing | 1,450** | 1,700** | 1,751** | 1,808 | 2,602** | 2,124** |
| FY 2023 Privately-Held Net Marketable Borrowing | 1,450 | 1,620 | 1,825 |  | 1,917** | 1,740** |
| FY 2024 Privately-Held Net Marketable Borrowing | 1,032 | 1,300 | 1,632 |  | 1,643** | 1,429** |
| Estimates as of: |  | Jul-22 |  | Aug-22 | Mar-22 | May-22 |

${ }^{1}$ Estimates represent the medians/interquartile ranges from the primary dealer survey in July 2022.
${ }^{2}$ Treasury's Office of Fiscal Projections (OFP) borrowing estimates announced on August 1, 2022.
${ }^{3}$ OMB projections are using estimates are from Table S-1 of "Budget of The U.S. Government Fiscal Year 2023," March 2022.
${ }^{4}$ CBO projections are using estimates are from Table 1-1 of "The Budget and Economic Outlook: 2022 to 2032," May 2022.
*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 net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount. **Both OMB and CBO borrowing estimates are normalized to privately-held net borrowing after adding PD survey median SOMA redemption assumptions for FY22/23/24. In addition, all the PD, CBO and OMB's FY22 privately-held net borrowing estimates are normalized with OFP's FY22 ending cash balance of $\$ 650$ billion.

Budget Surplus/Deficit*

*OMB's projections are from OMB's Table S-1 of "Budget of The U.S. Government Fiscal Year 2023," March 2022.
CBO's deficit projections are using estimates from CBO's Table 1-1 of "The Budget and Economic Outlook: 2022 to 2032," May 2022.

## Privately-Held Net Marketable Borrowing Outlook*


*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 net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, 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.

## Section III:

Financing

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## Assumptions for Financing Section (pages 17 to 21)

- Portfolio and SOMA holdings as of 06/30/2022.
- Estimates assume private announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given changes made before the August 2022 refunding, while using total bills outstanding of $\sim \$ 3.52$ trillion.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 06/30/2022.
- No attempt was made to account for future financing needs.
- Privately-held net 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 net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

Sources of Privately-Held Financing in FY22 Q3


|  | April - June 2022 <br> Bill Issuance |  |  | Fiscal Year-to-Date <br> Bill Issuance |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Security | Gross | Maturing | Net | Gross | Maturing | Net |
| 4-Week | 455 | 485 | $(30)$ | 1,375 | 1,305 | 70 |
| 8-Week | 390 | 440 | $(50)$ | 1,220 | 1,225 | $(5)$ |
| 13-Week | 627 | 774 | $(147)$ | 2,100 | 2,139 | $(39)$ |
| 26-Week | 567 | 630 | $(63)$ | 1,854 | 1,965 | $(111)$ |
| 52-Week | 102 | 102 | $(0)$ | 340 | 340 | $(0)$ |
| CMBs |  |  |  |  |  |  |
| 17-Week | 390 | 505 | $(115)$ | 1,365 | 1,380 | $(15)$ |
| CMBs | 0 | 0 | 0 | 675 | 765 | $(90)$ |
| Bill Subtotal | 2,531 | 2,936 | $(405)$ | 8,929 | 9,119 | $(190)$ |


| Security | April - June 2022 <br> Coupon Issuance |  |  | Fiscal Year-to-Date Coupon Issuance |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross | Maturing | Net | Gross | Maturing | Net |
| 2-Year FRN | 68 | 62 | 6 | 214 | 172 | 42 |
| 2-Year | 141 | 111 | 30 | 471 | 305 | 166 |
| 3-Year | 135 | 73 | 62 | 453 | 227 | 226 |
| 5-Year | 144 | 78 | 66 | 480 | 235 | 245 |
| 7-Year | 126 | 78 | 48 | 453 | 228 | 225 |
| 10-Year | 103 | 23 | 80 | 323 | 91 | 232 |
| 20-Year | 47 | 0 | 47 | 169 | 0 | 169 |
| 30-Year | 61 | 0 | 61 | 197 | 9 | 188 |
| 5-Year TIPS | 38 | 40 | (2) | 74 | 40 | 34 |
| 10-Year TIPS | 14 | 0 | 14 | 58 | 40 | 18 |
| 30-Year TIPS | 0 | 0 | 0 | 9 | 0 | 9 |
| Coupon Subtotal | 877 | 465 | 412 | 2,901 | 1,348 | 1,553 |
| Total | 3,408 | 3,401 | 7 | 11,830 | 10,467 | 1,363 |

*By adjusting the change in cash balance, Treasury arrives at the net implied funding number.

## Sources of Privately-Held Financing in FY22 Q4

| July - September 2022 |  |
| ---: | ---: | ---: |
|  |  |
| Assuming Constant Coupon Issuance Sizes* |  |
| Treasury Announced Net Marketable Borrowing** | 444 |
| Net Coupon Issuance | 340 |
| Implied Change in Bills | 104 |


|  | July - September 2022 <br> Coupon Issuance |  | Fiscal Year-to-Date <br> Coupon Issuance |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Security | Gross | Maturing^ | Net | Gross | Maturing | Net |
| 2-Year FRN | 68 | 68 | 0 | 282 | 240 | 42 |
| 2-Year | 135 | 127 | 8 | 606 | 432 | 174 |
| 3-Year | 129 | 83 | 46 | 582 | 311 | 271 |
| 5-Year | 138 | 76 | 62 | 618 | 310 | 308 |
| 7-Year | 114 | 73 | 41 | 567 | 301 | 266 |
| 10-Year | 102 | 20 | 82 | 425 | 111 | 314 |
| 20-Year | 45 | 0 | 45 | 214 | 0 | 214 |
| 30-Year | 60 | 4 | 56 | 257 | 13 | 244 |
| 5-Year TIPS | 0 | 0 | 0 | 74 | 40 | 34 |
| 10-Year TIPS | 32 | 39 | $(7)$ | 90 | 80 | 10 |
| 30-Year TIPS | 8 | 0 | 8 | 17 | 0 | 17 |
| Coupon Subtotal | 831 | 491 | 340 | 3,732 | 1,838 | 1,894 |

* Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made before the August 2022 refunding.
** Assumes an end-of-September 2022 cash balance of $\$ 650$ billion versus a beginning-of-July 2022 cash balance of $\$ 782$ 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
$\wedge$ Maturing amounts could change based on future Federal Reserve purchases.


## Interest Rate Assumptions: 10-Year Treasury Note



## Projected Privately-Held Net Marketable Borrowing

 Assuming Private Coupon Issuance \& Total Bills Outstanding Remain Constant as of 06/30/2022*

- Projected Privately-Held NetMarketableBorrowing

■ PDSurvey Privately-Held NetMarketableBorrowingEstimates, Jul2022
OFP'sFY2022Privately-Held NetMarketableBorrowing Estimate

AdjustedPrivately-held NetBorrowing fromCBOs"The Budgetand EconomicOutlook 2022to2032",May 2022
A AdjustedPrivately-HeldNetBorrowing fromOMB'sBudget,Mar 2022
〕 PD Survey Privately-Held Marketable Borrowing Estimates at 25th, 50th and 75th Percentile
*Treasury's latest primary dealer survey median/interquartile range estimates can be found on page 12. OMB's borrowing projections are from Table S-1 of "Budget of the U.S. Government Fiscal Year 2023," March 2022. CBO's borrowing projections are using estimates from Table 1 of CBO's "The Budget and Economic Outlook: 2022 to 2032," May 2022. Both OMB and CBO borrowing estimates are normalized to privately-held net borrowing after adding PD survey median SOMA redemption assumptions for FY22/23/24. FY2022 net borrowing estimates from PD, OMB and CBO are normalized with OFP's FY22 ending cash balance of $\$ 650$ billion (details can be found on page 12).

Federal Reserve SOMA Treasury Holdings Maturity Profile as of 6/30/2022


The figures do not include any assumptions for Federal Reserve balance sheet normalization.

## Section IV: <br> Portfolio Metrics

Historical Weighted Average Maturity of Marketable Debt Outstanding


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


Private Bills Holdings as a Percentage of Total Private Holdings


## Treasury Maturity Profile History



## Section V: Demand

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Summary Statistics for Fiscal Year 2022 Q3 Auctions

| Security Type | Term | Stop Out <br> Rate (\%)* | Bid-to- <br> Cover <br> Ratio* | Competitive <br> Awards (\$bn) | \% Primary Dealer* | \% Direct* | $\begin{gathered} \% \\ \text { Indirect* } \end{gathered}$ | NonCompetitive Awards (\$bn) | SOMA "Add- Ons" (\$bn) | 10-Year Equivalent (\$bn)** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bill | 4-Week | 0.73 | 3.04 | 442.48 | 49.12 | 2.83 | 48.05 | 12.53 | 44.29 | 4.38 |
| Bill | 8-Week | 0.96 | 3.20 | 383.34 | 48.65 | 3.57 | 47.78 | 6.67 | 37.96 | 7.50 |
| Bill | 13-Week | 1.10 | 2.83 | 610.19 | 45.30 | 5.45 | 49.26 | 16.82 | 84.50 | 20.22 |
| Bill | 26-Week | 1.61 | 3.01 | 550.13 | 41.91 | 2.76 | 55.33 | 16.87 | 76.47 | 36.52 |
| Bill | 52-Week | 2.33 | 3.19 | 99.48 | 37.54 | 5.48 | 56.98 | 2.52 | 13.52 | 13.17 |
| CMB | 17-Week | 1.40 | 3.36 | 386.34 | 43.95 | 2.98 | 53.08 | 3.66 | - | 14.49 |
| Coupon | 2-Year | 2.73 | 2.62 | 138.37 | 16.99 | 22.91 | 60.10 | 2.63 | 17.24 | 35.40 |
| Coupon | 3-Year | 2.82 | 2.51 | 133.85 | 24.66 | 19.68 | 55.66 | 1.15 | 45.05 | 58.93 |
| Coupon | 5-Year | 2.93 | 2.38 | 143.47 | 19.08 | 19.73 | 61.19 | 0.53 | 17.60 | 86.52 |
| Coupon | 7-Year | 2.98 | 2.53 | 125.94 | 13.07 | 18.66 | 68.27 | 0.06 | 15.47 | 102.85 |
| Coupon | 10-Year | 2.90 | 2.44 | 102.92 | 15.64 | 18.19 | 66.18 | 0.08 | 35.24 | 137.26 |
| Coupon | 20-Year | 3.28 | 2.63 | 46.97 | 11.36 | 17.18 | 71.47 | 0.03 | 5.84 | 90.12 |
| Coupon | 30-Year | 3.00 | 2.34 | 60.98 | 14.54 | 17.45 | 68.01 | 0.02 | 21.28 | 189.49 |
| TIPS | 5-Year | (0.01) | 2.67 | 37.73 | 6.64 | 6.53 | 86.82 | 0.27 | 1.38 | 22.15 |
| TIPS | 10-Year | 0.23 | 2.24 | 13.97 | 17.85 | 11.42 | 70.73 | 0.03 | 2.10 | 17.86 |
| FRN | 2-Year | (0.03) | 3.06 | 67.84 | 33.12 | 11.07 | 55.81 | 0.16 | 3.33 | 0.07 |


|  | 1.22 | 3.06 | $2,471.95$ | 45.22 | 3.71 | 51.07 | 59.06 | 256.74 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total Bills | 96.29 |  |  |  |  |  |  |
| Total Coupons | 2.90 | 2.49 | 752.49 | 17.36 | 19.57 | 63.07 | 4.51 | 157.74 |
| Total TIPS | 0.06 | 2.56 | 51.70 | 9.67 | 7.85 | 82.47 | 0.30 | 3.48 |
| Total FRN | $(0.03)$ | 3.06 | 67.84 | 33.12 | 11.07 | 55.81 | 40.01 |  |
|  |  | 0.16 | 3.33 | 0.07 |  |  |  |  |

*Weighted averages of Competitive Awards. FRNs are reported on discount margin basis.
**Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS 10-year equivalent, a constant auction BEI is used as the inflation assumption.

Bid-to-Cover Ratios for Treasury Bills


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


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


Bid-to-Cover Ratios for 7-, 10-, 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 <br> (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 May 2022.
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.

## Appendix

## Projected Privately-Held Net Marketable Borrowing Assuming Private Coupon Issuance \& Total Bills Outstanding Remain Constant as of 06/30/2022*

| Fiscal <br> Year | Bills | $2 / 3 / 5$ | $7 / 10 / 20 / 30$ | TIPS | FRN | Historical/Projected <br> Net Borrowing <br> Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 155 | $(66)$ | 378 | 51 | $(0)$ | 519 |
| 2018 | 438 | 197 | 493 | 45 | 23 | 1,196 |
| 2019 | 137 | 498 | 534 | 51 | 59 | 1,280 |
| 2020 | 2,652 | 538 | 724 | 46 | 55 | 4,015 |
| 2021 | $(1,315)$ | 1,260 | 1,328 | 55 | 92 | 1,420 |
| 2022 | $(190)$ | 762 | 1,044 | 59 | 42 | 1,717 |
| 2023 | 0 | 443 | 769 | 39 | $(42)$ | 1,209 |
| 2024 | 0 | 174 | 797 | 64 | $(10)$ | 1,026 |
| 2025 | 0 | 43 | 812 | $(3)$ | 0 | 852 |
| 2026 | 0 | $(112)$ | 808 | 15 | 0 | 712 |
| 2027 | 0 | 2 | 691 | $(2)$ | 0 | 691 |
| 2028 | 0 | 0 | 372 | $(19)$ | 0 | 353 |
| 2029 | 0 | 0 | 490 | $(13)$ | 0 | 477 |
| 2030 | 0 | 0 | 558 | 2 | 0 | 561 |
| 2031 | 0 | 0 | 387 | $(10)$ | 0 | 378 |

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

| Bills |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out <br> Rate (\%) | Bid-toCover Ratio | Competitive <br> Awards (\$bn) | \% Primary <br> Dealer | \% Direct | \% Indirect | Non- Competitive Awards (\$bn) | SOMA "Add Ons" (\$bn) | $\begin{gathered} \text { 10-Year } \\ \text { Equivalent } \\ (\$ b n)^{*} \end{gathered}$ |
| 4-Week | 4/12/2022 | 0.205 | 3.38 | 34.4 | 32.4 | 1.2 | 66.4 | 0.6 | 3.5 | 0.3 |
| 4-Week | 4/19/2022 | 0.370 | 2.84 | 34.3 | 56.3 | 3.6 | 40.1 | 0.7 | 3.6 | 0.3 |
| 4-Week | 4/26/2022 | 0.500 | 3.21 | 34.3 | 53.3 | 4.0 | 42.7 | 0.7 | 2.9 | 0.3 |
| 4-Week | 5/3/2022 | 0.480 | 3.50 | 33.7 | 41.4 | 0.4 | 58.2 | 1.3 | 3.5 | 0.3 |
| 4-Week | 5/10/2022 | 0.490 | 3.06 | 33.5 | 43.4 | 2.1 | 54.6 | 1.5 | 3.5 | 0.3 |
| 4-Week | 5/17/2022 | 0.600 | 2.70 | 34.1 | 70.5 | 2.9 | 26.6 | 0.9 | 3.6 | 0.3 |
| 4-Week | 5/24/2022 | 0.640 | 3.07 | 34.2 | 47.0 | 4.0 | 49.1 | 0.8 | 3.0 | 0.3 |
| 4-Week | 5/31/2022 | 0.740 | 2.79 | 34.2 | 56.4 | 3.8 | 39.8 | 0.8 | 3.6 | 0.3 |
| 4-Week | 6/7/2022 | 0.860 | 3.07 | 34.3 | 47.9 | 0.9 | 51.2 | 0.7 | 3.5 | 0.3 |
| 4-Week | 6/14/2022 | 1.040 | 2.82 | 33.8 | 51.7 | 3.0 | 45.3 | 1.2 | 3.6 | 0.3 |
| 4-Week | 6/21/2022 | 1.180 | 3.17 | 33.8 | 50.2 | 4.0 | 45.8 | 1.2 | 3.0 | 0.3 |
| 4-Week | 6/28/2022 | 1.100 | 2.90 | 34.0 | 44.5 | 2.5 | 53.0 | 1.0 | 3.6 | 0.3 |
| 4-Week | 7/5/2022 | 1.240 | 2.97 | 34.1 | 43.4 | 4.5 | 52.2 | 0.9 | 3.5 | 0.3 |
| 8-Week | 4/12/2022 | 0.500 | 2.96 | 29.8 | 59.1 | 16.1 | 24.8 | 0.2 | 3.0 | 0.6 |
| 8-Week | 4/19/2022 | 0.570 | 3.56 | 29.8 | 40.5 | 0.8 | 58.7 | 0.2 | 3.1 | 0.6 |
| 8-Week | 4/26/2022 | 0.625 | 3.24 | 29.5 | 55.3 | 2.9 | 41.8 | 0.5 | 2.5 | 0.6 |
| 8-Week | 5/3/2022 | 0.710 | 3.64 | 28.8 | 46.4 | 6.8 | 46.9 | 1.2 | 3.0 | 0.6 |
| 8-Week | 5/10/2022 | 0.710 | 3.55 | 29.3 | 42.7 | 0.0 | 57.3 | 0.7 | 3.0 | 0.6 |
| 8-Week | 5/17/2022 | 0.755 | 3.02 | 29.7 | 63.1 | 3.4 | 33.6 | 0.3 | 3.1 | 0.6 |
| 8-Week | 5/24/2022 | 0.900 | 2.90 | 29.7 | 53.8 | 4.2 | 42.0 | 0.3 | 2.6 | 0.6 |
| 8-Week | 5/31/2022 | 0.915 | 3.36 | 29.3 | 44.7 | 0.9 | 54.3 | 0.7 | 3.1 | 0.6 |
| 8-Week | 6/7/2022 | 1.040 | 3.23 | 29.4 | 43.2 | 2.1 | 54.7 | 0.6 | 3.0 | 0.6 |
| 8-Week | 6/14/2022 | 1.150 | 3.06 | 29.5 | 49.8 | 1.9 | 48.3 | 0.5 | 3.1 | 0.6 |
| 8-Week | 6/21/2022 | 1.470 | 3.28 | 29.4 | 40.7 | 2.4 | 56.9 | 0.6 | 2.5 | 0.6 |
| 8-Week | 6/28/2022 | 1.500 | 2.97 | 29.6 | 42.8 | 1.9 | 55.3 | 0.4 | 3.0 | 0.6 |
| 8-Week | 7/5/2022 | 1.650 | 2.89 | 29.7 | 50.1 | 2.9 | 47.1 | 0.3 | 3.0 | 0.6 |

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

| Bills (cont.) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out Rate (\%) | Bid-toCover Ratio | Competitive <br> Awards (\$bn) | \% Primary <br> Dealer | \% Direct | \% Indirect | NonCompetitive Awards (\$bn) | $\begin{array}{\|c} \text { SOMA } \\ \text { "Add Ons" } \\ \text { (\$bn) } \end{array}$ | 10-Year <br> Equivalent <br> (\$bn)* |
| 13-Week | 4/7/2022 | 0.670 | 2.46 | 56.2 | 59.9 | 8.7 | 31.4 | 0.8 | 7.8 | 1.8 |
| 13-Week | 4/14/2022 | 0.785 | 2.64 | 55.9 | 44.4 | 4.7 | 50.9 | 1.1 | 7.1 | 1.8 |
| 13-Week | 4/21/2022 | 0.860 | 2.72 | 56.0 | 47.3 | 2.7 | 50.0 | 1.0 | 7.4 | 1.8 |
| 13-Week | 4/28/2022 | 0.890 | 2.96 | 49.1 | 52.8 | 4.6 | 42.7 | 1.9 | 7.0 | 1.6 |
| 13-Week | 5/5/2022 | 0.910 | 3.27 | 43.7 | 37.3 | 6.5 | 56.2 | 1.3 | 8.0 | 1.5 |
| 13-Week | 5/12/2022 | 0.900 | 3.18 | 42.9 | 41.6 | 10.5 | 47.9 | 2.1 | 6.2 | 1.4 |
| 13-Week | 5/19/2022 | 1.050 | 2.82 | 43.9 | 40.5 | 7.9 | 51.6 | 1.2 | 6.9 | 1.5 |
| 13-Week | 5/26/2022 | 1.060 | 3.06 | 43.4 | 36.3 | 4.9 | 58.7 | 1.6 | 5.8 | 1.4 |
| 13-Week | 6/2/2022 | 1.120 | 2.98 | 43.9 | 35.4 | 2.7 | 61.9 | 1.1 | 7.8 | 1.5 |
| 13-Week | 6/9/2022 | 1.230 | 2.98 | 44.0 | 29.8 | 2.7 | 67.6 | 1.0 | 5.2 | 1.4 |
| 13-Week | 6/16/2022 | 1.640 | 2.27 | 43.9 | 76.8 | 3.9 | 19.2 | 1.1 | 5.2 | 1.5 |
| 13-Week | 6/23/2022 | 1.670 | 2.83 | 43.4 | 41.7 | 6.3 | 52.0 | 1.6 | 2.1 | 1.4 |
| 13-Week | 6/30/2022 | 1.750 | 2.84 | 44.1 | 39.5 | 5.0 | 55.5 | 0.9 | 8.1 | 1.5 |
| 26-Week | 4/7/2022 | 1.110 | 3.29 | 46.9 | 34.4 | 5.2 | 60.5 | 1.1 | 6.6 | 3.0 |
| 26-Week | 4/14/2022 | 1.220 | 3.32 | 46.8 | 29.6 | 4.9 | 65.5 | 1.2 | 6.0 | 3.0 |
| 26-Week | 4/21/2022 | 1.250 | 3.29 | 46.9 | 31.9 | 1.0 | 67.1 | 1.1 | 6.2 | 3.0 |
| 26-Week | 4/28/2022 | 1.370 | 2.99 | 43.3 | 47.3 | 1.8 | 50.9 | 1.7 | 6.2 | 2.9 |
| 26-Week | 5/5/2022 | 1.420 | 2.99 | 40.8 | 35.5 | 0.1 | 64.4 | 1.2 | 7.5 | 2.8 |
| 26-Week | 5/12/2022 | 1.385 | 2.72 | 40.2 | 60.7 | 3.4 | 35.8 | 1.8 | 5.8 | 2.7 |
| 26-Week | 5/19/2022 | 1.490 | 3.09 | 40.8 | 47.4 | 3.1 | 49.5 | 1.2 | 6.4 | 2.8 |
| 26-Week | 5/26/2022 | 1.530 | 3.07 | 40.6 | 35.1 | 1.8 | 63.1 | 1.4 | 5.4 | 2.7 |
| 26-Week | 6/2/2022 | 1.580 | 2.81 | 40.9 | 46.9 | 2.8 | 50.3 | 1.1 | 7.3 | 2.8 |
| 26-Week | 6/9/2022 | 1.710 | 2.87 | 41.0 | 42.5 | 2.0 | 55.5 | 1.0 | 4.8 | 2.7 |
| 26-Week | 6/16/2022 | 2.160 | 3.26 | 41.1 | 28.3 | 3.7 | 68.1 | 0.9 | 4.9 | 2.7 |
| 26-Week | 6/23/2022 | 2.390 | 2.44 | 40.8 | 66.1 | 3.8 | 30.2 | 1.2 | 1.9 | 2.5 |
| 26-Week | 6/30/2022 | 2.500 | 2.79 | 40.1 | 43.7 | 2.2 | 54.2 | 1.9 | 7.6 | 2.9 |
| 52-Week | 4/21/2022 | 1.870 | 3.31 | 33.3 | 44.3 | 10.6 | 45.1 | 0.7 | 4.4 | 4.3 |
| 52-Week | 5/19/2022 | 2.100 | 3.12 | 33.1 | 35.8 | 3.5 | 60.7 | 0.9 | 5.2 | 4.5 |
| 52-Week | 6/16/2022 | 3.020 | 3.14 | 33.1 | 32.4 | 2.3 | 65.2 | 0.9 | 3.9 | 4.4 |

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

| Bills (cont.) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out Rate (\%) | Bid-to- <br> Cover <br> Ratio | Competitive Awards (\$bn) | \% Primary Dealer | \% Direct | \% Indirect | NonCompetitive Awards (\$bn) | SOMA <br> "Add Ons" (\$bn) | 10-Year <br> Equivalent (\$bn)* |
| 17-Week | 4/12/2022 | 0.910 | 3.70 | 30.0 | 36.8 | 7.5 | 55.7 | 0.0 | 0.0 | 1.1 |
| 17-Week | 4/19/2022 | 0.965 | 3.59 | 30.0 | 41.9 | 3.5 | 54.6 | 0.0 | 0.0 | 1.1 |
| 17-Week | 4/26/2022 | 1.070 | 3.82 | 30.0 | 51.3 | 1.8 | 46.9 | 0.0 | 0.0 | 1.1 |
| 17-Week | 5/3/2022 | 1.110 | 3.56 | 29.6 | 33.5 | 0.0 | 66.5 | 0.4 | 0.0 | 1.1 |
| 17-Week | 5/10/2022 | 1.225 | 3.31 | 29.8 | 42.0 | 0.9 | 57.1 | 0.2 | 0.0 | 1.1 |
| 17-Week | 5/17/2022 | 1.160 | 3.29 | 29.0 | 47.0 | 3.8 | 49.2 | 1.0 | 0.0 | 1.1 |
| 17-Week | 5/24/2022 | 1.250 | 3.05 | 29.9 | 54.5 | 3.3 | 42.1 | 0.1 | 0.0 | 1.1 |
| 17-Week | 5/31/2022 | 1.280 | 3.21 | 29.6 | 41.6 | 5.5 | 52.9 | 0.4 | 0.0 | 1.1 |
| 17-Week | 6/7/2022 | 1.390 | 3.09 | 29.8 | 35.2 | 3.3 | 61.6 | 0.2 | 0.0 | 1.1 |
| 17-Week | 6/14/2022 | 1.510 | 3.14 | 30.0 | 38.2 | 2.1 | 59.7 | 0.0 | 0.0 | 1.1 |
| 17-Week | 6/21/2022 | 2.090 | 3.20 | 30.0 | 53.3 | 1.7 | 45.1 | 0.0 | 0.0 | 1.1 |
| 17-Week | 6/28/2022 | 2.060 | 3.00 | 29.8 | 54.9 | 2.6 | 42.5 | 0.2 | 0.0 | 1.1 |
| 17-Week | 7/5/2022 | 2.185 | 3.72 | 29.0 | 40.9 | 2.7 | 56.3 | 1.0 | 0.0 | 1.1 |

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

| Nominal Coupons |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out <br> Rate (\%)* | Bid-toCover Ratio | Competitive <br> Awards (\$bn) | \% Primary Dealer | \% Direct | \% Indirect | NonCompetitive Awards (\$bn) | $\begin{aligned} & \hline \text { SOMA } \\ & \text { "Add } \\ & \text { Ons" } \\ & \text { (\$bn) } \end{aligned}$ | $\begin{aligned} & \text { 10-Year } \\ & \text { Equivalent } \\ & (\$ b n)^{* *} \end{aligned}$ |
| 2-Year | 5/2/2022 | 2.585 | 2.74 | 47.0 | 12.6 | 21.4 | 66.0 | 1.0 | 6.7 | 12.0 |
| 2-Year | 5/31/2022 | 2.519 | 2.61 | 46.2 | 15.4 | 22.1 | 62.6 | 0.8 | 7.1 | 12.2 |
| 2-Year | 6/30/2022 | 3.084 | 2.51 | 45.1 | 23.2 | 25.3 | 51.5 | 0.9 | 3.5 | 11.3 |
| 3-Year | 4/18/2022 | 2.738 | 2.48 | 45.6 | 29.0 | 17.6 | 53.4 | 0.4 | 11.0 | 18.4 |
| 3-Year | 5/16/2022 | 2.809 | 2.59 | 44.7 | 20.0 | 18.0 | 62.0 | 0.3 | 31.5 | 25.0 |
| 3-Year | 6/15/2022 | 2.927 | 2.45 | 43.6 | 24.9 | 23.6 | 51.5 | 0.4 | 2.6 | 15.5 |
| 5-Year | 5/2/2022 | 2.785 | 2.41 | 48.8 | 16.5 | 19.5 | 64.0 | 0.2 | 6.8 | 29.4 |
| 5-Year | 5/31/2022 | 2.736 | 2.44 | 47.8 | 17.0 | 20.0 | 62.9 | 0.2 | 7.2 | 29.8 |
| 5-Year | 6/30/2022 | 3.271 | 2.28 | 46.9 | 23.8 | 19.7 | 56.5 | 0.1 | 3.6 | 27.3 |
| 7-Year | 5/2/2022 | 2.908 | 2.41 | 44.0 | 15.2 | 19.8 | 65.0 | 0.0 | 6.1 | 35.9 |
| 7-Year | 5/31/2022 | 2.777 | 2.69 | 42.0 | 6.4 | 15.8 | 77.9 | 0.0 | 6.3 | 35.5 |
| 7-Year | 6/30/2022 | 3.280 | 2.48 | 40.0 | 17.7 | 20.4 | 61.9 | 0.0 | 3.1 | 31.5 |
| 10-Year | 4/18/2022 | 2.720 | 2.43 | 34.0 | 18.7 | 17.0 | 64.3 | 0.0 | 8.1 | 42.0 |
| 10-Year | 5/16/2022 | 2.943 | 2.49 | 35.9 | 11.5 | 18.2 | 70.3 | 0.1 | 25.2 | 60.4 |
| 10-Year | 6/15/2022 | 3.030 | 2.41 | 33.0 | 17.0 | 19.4 | 63.6 | 0.0 | 1.9 | 34.9 |
| 20-Year | 5/2/2022 | 3.095 | 2.80 | 16.0 | 8.7 | 15.3 | 75.9 | 0.0 | 2.2 | 31.6 |
| 20-Year | 5/31/2022 | 3.290 | 2.50 | 17.0 | 13.0 | 16.4 | 70.6 | 0.0 | 2.6 | 33.0 |
| 20-Year | 6/30/2022 | 3.488 | 2.60 | 14.0 | 12.4 | 20.2 | 67.4 | 0.0 | 1.1 | 25.5 |
| 30-Year | 4/18/2022 | 2.815 | 2.30 | 20.0 | 15.9 | 18.9 | 65.2 | 0.0 | 4.8 | 58.6 |
| 30-Year | 5/16/2022 | 2.997 | 2.38 | 22.0 | 13.7 | 16.6 | 69.7 | 0.0 | 15.4 | 84.9 |
| 30-Year | 6/15/2022 | 3.185 | 2.35 | 19.0 | 14.1 | 16.9 | 69.0 | 0.0 | 1.1 | 46.0 |
| 2-Year FRN | 5/2/2022 | (0.075) | 2.51 | 23.9 | 49.6 | 20.9 | 29.5 | 0.1 | 3.3 | 0.01 |
| 2-Year FRN | 5/27/2022 | 0.000 | 3.22 | 22.0 | 22.3 | 4.6 | 73.1 | 0.0 | 0.0 | 0.03 |
| 2-Year FRN | 6/24/2022 | (0.003) | 3.49 | 21.9 | 25.9 | 6.9 | 67.2 | 0.1 | 0.0 | 0.04 |


| TIPS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Settle Date | Stop Out <br> Rate (\%) | Bid-to- <br> Cover <br> Ratio | Competitive <br> Awards (\$bn) | \% Primary Dealer | \% Direct | \% Indirect | NonCompetitive Awards (\$bn) | $\begin{aligned} & \hline \text { SOMA } \\ & \text { "Add } \\ & \text { Ons" } \\ & \text { (\$bn) } \\ & \hline \end{aligned}$ | 10-Year <br> Equivalent (\$bn)** |
| 5-Year TIPS | 4/29/2022 | (0.340) | 2.73 | 19.9 | 6.5 | 4.0 | 89.5 | 0.1 | 0.0 | 11.3 |
| 5-Year TIPS | 6/30/2022 | 0.362 | 2.61 | 17.9 | 6.8 | 9.3 | 83.9 | 0.1 | 1.4 | 10.9 |
| 10-Year TIPS | 5/31/2022 | 0.232 | 2.24 | 14.0 | 17.9 | 11.4 | 70.7 | 0.0 | 2.1 | 17.9 |

*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.


[^0]:    Source: United States Department of the Treasury

[^1]:    Source: United States Department of the Treasury

