Treasury Presentation to TBAC

Office of Debt Management



Fiscal Year 2021 Q3 Report

Table of Contents

I. Executive Summary

| II. | Fiscal | |
|------|---|-------|
| | A. Quarterly Tax Receipts | p. 6 |
| | B. Monthly Receipt Levels | p. 8 |
| | C. Largest Outlays | p. 9 |
| | D. Treasury Net Nonmarketable Borrowing | p. 10 |
| | E. Cumulative Budget Deficits | p. 11 |
| | F. Deficit and Borrowing Estimates | p. 12 |
| | G. Budget Surplus/Deficit | p. 13 |
| | H. Privately-Held Net Marketable Borrowing Outlook | p. 14 |
| III. | Financing | |
| | A. Sources of Financing | p. 17 |
| | B. Interest Rate Assumptions | p. 19 |
| | C. Projected Net Marketable Borrowing Assuming Future Issuance Remains Constant | p. 20 |
| IV. | Portfolio Metrics | |
| | A. Historical Weighted Average Maturity of Marketable Debt Outstanding | p. 22 |
| | B. Bills, TIPS & FRNs Outstanding as a Percent of Marketable Debt Outstanding | p. 23 |
| | C. Maturity Profile | p. 25 |
| V. | Demand | |
| | A. Summary Statistics | p. 27 |
| | B. Bid-to-Cover Ratios | p. 28 |
| | C. Investor Class Awards at Auction | p. 33 |
| | D. Primary Dealer Awards at Auction | p. 37 |
| | E. Direct Bidder Awards at Auction | p. 38 |
| | F. Foreign Awards at Auction | p. 39 |

G. Foreign Holdings: Official and Private p. 40

Section I: Executive Summary

Highlights of Treasury's August 2021 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays through Q3 FY2021

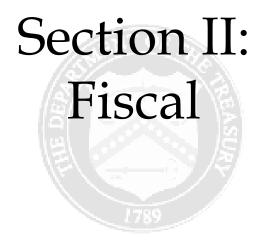
- Overall receipts totaled \$3.056 trillion, reflecting an increase of \$796 billion (35%) compared to the same period last fiscal year. Non-withheld and SECA taxes were \$476 billion (176%) higher because last year both estimated and final taxes were delayed until July 15. Corporate taxes were \$178 billion (142%) higher, as every month except one (November 2020) has seen higher levels than last fiscal year. The difference will narrow when looking at the full fiscal year as last year's due dates were deferred to Q4 FY2020. Adjusted withheld and FICA taxes were up \$147 billion (8%) due to the economic impact of COVID-19 and the end of the deferral of certain employer taxes through the end of December 2020. Half of these deferred taxes are due by the end of this calendar year and the remaining half by the end of 2022. Federal Reserve earnings were \$14 billion (25%) higher reflecting lower interest rates that reduce the Fed's interest expenses and higher System Open Market Account (SOMA) holdings that can increase remittances. Partially offsetting the overall gains to receipts, individual refunds were \$32 billion (16%) higher, but close to the 2019 level. This refund season is exhibiting a different pattern from last year due to tax season timing changes and other factors. Corporate refunds were \$5 billion (15%) higher, likely due to provisions of the CARES Act that expand allowances for net operating losses. Receipts were 18.2% of GDP, compared to 14.3% for the same period last year.
- Overall outlays were \$5.29 trillion, reflecting an increase of \$290 billion (6%) over the comparable period last fiscal year. Department of Treasury outlays were \$379 billion (37%) higher due to higher Economic Impact Payments and other tax credits \$305 billion (74%), Coronavirus Relief Fund payments to state, territorial, local, and tribal governments \$45 billion (30%), rental assistance payments \$33 billion, interest on the public debt \$14 billion (3%), and airline assistance grants \$8 billion (34%). Exchange Stabilization Fund activities were lowered by \$32 billion (-145%). Department of Labor outlays were \$50 billion (18%) higher due to increased unemployment and expanded benefits attributable to the COVID-19 pandemic. Small Business Administration outlays were \$212 billion (-40%) lower, mainly due to the differences in the recognition of subsidy costs for PPP. Health and Human Services spending was \$42 billion (-4%) lower mainly due to the COVID-19 effects seen in Medicare last year and somewhat offset by increases in Medicaid. Outlays were 31.4% of GDP, compared to 31.8% for the same period last year.

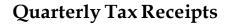
Projected Net Marketable Borrowing

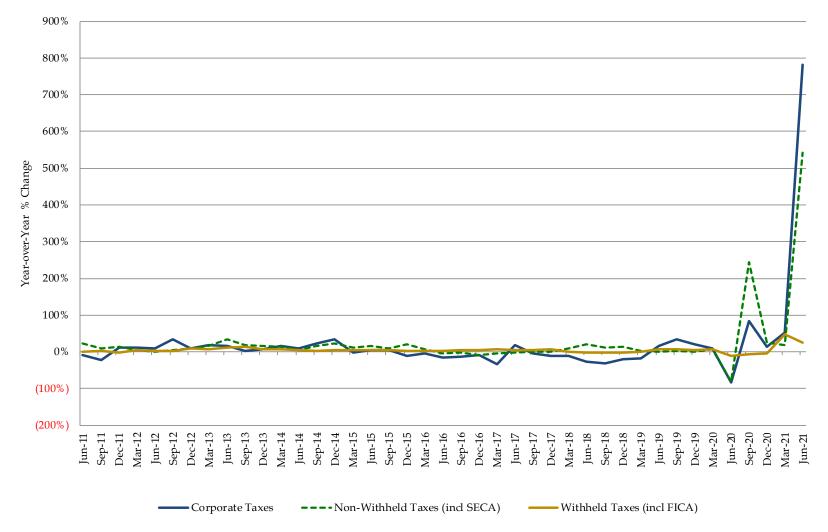
• Treasury's Office of Fiscal Projections (OFP) currently forecasts a net privately-held marketable borrowing need of \$673 billion for Q4 FY2021, with an end-of-September cash balance of \$750 billion. For Q1 FY2022, OFP forecasts a net privately-held marketable borrowing need of \$703 billion and assuming an end-of-December cash balance of \$800 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. The end-of-September and December cash balances assume enactment of a debt limit suspension or increase.

Demand for Treasury Securities

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

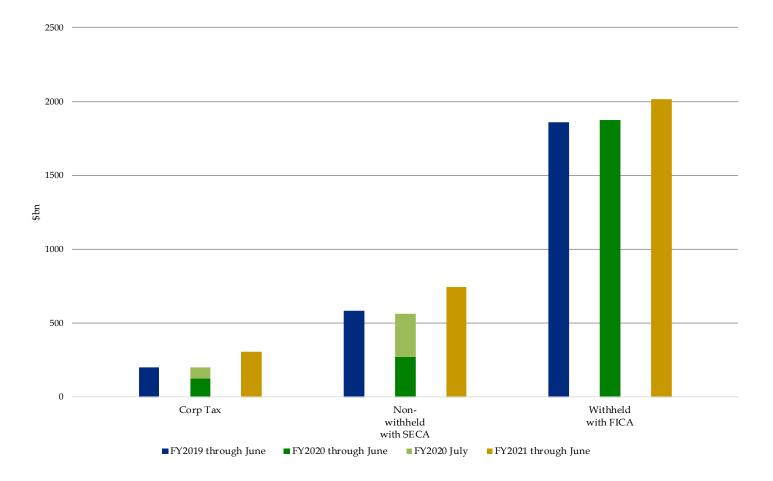




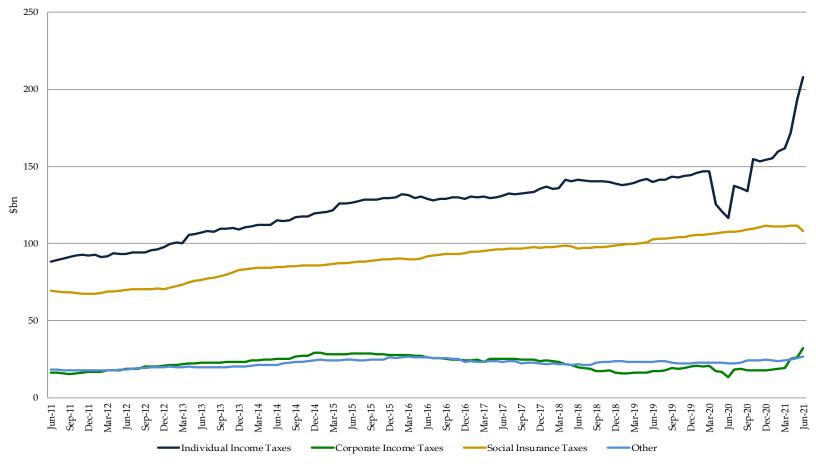


Quarterly tax receipts for Q4 FY2020 reflect the adjustment of April and June 2020 tax deadlines to July 15th, 2020. Source: United States Department of the Treasury

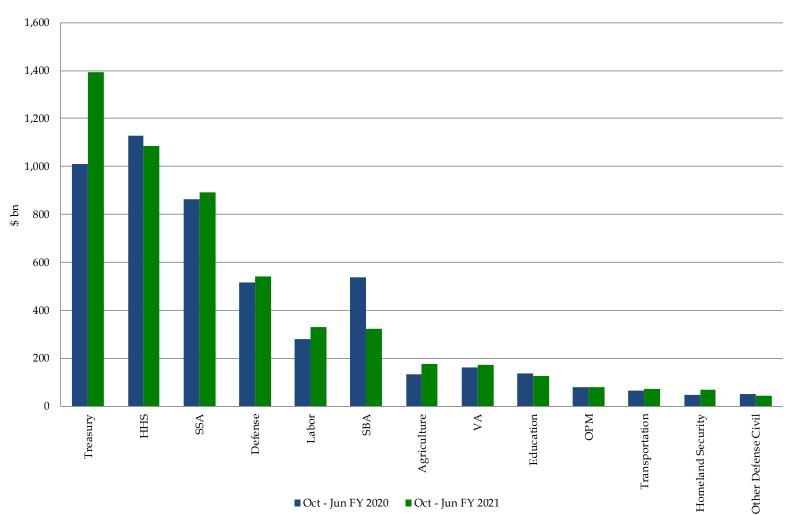
Fiscal Year Cumulative Receipts



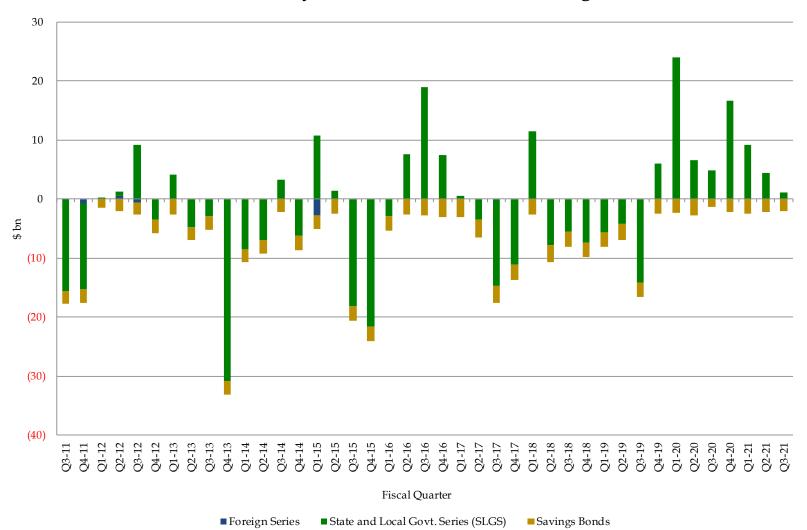
Monthly Receipt Levels (12-Month Moving Average)



Quarterly tax receipts for Q4 FY2020 reflect the adjustment of April and June 2020 tax deadlines to July 15th, 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



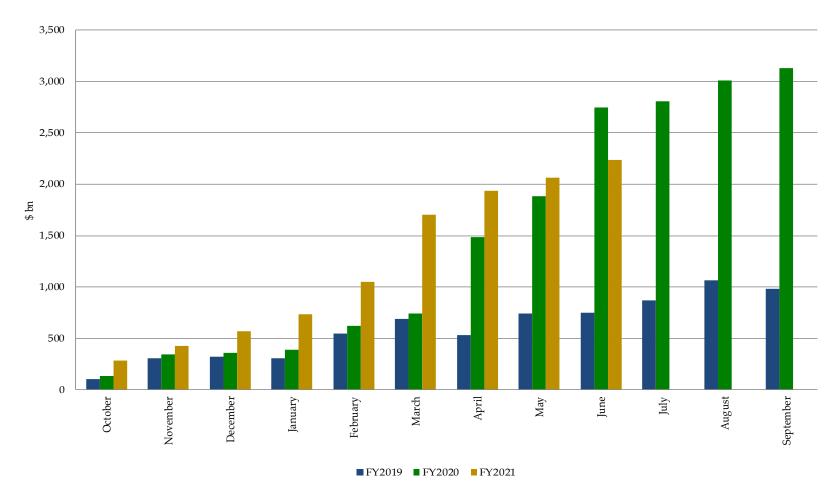
Largest Outlays



Treasury Net Nonmarketable Borrowing

Source: United States Department of the Treasury

Cumulative Budget Deficits by Fiscal Year



| | Primary Dealers ¹ | OFP ² | CBO ³ | OMB^4 |
|---|------------------------------|------------------|------------------|---------|
| FY2021 Deficit Estimate | 3,000 | | 3,003 | 3,669 |
| FY2022 Deficit Estimate | 1,500 | | 1,153 | 1,837 |
| FY2023 Deficit Estimate | 1,164 | | 789 | 1,372 |
| FY2021 Deficit Estimate Range | 2,800-3,468 | | | |
| FY2022 Deficit Estimate Range | 1,130-1,930 | | | |
| FY2023 Deficit Estimate Range | 789-1,600 | | | |
| FY2021 Privately-Held Net Marketable Borrowing Estimate | 2,075 | 1,990 | 1,995 | 3,150 |
| FY2022 Privately-Held Net Marketable Borrowing Estimate | 1,553 | | 1,380 | 2,098 |
| FY2023 Privately-Held Net Marketable Borrowing Estimate | 1,129 | | 764 | 1,418 |
| FY2021 Privately-Held Net Marketable Borrowing Range | 1,785-3,400 | | | |
| FY2022 Privately-Held Net Marketable Borrowing Range | 1,150-2,450 | | | |
| FY2023 Privately-Held Net Marketable Borrowing Range | 790-1,600 | | | |
| Estimates as of: | Jul-21 | Aug-21 | Jul-21 | May-21 |

FY 2021-2023 Deficits and Privately-Held Net Marketable Borrowing Estimates*, in \$ billions

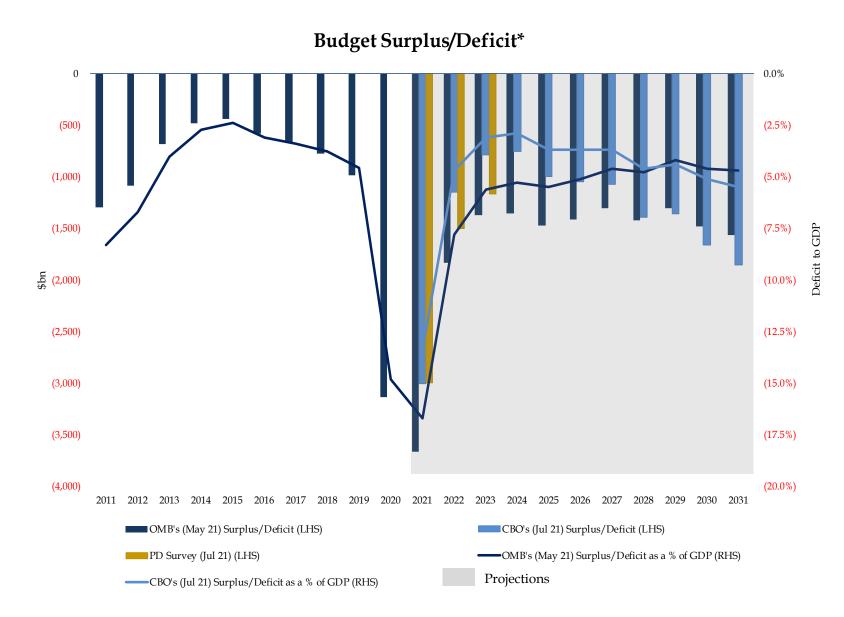
¹ Estimates represent the medians from the primary dealer survey in July 2021. The FY2021 net borrowing estimates are normalized with an assumption of end-of-September 2021 cash balance of \$750 billion.

² Treasury's Office of Fiscal Projections (OFP) borrowing estimates announced on August 2, 2021.

³ CBO projections are using estimates are from Table 1 of "An Update to The Budget and Economic Outlook: 2021 to 2031," July 2021.

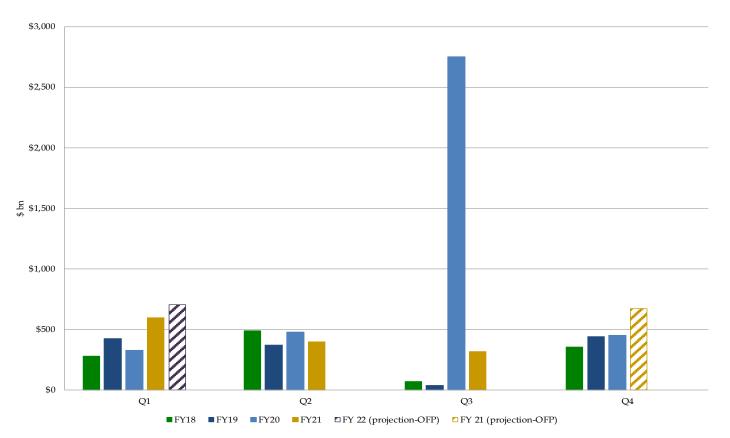
⁴ OMB projections are using estimates are from Table 10 of "Budget of The U.S. Government Fiscal Year 2022," May 2021.

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



*OMB's projections are from OMB's Table S-10 of "Budget of The U.S. Government Fiscal Year 2021," May 2021. CBO's deficit projections are using estimates from CBO's Table 1 of "An Update to The Budget and Economic Outlook: 2021 to 2031," May 2021.

Privately-Held Net Marketable Borrowing Outlook*



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

Assumptions for Financing Section (pages 16 to 19)

- Portfolio and SOMA holdings as of 06/30/2021.
- Estimates assume private announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given changes made before the August 2021 refunding, while using total bills outstanding of ~\$4.28 trillion.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 06/30/2020.
- No attempt was made to account for future financing needs.



| | - | pril - June 20 Bill Issuance | | Fiscal Year-to-Date Bill Issuance | | | | |
|---------------|-------|---------------------------------|-------|--------------------------------------|----------|-------|--|--|
| Security | Gross | Maturing | Net | Gross | Maturing | Net | | |
| 4-Week | 520 | 500 | 20 | 1,320 | 1,280 | 40 | | |
| 8-Week | 520 | 490 | 30 | 1,440 | 1,400 | 40 | | |
| 13-Week | 741 | 708 | 33 | 2,151 | 2,112 | 39 | | |
| 26-Week | 702 | 663 | 39 | 2,034 | 1,986 | 48 | | |
| 52-Week | 102 | 93 | 9 | 340 | 221 | 119 | | |
| CMBs | | | | | | | | |
| 6-Week | 520 | 475 | 45 | 1,315 | 1,255 | 60 | | |
| 15-Week | 0 | 225 | (225) | 500 | 890 | (390) | | |
| 17-Week | 455 | 390 | 65 | 1,245 | 1,225 | 20 | | |
| 22-Week | 0 | 390 | (390) | 600 | 1,240 | (640) | | |
| 39-Week | 0 | 20 | (20) | 0 | 90 | (90) | | |
| Bill Subtotal | 3,560 | 3,954 | (394) | 10,945 | 11,699 | (754) | | |

| 15-Week | 0 | 225 | (225) | 500 | 890 | (390) |
|-----------------|-------|----------------|-------|--------|-----------------|-------|
| 17-Week | 455 | 390 | 65 | 1,245 | 1,225 | 20 |
| 22-Week | 0 | 390 | (390) | 600 | 1,240 | (640) |
| 39-Week | 0 | 20 | (20) | 0 | 90 | (90) |
| Bill Subtotal | 3,560 | 3,954 | (394) | 10,945 | 11,699 | (754) |
| | | | | | | |
| | | | | | | _ |
| | - | pril - June 20 | | | Fiscal Year-to- | |
| | Co | oupon Issuan | ce | | Coupon Issua | nce |
| Security | Gross | Maturing | Net | Gross | Maturing | Net |
| 2-Year FRN | 80 | 56 | 24 | 234 | 167 | 67 |
| 2-Year | 180 | 50 | 130 | 528 | 185 | 343 |
| 3-Year | 174 | 62 | 112 | 510 | 177 | 333 |
| 5-Year | 183 | 79 | 104 | 537 | 245 | 292 |
| 7-Year | 186 | 89 | 97 | 540 | 234 | 306 |
| 10-Year | 117 | 25 | 92 | 348 | 109 | 239 |
| 20-Year | 75 | 0 | 75 | 223 | 0 | 223 |
| 30-Year | 75 | 3 | 72 | 224 | 6 | 218 |
| 5-Year TIPS | 34 | 41 | (7) | 66 | 41 | 25 |
| 10-Year TIPS | 13 | 0 | 13 | 53 | 38 | 15 |
| 30-Year TIPS | 0 | 0 | 0 | 9 | 0 | 9 |
| Coupon Subtotal | 1,117 | 404 | 713 | 3,272 | 1,201 | 2,071 |

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

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

April - June 2021

Subtotal: Net Marketable Borrowing

Subtotal: Change in Cash Balance

Net Implied Funding for FY 2021 Q3**

Net Bill Issuance

Net Coupon Issuance

Ending Cash Balance

Beginning Cash Balance

(394)

713

319

852

1,122

(270)

589

Sources of Privately-Held Financing in FY21 Q4*

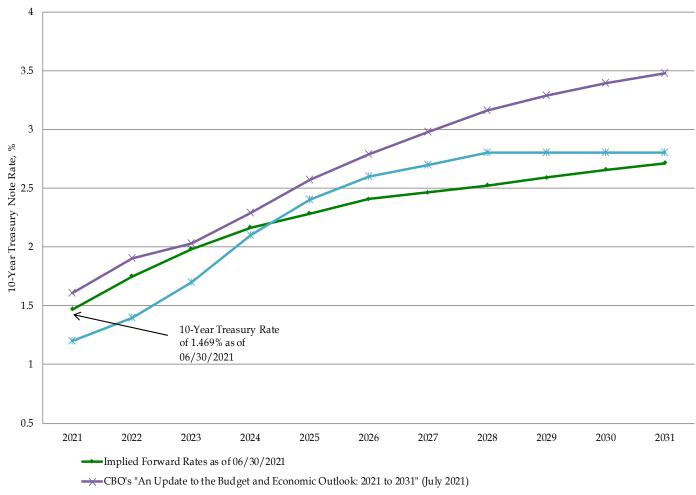
| July - September 2021 | |
|--|-----|
| Assuming Constant Coupon Issuance Sizes** | |
| Treasury Announced Net Marketable Borrowing*** | 673 |
| Net Coupon Issuance | 661 |
| Implied Change in Bills | 12 |
| | |

| | | - September oupon Issuan | | Fiscal Year-to-Date Coupon Issuance | | |
|-----------------|-------|-----------------------------|-----|--|----------|-------|
| Security | Gross | Maturing^ | Net | Gross | Maturing | Net |
| 2-Year FRN | 80 | 55 | 25 | 314 | 222 | 92 |
| 2-Year | 180 | 91 | 89 | 708 | 276 | 432 |
| 3-Year | 174 | 71 | 103 | 684 | 248 | 436 |
| 5-Year | 183 | 85 | 98 | 720 | 329 | 391 |
| 7-Year | 186 | 77 | 109 | 726 | 311 | 415 |
| 10-Year | 117 | 32 | 85 | 465 | 141 | 324 |
| 20-Year | 75 | 0 | 75 | 298 | 0 | 298 |
| 30-Year | 75 | 3 | 72 | 299 | 9 | 290 |
| 5-Year TIPS | 0 | 0 | 0 | 66 | 41 | 25 |
| 10-Year TIPS | 29 | 32 | (3) | 82 | 70 | 12 |
| 30-Year TIPS | 7 | 0 | 7 | 16 | 0 | 16 |
| Coupon Subtotal | 1,106 | 445 | 661 | 4,378 | 1,646 | 2,732 |

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

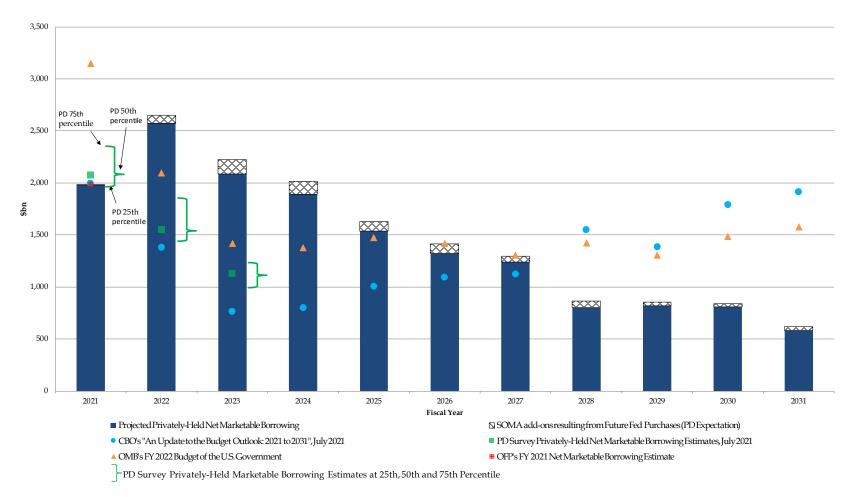
** Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made before the August 2021 refunding. *** Assumes an end-of-September 2021 cash balance of \$750 billion versus a beginning-of-June 2021 cash balance of \$852 billion.

Financing Estimates released by the Treasury can be found here: <u>http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx</u> ^ Maturing amounts could change based on future Federal Reserve purchases.



Interest Rate Assumptions: 10-Year Treasury Note

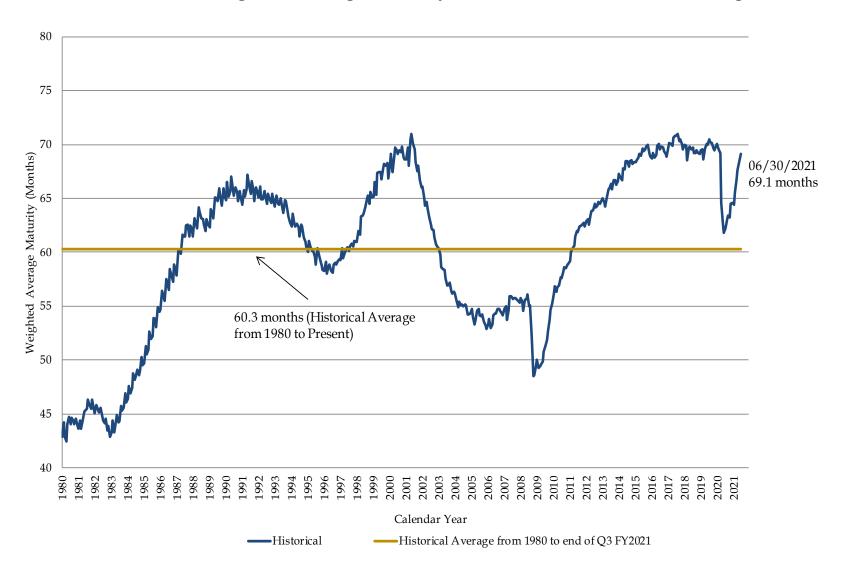
Projected Privately-Held Net Marketable Borrowing Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant as of 06/30/2021*



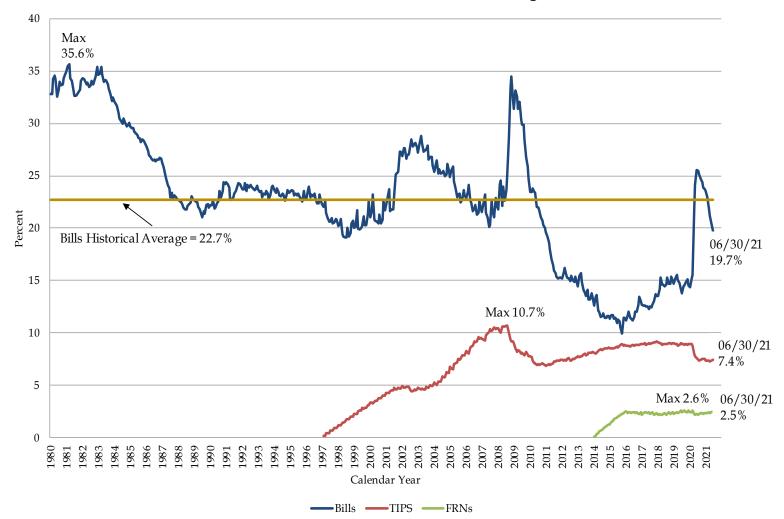
Treasury's latest primary dealer survey median estimates can be found on page 12. OMB's borrowing projections are from Table S-10 of "Budget of the U.S. Government Fiscal Year 2022," May 2021. CBO's borrowing projections are using estimates from Table 1 of CBO's "An Update to The Budget and Economic Outlook: 2021 to 2031," July 2021.

Future Fed purchases are derived from the Fed's June 2021 Primary Dealer Survey median results with maturity bucket weights based on current operations and pro-rata across securities within each maturity bucket. <u>https://www.newyorkfed.org/medialibrary/media/markets/survey/2021/june-2021-spd-results.pdf</u> * Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. No adjustments are made for open-market outright purchases.

Section IV: Portfolio Metrics



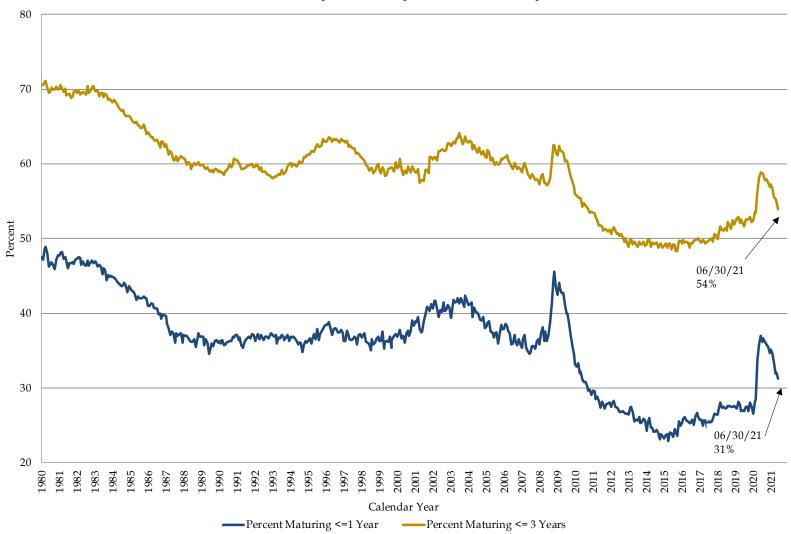
Historical Weighted Average Maturity of Marketable Debt Outstanding



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

| Security Type | Term | Stop Out Rate (%)* | Bid-to- Cover Ratio* | Competitive Awards (\$bn) | % Primary Dealer* | % Direct* | % Indirect* | Non- Competitive Awards (\$bn) | SOMA "Add- Ons" (\$bn) | 10-Year Equivalent (\$bn)** |
|------------------|---------|-----------------------|----------------------------|------------------------------|----------------------|--------------|----------------|--------------------------------------|------------------------------|-----------------------------------|
| Bill | 4-Week | 0.011 | 3.6 | 507.0 | 47.6 | 5.8 | 46.6 | 13.03 | 40.1 | 4.7 |
| Bill | 8-Week | 0.017 | 3.4 | 512.8 | 53.2 | 7.6 | 39.3 | 7.19 | 40.1 | 9.3 |
| Bill | 13-Week | 0.024 | 3.0 | 726.6 | 44.8 | 8.0 | 47.2 | 14.44 | 81.0 | 22.2 |
| Bill | 26-Week | 0.039 | 3.3 | 689.9 | 40.5 | 5.2 | 54.4 | 12.14 | 76.7 | 42.2 |
| Bill | 52-Week | 0.063 | 3.4 | 101.4 | 55.6 | 5.1 | 39.3 | 0.65 | 11.6 | 12.3 |
| CMB | 6-Week | 0.015 | 3.5 | 519.6 | 45.8 | 7.5 | 46.7 | 0.47 | 0.0 | 6.5 |
| СМВ | 17-Week | 0.029 | 3.6 | 454.4 | 49.2 | 7.6 | 43.2 | 0.64 | 0.0 | 16.1 |
| Coupon | 2-Year | 0.192 | 2.5 | 179.4 | 31.2 | 18.3 | 50.4 | 0.60 | 32.2 | 46.3 |
| Coupon | 3-Year | 0.343 | 2.4 | 173.6 | 31.0 | 17.4 | 51.6 | 0.44 | 45.0 | 71.2 |
| Coupon | 5-Year | 0.847 | 2.4 | 182.7 | 23.2 | 16.8 | 60.0 | 0.32 | 32.7 | 115.2 |
| Coupon | 7-Year | 1.285 | 2.4 | 185.9 | 20.3 | 20.9 | 58.9 | 0.06 | 33.3 | 160.1 |
| Coupon | 10-Year | 1.622 | 2.5 | 116.9 | 19.8 | 17.5 | 62.7 | 0.06 | 31.1 | 148.2 |
| Coupon | 20-Year | 2.187 | 2.3 | 75.0 | 20.9 | 20.0 | 59.1 | 0.01 | 13.5 | 155.0 |
| Coupon | 30-Year | 2.300 | 2.3 | 75.0 | 18.4 | 20.0 | 61.6 | 0.02 | 20.2 | 224.7 |
| TIPS | 5-Year | -1.530 | 2.6 | 33.9 | 9.2 | 13.2 | 77.6 | 0.13 | 5.9 | 21.3 |
| TIPS | 10-Year | -0.805 | 2.5 | 13.0 | 15.5 | 15.9 | 68.6 | 0.02 | 0.0 | 13.6 |
| FRN | 2-Year | 0.031 | 3.1 | 79.9 | 36.0 | 2.3 | 61.7 | 0.07 | 5.3 | 0.0 |

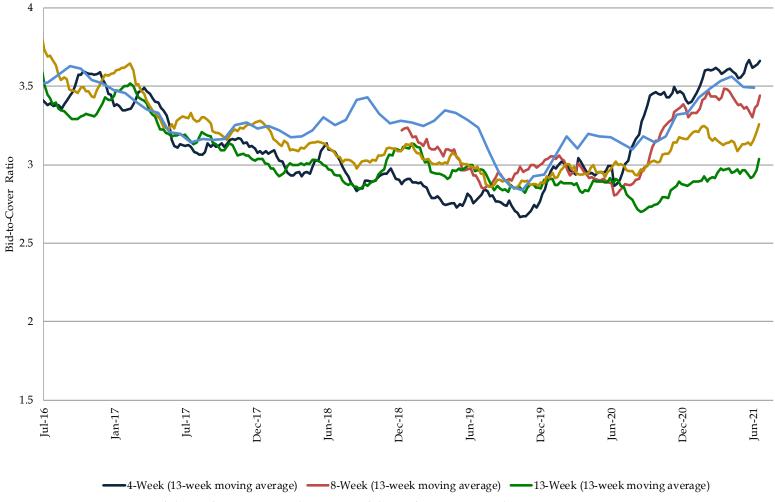
Summary Statistics for Fiscal Year 2021 Q3 Auctions

| Total Bills | 0.024 | 3.4 | 3,511.5 | 46.6 | 6.8 | 46.5 | 48.57 | 249.6 | 113.3 |
|---------------|--------|-----|---------|------|------|------|-------|-------|-------|
| Total Coupons | 1.026 | 2.4 | 988.5 | 24.5 | 18.5 | 56.9 | 1.53 | 208.0 | 920.6 |
| Total TIPS | -1.329 | 2.6 | 46.9 | 10.9 | 14.0 | 75.1 | 0.14 | 5.9 | 35.0 |
| Total FRN | 0.031 | 3.1 | 79.9 | 36.0 | 2.3 | 61.7 | 0.07 | 5.3 | 0.0 |

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

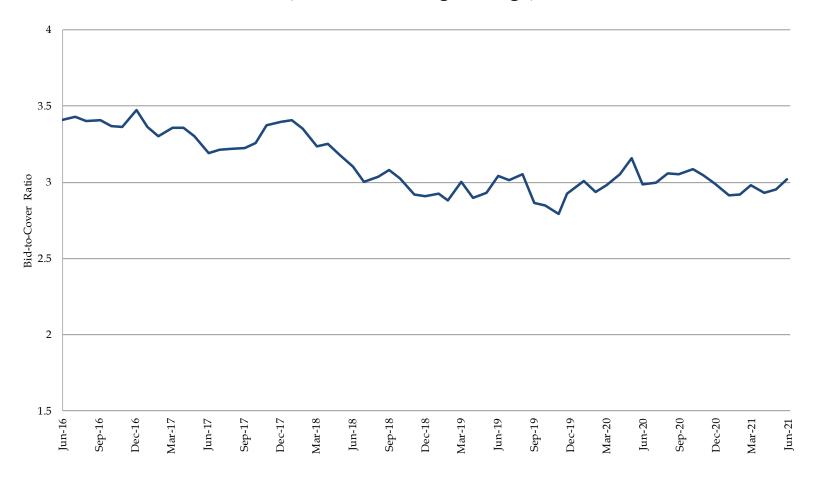
**Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS 10-year equivalent, a constant auction BEI is used as the inflation assumption.



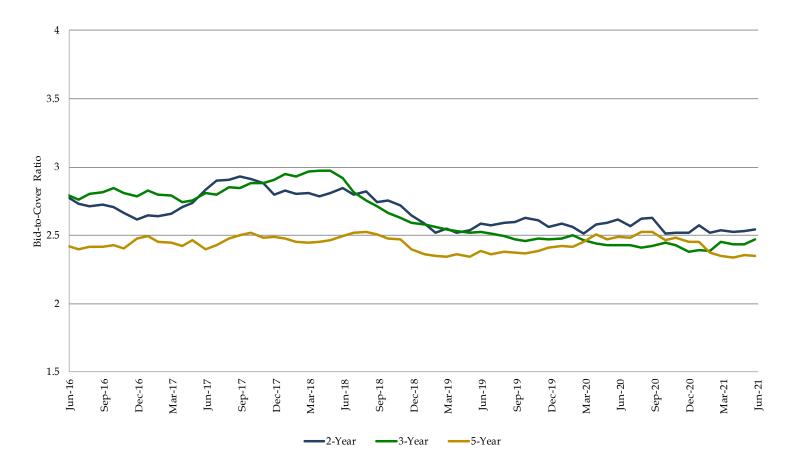


—26-Week (13-week moving average) **—**52-Week (6-month moving average)

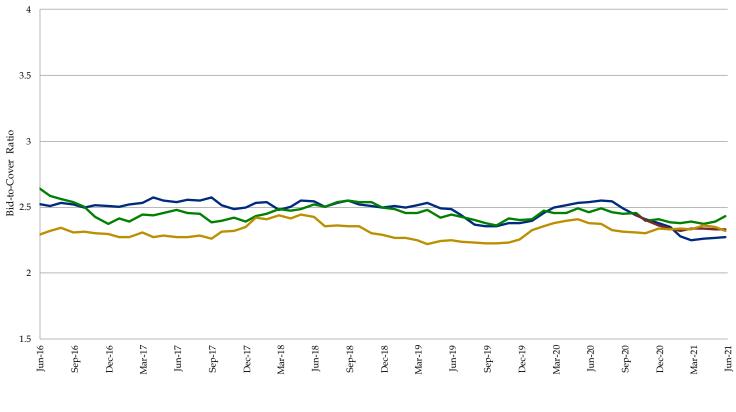
Bid-to-Cover Ratios for FRNs (6-Month Moving Average)



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

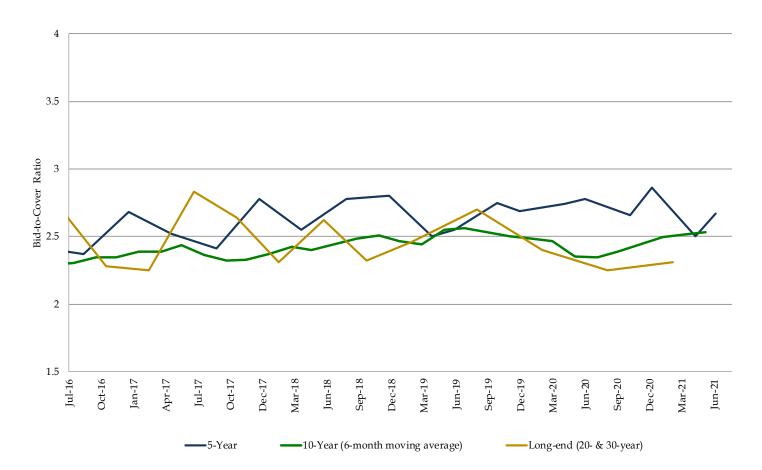


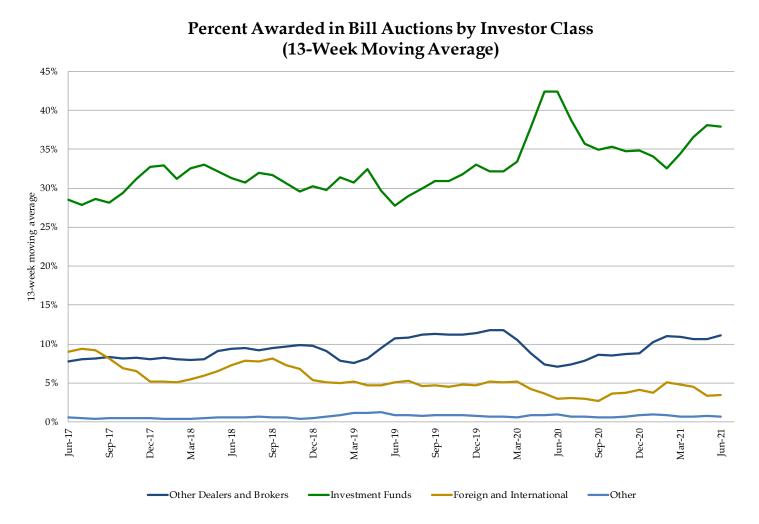
Bid-to-Cover Ratios for 7-, 10-, 20-, and 30-Year Nominal Securities (6-Month Moving Average)



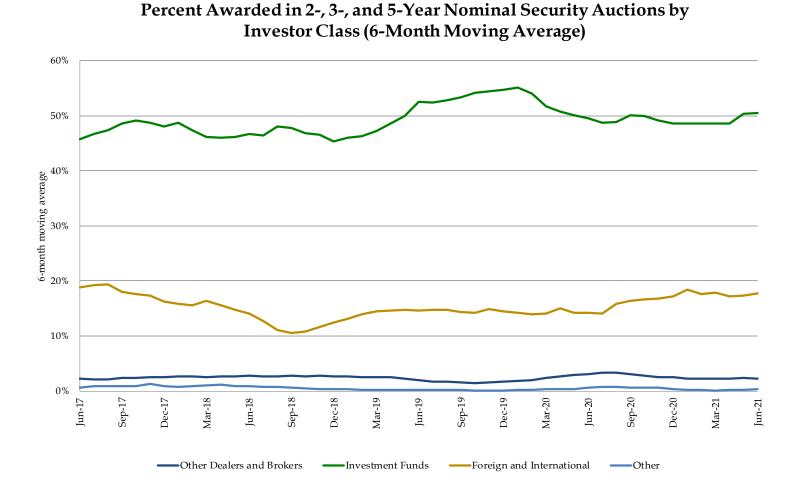
7-Year 10-Year 20-Year 30-year

Bid-to-Cover Ratios for TIPS

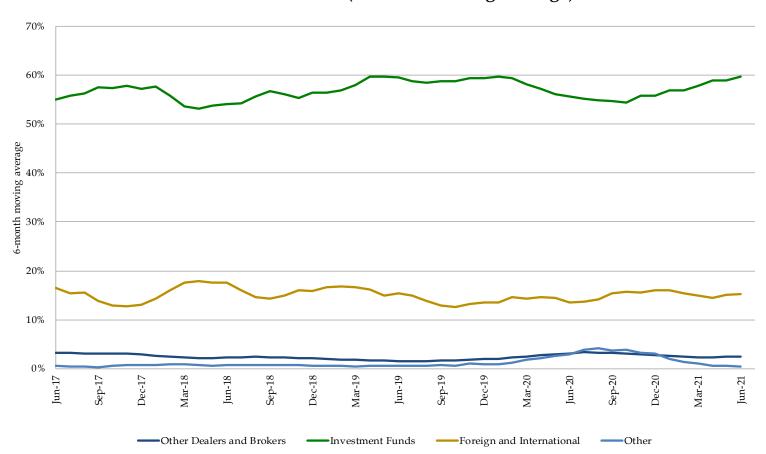




Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.

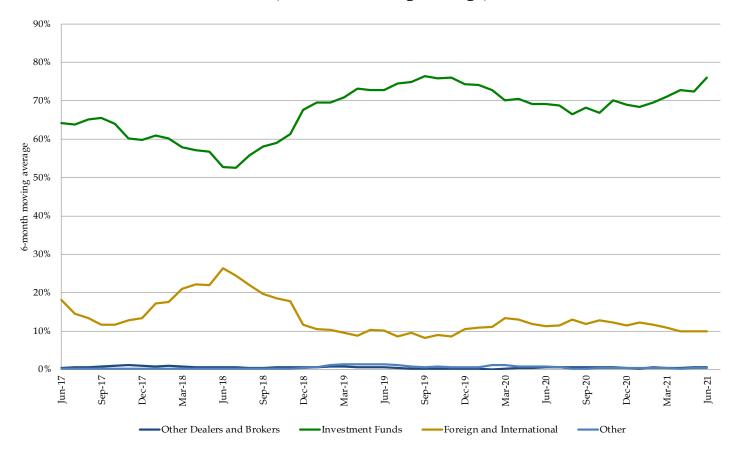


Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.



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

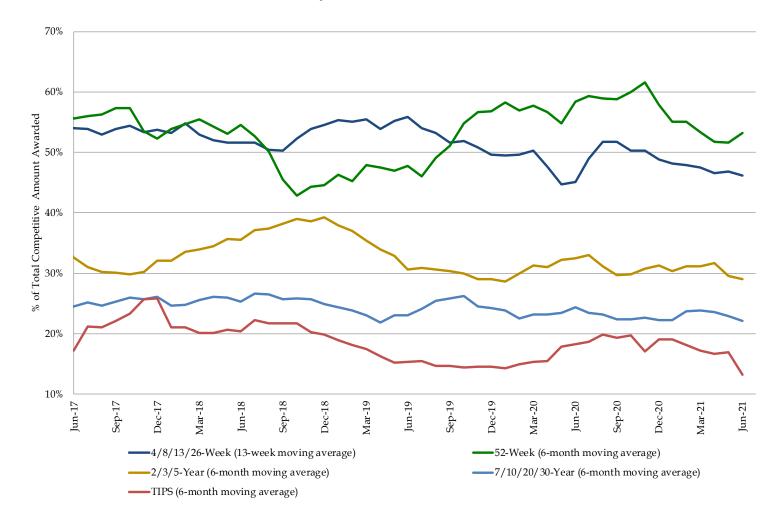
Excludes SOMA add-ons. The "Other" category includes categories that are each less than 5%, which include Depository Institutions, Individuals, Pension and Insurance.



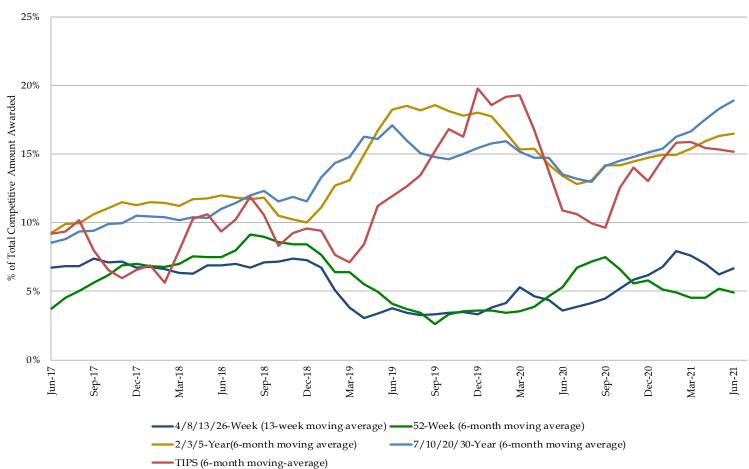
Percent Awarded in TIPS Auctions by Investor Class (6-Month Moving Average)

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



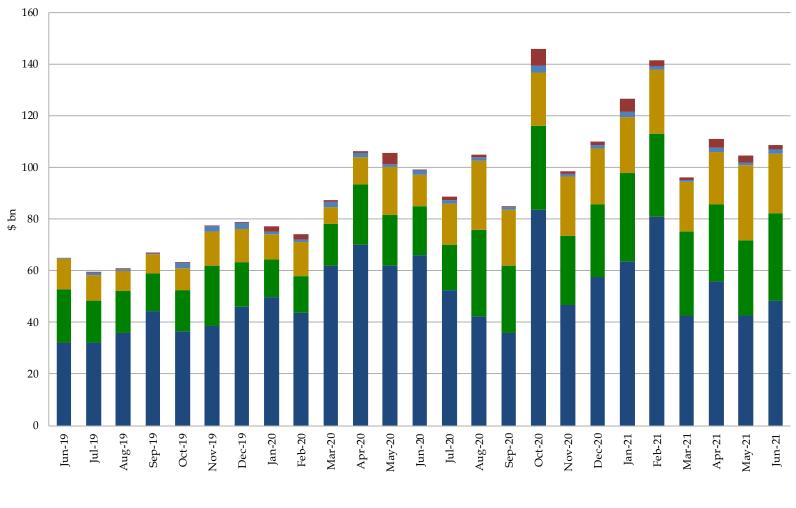


Competitive Amount Awarded excludes SOMA add-ons.



Direct Bidder Awards at Auction

Competitive Amount Awarded excludes SOMA add-ons.

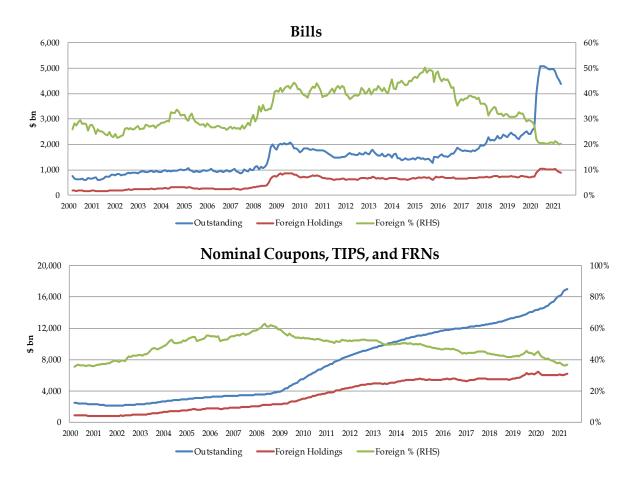


Total Foreign Awards of Treasuries at Auction, \$ billions

■ Bills ■ 2/3/5 ■ 7/10/20/30 ■ TIPS ■ FRN

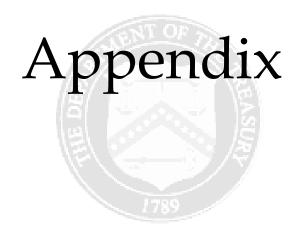
Foreign includes both private sector and official institutions.

Total Foreign Holdings



Source: Treasury International Capital (TIC) System as of May 2021.

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.



Projected Privately-Held Net Marketable Borrowing Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant as of 6/30/2021*

| Fiscal Year | Bills | 2/3/5 | 7/10/20/30 | TIPS | FRN | Historical/Projected Net Borrowing Capacity |
|----------------|-------|-------|------------|------|-----|---|
| 2016 | 289 | (107) | 515 | 58 | 41 | 795 |
| 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 | 4,014 |
| 2021 | (754) | 1,259 | 1,328 | 53 | 92 | 1,978 |
| 2022 | 0 | 1,065 | 1,379 | 51 | 80 | 2,574 |
| 2023 | 0 | 828 | 1,222 | 33 | 6 | 2,089 |
| 2024 | 0 | 524 | 1,312 | 55 | 0 | 1,891 |
| 2025 | 0 | 250 | 1,299 | (11) | 0 | 1,538 |
| 2026 | 0 | 24 | 1,299 | 1 | 0 | 1,324 |
| 2027 | 0 | 0 | 1,238 | 2 | 0 | 1,241 |
| 2028 | 0 | 0 | 819 | (16) | 0 | 803 |
| 2029 | 0 | 0 | 831 | (11) | 0 | 820 |
| 2030 | 0 | 0 | 805 | 5 | 0 | 811 |
| 2031 | 0 | 0 | 593 | (12) | 0 | 582 |

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.

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

| | | | | | 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 | 4/6/2021 | 0.015 | 3.19 | 38.8 | 49.0 | 6.8 | 44.2 | 1.2 | 3.1 | 0.4 |
| 4-Week | 4/13/2021 | 0.010 | 3.72 | 38.7 | 55.0 | 10.6 | 34.4 | 1.3 | 3.1 | 0.4 |
| 4-Week | 4/20/2021 | 0.010 | 3.64 | 38.9 | 45.5 | 6.4 | 48.2 | 1.1 | 3.3 | 0.4 |
| 4-Week | 4/27/2021 | 0.005 | 3.73 | 38.6 | 41.4 | 4.6 | 54.0 | 1.4 | 2.7 | 0.4 |
| 4-Week | 5/4/2021 | 0.000 | 3.75 | 38.3 | 39.5 | 6.4 | 54.2 | 1.7 | 3.3 | 0.4 |
| 4-Week | 5/11/2021 | 0.010 | 3.48 | 39.3 | 49.0 | 4.8 | 46.2 | 0.7 | 3.2 | 0.4 |
| 4-Week | 5/18/2021 | 0.000 | 4.17 | 38.8 | 44.0 | 3.8 | 52.2 | 1.2 | 3.2 | 0.4 |
| 4-Week | 5/25/2021 | 0.000 | 3.98 | 39.3 | 52.6 | 9.0 | 38.4 | 0.7 | 2.7 | 0.4 |
| 4-Week | 6/1/2021 | 0.000 | 4.06 | 39.4 | 53.8 | 3.1 | 43.1 | 0.6 | 3.2 | 0.4 |
| 4-Week | 6/8/2021 | 0.000 | 3.73 | 39.3 | 31.5 | 1.2 | 67.3 | 0.7 | 3.1 | 0.4 |
| 4-Week | 6/15/2021 | 0.005 | 3.16 | 39.3 | 54.3 | 6.5 | 39.2 | 0.7 | 3.3 | 0.4 |
| 4-Week | 6/22/2021 | 0.045 | 3.48 | 38.8 | 54.8 | 3.3 | 42.0 | 1.2 | 2.7 | 0.4 |
| 4-Week | 6/29/2021 | 0.045 | 3.24 | 39.3 | 47.8 | 9.1 | 43.1 | 0.7 | 3.2 | 0.4 |
| 8-Week | 4/6/2021 | 0.015 | 3.62 | 39.3 | 41.5 | 4.4 | 54.0 | 0.7 | 3.1 | 0.7 |
| 8-Week | 4/13/2021 | 0.010 | 3.71 | 39.4 | 44.2 | 7.9 | 47.9 | 0.6 | 3.1 | 0.7 |
| 8-Week | 4/20/2021 | 0.015 | 2.99 | 39.2 | 70.8 | 11.5 | 17.7 | 0.8 | 3.3 | 0.7 |
| 8-Week | 4/27/2021 | 0.015 | 3.14 | 39.5 | 48.4 | 10.5 | 41.1 | 0.5 | 2.7 | 0.7 |
| 8-Week | 5/4/2021 | 0.010 | 3.40 | 38.9 | 43.8 | 6.6 | 49.6 | 1.1 | 3.3 | 0.7 |
| 8-Week | 5/11/2021 | 0.010 | 3.59 | 39.7 | 53.1 | 3.9 | 43.0 | 0.3 | 3.2 | 0.7 |
| 8-Week | 5/18/2021 | 0.010 | 3.47 | 39.7 | 67.7 | 9.8 | 22.5 | 0.3 | 3.2 | 0.7 |
| 8-Week | 5/25/2021 | 0.005 | 3.38 | 39.6 | 66.1 | 7.8 | 26.1 | 0.4 | 2.7 | 0.7 |
| 8-Week | 6/1/2021 | 0.005 | 3.23 | 39.8 | 62.6 | 11.7 | 25.7 | 0.2 | 3.2 | 0.7 |
| 8-Week | 6/8/2021 | 0.015 | 2.97 | 39.3 | 63.8 | 9.3 | 26.9 | 0.7 | 3.1 | 0.7 |
| 8-Week | 6/15/2021 | 0.020 | 2.89 | 39.4 | 59.4 | 9.3 | 31.3 | 0.6 | 3.3 | 0.7 |
| 8-Week | 6/22/2021 | 0.035 | 3.92 | 39.3 | 30.0 | 1.0 | 68.9 | 0.7 | 2.7 | 0.7 |
| 8-Week | 6/29/2021 | 0.050 | 3.60 | 39.8 | 39.3 | 4.4 | 56.2 | 0.2 | 3.2 | 0.7 |

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

| Bills (cont.) | | | | | | | | | | |
|---------------|-------------|----------------------|---------------------------|------------------------------|---------------------|----------|------------|--------------------------------------|-----------------------------|----------------------------------|
| Issue | Settle Date | Stop Out Rate (%) | Bid-to- Cover Ratio | Competitive Awards (\$bn) | % Primary Dealer | % Direct | % Indirect | Non- Competitive Awards (\$bn) | SOMA "Add Ons" (\$bn) | 10-Year Equivalent (\$bn)* |
| 13-Week | 4/8/2021 | 0.020 | 3.00 | 56.1 | 32.7 | 4.7 | 62.5 | 0.9 | 7.5 | 1.7 |
| 13-Week | 4/15/2021 | 0.020 | 3.02 | 55.7 | 53.1 | 6.5 | 40.3 | 1.3 | 6.2 | 1.7 |
| 13-Week | 4/22/2021 | 0.025 | 2.64 | 56.2 | 52.3 | 7.2 | 40.5 | 0.8 | 6.7 | 1.7 |
| 13-Week | 4/29/2021 | 0.020 | 2.99 | 55.4 | 47.7 | 6.2 | 46.1 | 1.6 | 6.1 | 1.7 |
| 13-Week | 5/6/2021 | 0.015 | 3.05 | 55.5 | 42.1 | 8.0 | 49.9 | 1.5 | 7.9 | 1.7 |
| 13-Week | 5/13/2021 | 0.015 | 2.72 | 56.1 | 47.6 | 9.1 | 43.3 | 0.9 | 6.0 | 1.7 |
| 13-Week | 5/20/2021 | 0.015 | 2.94 | 55.5 | 47.9 | 9.7 | 42.4 | 1.5 | 7.1 | 1.7 |
| 13-Week | 5/27/2021 | 0.015 | 2.88 | 56.3 | 49.4 | 8.0 | 42.6 | 0.8 | 5.3 | 1.7 |
| 13-Week | 6/3/2021 | 0.020 | 2.74 | 55.5 | 53.2 | 15.2 | 31.6 | 1.5 | 7.6 | 1.8 |
| 13-Week | 6/10/2021 | 0.025 | 2.79 | 55.6 | 46.6 | 8.7 | 44.6 | 1.4 | 4.9 | 1.7 |
| 13-Week | 6/17/2021 | 0.025 | 3.45 | 55.8 | 31.5 | 4.1 | 64.4 | 1.2 | 5.6 | 1.7 |
| 13-Week | 6/24/2021 | 0.045 | 3.62 | 56.3 | 39.0 | 6.8 | 54.2 | 0.7 | 2.1 | 1.6 |
| 13-Week | 7/1/2021 | 0.050 | 3.62 | 56.6 | 40.1 | 9.0 | 50.9 | 0.4 | 7.9 | 1.8 |
| 26-Week | 4/8/2021 | 0.035 | 3.38 | 53.0 | 31.3 | 3.8 | 64.9 | 1.0 | 7.1 | 3.3 |
| 26-Week | 4/15/2021 | 0.040 | 3.39 | 53.1 | 39.7 | 4.1 | 56.2 | 0.9 | 5.9 | 3.2 |
| 26-Week | 4/22/2021 | 0.040 | 3.23 | 53.3 | 41.4 | 2.9 | 55.7 | 0.7 | 6.4 | 3.3 |
| 26-Week | 4/29/2021 | 0.035 | 3.32 | 52.5 | 37.3 | 2.7 | 60.0 | 1.5 | 5.8 | 3.2 |
| 26-Week | 5/6/2021 | 0.035 | 2.72 | 53.2 | 62.8 | 5.8 | 31.4 | 0.8 | 7.5 | 3.3 |
| 26-Week | 5/13/2021 | 0.035 | 3.28 | 53.4 | 32.4 | 3.4 | 64.2 | 0.6 | 5.7 | 3.2 |
| 26-Week | 5/20/2021 | 0.030 | 3.28 | 53.1 | 41.6 | 5.7 | 52.7 | 0.9 | 6.8 | 3.3 |
| 26-Week | 5/27/2021 | 0.030 | 2.78 | 52.5 | 56.3 | 7.4 | 36.4 | 1.5 | 5.0 | 3.2 |
| 26-Week | 6/3/2021 | 0.035 | 3.10 | 52.6 | 43.0 | 14.1 | 42.8 | 1.4 | 7.2 | 3.3 |
| 26-Week | 6/10/2021 | 0.040 | 3.31 | 53.1 | 41.9 | 3.8 | 54.4 | 0.9 | 4.6 | 3.2 |
| 26-Week | 6/17/2021 | 0.040 | 3.32 | 53.1 | 37.9 | 6.4 | 55.7 | 0.9 | 5.3 | 3.2 |
| 26-Week | 6/24/2021 | 0.055 | 3.64 | 53.5 | 28.1 | 5.2 | 66.7 | 0.5 | 2.0 | 3.1 |
| 26-Week | 7/1/2021 | 0.055 | 3.60 | 53.5 | 33.0 | 1.6 | 65.4 | 0.5 | 7.5 | 3.3 |
| 52-Week | 4/22/2021 | 0.065 | 3.69 | 33.8 | 46.8 | 2.8 | 50.4 | 0.2 | 4.0 | 4.1 |
| 52-Week | 5/20/2021 | 0.055 | 3.32 | 33.8 | 57.4 | 6.9 | 35.7 | 0.2 | 4.3 | 4.2 |
| 52-Week | 6/17/2021 | 0.070 | 3.19 | 33.8 | 62.6 | 5.5 | 31.9 | 0.2 | 3.3 | 4.1 |

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

| 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)* |
| 6-Week | 4/8/2021 | 0.020 | 3.50 | 40.0 | 58.4 | 10.9 | 30.7 | 0.0 | 0.0 | 0.5 |
| 6-Week | 4/15/2021 | 0.015 | 3.34 | 40.0 | 53.7 | 9.0 | 37.3 | 0.0 | 0.0 | 0.5 |
| 6-Week | 4/22/2021 | 0.010 | 3.56 | 40.0 | 34.0 | 8.6 | 57.3 | 0.0 | 0.0 | 0.5 |
| 6-Week | 4/29/2021 | 0.010 | 3.41 | 39.8 | 44.7 | 8.6 | 46.7 | 0.2 | 0.0 | 0.5 |
| 6-Week | 5/6/2021 | 0.010 | 3.58 | 40.0 | 40.9 | 4.3 | 54.7 | 0.0 | 0.0 | 0.5 |
| 6-Week | 5/13/2021 | 0.005 | 3.95 | 40.0 | 40.0 | 8.9 | 51.0 | 0.0 | 0.0 | 0.5 |
| 6-Week | 5/20/2021 | 0.005 | 3.86 | 40.0 | 60.7 | 5.9 | 33.4 | 0.0 | 0.0 | 0.5 |
| 6-Week | 5/27/2021 | 0.005 | 3.60 | 40.0 | 46.1 | 4.5 | 49.5 | 0.0 | 0.0 | 0.5 |
| 6-Week | 6/3/2021 | 0.005 | 3.46 | 39.9 | 27.0 | 3.9 | 69.1 | 0.1 | 0.0 | 0.5 |
| 6-Week | 6/10/2021 | 0.010 | 3.12 | 40.0 | 47.9 | 7.9 | 44.2 | 0.0 | 0.0 | 0.5 |
| 6-Week | 6/17/2021 | 0.015 | 3.22 | 39.9 | 40.2 | 4.8 | 55.0 | 0.1 | 0.0 | 0.5 |
| 6-Week | 6/24/2021 | 0.040 | 3.06 | 40.0 | 55.3 | 13.3 | 31.4 | 0.0 | 0.0 | 0.5 |
| 6-Week | 7/1/2021 | 0.050 | 3.43 | 40.0 | 46.4 | 6.9 | 46.7 | 0.0 | 0.0 | 0.5 |
| 17-Week | 4/13/2021 | 0.025 | 4.06 | 35.0 | 36.9 | 8.1 | 55.0 | 0.0 | 0.0 | 1.2 |
| 17-Week | 4/20/2021 | 0.025 | 3.60 | 35.0 | 54.0 | 4.8 | 41.2 | 0.0 | 0.0 | 1.2 |
| 17-Week | 4/27/2021 | 0.025 | 3.55 | 35.0 | 46.0 | 12.5 | 41.5 | 0.0 | 0.0 | 1.2 |
| 17-Week | 5/4/2021 | 0.025 | 3.56 | 34.9 | 53.1 | 7.6 | 39.3 | 0.1 | 0.0 | 1.2 |
| 17-Week | 5/11/2021 | 0.025 | 3.62 | 35.0 | 40.9 | 4.7 | 54.4 | 0.0 | 0.0 | 1.2 |
| 17-Week | 5/18/2021 | 0.020 | 3.24 | 35.0 | 58.9 | 8.2 | 32.9 | 0.0 | 0.0 | 1.2 |
| 17-Week | 5/25/2021 | 0.015 | 3.51 | 34.9 | 50.1 | 9.8 | 40.1 | 0.1 | 0.0 | 1.2 |
| 17-Week | 6/1/2021 | 0.020 | 3.12 | 35.0 | 55.1 | 8.2 | 36.7 | 0.0 | 0.0 | 1.2 |
| 17-Week | 6/8/2021 | 0.030 | 3.29 | 34.9 | 59.0 | 7.9 | 33.0 | 0.1 | 0.0 | 1.2 |
| 17-Week | 6/15/2021 | 0.030 | 3.95 | 34.7 | 37.8 | 4.8 | 57.3 | 0.3 | 0.0 | 1.2 |
| 17-Week | 6/22/2021 | 0.035 | 3.72 | 35.0 | 46.1 | 7.5 | 46.4 | 0.0 | 0.0 | 1.2 |
| 17-Week | 6/29/2021 | 0.050 | 3.90 | 35.0 | 45.1 | 7.6 | 47.3 | 0.0 | 0.0 | 1.2 |
| 17-Week | 7/6/2021 | 0.050 | 4.16 | 35.0 | 57.1 | 6.5 | 36.4 | 0.0 | 0.0 | 1.2 |

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

| Nominal Coupons | | | | | | | | | | |
|-----------------|-------------|-----------------------|---------------------------|------------------------------|---------------------|----------|------------|--------------------------------------|--------------------------------|-----------------------------------|
| Issue | Settle Date | Stop Out Rate (%)* | Bid-to- Cover Ratio | Competitive Awards (\$bn) | % Primary Dealer | % Direct | % Indirect | Non- Competitive Awards (\$bn) | SOMA "Add Ons" (\$bn) | 10-Year Equivalent (\$bn)** |
| 2-Year | 4/30/2021 | 0.175 | 2.34 | 59.7 | 37.9 | 18.5 | 43.6 | 0.3 | 11.5 | 15.5 |
| 2-Year | 6/1/2021 | 0.152 | 2.74 | 59.8 | 24.9 | 18.0 | 57.1 | 0.2 | 11.6 | 15.6 |
| 2-Year | 6/30/2021 | 0.249 | 2.54 | 59.9 | 30.9 | 18.5 | 50.6 | 0.1 | 9.1 | 15.2 |
| 3-Year | 4/15/2021 | 0.376 | 2.32 | 57.7 | 33.1 | 15.8 | 51.1 | 0.3 | 8.9 | 21.6 |
| 3-Year | 5/17/2021 | 0.329 | 2.42 | 57.9 | 32.3 | 18.1 | 49.6 | 0.1 | 30.8 | 28.9 |
| 3-Year | 6/15/2021 | 0.325 | 2.47 | 58.0 | 27.6 | 18.3 | 54.2 | 0.0 | 5.3 | 20.7 |
| 5-Year | 4/30/2021 | 0.849 | 2.31 | 60.9 | 24.6 | 17.5 | 57.9 | 0.1 | 11.6 | 38.7 |
| 5-Year | 6/1/2021 | 0.788 | 2.49 | 60.9 | 20.8 | 14.9 | 64.4 | 0.1 | 11.8 | 38.9 |
| 5-Year | 6/30/2021 | 0.904 | 2.36 | 61.0 | 24.3 | 18.1 | 57.6 | 0.0 | 9.3 | 37.7 |
| 7-Year | 4/30/2021 | 1.306 | 2.31 | 62.0 | 22.3 | 20.6 | 57.1 | 0.0 | 11.8 | 53.7 |
| 7-Year | 6/1/2021 | 1.285 | 2.41 | 62.0 | 19.7 | 20.7 | 59.6 | 0.0 | 12.0 | 54.0 |
| 7-Year | 6/30/2021 | 1.264 | 2.36 | 62.0 | 18.7 | 21.3 | 60.0 | 0.0 | 9.4 | 52.5 |
| 10-Year | 4/15/2021 | 1.680 | 2.36 | 38.0 | 24.2 | 16.2 | 59.6 | 0.0 | 5.8 | 43.8 |
| 10-Year | 5/17/2021 | 1.684 | 2.45 | 41.0 | 19.5 | 17.1 | 63.4 | 0.0 | 21.8 | 63.0 |
| 10-Year | 6/15/2021 | 1.497 | 2.58 | 38.0 | 15.7 | 19.2 | 65.0 | 0.0 | 3.5 | 41.4 |
| 20-Year | 4/30/2021 | 2.144 | 2.42 | 24.0 | 21.1 | 20.2 | 58.7 | 0.0 | 4.6 | 50.5 |
| 20-Year | 6/1/2021 | 2.286 | 2.24 | 27.0 | 23.8 | 19.5 | 56.7 | 0.0 | 5.2 | 56.1 |
| 20-Year | 6/30/2021 | 2.120 | 2.40 | 24.0 | 17.5 | 20.4 | 62.1 | 0.0 | 3.6 | 48.4 |
| 30-Year | 4/15/2021 | 2.320 | 2.47 | 24.0 | 17.1 | 21.9 | 61.0 | 0.0 | 3.7 | 66.6 |
| 30-Year | 5/17/2021 | 2.395 | 2.22 | 27.0 | 20.1 | 20.1 | 59.9 | 0.0 | 14.3 | 96.4 |
| 30-Year | 6/15/2021 | 2.172 | 2.29 | 24.0 | 18.0 | 18.0 | 64.0 | 0.0 | 2.2 | 61.7 |
| 2-Year FRN | 4/30/2021 | 0.034 | 2.91 | 28.0 | 36.7 | 3.6 | 59.7 | 0.0 | 5.3 | 0.0 |
| 2-Year FRN | 5/28/2021 | 0.030 | 3.03 | 26.0 | 39.5 | 1.3 | 59.2 | 0.0 | 0.0 | 0.0 |
| 2-Year FRN | 6/25/2021 | 0.030 | 3.23 | 26.0 | 31.8 | 1.9 | 66.3 | 0.0 | 0.0 | 0.0 |

| | TIPS | | | | | | | | | | | | |
|--------------|-------------|----------------------|---------------------------|------------------------------|---------------------|----------|------------|--------------------------------------|--------------------------------|-----------------------------------|--|--|--|
| Issue | Settle Date | Stop Out Rate (%) | Bid-to- Cover Ratio | Competitive Awards (\$bn) | % Primary Dealer | % Direct | % Indirect | Non- Competitive Awards (\$bn) | SOMA "Add Ons" (\$bn) | 10-Year Equivalent (\$bn)** | | | |
| 5-Year TIPS | 4/30/2021 | (1.631) | 2.50 | 17.9 | 13.1 | 17.9 | 69.0 | 0.1 | 3.4 | 11.6 | | | |
| 5-Year TIPS | 6/30/2021 | (1.416) | 2.67 | 16.0 | 4.7 | 7.9 | 87.3 | 0.0 | 2.4 | 9.7 | | | |
| 10-Year TIPS | 5/28/2021 | (0.805) | 2.50 | 13.0 | 15.5 | 15.9 | 68.6 | 0.0 | 0.0 | 13.6 | | | |

*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.