

February 24, 2022

## Setting the Record Straight on Bond Mutual Funds' Sales of Treasuries

When analyzing the complex and unprecedented market activity of March 2020, it is vital to use comprehensive and accurate data to understand bond mutual funds' transactions in the Treasury market. Using figures published by the Federal Reserve, commentators have argued that mutual funds sold \$260 billion in Treasury securities in March 2020. But we estimate that mutual funds sold less than half of that, based on a recent ICI survey. The survey data show that bond mutual funds—the focus of intense regulatory attention—sold just \$101 billion in Treasuries that month.

### A Series on Bond Mutual Funds' Role in the Fixed-Income Markets During March 2020

Very soon after the pandemic-induced market turmoil in March 2020, policymakers, academics, and the financial press began suggesting that bond mutual funds may have caused or amplified financial market stresses that month.<sup>1</sup> These observers argued—and continue to do so—that the actions of bond mutual funds and their investors contributed significantly to stresses in the US Treasury bond market.

Some policymakers and analysts have thrown out some very large numbers when making claims about mutual funds' sales of Treasuries in the first quarter of 2020.<sup>2</sup> They appear to have drawn on the same official source for data for these statements and infer that mutual funds sold, on net, \$260 billion in Treasuries during 2020:Q1. Policymakers treat this \$260 billion figure as fact, and have focused intensely on bond mutual funds as the predominant, if not entire, source of the net sales.<sup>3</sup>

We have suspected this \$260 billion figure must be too high, but until ICI undertook its recent survey collecting data on bond mutual funds' daily activities in March 2020, we didn't have conclusive evidence. Based on the survey's results, we now know that bond mutual funds sold, on net, far fewer Treasury notes

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<sup>1</sup> See Lorie K. Logan, “[The Federal Reserve's Recent Actions to Support the Flow of Credit to Households and Businesses](#),” transcript of speech delivered to the Foreign Exchange Committee, Federal Reserve Bank of New York (April 14, 2020); International Monetary Fund, “[Global Financial Stability Update](#)” (June 2020).

<sup>2</sup> See Board of Governors of the Federal Reserve System, [Financial Stability Report](#) (November 2021); Annette Vissing-Jorgensen, “[The Treasury Market in Spring 2020 and the Response of the Federal Reserve](#),” National Bureau of Economic Research Working Paper 29128 (August 2021).

<sup>3</sup> To date, there are no available data on Treasuries sold by mutual funds or bond funds in March 2020. Nevertheless, many observers seem to have assumed that because bond mutual funds had historically high outflows in March 2020, this supposed \$260 billion in Treasury net sales must have occurred entirely in March and was predominantly from bond mutual funds.

and bonds in March 2020—only \$101 billion (we estimate that other types of mutual funds added modestly to this total).<sup>4</sup>

## \$260 Billion: It's Not Net Sales of Treasuries

What is this \$260 billion number that supposedly represents mutual funds' net sales of Treasury bonds and where does it come from? It's from the Federal Reserve's Z.1 *Financial Accounts of the United States* (Flow of Funds)<sup>5</sup> and is meant to capture "net acquisitions of financial securities." But the concept of net acquisitions is broader than the concept of *net transactions*<sup>6</sup> of portfolio securities. Net acquisitions of bonds by mutual funds, as defined in Flow of Funds, reflect purchases less sales of bonds, *less the amount of any bonds that matured off the books of mutual funds in the quarter*. This important distinction is often not well understood by users of Flow of Funds data. To the extent that mutual funds let Treasury bonds mature off their portfolios in the first quarter of 2020, the \$260 billion figure overstates mutual funds' net sales of Treasury bonds.<sup>7</sup>

## \$260 Billion: It's Not Based on Mutual Funds' Purchases and Sales of Treasuries

In addition, in arriving at the -\$260 billion figure for net acquisitions, Flow of Funds does not use as inputs any data on mutual funds' purchases, sales, or matured bonds. Rather, mutual funds' net acquisitions of Treasuries are **estimated** by taking the quarterly difference in the estimated market value of mutual funds' Treasury holdings and adjusting this difference by estimated capital gains on Treasury securities in the quarter.<sup>8</sup> This methodology leaves room for error, and so it is an open question as to whether the -\$260 billion figure is a plausible estimate of mutual funds' net acquisitions of Treasury bonds.

## \$260 Billion: ICI Data Demonstrate Net Sales Were Much Lower

Flow of Funds reported that mutual funds had -\$260 billion in net acquisitions of Treasury bonds in 2020:Q1 (Figure 1) and their net acquisitions of Treasuries and agencies combined totaled -\$242 billion.<sup>9</sup> ICI collects monthly data on mutual funds' purchases and sales of US government securities (long-term

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<sup>4</sup> We focus on bond mutual funds' net sales of Treasuries because regulators themselves have focused almost exclusively on bond mutual funds, as opposed to all mutual funds. For example, a February 4, 2022, statement by [Securities and Exchange Commission Chair Gary Gensler before the Financial Stability Oversight Council](#) highlighted perceived systemic issues in bond mutual funds. See also [Board of Governors of the Federal Reserve System 2021](#) at 45, 48 (asserting that bond mutual funds "remain exposed to risks due to their large holdings of illiquid assets"). Broadening the focus to all mutual funds does not change the overall picture. We estimate that in March 2020 all mutual funds sold, on net, \$130 billion in Treasury notes and bonds.

<sup>5</sup> US Federal Reserve Board, *Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, Third Quarter 2021*, Z.1 Release (December 9, 2021).

<sup>6</sup> The term net transactions is defined as purchases less sales of securities. When net transactions are negative (sales exceed purchases), it's commonly referred to as net sales and reported as a positive number. For example, if purchases are \$10 billion and sales are \$50 billion, net transactions are -\$40 billion. This -\$40 billion will often be referred to as \$40 billion in net sales.

<sup>7</sup> One might be tempted to argue that Treasury bonds maturing off the books of mutual funds, which those funds then elect not to replace, would have created just as much pressure on the Treasury market in March 2020 as outright sales of Treasury bonds by mutual funds. After all, both actions—electing not to roll over matured Treasuries and outright sales—remove demand from the market. But this argument would be flawed. If in March 2020, mutual funds had held onto the proceeds from maturing Treasury bonds, they would have raised their cash holdings available to meet redemptions. These higher cash holdings, in turn, would have reduced the potential need for mutual funds to sell Treasury bonds outright, relieving—rather than adding to—Treasury bond market stress.

<sup>8</sup> See [Financial Accounts Guide](#) for Flow of Funds code FU653061125.Q (mutual funds; other Treasury securities, excluding Treasury bills, not seasonally adjusted).

<sup>9</sup> Flow of Funds reported -\$260 billion in net acquisitions of Treasury notes and bonds and \$18 billion in net acquisitions of agency securities by mutual funds in 2020:Q1.

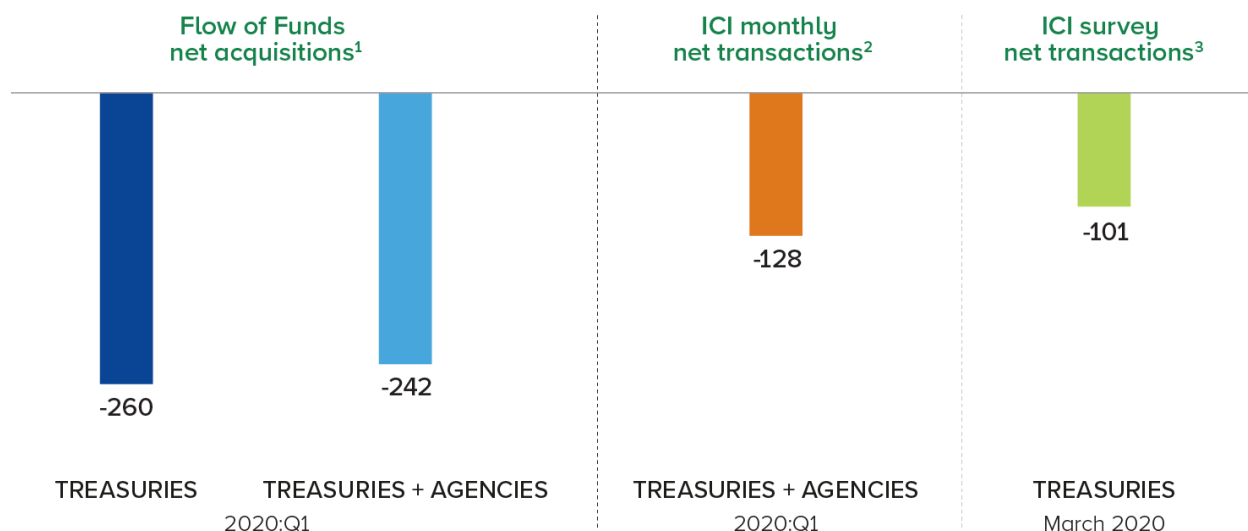
Treasuries and agencies combined).<sup>10</sup> These monthly data show that in 2020:Q1 mutual funds had net sales of \$128 billion in Treasury and agency bonds. This strongly suggests that the \$260 billion figure is far too high an estimate of mutual funds' net sales of Treasury bonds in 2020:Q1, let alone for just the month of March 2020.<sup>11</sup>

We can't distinguish the split between transactions in Treasuries versus agencies in our monthly data. But we can from our survey data. The survey results show that bond mutual funds sold just \$101 billion, on net, in Treasury securities—far less than has been suggested by policymakers and analysts who rely on figures from Flow of Funds.

FIGURE 1

### Bond Mutual Funds Sold Far Less Treasuries Than Policymakers Suggest

Billions of dollars (not seasonally adjusted)



<sup>1</sup> This category represents mutual funds' net acquisitions as reported in Flow of Funds. Net acquisitions in the Flow of Funds Accounts conceptually reflect purchases less sales, minus retirements of bonds that matured off the books of mutual funds during the quarter.

<sup>2</sup> This category represents mutual funds' net transactions (purchases less sales) of Treasury and agency securities as reported by the Investment Company Institute for the quarter.

<sup>3</sup> This category represents industrywide estimates of bond mutual funds' net transactions (purchases less sales) of Treasury notes and bonds from a survey of ICI's members.

Sources: Investment Company Institute and Federal Reserve Board

<sup>10</sup>ICI does not collect monthly purchases and sales separately for Treasury and agency securities.

<sup>11</sup>The only conceptual difference between Flow of Funds' -\$260 billion for mutual funds' net acquisition of Treasury notes and bonds and ICI's survey estimate of \$130 billion in net sales (see note 4) is the amount that matured off the books of mutual funds. This means that Flow of Funds implicitly estimates that mutual funds received \$130 billion in proceeds from US government securities that matured in 2020:Q1, which seems unrealistically high to us. For instance, based on the Daily Treasury Statements for [January 29, 2020](#), [February 28, 2020](#), and [March 31, 2020](#), the US Treasury Department redeemed a total of \$378 billion in marketable Treasury notes and bonds in 2020:Q1—meaning that mutual funds potentially received 34 percent of redemptions. But based on our survey, bond mutual funds held only 6 percent of outstanding Treasury notes and bonds at the end of February 2020.

## \$101 Billion: Foreign Investors Sold Three to Four Times More Treasury Bonds in March 2020

The Financial Stability Oversight Council—likely using the Flow of Funds as a point of reference—recently claimed that US mutual funds were among the largest recorded sellers of Treasuries during March 2020.<sup>12</sup> Our survey data on bond mutual funds, which show far lower net sales of Treasuries, provide a far different perspective. According to the Treasury Department’s Treasury International Capital (TIC) data, foreign investors sold \$311 billion in Treasury notes and bonds in March—three times more than ICI’s estimate for bond mutual funds (Figure 2). These foreign investors included private-sector investors, but also—perhaps most significantly—foreign central banks, other foreign government entities, and sovereign wealth funds.

And the TIC data may well *understate* sales of Treasury bonds by foreign investors. For instance, the TIC data exclude transactions in securities between foreign investors. Because many US securities, including US Treasury securities, trade in foreign financial markets, the TIC data will not capture all foreign transactions in US securities.<sup>13</sup> Weiss (2022) suggests that net sales of Treasuries by foreigners were likely even higher in March 2020, at nearly \$420 billion, or four times the amount sold by bond mutual funds.<sup>14</sup> The Federal Reserve’s most recent Financial Stability Report likewise estimates net sales of Treasuries by foreign investors to be almost \$420 billion and states that more than half of these foreign investors’ net sales were from foreign official institutions.<sup>15</sup> Thus, in March 2020, foreign official institutions alone sold, on net, more than twice the amount of Treasuries than bond mutual funds.

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<sup>12</sup> [Financial Stability Oversight Council Statement on Nonbank Financial Intermediation](#) (February 4, 2022).

<sup>13</sup> See US Treasury Department, [“Frequently Asked Questions Regarding the TIC System and TIC Data.”](#)

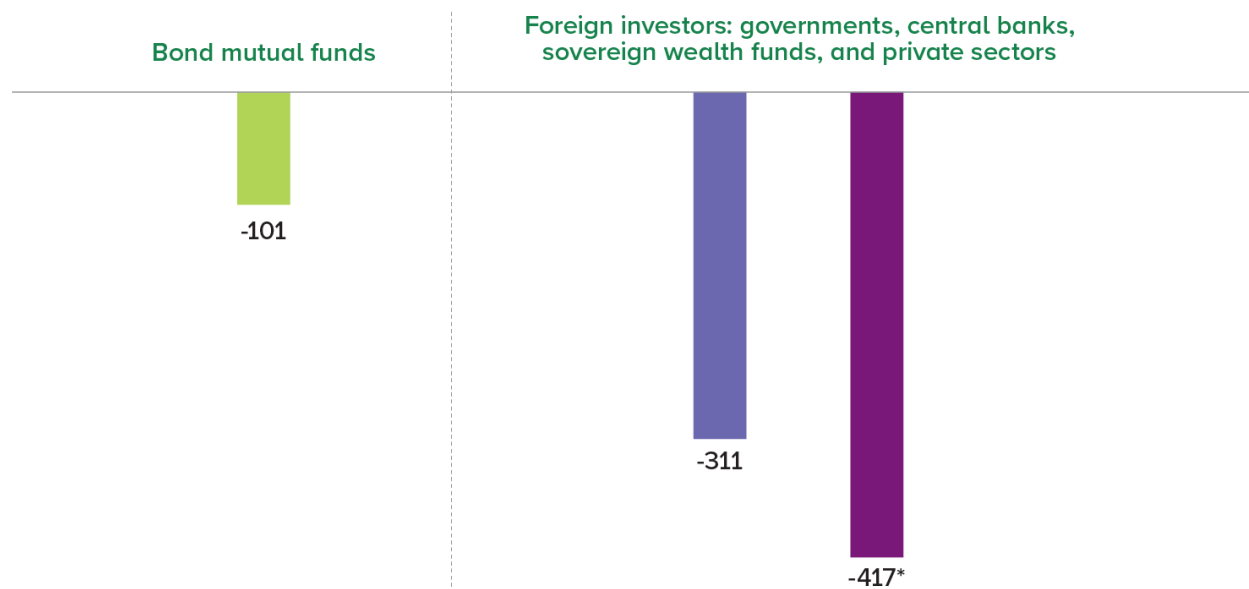
<sup>14</sup> See Colin R. Weiss, [“Foreign Demand for US Treasury Securities During the Pandemic,”](#) *FEDS Notes*, Federal Reserve Board (January 28, 2022).

<sup>15</sup> [Board of Governors of the Federal Reserve System 2021](#) at 23.

FIGURE 2

## Foreign Investors Sold Three to Four Times More Treasuries Than Bond Mutual Funds

Net sales of Treasury notes and bonds, billions of dollars, March 2020 Billions of dollars (not seasonally adjusted)



\* This estimate includes \$8 billion in net sales of Treasury bills.

Sources: Investment Company Institute, Treasury International Capital (TIC) System, and Weiss (2022)

## Conclusions

Hopefully, the analysis and survey data we have presented here will add some perspective and much-needed hard evidence to discussions about the influence of bond mutual funds' actions on the Treasury market in March 2020. Policymakers continue to assert that sales of Treasury securities by mutual funds generally—and bond mutual funds in particular—were one of the significant contributors to this stress.<sup>16</sup> Our survey data demonstrate that the amount of the stress added was significantly less than regulators seem to believe, and perhaps three to four times less than that created by foreign entities.

But even then, it remains unclear whether the supposition is correct that bond mutual funds were a significant contributor to stresses in the Treasury market. As we will show in a subsequent ICI Viewpoints post, our daily survey data indicate that the Treasury market had become significantly dislocated several days before bond mutual funds began selling Treasury bonds in size. And in the financial markets of March 2020, a single day was a lifetime.

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<sup>16</sup> See [Financial Stability Oversight Council Statement on Nonbank Financial Intermediation](#) (February 4, 2022), which argues that "Open-end funds were not the sole or primary cause of market stress [in March 2020]—there was no single, primary cause—but the size of their asset liquidations indicates that they were one of the significant contributors to this stress"(emphasis added).