

Remarks by Under Secretary for Domestic Finance Nellie Liang at the 2022 Treasury Market Conference

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INTRODUCTION

Good morning. It is great to be back in person at this conference. I would like to begin by thanking our colleagues in the Inter-Agency Working Group on Treasury Market Surveillance (IAWG) for co-hosting this conference.^[1] The collaboration between IAWG members has been tremendously important as we prioritize efforts to strengthen the resilience of the Treasury market. The feedback from many of you to implement those priorities has also been very useful. I believe that collectively, we have made significant progress on a path to a more resilient market. We have introduced some significant changes and proposals, but there is still more to do. Today I would like to begin by offering some brief observations about current Treasury market liquidity conditions. After that, I will highlight the overall work of the IAWG, and then provide more detail about a key workstream led by Treasury to improve data quality and transparency in the Treasury market.

TREASURY MARKET LIQUIDITY

The Treasury market plays a critical role to finance the federal government, support the broader financial system, and implement monetary policy. A liquid, well-functioning market is key to supporting those objectives. Market liquidity is often characterized by the cost and ease of transacting, and can vary with changes in the financial environment.

Over the past year or so, liquidity conditions in the Treasury market have shown some deterioration, but I believe these conditions largely reflect the heightened uncertainty about economic and geopolitical conditions. It is not surprising that it is somewhat harder and more expensive to trade, but there is a significant amount of trading. Moreover, to date, we have not seen strong signs that the decline in liquidity is driving up financial volatility.



To start, it is clear that the disruptive impact of Russia's war in Ukraine, combined with lingering uncertainties regarding supply chain disruptions as well as uncertainties about the persistence of higher inflation, have led to substantial asset price volatility this year in both domestic and global financial markets. As indicated in Figure 1, the volatility of the yields of the 2-year and 10-year Treasury notes have risen, but it has risen more notably for the 2-year than for the 10-year, reflecting the greater scale of near-term uncertainties.

Historically, volatility has a significant negative effect on liquidity conditions. This relationship is illustrated in Figure 2 by the inverse relationship between the volatility of yields and market depth, which in this chart is measured by the depth of resting orders on a central-limit order book in the electronic interdealer segment of the market. Market depth for the 2-year note currently is very low, near the lows of March 2020, as has been pointed out by many observers. But volatility is notably higher than in 2020, and to a large extent, responsible for pushing liquidity lower. By contrast, current market depth for the 10-year note is well above March 2020 lows despite similar levels of volatility in the two periods.

In addition, investors often cite price impact, or the price movements that can occur as a result of their trades, as a key concern. As seen in Figure 3, an estimate of price impact indicates that it has increased across tenors, but relatively less for the 10-year than for the 2-year note, again linking back to the relatively higher volatility at the front-end than the longer-end. Another measure, bid-ask spreads, shown in Figure 4, have also increased across tenors, but show episodic spikes in the 2-year note.

While these indicators paint a picture of higher costs and less ease of transacting in Treasury securities that are linked to higher volatility, so far, the market, more broadly, has continued to operate well during these particularly volatile times. As the next figure shows, transaction volumes have not indicated any sustained decline in the significant activity that clears through the Treasury market each day. Trading volumes are high, at an average above \$600 billion per day in recent months. Regular conversations with market participants indicate they have been able to effectively transfer a substantial amount of interest rate risk. Compositional trends, such as whether trading is occurring in the interdealer or dealer-to-customer venues, or the relative participation by different types of intermediaries, have also remained steady. As the next figure shows, the volume reflects an increase in net selling of off-the-run securities, though the extent and pace has been far more moderate than the tremendous amount of net selling by end-users in March 2020.



Overall, investors in recent months have been able to continue to transfer risk in large size at all tenors, though at somewhat higher cost, reflecting greater uncertainty. Still, there is a risk that more negative shocks could lead to disruptions in market functioning, particularly if the shocks were amplified by leverage, funding mismatches, or other constraints at Treasury market participants. It is therefore important we continue to closely monitor this critical market for signs of rising vulnerabilities.

ENHANCING TREASURY MARKET RESILIENCE

Let me turn to the official sector's recent efforts to enhance the resilience of the Treasury market. The market has changed significantly over time, with changes in technology, participants, and regulations, and Treasury debt outstanding has grown substantially. Moreover, episodes of significant market stress in recent years highlight the need for the official sector to consider and take actions to ensure that the market operates efficiently and effectively, and that liquidity is resilient and elastic. Actions to enhance resilience are designed to support the Treasury market's ability to absorb, and not significantly amplify, adverse market shocks that could lead to breakdowns in intermediation. These actions are not meant to eliminate the kinds of changes in liquidity, those due to increases in volatility, like we have seen in recent months. Moreover, we do not expect actions could fully insulate market liquidity from unpredictably large exogenous shocks, such as the pandemic, even with substantive reforms under consideration or already implemented.

When I spoke at last year's conference, the IAWG had just released a Staff Progress Report on its review of potential policies to enhance Treasury market resilience.^[2] In September, Treasury released a fact sheet, highlighting 12 key actions taken across the official sector to make progress in building resilience.^[3] And just last week, the IAWG released a second Staff Progress Report to summarize recent accomplishments and provide greater perspective about some future work.^[4] All told, the official sector has made tremendous progress in a short period of time, though there is still much work ahead. We will hear about some of these efforts later today, which include proposals for enhanced oversight of participants and venues and to centrally clear more Treasury transactions, analysis of options for establishment of more uniform leverage requirements across participants, and a study of the potential benefits of all-to-all trading.

I will focus on recent accomplishments and the road ahead for two parts of a workstream focused on improving data quality and availability that Treasury is leading. The first is relat



data collection in the non-centrally cleared bilateral repo market by the Office of Financial Research (OFR), and the second is related to data collection of transactions in the secondary cash market and efforts to improve public transparency of that data. The work to improve data quality and availability in the Treasury market was developed to support the official sector's ability to assess market conditions and preparedness to respond to market stresses, and also to provide transparency that fosters public confidence, fair trading, and a market ecosystem that provides for more resilient and elastic liquidity.

OFR'S NON-CENTRALLY CLEARED BILATERAL REPO PILOT

One of the largest remaining gaps in Treasury market data for the official sector is the non-centrally cleared bilateral repo market, where transactions are conducted between two firms without a central counterparty. At the beginning of this year, the Federal Reserve Bank of New York updated its primary dealer statistics collection to capture primary dealer repo activity (in Treasury securities and other collateral classes) in the different repo market segments, as can be seen in Figure 7. As a whole, primary dealer (reverse repo) outstanding has been roughly \$2 trillion in the past few years. According to the new data, about 60 percent of primary dealer repo lending and about 40 percent of primary dealer repo borrowing occurs in the non-centrally cleared bilateral repo market segment. This suggests an important gap to fill, to collect information on primary dealers' counterparties and the terms of the trades to be able to assess leverage in the Treasury market and the market's resilience to various shocks.

To assess filling this data gap, OFR conducted a pilot data collection on the non-centrally cleared bilateral repo market in June 2022, covering nine U.S. registered broker-dealers over three days in that month. This pilot was conducted after extensive consultation with market participants and drew upon findings from an earlier pilot completed in 2015.^[5]

Enough of the recent pilot data has been collected for us to share some preliminary conclusions. Based on our initial observations for the first day of the collection, the pilot confirmed that participants conduct significantly larger volumes of transactions in this segment of the repo market than in centrally cleared segments. This preliminary result is consistent with the previous estimates and further illustrates that this collection helps to fill an important gap. In addition, the pilot data indicates that Treasury securities are the dominant collateral in the market, representing almost 95 percent of repo and 85 percent of reverse repo. The prominence of Treasury and agency securities is similar to activity in other repo market segments.



We can also see who dealers are lending to and on what terms. While there are a variety of borrowers, such as banks and other broker-dealers, the largest group in the data collection are hedge funds. Being able to look at hedge fund exposures will be very helpful for evaluating when leverage or other vulnerabilities in the Treasury market are increasing.

With respect to terms and standards, the pilot indicates that borrowing rates in the non-centrally cleared bilateral market are similar to those in other repo market segments. In particular, the distribution of rates for overnight Treasury securities collateralized repo is similar to rates in the centrally cleared market.

But there are two significant distinctions of note, in maturities and in haircuts. This segment of the market has more trades with longer maturities. Less than 40 percent of the data collected from the pilot participants are overnight, compared to more than 70 percent in the centrally cleared market, and more than 30 percent of total volume has maturities of more than 30 days.

In addition, and as previewed in 2015, almost 75 percent of repo transactions collateralized by Treasury securities and about 25 percent of repo transactions collateralized by non-Treasury securities are traded at a zero percent haircut. In certain cases, these haircuts may represent netted packages, where dealers enter into offsetting repo and reverse-repo trades with their counterparties, but it will be important to assess how these practices affect risks.

The preliminary analysis indicates that having robust data on this market is important for better understanding how to improve Treasury market resilience. The differences in maturities and in haircut practices raise important questions about how this market meets the needs of different types of counterparties. They also reinforce the need to be able to monitor this segment of the market for emerging financial stability risks.

OFR will continue to study data from this pilot collection, collaborating with the IAWG members and Financial Stability Oversight Council's working group on hedge funds. These efforts are also informing a rulemaking by the OFR to establish a permanent collection of data for this significant segment of the Treasury repo market.

ADDITIONAL PUBLIC TRANSPARENCY FOR TREASURY SECURITIES

Turning to transparency to the public for the cash Treasury market, let me briefly recap several steps that have been taken in the past few years before turning to next steps. In 2017, the Financial Industry Regulatory Authority (FINRA) began collecting transaction data from its




members through the Trade Reporting and Compliance Engine (TRACE) and providing that data to the official sector. Release of weekly aggregate volume data to the public began in March 2020, which by chance turned out to be the week with the highest reported volumes since data collection began in mid-2017. Then in 2021, FINRA enhanced the public release by providing more historical data back to 2019 and making changes to accommodate the re-introduction of the 20-year bond. Based on feedback from market participants, the additional release of aggregate statistics has been a valuable resource to evaluate how much and in what sectors trading is occurring. In particular, the aggregate statistics have provided insight into parts of the market that have traditionally been less transparent, such as trading in the dealer-to-customer segment and in off-the-run Treasury securities.

This past summer, the SEC approved another FINRA proposal to increase the frequency of releasing aggregate data from weekly to daily, and to include additional statistics such as daily trade counts and average prices. Based on guidance from FINRA, we anticipate this new daily aggregate data will be released to the public beginning sometime in the first quarter of 2023.

Given broad market participant support for the public release of the aggregate data, Treasury along with the IAWG members, believed it was appropriate to consider a policy for additional public transparency of transaction data. To assess next steps and collect feedback from the public, Treasury published a request for information (RFI) in June. Treasury stated in the RFI that additional insight into Treasury securities transactions “may enhance liquidity by fostering a greater understanding of market activity across market segments,” and “may also promote greater competition in the Treasury securities market.” The RFI sought input on the potential benefits and risks of additional public transparency, as well as on a range of illustrative scenarios for what public transparency could look like. As a follow-up, we also requested input from the Treasury Borrowing Advisory Committee (TBAC).

Responses to the RFI noted several potential benefits of additional transparency. First, additional transparency may improve investor confidence, particularly in times of stress and in less liquid securities. Investors may gain more assurance from observing executed transactions rather than indicative quotes and may therefore be more willing to remain engaged in the market. Second, additional transparency for transactions may support greater price discovery and thereby expand the supply of liquidity. RFI responses noted price data are unevenly available, and may depend upon access to certain venues, costly subscriptions, or direct participation in a transaction. Respondents argued that broader access to pricing information would allow for better evaluation of execution costs, enhanced risk management, more effi



price discovery, and increased competition. On this last point, several RFI responses noted academic research has generally found that post-trade transparency for other fixed-income markets, like corporates and mortgage-backed securities, tends to increase competition and benefit investors through reduced transaction costs.

At the same time, feedback highlighted potential risks related to additional transparency. Most RFI responses noted that releasing information too quickly or with too much detail could end up reducing liquidity. Responses also indicated these risks could be particularly acute for less liquid segments of the Treasury market, such as off-the-run securities. Concerns from intermediaries and end-users tended to focus on the ability of intermediaries to effectively transfer risk in large size, or for less liquid securities if information were to be released that could be used to trade against the intermediary. In such a scenario, the intermediary would face increased risks to execute transactions, which would likely result in increased costs passed on to end-users. In the worst-case scenarios, which could include stress episodes, respondents noted that intermediaries might be unwilling to transact in less liquid securities.

Feedback also offered a broad range of possible paths forward, though we see some areas of consensus. For one, nearly all responses indicated that any additional transparency should proceed gradually, and that the initial focus should be on more liquid segments of the Treasury securities market. In addition, feedback advised that the release of information be calibrated to mitigate potential risks for large trades or for trades in less liquid segments. It was very clear that a “one-size-fits-all” approach was viewed as inappropriate and potentially harmful.

Treasury greatly appreciates all the input we have received on this topic over the last several months. Based on the feedback, we believe that additional transparency can provide meaningful and lasting benefits on net for the Treasury securities market. We also agree that we should proceed in a gradual and calibrated manner. **In particular, we are proposing that the next step should be to release transaction data for on-the-run nominal coupons, with end-of-day dissemination and with appropriate cap sizes.**

To speak a bit more about this proposed policy, let me first discuss why we are focusing on on-the-run nominal coupon securities. These benchmark securities represent the most liquid segment of the Treasury securities market, and price information for the on-the-run securities are a fundamental reference point across financial markets. Looking at Figure 8, when compared to off-the-runs, on-the-runs account for a substantial share, up to 80 percent, of nominal coupon volume. Providing additional transparency for on-the-runs would be consistent with market participant feedback that data for these securities has greater bene



than costs. Furthermore, a comparison to Treasury futures suggests transparency for highly-liquid contracts has not hampered overall activity. Indeed, as shown in Figure 9, Treasury securities cash and futures volumes on an interest-rate risk basis track each other very closely, even in periods of stress, despite the futures market being more transparent.

Second, a policy for the end-of-day release of transaction data stems from the fact that current FINRA rules require that transactions be reported by the end of the day. However, the SEC recently approved a FINRA proposal to reduce the reporting requirement to 60 minutes, and we believe eventually shortening the period of dissemination to closer to 60 minutes would be beneficial and would still allow sufficient time for market participants to handle large transactions. In fact, data from FINRA's TRACE has indicated that the time needed to trade a large block in the on-the-runs is typically less than 10 minutes, as shown in Figure 10.

Third, we agree that information for very large trades should be released cautiously, with the actual size of the trade masked at the point of dissemination, similar to practices used for other fixed income markets. At this point, the precise "cap sizes" will still need to be determined through further engagement with the IAWG members and market participants. However, we anticipate caps may be tiered based on the interest rate risk profile, with initial caps set conservatively and reviewed periodically.

We expect that after a sufficient period of time and experience with additional transparency for on-the-runs, we will consider releasing transaction data for other highly liquid Treasury securities. Of course, any expansion would involve an evaluation of the effects of additional transparency on liquidity, recognizing that the benefits and costs may vary with each increment, as well as input from market participants.

To summarize, we are proposing to provide transaction-level transparency to the public, starting gradual and in a calibrated way. We will walk, not run. There remain some details to work out, and we look forward to further engagement with IAWG members and market participants in coming months.

TREASURY BUYBACKS

Finally, there has been a lot of market attention on a potential Treasury buyback program. Therefore, I want to reiterate our update on such a program from the most recent quarterly refunding announcement. Treasury continually evaluates potential debt management tools, including buybacks, that help us meet our objective of achieving the lowest cost of debt



financing over time. Buybacks could have several potential uses, including liquidity support and cash and maturity management. Treasury is gathering information on this topic from market participants, including through questions for the TBAC in August and to the primary dealers in October. We have not made any decision on whether or how to implement a buyback program but expect to share our findings on buybacks as part of future refundings.


CONCLUSION


To conclude, I again want to thank everyone for their support as Treasury and all of the IAWG members have studied and considered several significant policies over the past year to improve the resilience of the Treasury market. While I see a lot of progress to date, there is clearly more ahead, and we look forward to the ongoing collaboration to address these complex yet critical topics. Thank you.


The slides and figures referenced in the Treasury Market Conference remarks are available [here](#).



[1] The Inter-Agency Working Group on Treasury Market Surveillance (IAWG) is composed of staff from the U.S. Department of the Treasury, the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, the U.S. Securities and Exchange Commission, and the U.S. Commodity Futures Trading Commission.

[2] “Recent Disruptions and Potential Reforms in the U.S. Treasury Market: A Staff Progress Report” (Nov. 8, 2021), available at <https://home.treasury.gov/system/files/136/IAWG-Treasury-Report.pdf> .

[3] “Fact Sheet: Progress of the Inter-Agency Working Group on Treasury Market Surveillance in Enhancing the Resilience of Treasury Markets” (Sep. 22, 2021), available at <https://home.treasury.gov/system/files/136/IAWG-Progress-Fact-Sheet.pdf> .

[4] “Enhancing the Resilience of the U.S. Treasury Market: 2022 Staff Progress Report” (Nov. 10, 2022), available at <https://home.treasury.gov/system/files/136/2022-IAWG-Treasury-Report.pdf> .

[5] Baklanova, Viktoria, Cecilia Caglio, Marco Cipriani, and Adam Copeland (2016) The U.S. Bilateral Repo Market: Lessons from a New Survey. Office of Financial Research Brief 16-01 <https://www.financialresearch.gov/briefs/2016/01/13/us-bilateral-repo-market-lessons-from-a-new-survey/>

