



FEDERAL RESERVE SYSTEM

Docket Number OP-1573

Production of Rates Based on Data for Repurchase Agreements

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice.

SUMMARY: The Board of Governors of the Federal Reserve System (Board) is announcing the production and publication of three rates by the Federal Reserve Bank of New York (FRBNY), in coordination with the U.S. Office of Financial Research (OFR), based on data for overnight repurchase agreement transactions on Treasury securities.

DATES: FRBNY intends to begin publishing the three rates during the second quarter of 2018.

FOR FURTHER INFORMATION CONTACT: David Bowman, Associate Director, (202-452-2334), Division of International Finance; or Christopher W. Clubb, Special Counsel (202-452-3904), Evan Winerman, Counsel (202-872-7578), Legal Division; for users of Telecommunications Device for the Deaf (TDD) only, contact (202-263-4869).

SUPPLEMENTARY INFORMATION:

I. Background

On August 30, 2017, the Board published a notice and request for public comment (Request for Information) on the proposal that FRBNY, in coordination with OFR, produce and publish three rates based on overnight repurchase agreement (repo) transactions on U.S. Treasury securities (Treasury repo).¹ The three rates (collectively, the “Treasury repo rates”) would be based on transaction-level data from various

¹ 82 FR 41259 (Aug. 30, 2017). The Request for Information included a detailed overview of the Treasury repo market.

segments of the repo market.

A. Summary of Proposed Rates

Rate 1: Tri-party General Collateral Rate (TGCR)

The Request for Information indicated that this rate would be a measure of rates on overnight, specific-counterparty tri-party Treasury general collateral (GC) repo. This rate would be calculated based on transaction-level tri-party repo data collected from the Bank of New York Mellon (BNYM) under the Board's supervisory authority. The rate would exclude General Collateral Finance (GCF) Repo[®] cleared by the Fixed Income Clearing Corporation (FICC) and transactions in which a Federal Reserve Bank is a counterparty.²

Rate 2: Broad General Collateral Rate (BGCR)

The Request for Information indicated that this rate would provide a broad measure of rates on overnight Treasury GC repo transactions. The rate would be calculated based on the same transaction-level tri-party repo data collected from BNYM as in the TGCR plus GCF Repo data obtained from DTCC Solutions LLC (DTCC Solutions), an affiliate of the Depository Trust & Clearing Corporation (DTCC).

Rate 3: Secured Overnight Financing Rate (SOFR)

The Request for Information indicated that this rate would provide a broad measure of the general cost of financing Treasury securities overnight. The rate would be calculated based on the tri-party data from BNYM and GCF Repo data from DTCC Solutions used to calculate the BGCR, plus bilateral Treasury repo transactions cleared

² A Federal Reserve Bank may enter into bilateral and tri-party Treasury repos in order to implement monetary policy. Because all three proposed rates were intended to reflect rates on trades between market participants, it was proposed that all would exclude Federal Reserve repos.

through FICC's Delivery-versus-Payment (DVP) service, filtered to remove some (but not all) transactions considered "specials."³ This rate would not be a pure GC repo rate, but would offer the broadest measure of dealers' cost of financing Treasury securities overnight.

B. Proposed Calculation of and Publication of the Rates

The Request for Information stated that FRBNY would use a volume-weighted median as the central tendency measure for each of the three Treasury repo rates described above. FRBNY would publish summary statistics to accompany the daily publication of the rate, which would consist of the 1st, 25th, 75th and 99th volume-weighted percentile rates, as well as volumes.

The Request for Information included a target publication time of 8:30 a.m. ET. The Request for Information stated that the rates would be revised only on a same-day basis, and only if the revision would result in a shift in the volume-weighted median by more than one basis point. Such revisions would be effected that same day at or around 2:30 p.m. ET and would result in a republication of updated summary statistics. If relevant data sources were unavailable, the Request for Information stated that the rates would be calculated based upon back-up repo market survey data collected from FRBNY's primary dealer counterparties. In such circumstances, the Request for Information indicated that FRBNY might revise the summary statistics or publish additional summary statistics on a lagged basis.

³ "Specials" are repos for specific-issue collateral, which can take place at much lower rates than GC trades because cash providers may be willing to accept a lesser return on their cash, or even at times accept a negative return, in order to secure a particular security. The Request for Information noted that FRBNY could filter out specials by simply excluding the lowest quartile of bilateral transaction volume.

For each rate, the Request for Information stated that FRBNY would exclude trades between affiliated entities when relevant and when the data to make such exclusions is available. To the extent possible, “open” trades for which pricing resets daily (making such transactions economically similar to overnight transactions) would be included in the calculation of the rates.

Finally, the Request for Information stated that each of the rates could be modified in the future in response to market evolution or to incorporate additional market segments if data become available.

II. Public Comments

The Board received twelve comments on the Request for Information from financial institutions and industry associations. Certain commenters focused on possible uses of the proposed rates, including the possibility that the proposed rates (particularly SOFR) could serve as reference rates for financial contracts. Other commenters focused on the calculation, publication, and governance of the proposed rates.

A. Uses of the Proposed Rates

Commenters suggested that the proposed rates would be useful because they would provide a comprehensive view of pricing in the Treasury repo market, would provide a good proxy for a risk-free rate, would provide useful information regarding overnight demand and supply for funding, and could facilitate the creation of futures contracts that would allow market participants to hedge Treasury repos and spot-market Treasury purchases. Most commenters who expressed a view on the potential uses of the proposed rates suggested that SOFR would be more useful than the other rates because SOFR would provide a broader measure of pricing in the Treasury repo market.

Other commenters raised concerns regarding the possible use of SOFR as a replacement for the London Interbank Offered Rate (LIBOR) in financial contracts. For example, a number of commenters believed that U.S. dollar LIBOR should be replaced with term reference rates or rates that reflect bank credit risk in ways that are similar to U.S. dollar LIBOR. Some commenters also noted difficulties in amending certain existing contracts (e.g., syndicated loan and corporate bond contracts) to replace U.S. dollar LIBOR.

Based on public comments, the Board believes that market participants could use the proposed Treasury repo rates in a variety of ways. The Board recognizes that the proposed rates could be used as reference rates in financial contracts, and that the Alternative Reference Rates Committee (ARRC) has selected SOFR as its recommended alternative to U.S. Dollar LIBOR.⁴ The Board notes, however, that the proposal to publish these rates was not contingent upon the ARRC's selection of SOFR or the possible use of SOFR (or either of the other proposed rates) as a reference rate in financial contracts. As noted in the Request for Information, the publication of the Treasury repo rates is intended to improve transparency into the repo market by increasing the amount and quality of information available about the market for overnight Treasury repo activity. This information could be useful to market participants in a variety of ways. To the extent that market participants choose to use SOFR or another of the Treasury repo rates as a reference rate, details regarding the transition from U.S. Dollar LIBOR to that rate in particular markets are outside the scope of the Request for

⁴ See <https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/ARRC-press-release-Jun-22-2017.pdf>.

Information and this final *Federal Register* notice.

B. Calculation, Publication, and Governance of the Proposed Rates

The Board received a number of comments on the calculation, publication, and governance of the proposed rates. Commenters discussed the types of data that FRBNY will include in the rates, FRBNY's calculation methodology, and various issues related to publication and governance of the rates.

1. Data sources

Three commenters suggested that the Federal Reserve and OFR should consider including additional Treasury repo activity in the proposed rates (*e.g.*, uncleared bilateral repos, FICC's Sponsored DVP Repo Service, and FICC's new CCIT™ Service) and should adopt a clear mechanism for including additional Treasury repo activity in the future. As noted in the Request for Information, each of the Treasury repo rates could be modified in the future in response to market evolution or to incorporate additional market segments if data become available. The Federal Reserve and OFR will monitor trading activity in new market segments and will consult with the public in deciding whether to include new data sources in the Treasury repo rates or make other compositional or methodological changes to the rates. The Board also notes that (1) FRBNY cannot currently include data regarding uncleared bilateral repos in the Treasury repo rates because there is no available data source for such information and (2) SOFR *will* include data from FICC's Sponsored DVP Repo Service.

A commenter asked the Board to provide more information regarding FRBNY's contract to acquire data from DTCC Solutions, stating that additional information would help market participants evaluate potential risks related to loss of access to data. The

Federal Reserve and OFR are confident that the combination of the relevant provisions of the contract with DTCC Solutions and the data collection authorities of the OFR and Federal Reserve will ensure that they will be able to continue to produce robust rates under a variety of circumstances. In this regard, the Board notes that OFR informed the Financial Stability Oversight Council on November 16, 2017, that it intends to propose an information collection in the first half of 2018 to collect data regarding cleared repo transactions.⁵

Finally, a commenter suggested that the Board should use its supervisory authority to ensure that BNYM conducts its tri-party operations properly, including appropriate business continuity and other risk contingency planning. BNYM is a State member bank and is subject to comprehensive supervision by the Federal Reserve.⁶ In particular, the Federal Reserve supervises BNYM's tri-party operations.⁷

2. Calculation methodology

Two commenters supported the proposal to calculate the Treasury repo rates using a volume-weighted median approach. One commenter suggested, however, that a volume-weighted average might be more appropriate because SOFR could have a bimodal distribution, with one peak representing relatively low tri-party rates and a second peak reflecting higher rates for GCF repos and repos cleared through FICC's DVP service. This commenter believed that, if SOFR has a bimodal distribution, small changes in the relative volumes of the two peaks could result in significant shifts in the

⁵ See <https://www.financialresearch.gov/from-the-management-team/2017/11/22/ofr-update-on-bilateral-repo-collection/>.

⁶ See, *inter alia*, section 9 of the Federal Reserve Act (12 U.S.C. 321 *et seq.*) and the Board's Regulation H (12 CFR Part 208).

⁷ The Board notes that the Federal Reserve has taken a variety of steps in recent years that have made tri-party repo infrastructure more resilient. See https://www.newyorkfed.org/banking/tpr_infr_reform.html.

median rate. FRBNY will use a volume-weighted median approach because, compared to a volume-weighted mean approach, it is more robust to erroneous data and outliers and more frequently reflects a transacted rate. Although the aggregation of heterogeneous market segments increases the risk of a multimodal distribution, FRBNY's historical analysis indicates that use of a volume-weighted median did not materially increase the volatility of the rate and that small shifts in the data did not cause significant shifts in the median rate. The Federal Reserve and OFR will review the composition and methodology of the rates over time and, as noted above, will consult with the public in deciding whether to make any compositional or methodological changes.

Multiple commenters asked the Board to clarify how FRBNY will trim specials from the proposed rates. One commenter supported exclusion of all bilateral transactions below the 25th volume-weighted percentile rate, while two commenters stated that they would need more data to evaluate whether this approach is sensible. Another commenter suggested other possible techniques for excluding outlier transactions. Federal Reserve and OFR staff considered several techniques for trimming specials activity, including removing all transactions collateralized by on-the-run and first-off-the-run securities.⁸ The Board confirms that FRBNY will trim specials by excluding from the FICC-cleared bilateral data all transactions with rates below the 25th volume-weighted percentile.

Analysis of various volume-weighted percentile thresholds revealed that excluding all

⁸ See Kathryn Bayeux, Alyssa Cambron, Marco Cipriani, Adam Copeland, Scott Sherman, and Brett Solimine, "Introducing the Revised Broad Treasuries Financing Rate," Federal Reserve Bank of New York *Liberty Street Economics* (blog), June 19, 2017, <http://libertystreeteconomics.newyorkfed.org/2017/06/introducing-the-revised-broad-treasuries-financing-rate.html>; Bowman, David, Joshua Loria, Matthew McCormick, and Mary-Frances Styczynski (2017). "The Cleared Bilateral Repo Market and Proposed Repo Benchmark Rates," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 27, 2017, <https://doi.org/10.17016/2380-7172.1940>.

activity trading below the 25th percentile rate struck an appropriate balance between removing the largest number of specials transactions and maintaining robust volume to use in calculating a rate.⁹ This approach effectively removes transactions with rates that are notably lower than other transactions in the FICC-cleared bilateral data set, which indicates that the removed transactions are specials.

A commenter requested more information about how FRBNY will include “open” trades in the proposed rates. Open transactions are transactions with no specific maturity date for which the interest rate is periodically reset upon agreement by both borrower and lender. Although there are many forms of open transactions with different reset periods, those with daily rate resets are economically very similar to overnight transactions. On January 24, 2017, the Treasury Market Practices Group recommended a new best practice in the recording of daily-resetting open trades, which is expected to make daily-resetting trades easier to differentiate from open trades with different reset periods.¹⁰

Two commenters noted that SOFR tends to spike at quarter-ends and suggested that FRBNY apply a “smoothing” mechanism to minimize volatility of the proposed rates. The Board recognizes that rates in some segments of the Treasury repo market currently tend to increase at quarter-ends, but FRBNY will not apply a smoothing mechanism to the Treasury repo rates because doing so would provide an inaccurate view of that day’s pricing in the Treasury repo market.

Finally, one commenter suggested that, even though the proposed rates would

⁹ For a fuller explanation of this approach, *see* “Introducing the Revised Broad Treasuries Financing Rate,” <http://libertystreeteconomics.newyorkfed.org/2017/06/introducing-the-revised-broad-treasuries-financing-rate.html>.

¹⁰ *See* <https://www.newyorkfed.org/medialibrary/microsites/tmpg/files/best-practices-tripartyrepo-170124.pdf>.

exclude transactions in which a Federal Reserve Bank is a counterparty, Federal Reserve activity in repo markets might distort rates in Treasury repos that do not involve a Federal Reserve Bank. The Federal Reserve implements monetary policy through multiple types of financial transactions, including repos. These open market operations affect all money market rates. The Board nevertheless believes that the Treasury repo rates will provide market participants with a transparent and comprehensive view of pricing in the Treasury repo market.

3. Publication issues

One commenter stated that the proposed 8:30 a.m. ET publication time was appropriate. Another commenter asked the Federal Reserve to consider carefully whether publishing the rates at 8:30 a.m. would impact efficient market functioning. Three commenters believed that the proposed rates should be published earlier, explaining that 8:30 a.m. publication would be too late for some foreign financial markets and on certain days would coincide with some U.S. economic data releases. FRBNY will shift the publication time at least as early as 8:00 a.m. ET to avoid coincident release with key U.S. economic data. The Board and FRBNY will consider whether FRBNY can publish Treasury repo rates even earlier, but operational constraints—for example, constraints on the ability of FRBNY’s data providers to produce and deliver data overnight and the time required for FRBNY to perform data validation and quality assurance processes—may prevent earlier publication.

A commenter asked for an explanation of how FRBNY would publish the proposed rates. FRBNY will publish the Treasury repo rates on its public website, similar to the manner in which FRBNY currently publishes the effective federal funds

rate (EFFR) and the overnight bank funding rate (OBFR).¹¹

Four commenters supported the proposal to publish summary statistics. One of these commenters suggested, however, that publishing statistics from the 1st and 99th percentiles would not be informative, and that FRBNY should instead publish summary statistics for percentiles *between* the 1st and 25th/75th and 99th percentiles (*e.g.*, the 5th and 95th percentiles). Initially, FRBNY will publish summary statistics as described in the Request for Information, and may publish additional percentiles on a lagged basis. After FRBNY begins publishing the Treasury repo rates, FRBNY will reassess whether market participants would benefit from additional summary statistics.

Three commenters requested that FRBNY publish historical data for SOFR. Commenters believed that historical data would serve a number of purposes—for example, commenters suggested that historical data would help market participants determine margin requirements for derivatives that reference SOFR and would help market participants compare SOFR to existing benchmarks. The Board recognizes that market participants might benefit from historical data. While longer histories of comparable commercially produced repo rates are publicly available, the Board believes that a significantly longer history of the Treasury repo rates may not be possible due to limitations on the availability of data. The Board and FRBNY will work with BNYM and DTCC to determine whether FRBNY can publish additional historical data for the Treasury repo rates.

Two commenters suggested that the proposed threshold of “greater than one basis

¹¹ See <https://apps.newyorkfed.org/markets/autorates/fed%20funds> and <https://apps.newyorkfed.org/markets/autorates/obfr>.

point” for revising the proposed rates was too sensitive. Another commenter explained that its members had not achieved consensus on the threshold at which FRBNY should revise errors, but the commenter emphasized that FRBNY should articulate a clear rationale for its revision policy. The Board notes that, because FRBNY will round the Treasury repo rates to the nearest whole basis point, the threshold is effectively two basis points. The Board also notes that this is the same threshold employed for EFR and OFR, for which revisions are very rare. The Federal Reserve will periodically review the revision threshold to ensure that revisions are very rare and do not impose undue operational costs on users of the Treasury repo rates.

A commenter asked whether FRBNY would publish the proposed rates if relevant data sources were unavailable and, if so, whether FRBNY would correct such rates retroactively when data becomes available. Another commenter suggested that FRBNY should provide more information regarding the back-up repo market survey it would conduct if standard data sources are unavailable. As noted in the Request for Information, in the event that data sources are unavailable, the Treasury repo rates would be calculated based upon back-up repo market survey data collected from FRBNY’s primary dealer counterparties. FRBNY currently collects repo data from primary dealers each morning. Going forward, FRBNY will also collect data each afternoon. The afternoon survey will capture that day’s activity by primary dealers and will be available as a contingency data source for the following morning’s publication of the Treasury repo rates. The survey will request aggregated primary dealer activity in each of the market segments captured in the Treasury repo rates: overnight tri-party Treasury repo transactions, overnight Treasury repo transactions in the GCF market, and FICC-cleared

bilateral Treasury repo transactions. For each of these market segments, each dealer will report its aggregate borrowing activity (excluding, to the extent possible, transactions between affiliated entities and transactions in which the Federal Reserve is a counterparty), along with the weighted-average rate of its borrowing. If FRBNY publishes Treasury repo rates that use survey data and subsequently receives updated data, FRBNY would issue same-day revisions at or around 2:30 p.m. ET if the use of updated data would result in the published rate changing by more than one basis point.

Finally, two commenters asked that FRBNY begin publishing the Treasury repo rates as soon as possible. FRBNY intends to begin publishing the Treasury repo rates in the second quarter of 2018.

4. Governance

A commenter suggested that governance arrangements for the Treasury repo rates should align with the *Principles for Financial Benchmarks* published by the International Organization of Securities Commissions (IOSCO) in July 2013.¹² FRBNY plans to publish an IOSCO statement of compliance covering the Treasury repo rates in the first half of 2018.

III. Conclusion

After considering public comments, the Board concludes that the public would benefit if FRBNY publishes the three Treasury repo rates as proposed, with certain modifications described above.

¹² See <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>.

IV. Administrative law

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3506; 5 CFR part 1320, Appendix A.1), the Board reviewed the Request for Information and this final notice under the authority delegated to the Board by the Office of Management and Budget. For purposes of calculating burden under the Paperwork Reduction Act, a “collection of information” involves 10 or more respondents. As noted above, the data to be used to produce the rates will be obtained solely from (1) BNYM with respect to tri-party GC repo data and (2) DTCC Solutions with respect to GCF repo data and DVP bilateral repo data. Therefore, producing the rates will not involve a collection of information pursuant to the Paperwork Reduction Act.

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) (RFA) generally requires an agency to perform an initial and a final regulatory flexibility analysis on the impact a rule is expected to have on small entities. The RFA imposes these requirements in situations where an agency is required by law to publish a general notice of proposed rulemaking for any proposed rule. The production of the rates does not create any obligations or rights for any private parties, including any small entities, and so the Board was not required to publish a notice of proposed rulemaking. Accordingly, the RFA does not apply and an initial and final regulatory flexibility analysis is not required.

The Board did not receive any comments regarding the Paperwork Reduction Act or the RFA.

By order of the Board of Governors of the Federal Reserve System, December 7, 2017.

Ann E. Misback,
Secretary of the Board.

BILLING CODE 6210-01-P

[FR Doc. 2017-26761 Filed: 12/11/2017 8:45 am; Publication Date: 12/12/2017]