Explanatory Notes to the Summary Statistics for the U.S. Tri-Party Repo Market

Tri-Party Repo Data

- 1. The tri-party repo data in the tables detail the market value and margin percentages applied in triparty repurchase transactions in the U.S. The summary statistics are being provided to market participants in the interest of creating greater transparency on the size and nature of the U.S. tri-party repo market, as outlined in Recommendation 13 by the <u>Tri-Party Repo Task Force Report</u>. Each investor should make risk-based decisions appropriate for his or her own institution with proper consideration for the credit quality and liquidity of the collateral, credit quality of the counterparties, as well as underlying tenor and rate of the transaction.
- 2. The figures in the tables are derived from the entire population of securities allocated in tri-party repurchase transactions for which BNY Mellon (BNYM) and JP Morgan Chase (JPMC) serve as agents. These transactions are executed on their U.S.-based tri-party platforms.
 - a. Because the data set comprises the entire population of tri-party repos, the figures shown are all-inclusive and are not estimates that are obtained by drawing a sample.
 - b. Readers should be aware that while the underlying data reflect all U.S. tri-party repo transactions, including those undertaken by the Federal Reserve, the data do not account for any bilateral repo trades, and thus do not reflect the entire U.S. repo market.
 - c. While the intent is to provide a summary of all tri-party repo transactions in the U.S., the underlying data does also include a small amount of alternative financing that utilizes the triparty repo platform of the two clearing banks. In particular, there is a very limited amount of securities lending transactions that are captured in the data, although both clearing banks maintain that these financing transactions do not materially affect the summary statistics.
- 3. The data is obtained from the close of business on the seventh business day of each month, which was selected because it is judged to be a typical business date. Days such as the first or last business day of the month, or a mortgage-backed securities settlement day, could introduce distortions into the data.
 - a. These tables will be published monthly as of the seventh business day of each month unless such date is deemed by the FRBNY or the two clearing banks to be an atypical business day in which case an alternate date will be selected.
- 4. The data consists of the market values applied by BNYM and JPMC using their standard processes and third party vendor sources. The collateral values used for calculating totals are the value of collateral (including accrued interest) before the margin. The margin figures are calculated by dividing the value of the securities used as collateral by the loan amount, then subtracting 1.
 - a. For each asset group, concentration data is shown for the three largest dealer holdings.
 - b. For each asset group, the 10th, 50th (median), and 90th percentile of margins are shown. The number of observations and the standard deviation of the values used to calculate these percentiles are reported. These statistics could include affiliate trades, which may not be done at arms-length. Margins are never shown for the "Other" asset group.
 - c. To protect dealer anonymity, value, concentration, and margin data are withheld for asset groups with fewer than 3 active dealers.

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- 5. Data in the daily average table tabulates the daily average collateral value financed in the tri-party repo market, including GCF repo transactions.
- 6. The data lists both the number of individual repurchase agreements as well as the entire number of data points. It is common practice to use a combination of securities from two or more asset groups to serve as the collateral for a single repurchase agreement. Securities taken from each asset group may have a different margin applied to them. For example, a mix of Treasury securities, agency debentures, and agency MBS could collateralize a single repurchase agreement. The respective margins could be 2 percent, 2.5 percent, and 3 percent. In this example, the single repurchase agreement would yield these three data points. As a result, in the margin data, the number of data points is greater than the number of repurchase agreements.
- 7. Both sides of the tri-party repo market are characterized by at least moderate levels of concentration. This concentration can mean that not all transactions are statistically independent.
 - a. On the cash borrowing side, the broker-dealers that are most active in the market engage in a substantial number of repo contracts. As a result, several of the data points have the same broker-dealer as the counterparty. This pattern is true for the entire data set as well as for a particular asset group.
 - b. On the cash lending side, entities that are most active in the market also engage in a substantial number of repo contracts, and as a result, several of the data points have the same financial institution or legal entity as the counterparty. In the case of money market mutual funds, this pattern is described in their SEC Form N-MFP filings. In the filings, a MMMF lists its entire portfolio holdings, including repurchase agreements. A large MMMF may be engaged in as many as 50 repurchase agreements on a given day.
 - c. Multiple repos between the same pair of counterparties also yield some repetition in the data set. The repetitions occur not only in the data set as a whole, but also for specific asset groups (for example, equities). In effect, there are fewer independent observations than the number of observations.

8. Definition of Tri-Party asset groups

Asset group	Definition
ABS (Asset-Backed Securities)	 Securities that are secured by cash flows of a discrete pool of receivables or other financial assets, further divided into: ABS Investment grade securities ABS Non-Investment grade securities
Agency CMO ¹ (Collateralized Mortgage Obligations) Agency Debentures & Strips ¹	REMIC and CMO securities issued by GSEs supporting the housing market – FNMA, FMAC, and GNMA. Debt securities issued by federal agencies or GSEs. These
	agencies and GSEs are: FNMA, FMAC, GNMA, FHLB, TVA, SLMA, REFCO, FICO, USPS, FFCB, FMHA, FAMC, FCFAC, and FLBB.
Agency MBS ¹	MBS issued by Government Sponsored Enterprises (GSEs) that
(Mortgage-Backed Securities)	support the housing market – FNMA, FMAC, and GNMA.
CDO (Collateralized Debt Obligation)	CDO securities issued by corporations or private institutions.
Corporate Securities	Unsecured debt securities issued and guaranteed by a corporation, further divided into:
	Corporate Investment grade
Equities	Corporate Non-Investment grade Common and Preferred Stock, ETFs, ADRs, UITs, Mutual Funds,
Equities	Warrants & Rights, and Convertible Bonds.
International Securities	Debt securities issued by international agencies (ADBB, AFDB, IADB, IFCO, WLBD).
Money Market	CP, CDs, BAs, and Bank Notes.
Municipality Debt	Debt securities issued by municipalities.
Private Label CMO	CMOs issued by corporations or private institutions, further
(Collateralized Mortgage Obligations)	divided into:
	CMO Private Label Investment grade
1	CMO Private Label Non-Investment grade
US Treasuries ¹	Bills, bonds, and notes issued by the U.S. Treasury, including
	TIPS, further divided by:
	 US Treasury Strips US Treasuries excluding Strips
Whole Loans	Loans issued by corporations or private institutions.
Whole Loans	Loans issued by corporations of private institutions.

¹ These are Fedwire-eligible securities, meaning they can be settled on the Fedwire® Securities Service.

Explanatory Notes to the Summary Statistics for the U.S. Tri-Party Repo Market

FICC General Collateral Finance (GCF) RepoTM Data²

- 1. FICC-GSD's GCF Repo service enables dealers to trade general collateral repos. In order to participate, dealers must be netting members of FICC's Government Securities Division (GSD). GCF Repo transactions are settled on a tri-party basis, which requires dealer participants to have an account with either one or both of the participating clearing banks: The Bank of New York Mellon or JPMorgan Chase. GCF Repos are an extension of the tri-party repo market and help foster a highly liquid market for securities financing. GCF repos are used foremost to redistribute among dealers a portion of the total cash raised via tri-party repos. The "Net Cash Borrowed" series under the GCF Repo tab shows this usage of GCF Repo. In addition, GCF repos are used to switch among the dealers the securities that are available to collateralize tri-party repos. This usage of GCF repo is measured by the difference between the total amount of securities delivered to FICC-GSD to settle GCF repo obligations, and the total amount of cash borrowed via GCF Repo.
- 2. Amounts in the Asset Classes and GCF Repo CUSIP series are measured at par. Figures shown are the total nominal value of GCF Repos submitted to the daily GCF netting process each day. All GCF trades are submitted to FICC by an interdealer broker on a "blind basis." These statistics do not include the interdealer broker trades, which always net to zero by virtue of the broker's role in the transaction.
- 3. The overnight trades are all trades done on the date above for end date the following day. The term trades are all trades done prior to and including the date above for forward maturation.
- 4. The amounts shown in the "Total" section of the GCF Repo tab are determined as a result of Fixed Income Clearing Corporation-Government Securities Division (FICC-GSD) interposing itself between the original trading parties. FICC-GSD becomes the legal counterparty for settlement purposes and nets off-setting transactions.

² GCF RepoTM (hereinafter, "GCF Repo") is a registered trademark of the Depository Trust and Clearing Corporation or its affiliates in the United States.