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

1. The tables detail the market value and margin percentages applied in tri-party 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 Tri-Party Repo Task Force Report. 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 table 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 tri-party 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 set 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 the totals in the first table are the value of collateral (including accrued interest) before the haircut. The figures shown in the second table are based on the haircuts (also called margins) applied to the value of the securities used as collateral, expressed as a percent of the valuation given to the securities.
   
   a. Concentration data is shown for the three largest dealer holdings for most asset groups. Concentration data is not provided for select asset groups where the value of collateral financed is typically very low.
   
   b. For each asset group, a median value and a range of haircuts are shown.

5. The data set lists both the number of individual repurchase agreements (“deals”) as well as the entire number of data points (or collateral allocations). It is common practice to use a combination
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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 haircut applied to them. For example, a mix of Treasury securities, agency debentures, and agency MBS could collateralize a single repurchase agreement. The respective haircuts 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 haircut table, the number of data points (or collateral allocations) is greater than the number of repurchase agreements.

6. 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 semi-annual reports. In the reports, an 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 collateral allocations.
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7. Definition of asset groups

<table>
<thead>
<tr>
<th>Asset group</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency CMO (Collateralized Mortgage Obligations)</td>
<td>REMIC and CMO securities issued by GSEs supporting the housing market – FNMA, FMAC, and GNMA.</td>
</tr>
<tr>
<td>Agency Debentures and Agency Strips</td>
<td>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.</td>
</tr>
<tr>
<td>Agency MBS (Mortgage-Backed Securities)</td>
<td>MBSs issued by Government Sponsored Enterprises (GSEs) that support the housing market – FNMA, FMAC, and GNMA.</td>
</tr>
</tbody>
</table>
| US Treasuries excluding Strips and US Treasury Strips      | Bills, bonds, and notes issued by the U.S. Treasury, including TIPS, further divided by the following:  
  - US Treasuries excluding Strips and  
  - US Treasury Strips. |
| Asset-Backed Securities (Investment Grade and Non-Investment Grade) | Securities that are secured by cash flows of a discrete pool of receivables or other financial assets, further divided by the following:  
  - ABS Investment grade securities and  
  - ABS Non-Investment grade securities. |
| Collateralized Debt Obligations (CDOs)                     | CDO securities issued by corporations or private institutions. |
| Private Label Collateralized Mortgage Obligations (CMOs), (Investment Grade and Non-Investment Grade) | CMOs issued by corporations or private institutions, further divided by the following:  
  - CMOs Private Label Investment grade and  
  - CMOs Private Label Non-Investment grade. |
| Corporate Securities (Investment Grade and Non-Investment Grade) | Unsecured debt securities issued and guaranteed by a corporation, further divided by the following:  
  - Corporate Investment grade and  
  - Corporate Non-Investment grade. |
| Equities                                                    | Common and Preferred Stock, ETFs, ADRs, UITs, Mutual Funds, 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. |
| Whole Loans                                                 | Loans issued by corporations or private institutions. |