



FEDERAL RESERVE BANK *of* NEW YORK

Introducing the Secured Overnight Financing Rate (SOFR)

Joshua Frost
Senior Vice President, Markets Group, FRBNY
November 2, 2017
ARRC Roundtable

SOFR: The Selected Alternative to LIBOR

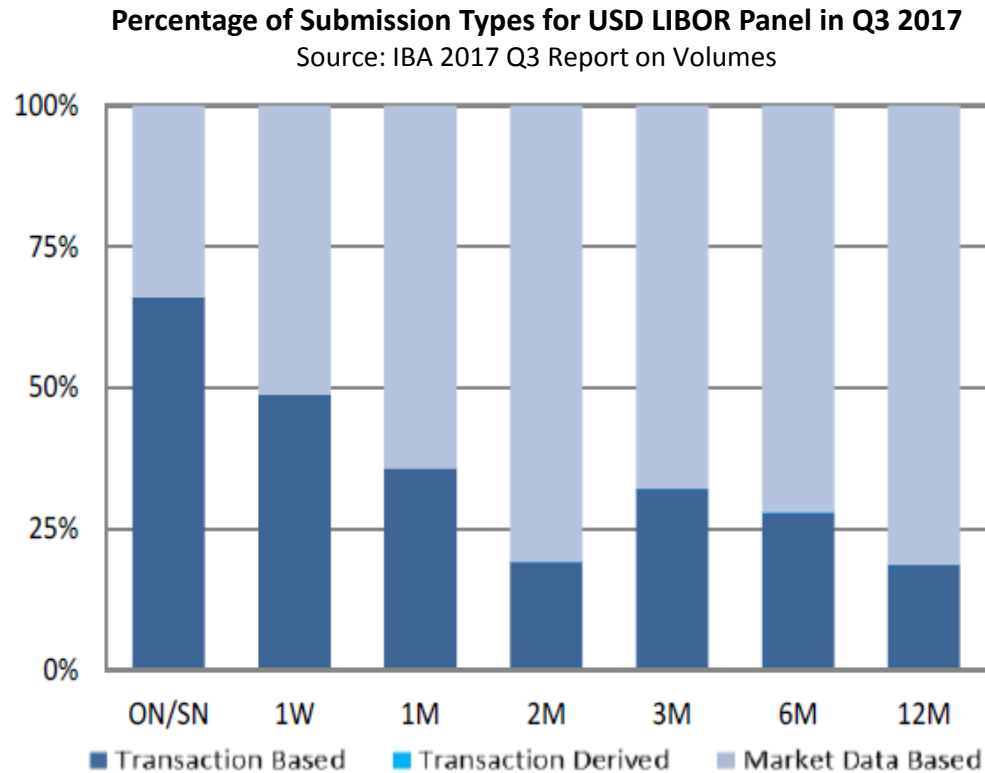
- The New York Fed, in cooperation with the Office of Financial Research, has announced its intention to produce three reference rates based upon trade-level data from various segments of the repo market:
 - TGCR – Tri-party General Collateral Rate: Based on trade-level tri-party data
 - BGCR – Broad General Collateral Rate: TGCR + GCF repo
 - **SOFR – Secured Overnight Financing Rate**: BGCR + FICC-cleared bilateral repo
- In June 2017, the ARRC identified the **SOFR** as its preferred alternative to USD LIBOR
- The **SOFR** is the broadest of the three repo rates, and will begin publication in the first half of 2018
 - Current expectations are for publication to begin in Q2
- In addition to serving as potential alternative reference rate, the **SOFR** (along with the TGCR and BGCR) is intended to provide market participants with greater transparency into an important segment of U.S. financial markets

Characteristics of the SOFR

- Fully transaction-based
- Encompasses a robust underlying market
- Overnight, nearly risk-free reference rate that correlates closely with other money market rates
- Covers multiple repo market segments allowing for future market evolution

Fully Transaction-Based

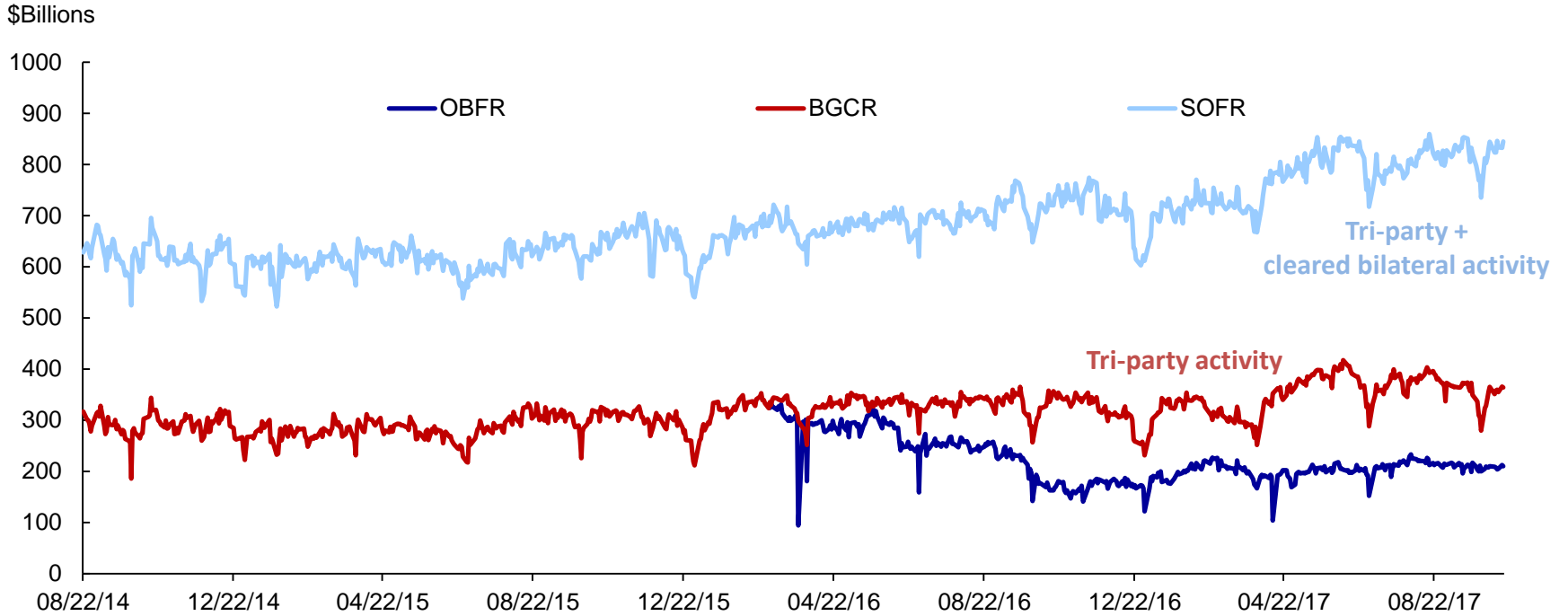
- Most LIBOR submissions are still based on expert judgment



- The **SOFR** will be fully transacted-based, with Bank of New York Mellon (BNYM) and the Depository Trust and Clearing Corporation (DTCC) providing transaction-level data for three repo market segments

Robust Underlying Volume

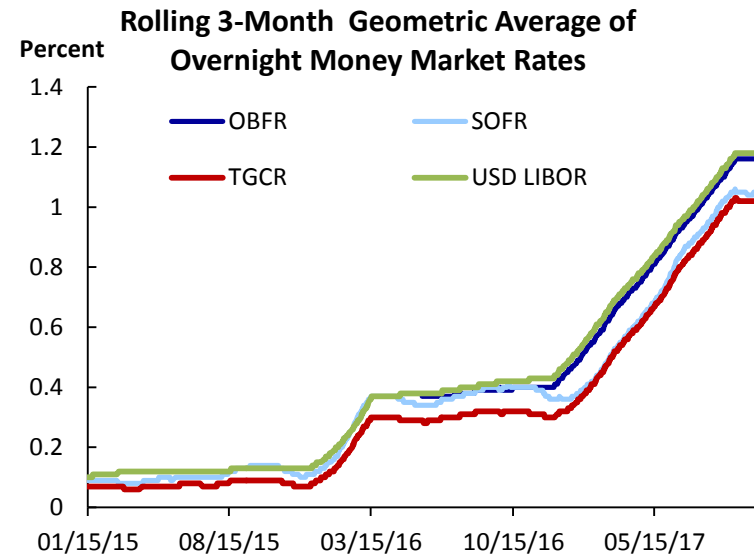
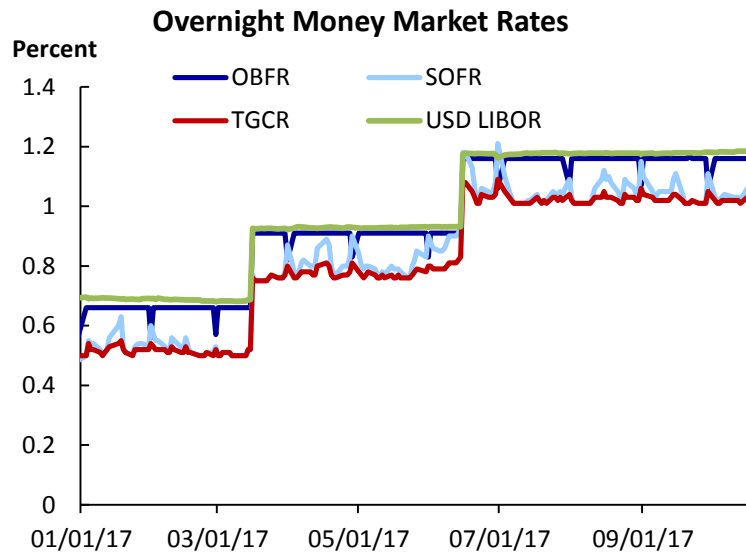
Aggregate Volumes Underlying Select Money Market Rates



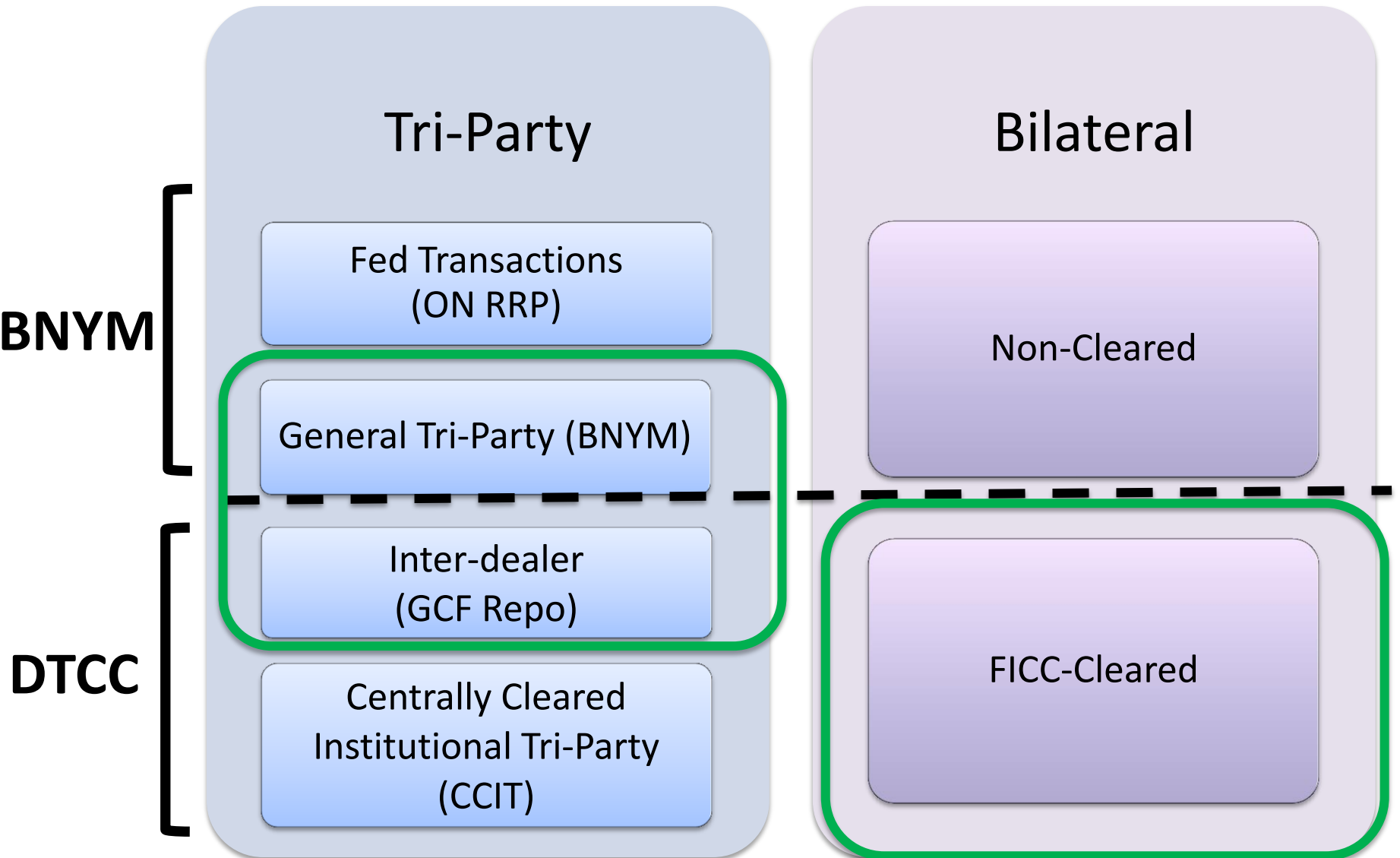
Source: Bank of New York Mellon; JPMorgan Chase; DTCC Solutions, LLC; FRBNY Staff Calculations

Correlates Closely with Other Money Market Benchmarks

....Over shorter and longer timeframes....



Covers Multiple Market Segments, Allowing for Future Market Evolution



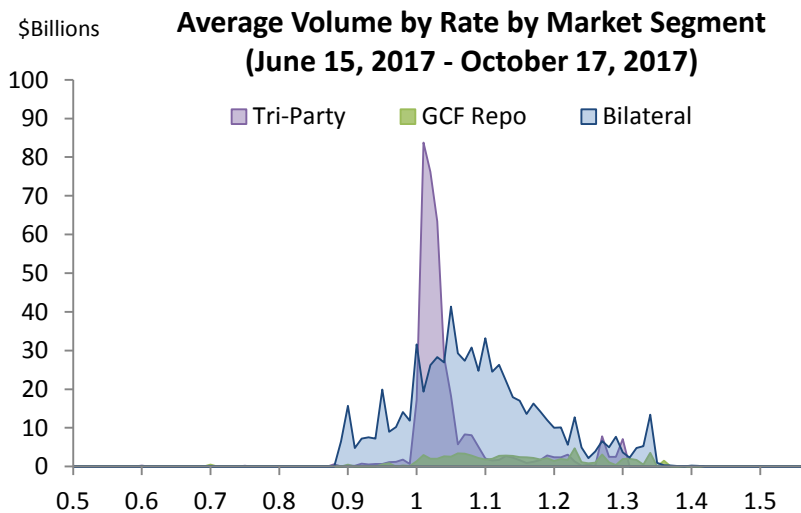
Refining the Source Data to Isolate Targeted Activity

In an effort to align the **SOFR** to the IOSCO Principles, certain filters and trims are applied to the data to separate overnight Treasury GC repo from other repo market activity

- **Tri-party repo data (BNYM)**
 - Fed transactions will be removed
 - “Open” trades that are economically similar to overnight trades will be included
 - Transactions between affiliated entities not conducted at arm’s length will be removed
- **GCF data (DTCC)**
 - Duplicate transactions with FICC as central counterparty will be treated as single transaction
 - Transactions between affiliated entities will not be removed, as they are blind-brokered
- **FICC-cleared bilateral repo data (DTCC)**
 - Transactions between affiliated entities will not be removed as counterparty names are not currently available as part of the data we receive
 - All transactions with rates below the 25th volume-weighted percentile rate within this data set will be removed, to reduce the impact of specials activity on the **SOFR**

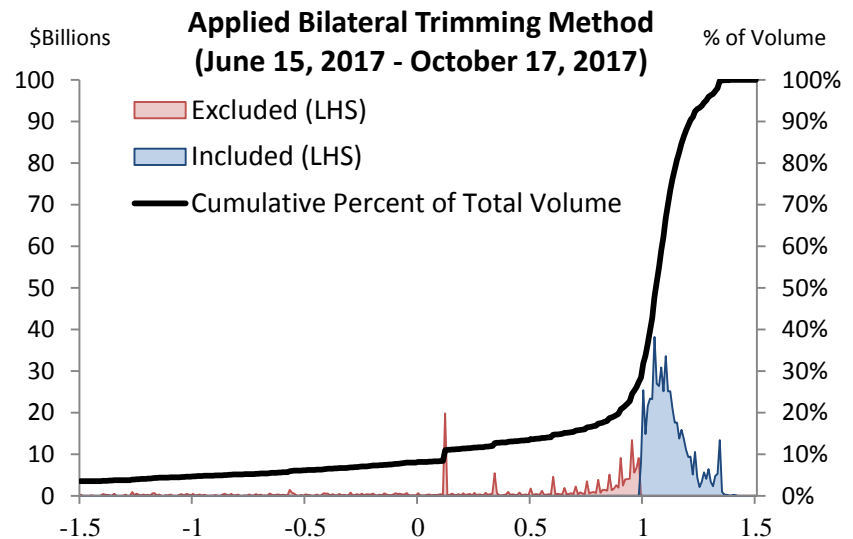
Bilateral Data: Trimming Methodology

- Motivations for trading in the bilateral repo market:
 - Want to invest cash, but specific Treasury issues are denoted
 - Want to acquire specific Treasury issues with scarcity value, known as “specials” activity
- Removing the bottom 25th percentile of the distribution strikes a reasonable balance between filtering out specials activity and maintaining robust volumes



Source: Bank of New York Mellon; JPMorgan Chase; DTCC Solutions, LLC; FRBNY Staff Calculations

Note: All month and quarter-ends are excluded.



Source: DTCC Solutions, LLC; FRBNY Staff Calculations

Note: All month and quarter-ends are excluded.

Rate Production Process

- Expected publication time of around 8:30 a.m. ET based on the prior day's trading activity
- Robust production platforms
- Dedicated staff with experience in reference rate production
- Resilient back-up processes
 - Geographic dispersion among staff and platforms involved in data collection, administration, and publication
 - Daily survey of primary dealers' overnight repo borrowing will act as a potential contingency data source
- Extensive oversight
 - Regular review by oversight bodies
 - Comprehensive [Ethics and Conflicts of Interest](#) policies for staff

Timeline for Publication

- [Initial Federal Register Notice](#) (FRN) comment period ended: October 30, 2017
- Publication of final FRN: by end-Q4 2017
- Announce production date: Q1 2018
- Begin production: Currently tracking toward Q2 2018

Additional Information

November 2016 Desk Statement:

https://www.newyorkfed.org/markets/opolicy/operating_policy_161104

December 2016 Liberty Street Blog:

<http://libertystreeteconomics.newyorkfed.org/2016/12/investigating-the-proposed-overnight-treasury-gc-repo-benchmark-rates.html>

February 2017 FEDS Note:

<https://www.federalreserve.gov/econresdata/notes/feds-notes/2017/cleared-bilateral-repo-market-and-proposed-repo-benchmark-rates-20170227.html>

May 2017: May Desk Statement:

https://www.newyorkfed.org/markets/opolicy/operating_policy_170524a

June 2017 Liberty Street Blog:

<http://libertystreeteconomics.newyorkfed.org/2017/06/introducing-the-revised-broad-treasuries-financing-rate.html>

Questions

- What historical data can the Fed make available on the SOFR? Is it possible to provide more than has already been made public?
- What steps has the Fed taken to ensure that the SOFR is robust against attempts to manipulate it?
- How early can the Fed publish the SOFR?
- Has the Fed considered publishing transaction-based term repo rates based on the same datasets that underlie the SOFR?
- What are the Fed's plans for dealing with a disruption to one or more of the data sources or processes that go into generating the SOFR?
- Others?