Committee on Payments and Market Infrastructures



Discussion: Reserves were not so ample after all

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* Views expressed in this presentation are those of the presenter and not necessarily those of the BIS, the CPMI or its member central banks.

Main conclusions of Copeland, Duffie and Yang (2022)

- September 2019: Distortions in US repo markets...
 - ...measured by the spread between SOFR and IOR
 - ...are highly correlated with or caused by, among others:
 - Reserve balances (ie daily opening balances of 10 largest "repo-active dealer banks")
 - Intraday timing of payments (ie the time by which these banks have received half of their daily incoming payments)
 - Aversion to hitting constraints imposed by "post-crisis intraday liquidity regulations and supervision"
 - Sizes of Treasury issuances
 - ...suggest "Reserves Were Not So Ample After All".

Policy approaches suggested in the paper

- Maintain clearly abundant reserve balance
- Standing repo facility Established in July 2021
- Relax post-crisis liquidity rules and supervision
- Offer greater incentives for banks to utilize the discount window



Will this persist?

Peak Daylight Overdrafts (Based on 21.5 hour Fedwire day)

--- Collateralized Funds Book Entry otal 200-180 160 140-120-\$ Billions 100 80 60 40 20 0 O O 0 O ø O G O o o C o Ø C O O o o O 1999 994 995: 996 998 2004: 2006 2008 997 2002 2003 2005 2009 2010 993 2007 201 5 2

The paper reports that "a daylight overdraft at a large systemically important bank would cause a loss of reputation to the bank and thus to its line managers responsible for managing intraday balances".



Payment System Liquidity Analysis Group (PSLA)

- The PSLA is an independent group of payments researchers, chaired by the Bank of Canada.
- The group has assembled a harmonised data set across nine large-value payment systems, including Fedwire, for studying the determinants of intraday liquidity usage.
- Based on data from 2006 to 2020, the PSLA finds that:
 - Lower levels of reserve balances correlate with payments being made later in the day, which is consistent with CDY (2022).
 - But lower levels of balances also correlate with higher liquidity efficiency (ie the ratio of payments made to liquidity used).
 - In line with expected behaviour: when reserve balances are lower, banks are more inclined to economise on liquidity and more willing to coordinate timing of payments.
 - Ample balances could reduce the incentive to coordinate.

Is the US wholesale payment ecosystem unique?

- Standing overnight repo facility
 - Introduced in many other jurisdictions
 - Now established
- Coexistence of two large-value payment systems
 - Fedwire and CHIPS
- Intraday credit regimes
 - Uncollateralised with fees vs collateralised without fees
 - Recent measures to expand use of collateralised overdraft
- Liquidity saving mechanism in RTGS
 - To reduce intraday liquidity needs in RTGS (and use of central bank intraday liquidity)
- ... The current research in this area is critical to our collective knowledge

Annex: PSLA - characteristics of large-value payment systems

Panel A: Dummy variable definitions

Institutional characteristics

Incentives	Equals 1 if there are in place incentives or requirements for settling payments early
Credit	Equals 1 if the central bank can provide intraday credit on an uncollateralised basis
	or at a lower collateral cost (e.g., via collateral pooling)

LSM design features

LSM	Equals 1 if there is an LSM in place
$FIFO_bp$	Equals 1 if the LSM allows for the FIFO protocol to be bypassed
$O\!f\!f\!setting$	Equals 1 if the LSM enables multilateral offsetting
Priority	Equals 1 if it is possible to change the priority of payments in the LSM queue
Reservations	Equals 1 if it is possible to reserve liquidity for payments outside the LSM

Panel B: Dummy variable values by jurisdiction

System name	Jurisdiction	Incentives	Credit	LSM	FIFO_bp	O∬setting	Priority	Reservations
CHAPS	United Kingdom	1	0	0/1	0/1	0/1	0/1	0/1
CUD	Colombia	1	0	1	1	1	1	0
Fedwire	United States	0	1	0	0	0	0	0
Kronos	Denmark	1	0	1	1	1	1	0
LVTS	Canada	1	1	1	0	1	0	0
SIC	Switzerland	1	0	1	0	0	1	0/1
SPEI	Mexico	0	0	1	0	1	0	0
STR	Brazil	0	0	0/1	0/1	0/1	0/1	0
TARGET2	Eurosystem	0	0	1	1	1	1	1