

THE GLOBAL PIPES

WORLD FORUM OF CENTRAL
SECURITIES DEPOSITORIES

(WFC)

May 25, 2023

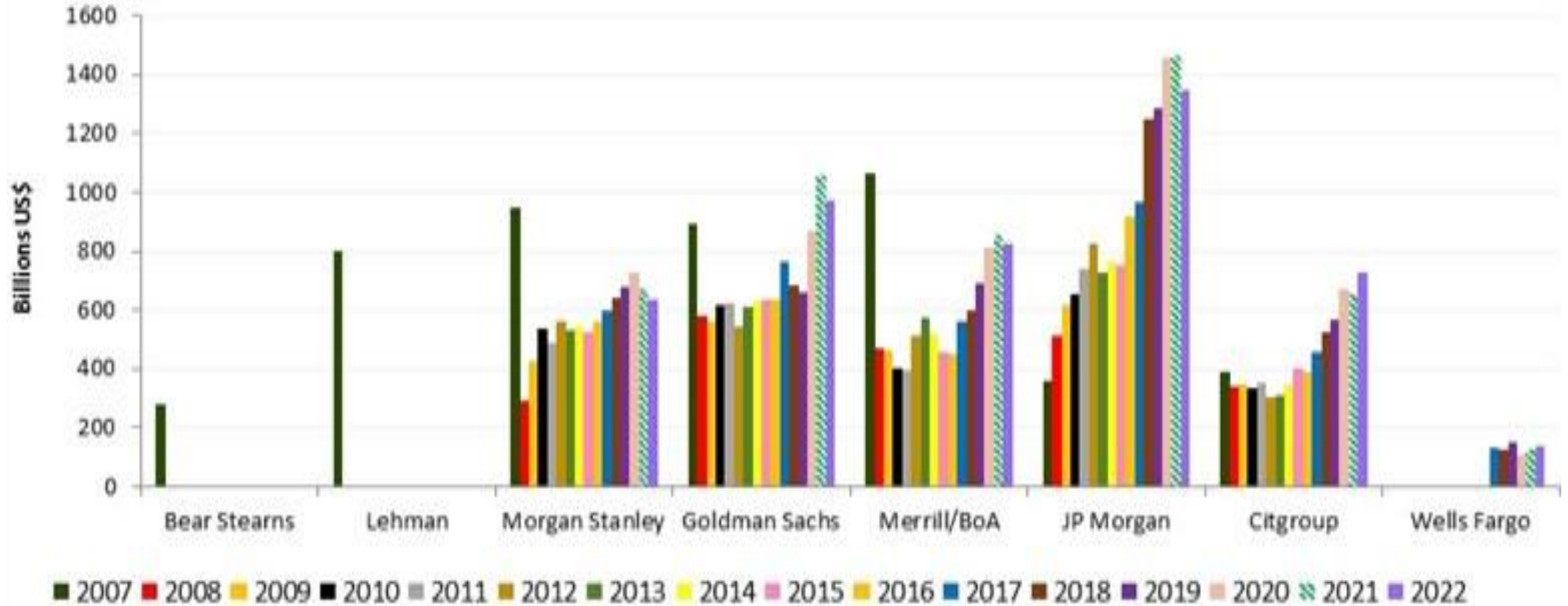
Manmohan Singh (IMF)

"The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management."

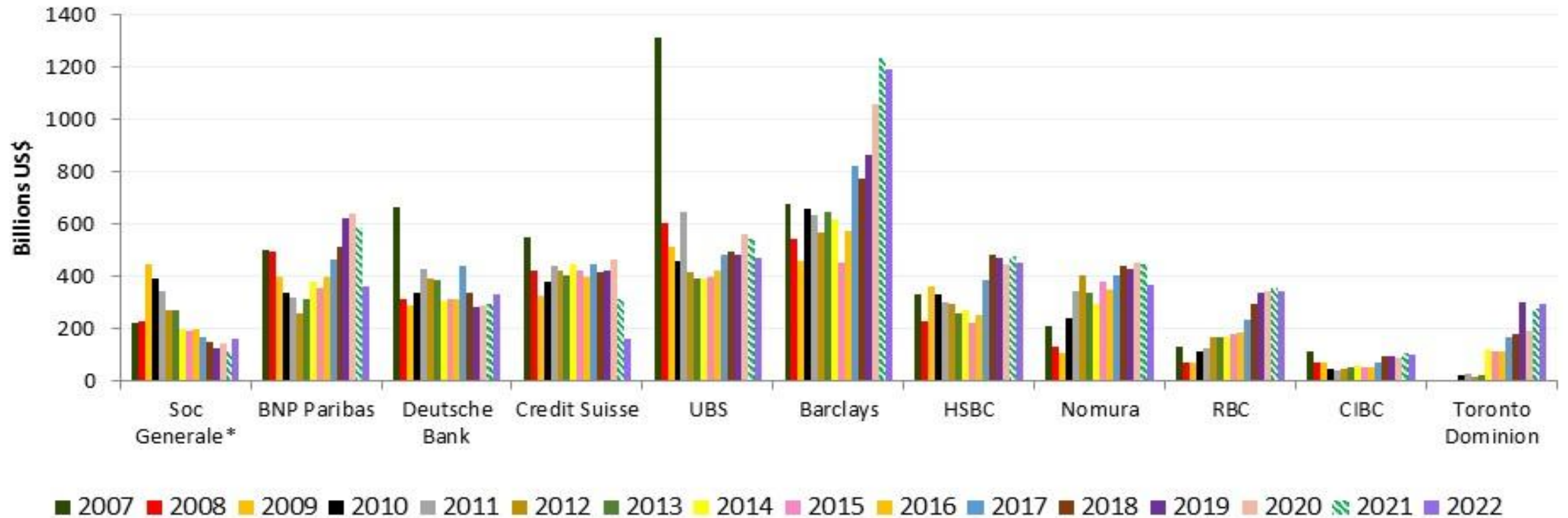
“The Global Pipes”

- Although banks adapted to the post-Basel regulatory era and balance-sheet space constraints, global collateral re-use has maxed out in recent years. **Collateral cannot travel in vacuum; needs balance sheets (“on” balance sheet or “off” balance sheet) to move.**
- Despite increase in the sources of overall pledged collateral that is available for reuse, banks’ balance sheets **often have to compete with central banks’ balance sheets**
- There is need to **reduce the reliance on the old pipes** and build state of the art robust systems , (including digitalization etc.), to bring up the global plumbing into the new century; however, there is **desire to hold on to legacy plumbing and thus limits progress**
- If new infrastructure is not embraced, we may continue to need regulatory /central bank intervention to prevent unavoidable systemic risk. However, in the aftermath of QE/Covid etc., the **central bank footprint in market is already large.....**

U.S. “pipes”- JPMorgan Remains a Giant



Non-US “pipes”: Barclays Stands Out



Source: Hand-picked data by author from annual reports; see also Singh (2011).

* some data (prime brokerage, derivatives) not available for SocGen in their annual reports (Investor Relations).

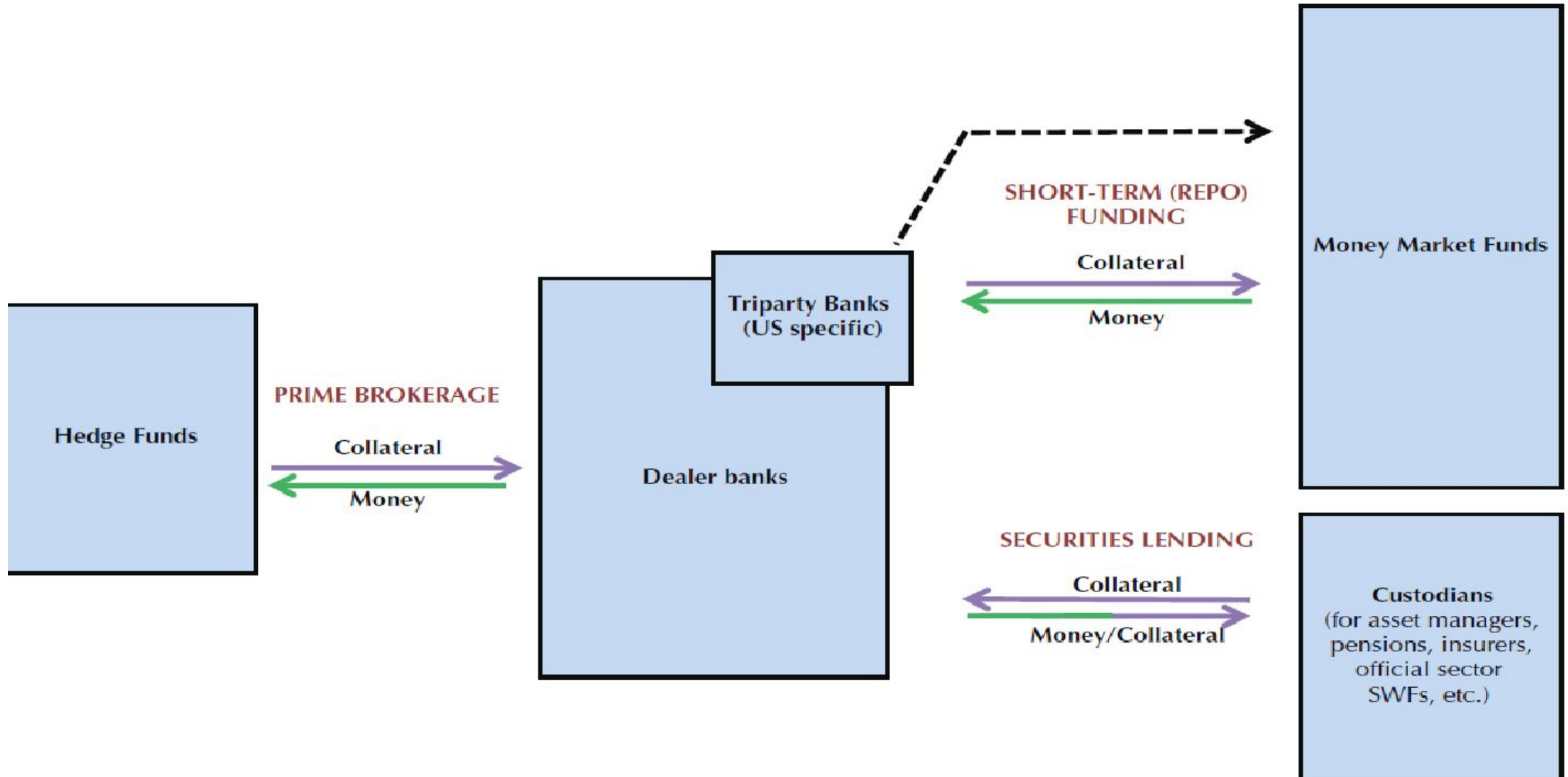
Dealer-banks “pipes” are full – need new pipes/technology

Table 1: Collateral Velocity and related components

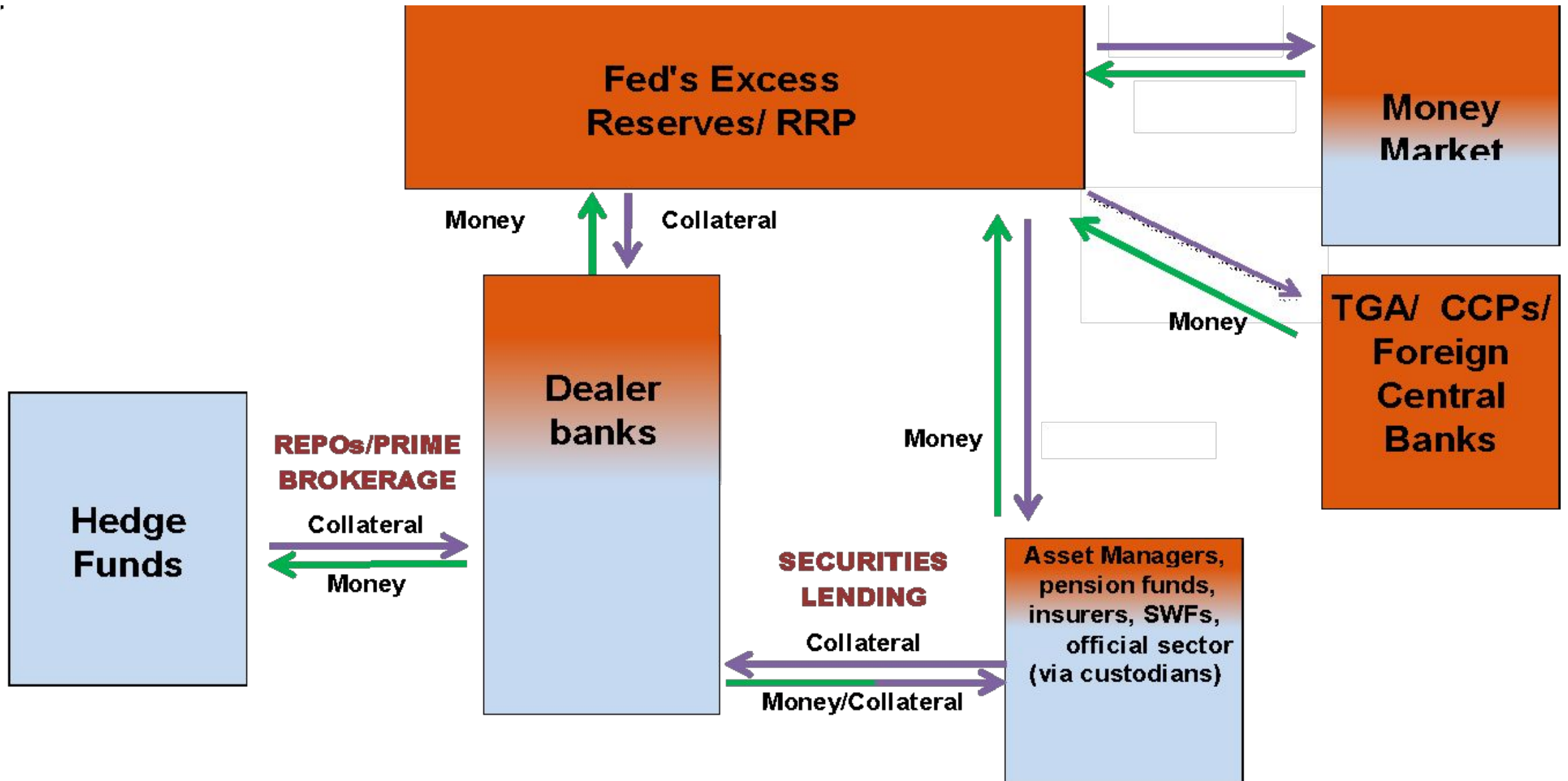
Year	Sources of collateral			Volume of Pledged Collateral	Reuse Rate (or Velocity)
	Hedge Funds	Securities Lending	Total		
2007	1.7	1.7	3.4	10.0	3.0
2010	1.3	1.1	2.4	6.0	2.5
2011	1.4	1.05	2.5	6.3	2.5
2012	1.8	1.0	2.8	6.1	2.2
2013	1.85	1.0	2.85	6.0	2.1
2014	1.9	1.1	3.0	6.1	2.0
2015	2.0	1.1	3.1	5.8	1.9
2016	2.1	1.2	3.3	6.1	1.8
2017	2.2	1.5	3.7	7.5	2.0
2018	2.1	1.6	3.7	8.1	2.2
2019	2.3	1.6	3.9	8.5	2.2
2020	2.6	1.5	4.1	9.4	2.3
2021	2.8	1.8	4.6	9.6	2.1
2022	2.7	1.8	4.5	8.9	2.0

Sources for Table 1: Risk Management Association; IMF Working Paper 11/256, updated to factor Form PF of SEC

Market Plumbing (pre-Lehman)



A Plumbing with Central Bank Footprint



Pipes and Rules are not easy to twist around....

- Some pipes will need to be augmented: US Treasury debt market has to function –new ideas include: “all-to-all trading” in the Treasury market would encourage market resilience by skipping bank intermediation, both, on-the-run and off-the-run;

[recall Sept 2019 and March 2020 showed intermediation was limited; FICC/CME netting idea did not go far]

- In the Euro-area the effectiveness of national central banks’ securities lending to provide specials is limited by the fact that dealer banks have counterparty limits
- Abundance of reserves: monetary transmission is rusty (banks pay less than 50 bps in USA on deposits but policy rates and RRP are at 5% and above)
- Velocity of Collateral need to remain high (even if dealers cannot do it)--new securities may need to move in new pipes (e.g., Chinese Gov bonds): China “north and south” connect / Hong Kong, [re: CSDCC / next keynote/ CCDC paper on new

Issues for the near future....

- Money, in trillions, now has direct access to central banks (e.g., Fed's reverse repo program); this money does not reach the market and does not need global banks' balance sheet for intermediation.
- Money and collateral do not get priced in one place; this **bifurcates market plumbing**.
- Inter-operability, including Tri-party : global Custodians pro-active but slow and ICSDs need to enhance links w/ local CSDs (e.g., Korea).
- Digital pipes will result in new pipes "rewiring" and may result in lower demand for collateral and money, as the speed goes up (i.e. more T0 settlement).
- However, will new rewiring be within the regulatory perimeter? (e.g., stablecoins;) or will intra-day **collateral-money swaps** take over but 'off balance