FROM FISCAL TO FINANCIAL DOMINANCE

Technocratic Myopia and the struggle to integrate financial stability concerns in the liquidity regime after the financial crisis

OUTLINE

Introduction

Historical Narrative Part 1: 1966-2008 (Expansion of the Liquidity Machine)

Historical Narrative Part 2: 2008-2020 (Regulatory Work and the Repo-Market Hiccups)

The Post-Covid World

Conclusion

INTRODUCTION

SHADOW BANKING AS FINANCIAL STATECRAFT

Argument: Shadow banking is an outcome of **state-driven financial engineering**, not just market innovation.

- Fed & Treasury played active roles through legal and regulatory creativity.

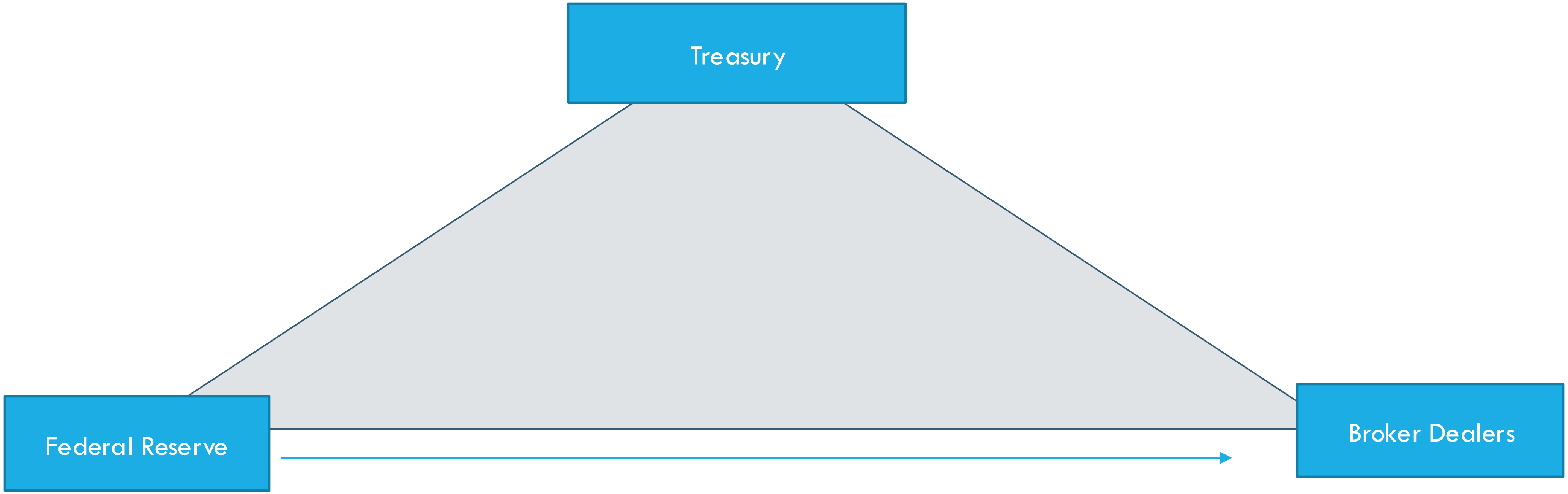
Political Economy of Liquidity:

- A **"world-making"** process with winners and losers (establishing a liquidity regime).
- Central banks, private non-bank dealers, and economists form a powerful **coalition of interests**.

Key Takeaway:

- Understanding shadow banking requires rethinking state-market boundaries and historical narratives.

THE LIQUIDITY TRIANGLE: THE FED, BROKER DEALERS AND TREASURY



Providing Public Liquidity Put for Private Liquidity Provision (Broker-Dealers) for Treasury Funding

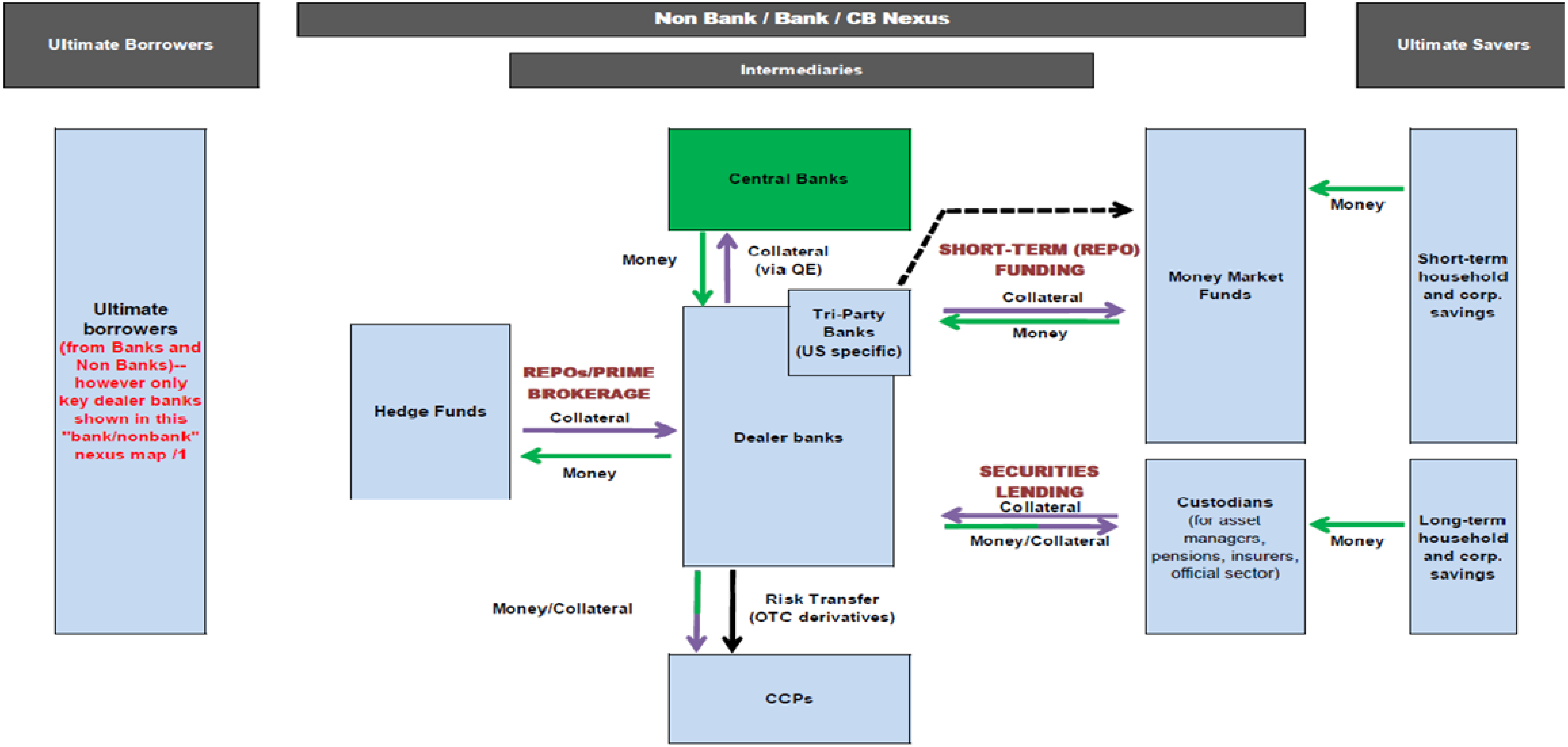
1951-2021: FROM FISCAL TO FINANCIAL DOMINANCE

- From 20% US debt to GDP in 1951to 25% US debt to GDP in 2021
- Irony of the development: today, Fed has to protect asset prices and fragile financial institutions
- The institutional regime which it had set up to empower it has outgrown it and today the liquidity machine is no longer under its control
- Fragmented supervision and regulation, as well as the political economic power of the groups growing up around it
- Debt led growth regime: path dependency, but also exhaustion?
- Need to understand the development of the shadow banking system as well as the antinomies it entails

Primary Dealers’ Treasury Holdings vs. Total Marketable Debt Outstanding

(All figures in billions of USD, approximate)

Year	Primary Dealers’ Treasury Inventory	Total Marketable Treasury Debt Outstanding	Dealers’ Share of Market
1960	5–10	~$290	1.7–3.4%
1970	20–40	~382	5.2–10.5%
1980	50–100	~730	6.8–13.7%
1990	150–200	~2,200	6.8–9.1%
2000	300–400	~3,400	8.8–11.8%
2010	200–300	~8,200	2.4–3.7%
2020	250–400	~17,200	1.5–2.3%



/1 Figure 1 is a snapshot of "z" or the nonbank/bank nexus explained in the analytical framework. The dealer bank depicted above are active in the cross-border collateral intermediation. . So "zi" is important for dealer bank "i". The ultimate borrowers also borrow directly from commercial banks; however they are not shown in this figure as their interaction with nonbanks is minimal; hence "zi" is negligible.

THE HISTORICAL NARRATIVE PART 1: 1960-2008

The expansion of the liquidity machine and its linkage to securitization

Statecraft for building an ever-liquid market

Frenzy

EXPANSION OF THE LIQUIDITY MACHINE

1960s: expansion of repos, also for banks

1966: expansion to agency debt (FNMA) as part of dealer-repo (credit crunch)

1972: first Money Market Mutual Fund founded: new actor for repos, not only non-financial corporation

1982: failure of a broker-dealer: bankruptcy automatic stay exemption for repos lobbied for by the Fed in 1984

SECURITIZATION: THE ASSET SIDE OF SHADOW BANKING AS OUTCOME OF FINANCIAL STATECRAFT

FNMA set up in 1935 to spur markets

Has a secondary market making function, in addition to setting standards and granting mortgages

1968: Lyndon B. Johnson seeks to finance Vietnam War and Great Society: Agrees to sale of FNMA secondary market dealer

Yet, no true sale, as there is a treasury credit line and a guarantee on the notes issued by FNMA (politically known, but in the end accepted)

In 1981 FNMA will issue the first tranched MBS: explosive growth

1991-1999 REPO MARKET FRAILTIES AND REGULATORY RESPONSES

Salomon Brothers (primary dealer) corners the US treasury 2 year market

Scandal: CEO fired and new rules for transparency imposed: Inter-Agency Working Group: Treasury-Fed doubles down on Repo market (Gabor 2016)

LTCM Crisis in 1998: first „global margin call“ (CGFS 1999b, 6): Hedge Fund (1:100 leverage) is caught wrong-footed: Fed NY (in coordination with Treasury) organizes private bail-out of 3.5 billion dollars, 3 rate cuts in a row

Flights to safety into US Treasury Bond markets

No regulatory consequences for hedge funds in terms of leverage constraints, very limited reporting requirements

RISKS OF LARGE SPECULATIVE TRADES REVEALED AND FORGOTTEN

Relative value arbitrage trades in relatively illiquid markets: bets on return to historical norm

LTCM's success led to emulation and easy leverage

When Russia defaults, correlations start to move in the wrong directions-margin calls→ need to sell into illiquid markets

CGFS report, led by Fed official recommends research into liquidity indicators and different trading platforms. In addition, recommends more transparency (CGFS 1999b, p. 20), US opposes international regulation

Hedge funds shall be disciplined by markets→ 10 fold growth 1995-2005 from 150bn to 2 trillion dollars

Visual Snapshot of the growth of the hedge fund industry *(AUM in USD billions)*

Year	AUM	# of Funds
1949	0.1	1
1980	15	~200
1995	110	~1,100
2007	1,900	~10,000
2024	4,700	~15,000

GENERAL STANCE: REPOS AND HEDGE FUNDS ARE USEFUL: DOUBLING DOWN ON REPO

Presidents‘ Working Group 1999: „In view of our findings, the Working Group recommends a number of measures designed to constrain excessive leverage. These measures are designed to improve transparency in the system, enhance private sector risk management practices, develop more risk-sensitive approaches to capital adequacy, support financial contract netting in the event of bankruptcy, and encourage offshore financial centers to comply with international standards.” → Improve bankruptcy remoteness of collateral internationally (LTCM was registered in the Cayman Islands, PWG 1999, p. 20f)

CGFS 1999c: repos are a central tool for central banking, but need for a highly liquid market, excluded from volatility (stable liquidity)

Appropriate margins and haircuts with respect to risk are needed: How to get that? Private risk management

EXPANSION OF COLLATERAL FOR DEALER REPO AND EXPANSION OF EXEMPTION FROM AUTOMATIC STAY IN BANKRUPTCY

MBS included by Fed in dealer repo in 1999

Strong investment in MBS by broker dealers (also incentivized by application of risk weighting measures by SEC in 2004)

2005: Congress approves the bankruptcy exemption for MBS and ABS (lobbying by Treasury)

Leverage ratio of broker-dealers reaches almost 40 pre-crisis

RUN ON THE SHADOW BANKING SYSTEM 2007-2008

Refinancing of Broker-Dealers progressively breaks down

Bear Stearns bailed out and merged in Spring 2008, Lehman let go in September, as Fed and Treasury feel they become played by the market and lack political cover

Lehman: run on repos (bilateral repos from 0 to 100%)

Liquidity constraint bites before the solvency constraint: trust in repo-finance shaken (Bernanke 2008 statement about supposedly risk-free asset)

FSB and Federal Reserve Work begins

HISTORICAL NARRATIVE PART 2: 2008-2020

Transformation of Shadow Banking

Regulatory Work by the Federal Reserve and its effects

QE and the treasury market

The Covid Crisis and the Fed Backstop of the Shadow Banking System

DIRECT CONSEQUENCES OF THE CRISIS

All non-bank broker dealers either go bust or get integrated into banking

In a sense, this provides a much better control possibility for the Federal Reserve over these actors

Given the emphasis in the final narrative of the GFC on the main locus of problems within banks (internal shadow banking system), there is a possibility for substantive regulatory tightening

At the same time: Fed becomes MMoLR and engages in QE (2 trillion dollar balance sheet in 2010)

MAPPING SHADOW BANKING AND PROBLEMATIZING THE ROLE OF BROKER DEALERS

Applied economists in the Fed New York map the shadow banking system (Pozsar et al 2011) and differentiate external and internal shadow banking system (the former probably justified)

Together with Princeton Profs, they problematize the link between liquidity and leverage (the repo market stands at its core)

Showing the procyclical lending behavior of broker-dealers, they generate a major impetus for regulatory reform within the Federal Reserve

MAP OF THE SHADOW BANKING SYSTEM

INTERNATIONAL REPO-REGULATIONS

Attempt to fix pro-cyclical tendencies of repos by installing haircuts and margining requirements

FSB working group 2011-2013

Rates agreed upon are lower than market practice and are 0% for government bonds

Lack of evidence, difficulties to coordinate and political economy problems altogether bring about huge disappointment for change agents within the Fed

BASEL III AND THE US INITIATIVES

Leverage Ratio for the first time includes repos as loans (1-33)

Implemented in US in 2013

There is a supplementary leverage ratio introduced in the US, based on concerns over Broker-dealers‘ pro-cyclical behavior, which are now standing at the center of the largest BHC (for G-SIB, 1-20)

Very conscious limiting of intermediation capacity, coupled with additional G-SIB surcharge, which punishes Repos even further (openly defended by Tarullo)

In addition, implementation of NSFR in 2014 is geared towards further putting regulatory costs on matched book-making

→ Conscious goal of introducing frictions in the market

THE FED AND THE REPO MARKET 2010-2014

Fed engages in proper QE2 and QE3 from 2010 to 2014, provides additional reserves to the system

Potential repo-problems are flushed away by massive public liquidity

QE 2 ends in 2014

To deal with excess cash reserves and to be able to keep control over the bottom of the Federal Funds Rate, the Fed experiments and then installs an Overnight Reverse Repurchasing Facility (2013, now permanent)

REGULATORY ACTIVITIES

Fed pushes in FSOC for prudential market regulation of MMFs and Mutual Funds: industry solution implemented due to SEC opposition

Fed is very active in the Inter-Agency Working Group on Hedge Funds from 2012 onwards, seeks to gather data and prepare legislation (leverage), preparations end in 2016 (Trump)

No meaningful regulation of run-prone nature of the shadow banking system, regulations of broker-dealers push for growth of Hedge Funds

REPO-HICCUPS AND INSTITUTIONAL REACTIONS 2015-2019

First small sudden flashes of repo illiquidity in 2016, CGFS 2017: notices the reduction in liquidity

End 2018: Mnuchin proposes E-SLR (grant balance sheet space)

September 2019: first major repo-market crash: Overnight repo rate shoots up to 10% intraday and then drops to 6%

Caused by sudden need for cash (Treasury settlement dates (mid-months and month-ends), corporate tax payment dates (some mid-months), and regulatory reporting dates (month-ends).

Repo jitters hold up for 3 days→ massive intervention by the Fed is seen as necessary: 75 bn dollars every day (Pathway to the installation of a Standing Repo Facility 2021)

THE COVID CRISIS, THE REPO MARKET AND THE FED

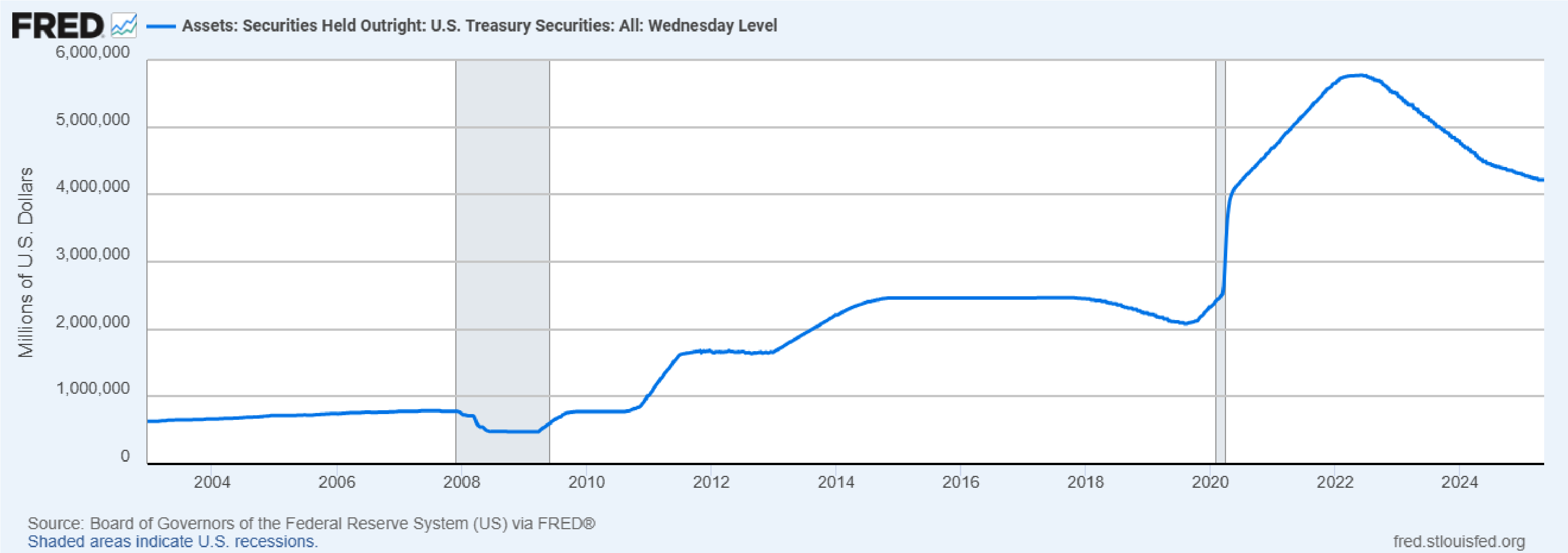
March 2020: Covid declared, flight to safety (yields drop), but then Treasury yields rise, rather than fall (stronger in US): „Dash for Cash“

The unfolding of a liquidity spiral: Hedge funds have to undo their basis trades (futures vs t-bonds), sell treasuries, also mutual funds and foreign owners sell

Dealers step back, no balance sheet capacity

Fed intervenes massively in the Treasury Market and Agency Security market to stop the run (first, cheap liquidity to broker-dealers, then direct purchases of 1.5 trillion in a month)

THE FEDS BALANCE SHEET AND TREASURY SECURITIES



MASSIVE LIQUIDITY INJECTIONS AND THE NEED TO INTERMEDIATE THE WHOLE SHADOW BANKING SYSTEM

Fed unbound: backstop of the entire shadow banking system again

+ direct money infusion to public (to compensate for the latter)

Exemptions of the SLR for treasury bills and reserves until March 31st 2021

This belies the notion that the reform efforts have managed to turn the shadow banking system into resilient market based finance→ Fed is the de facto backstop of an instable system

Restart of the regulatory agenda by FSB and by the US FSOC

HISTORICAL NARRATIVE PART 3: 2021-2025

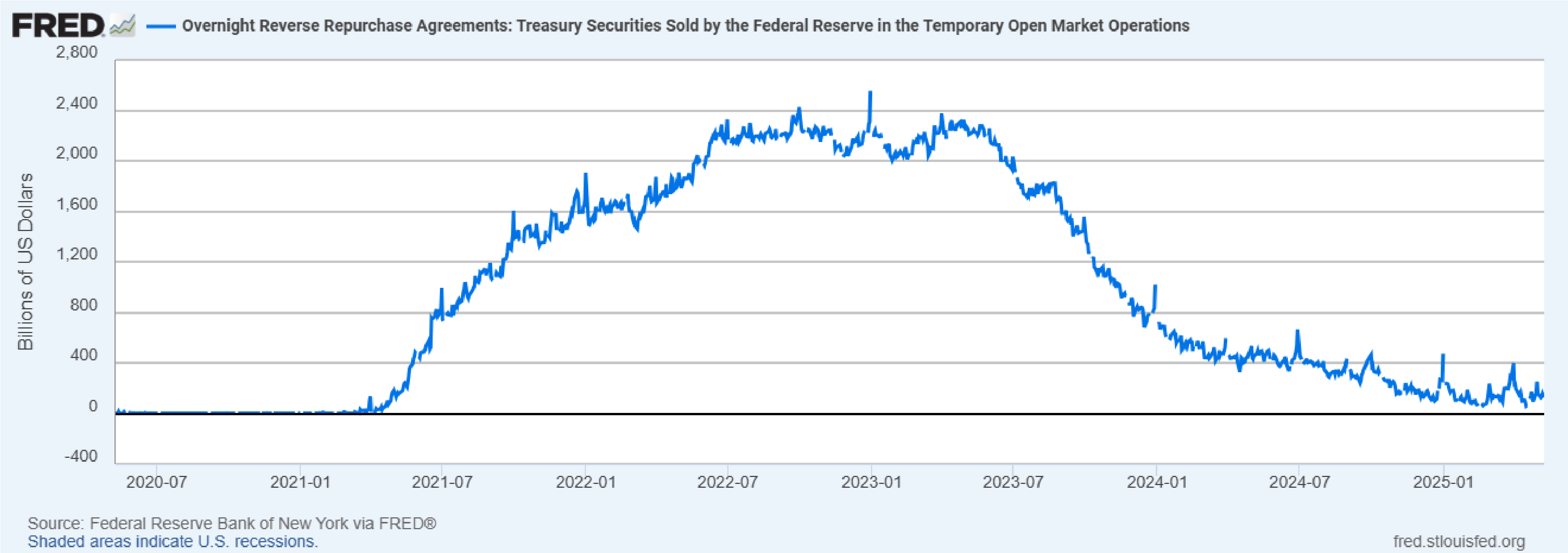
The securitization of the Repo-System

The growth of hedge funds

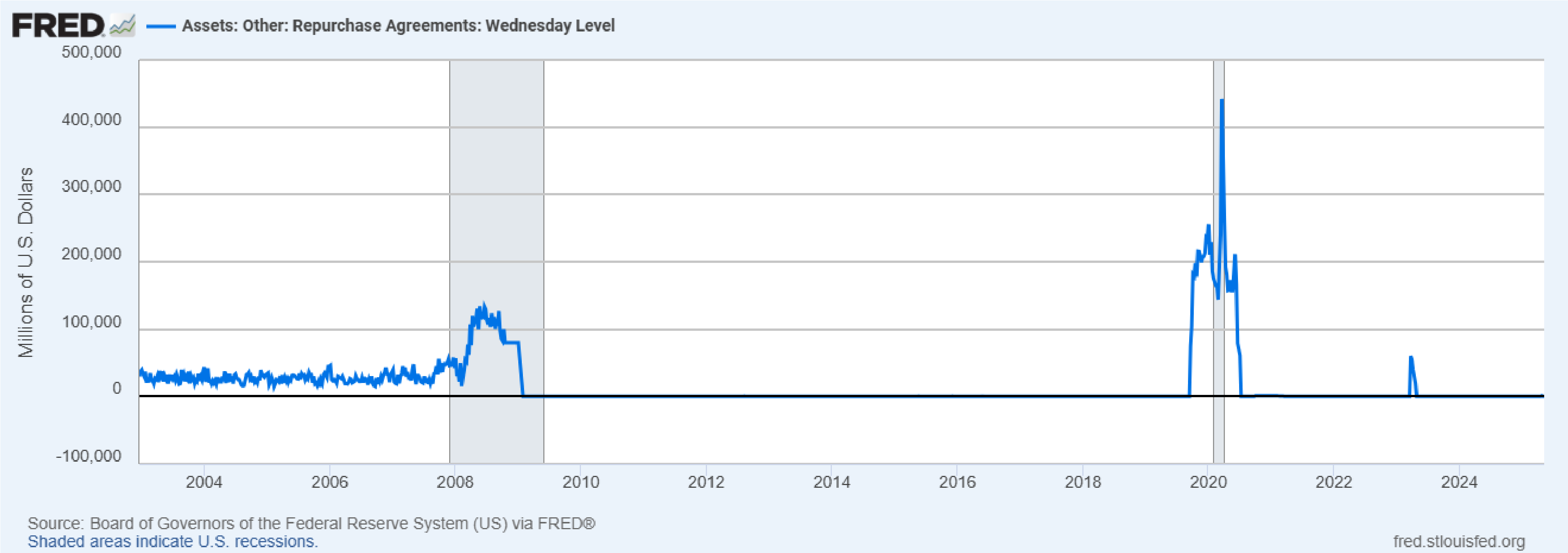
The regulatory work to fix the Treasury market: its failures and gains

April 2025 and the future of the SBS

DRAINING LIQUIDITY FROM THE SYSTEM THROUGH RRPS



PROVIDING LIQUIDITY TO THE SYSTEM VIA RP



JOINT ACTION BY ALL REGULATORS TO FIX TREASURY MARKET

Interagency Working Group on Treasury Market (2021-2025)

Goals: more transparency by hedge funds and leverage limits (revival of Interagency working group on hedge funds)

Stop run-prone MMFs and install liquidity gates for MFs

Increase Broker Dealer Balance sheet space through regulatory changes and install clearing of Repos through CCPs

Only partial successes: Balance sheet space yes, but regulation largely no

LATEST CHANGES IN THE REPO-ECOSYSTEM AND THE CRISIS OF APRIL 2025

Large supply of Treasuries from 2020 onwards

MMFs now need plenty of Treasuries

Hedge Funds grow (4 trillion) and move into making markets for Treasuries (called Principal Trading Firms), yet refuse to become Primary Dealers (due to defeat in the regulatory hedge fund agenda)

the sudden announcements of Tariffs in April 2025 (Liberation Day) acts as a stress test: Flight to safety, but Treasury Bond rises

HEDGE FUNDS: DERIVATIVES POSITIONS IN TREASURIES

FT, 25 April

REPO MARKET JITTERS AND THE FED

Sudden large scale sales of Treasury Bonds, but no intermediating capacity of broker-dealers

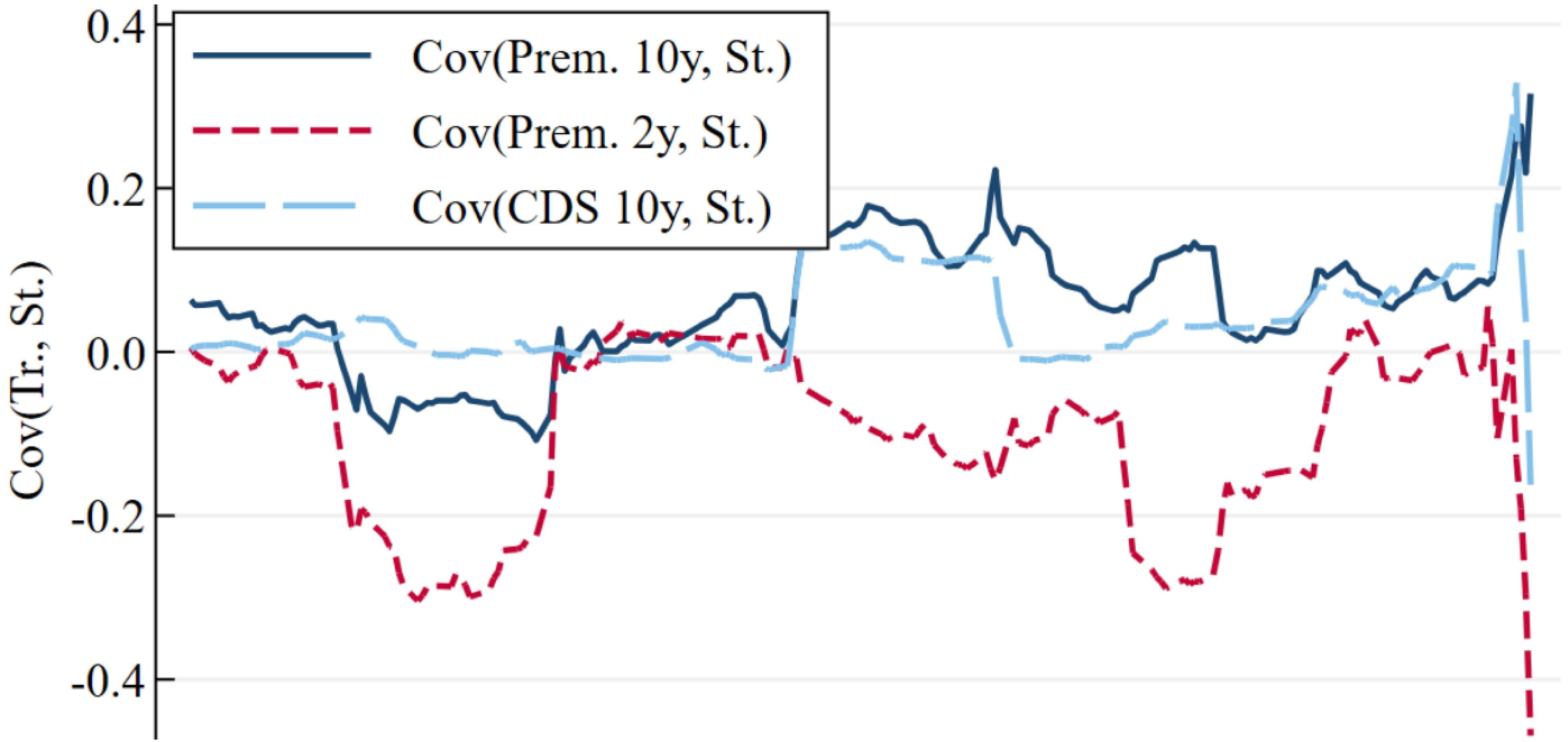
Hedge funds had bet on e-SLR (ie more intermediation space for broker-dealers, hence lower Treasury Bond yields in the future)

Caught wrong-footed, they had to sell Treasury Bonds

FT Articles: Hedge Fund managers calling for help (or Armageddon) and Powell announces that the Fed stands ready

9th of May: liquidity will be provided in the morning

CO-VARIANCE STOCK AND 2- & 5 YEAR BONDS (CONVENIENCE V. DEFAULT RISK)



Acharya et al. 2025

CONCLUSION

Fed has moved from fiscal dominance to financial dominance (note that the latter does not exclude the former necessarily, alliance formation)

Unable to control the actors outside its reach, it will soon have to even further expand liquidity access (regulatory action on SLR)

This will set off the pro-cyclical tendencies of the SBS once more (no tools against that, only monetary policy could fix that): the latter attempt is defeated in the Fed in 2016

THE DEBT-LED GROWT MODEL AND THE FUTURE OF THE FED

Expanding the Federal Reserve Backstop, coupled with an expansion of debt by the US and the position-taking by Hedge Funds means a strong expansion of debt

Is this long-term sustainable? A: Is this inflationary? (risk of losses for the Fed, currently at 300bn Dollars and counting, QT was just postponed again last week, Treasury Bond reduction of balance sheet from 60bn per month to 5bn)

B: the convenience yield is threatened as the Treasury markets‘s permanent liquidity suffers: international benefits might disappear

With it disappears also the benefit for Agency MBS

LARGER POINTS OF THE LECTURE SERIES

What is the critical take on shadow banking now? From revelatory work (teaching the state) to problematization of monetary order (state knows, or parts of the state know)

The monetary order is

-Based on profits of broker-dealers, today hedge funds

enables a financialized form of capitalism, with the profit share of 40% going to FIRE every year in the US

How can it be undone?

We need a new social contract of money, which is not based on the creation of excessive credit, to be validated on the Federal Reserve‘s central bank

RECOGNIZING FINANCIAL STATECRAFT PERMITS THE UTOPIAN VISION OF OTHER STATE PROJECTS

If finance is always hybrid, here are some alternatives:

A public housing program, funded with beneficial credit by a public bank, which refinances in capital markets

A system of public funding of public debt, which engages Federal Reserve and Treasury in a public debate on inflation vs the financing of public goods (but how could the public vote?)

KEY TRENDS & NOTES

1. **1960s–1980s**:
   - Dealers' inventories grew in absolute terms but stayed **below 15% of outstanding debt**, as the Fed and banks held larger shares.
   - *1980s spike*: Volcker's high-rate policy increased dealer positions (more trading volatility).
2. **1990s–2000s**:
   - Share peaked near **10%** as dealer intermediation expanded with electronic trading.
   - Dot-com era and post-9/11 stimulus boosted Treasury issuance.
3. **Post-2008 Crisis**:
   - Dealers' share **dropped sharply** (2–4%) due to:
     - **Quantitative Easing (QE)**: The Fed absorbed ~$2.5T in Treasuries, shrinking dealer inventories.
     - **Basel III rules**: Higher capital requirements reduced dealer balance sheets.
4. **2020s**:
   - Despite record debt ($34T+ today), dealers hold **<2.5%**—reflecting structural shifts (e.g., hedge funds and ETFs now play larger roles).

Table 1 Interactions between monetary/fiscal policies and collateral-based finance			
		To collateral-based finance	From collateral-based finance
Monetary policy	Normal times	Repo rate targeting Collateral framework	New money – liquidity and velocity of collateral Financial fragility (valuations, leverage, haircuts)
	Crisis	Procyclical LOLR vs. MMLR (supporting liquidity in collateral markets) Ratio good/bad collateral (QE)	Liquidity spirals – collateral crises
Fiscal policy	Normal times	Issuer of collateral for private and central bank repos	Liquidity for sovereign bond market Securitization as response to shortage of government debt
	Crisis	Financial stability (market liquidity)	Collateral fragility
Coordination monetary / fiscal policy			