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Outline

This comment on Prime MMFs will give a summary of US banking history, up to how the banking system interacts with Money Market Funds. With clearinghouse certificates, the deposit insurance from Fed in 1933 and the month-plus suspension of Reserve Primary Fund shareholder withdrawals, I believe this summary will show some novel facets of the development of our financial system.

In short, I believe the request for comment has a good intention but has an unattainable goal. For better or worse, our modern system does not have the capacity to handle a large failure of an institution relying on short-term liabilities. While banking suspensions and clearinghouse certificates provided reprieves and functionality in banking panics before, modern legal and financial systems simply cannot accept the measures of 100+ years ago. Any modern system of borrow-short/lend-long needs public backstops. Therefore, I propose a restriction of time and type of assets in 2a-7 funds compatible with the well-evidenced need for the backstop.

Finally, if nothing else, please consider reforming disclosure of securities lending for mutual funds. Bluntly, securities lending for mutual funds puts main street fund holders into a two-legged parlay with both fund assets and shadow banking assets. The disclosure involved with this parlay is catastrophic and laughable. The fact security lending happens at all is only disclosed deep in the Statement of Additional Information. There is *no* disclosure as to the amount of assets lent out or the nature of the collateral reinvestment (outside of broad terms in the Statement of Additional Information).

Pre-1933 US Banking to 2008

To give a brief overview, banking panics were common in the US before 1913. Unlike other companies, banks were not forced into liquidation when they suspended deposit withdrawals. Withdrawal suspensions were allowed by regulators and the courts as a backstop until the panic subsided.

A common tool in banking panics was clearinghouse certificates, where the clearinghouse's banks issued scrip with joint responsibility by all banks. Panics tended to subside in a matter of weeks, as gold flowed in and purchased scrip at a fairly small discount. Importantly, regular non-withdrawal banking business mostly kept going. Indeed, businesses would advertise that they would take either clearinghouse scrip or checks at par.[1]

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[1] Gorton, Gary. "Clearinghouses and the Origin of Central Banking in the United States." The Journal of Economic History, vol. 45, no. 2, 1985, pp. 277–283. JSTOR, www.jstor.org/stable/2121695. Accessed 11 Apr. 2021.

Below is an ad from the New York Times on March 7, 1933. The creation of the Fed in 1913 was meant to end banking panics through the lender of last resort. However in 1933, state bank holidays started in Michigan and spread throughout the country. Well-founded fears of leaving the gold standard accelerated withdrawals in addition to concerns of solvency. The New York Clearinghouse started to print certificates[2] but did not distribute them. On this news, several New York Times ads show acceptance of checks or certificates “as we always have.”

Instead of resorting to clearinghouse certificates as in the past, FDR’s White House asked the Fed to give *de facto* deposit insurance. The Federal Reserve banks still had a conservative banking mentality, with member banks’ capital at risk. However, the Treasury indemnified the Federal Reserve banks of any losses incurred through the expansive backstop allowed under the Emergency Banking Act of 1933.[3]

[2] “Plan to Use Scrip Here.” New York Times [New York, NY], 5 Mar. 1933, p. 1.
[3] Silber, William. “Why Did FDR’s Bank Holiday Succeed?” FRBNY Economic Policy Review, vol. July 2009, 2009, www.newyorkfed.org/medialibrary/media/research/epr/09v15n1/0907silb.html.

For better or worse, the pseudo-defaulting mechanisms to deal with banking panics faded from memory after the Emergency Banking Act of 1933 and the later creation of the FDIC. The Federal Reserve and FDIC then backstopped banking and shadow banking liabilities on some occasions, well past FDIC limits:

- Commercial paper market after Penn Central's bankruptcy in 1970.[4]
- Franklin National in 1974.[5]
- Continental Illinois in 1984.[6]
- FirstRepublic[7]

In *de facto* terms, short-term liabilities without explicit FDIC insurance, but big enough to the rest of the financial system, had unlimited FDIC insurance. The passage of the FDICIA in 1991, with capital requirements and prompt corrective action, gave a pause in bank failures until the Panic of 2007-08.

The aggressive use of the Fed and FDIC filtered through the rest of the financial and legal system. Bank deposits and shadow banking liabilities carried the expectation of immediate or, at latest end-of-day, payment, at par, ultimately using a Federal Reserve credit. Any failure to pay immediately and at par fell back mostly on to the bankruptcy statutes, with their lengthy hearings and automatic stays.

Panic of 2007-08

The "subprime crisis" has been well documented from the poorly underwritten mortgages up to securitized trusts passing through mortgage interest and principal (i.e. MBS and CDOs). Less well known is the ultimate funding came from American MMF holders or American security lenders through either the five largest dealers ("Investment Banks"), Foreign banks, or off-balance-sheet conduits of American banks. The former two conduits had brunt of the funding since they implemented Basel II with very low capital standards. Banking regulators in US delayed Basel II for banks and Bank Holding Companies. Therefore funding through US banks tended to be in off-balance-sheet

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[4] Times, The New York. "How the Fed Weathered A Fateful Week." The New York Times, 20 June 1971, www.nytimes.com/1971/06/20/archives/how-the-fed-weathered-a-fateful-week-how-fed-weathered-fateful-week.html.

[5] Sissoko, Carolyn. "':Dismantling the Economy's Legal Infrastructure V-5-a: The Collapse of Bretton Woods and the Entrenchment of Too-Big-to-Fail — Step 1: Eurodollar Markets.'" Synthetic Assets, 7 Aug. 2019, syntheticassets.wordpress.com/2019/08/07/dismantling-the-economys-legal-infrastructure-v-5-a-the-collapse-of-bretton-woods-and-the-entrenchment-of-too-big-to-fail-step-1-eurodollar-markets.

[6] Federal Deposit Insurance Corporation (FDIC). 1997. History of the Eighties: Lessons for the Future. Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s. Washington, DC: FDIC. (Chapter 7 - https://www.fdic.gov/bank/historical/history/235_258.pdf)

[7] Walsh, Sharon Warren. "FDIC CHAIRMAN QUIZZED ON FIRST REPUBLIC BAILOUT." Washington Post, 4 Aug. 1988, www.washingtonpost.com/archive/business/1988/08/04/fdic-chairman-quizzed-on-first-republic-bailout/f16154fb-b6c9-49ec-98bf-5e04e27c70a6.

vehicles not consolidated with the banks' balance sheet for capital purposes. Other conduits outside of banks or dealers existed, but these three types were the primary conduits.[8]

As described in the last section, the American financial system and Eurodollar systems now had an expectation for short-term dollar liabilities to give payment at par and on demand. The financial system deepened and multiplied very large, immediate cash liabilities using shadow banking assets. Tri-party repo for the dealers required an immediate payment to repo funder every morning. The dealer required intraday credit extended every morning. Then the dealer's balance sheet needed to be rewound every afternoon, finding funds to pay back their bank's intraday clearing loan.[9]

Expanding outward from tri-party repo, security lenders reinvested collateral in both "safe" AAA MBS and CDO tranches and in tri-party repos. Security lending for funds typically have the custodian bank guarantee return of the security but give the fund responsibility for collateral reinvestment losses. In addition to large losses in AIG's Financial Products group, AIG lent out its insurance subsidiaries' assets and reinvested in securitized assets considered safe. As Commissioner Pierce described, as these investments became illiquid, AIG had to lend out yet more assets to get cash to pay back collateral on previous security loans.[10]

Up to Lehman Brothers Holdings filing for bankruptcy, several different backstops were used for Bear Stearns, European banks and Primary Dealers generally (PDCF). Even though the US boker subsidiary was a Primary Dealer and thus had access to the PDCF, Lehman's London subsidiary did not have access to the PDCF. The Fed did not allow assets to be moved on the weekend from London to the New York dealer, due to Fed concerns of fraudulent conveyance action from such large transfers. While Lehman's US broker still had backing in the week of LBH's bankruptcy, LBH had to default on its obligations and the London subsidiary had to go into insolvency, UK's equivalent of bankruptcy.[11]

To be blunt, the Reserve Primary Fund "breaking the buck" is an extremely gross mischaracterization of its issues and the issues in MMFs generally following Lehman's bankruptcy. The Reserve Primary Fund did indeed have 3% of its assets in Commercial

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[8] I'm ripping off Adam Tooze's *Crashed* for this paragraph.
[9] Copeland, Adam, et al. "Key Mechanics of the U.S. Tri-Party Repo Market." FRBNY Economic Policy Review, vol. November 2012, 2012, www.newyorkfed.org/medialibrary/media/research/epr/12v18n3/1210cope.pdf.
[10] Peirce, Hester. "Securities Lending and the Untold Story in the Collapse of AIG." *SSRN Electronic Journal*, 2014. *Crossref*, www.mercatus.org/publications/financial-markets/securities-lending-and-untold-story-collapse-aig.
[11] Ball, Laurence. "The Fed and Lehman Brothers." Meeting of the NBER Economics Program, July 14, 2016, 2016, data.nber.org/data-appendix/w22410/The%20Fed%20and%20Lehman%20Brothers.pdf.

Paper issued by LBH and thus this paper was in bankruptcy on Monday. However, the Reserve Primary Fund had an aggressive valuation of the Lehman paper which kept an NAV of $1 on Monday.

To give near-cash equivalency of MMF shares, the Reserve Primary Fund took withdrawal requests throughout the day and depended on a credit line from its custodian bank to meet the request. The custodian bank revoked the credit line, forcing a suspension of withdrawals. The NAV was reduced below $1 *after* the suspension.[12]

However, the fate for the holders was far worse than a mere 3% loss of principal. For the shareholders not first at the teller window on Monday morning, *no* withdrawals occurred until October 30, when shareholders received half of their investment back.[13] Later distributions are unclear as to their timing, but likely around 95 cents was distributed later in 2008. At the time of the SEC order, $3.5 billion of the original $50.6 billion in assets were still undistributed.

The long suspension of the Reserve Primary Fund gives a *very* dire scenario should the free market have been allowed to "take its course." Reporting gave many examples of unsophisticated investors using the Reserve Primary Fund for money needed to pay bills. One hates to think of similar suspensions spreading throughout the economy, with money needed to pay payroll or not default on securities lending obligations unavailable for months. Even the 50 cents return on October 30 used the tremendous government backstops to help liquidate 50% of assets. In a complete collapse scenario, assets may not have been paid until their ultimate due date, if they were paid at all.

The contrast with the pre-1933 mechanisms also illuminate why this hypothetical economic collapse would have been so much *worse* than the Panic of 1907. The joint backing of clearinghouse certificates and checks would, in 2008, be disallowed by regulators or by company boards. Certainly no court and almost no payee would accept a slightly discounted form of private bank money (not Fed money) as payment.

With modern legal infrastructure and absolute requirements of one form of payment, the risk is not bailouts. It's *not* having a bailout.

March 2020

March 2020 differed in many ways from the 2008 panic. Generally, the solvency of major financial institutions has not been questioned and issues have occurred in financial instruments outside financial institutions. Generally cash substitutes moved to bank

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[12] ECF Case No. 09 Civ. 4346 (PGG) Opinion by Gardephe. https://www.sec.gov/spotlight/reserve_primary_fund_investors/gardephe_opinion.pdf.
[13] Henriques, Diana. "Frozen Money Market Fund Returns Some Cash." The New York Times, 14 Nov. 2008, www.nytimes.com/2008/11/14/business/14fund.html.

deposits or government MMFs, often simply to have cash to handle the lockdowns and drop in revenue.

In my opinion, Prime MMF counterparties suffered from maturity mismatch more than anything else. Smarter holders may have liquidated Prime MMF shares given the liquidity gates and, even if MMF's counterparties had access to private or discount window funding, the MMF in theory had to wait for CDs, commercial paper, etc. to mature. The theoretical "good" part of the money market is commercial paper to non-financial companies, but non-financial companies actually form a very small part of the assets. Other than non-financial company CP, financial companies had ways to access the Fed balance sheet for their needs.

The need to liquidate more-than-daily paper is given by relative sizes of the CPFF and MMLF. On April 14, 2020, the CPFF had $249 million in loans outstanding versus the MMLF with $51 billion in loans outstanding.[14] In other words, original issuers had a nearly negligible need to utilize the Fed while Prime MMFs needed $51 billion to get liquidity for withdrawals. Even if the maturity mismatch is a matter of weeks or months, maturity is still mismatched.

The stricter capital requirements after Dodd-Frank also played a role, as banks generally operated close to their minimum capital and leverage ratios before the crisis. In theory, if banks got a good enough deal on buying Prime MMF assets, they could raise capital to expand capital numerator and thus allow more assets in ratio denominators. In practice though, banks would have had to have given prohibitive return on equity to *new* shareholders and thus *existing* shareholders do not have incentive to raise capital and purchase these assets. While capital requirements are of course good, the inflexibility contrasts with the 1970 commercial paper bailout after Penn Central's bankruptcy. That was before FDICIA or Dodd-Frank, allowing the Fed to use the discount window to cajole banks to backstop commercial paper.

Note Basel III does have "countercyclical capital requirement," but this requirement was only on risk-weighted assets and not leverage. It was also meant for some hypothetical expansion of credit by banks. It did not have in mind the possible need for banks to absorb some assets.

No Silver Bullet: How to Restrict 2a-7 Assets

The request for comment looks for some way to both:

1. Have a form of punishment on MMF shareholders should the assets lose value.
2. Not have MMFs utilize any public backstops.

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[14] Federal Reserve's April 24, 2020 report to Congress on 13(3) facilities. https://www.federalreserve.gov/publications/files/pdcf-mmlf-and-cpff-4-24-20.pdf

3. Generally have liquidity for MMFs, i.e. not having losses or, worse, months-long suspensions.

Based on the economic history, I believe this follows from a faulty view of financial markets. The bailouts before 2008 were buried very deeply or forgotten, but they always existed. Strict reserve requirements have always had the issue of banks or MMFs unable to use reserves for both reserve requirements and withdrawals. While capital always provides the ultimate cushion for private or public emergency lending, capital does *not* serve to provide immediate withdrawals. In March 2020, there was apparently not a solvency concern of Prime MMF counterparties, but rather pure liquidity.

Morgan Ricks' book "The Money Problem" is the best overview of the issue of short-term liabilities being used as "cash equivalent." Ricks' recommendations are somewhat extreme, but in any case the first necessary element is unlimited FDIC insurance, with strict regulation. Then "cash equivalents" should generally move to these accounts.

In the meantime, the SEC can take this step for 2a-7 fund assets. The assets must either be one of these classes ("New Rule 2a-7 Assets"):

1. Obligations of the US government or Agencies.
2. Overnight repos backed by obligations of the US government or Agencies.
3. Liabilities, demandable within a day, of Fed member banks or branches.

Many unsecured counterparties of Prime MMFs are already either a Fed member bank or branch in the US or a holding company for such a bank or branch.

New sorts of short-term asset funds will certainly pop up given these restrictions. But since Rule 2a-7 funds now often have cash equivalency in many legal circumstances (such as allowable margin for options), this is a good first step.

Access to the Fed discount window does not absolutely prevent default of course. Should such a counterparty default on their demandable obligation, these funds will likely have a run. However, the other counterparties have to pay on demand and have access to the Fed balance sheet. Based on the pattern of bailouts before 2008 and then the expansion of Fed and Treasury programs, I believe it is wishful to say discount window support can somehow be eliminated in a modern context.

A Word on "Money Market Instruments

I also believe the idea of "Money Market Instruments" with months-long maturity but liquidity is framed incorrectly. As with Eurodollars generally, there is a strong presumption that these instruments naturally exist apart from the central bank, will always exist and will always have liquidity.

The Fed, in part, was created to create liquidity in commercial paper and bankers' acceptances. The true "liquid" assets before 1913 was not commercial paper but call loans (i.e. margin loans on stocks and bonds). Unlike CP, they could in fact be called on demand for withdrawals within a day. The Fed helped create a liquid market for lending to support commerce, rather than the "financial speculation" supported by call loans.[15]

Meanwhile, Certificates of Deposits were created explicitly to get around interest rate restrictions. By 1961, Corporate Treasurers became more sophisticated at bypassing traditional banks and earning interest in money market products (i.e. T-bills in addition to commercial paper and bankers' acceptances). First National City Bank introduced the Certificate of Deposit and also gave a dealer a loan to create a market in the new negotiable CDs. With National City Bank both creating the certificates and lending to dealers against the certificates, it is questionable how different the CDs truly were from regular deposits.[16]

Money Market Instruments after 1961 were then driven mainly by regulatory arbitrage, especially reserve requirements or interest rate caps. To be fair, I find both of these requirements to be unnecessary, as opposed to capital requirements and asset quality. Especially amidst higher T-bill rates, reserve requirements or interest rate caps will simply be too punitive on depositors and banks for little gain. Even worse, the mechanisms to get around the caps were available to the wealthy but often unavailable to the middle class. For example, Regulation Q caps had an exception for large deposits, which Merrill Lynch used to sell the first Money Market Funds. Morgan Guaranty, a bank with only large depositor clients and no branch network, joked how its branch network was Merrill Lynch through Merrill Lynch's Money Market Funds.[17]

Nevertheless, history shows Certificates of Deposits are not an instrument that *has* to exist. My suggestion of 2a-7 asset duration being daily only seems extreme given the historical development of the money market and especially in regulatory arbitrage. These instruments have always had an expectation of daily liquidity, backed by the Money Center banks and then ultimately the Fed.

Other Suggestions

Either in lieu of or in addition to this 2a-7 asset restriction:

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[15] Moen, Jon R., and Ellis W. Tallman. "The Call Loan Market in the U.S. Financial System Prior to the Federal Reserve System." FRB of Atlanta Working Paper No. 2003–43, 2004, papers.ssrn.com/sol3/papers.cfm?abstract_id=498762.
[16] Office of the Comptroller of the Currency. "The Negotiable CD: National Bank Innovation in the 1960s | OCC." OCC History 1936–66, 2021, www.occ.treas.gov/about/who-we-are/history/1936-1966/1936-1966-negotiable-cd.html.
[17] Chernow, Ron. The House of Morgan: An American Banking Dynasty and the Rise of Modern Finance. Grove Press, 2010.

1. Create far more transparency as to Security Lending collateral reinvestment for mutual funds. As it stands, mutual funds use historic no-action letters from the SEC to permit security lending and then disclose security lending deep in the "Statement of Additional Information." Traditional collateral reinvestment, in my opinion, creates a hidden two-legged parlay for the fund investor. They are investing both in the stocks and bonds in the fund portfolio, but also in the assets for security lending collateral reinvestment. Funds should disclose for this parlay:
    a. Peak and ending percentage of fund assets lent out.
    b. Peak and ending composition of fund reinvestment, with particular attention to any counterparty without Fed discount window access.
2. Require cash in brokerage accounts be either cash liability of broker (as segregated customer account), an FDIC-insured bank deposit, a Rule 2a-7 Fund if restrictions above pass, or a New Rule 2a-7 Assets asset. Any terms such as "cash" and "money" are highly misleading for sweep accounts in traditional Prime MMFs or money market instruments subject to suspension and illiquidity.
3. "Cash equivalents" is a highly misleading term under GAAP. Anything other than bank deposits or a New Rule 2a-7 Assets asset should be classified under investments rather than "Cash and Cash Equivalents."
4. Should any non-2a-7 fund rise up with short-term asset and close to $1 NAV, words evoking deposit-like nature such as "cash" and "money" must be prohibited in their marketing materials.