Money in the Time of Coronavirus
N. Orian Peer, Repo in the Time of Corona

March 16, 2020

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“It was inevitable: the scent of bitter [money markets] always reminded him of the fate of unrequited [convergence trades].”

Yes, this is a paraphrase. The Márquez original reads “almonds” in lieu of “money markets”, and “love” instead of “convergence trades”. An odd paraphrase, I am aware, but like the Márquez classic, Repo in the Time of Corona grapples with existential features of the human condition. Those are: (1) The desire to tap money markets for high-leverage trades; (2) The incessant drive towards regulatory arbitrage; (3) The Fed’s dilemma of dealing with the former two in its role as the ultimate purveyor of liquidity. Main characters and events include the rise of FICC sponsored repo, the sponsored hedge funds and the dealers sponsoring them, corona disruptions in the treasury market, and the Fed’s policy response. It’s nowhere as charming as Márquez, but quite as dramatic.

Flashback: Repo Post-Crisis

I started studying financial regulation in 2010 and, like many of my cohort, felt an urgency to understand the causes of the Financial Crisis, and the reforms just then taking shape. An early key insight, reading people like Ricks, and Gorton, was
that repo was “money like”: a short-term claim held for transactional purposes, much like a bank deposit. Repo borrowers share another trait with banks: they are vulnerable to runs. This run risk materialized in 2008, and became an inflection point in the recession that followed. Work like this trained its readers to see the issuance of money claims outside of chartered banking (and the public safety net) as a threat to stability.

A second key insight, reading people like Mehrling and Pozsar, was a mental map of the repo market. The right-hand side of this map had cash investors (money funds, corporate treasuries) lending repo as a kind of cash equivalent. The left-hand side had hedge funds borrowing repo to leverage-up their trades. A dealer was drawn in the center of the diagram, reflecting the fact that cash investors and hedge funds do not interact directly. Dealers borrow from cash investors in the triparty repo market, and lend to hedge funds (often, prime brokerage clients) bilaterally. The dealer’s ability to profitably offer its balance sheet as this meeting ground, I learned, shapes the daily workings of money and capital markets.

A third insight was about the regulatory philosophy guiding the Dodd Frank Act and Basel III, the reforms everybody was trying to wrap their heads around. This third insight knitted together the first two. Morgan Ricks and others argued that as a non-sovereign money claim, repo was crisis prone, and should be prohibited outright. The regulatory reforms did not adopt this approach. They opted instead for a middle-ground, somewhere between eliminating repo and business as usual. Enter the smallish repo market of the 2010s, shrunk from its $5 trillion glory, to $1.5-2 trillion.[1] That the repo market would remain smallish was premised on several assumptions. First, all major dealers were now regulated as affiliates of
bank holding companies. Second, Basel III’s tightening of capital, leverage, and liquidity requirements meant these dealers’ balance sheets were becoming increasingly expensive. To address rising balance sheet costs, dealers had to mark-up their bilateral repo lending rates to hedge funds. Rising rates would make levered trades less profitable to hedge funds, ultimately curbing demand. That is, of course, as long as hedge funds and cash investors could not find each other outside the dealer’s balance sheet. Spoiler alert: they did.

The End of the Basel III Honeymoon

On September 17, 2019 the otherwise sleepy repo market made headlines when the repo rate spiked from 2% to 5%, with some distressed trades reportedly paying double that rate. Much of the commentary on the repo spike focused on what it implied about the tightness of bank reserves. This was essentially a story about the supply side: looser reserves would have created opportunities for profitable repo lending by banks. But readers following this episode also learned something new about the demand side, the identity of repo borrowers. The assumptions that underwrote the smallish repo market of the 2010s were loosening. Time to update the repo mental map.

“Sponsored repo” is the name of a new segment of the repo market. In just two short years, it went from basically non-existent, to $400 billion. The service is offered by the Fixed Income Clearing Corporation (FICC), a user-owned central clearing counterparty (CCP) whose primary regulator is the SEC. A hedge fund and a cash investor enter a repo, and the trade is novated to the CCP. As the central counterparty, FICC becomes a repo borrower to the cash investor and a repo lender to the hedge fund. The dealers themselves, it is worth noting, are still involved as the “sponsors” of those hedge funds. But
the dealers’ *balance sheets* are basically out of the picture, thanks to the CCP.

It requires more careful study, but this arrangement raises concerns of regulatory arbitrage. In traditional CCP practice, each member (like the dealers) guarantees performance by its clients (like the hedge funds). FICC seems to use a similar model, in their words:

“While the Sponsored Members [=hedge funds] are principally liable to FICC for their securities and funds-only settlement obligations, the Sponsoring Member [=dealer] is required to provide a guaranty to FICC with respect to all obligations of its Sponsored Members, so that if a Sponsored Member does not satisfy any of its obligations to FICC, FICC can invoke the Sponsoring Member’s guaranty.”

If a hedge defaults, a dealer is still on the hook to FICC and its risk exposure as sponsor is essentially identical to on-balance sheet intermediation. It is not clear why regulators would provide sponsoring with favorable treatment. Be that as it may, dealers discovered favorable treatment was in fact forthcoming. A JPM primer explains:

“[Sponsored repo] …takes a significant step in alleviating the regulatory costs of fixed-income financing in a post-crisis world. ‘We believe sponsored repo cannibalizes less efficient forms of repo, ultimately freeing up capital and creating more capacity for banks to provide liquidity to the fixed-income markets...’”
Since 2018, triparty repo volume (which includes FICC) rose by around $600 billion (~30%), with sponsored repo accounting for the majority of the increase. Some of this capacity was taken up by hedge funds engaging in relative value trades. A December research note by the BIS related the demand-side squeeze in the September repo spike to these sponsored hedge funds. Interestingly, the FT reports that last week’s disruptions in the treasury market were also related—to some degree, large or small, we do not yet know—to these relative value trades coming under liquidity pressure. These are the same market disruptions that the Fed cited in its string of announcements of large-scale repo auctions and asset purchases. Sponsored repo is still relatively small, but it raises new and perplexing questions about how the Fed’s crisis response is going to play out.

**Trading Liquidity Risk**

Relative value trades exploit small pricing discrepancies, which become profitable if leveraged many times over. For example, a hedge fund might purchase treasuries that are underpriced in the cash market, and hedge its position by selling futures against them. This trade elegantly eliminates market risk. The futures contract allows the seller to settle by delivering the actual treasuries towards the end of the contract period. At that time, prices would have to converge, and the seller hedge fund would pocket the pricing difference, amplified by its leverage. This leverage is obtained in the repo market, where the hedge fund can borrow cheaply by pledging its treasuries as collateral.

But while the trade eliminates market risk, the hedge fund is assuming a considerable amount of liquidity risk. The FT’s reporting about relative value traders coming under pressure
amidst corona volatility is a case in point. As it turns out, the futures leg of the trade appreciated at a faster rate than the cash leg (the actual treasury securities). Here’s a speculation as to what’s going on. Futures contracts are subject to daily—and sometimes intradaily—variation margin by the clearinghouses. With treasuries appreciating, this represents a liquidity drain to hedge funds. As repo borrowers, however, the hedge funds are also gaining liquidity, because their treasury collateral is gaining in value (yields are dropping), making them entitled to positive mark-to-market. The problem, it appears, is that the cash market is moving more slowly than the futures market, meaning the liquidity drains dominate the gains. If so, the same frictions between cash and derivatives markets that relative value traders were trying to exploit are now turning against them (For more on the theme of liquidity exposure between cash and derivatives positions, see Merhrling, and Mehrling et al.).

Like many a convergence trader before them (say, LTCM), these hedge funds are struggling to maintain positions that will become profitable, if only they can survive to see the day. The FT reports that pressure on these hedge funds can translate—and perhaps, has already been translating—into disorderly liquidations, disrupting the broader treasury market. This is where the Fed’s recent policy announcements come in. To reiterate, how large a factor relative value trading has been in the current disruptions remains to be discovered. It is certain, however, that if the sponsored repo market continues its growth trajectory, such dynamics will become more likely in episodes yet to come.

Fed Support for Sponsored Repo?
At over 15% of the market, the rise of sponsored repo subverts the unspoken compromise of the post-crisis order: the repo market will survive, but only as long as dealers, the gateway to the ultimate borrowers, remain tightly regulated. With hedge funds meeting cash investors through FICC, the Fed could be increasingly facing the dilemma of whether to support sponsored repo. Failure to offer support risks market disruptions, while willingness to support is bound to increase leverage and risk. The post-crisis compromise was based on the premise that risk and leverage regulation ex-ante would save the Fed from facing this dilemma ex-post. This compromise is now unraveling.

Fed support of sponsored repo could take various forms, providing funding liquidity as a lender of last resort, or market liquidity, as Mehrling’s dealer of last resort.

Funding liquidity would become relevant if cash investors withdrew from FICC, perhaps after the failure of a sponsored hedge fund. The Fed could put itself in cash investors’ position, lending directly on the FICC platform. Indeed, only two months ago, the WSJ reported the Fed considered adding a sponsored repo facility to its evolving monetary policy implementation framework. So far, this has not happened. In part, legal concerns might be at play given the FICC’s DFMU status (designated financial market utility). Fed lending to DFMUs requires a Fed Board finding of “unusual and exigent circumstances” and consultation with the Treasury Secretary (12 U.S. Code § 5465(b)). This roughly parallels the famous Sec. 13(3) emergency lending authority to non-banks. So far, neither provision has been triggered. Stay tuned.

Short of a 13(3) announcement, funding liquidity to sponsored repo borrowers could only be provided indirectly, through the
dealers. Hypothetically, a dealer could borrow repo through the Fed’s current auctions, and lend into the sponsored market. Such indirect support might face serious limitations. After all, the whole raison d’être of sponsored repo was “freeing up capital” for the dealers and BHCs. Reintermediation would require recommitment of this capital. Judging by low take-up in the first large repo auctions last week, dealers seem reluctant to offer their balance sheets for any purpose at this point.

Given that a run on sponsored repo has not yet happened, Fed actions have a more direct bearing to relative value traders through the impact those actions may have on market liquidity (as opposed to funding liquidity). As hinted on Sunday evening’s FOMC conference call, the Fed was initially hoping the large repo auctions to dealers would encourage them to make steadier markets. Low dealer take-up of repo got the Fed moving to outright purchases of at least $700 billion in treasury and agency securities (with few exceptions, the Fed is legally not allowed to purchase private credit assets). Note that the Fed’s goal here is to stabilize market pricing conditions (dealer of last resort), not merely increasing bank reserves, which given the scale of purchases, are once again on a path to super-abundance.

To the distressed hedge funds, these market purchases might come as a lifeline. If the relative value trades are coming under pressure due to slower appreciation of treasuries (slower than the futures leg, that is), Fed purchases in the cash market could bring more rapid appreciation. The hedge funds were profiting by assuming liquidity risk, and Fed actions are intended to make this liquidity risk disappear. It might work, it might not. It remains to be seen.
All of this goes to the technical question of how the Fed might support (or is already supporting, wittingly, or unwittingly) sponsored repo. The broader question, of course, is whether the Fed should offer such support in the first place. To ask this question is already to acknowledge the decline of the post-crisis order. If sponsored repo is the regulatory work-around it appears to be, its growth would compromise the immunity system that the post-crisis order was so desperately trying to boost. Repo in the time of corona is a wakeup call for regulators: the public’s financial health should come first.

[1] FRBNY’s triparty repo statistics only begin in 2010. The $5 trillion figure is my back-of-the-envelope calculation based on the primary dealer survey. It aggregates “securities out” figures for Jan. 2007, and discounts it somewhat to account for haircuts. Working with repo statistics presents challenges that are beyond our current scope.

The Constitution and the Fed after the COVID-19 Crisis

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The COVID-19 financial response brought a seismic shift in the allocation of authority between Congress, the Treasury, and the Federal Reserve. Between them, those power centers provide the public structure for the material economy.
Congress claims the “power of the purse” or the authority to appropriate public funds; the Treasury holds responsibility over the spending and taxing that puts those orders into effect; and the Federal Reserve literally makes the money we use by creating the dollar reserves that anchor our sovereign money supply. So when events re-order the relationship between Congress, the Treasury, and the Federal Reserve, the change goes to the heart of our economy as well as our constitutional system.

We understand that emergencies call for action early and explanations later. But the Financial Crisis of 2008 realigned the triangle of authorities we identify above in lasting ways. The COVID-19 Crisis looks to have restructured (collapsed?) that triangle altogether. To date, the federal government’s responses displace the authority of Congress for discretion held by the Treasury. They load the Fed with an enormous amount of ammunition that will determine who wins (large corporations? indebted fossil fuel companies?), and who loses (minority businesses and lenders? low income tenants? educational institutions?). They operate through a financial infrastructure that is inaccessible to many Americans and opaque to virtually all others.

So even as emergency operations continue, it’s time to start taking stock. We focus here on a series of lending facilities at the center of the government’s COVID-19 response. Established by the Fed, these facilities are anticipated to lend $4.5 trillion over the coming months (see below). The Treasury’s expanded powers lie in the key role that Treasury guarantees play in determining the lending that will be done by these new facilities. We do not know how the Treasury selects assets and industries to guarantee, how it sets terms for the guarantees, or who is in the room as those terms are hammered out. Surely the Fed and the Treasury are working together but where, then, is the Fed’s independence? And where is Congress as the details of an amount – $4.5 trillion
– as large as the federal budget in 2019 – are being determined?

1. The Constitution and Traditional Lender of Last Resort

First, let’s return to basics. Why does the Federal Reserve wield such enormous authority to dispense credit in money and how is that power supposed to be channeled? How is that authority consistent with the separation of powers that should leave critical appropriation responsibilities with Congress? And how do the COVID lending facilities square with the fact that the Fed is supposed to operate within safeguards that give it political independence from the Treasury?

Congress established the Federal Reserve to support the nation’s banking system. By the early 20th century, Congress had endorsed commercial banks as the vehicle for amplifying sovereign base money: banks could make credit, denominated in dollars, available when they lent. The idea, argued in iconic form by Walter Bagehot, was that those lenders could make the best substantive decisions about how to allocate credit; acting with local knowledge, they could judge which borrowers were most likely to be productive.[1] But a decentralized network of banks was also fragile. Banks operate by giving out long-term loans in the form of deposits that can be used at any time – “maturity transformation” in the jargon. Bank panics, where depositors withdraw funds en masse, can destroy banks even if they have only good loans on their books.

In response, Congress designed the Fed as a “lender of last resort.” The central bank was supposed to extend a life-line to banks to get them through a liquidity crunch so that they could continue as fundamentally solvent institutions. The Fed can do this because, unlike any other public or private actor, its balance sheet is unconstrained. While other actors must borrow, the Fed has the legal power to issue money: it makes the cash value of the longer-term loans held by stressed lenders immediately available in dollars that the government
recognizes as its own liability to those lenders so that they can ride out a panic. See Secs. 10B and 13(3) of the Federal Reserve Act, 12 U.S. C. 347(b); 12 U.S.C. 343. Note that the Fed’s capacity means that it is, effectively, creating money — a capacity that could threaten Congress’s power over appropriations.

Given its enormous power, the Fed was controversial from the start. Traditionally, Congress has jealously guarded its power over the purse, including its authority to create sovereign money. That authority to spend public resources lies at the root of our democracy. In fact, the claim by young colonial legislatures that they had the authority to tax and spend was the matter that split Americans from British rule in the eighteenth century.[2] Fast forward to the early twentieth century: we can see how the Fed’s design as a fallback lender for banks was essential to its political acceptance. The Fed was understood merely as a backstop for banks making the real decisions, as opposed to a source of funds that would compete with Congress.

Consistent with that theory, lender of last resort operations typically extend only to supporting solvent commercial banks. We emphasize that legally, those operations traditionally involve lending, not purchases. As long as the banks are solvent, any losses on bank loans would accrue to the borrowing bank and its investors, not to the Fed. Insofar as those Fed lending operations aim to protect the credit system from contagions of panic, as opposed to changing the character and destinations of private lending, they can be understood as instrumental support to the network of private banks. We’ll come back to the oddity of this narrative as an account of the Fed’s authority, but take its logic seriously here for the purpose of exposing recent changes.

2. The Constitution and Traditional Monetary Policy

Central banking posed a second challenge to constitutional
Following European models, Congress gave the Fed authority to purchase assets directly, rather than merely lend. (See Section 14 of the Federal Reserve Act, 12 U.S.C. 353-359.) That authority allowed the Fed to conduct open market operations; over the course of the twentieth century, that activity became an essential tool in monetary policy over interest rates. But Section 14 authority also threatens congressional sovereignty over spending. For one, it clearly creates money: the Fed buys assets by crediting a seller with an increase in dollar credit. (Technically, this is done by crediting the seller’s bank account at the Fed with newly created reserves). Moreover, purchasing assets obviously intervenes into the market for those assets, changing their supply and, in turn, affecting asset prices.[3]

Here, a series of safeguards, both conceptual and legal, have long kept the Fed’s purchasing power from breaking the surface of constitutional concern. Again, they operate to categorize the Fed’s purchasing authority as a stabilizing tool.

On the conceptual side, Americans adopted approaches to central banking that cast purchasing operations as simply supporting a healthy market for credit. As opposed to “picking winners and losers,” that activity was seen as loosening or tightening credit conditions in general. In fact, the Fed seemed to control those conditions with modest asset purchases that, by successfully affecting the price of credit, spread economy-wide.

For good measure, Section 14 limited Fed discretion by specifying the assets eligible for purchase, primarily U.S. treasuries, and obligations “fully guaranteed by the United States as to the principal and interest.” In the case of purchases, as opposed to loans, the Fed directly bears the risk of profit or loss. In the absence of the private filter, Fed purchases seem an awful lot like spending decisions, and those should reside in Congress. By restricting Fed purchases (mainly) to assets already fully backed by the U.S., Congress
can be understood as preserving its power of the purse: such obligations have already been vetted by Congress.[4]

The same reasoning – understanding the Fed’s work as reactive and constrained – went some distance towards distinguishing its responsibilities and role from those of the Treasury department. The economic imagination emptied “monetary policy,” rightly pursued, of political content compared to fiscal policy on spending. Here, limits on the President’s removal power over the governors and Reserve Bank presidents kick in.[5] That constraint arguably liberates the Fed to hold its own course without bowing to political demands for monetary stimulus, a concern conventionally captured by the notion that the Fed should operate independently. We note here that this traditional conception of central bank independence fails to capture important external influences to which the Fed is subject, including cooperation with Treasury in wartime, sensitivity to Congressional pressures during recessions, as well as accommodation of private banks in monetary policy implementation.[6] These pressures notwithstanding, the division of labor between fiscal and monetary policy has long oriented expectations and argument about who was wielding power and how they did so.

3. The Constitution and the 2008 Crisis

The 2008 crisis brought about significant changes in lender of last resort and monetary policy alike. From the constitutional perspective we sketched above, those 2008 changes – changes that seemed so transformative in their time—now appear subtle in comparison to the COVID-19 response.

First, the Fed expanded its lender of last resort support from commercial banks to “shadow banks” under its emergency Section 13(3) authority.[7] That expansion was arguably consistent with the traditional ways of distinguishing Fed lending of last resort from congressional spending. Specifically, 2008 Fed lending was still limited to entities that created liquid
forms of credit to end-borrowers. Notable exceptions aside,[8] the supported shadow banks were, by and large, considered solvent, so the notion of a “private filter” over credit decisions remained.[9] What is more, those shadow banks suffered from run-like dynamics that could destroy the money supply and cripple the economy. So, while the recipients of support were new in ways that triggered various anxieties, the constitutional modes of legitimacy actually remained comfortably familiar.

Second, the Fed innovated in making monetary policy. Traditionally, the Fed had used its ability to control short-term borrowing costs between banks — the “fed funds rate” — to influence a range of longer-term borrowing costs in the economy, and ultimately, overall economic conditions (employment, price level, growth). With interest rates already at the zero bound and the financial sector in disarray, Bernanke and Yellen discovered that the Fed’s ability to “transmit” monetary policy through the Fed funds rate had run down. Enter Quantitative Easing, the Fed’s Section 14 attempt to shape long-term borrowing costs more directly given economic conditions. Gone were the smallish purchases to control the fed funds rate. In their stead, the Fed purchased two trillion in long-term treasuries and agency mortgage-backed securities (MBS) to reduce their supply, thereby lowering the yield investors demanded to hold them. In turn, lower yields on these public safe-assets would help reduce rates on long-term private borrowing.

Radical as that seemed at the time, note again the continuity with traditional modes of constitutional legitimacy. Despite its enormous size, QE was carried out through Section 14, using assets that were already backed by the U.S. in ways vetted by Congress or, in the case of agency MBS, that had a tenable claim to that status.[10] Limiting QE to these assets meant minimizing potential encroachment on the power of the purse.
4. The Constitution and COVID-19 Liquidity Facilities

The Fed’s response to the COVID-19 crisis breaches traditional modes of constitutional legitimacy which, miraculously, survived the 2008 vintage. Following that precedent, the Fed in March 2020 began by authorizing emergency lending to shadow banks under 13(3) (e.g., here, and here), and launching a new QE in treasuries and agency MBS. But by month’s end, these once extraordinary measures seemed woefully inadequate to the distressed COVID-19 economy. Enter the Fed’s new COVID-19 liquidity facilities, first announced on March 23, following the initial congressional impasse, and expanded in various ways since. Those facilities subvert the traditional modes of constitutional legitimacy in a number of ways.

First, the Fed’s facilities are offering support not to credit providers but to the end-borrowers: corporations, local and state government, consumers etc. These recipients are not in the business of maturity transformation and are not vulnerable to runs. Here, recall that its use to support private credit allocation and to prevent runs was the condition that distinguished central bank money creation from Congressional spending. With COVID-19, this limitation is gone.

Second, setting some nuance aside, the COVID-19 facilities are structured in ways that leave each facility directly exposed to the credit risk of end-borrowers (corporations, local and state government, consumers). That risk further undermines the appearance that real decisions over credit, like a private filter, stay with private lenders. COVID-19 facilities engage in a kind of credit distribution that makes it impossible to ignore that public authority is “picking winners and losers.” That sounds a lot like power of the purse.

Third, while the COVID-19 facilities are stylized as doing Section 13(3) loans of last resort, those facilities’ direct exposure to borrowers makes us wonder whether they are really making “purchases” regulated by Section 14 – a mashup that
breaks new statutory ground as a kind of “Section 14(3).” In some facilities, like the Secondary Market Corporate Facility, the facility will literally purchase corporate bonds in the open market. In other facilities, the transactional structures are more complex, but the result is similar (again, leaving some nuance aside[11]). That is, the goal of the facilities is reminiscent of QE, and, at an anticipated $4.5 trillion, they are certainly QE sized. Here at the COVID-19 vanguard, lender of last resort support and monetary policy are blending in to the point they are indistinguishable.

Recognizing that the new facilities are making de facto purchases also exposes that they are reaching far beyond the assets eligible for purchase under Section 14, primarily treasuries and debt fully guaranteed by the U.S. With minor exceptions, the corporate, local and state government, and consumer debt purchased by the Fed is clearly not Section 14-eligible. Fed officials are likely aware of this: the transactional structures they chose seem like a kind of regulatory arbitrage, one that dresses-up Section 14 purchases as Section 13(3) loans. The Fed can, for example, set up a special purpose vehicle (SPV), lend to that SPV, and have the SPV purchase a corporate bond. That may or may not comply with the statutory terms in some superficial sense, but it leaves the deeper constitutional legitimacy of the facilities just as vulnerable. In the 2010s QE, Section 14’s requirement that assets eligible for purchase be guaranteed by the U.S. worked to maintain ultimate vetting with Congress. Clearly, this no longer holds.

Finally, the Fed’s lending facilities appear to depend on political direction from the Treasury. This development follows from the requirements in Section 13(3), added by Dodd-Frank, that the Fed receive “the prior approval of the Secretary of the Treasury” before establishing a lending facility, and even more crucially, that “security for emergency loans is sufficient to protect taxpayers from
losses.” With the Fed providing direct support to end-borrowers in the distressed COVID-19 economy, the no-loss requirement becomes a tall-order. Traditional lender of last resort meant a private capital buffer between the Fed and the end-borrower. That buffer is now gone, and the Treasury has stepped into its place through use of its Exchange Stabilization Fund (ESF), first established during the Depression to stabilize the dollar as the U.S. abandoned the gold standard. The legalities of the ESF raise their own questions, which are beyond our scope here.[12]

Use of the ESF began with a deceptively small amount – $50 billion in March 2020.[13] If one assumes anticipated losses of ~10% of lending, $50 billion in loss guarantees can support Fed lending to the tune of $500 billion. No small change, but nowhere near the size required. So as part of the CARES Act (passed March 27), Treasury requested from Congress – and received – an appropriation for $450 billion to the ESF. Now, with this additional $450 billion, the Treasury can support $4.5 trillion (10X) in Fed lending.[14] That is, with a relatively small appropriation of $450 billion, the Treasury and the Fed get to determine whether and how to use an additional $4.5 trillion, including the amount added by Congress to the ESF and the lending done when that amount is used as loss protection.

5. Closing Thoughts: The Constitution and Monetary Reform

We are left to ask how innovations in the Fed’s lending and purchasing authorities fit with the constitutional framework we had come to assume. In particular, do they preserve the appropriations authority to Congress? And is there a coherent division of responsibilities between the Treasury and the Fed, one that renders presidential powers transparent and justifies the Fed’s relative insulation from popular accountability?

We fear that Congress has basically delegated the power of the purse to the Treasury. Treasury’s discretion over the
character of the new lending facilities is extremely broad and the oversight mechanisms correspondingly weak. This arrangement marks a fundamental reorientation in the relationship between the legislative and executive branch.

Recall that Congress initially deputized the Fed, not the Treasury, to engage in money creation, according to a theory that came to distinguish its rescue and policy roles as stabilizing operations. Contrast the situation today: the Fed now uses its enormous authority to create money according to the Treasury’s judgment about how to save the economy.

The arrangement marks an equally important reorientation in the relationship between the Treasury and the central bank. The Federal Reserve and the Treasury are, between themselves, determining what sectors to support and, as importantly, how to support them — under what conditions, with what distribution of costs and risks, and through what kind of process. Despite their crucial nature, we have no idea how the conditions defined by the “term sheets” are determined or by whom.[15]

We are also concerned that the arrangement obscures the exercise of power by the Treasury, while misusing the notion that a central bank should have independence. The latter is an organizing principle of modern central banking, intended to insulate the power of money creation from improper manipulation for short-term electoral gain. What we’re seeing now is a kind of backward use of central bank independence. On the one hand, the Fed, which is timid to make loans that can result in losses, is taking cover in loan guarantees from the politically accountable Treasury. On the other hand, the Treasury, which is effectively controlling $4.5 trillion in Fed lending (based on the original ESF amount, expanded by the CARES Act appropriation), is taking cover in the notion that lending is administered by the Fed, a neutral institution, based on Fed expertise, rather than political influence. In this way, the Treasury gets to avoid the very same political
accountability that the Fed cites as justification for its risk taking.

What is to be done? For starters, we believe it would be far better if Congress itself allocates the risk capital among Fed programs, and takes true accountability for its decisions. But that injunction may well have been mooted by events: the pandemic requires fast action and collaborative decision-making. Congress does not seem capable of either. This raises the possibility of more structural reform.

The narrative that located the Fed as simply backstopping private initiative and stabilizing the wider economy has always been a fiction. Most dangerously, it arrested an intense American debate about how we should make and allocate credit in money – public or partly public banks?[16] federal provision of credit to farmers or homeowners?[17] money directly issued outside of banks? postal banking? It romanticized as local lenders those that would consolidate into financial behemoths. And it ordained the investor instruments, modes of profit, and particular markets that would be supported.

Our point here is not that the COVID-19 response represents a fall from grace, from a time when central banks kept to their proper and humble role. Our point is that COVID-19 makes impossible to ignore what we argue has always been the case: money creation is inherently political and greater democratic input is required into its large distributive outcomes.

If we want to understand the distributive impact of these huge lending facilities, we need to analyze the way Fed credit flows, the targets it supports, as well as the communities it leaves behind. At broadest level, Fed facilities appear to privilege lending to corporations, as well as to those established businesses and consumers fortunate enough to enjoy access to mainstream financial services.
Communities of color – where centuries of discriminatory policies made such access painfully lacking – once again appear to be left out. According to Fed data, black families are 3.5 times more likely to be unbanked than white families (14% and 4% respectively). A staggering 35% of black families is underbanked, as compared to 11% of white families. Credit denial rates for black families are substantial (59% and 41% for families earning less than $40,000 and $40,000-$100,000 respectively) and double the size of their white counterparts. These black communities, that are so much less likely to benefit from the Fed’s facilities are also those hardest hit by COVID-19, in terms of public health and economic distress alike. As lawyers, we believe it is important to scrutinize the civil rights implications of government channeling of emergency lending through channels that inherently disfavor minorities.

Minority, and other vulnerable communities, will also suffer disproportionately from the emerging crisis in municipal finance, and the disruption in essential social services it will bring. While we welcome the Fed’s Municipal Liquidity Facility, the amounts committed remain woefully inadequate (only 20% of 2019 revenues). We are struck by the ways in which term sheets provide credit to different actors – e.g., municipalities and corporations – on widely different terms, without apparent justifications. Here at JustMoney.org, we plan to continue analysis into the distributive outcomes of Fed COVID-19 lending in a number of ways. We will update this spotlight as we do so.

Twice in two decades, shocks have destabilized our financial and economic system with such violence that the Fed’s action, directed in convoluted ways by the Treasury and questionable in terms of constitutionality, became necessary. There could be no more clear demonstration that we need to restructure our financial architecture. Neither the crises, nor their distributive effects, nor the way their remedy eludes...
accountability, are sustainable in a democratic society.


[3] Traditional monetary policy was carried through a combination of outright purchases, and repurchase agreements with primary dealers, which are purchases in name, but secured loans in essence. Both types of operations shape asset prices, though the effects of the former method (outright purchases) are generally considered greater. The COVID-19 developments we discuss below are generally similar to outright purchases.

[4] Contrast this with collateral the Fed accepts as a lender of last resort to commercial banks under Sec. 10B, which is extremely broad. Why this difference you ask? Recall that when the Fed lends to a commercial bank, that bank’s capital protects the Fed from losses. Outright purchases involve no such capital.


[7] In a nutshell, shadow banks are institutions that issue money-like liabilities to fund holdings of securities. While these money-like liabilities are subject to run risk similarly to commercial banks, shadow banks lack a bank charter, and do not enjoy deposit insurance, nor access to Fed lending of last resort under ordinary Section 10B. authority.

[8] One such interesting exception is the Fed’s facilitation of the Bear Stearns-JPMC merger through a special purpose vehicle known as Maiden Lane LLC (more on Fed SPVs below). Maiden Lane did not merely lend to Bear, but purchased $30 billion of its assets. JPMC apparently found these assets too risky to assume in the merger, and was only willing to extend a small amount of loss protection ($1 billion, or 3%) to the Fed. This arrangement violated norms around lender of last resort, and was part of the impetus for Dodd-Frank amendments of Section 13(3). A full decade later, the Maiden Lane portfolio was liquidated at a small profit.

[9] It is telling that when the government contemplated purchasing bank assets—a plan later turned into recapitalization of banks by the Paulson Treasury—the plan was not carried through Federal Reserve lender of last resort authority. The so-called Troubled Assets Relief Program (TARP) was subject to direct congressional appropriation in the Emergency Economic Stabilization Act of 2008.
The legal basis for Fed purchases of agency MBS raises important questions. Fannie Mae and Freddie Mac—the GSEs issuing the agency MBS—entered government (FHFA) conservatorship in Sept. 2008. The legal framework for conservatorship is complex and includes the Housing and Economic Recovery Act of 2008 and a series of Senior Preferred Stock Purchase Agreements. While various forms of support were extended to the GSEs, as far as we know, the government never provided permanent blanket guarantees of their liabilities. This raises the possibility that Fed lawyers were (and still are) willing to interpret Section 14 in ways that appear to go beyond the text. See 12 U.S.C. 355.

The nuance comes in two flavors, light and medium. An example of nuance light is the Mainstreet Loan Lending Program, which requires financial institutions to retain relatively small participations (5%-15%) in the business loans they are essentially selling to the Fed. An example of nuance medium is the Term Asset-Backed Securities Facility (TALF), which provides non-recourse loans, but requires haircuts of 5%-22%. This arrangement essentially operates as a Fed purchase, with the haircut amount acting as limited loss protection to the Fed (In effect, this works similarly to Maiden Lane, discussed in note 8, an arrangement that even in 2008 pushed the envelope of legality).

The Gold Reserve Act (31 U.S. Code § 5302) allows the Secretary of the Treasury, with the approval of the President, to “deal in gold, foreign exchange and other instruments of credit and securities the Secretary considers necessary.” In 2008, the Treasury controversially used this authority to guarantee the money market fund industry. Congress was upset, and attempted to prevent the recurrence of such guarantees for the money fund industry. That didn’t help much. The provision of $10 billion in ESF loss protection to the Fed’s Money Market Mutual Fund Facility (MMLF) in March 2020 has a similar effect to the 2008 guarantees.
[13] By our tally: $10 billion equity investment in the Commercial Paper Funding Facility (March 17), $10 billion in loss protection to the Money Market Mutual Fund Liquidity facility (March 18; note this facility is of a more “traditional” 2008 variety); and then, in the March 23 announcement, $10 billion in loss protection to each of the following: the Primary Market Corporate Credit Facility, the Secondary Market Corporate Facility, and the Term Asset-Backed Securities Loan Facility. These amounts were increased to about $200 billion subsequent to the passage of the CARES Act on March 27. Note that prior to the CARES Act, the ESF had only $40 billion in equity. Depending on the size of losses anticipated on the $50 billion in loss protection, the ESF may have been technically insolvent during that initial period.

[14] The approximate 10-to-1 ratio has been assumed in various Fed and Treasury statements. See, e.g., Chair Powell’s congressional testimony on May 19, 2020 (here at 1:11:50).

[15] An aside here: It’s not clear whether the Treasury’s determination to provide loss protection to Fed facilities neutralizes the legislative requirement that the Fed take “security for emergency loans …sufficient to protect taxpayers from losses.” Section 13(3), 12 U.S.C. 343. The CARES Act provides in Section 4003(c)(3)(B) that “For the avoidance of doubt, any applicable requirements under section 13(3) of the Federal Reserve Act (12 U.S.C. 343(3)), including requirements relating to loan collateralization, taxpayer protection, and borrower solvency, shall apply with respect to any program or facility described in subsection (b)(4) [Treasury supported facilities].” On the other hand, Congress’s grant to Treasury of authority to provide loss protection suggests that the legislature may consider that lending facility losses up to that ceiling do not violate the Section 13(3) prohibition.

In that sense, Congress may be creating a caveat to the normal operation of Section 13(3). In accord with that reading, neither legislators nor Treasury department officials
seem focused on the constraint imposed by the provision. Rather, legislators in the first oversight hearing pressured Fed Chair Powell and Treasury Secretary Mnuchin to take more, not less, risk.

We flag and set aside language in the CARES Act, Sec. 4020,(b)(2), to the effect that the Oversight Committee should determine whether the Fed/Treasury activities were effective in “minimizing long-term costs to the taxpayers and maximizing the benefits for taxpayers.” In our view, the fact that this language concerns congressional oversight indicates that it does not alter the substantive responsibilities of the Fed under Section 13(3).

The bottom line in our view: the tension between the dictates of Section 13(3) and those of the CARES Act add to our argument that the current solution exposes the fragility and inadequacy of the current architecture.


Public Purpose Finance: The
This Article explores the workings of Public Purpose Finance, and its role within the U.S. political economy. “Public Purpose Finance” (PPF) refers to the broad range of institutions through which the government extends credit to private borrowers in sectors like housing, education, agriculture and small business. At a total of $10 trillion, PPF roughly equals the entire U.S. corporate bond market, and is around one half of the U.S. Gross national debt (2018 figures). The Article begins by surveying and quantifying the scope of PPF. It then demonstrates that PPF enjoys a considerable degree of insulation from the federal budgetary process. The heart of the Article is an attempt to explain the political logic behind the off-budget treatment that PPF enjoys. In a nutshell, while ordinary budget spending is ultimately funded through taxes levied across the tax base, government lending is funded through loan repayment by the borrowers themselves (A model formalizing these claims is available in the Appendix). This off-budget treatment makes PPF a powerful tool for upward mobility, but it also creates a democratic deficit, and has long been a driver of racial inequality. A key theme of the Article is the need to maintain the off-budget treatment, while developing alternative modes of political participation. Government lending, like the budget, should become a key tool for society to formulate its economic agenda.
Primer on the CARES Act SBA Payment Protection Loan Program

Authors: Lydia J. Hwang and Nadav Orian Peer

This primer provides a user-friendly, step-by-step explanation of the Paycheck Protection Loan Program enacted last week as part of the CARES Act (Mar. 27, 2020). This $350 billion program will provide small businesses, the self-employed and non-profits with resources to weather the coming two months. As explained in the Primer, loans under the program are intended to be forgiven, such that they essentially operate as grants (no repayment required).

You can access a .pdf of the primer here.
Financial Aspects of the COVID Crisis was a community teach-in in CU Law, held online on March 24, 2020. The teach-in includes presentations by Erik Gerding and Nadav Orian Peer, followed by a discussion with viewers. The main topics addressed were:

- The macroeconomic toolkit, and the unique challenges presented by COVID;
- The Federal Reserve’s emergency support of the financial sector, and its historic expansion to businesses, firms and municipalities;
- The unprecedented relief package (which just passed today, March 27);
- Cashflow disruptions, and legal issues around forbearance, contracts, and bankruptcy law;
- Issues to address when the dust settles: in financial regulation, and in the social safety net.

You can find the full video of the teach-in here: https://www.youtube.com/watch?v=q2h0e9Qr-BE
Orian Peer, Nadav

Nadav Orian Peer (profile)

- Public Purpose Finance (Fall 2018) Syllabus (pdf)
- Financial Institutions (Spring 2019) Syllabus (pdf)

Nadav Orian Peer, Co-Editor

Nadav Orian Peer is an associate professor at the University of Colorado Law School. His scholarship and teaching focus on the law of financial institutions, including banking, capital markets, derivatives and community reinvestment.

Orian Peer’s research explores the intense framework of governance and regulation that undergirds the day-to-day functioning of financial markets. The design and operation of this framework has profound implications for the distribution of credit and economic opportunity in society. His recent articles include Negotiating the Lender-of-Last-Resort: The 1913 Fed Act as a Debate Over Credit Distribution (15 NYU
Journal of Law & Business, 2019) and Your Grandfather’s Shadow Banking: Clearing and Call Loans in Gilded Age New York, forthcoming in Inside Money: Re-Theorizing Liquidity (Christine Desan ed.). Orian Peer’s current research focuses on policy proposals to increase access to credit for important social goals like fair housing, and climate mitigation efforts.

Before joining Colorado Law, Orian Peer worked as a visiting assistant professor in Tulane Law School, as well as a business economist at the Federal Reserve Bank of Chicago (Financial Markets Group). He completed an S.J.D. at Harvard Law School, where he taught as a Byse Fellow. As a member of the Israel Bar Association, he also practiced commercial litigation, specializing in bankruptcy and secured transactions.

MDM 2018- Wrapping Up

We conclude with brief comments from participants on a small number of core questions, including (1) what themes emerged most powerfully across the conference sessions, and (2) what steps can we take to ensure that this conversation continues in ways that support future work?

Nadav Orian Peer – Tulane Law School
Patricia McCoy – Boston College Law School
Saule Omarova – Cornell Law School
Iain Frame – Kent Law School
Thank you – Christine Desan