

RESPONSE

Radicalism and Democracy in Monetary System Reform

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I.	MONEY CREATION.....	61
A.	<i>The NIA and NDW</i>	62
B.	<i>OMO Plus</i>	64
C.	<i>Helicopter drops</i>	65
II.	STABILITY AND BUBBLES	71
III.	SEIGNIORAGE.....	74
IV.	DEMOCRATIZING MONEY.....	76
A.	<i>Inequality and the desirability of Fed independence</i>	77
B.	<i>The People’s Ledger and the fragility of Fed independence</i>	81
C.	<i>Other implications</i>	84
	CONCLUSION.....	86

In the waning decades of the twentieth century, there was broad academic and policy agreement on how the U.S. monetary system worked and on the appropriate role of the Federal Reserve (“Fed”) in making it work. Money was created and injected into the economy in two principal ways: (1) the Fed would buy U.S. Treasury securities and, in the process, credit the sellers’ bank account with new dollars;¹ and

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1. *Large Scale Asset Purchases*, FED. RESERVE BANK OF N.Y., <https://www.newyorkfed.org/markets/programs-archive/large-scale-asset-purchases> (last visited Oct. 11, 2021) [<https://perma.cc/XJ96-4NAA>] (“Outright purchases or sales of Treasury securities were used historically as a tool to manage the supply of bank reserves to maintain conditions consistent with the federal funds target rate set by the FOMC.”). While Treasuries were the primary asset the Fed bought and sold, it would also routinely transact in “federal agency

(2) private banks would lend to private borrowers, similarly crediting the borrowers' accounts with new dollars.² Most of this bank-created money was, thanks to federal deposit insurance, nondefaultable, effectively enjoying the “full and faith and credit” of the federal government.³ While the Fed faced no theoretical limit on its ability to create dollars, private banks were constrained, inter alia, by “reserve” requirements—the need to maintain a percentage of deposit account liabilities in the form of either vault cash or their own reserve account with the Federal Reserve.⁴ But in each case, dollars were created *ex nihilo*; neither the Fed nor the private banks were lending or spending already-created dollars, as other lenders and purchasers must do, but rather creating them with a keystroke by crediting the accounts of their counterparty borrowers or sellers.

The Federal Reserve controlled price levels and the supply of money with targeted sales and purchases of Treasuries through so-called “open market operations.”⁵ These purchases or sales would augment or diminish the supply of bank reserves in the system, which, due to reserve requirements, augmented or diminished banks' ability to create (more) money.⁶ In implementing open market operations, the Fed would target the “fed funds” rate: that is, the overnight rate that banks would charge each other in the interbank lending market.⁷ By adding to or subtracting from the reserves in the system, the Fed would affect supply and demand in this market, thereby shifting the fed funds

securities,” including securities issued by government-sponsored enterprises such as Fannie Mae. See, e.g., Cheryl L. Edwards, *Open Market Operations in the 1990s*, 83 FED. RESERVE BULLETIN 859, 859 (1997) (“[P]urchases and sales of U.S. Treasury and federal agency securities largely determine the federal funds rate.”). And as part of its broader operations, it acquired other assets in limited quantities, such as gold certificates, IMF special drawing rights, foreign currencies, and discount window loans. See Saule T. Omarova, *The People's Ledger: How to Democratize Money and Finance the Economy*, 74 VAND. L. REV. 1231, 1244 (2021).

2. Frances Coppola, *How Bank Lending Really Creates Money, and Why The Magic Money Tree Is Not Cost Free*, FORBES (Oct. 31, 2017), <https://www.forbes.com/sites/francescoppola/2017/10/31/how-bank-lending-really-creates-money-and-why-the-magic-money-tree-is-not-cost-free/?sh=25df5ec83073> [https://perma.cc/2ZEF-KEGK] (“Money is created when banks lend.”).

3. See generally *A Brief History of Deposit Insurance in the United States*, FED. DEPOSIT INS. CORP. (Sept. 1998), <https://www.fdic.gov/bank/historical/brief/brhist.pdf> [https://perma.cc/4U92-8EGC].

4. See, e.g., Edwards, *supra* note 1, at 860. Note that in the throes of the market disruptions caused by the onset of the COVID-19 pandemic in March 2020, the Fed, concerned that banks wouldn't be making *enough* loans, set the reserve requirement at zero. See *Reserve Requirements*, BD. OF GOVERNORS OF THE FED. RESERVE SYS., <https://www.federalreserve.gov/monetarypolicy/reservereq.htm> (last visited Oct. 11, 2021) [https://perma.cc/4HRX-E3KZ] (“As announced on March 15, 2020, the Board reduced reserve requirement ratios to zero percent effective March 26, 2020.”).

5. See, e.g., Edwards, *supra* note 1.

6. See Morgan Ricks, *Money as Infrastructure*, 3 COLUM. BUS. L. REV. 757, 772–86 (2018).

7. *Id.*

rate up or down as the economic outlook demanded—and this shift in interest rate would then seep into the wider economy.⁸ Because excess reserves were relatively scarce in this system, the Fed could affect the fed funds rate with open market operations that were quite modest relative to the overall size of the market or of its own balance sheet.⁹

Furthermore, the Fed was “independent,” and this was seen as a good thing: direct political control of money would, it was thought, inexorably lead to inflation.¹⁰ As economic historian Adam Tooze writes,

As the idea emerged in the 20th century, central bank independence meant above all freedom from direction by the short-term concerns of politicians. Instead, central bankers would be allowed to set monetary policy as they saw fit, usually with a view not only to bringing down inflation but to permanently installing a regime of confidence in monetary stability—what economists call anchoring price expectations.¹¹

In this model, the Fed was a countermajoritarian institution. The model “rested on a series of assumptions about the economy (there was a trade-off between inflation and unemployment), global financial markets (they had the power to punish), politics (overspending was the preferred vote-getting strategy), and society at large (there were substantial social forces pushing for high employment regardless of inflation).”¹²

While far from perfect,¹³ this system had its virtues.¹⁴ The world has changed profoundly, however, and this model fails to capture key

8. *Id.*

9. *Id.*

10. Adam Tooze, *The Death of the Central Bank Myth*, FOREIGN POL’Y (May 13, 2020), <https://foreignpolicy.com/2020/05/13/european-central-bank-myth-monetary-policy-german-court-ruling/> [<https://perma.cc/G6JB-VQ3T>] (“The [central] bank was to act as a countermajoritarian institution. It was charged with doing whatever it took to achieve just one objective: hold inflation low. Giving the central bank a quasi-constitutional position would deter reckless politicians from attempting expansive policies.”).

11. *Id.*

12. *Id.*

13. A primary flaw was that certain geographic regions and demographic groups were—as they remain today—underserved by the banking system. *See, e.g.*, Christine Desan, *How to Spend a Trillion Dollars* (2021) (on file with author) (“The fact that certain regions and income groups are starved of bank credit argues against the adequacy of the system” and “[a] ‘substantial literature’ documents that banks disfavor financing for minority-owned firms (along with small businesses and women-owned businesses).”); *see also* FED. DEPOSIT INS. CORP., 2017 FDIC NATIONAL SURVEY OF UNBANKED AND UNDERBANKED HOUSEHOLDS 1 (2017), <https://www.fdic.gov/householdsurvey/2017/2017report.pdf> [<https://perma.cc/TC24-P359>] (“Approximately 8.4 million U.S. households, made up of 14.1 million adults and 6.4 million children, were unbanked in 2017.”).

14. For good accounts of some of the virtues of this system, see MORGAN RICKS, *THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION* 149–53 (2016) (providing a theoretical account of why Fed purchase of government securities combined with loans extended by heavily regulated private banks was superior to a number of other alternatives); GARY B. GORTON, *SLAPPED BY THE*

features of the way money now works in the United States, as well as of the roles and functions the Fed has assumed in recent years.

The most important change has been in the ways dollars are created and injected into the economy. First, in the period leading up to the global financial crisis (“GFC”) of 2008, financial institutions that did not have bank charters and were not legally permitted to issue deposits¹⁵ nevertheless issued vast quantities of close functional substitutes for deposits, including instruments such as money market fund shares, repurchase agreements, and commercial paper.¹⁶ These instruments served as money for their claimants, just as the money in my bank savings deposit account is money for me.¹⁷ This was the so-called “shadow banking system,” and these were the instruments most directly implicated in the GFC, as well as in the COVID-19-related market disruptions of March 2020, as claimants panicked and tried to cash out of these deposit substitutes en masse.¹⁸

Second, in dealing with the GFC and its aftermath, the Fed no longer confined itself primarily to Treasuries in creating money: it began to buy and lend against large quantities of other financial assets.¹⁹ This trend only accelerated with the market disruptions at the

INVISIBLE HAND: THE PANIC OF 2007, at 54 (2010) (describing the period described by this model as a panic-free “Quiet Period” in U.S. history).

15. 12 U.S.C. § 378(a)(2); *see also* 12 U.S.C. § 1813(l)(3) (defining “deposit” as, among other things, “money received or held by a bank” or as “*the credit given for money or its equivalent received or held by a bank*” (emphasis added)). Reference to the “issuance” of deposits reinforces the important but often overlooked fact that banks *create* money when they credit a borrower’s bank account in making a loan.

16. *See, e.g.*, John Crawford, *Lesson Unlearned? Regulatory Reform and Financial Stability in the Trump Administration*, 117 COLUM. L. REV. ONLINE 127, 134–35 (2017) (describing shadow banking and deposit substitutes).

17. Christine Desan provides a good explanation of how shadow banking instruments expand the money supply:

[T]he debt instruments at [shadow banking’s] core are legally engineered to produce liquidity. Note, first, how those instruments expand available liquidity. As for cash investors, they are holding contracts—the short-term, routinely renewed liabilities—that are almost as good as cash. After all, those contracts are “pay-on-demand” instruments, returning a contracted amount if not rolled over; those holding them appropriately book them as “cash equivalents.” As for the shadow banks, they have the borrowed cash and are using that cash at the same time. The cash and the cash-like credit (the overnight contract, for example) function together to expand the money supply *de facto*.

Christine Desan, *Money’s Design Elements: Debt, Liquidity, and the Pledge of Value from Medieval Coin to Modern ‘Repo’*, 38 BANKING L. & FIN. REV. (forthcoming 2022).

18. *See, e.g.*, Crawford, *supra* note 16, at 134–35 (describing the central role of shadow banks in the GFC); Rajdeep Sangupta & Fei Xue, *The Global Pandemic and Run on Shadow Banks*, FED. RESERVE BANK KAN. CITY: ECON. BULLETIN (May 11, 2020), <https://www.kansascityfed.org/research/economic-bulletin/global-pandemic-run-shadow-banks-2020/> [https://perma.cc/5Y4R-GWCW] (describing the run on deposit equivalents in March 2020).

19. *See, e.g.*, DAVIS POLK & WARDWELL LLP, FINANCIAL CRISIS MANUAL: A GUIDE TO THE LAWS, REGULATIONS AND CONTRACTS OF THE FINANCIAL CRISIS (2009) (describing the array of

start of the COVID-19 pandemic.²⁰ The expansion into other asset categories unavoidably draws the Fed into playing a more direct role not just in how much money there is, but in how it is allocated. Further, as the Fed bought or financed these assets, it injected unprecedented quantities of “base” money²¹ into the banking system, which was now awash in reserves. As a result, the Fed could no longer rely on the tool it had employed to modulate interest rates and the money supply—namely, modest open market operations to affect supply and demand in the fed funds market.²² It therefore turned to “directly administered” rates, paying interest on reserves to a privileged clientele—banks—permitted to maintain reserve accounts at the Fed, which would then set a floor on the fed funds rate.²³

A related major change is that central bank independence has taken on a new hue. In describing the extraordinary measures adopted not just by the Fed, but also by the Bank of Japan and the European Central Bank in response to crises of recent decades, Adam Tooze writes:

These efforts proved effective in delivering a measure of financial stability. They made central bankers into heroes. But they also fundamentally altered the meaning of independence. In the paradigm that emerged from the crises of the 1970s, independence meant restraint and respect for the boundaries of delegated authority. In the new era, it had more to do with independence of action and initiative. More often than not, it meant the central bank single-handedly saving the day.²⁴

immediate tools with which the Fed responded to the GFC, including unprecedented use of Section 13(3) of the Federal Reserve Act to lend to nonbank financial institutions); *Large-Scale Asset Purchases*, *supra* note 1 (describing the shift in the maturity and make-up of the Fed’s asset purchases during periods of quantitative easing); *Overnight Reverse Repurchase Agreement Facility*, BD. OF GOVERNORS OF THE FED. RESERVE SYS., <https://www.federalreserve.gov/monetarypolicy/overnight-reverse-repurchase-agreements.htm> (last visited November 11, 2021) [<https://perma.cc/88PK-6NUY>] (describing the program through which the Fed provides overnight secured loans to eligible financial institutions); Colleen Baker, *The Federal Reserve’s Use of International Swap Lines*, 55 ARIZ. L. REV. 603 (2013) (describing the Fed’s program to lend dollars to foreign central banks, structured as currency swaps).

20. See generally Lev Menand, *The Federal Reserve and the 2020 Economic and Financial Crisis*, 26 STAN. J.L. BUS. & FIN. 295 (2021) (describing the array of programs through which the Fed responded to the economic and financial disruptions caused by the COVID-19 pandemic).

21. Base money comprises physical currency and reserve accounts held at the Federal Reserve. See *Adjusted Monetary Base*, FED. RSRV. BANK OF ST. LOUIS, <https://www.stlouisfed.org/financial-crisis/data/adjusted-monetary-base> (last visited November 11, 2021) [<https://perma.cc/2FMA-6JB7>].

22. See Ricks, *supra* note 6, at 772–86.

23. *Id.* at 786–801. Note that for an extended period of time, to the surprise of almost everyone, the fed funds rate fell below interest on reserves. *Id.* (explaining how and why this anomaly arose).

24. Tooze, *supra* note 10.

Again, the Fed's role became, in fact if not in popular understanding, more directly political.²⁵

As a partial response to this changing landscape, some scholars and policy thinkers (including this author) have in recent years proposed democratizing the Federal Reserve's balance sheet by allowing all American citizens and businesses to bank directly with the Fed, providing them with so-called "FedAccounts."²⁶ It is argued that this would, inter alia, promote inclusion by providing basic banking services to the unbanked and underbanked;²⁷ promote stability by "crowding out" shadow banking instruments, which remain the greatest source of instability in our financial system;²⁸ and strengthen the Fed's monetary toolkit by allowing it to pay interest on reserves to everyone, so that it would not have to rely on banks to "pass through" the rate to the broader economy.²⁹

Such proposals would also, if implemented effectively, provide a way for the Fed to build credibility with the populace at large, without demanding discretionary distributive judgments that might invite backlash. These proposals tended not, however, to address head-on the political dimensions of the Fed's increasingly direct impact on allocation when it creates money.

In her rich, provocative article *The People's Ledger: How to Democratize Money and Finance the Economy*, Professor Saule Omarova takes these proposals to task for their failure to wrestle with these distributive issues, and argues that a more comprehensive approach is needed—one which would democratize the *asset* side of the Fed's balance sheet as well as its liabilities.³⁰ Other key departures from prior FedAccounts proposals include mandatory migration away from private bank accounts³¹ and the possibility of so-

25. A final change worth mentioning is that the percentage of payments carried out electronically, rather than by cash or check, increased dramatically, creating an opportunity to weave together and improve the efficiency of a fragmented national payment system. See, e.g., *The 2019 Federal Reserve Payments Study*, BD. OF GOVERNORS OF THE FED. RESERVE SYS., <https://www.federalreserve.gov/paymentsystems/2019-December-The-Federal-Reserve-Payments-Study.htm> (last updated January 6, 2020) [<https://perma.cc/V6UW-3X65>] ("In 2018, for the first time, the number of ACH debit transfers (16.6 billion) exceeded the number of check payments (14.5 billion). In 2000, in contrast, the number of ACH debit transfers stood at 2.1 billion compared to 42.6 billion check payments.").

26. See, e.g., Morgan Ricks, John Crawford, & Lev Menand, *FedAccounts: Digital Dollars*, 89 GEO. WASH. L. REV. 113 (2021).

27. *Id.* at 125–30.

28. *Id.* at 132–35.

29. *Id.* at 135–37.

30. Omarova, *supra* note 1.

31. *Id.* at 1265 (with relatively minor carve-outs, Omarova "advocates full migration of demand deposits onto the Fed's balance sheet"). Most other proposals would make FedAccounts optional.

called “helicopter drops”—that is, creating money by crediting people’s accounts *without* a corresponding purchase or loan—as a tool of monetary policy.³²

The People’s Ledger is a wonderfully thoughtful, informed, and creative contribution to the debate over our monetary system and what reforms may be called for; there is much to like and even more to learn from a careful reading of it. It is thought-provoking in the best way: I continue to return to its themes and arguments, pondering them and oscillating between persuasion and critique. There are, however, central features of its argument that ultimately leave me unpersuaded.

The People’s Ledger is meant to offer “a blueprint for reform that would radically democratize access to money and control over financial flows in the nation’s economy.”³³ Admitting that radical reform of the current system demands consideration, and that democratizing money is desirable, in this Response, I will critically evaluate the set of proposals put forward in *The People’s Ledger* along the dimensions of radicalism and democratization, while also suggesting reasons to embrace or reject parts of the program. What *The People’s Ledger* adds to prior FedAccounts proposals, and what grounds its claims to radicalism, lies first and foremost in its call for fundamental changes to how money is created. To this end, the Article proposes four “new” methods of money creation. I will suggest that two of these methods are unobjectionable but, at core, not new; that a third method is new but unadvisable; and that the fourth proposed method is new and radical, but possibly not radical enough. With respect to certain other issues *The People’s Ledger* addresses—shadow banking and determining the rates at which the Fed would lend to banks—I suggest that the proposal needs to be more radical. Finally, I will explore what strikes me as a deep ambiguity in *The People’s Ledger* with respect to what democratizing the Fed’s balance sheet means, or should mean, and its implications for the Fed’s popular legitimacy, as well as the quality of its policymaking going forward.

I. MONEY CREATION

The People’s Ledger positions itself as a radical reimagining of the monetary system, particularly with respect to the *allocative* effects of money creation. Professor Omarova identifies four “new” means by which money would be injected into the economy in her reimagined

32. *Id.* at 1259–63.

33. *Id.* at 1234–36.

system: (1) purchase by the Fed of securities issued by a new National Investment Authority (“NIA”), focused on public infrastructure projects;³⁴ (2) so-called “new discount window” (“NDW”) loans by the Fed to private banks, to allow banks to continue making consumer and business loans after they have lost their deposits to FedAccounts;³⁵ (3) expanded open market operations by the Fed, in which it would hold a broad market portfolio and intervene to short sell classes of assets that are overvalued and prop up asset classes that are undervalued;³⁶ and (4) direct “helicopter drops” into individual accounts.³⁷

In terms of monetary architecture, I will argue that the first two amount to a perpetuation of the current system, with some of the furniture rearranged; the third is radical but unadvisable; and the fourth is radical but only half-explored in the Article.

A. *The NIA and NDW*

The question of whether a reform is new or radical is obviously distinct from the question of whether it is desirable, but labels may affect the political reception of proposed reforms. And on its own terms, students of monetary architecture may find it worth exploring the ways in which key aspects of *The People’s Ledger* mark a continuation of, rather than a departure from, current structures. As noted above, traditional methods of money creation involved (1) the Federal Reserve purchasing debt from government agencies and (2) private banks extending loans. The purchase of NIA securities falls into the first category; NDW loans falls into the second.

With respect to the purchase of NIA securities, nothing prevents Congress from funding public infrastructure projects by issuing Treasuries, and nothing under the “traditional” Fed model would prevent the Fed from buying those Treasuries.³⁸ At its core, then, it is difficult to distinguish this first “new” method of money creation from a simple prescription that Congress should have different priorities. This is not to gainsay either the wisdom of more public infrastructure spending in the current economy³⁹ or the practical advantages of setting

34. *Id.* at 1272–75.

35. *Id.* at 1270–72 (noting that NDW loans would be available not just to banks but to other “qualifying lending institutions” as well).

36. *Id.* at 1275–76.

37. *Id.* at 1259–63.

38. Likewise, nothing in the traditional Fed model would prevent it from purchasing securities issued by a federal agency newly established by Congress; purchase of securities issued by government-sponsored enterprises has long been part of the Fed’s toolkit. *See supra* note 1.

39. It is also worth noting that while there are doubtless vast opportunities for valuable infrastructure projects in the United States today, at a certain point it may become hard to find

up an independent authority to carry out that mission—but neither of these implicates a fundamental shift in the *monetary* system.

A similar observation applies to Omarova’s emphasis on the importance of coordination between the Fed and fiscal authorities responsible for implementing the NIA. She writes of such coordination that “[i]n this tangible way, abandoning the illusory notion of technocratic neutrality as the basis of sound monetary policy creates an important opening for a more deliberate and transparent incorporation of democratically established public policy priorities into the Fed’s operations.”⁴⁰ I argue below that making the Fed more overtly political could have significant drawbacks,⁴¹ but one may note here that close coordination between fiscal and monetary authorities has been a hallmark of U.S. policymaking in recent years.⁴²

The NDW loans would similarly perpetuate the current system of bank lending as a mode of money creation, albeit with an extra step. In the current system, banks do not need to borrow from the Fed or from anyone else before they create new money: they simply credit their borrowers’ accounts.⁴³ With NDW, money creation would still depend on banks lending to businesses and consumers, but the banks would have to borrow the (newly created) dollars from the Fed first. Of course, what would necessitate the ramped up use of the discount window *is* new—namely, the introduction of FedAccounts. But the Fed’s reliance on banks to allocate money creation to creditworthy consumers and businesses is not new. (And the discount window, of course, is one of the oldest tools at the Fed’s disposal—though as Omarova notes, in normal

projects that pass the cost-benefit test. *See, e.g.*, Gabriel Wildau, *China Infrastructure Investment Model Under Fire*, FIN. TIMES (Sept. 10, 2016), <https://www.ft.com/content/b1d9177c-7650-11e6-bf48-b372cdb1043a> [<https://perma.cc/3867-Y92E>] (citing researchers who argue that “[m]ore than half of Chinese infrastructure projects have ‘destroyed, not generated’ economic value as costs have been larger than the benefits”).

40. Omarova, *supra* note 1, at 1281–82.

41. *See infra* Part IV.

42. *See, e.g.*, Salesha Mohsin, *Mnuchin Defends Work With Fed as Democrats Fault Funds Shift* (Nov. 25, 2020), <https://www.bloomberg.com/news/articles/2020-11-25/mnuchin-defends-record-of-close-coordination-with-fed-in-crisis> (“Powell and I speak multiple times a week. We would both characterize that we have an excellent relationship,” Mnuchin said in an interview Wednesday. Treasury and the Fed have been ‘incredibly coordinated on the execution of the Cares Act facilities,’ he said, referring to the federal stimulus law.”); James B. Stewart, *Eight Days: The Battle to Save the American Financial System*, NEW YORKER (Sept. 14, 2009), <https://www.newyorker.com/magazine/2009/09/21/eight-days> [<https://perma.cc/X8GJ-BEPG>] (describing the close coordination between the Fed and the Department of the Treasury during the critical period around Lehman Brothers’ failure in September 2008).

43. It is worth noting that while reserve requirements are currently set at zero, *supra* note 4, banks face other liquidity requirements, as well as capital requirements, which set some constraints on their ability to create new money. *See, e.g.*, 12 C.F.R. § 3.10 (Minimum Capital Requirements); 12 C.F.R. § 249.10 (Liquidity Coverage Ratio).

times banks rarely avail themselves of it.⁴⁴) Again, whether NDW is new and radical is distinct from whether the NDW is a good idea; I believe it could be an important part of the Fed's toolkit if FedAccounts were adopted.⁴⁵

B. OMO Plus

The proposed expanded open market operations ("OMO Plus"⁴⁶) aimed at correcting mispriced asset classes would, on the other hand, mark a radical departure from the traditional model. In one sense, it marks a recognition that the Fed has gotten much more deeply entwined in markets since the GFC than many casual observers might realize.⁴⁷ While some may feel uncomfortable with these interventions, and believe it prudent for the Fed to scale back its market footprint, *The People's Ledger* suggests that the Fed should go all in. The primary goal of OMO Plus would be to promote stability by shorting overpriced asset classes—"such as mortgage-backed securities or technology stocks"—and propping up underpriced asset classes.⁴⁸ This is a bold proposal to address a real problem. I nevertheless remain unpersuaded that this would be a wise project for three reasons, two of which touch on subjects more fully explored below. First, while bubbles are never good, if we address the fundamental cause of instability, we need not worry quite as much about them.⁴⁹ The second point relates to the legitimacy of the Fed in the public eye; short sellers are, whether justified or not, among the most routinely reviled market actors.⁵⁰ It is hard to think of anything that would do more to create resentment against the Fed among politically powerful constituents in the United States than its taking a direct short position on something like residential housing—particularly because, given the Fed's fire power, there would likely be aspects of a self-fulfilling prophecy to any intervention it undertook.

Even setting these points aside, however, I am deeply skeptical that the Fed would reliably make the right call *ex ante* about which

44. Omarova, *supra* note 1, at 1270 ("Banks . . . are generally reluctant to borrow from the Fed because of the commonly described 'stigma' attached to discount window loans as a sign of the borrowing banks' diminished ability to access liquidity in the interbank loan market.").

45. Indeed, my coauthors and I propose a version of NDW in earlier work. See Ricks et al., *supra* note 26, at 146.

46. *Id.* at 1275.

47. See *supra* note 19.

48. Omarova, *supra* note 1, at 1276.

49. See *infra* Part II.

50. See, e.g., Jenny Anderson, *A New Wave of Vilifying Short Sellers*, N.Y. TIMES (Apr. 30, 2008), <https://www.nytimes.com/2008/04/30/business/30shorts.html> [<https://perma.cc/M3UM-B2ST>].

assets to short and which assets to prop up. While there were certainly people warning that residential housing in the mid-aughts and tech stocks at the turn of the millennium were overvalued, hindsight bias may make it seem like these facts were, or should have been, more obvious at the time. As Adam Tooze recounts in his history of the GFC, *Crashed*, what preoccupied the most respected financial policy figures in the mid-aughts was public debt, not subprime housing.⁵¹ Would this have led to a OMO Plus policy of shorting the Treasury market? Should it have? One possible response is that we need better policymakers, but this is cold comfort if we are trying to achieve change via structural reform. (I am also skeptical, of course, that—even if such policymakers exist—we could reliably identify them *ex ante*.) Another possible response is that we shouldn't be focused on the policymakers at all here—this is a technical job, and we should rely on the Fed's nonpolitical staff to do it.⁵² I would be curious to know, however, to what degree staff at the Fed's trading desk held (with high confidence) views similar to, say, the heroes of Michael Lewis's *The Big Short* or Gregory Zuckerman's *The Greatest Trade Ever*.⁵³ It is also worth querying whether those who made riches by shorting the housing market leading up to 2008 have consistently made correct market calls in the years before or since.⁵⁴

In short, for a variety of reasons, I am skeptical of the wisdom of adding OMO Plus to the Fed's monetary toolkit.

C. Helicopter drops

Perhaps the most radical element of *The People's Ledger* in terms of monetary system design is the proposal to empower the Fed to implement “helicopter drops” as a tool of monetary policy—that is, simply disbursing cash to individuals and businesses without obtaining

51. ADAM TOOZE, *CRASHED: HOW A DECADE OF FINANCIAL CRISES CHANGED THE WORLD* 42 (2018).

52. This could of course exacerbate the concerns about the political legitimacy of the Fed's actions. *See infra* Part IV.

53. These are two popular accounts of those who figured out how to bet against the housing market in the mid-aughts, making huge profits in the process. MICHAEL LEWIS, *THE BIG SHORT: INSIDE THE DOOMSDAY MACHINE* (2010); GREGORY ZUCKERMAN, *THE GREATEST TRADE EVER: THE BEHIND-THE-SCENES STORY OF HOW JOHN PAULSON DEFIED WALL STREET AND MADE FINANCIAL HISTORY* (2010).

54. *See, e.g.*, Alexandra Stevenson & Matthew Goldstein, *John Paulson's Fall from Hedge Fund Stardom*, N.Y. TIMES (May 1, 2017), <https://www.nytimes.com/2017/05/01/business/dealbook/john-paulsons-fall-from-hedge-fund-stardom.html> [<https://perma.cc/PGM7-9WTF>].

thereby a financial asset.⁵⁵ The traditional critique of using such a method in *normal* times is that it would have a deleterious effect on incentives to work and save—that is, to *create* economic value.⁵⁶ The idea that such an approach could be an effective tool when other monetary tools prove dull, however, has received support from a number of influential figures in the post-GFC era.⁵⁷ In one sense, of course, it is obvious that giving people money to spend may be an effective response when a severe recession has threatened or already begun—this, after all, was one rationale for the stimulus checks Congress sent out during the recent pandemic.⁵⁸

There are fundamental differences, however, between those stimulus checks and Omarova’s proposal. As Christine Desan observes, there is a

double standard separating fiscal and monetary initiatives [that] follows in part from the structure of spending: public spending depends on a political process while monetary outlays draw on administrative practice. . . . [And e]ven as [the Fed] commits funds, they do not “count” against the tally of national debt. By contrast, when Congress spends, it first borrows by way of issuing a Treasury bill or bond, which adds to the national debt.⁵⁹

Another way of putting the point is that Congress only gets to spend money that’s already been created: it must either borrow or tax in order to effect fiscal outlays.⁶⁰ The Federal Reserve creates money by

55. Omarova, *supra* note 1, at 1259–63. Note that Omarova’s proposal is sensitive to distributional concerns but explicitly geared toward providing the Fed with a tool to affect aggregate demand in the economy. As Omarova notes, the term “helicopter money” comes from a Milton Friedman essay. MILTON FRIEDMAN, *THE OPTIMUM QUANTITY OF MONEY* (1969), *reprinted in* THE OPTIMUM QUANTITY OF MONEY AND OTHER ESSAYS 4 (2006); *see also* Kevin Dowd, *Against Helicopter Money*, 38 CATO J. 147, 147 (Winter 2018), <https://www.cato.org/cato-journal/winter-2018/against-helicopter-money> [<https://perma.cc/363R-NHHV>] (“Friedman did not intend his suggestion as a serious policy proposal. Instead, he intended it as a classroom device to illustrate the consequences of changes in the stock of base money.”).

56. *See, e.g.*, RICKS, *supra* note 14, at 150–51.

57. *See, e.g.*, Ben S. Bernanke, *What Tools Does the Fed Have Left? Part 3: Helicopter Money*, BROOKINGS INST. (Apr. 11, 2016), <https://www.brookings.edu/blog/ben-bernanke/2016/04/11/what-tools-does-the-fed-have-left-part-3-helicopter-money/> [<https://perma.cc/Z5LH-FB88>] (“In recent years,” with interest rates stuck near zero and legislatures reluctant to spend, “Milton Friedman’s idea of money-financed (as opposed to debt-financed) tax cuts –‘helicopter money’– has received a flurry of attention, with influential advocates including Adair Turner, Willem Buiter, and Jordi Gali”).

58. *See, e.g.*, CTR. BUDGET POL’Y PRIORITIES, *POLICY BASICS: FISCAL STIMULUS* (May 21, 2020) <https://www.cbpp.org/research/economy/fiscal-stimulus> [<https://perma.cc/4MTK-G3R3>].

59. Desan, *supra* note 13, at 8.

60. Ben Bernanke observes that “fiscal expansion financed by money creation”—i.e., helicopter money—is likely to be more effective at boosting spending than an equivalent magnitude of debt-financed fiscal expansion. *See* Bernanke, *supra* note 57:

[W]hen a spending increase or tax cut is paid for by debt issuance, as in the standard case, future debt service costs and thus future tax burdens rise. To the extent that households today anticipate that increase in taxes—or if they simply become more cautious when they hear that the national debt has increased—they will spend less today, offsetting some of the program’s expansionary effect. In contrast, a fiscal

purchasing or lending against financial assets with *newly created* dollars.

It is worth pausing to emphasize that because the assets the Fed acquires when it creates money pay a higher interest rate than what the Fed pays on its liabilities, it generates enormous profits, and its balance sheet is “solvent.”⁶¹ This is generally understood to be a good thing, in part because the Fed is able to remit to the Treasury, after paying for its own operations, all of its considerable profits, thereby reducing the public debt.⁶²

Notice, however, what helicopter drops do: they create new money *without* the purchase of financial assets. This new money would amount to a liability of the Fed, but the Fed would not thereby acquire a corresponding asset.⁶³ Depending on the extent of such helicopter drops, it is possible that the Fed’s liabilities would exceed its assets—in other words, the Fed could be “insolvent.” I use scare quotes here because this is not quite the problem it may at first seem to be: unlike banks, the Fed faces no limit on its ability to generate new dollars, and therefore cannot default. While insolvency does not matter for the Fed in the same way that it would matter for any other institution, it is not clear to me what the systemic knock-on effects might be; I would very much like to have seen an exploration of this question in *The People’s Ledger*.⁶⁴ Of course, it is possible that Omarova would respond that we should limit helicopter drops to ensure that they did not push the Fed into insolvency, but this, too, would seem to demand some analysis and justification: how much should we expect such a limitation to blunt the

expansion financed by money creation does not increase the government debt or households’ future tax payments and so should provide a greater impetus to household spending, all else equal.

61. “Solvency” here means simply that the value of the Fed’s assets exceeds its liabilities. *See Factors Affecting Reserve Balances*, FED. RSRV. STAT. RELEASE (Oct. 28, 2021), <https://www.federalreserve.gov/releases/h41/20211028/> [<https://perma.cc/3F52-RMK4>] (showing that as of October 28, 2021, on a balance sheet of more than eight trillion dollars, the Fed’s assets exceeded its liabilities by almost forty billion dollars).

62. *See, e.g.*, Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Board Announces Reserve Bank Income Data and Transfers to Treasury for 2020 (Jan. 11, 2021), <https://www.federalreserve.gov/newsevents/pressreleases/other20210111a.htm> [<https://perma.cc/5ZBF-8QGB>] (providing data for the past ten years on Fed remittances to the Department of the Treasury, including \$88.5 billion in 2020).

63. Kevin Dowd, in a piece critical of such approaches, observes that if for technical accounting reasons the Fed needed to buy assets to create money, it could buy perpetual zero-coupon bonds—that is, bonds that never require any payments whatsoever from the “borrower.” Dowd, *supra* note 55, at 150. He acknowledges, however, that the actual impact would be that the Fed would wind up with negative equity (or “capital”) on its balance sheet. *Id.* at 155–57.

64. Other critiques of helicopter money tend to focus on political legitimacy—a question I take up again below—or the fiscal impact of the approach, which assumes the continued debt financing of fiscal outlays. *See, e.g., id.*; *see also* Bernanke, *supra* note 57.

effectiveness of helicopter drops as a monetary tool, and what costs are we trying to avoid by prioritizing balance sheet solvency for the Fed?

In any event, if one can get comfortable with the idea of negative equity on the Fed's balance sheet, it opens up the possibility of monetary reform potentially much more radical than what Professor Omarova proposes here. Why, for example, should congressional spending rely on already created dollars at all? Why not allow for direct fiscal expenditures, so that when Congress spends, new money is created? There is precedent for this: during the Civil War, the Union government famously issued "greenbacks," which were "sovereign IOUs [used] to pay soldiers and suppliers," and which "entered and lubricated the civilian market."⁶⁵ Fiscal expenditures of the federal government could then result in direct credits to the FedAccounts of suppliers of goods and services, or recipients of transfer payments, with no need to borrow or tax, and no purchase of any financial assets that would provide an income stream to the Federal Reserve. Indeed, why not retire the idea of "transfer" payments and effect Social Security payments and Medicare reimbursements as direct fiscal helicopter drops?

To be clear, I am not suggesting that this approach would not have costs, and perhaps significant costs that would counsel against adopting it—but it would seem to demand careful analysis if our goal is to reform our monetary system to make it more democratic.⁶⁶ Without pretending to provide such analysis, a preliminary point worth noting is that because "the amount of sovereign debt that a community issues to pay for public needs . . . bears no necessary resemblance to the amount of money that its citizens might wish to hold as a medium for their own use,"⁶⁷ the Fed would still have a central role to play in modulating the money supply.

It also worth addressing a second common objection to helicopter drops, if only because Omarova deals with it in such a creative way. Specifically, modulating the money supply requires not only a tool to augment money—which helicopter drops can clearly do—but also a tool to drain money out of the economy⁶⁸—for which helicopter drops seem

65. Desan, *supra* note 13, at 13.

66. Without endorsing this view, one can imagine a line of attack positing that debt-financing, and the attendant need to tax, imposes some constraints on fiscal expenditures, and that such expenditures *should* be constrained at a certain point due to concerns about crowding out private investment, with all its "Hayekian" comparative advantages over government investment.

67. Desan, *supra* note 13, at 13.

68. Monetary contraction is called for when the economy is "overheating" and inflation threatens. For a good intuitive account of why a healthy economy requires modulation of the money supply, see Paul Krugman, *Babysitting the Economy*, SLATE (Aug. 14, 1998),

less well adapted. If all money is held in account form, it would of course be straightforward to debit everyone's accounts, but even if one can find a "fair" way to do so, people will be angered by seeing their account balances diminished by an administrative process. Furthermore, it can have a profoundly disruptive effect on people's plans; and to the degree there *are* alternatives such as physical cash, the mere risk of such a move would cause savvy persons to migrate out of FedAccounts ahead of the move.

Omarova comes up with an ingenious proposal to try to address these issues. In effect, she proposes putting money into abeyance rather than into permanent retirement: each FedAccount holder—with various carve-outs⁶⁹—would have a portion of their account balance placed into escrow, where it would not be lost but could not be spent for some period of time, either.⁷⁰ The escrowed funds would receive a higher rate of interest than spendable account balances.⁷¹ The beauty of this proposal is that it could mitigate the outrage people would likely feel if their nominal money balance were diminished by administrative procedure.

While I applaud the ingenuity of this proposal, I remain unpersuaded of its wisdom or necessity, even if we were to adopt helicopter drops as a means of augmenting the money supply. First, most businesses and individuals hold money primarily as a "transaction reserve"—that is, a medium of exchange to meet near-term transactional obligations, such as paying rent or (for businesses) workers' wages.⁷² While there are doubtless many who maintain a large balance in their bank accounts that they do not plan to spend in the near term, there are also many—and not just the less wealthy—who for very good reasons simultaneously try to minimize the amount they hold in transaction reserves, while ensuring that they can meet their near-term obligations.⁷³ An escrow system could be extremely disruptive and

http://www.slate.com/articles/business/the_dismal_science/1998/08/babysitting_the_economy.sing.html [<https://perma.cc/7Q9Y-PYFZ>].

69. Omarova, *supra* note 1, at 1262.

70. *Id.* at 1261–63.

71. *Id.* at 1262.

72. See RICKS, *supra* note 14, at 42–46.

73. See, e.g., John Crawford, *Shining a Light on Shadow Money*, 69 VAND. L. REV. EN BANC 185, 193 (2016) ("Consider a firm with some visibility into its near-term payment obligations; the firm wants to ensure it can meet these obligations but does not want to devote any more to this end than is necessary, since holding claims in a transaction reserve diverts resources from the firm's central profit-generating activities.").

distortive for these account holders.⁷⁴ Omarova recognizes this, writing, “to avoid or minimize unnecessarily harsh liquidity shocks, especially on small businesses and vulnerable individuals, it would be important for the Fed to communicate its intentions clearly and continuously, with as much advance warning as possible.”⁷⁵

To the degree advance warning mitigates disruption, however, it may exacerbate two different problems. First, as account holders are told to expect an escrowing of their balances, they may try to spend down their account by accelerating purchases, thus stoking the inflationary pressures the Fed wishes to suppress. Second, there are at least two ways that such a system could be arbitrated based on the parameters set out in the article: Omarova explicitly allows for (1) physical cash and (2) *certain* accounts at community development banks to persist in her proposed system.⁷⁶ If people expected monetary tightening, there would presumably be a rush into these other types of money, which would not be subject to the escrow process. Granted, Omarova proposes caps on account size for the residual private accounts,⁷⁷ but one could imagine a system of deposit brokers arising to arbitrage that limitation. I have no doubt that there are regulatory reactions that could attempt to address all these issues—ever-more nuanced carve-outs for certain FedAccounts holders; withdrawal limits for physical cash; a ban on brokered deposits. And it is true that one could object to virtually any regulatory reform proposal by pointing to the inevitability of regulatory arbitrage and unintended consequences, and that such objections are too often made in a facile or lazy manner. In *some* situations, however, one does fear that a system designed to address such concerns may begin to look like a Rube Goldberg machine.

Happily, though, I do not believe a system of helicopter drops *needs* to wrestle with these issues, unless such drops become the sole (or primary) method of creating money. Omarova writes that “[t]his tool is to be reserved only for extreme and rare circumstances, when the Fed is unable to control inflation by raising interest rates and deploying its

74. Delay in accessing money can be as disruptive as a “haircut” for many depositors. For example, right before the failure of Washington Mutual in 2008, even depositors under the deposit insurance cap engaged in run-like behavior—not because they were afraid of losing their money, but because “any interruptions would cause real problems in [their] li[ves].” E. Scott Reckard, *Deposit Run at WaMu Forced Their Hand, Regulators Say*, L.A. TIMES (Sept. 25, 2008), https://latimesblogs.latimes.com/money_co/2008/09/just-as-with-in.html [<https://perma.cc/YL6P-L55R>].

75. Omarova, *supra* note 1, at 1262.

76. *Id.* at 1263–64, 1267 (referring to the continued existence of physical cash); *id.* at 1265–66 (describing savings accounts to be offered by community banking institutions).

77. *Id.* at 1265 n.154.

new asset-side tools.”⁷⁸ But it is hard to imagine a significant *technical* limitation on the Fed’s ability to control inflation using its other tools, given that it would be directly administering the rate of interest on NDW loans and on FedAccounts themselves, and given the vast quantity of assets it could sell (NIA and Treasury securities) or allow to “run off” (NDW loans) if it wanted to contract the money supply. The constraint on raising interest rates has traditionally been political,⁷⁹ but the political headwinds to debiting or escrowing individual FedAccounts would likely be much stronger. In short, I believe that even if helicopter drops were adopted to augment the money supply, it may be better to eschew directly debiting or escrowing FedAccounts as a means of monetary contraction.

II. STABILITY AND BUBBLES

The expanded open market operations Omarova proposes are motivated in large part by a recognition of the disruptive and distortive effects of bubbles. Omarova mentions two bubbles from recent memory—housing and tech stocks⁸⁰—in suggesting the types of asset classes OMO Plus short positions may target. But the bursting of these two bubbles—tech stocks in 2000 and housing in 2007–09—had profoundly different economic fallouts, despite the fact that first-order paper losses on each asset class were of similar magnitude.⁸¹ The bursting of the tech stock bubble caused a very minor recession and no disruptions to the financial system; the bursting of the housing bubble in 2008 created immense systemic disruptions and caused a deep and scarring recession.⁸² Why the different outcomes?

Former Federal Reserve Chair Ben Bernanke has argued persuasively that the principal difference was that the housing bubble caused a financial panic, primarily in the shadow banking sector, while

78. *Id.* at 1261.

79. *See generally* Tooze, *supra* note 10.

80. Omarova, *supra* note 1, at 1276.

81. Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Rsrv. Sys., Speech at the Russell Sage Foundation and The Century Foundation Conference on “Rethinking Finance”: Some Reflections on the Crisis and the Policy Response (Apr. 13, 2012), <https://www.federalreserve.gov/newsevents/speech/bernanke20120413a.htm> [<https://perma.cc/JM6C-877N>] (observing that the peak-to-trough losses on *all* residential real estate in the United States from 2006 through 2011 was on the order of seven trillion dollars; the paper losses on stock-market wealth in the wake of the dot-com bust was on the order of eight trillion dollars).

82. *Id.*

the tech bubble did not.⁸³ Specifically, losses from the housing crash were relatively concentrated among highly leveraged (mostly noncommercial bank) financial intermediaries that funded themselves with very short-term debt, whose claimants had no tolerance for losses and could easily withdraw their funding.⁸⁴ When they withdrew en masse, it was the structural equivalent of a “run” on the bank. The essence of a financial panic is widespread runs. Since the GFC, there have been myriad explanations of why panics are profoundly damaging to the economy,⁸⁵ and I will not attempt to rehearse them here—particularly since I do not think Omarova disagrees with me on the importance of panic prevention. Indeed, this is a large part of why she argues that migration to FedAccounts should be mandatory.⁸⁶ If panics are the problem, and panics are defined by runs on private deposits and deposit substitutes, why *not* eliminate such instruments?

Given Omarova’s radical move with respect to bank accounts, I am left wondering why she does not adopt a similar prohibitory approach with respect to deposit *substitutes*—the lifeblood of the shadow banking industry. Professor Morgan Ricks, for example, has argued persuasively that it is not only desirable but eminently feasible to force all entities who offer the functional equivalents of deposits to get a bank charter and comply with bank regulations, or to desist.⁸⁷ And it is the shadow banking instruments, not insured deposits, that were at the heart of both the GFC and the market disruptions of March 2020.⁸⁸

Omarova does not propose a prohibition on shadow banking, however; rather, she argues that the other parts of her proposal would

83. *Id.* (“[A] key vulnerability of the system was the heavy reliance of the shadow banking sector, as well as some of the largest global banks, on various forms of short-term wholesale funding, including commercial paper, repos, securities lending transactions, and interbank loans[.]”).

84. *Id.* Of course, losses also fell heavily on homeowners. Note that Atif Mian and Amir Sufi have argued that the more important distinguishing factor between the two crashes is that losses in the housing crash disproportionately hit those with a much higher marginal propensity to consume—i.e., lower-income, highly leveraged homeowners. See ATIF MIAN & AMIR SUFI, HOUSE OF DEBT 19–21 (2014). For an assessment of the debate between those who side with Bernanke and those who side with Mian and Sufi, see Crawford, *supra* note 73, at 197–202.

85. See John Crawford, *Safe Money*, 104 MARQ. L. REV. 411, 425–31 (2020); see also Ben S. Bernanke, *The Real Effects of Disrupted Credit: Evidence from the Global Financial Crisis*, BROOKINGS PAPERS ECON. ACTIVITY, (Sept. 13, 2018), https://www.brookings.edu/wp-content/uploads/2018/09/Bernanke_final-draft.pdf.

86. Omarova, *supra* note 1, at 1264 (“Universal availability of fully sovereign digital money will make it much easier for all bank depositors to ‘run to safety’ in real time, thus taking the classic bank run problem to the next level.”).

87. RICKS, *supra* note 14, at 223–47.

88. See *supra* note 18 and accompanying text.

effectively crowd out shadow banking.⁸⁹ For example, in her discussion of securities firms, key players in shadow banking activities, she suggests that a sine qua non of most of the mischief they make is institutional affiliation with insured depository institutions:

[S]ecurities dealers continuously fuel the ever-increasing volumes of trading in secondary financial markets—and the accompanying growth in the system-wide levels of leverage, risk, and interconnectedness. As emphasized throughout this discussion, the critical factor enabling securities firms to conduct these activities on such a massive scale is their institutional affiliation with federally-insured banks. Through organizational attachment to banks, securities dealers gain access to—and a significant degree of de facto control over—the flow of the sovereign public’s full faith and credit powering the financial system.⁹⁰

Whatever the demerits of close institutional ties between commercial banks and investment banks, however, I am not persuaded that they are as critical as Omarova implies in creating systemic instability. After all, Lehman Brothers did not have a commercial banking affiliate.⁹¹ Neither did Bear Stearns nor many of the other entities at the core of the GFC.⁹²

Furthermore, the arguments Omarova offers for banning private deposits—the risk of a “run to safety” in crisis and the incentives banks would have to offer higher interest rates matched with a “broader suite of high-risk, high-return financial products”⁹³—seem to me to apply a fortiori to the shadow banking sector, where institutions are less constrained by the prudential rules that apply to banks.⁹⁴

89. Omarova, *supra* note 1, at 1288–99.

90. *Id.* at 1297.

91. The run on Lehman Brothers and its bankruptcy filing were a fulcrum point in the GFC. See generally NAT’L COMM’N ON THE CAUSES OF THE FIN. & ECON. CRISIS IN THE U.S., FINANCIAL CRISIS INQUIRY REPORT 324–43 (Jan. 2011) [<https://perma.cc/Q36H-5PRW>].

92. Bear Stearns experienced a run and would have failed absent government intervention to facilitate and subsidize its purchase by JP Morgan. See *id.* at 280–91. For an account of other entities without banking affiliates that either experienced runs or likely would have absent government backstops, see *id.* at 344–86.

93. Omarova, *supra* note 1, at 1264.

94. It is of course hard to tease out the contribution of affiliation to *current* implicit guarantees given that the largest independent investment banks in the US are all now part of bank holding companies, having either failed (Lehman), been bought by bank holding companies (Merrill Lynch and Bear Stearns), or converted into bank holding companies (Goldman Sachs and Morgan Stanley) in 2008. See NAT’L COMM’N ON THE CAUSES OF THE FIN. & ECON. CRISIS IN THE U.S., FINANCIAL CRISIS INQUIRY REPORT 280–91, 324–43, 353–86 (2011) [<https://perma.cc/PGC7-DTC3>]. But it is certainly plausible that the Fed’s intervention into repurchase agreements markets in March 2020, for example, would have covered (and would have needed to cover) entities like Lehman Brothers or Bear Stearns if they existed as they did in 2008. See Jeff Cox, *Fed Pumps \$198 Billion into Short-term Bank Funding Operations Amid Big Demand*, CNBC (Mar. 12, 2020, 2:26 PM), <https://www.cnbc.com/2020/03/12/fed-pumps-198-billion-into-short-term-repo-bank-funding-operations.html> [<https://perma.cc/2492-JS59>].

If it's true that the shadow banking sector is less constrained in catering to customers than commercial banks, then it is plausible that the "crowding out" effect of FedAccounts would operate with more force on commercial bank deposits than on shadow banking instruments—implying that a direct ban of deposits is *less* necessary than a direct ban of deposit substitutes.⁹⁵ And of course one of the primary lessons of the GFC is that deposit substitutes issued by shadow banks can be as much or more of a panic-prone source of funding as commercial bank deposits, strengthening this conclusion.⁹⁶

In the end, in a well-designed FedAccounts program, a "crowding out" approach may suffice to address potential problems with both deposits *and* deposit substitutes. But if a deposit ban *is* needed, then it seems a prohibition on the deposit substitutes of the shadow banking system is needed even more.

III. SEIGNIORAGE

Institutions that issue deposits or deposit substitutes to fund themselves—*viz.*, banks and shadow banks—have a lower cost of funding than those that do not. This is "[b]ecause cash equivalent instruments satisfy money demand," and so "are a source of extraordinarily cheap funding to their issuers."⁹⁷ The issuers of these instruments then "reap the rewards that come with having created the medium that provides cash services"⁹⁸ in the form of interest payments on the assets that were purchased as part of the money creation process. When the Fed engages in this process, the earnings are called "seigniorage," or fiscal profits from money creation.⁹⁹

95. On the regulation of banks, *see, e.g.*, RICKS, *supra* note 14, at 5: No other industry [than banking] is subject to remotely comparable regulatory constraints and oversight. In the United States, deposit banks face detailed chartering criteria; strict limitations on permissible activities and investments; leverage limits (capital requirements); special restrictions on affiliations and affiliate transactions; base money reserve requirements; extensive onsite supervision; a vigorous enforcement regime; special receivership regime in the event of failure; and so on.

96. *See, e.g.*, Jack Bao, Josh David & Song Han, *The Runnables*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (Sept. 3, 2015), <https://www.federalreserve.gov/econresdata/notes/feds-notes/2015/the-runnables-20150903.html> [<https://perma.cc/BHH3-V7W5>]; *see also* GARY B. GORTON, MISUNDERSTANDING FINANCIAL CRISES: WHY WE DON'T SEE THEM COMING 7 (2012) ("The financial crisis of 2007–8 was also a bank run, but it was not people who ran to their banks but firms running on investment banks.").

97. Ricks et al., *supra* note 26, at 141; *see also* Robin Greenwood, Samuel G. Hanson & Jeremy C. Stein, *A Comparative-Advantage Approach to Government Debt Maturity*, 70 J. FIN. 1683, 1709 (2015).

98. Desan, *supra* note 13, at 19.

99. Ricks et al., *supra* note 26, at 141.

Money creation can be understood as a public good;¹⁰⁰ it seems appropriate, therefore, for seigniorage to flow to the public treasury. We may then ask why we allow banks and shadow banks to siphon off this seigniorage that should flow to the public. Such a system is not inevitable; one of the features of FedAccounts that my coauthors and I propose elsewhere would be the recapture of seigniorage revenues for the public purse.¹⁰¹ Discount window loans could replace lost deposit funding for banks but would *not* be issued at a “preferential” rate.¹⁰² Omarova proposes that NDW loans in her system *would* be issued at a “preferential” rate,¹⁰³ but she does not explain why such subsidies should continue.

The obvious objection to removing these subsidies is that a higher cost of funding for banks could translate into less lending for the real economy. The hurdle rate for new lending by a bank, however, is not the average cost of funds but the *marginal* cost of funds—how much a bank would need to pay to borrow an extra dollar that it then turned around to lend.¹⁰⁴ The marginal cost of funds for banks is the fed funds rate, not the interest rate the bank pays on deposits.¹⁰⁵

Eliminating the seigniorage subsidy for banks should not cause the fed funds rate to rise, and even if it did, the Fed could then, if looser monetary policy were called for, target the fed funds rate directly. It is not, however, obvious that a looser monetary policy *would* be needed: assuming arguendo that eliminating bank subsidies would lead to a contraction in lending, this would, as Professor Adam Levitin has argued, amount to a “right-sizing, because the level of credit would reflect risk-internalized pricing rather than subsidization.”¹⁰⁶ And if we thought that certain categories of borrowers needed subsidies, a far more sensible approach would be to subsidize them in a targeted way—as we already do, for example, with student loans and residential mortgages—instead of subsidizing banks willy-nilly in the hope that they will pass on some (small) percentage of these subsidies.¹⁰⁷

100. *Id.* at 128 n.77.

101. *Id.* at 140–41.

102. *Id.* at 143 (“The Central Bank should charge actuarially fair rates for its discount window loans.”).

103. Omarova, *supra* note 1, at 1271.

104. Ricks et al., *supra* note 26, at 147–49.

105. *Id.*

106. Adam J. Levitin, *Safe Banking: Finance and Democracy*, 83 U. CHI. L. REV. 357, 427 (2016) (making this point in the context of a proposal that would prohibit fractional reserve banking).

107. Ricks et al., *supra* note 26, at 148–49.

In short, one of the best ways to democratize the monetary system would be to recapture seigniorage revenues for the public benefit.

IV. DEMOCRATIZING MONEY

As noted, what the Fed has been doing with its balance sheet since the GFC has a profound and underexplored political dimension to it. It seems entirely appropriate to highlight this fact and to call, as Omarova does, for a more democratic approach. There are, however, at least two ways to understand what democratizing the Fed and its balance sheet might mean: (1) increasing the political accountability of monetary decision makers or (2) ensuring the distributional benefits of the monetary system accrue to the broader public.¹⁰⁸ The latter appears to be what Professor Omarova mostly has in mind, though she also writes that “the proposed restructuring would democratize not only access to financial services but also the very *process* of generation and allocation of financial resources.”¹⁰⁹ It is unclear to me what democratizing this process would entail. Fiscal authorities are more directly accountable than monetary authorities in our system, and it clear that much of the burden of Omarova’s proposal would be carried by fiscal authorities, as with the establishment and implementation of the NIA—but as I argue above, this does not appear to me to be fundamentally different from how things have traditionally operated.¹¹⁰ While Omarova leaves open the possibility that it could mean making the Fed more directly politically accountable—that is, less independent—she declines to take a position on the question.¹¹¹ If democratizing money is our goal, however, it is worth interrogating the desirability of the Fed’s independence.

Using as a criterion of evaluation what I take to be a principal aim of *The People’s Ledger*—reducing the inequality flowing from the current system of money creation and payments—I will argue that Fed independence should not be cast aside lightly. I will then explore how

108. To “democratize” may mean to (1) “introduce a democratic system or democratic principles to” or as to (2) “make (something) accessible to everyone.” *Democratize*, LEXICO, <https://www.lexico.com/en/definition/democratize> (last visited Jan. 11, 2022) [<https://perma.cc/Q3XN-WNGL>]. Elaborating on the first definition, “democratic” may be defined as “based on a form of government in which people choose leaders by voting.” *Democratic*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/democratic> (last visited Jan. 11, 2022) [<https://perma.cc/ZHG8-KY8A>].

109. Omarova, *supra* note 1, at 1237 (emphasis added).

110. See *supra* Section I.A.

111. Omarova, *supra* note 1, at 1282 n.223 (noting that parts of her proposal “could potentially raise questions about the Fed’s political independence, which are beyond the Article’s scope”).

stable we should expect a regime of independence to be if the Fed were assigned all the tasks *The People's Ledger* proposes for it.

A. *Inequality and the desirability of Fed independence*

A threshold issue is what independence means for the Fed, aside from a generic understanding that the Fed should carry out its mission with some insulation from the immediate pressures of partisan politics. What does Fed independence look like operationally? Without diving too deeply into this issue,¹¹² it is worth highlighting, first, that the Fed, “unlike many other public agencies, is not funded by congressional appropriations.”¹¹³ Instead, “[i]ts operations are financed primarily from the interest earned on the securities it owns.”¹¹⁴ Thus, while “the Fed chairman is required to report to Congress twice a year on progress towards the Fed’s responsibilities and monetary policy objectives,”¹¹⁵ Congress lacks the leverage that the appropriations process might otherwise provide to influence Fed policy. In term of governance more generally, in contrast to other agencies “whose directors serve at the pleasure of the president, [such as] the CIA and the Office of the Director of National Intelligence,”

the [Federal Reserve] Board of Governors and [the Federal Open Market Committee] are truly independent. These entities do not report to the president, and governors (and the presidents of the [twelve] regional Federal Reserve banks) do not serve at the pleasure of the president. Board members are appointed for staggered [fourteen]-year terms, so every two years a term expires, the intent being to limit the number of governors that a sitting president could appoint. . . . Section 242 of the Federal Reserve Act provides that a governor can be removed by the president only “‘for cause,’” which is usually meant to mean incompetence, neglect of duty, or malfeasance in office.¹¹⁶

It is of course true that Fed independence is not a binary question but a matter of degree. The Fed could be vulnerable to legislative changes, and its leaders, in contrast to federal judges, do not enjoy life tenure. Further, as Omarova observes, “in our democratic

112. For a detailed and nuanced treatment of this topic, see PETER CONTI-BROWN, *THE POWER AND INDEPENDENCE OF THE FEDERAL RESERVE* (2017).

113. *Who Owns The Federal Reserve?*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (March 1, 2017), https://www.federalreserve.gov/faqs/about_14986.htm [<https://perma.cc/CQM8-WA34>].

114. FED. RSRV. SYS., *OVERVIEW OF THE FEDERAL RESERVE SYSTEM* 6, https://www.federalreserve.gov/aboutthefed/files/pf_1.pdf [<https://perma.cc/BF4P-R46W>].

115. Robert Eisenbeis, *Can The President Fire The Chairman of the Federal Reserve?*, CUMBERLAND ADVISORS (Jan. 11, 2019), <https://www.cumber.com/market-commentary/can-president-fire-chairman-federal-reserve> [<https://perma.cc/X4A3-VB3X>].

116. *Id.* On the president’s power to fire board members, see also Peter Conti-Brown, *What Happens If Trump Tries To Fire Fed Chair Jerome Powell?*, BROOKINGS INST. (Sept. 9, 2019), <https://www.brookings.edu/blog/up-front/2019/09/09/what-happens-if-trump-tries-to-fire-fed-chair-jerome-powell/> [<https://perma.cc/CD7U-VXTZ>].

society, institutional independence is an inherently complex and context-dependent phenomenon.”¹¹⁷ At the same time, it seems clear that relative to other federal agencies, the Fed enjoys a high degree of independence of action.

The next question that arises is, what is so great about Fed independence? Why *not* make the Fed more directly and democratically accountable? Adam Tooze, for example, has questioned the assumptions that underlay the countermajoritarian model of the Fed:

The model [of independence] was also based on a jaundiced vision of modern history and more or less explicitly at odds with democratic politics: first in the sense that it made cynical assumptions about the motivations of voters and politicians but also in the more general sense that in the place of debate, collective agreement, and choice, it favored technocratic calculation, institutional independence, and nondiscretionary rules.¹¹⁸

Writing in May 2020, Tooze argued that most of the key assumptions of the traditional countermajoritarian view of the Fed no longer apply, above all the assumption that inflation is a threat. On the contrary, Tooze averred that “the fight against inflation was won. Indeed, it was won so decisively that economists now ask themselves whether the basic organizing idea of a trade-off between inflation and unemployment any longer obtains.”¹¹⁹ If this is true, then it may seem that a principal justification for Fed independence evaporates.

I remain unpersuaded by this line of argument for several reasons, however. First, in the latter half of 2021, concerns about inflation came roaring back.¹²⁰ Second, inflation is not the only monetary threat we face. In the decade after the GFC, the independent Fed proved to be an aggressive enemy of *deflation*,¹²¹ in ways that

117. Omarova, *supra* note 1, at 1282 n.223.

118. Tooze, *supra* note 10.

119. *Id.*

120. See, e.g., Jeanna Smialek, *Lingering Virus, Lasting Inflation: A Fed Official Explains Her Pivot*, N.Y. TIMES (Dec. 21, 2021), <https://www.nytimes.com/2021/12/21/business/economy/mary-daly-federal-reserve-inflation.html> [<https://perma.cc/AG6H-8CW9>]; Jeff Cox, *Yellen Sees Inflation Staying Higher for the Next Several Months*, CNBC (Oct. 5, 2021, 1:13 PM), <https://www.cnbc.com/2021/10/05/yellen-sees-inflation-staying-higher-for-the-next-several-months.html> [<https://perma.cc/AV7W-EEPN>]; see also Masahiro Okoshi, *Interview: China's Yuan Likely to Become Asia's Central Currency: Kenneth Rogoff*, NIKKEI ASIA (Aug. 10, 2021, 4:32 AM), <https://asia.nikkei.com/Editor-s-Picks/Interview/China-s-yuan-likely-to-become-Asia-s-central-currency-Kenneth-Rogoff> [<https://perma.cc/XV87-GWDC>] (quoting economist Ken Rogoff arguing against those who would say “ [w]ell, let’s make everything free for everyone, and we can just borrow. Interest rates will never go up.’ . . . Everyone is treating that like that’s forever. If the U.S. political system believes in itself too much, [then it takes] a big risk”).

121. Above all, it kept its target interest rate near zero for almost seven years after the financial crisis and engaged in unprecedented asset purchases termed “quantitative easing.” See, e.g., *Federal Funds Effective Rate*, FED. RSRV. OF ST. LOUIS, <https://fred.stlouisfed.org/series/FEDFUNDS> (last visited Nov. 16, 2021) [<https://perma.cc/VUB6-8MG9>] (showing that the Fed Funds rate remained near zero for nearly seven years, from the end of 2008 through the end of 2015, and again for over a year from March 2020 through the time of

invited intense criticism from market, academic, and political figures,¹²² and which would likely have been much harder to accomplish had the Fed been more directly politically accountable.

The question may then arise of why we need fear inflation and deflation. Put another way, is price stability important, and if so, why? And if it is important, is central bank independence really necessary to achieve it?

A number of thoughtful monetary economists and policymakers have written recently on the importance of price stability as a means of mitigating inequality (while also arguing that inequality is primarily a structural rather than monetary phenomenon).¹²³ For example, Agustín Carstens, General Manager of the Bank for International Settlements, writes that

over the long run, inequality is not a monetary phenomenon, though central banks' actions can have an impact on the distribution of wealth and income over shorter horizons. Prolonged periods of high inflation and recessions can hurt the economy and disproportionately hit the most disadvantaged. Therefore, the best contribution monetary

this writing); Elizabeth Schulze, *The Fed Launched QE Nine Years Ago—These Four Charts Show its Impact*, CNBC (Nov. 24, 2017, 7:59 AM), <https://www.cnbc.com/2017/11/24/the-fed-launched-qe-nine-years-ago—these-four-charts-show-its-impact.html> [<https://perma.cc/AM7M-2EBH>] (with interest rates already close to zero, “[t]he Fed launched quantitative easing (QE), ultimately buying trillions of dollars of government bonds and mortgage-backed securities. Between 2008 and 2015, the Fed’s . . . total assets ballooned from \$900 billion to \$4.5 trillion”); see also Ben S. Bernanke, Chair of the Fed. Rsrv., Speech at the Federal Reserve Bank of Kansas City Economic Symposium, Jackson Hole, Wyoming: The Economic Outlook and Monetary Policy (Aug. 27, 2010), <https://www.federalreserve.gov/newsevents/speech/bernanke20100827a.htm> [<https://perma.cc/64QQ-KADS>] (the Federal Open Market Committee “will strongly resist deviations from price stability in the downward direction”).

122. For an account of criticisms from members of Congress, see, for example, Sewell Chan, *In Unusual Move, Fed Bolsters Its Defense of Its Plan*, N.Y. TIMES (Nov. 17, 2010), <https://www.nytimes.com/2010/11/18/business/economy/18fed.html> [<https://perma.cc/9EWU-8RWW>]. For an example of criticism from market figures and academics, signed by economists such as Michael Boskin and John Taylor, and fund managers such as Cliff Asness and Jim Chanos, see Open Letter from Hoover Inst. Ed. to Ben Bernanke, Chair of the Fed. Rsrv. (Nov. 15, 2010), <https://www.hoover.org/research/open-letter-ben-bernanke> [<https://perma.cc/BE9B-HRZR>] (arguing that “planned asset purchases risk currency debasement and inflation”).

123. See Isabel Schnabel, Member of the Exec. Bd. of the Eur. Cent. Bank, Speech at Conference on Diversity and Inclusion in Economics, Finance, and Central Banking: Monetary Policy and Inequality (Nov. 9, 2021), https://www.ecb.europa.eu/press/key/date/2021/html/ecb.sp211109_2~cca25b0a68.en.html [<https://perma.cc/P4E8-RY99>]; Claudio Borio, Head of the Monetary & Econ. Dep’t, Bank for Int’l Settlements, Speech at Bank of International Settlements Annual Meeting: The Distributional Footprint of Monetary Policy (June 29, 2021), <https://www.bis.org/speeches/sp210629a.pdf> [<https://perma.cc/CW6J-366B>]; Agustín Carstens, Gen. Manager of the Bank of Int’l Settlements, Comments at Markus’ Academy, Princeton University’s Bendheim Center for Finance: Central Banks and Inequality (May 6, 2021), <https://www.bis.org/speeches/sp210506.htm> [<https://perma.cc/5D52-2PFT>]. These speakers all argue that the *primary* drivers of inequality are structural and call for nonmonetary policy responses, but that monetary policy can nonetheless serve an important role, above all in promoting price stability.

policy can make to an equitable society is to try to keep the economy on an even keel by fulfilling its mandate. Governments can reduce inequality through more direct fiscal and structural policies.¹²⁴

Both high levels of inflation and the policy response required to address it hit the least well-off the hardest. Inflation “is often rightly portrayed as one of the most regressive taxes. The households at the lowest end of the income spectrum are the least able to hedge against it: their income is usually fixed in nominal terms and their savings held in cash or bank accounts.”¹²⁵ Meanwhile, fighting inflation requires monetary tightening that can “bring[] on recessions and boost[] unemployment, which disproportionately hit the most disadvantaged households.”¹²⁶

Deflation can be even more damaging than high levels of inflation and if left unaddressed can cause severe recessions or depressions.¹²⁷ And again, “[a]s recessions hit, the lower-skilled workers are typically the first to be laid off.”¹²⁸ Unlike the policy response required to fight inflation, fighting a deflationary recession calls for a loose monetary policy that should boost employment and decrease income inequality.¹²⁹ Such a policy—while better overall both for the economy and for the least well-off—may, however, exacerbate *wealth* inequality.¹³⁰ Lower interest rates tend to boost the prices of financial and real assets, and these assets are overwhelmingly held by those who are already wealthy.¹³¹ In short, a lack of price stability is a primary way the monetary system may exacerbate inequality.

If price stability is important, how important is central bank independence in achieving? In the past half century, the Fed has faced two great battles for price stability: against inflation in the 1970s and

124. Carstens, Comments, *supra* note 123, at 1.

125. *Id.* at 4.

126. *Id.* at 4.

127. To take the most salient example, the Fed’s failure to fight monetary contraction and deflation in the 1930s is widely accepted as a principal cause of the Great Depression:

The Federal Reserve’s most serious sin of omission [was] failure to stem [this] decline in the supply of money. From the fall of 1930 through the winter of 1933, the money supply fell by nearly [thirty] percent. The declining supply of funds reduced average prices by an equivalent amount. This deflation increased debt burdens; distorted economic decision-making; reduced consumption; increased unemployment; and forced banks, firms, and individuals into bankruptcy.

Gary Richardson, *The Great Depression*, FED. RSRV. HIST. (Nov. 22, 2013), <https://www.federalreservehistory.org/essays/great-depression> [<https://perma.cc/GED8-8RW6>].

128. Carstens, Comments, *supra* note 123, at 5.

129. Borio, Speech, *supra* note 123, at 8.

130. *Id.*

131. If, for example, one can finance the purchase of a home on more favorable terms, one can afford to pay a higher price for it, driving up the prices of homes more generally, and benefitting those who owned homes prior to the low interest rate environment.

early 1980s, and against deflation in the post-GFC era. In both cases the Fed faced political headwinds that, had it been less independent, may have undermined its efforts to stabilize prices. I have already observed that the Fed faced significant criticism as it fought deflation in the post-GFC decade.¹³² The political and popular backlash to then Fed Chair Paul Volcker's campaign against inflation in the early 1980s was arguably fiercer; as Neil Irwin recounts, Volcker's campaign, which required a sharp increase in interest rates,

most certainly put a bullet in the U.S. economy. . . . By the time Mr. Volcker's campaign of monetary tightening was done, in 1982, joblessness would peak at 10.8 percent. This, understandably, led to intense pressure on Mr. Volcker and the Fed to relent, to hold off on the tight-money policies that had caused the deepest recession since World War II. With interest rates over [twenty] percent, home-building activity practically came to a halt. People who worked in construction trades mailed two-by-four pieces of lumber to Mr. Volcker in protest. Auto dealers mailed keys to the cars for which there were no buyers. Farmers drove their tractors around the white marble Fed building. A man with a sawed-off shotgun and other weapons, who later told police he was angry about high interest rates, charged past guards at the Fed's building and nearly made it to the boardroom of the central bank before a guard tackled him. (After the incident, Mr. Volcker was assigned a full-time security detail for the first time.) Mr. Volcker's routine appearances on Capitol Hill became an exercise in lawmakers of both parties attacking him.¹³³

This illustrates, in my view, two key points: first, that Fed independence may be essential to accomplishing price stability; and second, that even when the Fed confines itself to its core mandate, its independence is fragile and should not be taken for granted.

B. The People's Ledger and the fragility of Fed independence

The more we ask the Fed to do, however, the harder it may be to maintain its independence over the long-term—and this is a potential concern with *some* aspects of *The People's Ledger*. On the one hand, these concerns, even if correct, do not imply a rejection of much of Omarova's project, as key aspects of *The People's Ledger*, such as the NIA, do not require the Fed to make discretionary decisions at all;¹³⁴

132. See *supra* note 122 and accompanying text.

133. Neil Irwin, *Paul A. Volcker, Fed Chairman Who Curbed Inflation by Raising Interest Rates*, *Dies at 92*, WASH. POST (Dec. 9, 2019), https://www.washingtonpost.com/local/obituaries/2019/12/09/c744d596-1468-11e1-9048-1f5352187eed_story.html [https://perma.cc/U9KW-8XAY]. Note that while the intensity of the reaction to Volcker's interest rate hikes was likely unique, there has been popular unrest with the Fed's interest rate policies in other eras, as well. See, e.g., Victoria Guida, *Fed, Facing Populist Anger, Embraces 'Those Left Behind' by Economy*, POLITICO (Aug. 9, 2019, 12:45 PM), <https://www.politico.com/story/2019/08/09/fed-facing-populist-anger-embraces-those-left-behind-by-economy-1648020> [https://perma.cc/8LPZ-GHM2].

134. Omarova, *supra* note 1, at 1281 ("Public investment decisions would be left to the Treasury and the newly created NIA.").

and other elements, such as helicopter drops, can be engineered so that the discretionary decisionmaking point lies outside the Fed.¹³⁵ On the other hand, one can imagine those sympathetic to *The People's Ledger* despairing of the ability of Congress and other more directly accountable agencies to carry out Omarova's vision; these allies might then place their hope in an independent Fed. In my view, this would be a mistake: it could undermine Fed independence and would not guarantee better policies over the longer term.

Without denying that the Fed's operations inevitably have some distributional impact,¹³⁶ we should query what the results might be if the Fed's remit required it to make decisions with more direct and transparent distributional effects. Here I am reminded of a tale of the philosopher Sidney Morgenbesser, who had been in the middle of student riots at Columbia University in 1968 and been "clobbered" by police.¹³⁷ Years later, he was called up for jury duty and during voir dire was asked if he had ever been treated "unjustly or unfairly" by police.¹³⁸ He replied, "I've been treated unjustly but not unfairly. They were clobbering everybody."¹³⁹ Here we may have the opposite problem: even if the decisions the Fed makes are just according to our standards, to the degree they are perceived as "unfair" by (some) citizens, it will undermine the Fed's legitimacy with (some portion of) the populace. It's one thing when market actors bet against your most highly valued personal asset; it would be quite another if the Fed did it.¹⁴⁰ Similarly,

135. Ben Bernanke argues that helicopter drops can be arranged in such a way that the allocative decisionmaking locus rests outside the Fed—something that strikes me as harmonious with the overall approach of *The People's Ledger*. Bernanke concerned that the Fed lacks the political legitimacy to make the direct allocative decisions that helicopter drops may require, proposes as a potential way to address this that we:

Ask Congress to create, by statute, a special Treasury account at the Fed, and to give the Fed (specifically, the Federal Open Market Committee) the sole authority to "fill" the account, perhaps up to some prespecified limit. At almost all times, the account would be empty; the Fed would use its authority to add funds to the account only when the [Federal Open Market Committee] assessed that [a helicopter drop] of specified size was needed to achieve the Fed's employment and inflation goals. Should the Fed act, under this proposal, the next step would be for the Congress and the Administration—through the usual, but possibly expedited, legislative process—to determine how to spend the funds (for example, on a tax rebate or on public works).

Bernanke, *supra* note 57.

136. Lower interest rates, for example, benefit borrowers at the expense of savers, and vice versa for higher rates.

137. David Shatz, 'Yeah, Yeah': *Eulogy for Sidney Morgenbesser, Philosopher with a Yiddish Accent*, TABLET (June 26, 2014), <https://www.tabletmag.com/sections/arts-letters/articles/sidney-morgenbesser> [https://perma.cc/T7YU-BWLM].

138. *Id.*

139. *Id.*

140. See *supra* Section I.B (critiquing the idea of the Fed taking a short position on residential real estate through OMO Plus when it determines that the housing market is running too hot).

it is one thing when those who face elections every two, four, or six years make political determinations about who is eligible or ineligible to receive stimulus checks;¹⁴¹ it would be another thing if unelected officials make these determinations in implementing “helicopter drops.”

A second question that arises overlaps with the first: how confident can Omarova’s allies be that Fed policymakers will share their commitments over the long term? Even if everyone agrees on some version of “equality” as an allocative criterion, for example, that could mean very different things to different people. Drawing an analogy to constitutional law, one group of Fed policymakers may adopt an “anticlassification” approach, in which it is wrong to take into account factors such as gender and race when considering the distributive effects of money creation.¹⁴² Another school may adopt an “antisubordination” approach, based on a recognition of inequality in the economic opportunities available for certain demographic groups, and demand a remedial approach that takes these factors into account in order to promote equality.¹⁴³

But the problems go deeper than that: at least in the “equality” example there is a nod towards (a kind of) impartiality, and this may impose salutary, if highly imperfect, constraints on decisionmaking. What if, however, those constraints are eroded? There is a famous experiment at daycare centers in which monetary fines were introduced for parents arriving late to pick up their children, with the result that late pick-ups *increased* markedly.¹⁴⁴ The fines imposed an economic cost on late pick-ups, but the psychological impact apparently was to make late arrivals morally permissible in a way they had not been hither thereto.¹⁴⁵ The effect was such that late arrivals did not abate after the fines were removed.¹⁴⁶ The analogy is not, of course, perfect, but by telling the Fed, “Your decisions are political—act like it!” the impact may be to remove the psychological imperative to *appear* neutral. This

141. See, e.g., Tim Breene, *These Taxpayers Won't Get Stimulus Checks. That's Unjust*, CNN BUS. PERSP. (March 26, 2020, 3:24 PM), <https://www.cnn.com/2020/03/26/perspectives/stimulus-checks-undocumented-taxpayers/index.html> [<https://perma.cc/CNR9-RGUM>].

142. See, e.g., Jack M. Balkin & Reva B. Siegel, *The American Civil Rights Tradition: Anticlassification or Antisubordination?*, 58 U. MIAMI L. REV. 9, 10 (2003) (“Roughly speaking, this principle holds that the government may not classify people either overtly or surreptitiously on the basis of a forbidden category: for example, their race.”).

143. *Id.* at 9 (“Antisubordination theorists contend that guarantees of equal citizenship cannot be realized under conditions of pervasive social stratification and argue that law should reform institutions and practices that enforce the secondary social status of historically oppressed groups.”).

144. Uri Gneezy & Aldo Rustichini, *A Fine is a Price*, 29 J. LEG. STUD. 1 (2000).

145. *Id.*

146. *Id.*

could increase transparency but still have a highly toxic effect on Fed independence and decisionmaking. We can imagine one set of Fed decisionmakers setting collateral eligibility requirements under the NDW to heavily disfavor those corporations that fail to provide for direct employee representation on their board of directors;¹⁴⁷ and another set of Fed decisionmakers setting collateral eligibility requirements to heavily disfavor corporations that “abus[e] their positions to advance left-wing social policies.”¹⁴⁸

It seems, in other words, that even if we try to maintain some degree of Fed independence, it would be unstable in this regime, with a large percentage of people at any given moment—sometimes conservatives, sometimes progressives—antagonistic toward such independence.¹⁴⁹ And in trying to insulate the Fed’s decisions from the dysfunctions of partisan politics, such a regime would eventually infect the Fed with the same dysfunctions.

C. Other implications

The astute reader will remember, of course, that the Fed as it currently operates does not confine itself to traditional monetary policy.¹⁵⁰ Its massive intervention into markets since the GFC have been driven partly by the challenges posed when recession threatens and interest rates are already at zero,¹⁵¹ partly by its need to prevent

147. See Press Release, Senator Elizabeth Warren, Warren Introduces Accountable Capitalism Act (Aug. 15, 2018), <https://www.warren.senate.gov/newsroom/press-releases/warren-introduces-accountable-capitalism-act> [<https://perma.cc/YQ3T-9WMR>] (proposing to require U.S. corporations to permit employees to select at least forty percent of company directors).

148. Press Release, Marco Rubio, New Rubio Bill Helps Shareholders Fight Back Against Woke Corporations (Sept. 23, 2021), <https://www.rubio.senate.gov/public/index.cfm/2021/9/new-rubio-bill-helps-shareholders-fight-back-against-woke-corporations> [<https://perma.cc/7XF5-EM75>].

149. Eric Posner and Cass R. Sunstein have described a similar dynamic in other areas: Many people vigorously defend particular institutional judgments on such issues as the filibuster, recess appointments, executive privilege, federalism, and the role of the courts. These judgments are defended publicly with great intensity and conviction, but some of them turn out to be exceedingly fragile in the sense that their advocates are prepared to change their positions as soon as their ideological commitments cut in the other direction.

Eric A. Posner & Cass R. Sunstein, *Institutional Flip-Flops*, 94 TEX. L. REV. 485, 485 (2016).

150. See *supra* notes 19–20 and accompanying text.

151. See, e.g., Ben S. Bernanke, *How Big a Problem Is The Zero Lower Bound on Interest Rates?*, BROOKINGS (April 12, 2017), <https://www.brookings.edu/blog/ben-bernanke/2017/04/12/how-big-a-problem-is-the-zero-lower-bound-on-interest-rates/> [<https://perma.cc/GT3T-U893>] (“When short-term interest rates reach zero, further monetary easing becomes difficult and may require unconventional monetary policy, such as large-scale asset purchases (quantitative easing).”).

panics in the shadow banking sector,¹⁵² and partly by Congressional unwillingness to authorize the full amount of aid contemplated during the COVID-19 pandemic via direct fiscal outlays.¹⁵³ These have all invited some degree of adverse political reaction.¹⁵⁴

To the degree that the Fed's balance sheet expansion has been driven at various times by the need to prop up the shadow banking system, the obvious policy response, in my view, is to stamp out the shadow banking system—that is, prohibit nonbanks (or, in Omarova's proposal, any private institution) from offering short-term debt claims that function for the claimant like a deposit.¹⁵⁵ To the degree the Fed's balance sheet expansion has been driven by the need to pursue unconventional monetary policy or respond (in cooperation with Congress) to the COVID-19 pandemic, I believe it may be wiser for the Fed to seek ways to cede the allocative power it has found itself wielding, rather than doubling down on it.

Even if the Fed succeeds in ceding this power and confines itself to its traditional functions, there is, of course, no guarantee that it will remain independent and make the right decisions over the long term. I would argue, however, that its independence is a prerequisite of good monetary policy, and thus worth striving to maintain. Asking the Fed to carry out distributive functions that other, more accountable entities are equally qualified to perform¹⁵⁶ would needlessly put its independence at risk. Even if, therefore, all the policy prescriptions in *The People's Ledger* were substantively embraced, I believe it would be both feasible and desirable to minimize the Fed's role.

As a final point, it is fair to ask if the same concerns regarding independence apply to the FedAccounts proposal itself—that is, permitting private citizens and businesses to bank directly at the Fed. I do not think they do in any significant way. FedAccounts may pose significant technical challenges in its implementation (relating, for example, to privacy concerns, customer service, and cybersecurity), but it is fairly straightforward from a policy perspective. Passing FedAccounts would require one moment of democratic action; its

152. See *supra* notes 18–19.

153. See generally Menand, *supra* note 20.

154. See, e.g., James Politi, *Fed Caught in Political Crosshairs Over Bailout Role*, FIN. TIMES (April 24, 2020), <https://www.ft.com/content/832107f4-e6d3-4dc4-adfa-c9c7338be7e3> [<https://perma.cc/NVS6-F34Z>]; Sewell Chan, *From Tea Party Advocates, Anger at the Federal Reserve*, N.Y. TIMES (Oct. 10, 2010), <https://www.nytimes.com/2010/10/11/us/politics/11fed.html> [<https://perma.cc/X4C9-NEL3>]; see also *supra* note 122.

155. See *supra* Part II.

156. See, e.g., *supra* notes 134–135 and accompanying text.

ongoing administration would require very little discretionary decisionmaking of the sort likely to invite popular backlash.¹⁵⁷

CONCLUSION

While this essay has focused on points of difference, I believe *The People's Ledger* is a model of what legal scholarship should be: pushing the envelope, thinking things through at their foundations, refusing to take current structures for granted, and marrying deep theoretical insight with thoughtful and informed considerations of how to implement policies. Of equal importance, it makes a significant contribution to our understanding of the legal dimensions of money and monetary system design—an area too often neglected in legal scholarship. Omarova has done as much as anyone to remedy this neglect. *The People's Ledger* serves this remedial project in its own right and may, one hopes, do even more by drawing new scholars and policymakers into the debate.

157. It would have discretion to set interest on reserves, but if this were a single rate it would be unlikely to create a sense of unfairness in the general populace. *See generally* Ricks et al., *supra* note 26.