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Rebuilding Banking Law: Banks as Public Utilities

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Rebuilding Banking Law: Banks as Public Utilities

Lev Menand[†] & Morgan Ricks^{††}

Under the New Deal framework for money and payments—which had its roots in the National Bank Act of 1864—banks in the United States were governed in many respects as public utilities. Charters were available only where they were consistent with public convenience and need, the usual standard for utilities. Banks enjoyed an exclusive privilege to augment the money supply, maintaining deposit account balances that households and businesses could use as a means of payment and store of value. Banks were largely limited to conducting activities consistent with their monetary purpose. Geographic expansion was constrained to promote adequate service to local communities. And a government agency, the Federal Reserve, regulated the quantity of bank money in circulation and set the interest that accrued to its holders. The result was an unprecedented period of overall financial stability that lasted more or less until 2008.

Unfortunately, policymakers have steadily undermined and degraded key elements of this system, and now its logic has been largely forgotten. Deposit alternatives—financial products that as a formal, legal matter are distinct from bank deposits but that function like them in practice—match or exceed deposits in value, and the country’s once-diffuse banking system has given way to a top-heavy financial architecture in which a handful of complex conglomerates engage in a broad range of monetary and non-monetary financial activities with little meaningful government oversight. Although policymakers dramatically expanded regulation after the 2008 financial crisis, we still face rolling panics, a central bank committed to backstopping much of private finance, massive rent extraction by Wall Street, and democratic decline.

This paper offers a blueprint for reform: what we call a New National Banking system. Our goal is part restoration, part innovation. We aim to both renew the framework that undergirded American prosperity in the twentieth century and refine it by improving access to bank services and

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carrying through on the law's public utility vision where previous policy-makers came up short. The proposal is structural, not technocratic—banking law, not “finreg.” Consequently, it is conceptually and legally simple: it involves fairly surgical changes and can be implemented through a series of incremental adjustments, which we delineate herein.

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Introduction

America's system of money and banking is broken. Another interest rate tightening cycle has precipitated yet another round of financial instability. On March 10, 2023, with unemployment near multidecade lows and U.S. gross domestic product growing at a healthy clip, the \$210 billion Silicon Valley Bank (SVB) failed. Two days later, with panic spreading, the Federal Deposit Insurance Corporation (FDIC) took over the \$100 billion Signature Bank while also overriding a \$250,000 cap on deposit insurance to rescue SVB's and Signature's uninsured depositors.¹ To enable the rescue, the Secretary of the Treasury determined that following the ordinary rules of bank failure for SVB and Signature would have "serious adverse effects on economic conditions or financial stability."² That same day, the Federal Reserve invoked section 13(3) of its enabling act to establish an emergency lending facility to support other banks facing similar pressure.³ To enable this assistance, the Treasury Secretary committed \$25 billion from the country's Exchange Stabilization Fund (ESF).⁴ The joint maneuver marked the fourth extraordinary government intervention to prevent a financial collapse in fifteen years.⁵

Weeks later, the fallout continued. On May 1, the FDIC closed the \$230 billion First Republic Bank and sold it to one of the banking subsidiaries of JPMorgan Chase, the \$3.7 trillion conglomerate that functions as America's apex financial services provider.⁶ The FDIC once again made uninsured depositors whole, this time maneuvering around, rather than

1. Press Release, Fed. Deposit Ins. Corp., FDIC Establishes Signature Bridge Bank, N.A., as Successor to Signature Bank, New York, NY (Mar. 12, 2023), <https://www.fdic.gov/news/press-releases/2023/pr23018.html> [<https://perma.cc/49F9-AQCZ>]; Press Release, Fed. Deposit Ins. Corp., Joint Statement by the Department of the Treasury, Federal Reserve, and FDIC (Mar. 12, 2023), <https://www.fdic.gov/news/press-releases/2023/pr23017.html> [<https://perma.cc/7JES-6XD9>].

2. Federal Deposit Insurance Corporation Improvement Act, 12 U.S.C. § 1823(c)(4)(G) (2018).

3. See *Bank Term Funding Program: Frequently Asked Questions*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. 3 (Mar. 16, 2023), <https://www.federalreserve.gov/financial-stability/files/bank-term-funding-program-faqs.pdf> [<https://perma.cc/773G-HHEJ>].

4. *Report to Congress Pursuant to Section 13(3) of the Federal Reserve Act: Bank Term Funding Program*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. 2 (Mar. 16, 2023), <https://www.federalreserve.gov/publications/files/13-3-report-btftp-20230316.pdf> [<https://perma.cc/6SWW-VSDA>].

5. The three prior episodes were: the 2007-09 global financial crisis, the 2019 repo market meltdown, and the 2020 pandemic panic.

6. Press Release, Fed. Deposit Ins. Corp., JPMorgan Chase Bank, National Association, Columbus, Ohio Assumes All the Deposits of First Republic Bank, San Francisco, California (May 1, 2023), <https://www.fdic.gov/news/press-releases/2023/pr23034.html> [<https://perma.cc/3CPV-YSBF>]; Press Release, JPMorgan Chase & Co., JPMorgan Chase Acquires Substantial Majority of Assets and Assumes Certain Liabilities of First Republic Bank (May 1, 2023), <https://www.jpmorganchase.com/ir/news/2023/jpmc-acquires-substantial-majority-of-assets-and-assumes-certain-liabilities-of-first-republic-bank> [<https://perma.cc/6HB2-R8Y3>].

overriding, the ordinary rules of bank failure.⁷ Regulators did so even though the primary beneficiaries this time were not true depositors, but eleven of the largest banks in the country, which had structured \$30 billion of loans to First Republic in the form of “deposits.”⁸ The FDIC now expects thirteen billion dollars of losses to the deposit insurance fund, which will ultimately be recouped through assessments on *all* banks, making the resolution of First Republic a bailout of the country’s largest banks by their smaller competitors.⁹

The United States has a long history of financial instability. While some countries have never experienced damaging bank runs,¹⁰ America has suffered many. And the consequences have been severe. Many recessions (and both depressions) since the Founding were the product of disorderly monetary and credit contractions.¹¹ The best known of these, the Great Depression, was driven largely by a banking collapse that led to the closure of nearly half the depository institutions in the country.¹² An ear-

7. The FDIC resolved First Republic Bank by entering into a purchase and assumption agreement with JPMorgan Chase that included an estimated loss to the Deposit Insurance Fund of \$13 billion even though the agreement also fully protected the uninsured depositors of First Republic, including eleven banks which had \$30 billion in uninsured deposits. Press Release, Fed. Deposit Ins. Corp., JPMorgan Chase Bank, National Association, Columbus, Ohio Assumes All the Deposits of First Republic Bank, San Francisco, California (May 1, 2023), <https://www.fdic.gov/news/press-releases/2023/pr23034.html> [<https://perma.cc/3CPV-YSBF>].

8. Richard Berner, Kermit L. Schoenholtz & Lawrence J. White, *Evaluation of the Policy Response: On the Resolution of Silicon Valley Bank, Signature Bank, and First Republic Bank*, in *SVB AND BEYOND: THE BANKING STRESS OF 2023* 99, 106 n.98 (Viral V. Acharya, Matthew P. Richardson, Kerit L. Schoenholtz & Bruce Tuckman eds., 2023); Press Release, Citigroup, Bank of America, Citigroup, JPMorgan Chase, Wells Fargo, Goldman Sachs, Morgan Stanley, BNY-Mellon, PNC Bank, State Street, Truist and U.S. Bank to make uninsured deposits totaling \$30 billion into First Republic Bank (March 16, 2023), <https://www.citigroup.com/global/news/press-release/2023/bank-of-america-citigroup-jpmorgan-chase-wells-fargo-goldman-sachs-morgan-stanley-bny-mellon-pnc-bank-state-street-truist-and-u-s-bank-to-make-uninsured-deposits-totaling-30-billion-into-first-republic-bank> [<https://perma.cc/3NEN-K2V2>].

9. *Id.* Because the FDIC did not invoke the systemic risk exception to the least cost resolution requirement, losses to the Deposit Insurance Fund must be recouped by the FDIC through the ordinary assessment process. 12 U.S.C. § 1817.

10. For example, Canada. Canada has an oligopolistic banking system in which banks are closely tied to the government. See Michael D. Bordo, Angela Redish & Hugh Rockoff, *Why Didn't Canada Have a Banking Crisis in 2008 (or in 1930, or 1907, or . . .)?*, 68 *ECON. HIST. REV.* 218, 219 (2015). Although such systems are more stable, there are significant political and economic downsides. See *infra* Part II; see also MORGAN RICKS, GANESH SITARAMAN, SHELLEY WELTON & LEV MENAND, *NETWORKS, PLATFORMS, AND UTILITIES: LAW AND POLICY* 821-35 (2022) (exploring the U.S. experiment with a similar model in the Early Republic).

11. See *infra* Section II.A.2; MORGAN RICKS, *THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION* 102-42 (2016).

12. See MILTON FRIEDMAN, *A PROGRAM FOR MONETARY STABILITY* 18-19 (1960); Ben S. Bernanke, *Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression*, 73 *AM. ECON. REV.* 257, 259 (1983); CHARLES P. KINDLEBERGER, *THE WORLD IN DEPRESSION: 1929-1939* (1973); Barry Eichengreen, *Viewpoint: Understanding the Great Depression*, 37 *CANADIAN J. OF ECON.* 1 (2004). Also relevant was the operation of the international gold standard—another dimension of the monetary framework of that period. See BARRY J. EICHENGREEN, *GOLDEN FETTERS: THE GOLD STANDARD AND THE GREAT DEPRESSION, 1919-1939* (1995) [hereinafter EICHENGREEN, *GOLDEN FETTERS*].

lier depression running from 1837 to 1842, sometimes known as the First Great Depression, was also triggered by a panic and led multiple states to default on their obligations.¹³ The more recent Great Recession was the product of similar dynamics.¹⁴

America's core banking laws were enacted in the aftermath of such crises. The pivotal moment arrived during the Civil War when the fiscal demands of the North's military campaign crippled the country's fragmented network of state-chartered banks. Congress responded with the National Bank Act of 1864 (NBA), which established a system of federally chartered corporations overseen by a federal official, the Comptroller of the Currency (OCC).¹⁵ Championed by Treasury Secretary Salmon P. Chase and Senator John Sherman (R-Ohio), and signed into law by President Abraham Lincoln, the NBA was designed to resurrect the Bank of the United States—slain three decades earlier by Andrew Jackson—in new form.¹⁶ Rather than rely on a single instrumentality, the NBA enabled many separate ones, each with their own capital, shareholders, and directors.¹⁷ Policymakers hoped that these “national banks,” plural, could replace the country's heterogenous mix of state banks and become the exclusive source of paper notes.¹⁸

The new system had four major features. The most significant was delegation: banks owned by investors, not the government, expanded (and contracted) the money supply. Although the federal government continued to issue legal tender cash (largely in the form of gold and silver coins), it did not intend to do so on a discretionary basis. Instead, national banks enjoyed a franchise to augment a fairly inelastic base with a much larger supply of notes and deposit account balances—“bank money.” Pol-

13. ALASDAIR ROBERTS, *AMERICA'S FIRST GREAT DEPRESSION: ECONOMIC CRISIS AND POLITICAL DISORDER AFTER THE PANIC OF 1837*, at 43, 53 (2012).

14. See Ben S. Bernanke, *The Real Effects of Disrupted Credit: Evidence from the Global Financial Crisis*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2018, at 251 (tying the economic contraction to the financial system disruption); Tyler Atkinson, David Luttrell & Harvey Rosenblum, *How Bad Was It? The Costs and Consequences of the 2007-09 Financial Crisis*, 20 FED. RES. BANK OF DALLAS STAFF PAPERS 1, 2 (2013) (estimating the output lost at between \$6 and \$14 trillion in 2012 dollars).

15. National Bank Act, ch. 106, 13 Stat. 99 (1864).

16. Lev Menand & Morgan Ricks, *Federal Corporate Law and the Business of Banking*, 88 U. CHI. L. REV. 1361, 1387-88 (2021).

17. As the law's leading drafter, Rep. Samuel Hooper (R-MA), explained, “[National banks will secure] all the benefits of the old United States Bank without many of those objectionable features which aroused opposition. . . . [T]he Government enabled that bank to monopolize the business of the country. Here no such system of favoritism exists. . . . It will be as if the Bank of the United States had been divided into many parts, and each part endowed with the life, motion, and similitude of the whole.” CONG. GLOBE, 37th Cong., 2d Sess. 616 (1862).

18. See Menand & Ricks, *supra* note 16, at 1387. To accelerate the obsolescence of state banks, in 1865, Congress enacted a prohibitively high, ten-percent tax on their note issue. Act of Mar. 3, 1865, ch. 78, 13 Stat. 469, 484. This tax worked to eliminate state bank notes but ultimately state banks shifted to deposit issue and checks drawn on those accounts, as these were not subject to the tax. See RICKS ET AL., *supra* note 10, at 839.

icymakers believed that renting new money into circulation through bank lending was a better way to adjust the amount of money in a growing economy. Bankers, unlike public officials, would not face political pressure to issue too many notes and deposits (or so the thinking went). And putting underwriting into the hands of investor-owned banks would prevent government corruption (or so everyone hoped).¹⁹ The NBA was an outsourcing regime.

The other three features of the national banking system were designed to sustain delegation politically and economically. Investor-owned, government-chartered banks were controversial: why should Congress hand over to private investors the power to expand the money supply? What would stop bank investors from using their ability to create money to dominate the economy and favor their own business activities? Worse, what would stop them from using it to control the government itself, subverting democracy? Outsourcing was also potentially inefficient. The problem was instability. To a much greater degree than the government, investor-owned businesses face the prospect of failure and default, especially during economic disruptions. To ameliorate both sets of concerns, the NBA (1) separated banks from other businesses, strictly limiting their activities to issuing notes and deposits (by originating loans and purchasing bonds) and dealing in government cash and bullion; (2) diffused banks geographically, aiming to prevent any one group of bankers from accumulating too much political or economic power; and (3) imposed a heightened form of public sector oversight, known as supervision.²⁰

The NBA remains the core of U.S. banking law. In 1913, at the urging of Woodrow Wilson, Congress supplemented the statute with the Federal Reserve Act, which established a federal agency, now called the Board of Governors of the Federal Reserve System (the Fed), to administer the banking system (including the state banks that survived Congress's efforts to force them into federal charters).²¹ During the Depression, Congress enacted the Banking Act of 1933, which created the FDIC, insured bank deposits, and restored the firewall between banks and securities dealers after it had eroded in the 1910s and 1920s.²² Through these

19. Lev Menand, *The Logic and Limits of the Federal Reserve Act*, 40 YALE J. ON REGUL. 197, 212-14 (2023).

20. Lev Menand, *Why Supervise Banks: The Foundations of the American Monetary Settlement*, 74 VAND. L. REV. 951, 958-59 (2021). To ensure monetary stability, the National Bank Act also required that national banks back their note issue with U.S. government debt. This practice eventually became unsustainable as the need for notes outpaced the supply of government debt—as predicted by Salmon Chase at the time of enactment. “But these considerations may be for another generation,” he wrote. U.S. DEP’T OF THE TREASURY, REPORT OF THE SECRETARY OF THE TREASURY ON THE STATE OF THE FINANCES FOR THE YEAR ENDING JUNE 30, 1862, at 20 (1863) [hereinafter REPORT OF THE SECRETARY 1862].

21. See Menand, *supra* note 19, at 222-23.

22. Banking Act of 1933, ch. 89, 48 Stat. 162.

further enhancements the vision underlying the NBA approached full realization.

Banks were governed in many respects as public utilities. Charters were available only where they were consistent with the convenience and needs of the public. Franchisees enjoyed an exclusive privilege to augment the money supply²³ but were largely limited to conducting activities consistent with their monetary mission. Geographic expansion by banks was constrained such that individual banks served their local communities.²⁴ Most bank money was rendered a government product by deposit insurance, and a government agency, the Fed, regulated the quantity of bank money in circulation and set the interest that accrued to its holders. The result was an unprecedented period of overall financial stability that lasted more or less until 2008.²⁵ During the system's heyday from 1935 to 1980, the United States also enjoyed a golden age of economic growth.

Unfortunately, the achievements of the Civil War Republican Party, the Wilson Administration, and the New Deal Congress have been progressively undermined and degraded since 1980, and Lincoln's underlying vision has been largely forgotten. The core of the problem is shadow banking: the creation of new forms of deposit-like money issued by non-bank financial firms.²⁶ The growth of shadow banking, fueled by the im-

23. For a description of what it means to say that banks augment the money supply, see *infra* note 38 and accompanying text.

24. In the 1970s, Congress added critical antidiscrimination and consumer protection provisions in an effort to extend to more people the benefits of this critical infrastructure. *See, e.g.*, Community Reinvestment Act of 1977, Pub. L. No. 95-128, tit. VIII, 91 Stat. 1111, 1147-48 (codified at 12 U.S.C. §§ 2901-2908); Michael S. Barr, *Credit Where it Counts: The Community Reinvestment Act and its Critics*, 80 N.Y.U. L. REV. 513 (2005). These measures were unsuccessful along many dimensions and the problems of access and rent extraction remain. *See infra* Section II.D.

25. The primary exception was an episode from the mid-to-late 1980s known as the Savings and Loan Crisis when many depository institutions failed, including Continental Illinois, one of the largest commercial banks in the country. These failures were in part a product of severe economic conditions between 1974 and 1984 and in part a product of deregulation and desupervision of banks over that same time period. *See, e.g.*, Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, §§ 401-402, 94 Stat. 132, 151-56; Garn-St. Germain Depository Institutions Act of 1982, Pub. L. No. 97-320, §§ 321-330, 403, 96 Stat. 1469, 1499-1502, 1510-11; George A. Akerlof & Paul M. Romer, *Looting: The Economic Underworld of Bankruptcy for Profit*, BROOKINGS PAPERS ON ECON. ACTIVITY, no. 2, 1993, at 1. The failures, however, never gave rise to widespread contagion, disorderly monetary contraction, or acute economic recession as the New Deal legal framework, which worked to prevent these outcomes, was still largely in place. Other episodes, such as the failure of Franklin National Bank in 1974, resulted from the deposit substitutes that plague our system today. Since the use of these substitutes was on a smaller scale, the fallout was more easily contained by policymakers. *See* Pierre-Christian Fink, *Caught Between Frontstage and Backstage: The Failure of the Federal Reserve to Halt Rule Evasion in the Financial Crisis of 1974*, 88 AM. SOC. REV. 24, 26 (2022).

26. *See, e.g.*, *Money and Payments: The U.S. Dollar in the Age of Digital Transformation*, BD OF GOVERNORS OF THE FED. RESRV. SYS. 27 (Jan. 2022) [hereinafter *Money and Payments*], <https://www.federalreserve.gov/publications/files/money-and-payments-20220120.pdf> [<https://perma.cc/LAA6-BLH4>] (stating that the 2008 financial crisis was “in large part” caused by “nonbank money”). We describe these “private moneys” in Section II.B.1.

PLICIT and explicit backing of the Federal Reserve,²⁷ made it impossible for policymakers to sustain the federal banking laws as originally conceived. Steadily, the legal framework collapsed. Regulators loosened restrictions on bank activities and affiliations, raising the pressure on Congress to do the same. By 2007, deposit alternatives exceeded deposits in value,²⁸ and the country's once-diffuse banking system gave way to top-heavy financial architecture in which a handful of complex conglomerates engaged in a broad range of monetary and nonmonetary financial activities with little meaningful government oversight.²⁹ Although policymakers dramatically expanded regulation in the 2010s, we still face rolling panics, a central bank committed to backstopping much of private finance, massive rent extraction by Wall Street, and democratic decline.³⁰

It's time therefore to reform our banking laws and refashion them for the twenty-first century.³¹ This paper proposes a New National Banking (NNB) system. The goal is part restoration, part innovation. We aim to both renew the framework that undergirded American prosperity in the twentieth century and refine it by expanding access to bank services and carrying through on the law's public utility vision where previous policymakers came up short.³² The NNB proposal would reconfigure and ra-

27. See *infra* notes 241-245 and accompanying text.

28. RICKS, *supra* note 11, at 32-37.

29. See Lev Menand, *Too Big to Supervise: The Rise of Financial Conglomerates and the Decline of Discretionary Oversight in Banking*, 103 CORNELL L. REV. 1527 (2018); Saule T. Omarova, *From Gramm-Leach-Bliley to Dodd-Frank: The Unfulfilled Promise of Section 23A of the Federal Reserve Act*, 89 N.C. L. REV. 1683 (2011); Yeva Nersisyan, *The Repeal of the Glass-Steagall Act and Consequences for Crisis Response*, in REFORMING THE FED'S POLICY RESPONSE IN THE ERA OF SHADOW BANKING 85 (2015).

30. See LEV MENAND, *THE FED UNBOUND: THE TROUBLE WITH GOVERNMENT BY CENTRAL BANK* (2022); ARTHUR E. WILMARTH, *TAMING THE MEGABANKS: WHY WE NEED A NEW GLASS-STEAGALL ACT* (2020); *Money and Payments*, *supra* note 26, at 27 (“[N]onbank money contributed to financial strains again at the onset of the COVID-19 pandemic.”).

31. For a somewhat different defense of the New Deal system of bank regulation, see Prasad Krishnamurthy, *George Stigler on His Head: The Consequences of Restrictions on Competition in (Bank) Regulation*, 35 YALE J. ON REGUL. 823 (2018). For a more critical take on that system, see Daniel R. Fischel, Andrew M. Rosenfeld & Robert S. Stillman, *The Regulation of Banks and Bank Holding Companies*, 73 VA. L. REV. 301 (1987).

32. In developing a contemporary framework for governing banks as public utilities, we follow progressive era policymakers, jurists, and scholars such as Louis Brandeis who viewed banks as “public service corporations” that perform a public function and who worked to build a law that aligned. See LOUIS D. BRANDEIS, *OTHER PEOPLE'S MONEY AND HOW THE BANKERS USE IT* 67 (1914) (“[T]he directors of our great banking institutions, as the ultimate judges of bank credit, exercise today a function no less important to the country's welfare than that of the judges of our courts, the interstate commerce commissioners, and departmental heads”); HARVEY WHITE MAGEE, *A TREATISE ON THE LAW OF NATIONAL AND STATE BANKS: INCLUDING THE CLEARING HOUSE AND TRUST COMPANIES*, at iii (2d. ed. 1913) (“[T]he very nature of the business of a bank and its relationship to its customers and the public generally place it within the scope, or class, of a public utility institution.”). We also build on more recent scholarship including K. Sabeel Rahman, *The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept*, 39 CARDOZO L. REV. 1621 (2018); Nathan Tankus, *The New Monetary Policy: Reimagining Demand Management and Price Stability in the 21st Century*, MOD. MONETARY NETWORK, OUR MONEY & PUB. MONEY ACTION (Michael Brennan

tionalize our banking laws to confine money augmentation to federally chartered “member” banks, make member-bank money nondefaultable, require member banks to disgorge to the government any rents they accrue from money creation, and impose on member banks a logical and integrated system of regulatory and governance constraints and public-facing duties, while empowering the government to control the quantity of and interest rate paid on bank money in the conduct of monetary policy. In doing so, we have a further objective: to better explain the law we already have. There is a logic immanent in the longstanding statutory framework for money and banking.³³ The pieces do fit together, if imperfectly at points. By focusing on these misshapen joints, and tying each aspect of the NNB system to an aspect of the existing framework, this paper offers a roadmap for studying money and banking law more generally.

We should be clear about what the NNB system is not. It is not “public banking.” We expect that most banks in the NNB system will be investor owned. Nor is the NNB system a framework for converting the activity of lending money into a public utility. Banks in the NNB system would continue to compete with myriad other financial firms in the credit markets, and lending rates and terms would remain unregulated (subject of course to relevant consumer protection and antidiscrimination laws). The NNB system is a monetary framework geared toward the public utili-

ed., Jan. 2022), <https://files.modernmoney.network/M3F000001.pdf> [<https://perma.cc/7LPG-YXMB>]; Mehrsa Baradaran, *Banking and the Social Contract*, 89 NOTRE DAME L. REV. 1283 (2014); Robert C. Hockett & Saule T. Omarova, *The Finance Franchise*, 102 CORNELL L. REV. 1143 (2017); Saule T. Omarova, *The “Franchise” View of the Corporation: Purpose, Personality, Public Policy*, in RESEARCH HANDBOOK ON CORPORATE PURPOSE AND PERSONHOOD 201 (Elizabeth Pollman & Robert B. Thompson eds., 2021); WILMARTH, *supra* note 26; Krishnamurthy, *supra* note 31; and Alan M. White, *Banks as Utilities*, 90 TUL. L. REV. 1241 (2016); as well as Morgan Ricks, *Money as Infrastructure*, 2018 COLUM. BUS. L. REV. 757 (2018); and RICKS ET AL., *supra* note 10, at 813-928. *See also* Neel Kashkari, President and CEO, Fed. Rsrv. Bank of Minneapolis, Remarks at the Brookings Institution: Lessons from the Crisis: Ending Too Big to Fail (Feb. 16, 2016), <https://www.brookings.edu/wp-content/uploads/2016/02/KashkariBrookings2162016.pdf> [<https://perma.cc/HSR9-CQ4Q>] (suggesting that policymakers consider “turning large banks into public utilities”); Joe Rauch, *Big Banks are Government-Backed: Fed’s Hoenig*, REUTERS (Apr. 12, 2011, 2:22 PM EDT), <https://www.reuters.com/article/us-fed-hoenig/big-banks-are-government-backed-feds-hoenig-idUSTRE73B3S820110412/> [<https://perma.cc/2PNG-VL8A>] (quoting Federal Reserve Bank of Kansas City President Thomas Hoenig to the effect that large banks are “public utilit[ies]”); Stephanie Kelton & Paul McCulley, *The Fed Chair Should Be a “Principled Populist”*, N.Y. TIMES (Oct. 30, 2017), <https://www.nytimes.com/2017/10/30/opinion/fed-chair-yellen-powell.html> [<https://perma.cc/VH-T9-AVX2>] (“Banks are many things, but at their core, they have a public utility function In that sense, banks are not different than the gas company or the electric company, connecting you to the grid.”).

33. *But see* Peter Conti-Brown & Brian D. Feinstein, *The Contingent Origins of Financial Legislation*, 99 WASH. U. L. REV. 145, 216 (2021) (arguing that financial legislation has been the product of a “random walk,” that this randomness “undercuts the notion of ‘design’ at all,” and that, more generally, legislation “is not designed to be effective”). We find this account of U.S. banking law reductive and ahistorical. For alternative, less cynical conceptions of legislation and democracy, see generally WILLIAM N. ESKRIDGE, PHILIP P. FRICKEY & ELIZABETH GARRETT, *CASES AND MATERIALS ON LEGISLATION: STATUTES AND THE CREATION OF PUBLIC POLICY* (3d ed. 2001); JEREMY WALDRON, *THE DIGNITY OF LEGISLATION* (1999).

ty regulation of deposit liabilities (and their equivalents), not a credit-market framework, and it would in no way curtail entry into loan or bond origination, underwriting, or investment. Finally, the NNB system is not “narrow banking”—the old idea, which resurfaces periodically, that banks should hold only the safest assets, such as central bank cash and possibly government securities.³⁴ On the contrary, we envision that banks would participate actively in credit allocation, although subject to such portfolio constraints that legislators and regulators might choose to impose to promote safety and soundness and advance various public policies, much as policymakers did throughout the twentieth century and continue to do today, albeit to a lesser extent.

The Article proceeds in three parts. Part I describes the NNB system. Part II explains its rationales, demonstrating the ways in which it addresses the most glaring defects and pathologies of our current arrangement. Part III describes how to get from here to there.

I. What Is The New National Banking System?

We begin with a description of the NNB system. As shown in the notes, virtually every feature of the system has a direct analogue or precedent in U.S. banking law. We present the system as an end state rather than as a set of modifications to the current system; transition issues are deferred to Part III. All currently operating insured depository institutions would be grandfathered into the NNB system as “member banks.”

While it might at first seem that we are putting the cart before the horse—describing the solution in advance of the problem—this sequence is necessary. The defects of the current arrangement described in Part II can be fully understood only against the baseline of an alternative arrangement.³⁵ So, the blueprint must come first.

A. Legal Structure

We divide our overview of the NNB system into four categories: (1) the basic powers and purposes of member banks; (2) their role in economic governance; (3) ownership and control of member banks; and (4) their duties to the public.

34. See, e.g., IRVING FISHER, 100% MONEY (rev. ed. 1936); MILTON FRIEDMAN, A PROGRAM FOR MONETARY STABILITY 9-14 (1960); ROBERT E. LITAN, WHAT SHOULD BANKS DO? (1987); RONNIE J. PHILLIPS, THE CHICAGO PLAN AND NEW DEAL BANKING REFORM (1995).

35. In companion papers that are underway, we aim to flesh out the logic of the New Deal system of money and banking, document and elucidate its collapse, and delve more deeply into some of the consequences of that collapse. See Lev Menand, *The Collapse of Banking Law* (unpublished manuscript) (on file with authors); Lev Menand & Morgan Ricks, *The Monetary-Financial Complex* (unpublished manuscript) (on file with authors).

1. Member Banks

The NNB system is based on a set of federally chartered corporations called member banks, all of which have identical corporate charters that are codified by statute.³⁶ They are endowed with special privileges, but they must stay in their lane.

Bank money. Member banks maintain “bank money” liabilities consisting of account money (transactions accounts and savings deposits) and cash equivalents (short-term, zero-coupon debt, such as certificates of deposit).³⁷ Account money is a dollar-denominated, demandable liability that serves as a means of payment and store of value. By virtue of having mostly monetary liabilities but mostly nonmonetary assets, member banks are in the money-augmentation business.³⁸

Corporate powers. Member banks’ corporate charters endow them with only limited powers, entitling them to issue bank money, invest in loans and bonds (subject to portfolio constraints—see *infra* Section I.A.2), and exercise all such incidental powers as are necessary or useful to carry on these enumerated powers.³⁹ Courts are instructed to construe member banks’ corporate powers narrowly.⁴⁰

Unauthorized banking. Member banks are the only private-sector entities that are permitted to augment the dollar money supply.⁴¹ This is the main privilege that a member-bank charter conveys. While entities that are not member banks may hold money for their customers or others on a custodial or pass-through basis, they are prohibited from augmenting the supply of bank money or close substitutes therefor. (We address in-

36. Cf. National Bank Act of 1864, ch. 106, 13 Stat. 99 (codifying national banks’ corporate charters); see also Menand & Ricks, *supra* note 16; Robert C. Hockett & Saule T. Omarova, *Special, Vestigial, or Visionary: What Bank Regulation Tell Us about the Corporation—and Vice Versa*, 39 SEATTLE U. L. REV. 453, 461-62 (2016).

37. Cf. RICKS, *supra* note 11, at 29-51.

38. Cf. N. GREGORY MANKIW, PRINCIPLES OF MACROECONOMICS 347 (5th ed. 2009) (“[B]anks create money.”); United States v. Phila. Nat’l Bank, 374 U.S. 321, 326 (1963) (“[B]anks do not merely deal in, but are actually a source of, money.”). Affirming banks’ money-creation function does not require one to subscribe to the simplistic “money multiplier” story presented in many macroeconomics and banking textbooks. See Basil J. Moore, *How Credit Drives the Money Supply: The Significance of Institutional Developments*, 20 J. ECON. ISSUES 443, 444 (1986).

39. Cf. 12 U.S.C. § 24(Seventh) (2018) (enumerating national banks’ corporate powers).

40. Cf. 6 FLETCHER CYCLOPEDIA OF THE LAW OF CORPORATIONS § 2483 (2020) (stating the settled principle that “[a]ny ambiguity respecting the extent of [a corporation’s] powers will be strictly construed against the corporation.”); Menand and Ricks, *supra* note 16, at 1398-1406 (describing rules of construction for corporate charter provisions).

41. Cf. 12 U.S.C. § 378(a)(2) (2018) (criminalizing the unauthorized incurrence of “deposit” liabilities). We describe in Part II how the NNB system modernizes this provision. The existing provision succeeds the prohibitive tax on bank notes issued by entities other than national banks that was enacted alongside the National Bank Act. See Act of Mar. 3, 1865, ch. 78, § 6, 13 Stat. 469, 484 (as amended by Act of Feb. 8, 1875, ch. 36, § 19, 18 Stat. 307, 311).

ternational dimensions of this prohibition below.⁴²) Member banks compete with all manner of other financial institutions in the lending and bond-investing markets; the legal privilege they enjoy extends only to bank-money issuance.

Governmental guarantee. Member banks' bank-money liabilities—and only their bank-money liabilities—are nondefaultable, that is, fully backed by the federal government. This can be understood as deposit insurance without any coverage caps.⁴³ The government holds a senior, secured claim on each member bank's assets as collateral for the guarantee.⁴⁴ In conjunction with the unauthorized banking provision just described, the guarantee means there are no private (defaultable) dollar-denominated moneys or money substitutes outstanding.

2. Economic Governance

Member banks are not a mere set of standalone enterprises; they exist as part of an integrated system.

Quantity of bank money. The monetary authority⁴⁵ places a flexible cap on the aggregate quantity of bank money that member banks are permitted to issue and adjusts the cap in the conduct of monetary policy.⁴⁶ The cap may be implemented through a standard reserve requirement.⁴⁷ (This is how interest-rate policy was conducted in the United States from 1984 to 2008.)⁴⁸ The cap is pliable, not rigid; for example, member banks may borrow from the central bank to replenish temporary reserve deficiencies, at a modest penalty rate.⁴⁹ Permit capacity is tradeable among

42. See *infra* text accompanying note 88.

43. Cf. 12 U.S.C. § 1821(a) (2018) (deposit insurance with coverage cap).

44. Cf. *Id.* § 1821(d)(11)(A) (priority of deposits in bank receivership); *id.* § 1821(g)(1) (FDIC subrogation to insured depositors' claims).

45. We use "monetary authority" to refer collectively to the federal money and banking agency or agencies. We reserve questions of how to reform administrative structure for future work.

46. Cf. Menand, *supra* note 19, at 242-45 (describing how the Federal Reserve modulates the price of reserve balances).

47. Cf. 12 U.S.C. § 461 (2018) (reserve requirements). Reserve requirements set a legal cap on the quantity of reservable deposits. See FREDERIC S. MISHKIN, *THE ECONOMICS OF MONEY, BANKING, AND FINANCIAL MARKETS* (2022).

48. Specifically, reserve requirements constrained banks' balance sheet growth, and the Fed continuously adjusted the supply of reserves through purchases and sales of securities ("open market operations"), thereby influencing interbank lending ("federal funds") rates and broader economic conditions. Injecting reserves increased banks' balance sheet capacity, lowered interest rates, and stimulated economic activity. We discuss below how interest rate policy changed in 2008. See *infra* notes 148-151 and accompanying text.

49. Cf. Joshua N. Feinman, *Reserve Requirements: History, Current Practice, and Potential Reform*, 79 FED. RESRV. BULL. 569, 579-80 (1993) (describing the Federal Reserve's methods for affording flexibility in banks' daily reserve management under a system of reserve requirements). Thus, reserve requirements can restrain banks' balance sheet growth without interfering with par clearance of payments between banks.

member banks; for example, a member bank may augment its reserve balance by borrowing in the interbank market, enabling balance-sheet expansion (subject, however, to the concentration limit described in Section I.A.3, *infra*).⁵⁰

Interest rate paid on bank money. The monetary authority administers the interest rate that member banks pay on account money and adjusts this rate in the conduct of monetary policy.⁵¹ The interest rate that member banks pay on cash equivalents is determined by market forces.

Franchise royalties. Member banks are required to pay ongoing franchise royalties to the federal government.⁵² Royalties are paid periodically (say, quarterly) and are based on the quantity of the member bank's issued and outstanding bank money. The royalty is risk based, meaning it is tailored to the member bank's risk characteristics—in particular, its asset quality and capital adequacy.⁵³ The riskier the portfolio and the thinner the capital, the higher the royalty rate. The royalties payable by a given member bank are designed to approximate the incremental funding costs it would incur if it replaced its bank-money liabilities with long-term debt financing (with maturities matching its asset portfolio maturities) in

50. An alternative approach to similar ends would be to impose credit origination ceilings on banks, as detailed in Tankus, *supra* note 32. While we see advantages to Tankus's approach from a portfolio-shaping, distributional, and macroeconomic standpoint, bank-money caps are of course more readily administrable and a more incremental adjustment.

51. Cf. Banking Act of 1933, ch. 89, § 11, 48 Stat. 162, 181-82 (regulating the interest rate paid on bank deposits). This provision, which became the basis for the Federal Reserve's "Regulation Q," was repealed by the Depository Institution Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, 94 Stat. 132.

52. Cf. National Bank Act, ch. 106, § 41, 13 Stat. 99, 111 (1864) (duty imposed upon the circulation, deposits, and capital stock of national banks). Chase supported this provision. See U.S. 'DEP'T OF THE TREASURY, REPORT OF THE SECRETARY OF THE TREASURY ON THE STATE OF THE FINANCES FOR THE YEAR ENDING JUNE 30, 1861, at 17 (1861) (asking "whether sound policy does not require that the advantages [of bank note funding] be transferred, in part at least, from the banks, representing only the interests of the stockholders, to the government, representing the aggregate interests of the whole people"); *id.* at 19 (noting that the planned national banking system would give the people "a participation in the profit of circulation"); REPORT OF THE SECRETARY 1862, *supra* note 20, at 19 ("The people . . . claim, at least, part of the benefit of debt without interest, made into money, hitherto enjoyed exclusively by the banks."); Letter from 'Salmon P. Chase to John Bigelow (Oct. 7, 1862), in 3 THE SALMON P. CHASE PAPERS: CORRESPONDENCE, 1858-MARCH 1863, at 293 (John Niven, James P. McClure & Leigh Johnsen eds., 1996) (noting that the provision would "give to the government a fair seignorage" on bank note circulation). Members of Congress agreed. See CONG. GLOBE, 37th Cong., 3d Sess. 1146-47 (1863) (statement of Rep. Alley) (noting that "the people are entitled" to the profit from money creation and that "the Government is really the party who should have all the profit of the circulation" and is "entitled to the whole benefit"); CONG. GLOBE, 37th Cong., 2d Sess. 1412 (1864) (statement of Rep. Morrill) (opining that national banks should be assessed duties "to the fullest extent of their ability to bear" them); CONG. GLOBE, 38th Cong., 1st Sess. 1897-99 (1864) (statement of Sen. Sherman) (supporting the duties and predicting they would yield "a very large sum of money" to the government).

53. Cf. 12 U.S.C. § 1817(b) (2018) (risk-based deposit insurance fees keyed to probability of default, loss given default, and the revenue needs of the deposit insurance fund).

the capital markets.⁵⁴ From the government's standpoint, the royalties flow to fiscal revenue as seigniorage, or revenue from money creation.⁵⁵ By virtue of these royalties, member banks are constrained to a fair return on capital.⁵⁶

Portfolio constraints. Member banks are confined to diversified portfolios of dollar-denominated loans and bonds representing claims on U.S. domestic borrowers. As implied by their limited corporate powers (see *supra* Section I.A.1), member banks may not invest outright in stocks, commodities, or real estate apart from their premises, although such assets may be taken as loan collateral (and may be held for a period after foreclosure).⁵⁷ Investments in the securities of any one issuer, and in loans to any one borrower, are capped as a percentage of the bank's capital.⁵⁸ The precise contours of these portfolio constraints can't be specified *a priori*; they depend on the quantity and composition of available loans and bonds in relation to the desired money supply. The monetary author-

54. More specifically, the government charges each member bank an amount equal to the product of its outstanding bank-money liabilities and the sum of (1) the fair premium (expressed as a percentage of notional value) of a put option written on the member bank's total assets, struck at the face value of its outstanding bank-money liabilities and (2) the difference between (a) the weighted average of the "asset-specific risk-free rate" (defined below) corresponding to each investment asset in the member bank's portfolio and (b) the weighted-average interest rate paid by the member bank on its bank-money liabilities (which are guaranteed and, in the case of account money, rate-regulated). The value of the option is a function of the issuer's portfolio volatility (asset quality) and its level of capital (the difference between the fair value of the firm's assets and the face value of its money-claim liabilities). See Robert C. Merton, *An Analytic Derivation of the Cost of Deposit Insurance and Loan Guarantees: An Application of Modern Option Pricing Theory*, 1 J. BANKING & FIN. 3, 5-9 (1977); Fischer Black, Merton H. Miller & Richard A. Posner, *An Approach to the Regulation of Bank Holding Companies*, 51 J. BUS. 379, 386 (1978). The "asset-specific risk free rate" is, for fixed-rate assets, the as-of-acquisition risk-free rate corresponding to the asset's as-of-acquisition duration, and for floating-rate assets, the current value of the relevant benchmark rate. Properly charged, the franchise royalties, when added to the rate the bank pays to holders of its bank money, generate a long-term-debt-equivalent cost of financing. Conceptually, the government's earnings from the franchise royalties equate to what it would earn if all member banks' deposits migrated to the Fed (as under a "FedAccounts"-type system—see *infra* note 100), and the Fed replaced member banks' lost deposit funding with fairly priced discount window loans. From the standpoint of interest-rate risk, each member bank runs a matched book, obviating the need for member banks to engage in asset and liability management (ALM) to any meaningful extent. Rather than member banks' liability structures driving their asset portfolio decisions, portfolio characteristics determine the cost of their liabilities.

55. See Bryan P. Cutsinger & William J. Luther, *Seigniorage Payments and the Federal Reserve's New Operating Regime*, 220 ECON. LETTERS art. no. 110880 (2022).

56. Cf. RICKS ET AL., *supra* note 10, at 147-49 (describing how public utility ratemaking is designed to limit regulated firms to a fair return on invested capital). The monetary authority would also have the ability to cap employee compensation, dividends, and buybacks.

57. Cf. 12 U.S.C. § 24(Seventh) (2018) (prohibiting national banks from owning stocks, and, subject to exceptions, from dealing in and underwriting securities); *id.* § 29 (limiting national banks' real estate holdings to properties "necessary for [the bank's] accommodation in the transaction of its business," subject to exceptions, including holdings for up to five years of real estate acquired in foreclosure).

58. Cf. *Id.* § 24(Seventh) (limiting national banks' ownership of securities of any one issuer to 10% of regulatory capital); *Id.* § 84(a) (limiting national banks' loans to any one borrower to 15% of regulatory capital, or 25% when certain conditions are met).

ity is authorized to adjust portfolio constraints as a form of credit control and to ensure that member banks allocate credit toward productive ends.⁵⁹ Member banks' portfolios are also shaped by their obligation to meet the credit needs of their entire communities (see *infra* Section I.A.4).

Derivatives. While member banks are permitted to enter into interest-rate swaps to hedge rate risk,⁶⁰ they are not allowed to engage in derivatives dealing (intermediation or market making) or take directional bets in the derivatives markets.⁶¹ Derivatives dealing and speculation do not advance member banks' monetary function. Apart from loan commitments, member banks would not be in the business of offering guarantees or other forms of insurance.

Capital requirements. Member banks are subject to common equity capital requirements, which are calibrated together with portfolio constraints to both cabin the risk assumed by the government as guarantor and mitigate member banks' moral hazard incentives.⁶² Each member bank's common equity represents a residual claim on the firm, absorbing "first loss" in the event of portfolio underperformance.

Supervision. Member banks are subject to ongoing safety and soundness supervision by a single supervisory authority.⁶³ Supervisors are empowered to evaluate member banks' balance sheets to ensure that their risk-taking is consistent with the public interest. Supervisors are required to conduct annual stress tests for member banks with at least \$50 billion in assets, the results of which determine whether they are permit-

59. Cf. Tankus, *supra* note 32, at 16-18. A similar result could be reached through adjustments to franchise royalties. The system we describe is functionally similar to a system in which eligible collateral for central-bank loans is liberalized to be coextensive with banks' permissible investments. See, e.g., Rohan Grey, *Banking in a Digital Fiat Currency Regime*, in REGULATING BLOCKCHAIN: TECHNO-SOCIAL AND LEGAL CHALLENGES 169 (Philipp Hacker, Ioannis Lianos, Georgios Dimitropoulos & Stefan Eich eds., 2019).

60. The need to hedge interest-rate risk would, however, be substantially lessened by the franchise royalties described above.

61. Cf. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 716, 124 Stat. 1376, 1648-51 (2010) (the "swaps push-out"). This provision was later substantially repealed. See Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. No. 113-235, div. E, § 630, 128 Stat. 2130, 2378-79 (2014). For background on the evolution of banks' derivatives activities prior to Dodd-Frank, see Saule T. Omarova, *The Quiet Metamorphosis: How Derivatives Changed the Business of Banking*, 63 U. MIAMI L. REV. 1041 (2009).

62. Cf. 12 U.S.C. § 1831o(c) (2018) (capital standards); 12 C.F.R. §§ 3.1-3.701 (2023) (capital adequacy standards for national banks). Modern capital regulation is forbiddingly complex. See Matt Levine, "Relatively Simple Basel Leverage Rules Still Pretty Complicated," DEALBREAKER (Jan. 14, 2019), <https://dealbreaker.com/2013/06/relatively-simple-basel-leverage-rules-still-pretty-complicated> [<https://perma.cc/9RSE-WLU8>]. Because member banks in the NNB system are barred from the derivatives business, see *supra* notes 60-61 and accompanying text, and structurally separated from securities dealing and other commercial activities (more on this below), capital requirements in the NNB system would be much simpler than they are today.

63. Cf. Menand, *supra* note 20.

ted to pay out capital through dividends or share buybacks.⁶⁴ Supervisors have the power to order banks that are operating in an unsafe or unsound manner to cease and desist from such practices.⁶⁵ Supervisors also have the power to hold individual bank executives accountable for unsafe or unsound practices, removing them from office or prohibiting them from working at member banks upon a finding of gross negligence (or in the case of a failed member bank, simple negligence).⁶⁶

3. Ownership and Control

Because of their unique role in the economy, member banks' ownership and control are subject to special limitations.

Corporate governance. Each member bank is managed by or under the direction of a board of directors, whose members are elected by the corporation's shareholders. The monetary authority appoints an observer to the board who sits on the audit, compensation, and risk committees.⁶⁷ All board members owe fiduciary duties of care and loyalty to the corporation and its shareholders, and they are entitled, in considering the best interests of the corporation, to consider the effects of their actions on all groups affected, including shareholders, employees, suppliers, customers, creditors (including the federal government as guarantor—see *supra* Section I.A.1), and the communities in which the bank operates.⁶⁸

Share ownership. No person, entity, or group is permitted to own or control, directly or indirectly, more than five percent of a member bank's voting shares. Shares owned by non-U.S. citizens, or by entities con-

64. Cf. 12 U.S.C. § 5365(i) (2018) (annual stress tests).

65. Cf. *Id.* § 1818(b) (2018) (cease-and-desist proceedings).

66. *Id.* § 1818(e) (removal and prohibition authority); cf. Da Lin & Lev Menand, *The Banker Removal Power*, 108 VA. L. REV. 1 (2022); Fact Sheet: President Biden Urges Congressional Action to Strengthen Accountability for Senior Bank Executives, The White House (Mar. 17, 2023) [hereinafter White House Fact Sheet], <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/17/fact-sheet-president-biden-urges-congressional-action-to-strengthen-accountability-for-senior-bank-executives> [<https://perma.cc/9UNC-XABJ>].

67. Cf. An Act to Incorporate the Subscribers to the Bank of the United States, ch. 44, § 8, 3 Stat. 266, 269 (1816) (providing that five of the bank's twenty-five directors were to be appointed by the President of the United States with the advice and consent of the Senate); see also Saule T. Omarova, *Bank Governance and Systemic Stability: The "Golden Share" Approach*, 68 ALA. L. REV. 1029 (2017) (proposing that governmental representatives be appointed to the boards of directors of systemically important banking organizations); Andrew Verstein, *The Corporate Governance of National Security*, 95 WASH. U. L. REV. 775 (2018) (detailing the federal government's representation on the boards of directors of many defense contractors).

68. Cf. 15 PA. CONS. STAT. § 1715 (2024) (Pennsylvania's corporate constituency statute); see also Jonathan R. Macey & Maureen O'Hara, *The Corporate Governance of Banks*, FED. RES. BANK N.Y. ECON. POLICY REV., April 2003, at 91 (arguing that the scope of bank directors' and officers' fiduciary duties should be broadened to include creditors); Aneil Kovvali & Joshua C. Macey, *The Corporate Governance of Public Utilities*, 40 YALE J. ON REGUL. 569 (2023) (arguing that ratepayers, as residual claimants, should be represented on the boards of directors of public utilities).

trolled by non-U.S. citizens, are not entitled to vote.⁶⁹ Member bank mergers require the approval of the monetary authority.⁷⁰

Conglomeration and affiliation. The NNB system separates banking from commerce—a venerable principle of American banking law.⁷¹ This principle is realized by, first, endowing member banks with only limited corporate powers (see Section I.A.1. *supra*),⁷² and second, prohibiting member banks from conglomerating or otherwise affiliating with commercial enterprises, including investment banks and insurance companies.⁷³ Member banks are monoline enterprises and, as noted in Section I.A.3, *supra*, each member bank’s share ownership is dispersed.⁷⁴

Bank chartering. Member bank charters are granted selectively, under a “public convenience and necessity” standard, rather than to all qualified applicants.⁷⁵

69. Cf. ALEXANDER HAMILTON, REPORT ON A NATIONAL BANK (1790), in 1 THE WORKS OF ALEXANDER HAMILTON 59, 91 (New York, Williams & Whiting 1810) (“It seems scarcely reconcileable with a due caution, to permit, that any but citizens should be eligible, as directors of a national bank, or that non-resident foreigners should be able to influence the appointment of directors, by the votes of their proxies.”); Ganesh Sitaraman, *The Regulation of Foreign Platforms*, 74 STAN. L. REV. 1073, 1073 (2022) (describing “a long history of legal restrictions on the foreign ownership of, control of, and influence over platforms” in the United States).

70. Cf. Bank Merger Act of 1960, Pub. L. No. 86-463, 74 Stat. 129 (codified as amended at 12 U.S.C. § 1828(c)) (requiring regulatory approval of bank mergers).

71. See, e.g., Bernard Shull, *The Separation of Banking and Commerce in the United States: An Examination of the Principal Issues*, 8 FIN. MARKETS, INSTRS. & INSTRUMENTS, no. 3, 1999, at 1, 1.

72. Cf. *Arnold Tours Inc. v. Camp*, 472 F.2d 427, 436 (1st Cir. 1972) (holding that national banks may not own and operate travel agencies); 12 U.S.C. § 24(Seventh) (2018) (specifying that national banks may not engage in securities dealing or underwriting, subject to narrow exceptions); 15 U.S.C. § 6712(a) (2018) (specifying that national banks may not engage in insurance underwriting, subject to narrow exceptions).

73. See, e.g., Banking Act of 1933, ch. 89, §§ 20-21, 48 Stat. 162, 188-89 (commonly known as the “Glass-Steagall” prohibition). This prohibition was repealed by the Gramm-Leach-Bliley Act, Pub. L. No. 106-102, § 101, 113 Stat. 1338, 1341 (1999).

74. Cf. Menand, *supra* note 26; WILMARTH, *supra* note 27; Saule T. Omarova, *The Merchants of Wall Street: Banking, Commerce, and Commodities*, 98 MINN. L. REV. 265, 269 (2013) (arguing that “the quiet transformation of U.S. [financial holding companies] into global merchants of physical commodities effectively nullifies the foundational principle of separation of banking from commerce”); Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973, 974 (2019) (examining the history of and rationales for imposing structural separations between platform enterprises and other lines of business).

75. Cf. 12 C.F.R. § 5.20 (2023) (organizing a national bank). “Public convenience and necessity” (PCN) is the traditional standard in public utility law. Cf. RICKS, SITARAMAN, WELTON & MENAND, *supra* note 10, at 86-87; William K. Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 COLUM. L. REV. 426, 430 (1979). The PCN standard once applied to national bank chartering. See Banking Act of 1935, ch. 614, § 101, 49 Stat. 684, 687-88; see also Bureau of the Comptroller of the Currency, Functions and Procedures, 11 Fed. Reg. 177A-13, 177A-14 (Sept. 11, 1946). Subsequent case law confirmed the OCC’s broad discretion to reject charter applications based on PCN. See *Camp v. Pitts*, 411 U.S. 138, 140-41 (1973). As late as 1976 the OCC asserted that “[t]he vital relationship of banking to the monetary system precludes complete free market operation with unlimited entry.” Bank Charters, Branches, Conversions, Etc.: Policy Statements on Corporate Activities, 41 Fed. Reg. 47964, 47964 (Nov. 1, 1976). But in 1980 the OCC announced a major “shift in em-

Insolvency. In the event of insolvency, member banks enter receivership, where their equity and long-term debt obligations are written down or extinguished while their bank-money liabilities are seamlessly honored.⁷⁶ After that, they are returned to investor ownership, presumptively under new management. In extreme cases—specifically, when the value of a member bank’s assets falls very near to or below the value of its bank-money liabilities—the monetary authority or another organ of government may need to directly recapitalize the member bank.⁷⁷

Concentration limit. To prevent undue concentration and ease the process of bank resolution, no member bank is permitted to maintain more than three percent of the total bank-money liabilities of the NNB system taken as a whole.⁷⁸

4. Duties to the Public

Member banks in the NNB system are not mere for-profit businesses; they have affirmative obligations to the public.

Universal service. While all member banks are free to do business nationwide, each has a designated franchise area in which it is required to (1) establish physical branches in all communities, (2) open and maintain accounts for all comers (consistent with applicable law enforcement and national security laws⁷⁹), and (3) distribute credit equitably.⁸⁰ (More on the third point in Section I.A.4, *infra*.) The monetary authority is directed to ensure that every community in the country falls within the franchise area of at least one member bank.⁸¹

phasis,” relaxing its longstanding policy of considering PCN in its chartering decisions and concluding instead that “the marketplace normally is the best regulator of economic activity.” Clarification and Revision of Charter Policy, 45 Fed. Reg. 68603, 68604 (Oct. 15, 1980). In 1991, Congress unceremoniously deleted the provision, originally adopted in the 1935 Act, requiring the OCC when chartering a new bank to consider PCN in its chartering decisions. See Federal Deposit Insurance Corporation Improvement Act of 1991, Pub. L. No. 102-242, § 115(b), 105 Stat. 1126, 2249.

76. Cf. 12 U.S.C. § 1821(d) (2018) (bank receivership).

77. The cleanest way to do would be by supplying the member bank with a credit—recorded on its balance sheet as an asset—prospectively relieving it of the obligation to pay franchise royalties in relation to some quantity of its bank-money liabilities.

78. See Jonathan R. Macey & James P. Holdcroft, *Failure Is an Option: An Ersatz-Antitrust Approach to Financial Regulation*, 120 YALE L.J. 1368, 1403 (2011) (proposing a bright line limit on bank liabilities to ease the process of bank resolution). Although current law imposes a 10% deposit concentration limit, it applies only to growth through mergers and acquisitions, not organic growth. 12 U.S.C. § 1842(d)(2)(A) (2018). Dodd-Frank also added a 10% liabilities limit that similarly permits excess organic growth. *Id.* § 1852.

79. See Raúl Carrillo, *Seeing Through Money: Democracy, Data Governance, and the Digital Dollar*, 57 GA. L. REV. 1207, 1208 (examining these laws and the harms that may result from large-scale financial data collection by the government).

80. Cf. RICKS, SITARAMAN, WELTON, AND MENAND, *supra* note 11, at 26 (describing universal service mandates in public utility law).

81. Cf. *id.* at 26-27 (describing the franchise area concept in public utility law).

Consumer protection and antidiscrimination. With respect to consumer matters, member banks are subject to regulation and oversight by the Consumer Financial Protection Bureau (CFPB).⁸² They must offer standardized bank account terms and may not require minimum balances or charge periodic account fees. Bank account customers may not be charged overdraft fees for debit card transactions unless they affirmatively opt into overdraftable accounts, and all overdraft fees are subject to direct rate regulation by the CFPB.⁸³ As for lending activities, member banks are subject to the full panoply of consumer financial protection and antidiscrimination requirements under federal law, including the Equal Credit Opportunity Act,⁸⁴ the Truth in Lending Act,⁸⁵ and relevant provisions of the Dodd-Frank Act.⁸⁶

Lending to underserved communities. To prevent redlining, member banks are required to meet the credit needs of their entire communities, including low- and moderate-income neighborhoods, consistent with the safe and sound operations.⁸⁷ To be clear, the requirement to serve all communities does not obligate member banks to make loans to all applicants; member banks set loan terms and underwriting standards and make individual underwriting decisions (as under existing law). Rate regulation in the NNB system applies only to account-money rates, not lending rates. Because member banks have designated franchise areas, they cannot avoid their credit extension obligations by picking and choosing the areas in which they lend.⁸⁸

Payments. Member banks are required to clear and settle payments for their customers in real time, including payments between customers using different member banks.⁸⁹ Central bank payment services (such as

82. Cf. 12 U.S.C. §§ 5511-5567 (2018) (powers of the Consumer Financial Protection Bureau).

83. Cf. Lauren E. Willis, *When Nudges Fail: Slippery Defaults*, 80 U. CHI. L. REV. 1155, 1189 (2013) (evaluating shortcomings in overdraft opt-in rules).

84. 15 U.S.C. §§ 1691-1691f (2018).

85. 15 U.S.C. §§ 1601-1667f (2018).

86. E.g., Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, tit. XIV, 124 Stat. 1376, 2136-2212 (2010) (Mortgage Reform and Anti-Predatory Lending Act).

87. Cf. Community Reinvestment Act of 1977, 12 U.S.C. § 2903(a)(1) (2018)-2908 (requiring supervisory agencies to “assess [an insured bank’s] record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of such institution”). At present, banks are subject only to indirect sanctions for failing to meet the credit needs of the communities in which they operate. Under the NNB, banks would be subject to direct regulatory intervention.

88. Cf. Consent Decree, *United States v. Chevy Chase Bank*, (D.D.C. Aug. 22, 1994), <https://www.justice.gov/crt/housing-and-civil-enforcement-cases-documents-163> [<https://perma.cc/968U-E2LE>] (bank considered racial composition of residential areas in determining where to market products and avoided doing business in African-American neighborhoods).

89. Cf. Lael Brainard, Governor, Fed. Rsrv. Bd., Remarks at the Federal Reserve Bank of Kansas City: Delivering Faster Payments for All (Aug. 5, 2019), <https://www.federalreserve.gov>.

Fedwire, FedACH, and FedNow) are supplied to member banks at no charge.⁹⁰ Debit and credit card swipe fees are subject to direct rate regulation by either the monetary authority or the CFPB.⁹¹

* * *

The foregoing components of the NNB system are paired with two key international features, which complement the unauthorized banking prohibition. First, the monetary authority is directed to seek to supplement the Basel capital and liquidity accords⁹² with a new monetary sovereignty accord, under which countries mutually agree to prohibit domestic institutions from issuing account money or cash equivalents denominated in nondomestic currencies without the permission of the home jurisdiction. Second, the monetary authority is directed to deny dollar clearing services to foreign institutions that are known issuers of dollar-denominated account money or cash equivalents.⁹³ None of the foregoing

gov/newsevents/speech/brainard20190805a.htm [https://perma.cc/WV4M-Z43S] (describing the importance of payment speed). Japan has had real-time payments since 1973 and many other countries, including South Africa, Singapore, India, and the United Kingdom, have transitioned to real-time retail payments in recent years. *The U.S. Path to Faster Payments - Final Report Part One: The Faster Payments Task Force Approach*, FASTER PAYMENTS TASK FORCE 30 tbl.3 (Jan. 2017), <https://www.federalreserve.gov/newsevents/pressreleases/files/US-path-to-faster-payments-pt1-201701.pdf> [https://perma.cc/X2S5-35K8]. See also Aaron Klein, *How the Fed Can Help Families Living Paycheck to Paycheck*, BROOKINGS INST. (Nov. 22, 2017), <https://www.brookings.edu/articles/how-the-fed-can-help-families-living-paycheck-to-paycheck> [https://perma.cc/4FVJ-ALWV] (describing how faster payments would aid lower-income families).

90. The Federal Reserve generally did not charge banks for Fedwire and other payment system services until Congress required it to do so in 1980. See Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, § 107, 94 Stat. 132, 140-41 (codified as amended at 12 U.S.C. § 248a). For background, see Anatoli Kuprianov, *The Monetary Control Act and the Role of the Federal Reserve in the Interbank Clearing Market*, FED. RSRV. BANK RICH. ECON. REV., July/Aug. 1985, at 23.

91. Cf. Dodd-Frank Wall Street Reform and Consumer Protection Act § 1075, 15 U.S.C. § 1693o-2(a)(2) (2018) (the “Durbin Amendment”) (requiring that debit card interchange transaction fees be “reasonable and proportional” to the cost incurred by the issuer with respect to the transaction); 12 C.F.R. § 235.3 (2023) (defining reasonable and proportional debit card interchange fees as no more than 21 cents plus the product of 5 basis points and the value of the transaction). For its first sixty years the Federal Reserve fought doggedly, and ultimately successfully, to end “nonpar banking,” whereby some banks would charge fees to pay checks drawn upon them. For a brief history, see *Developing an Efficient Payments System*, FED. RSRV. BANK MINNEAPOLIS (Aug. 1, 1988), <https://www.minneapolisfed.org/article/1988/developing-an-efficient-payments-system> [https://perma.cc/XS5L-G7LY]; and *The Fed Explained: What the Central Bank Does*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. 89-90 (11th ed. Aug. 2021), <https://www.federalreserve.gov/aboutthefed/files/the-fed-explained.pdf> [https://perma.cc/UJ9U-TJYV]. See also Hal Scott, *The Risk Fixers*, 91 HARV. L. REV. 737 (1978) (describing the history of nonpar banking). Congressman Carter Glass called the fees “tollgates upon the highways of commerce.” Rep. Carter Glass, Address Before the American Bankers’ Association at Richmond, Virginia (Oct. 14, 1914), in 53 CONG. REC. 14085, 14089 (1916). Interchange fees are just nonpar banking in a new guise.

92. Basel Comm. on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems*, BANK FOR INT’L SETTLEMENTS (rev. June 2011), <https://www.bis.org/publ/bcbs189.pdf> [https://perma.cc/M7SH-7VZS].

93. See RICKS, *supra* note 11, at 239-40.

would prevent foreign or domestic institutions from holding dollar balances or dollar-denominated cash equivalents for customers or others on a custodial or pass-through (i.e., fully reserved) basis.

B. Banks as Public Utilities

Member banks in the NNB system are investor-owned public utilities that provide essential infrastructure: the money supply. The federal government charters them to invest the money supply into circulation. Like other regulated utilities, they must offer their services on nondiscriminatory terms within their franchise areas (though, of course, loan terms would be tailored to individual borrower characteristics) and may earn no more than a fair return on their invested capital.

By making loans and buying bonds in exchange for newly issued bank money, member banks augment the money supply and put downward pressure on market interest rates. By selling loans and bonds or allowing them to mature, they shrink the money supply and put upward pressure on market interest rates. Member banks operate within a “cap and trade” system, which places an adjustable cap on the supply of bank money. This is how reserve requirements worked in the past; as Jeremy C. Stein has written, under binding reserve requirements, reserve balances function as “tradeable permits” for “money creation.”⁹⁴ The monetary authority may increase or decrease permit capacity (e.g., by injecting or draining reserves through open market operations, or else by adjusting the reserve requirement) in the conduct of monetary policy, thereby influencing interest rates, the price level, and overall economic activity.

Necessarily, member-bank chartering is selective, just as entry is typically restricted in other public-utility contexts. Supplying member-bank charters to all applicants, even all qualified applicants, would make it difficult or impossible for existing member banks to manage their balance sheets, the aggregate size of which is determined not by market forces but by the monetary authority in the conduct of monetary policy. Excessively liberal chartering would also complicate supervision. Chartering decisions

94. Jeremy C. Stein, *Monetary Policy as Financial Stability Regulation*, 127 Q.J. ECON. 57, 59 (2012). Longstanding state and federal doctrine reflects an outsourcing perspective to bank chartering and regulation. See, e.g., *Shaake v. Dolley*, 118 P. 80, 83 (Kan. 1911) (“[B]anking has ceased to be, if it ever was, a matter of private concern only, like the business of the merchant, and for all purposes of legislative regulation and control it may be said to be ‘affected with a public interest.’ The public patronage which the banker invites and receives is of such a character that he becomes in a just sense a trustee of the fiscal affairs of the people and of the state.”); see also *Noble State Bank v. Haskell*, 219 U.S. 104, 111-13 (1911) (explaining that as “checks replace currency in daily business” the government may “tak[e] the whole business of banking under its control . . . [and that it] may go from regulation to prohibition except upon such conditions as it may prescribe”).

are therefore more in the nature of procurement or outsourcing than nondiscretionary permitting.⁹⁵

The fair-return-on-invested-capital constraint is implemented through the franchise royalties described above, by virtue of which the returns from each member bank's asset portfolio are split between the member bank and the federal government. The member bank's earnings net of royalties flow to shareholders' equity. The government's royalty stream from the member banking system constitutes seigniorage. Whereas today the government earns seigniorage only on the *central* bank's assets, in the NNB system it also receives seigniorage from money creation by its agents, the member banks.

This arrangement flows logically from the system's structure. If the government had chartered no investor-owned banks at all—if it had retained a monopoly on money creation, say through a central bank—then it would have accrued all the revenue from money creation. The government's decision to enlist private agents in no way obligates it to forfeit the entirety of the associated revenue stream. On the contrary, it should forfeit no more revenue than is necessary to induce its agents to do a good job. In the NNB system, as in all franchising arrangements, revenues are split between the franchisor, which bestows a valuable privilege, and its franchisees. In the absence of franchise royalties, member banks would earn windfall profits: because account money and cash equivalents satisfy money demand, they are a source of very cheap funding to their issuers.⁹⁶ The fair royalty thus causes banks to disgorge what would otherwise amount to privately captured seigniorage.⁹⁷

It bears emphasizing that the NNB system recognizes only its specially chartered, money-issuing banks, not other financial institutions, as

95. See generally Harold Demsetz, *Why Regulate Utilities?*, 11 J. L. & ECON. 55 (1968) (comparing public utility regulation to franchise bidding or outsourcing). The number of entities among which the banking system's aggregate portfolio is split also has implications for the cost of the government's guarantee. See Ricks, *supra* note 32.

96. See Robin Greenwood, Samuel G. Hanson & Jeremy C. Stein, *A Comparative-Advantage Approach to Government Debt Maturity*, 70 J. FIN. 1683, 1684-85 (2015).

97. See *id.* (describing the "monetary convenience premium" captured by financial institutions that issue money-like instruments); CHRISTINE DESAN, MAKING MONEY: COIN, CURRENCY, AND THE COMING OF CAPITALISM 414-21 (2014) (discussing private capture of "seigniorage"); Frank D. Graham, *Partial Reserve Money and the 100 Per Cent Proposal*, 26 AM. ECON. REV. 428, 430 (1936) (noting that banks earn "seigniorage profits"); Ulrich Bindseil, *Evaluating Monetary Policy Operational Frameworks*, in FED. RSRV. BANK OF KAN. CITY, DESIGNING RESILIENT MONETARY POLICY FRAMEWORKS FOR THE FUTURE: A SYMPOSIUM 179, 190 (2016) [hereinafter 2016 JACKSON HOLE SYMPOSIUM] (referring to "seigniorage income of banks"); REPORT, TOGETHER WITH MINUTES OF EVIDENCE, AND ACCOUNTS, FROM THE SELECT COMMITTEE ON THE HIGH PRICE OF GOLD BULLION 71-72 (London, J. Johnson & Co. 1810) (noting during England's suspension of convertibility, which lasted from 1797 to 1821, that bank money creation, "enabled under the protection of the law . . . at a very trifling expense," was "prejudicial to the public welfare" and that, barring some other remedy, "some mode ought to be devised of enabling the [English] State to participate much more largely in the profits accruing from" that issuance).

public utilities.⁹⁸ Member banks in the NNB system are presumably just one part of a diverse financial sector. Myriad other types of financial enterprises—securities firms (broker-dealers), finance companies, insurance companies, mutual funds, hedge funds, etc.—still exist, and the NNB system has no necessary implications for their regulation apart from barring them from (1) issuing dollar-denominated account money or cash equivalents and (2) conglomerating or otherwise affiliating with member banks. (These two restrictions would, however, profoundly affect many such enterprises; see Section III.B.) Member banks compete with nonbank financial institutions and other market participants in lending and bond-buying. By way of context, chartered U.S. depository institutions today hold only 30% of loans and 9% of debt securities in the United States, equating to 18% of the \$93 trillion U.S. debt markets.⁹⁹ Under the NNB system, these figures could either grow or shrink, as member banks' aggregate balance sheet is a function of monetary policy. In any case, the NNB system contemplates regulation only of account-money rates, not lending rates.¹⁰⁰

* * *

The NNB system follows through on the vision underlying the National Bank Act while also modernizing it to suit twenty-first century conditions. As with the NBA, the NNB system is an outsourcing scheme for money creation: member banks exercise delegated authority, issuing the money supply on the government's behalf.¹⁰¹ And as with the NBA, the NNB system separates members banks from ordinary commercial activity, diffuses them geographically, and constrains them through ongoing, intensive public oversight. As indicated in the notes above, virtually

98. This public utility approach to banks and not to other financial firms is consistent with longstanding U.S. historical practice. See *supra* note 32.

99. See *Federal Reserve Statistical Release: Z. 1 Financial Accounts of the United States*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. 3, 89 tbl.L.111 (Mar. 7, 2024), <https://www.federalreserve.gov/releases/z1/20240307/z1.pdf> [<https://perma.cc/NX8A-K6BQ>]. The relevant data series are available in the Federal Reserve Economic Database (FRED) under series codes BOGZ1FL764023005A, USCDIDSA, CBTCMAHDFS, ASTLL, ASTDSL, and TCMDO.

100. The NNB system would not be inconsistent with also establishing a public option for bank account money through direct public provisioning, as we proposed along with John Crawford many years ago. See John Crawford, Lev Menand & Morgan Ricks, *FedAccounts: Digital Dollars*, 89 GEO. WASH. L. REV. 113 (2021) (manuscript initially released in June 2018). In fact, the two proposals complement each other, with the NNB system improving the effectiveness of a public option and a public option raising the standards for NNB member banks. For another complementary public banking perspective, see Saule T. Omarova, *The People's Ledger: How to Democratize Money and Finance the Economy*, 74 VAND. L. REV. 1231 (2021).

101. Cf. FRIEDMAN, *supra* note 12, at 74 (“[The government] has a monopoly on the issuance of money, though it has chosen to give up part of its monopoly powers by permitting commercial banks to operate with fractional required reserves.”); *id* at 8 (describing commercial banks as “issuers of money”); FISHER, *supra* note 34, at 44 (“[B]anks are virtually private mints.”).

every component of the NNB system—including the public-utility-style provisions just mentioned, such as selective chartering, cap-and-trade, and risk-based fees—has a direct analogue in U.S. banking law as it appears the books today or, if not, in the recent past, prior to the sweeping program of liberalization undertaken in the last few decades.

II. Why Establish the New National Banking System?

We are now several decades into a radical political and economic experiment. What happens when the leading global hegemon embarks on a sustained program of monetary liberalization, allowing unrestricted entry into the business of issuing dollar-based money substitutes, relaxing or dismantling laws that separate money creation from other financial activities, and permitting or even encouraging dollar-denominated private moneys to proliferate? What is the impact on our financial system, our economy, and our democracy?¹⁰²

We think the answers are plain: recurring financial panics; ever-expanding too-big-to-fail institutions; a monetary-financial complex with the Federal Reserve at its center; loss of monetary control; rent extraction and upward redistribution; skyrocketing asset prices; financialization of the economy; and democratic erosion. The NNB system represents a different path. This Part enumerates the major rationales for transitioning from our current arrangement, dividing them into four categories: jurisdiction and stability; regulation and monetary policy; distribution and efficiency; and inclusion and political economy.

A. Jurisdiction and Stability

1. De-Privatizing Money

We currently live in a sort of monetary anarchy. Notwithstanding Congress's Constitutional power to create money and control its value¹⁰³ and its recognized power to restrain or prohibit the creation of money not issued under its own authority,¹⁰⁴ and despite recognition from even the most ardent laissez-faire advocates such as Milton Friedman that establishing a stable monetary framework is "an essential governmental function on a par with the provision of a stable legal framework,"¹⁰⁵ the U.S. government imposes no structural legal impediment to the financial sec-

102. This paragraph echoes the opening paragraph of TIM WU, *THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE* (2018). Our project bears a similarity to his.

103. U.S. CONST. art. I, sec. 8, cl. 5.

104. *Veazie Bank v. Fenno*, 75 U.S. (8 Wall.) 533 (1869).

105. FRIEDMAN, *supra* note 12, at 8; *see also* James M. Buchanan, *The Constitutionalization of Money*, 30 CATO J. 251, 251 (2010) ("The market will not work effectively with monetary anarchy.").

tor's creation of unlimited quantities of short-term or demandable debt funding.

That the short-term and demandable debt of the financial sector is a form of money is almost a truism.¹⁰⁶ But because this fundamental point is so often elided in contemporary scholarship, we feel the need to underscore it. We are far from the first to do so. John Maynard Keynes suggested “treat[ing] as *money*” debt instruments with a maturity not “in excess of three months.”¹⁰⁷ Another great English economist, John Hicks, wrote that “[b]ills of short maturity” have “moneyness.”¹⁰⁸ Henry C. Simons, who founded the Chicago School of economics, opined that certain “short-term debts . . . are . . . closely akin to money and demand deposits.”¹⁰⁹ Chicago economists Milton Friedman and Anna Schwartz said that short-term debt can have “moneyness.”¹¹⁰ Yale economist Gary B. Gorton has referred to various types of financial sector short-term debt as “forms of money” and “private money.”¹¹¹ Harvard economist and former member of the Federal Reserve's Board of Governors Jeremy C. Stein has said that the financial sector's short-term debt obligations are “private money” and offer “monetary services” and that they have “money-ness.”¹¹² Chicago economists Robert E. Lucas and Nancy L. Stokey observe that repo (a major type of financial sector short-term debt, described below) is “close to cash” and performs for large institutions “the same function that commercial banks perform for smaller depositors.”¹¹³ Paul Krugman says that “repo and other kinds of short-maturity obligations are, from an economic point of view, more or less

106. It wasn't always. See Charles F. Dunbar, *Deposits as Currency*, 1 Q.J. ECON. 401, 402 (1887) (“The ease with which we ignore deposits as a part of the currency seems the more remarkable, when we consider that few men in business fail to recognize the true meaning of this form of bank liability; that it is a circulating medium in as true a sense and in the same sense as the bank-note, and that, like the bank-note, it is created by the bank and for the same purposes.”).

107. JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY* 167 n.1 (1936).

108. JOHN HICKS, *VALUE AND CAPITAL: AN INQUIRY INTO SOME FUNDAMENTAL PRINCIPLES OF ECONOMIC THEORY* 163, 168 (2nd ed. 1946).

109. Henry C. Simons, *A Positive Program for Laissez Faire: Some Proposals for a Liberal Economic Policy* (1934), reprinted in *ECONOMIC POLICY FOR A FREE SOCIETY* 40, 320 n.7 (1948).

110. MILTON FRIEDMAN & ANNA SCHWARTZ, *MONETARY STATISTICS OF THE UNITED STATES: ESTIMATES, SOURCES, METHODS* 111 (1970).

111. GARY B. GORTON, *MISUNDERSTANDING FINANCIAL CRISES: WHY WE DON'T SEE THEM COMING* 5 (2012); Gary Gorton & Guillermo Ordoñez, *Collateral Crises*, 104 AM. ECON. REV. 343, 343 (2014).

112. Stein, *supra* note 94, at 57-58, 65; see also Greenwood et al., *supra* note 96, at 1684 (noting that “financial intermediaries engage in private money creation . . . when they issue safe short-term debt that is collateralized by long-term risky assets”).

113. Robert E. Lucas Jr. & Nancy L. Stokey, *Liquidity Crises—Understanding Sources and Limiting Consequences: A Theoretical Framework*, FED RSRV. BANK MINNEAPOLIS (May 17, 2011), <https://www.minneapolisfed.org/article/2011/liquidity-crises-epp> [<https://perma.cc/XFY9-54WB>].

equivalent to deposits.”¹¹⁴ Chicago economist John H. Cochrane says “short-term debt *is* money.”¹¹⁵ Longtime Fed economist Marvin Goodfriend said that short-term debt instruments offer “monetary services.”¹¹⁶ Legal scholars have referred to the financial sector’s short-term debt as “nondeposit deposits.”¹¹⁷ In a 2016 speech, the Fed’s vice chair for supervision, Daniel K. Tarullo, said the financial sector’s short-term debt instruments exhibit “features sometimes characterized as ‘money-like’” and that their “private creation . . . is, at least to some degree, the creation of money outside of the operations of central banks or of depository institutions subject to reserve requirements and other regulations.”¹¹⁸ In keeping with this widespread and longtime understanding, major categories of short-term financial-sector debt are included in central banks’ measures of the “broad” money supply,¹¹⁹ and U.S. generally accepted accounting principles recognize liquid short-term debts as “cash equivalents,” specifying that “[g]enerally, only investments with original maturities of three months or less qualify.”¹²⁰

114. Paul Krugman, “*The Amnesiac Economy*,” N.Y. TIMES: THE CONSCIENCE OF A LIBERAL (Oct. 26, 2011, 6:26 AM), <https://archive.nytimes.com/krugman.blogs.nytimes.com/2011/10/26/the-amnesiac-economy> [<https://perma.cc/P7ZL-R99V>].

115. John H. Cochrane, *Toward a Run-Free Financial System*, in ACROSS THE GREAT DIVIDE: NEW PERSPECTIVES ON THE FINANCIAL CRISIS 197, 224 (Martin Neil Bailey & John B. Taylor eds., 2014).

116. Marvin Goodfriend, *Money Markets*, 2011 ANN. REV. FIN. ECON. 119, 120.

117. Jonathan R. Macey & Geoffrey P. Miller, *Nondeposit Deposits and the Future of Bank Regulation*, 91 MICH. L. REV. 237 (1992).

118. Daniel K. Tarullo, Governor, Fed. Rsr. Bd., Opening Remarks at the Center for American Progress and Americans for Financial Reform Conference: Exploring Shadow Banking: Can the Nation Avoid the Next Crisis? (July 12, 2016), <https://www.federalreserve.gov/newsevents/speech/files/tarullo20160712a.pdf> [<https://perma.cc/P4W4-26LJ>].

119. According to the European Central Bank, “[B]road money . . . [includes] marketable instruments issued by the [monetary-financial institution (MFI)] sector. Certain money market instruments, in particular [money market fund (MMF)] shares/units and repurchase agreements are included in this aggregate. . . . A high degree of liquidity and price certainty make these instruments close substitutes for deposits.” *Manual on MFI Balance Sheet Statistics*, EUR. CENT. BANK 165 (Jan. 2019), <https://www.ecb.europa.eu/pub/pdf/other/ecb.manualmfbalancesheetstatistics201901~d2ebf72987.en.pdf> [<https://perma.cc/5DAM-T564>]. The ECB also refers to MFIs located in the euro area as the “money-issuing sector.” See *Lists of Financial Institutions*, EUR. CENT. BANK, https://www.ecb.europa.eu/stats/financial_corporations/list_of_financial_institutions [<https://perma.cc/W7K7-W7YL>]. The Federal Reserve stopped reporting its measure of broad money in 2006. *Federal Reserve Statistical Release: H.6 Money Stock Measures—Discontinuance of M3*, BD. GOVERNORS FED. RSRV. SYS. (Mar. 9, 2006), <https://www.federalreserve.gov/releases/h6/discm3.htm> [<https://perma.cc/68VT-K5VE>].

120. ACCT. STANDARDS CODIFICATION § 230-10-20 (FIN. ACCT. STANDARDS BD. 2024), <https://asc.fasb.org/1943274/2147482766> [<https://perma.cc/P9PH-74XC>]; see also *id.* (“Examples of items commonly considered to be cash equivalents are Treasury bills, commercial paper, money market funds, and federal funds sold (for an enterprise with banking operations). Cash purchases and sales of those investments generally are part of the enterprise’s cash management activities rather than part of its operating, investing, and financing activities, and details of those transactions need not be reported in a statement of cash flows.”). The corresponding definition under international accounting standards is similar. See INT’L ACCT. STANDARD 7 ¶¶ 6-7 (IFRS FOUND. 2024), <https://www.ifrs.org/content/dam/ifrs/publications/pdf->

In the heyday of the New Deal banking system, from 1933 to around 1980, the private money markets were small; explicitly or implicitly insured deposits dominated the U.S. money supply, and their issuance was controlled. But private moneys steadily grew—in some cases, nurtured by the Federal Reserve and other financial regulators¹²¹—and by the eve of the Global Financial Crisis their dollar value far exceeded the quantity of public money (cash and insured deposits) outstanding.¹²² The money supply, in other words, had been largely privatized.

Little has changed since then. The U.S. government has abdicated control over the money supply, and the consequences, sketched below, are disastrous: recurring financial panics, bailouts for large institutions, exorbitant subsidies for finance, a bloated and growing financial sector, ever-inflating asset prices, and corrosion of democracy. By confining money creation to member banks, controlling the amount of money they issue, and guaranteeing bank money's soundness, the NNB system re-establishes public control over this basic public infrastructure.

2. Forestalling Macroeconomic Disasters

Private money is often bad money.¹²³ Appealing to some during good times because of its higher yield, the greater risk-taking typically associated with that yield leads private money holders to turn to other issuers during periods of economic uncertainty. Panics—generalized runs on short-term or demandable debt¹²⁴—imperil the economy. This point, too, needs underscoring. Famed banking theorist Walter Bagehot wrote in 1873 that, in the event of a panic, “the public may be exposed to disaster.”¹²⁵ Irving Fisher, a towering figure in twentieth-century macroeconomics, identified “the instability of demand deposits” as “the chief cause

standards/english/2024/issued/part-a/ias-7-statement-of-cash-flows.pdf [https://perma.cc/6AKL-6JCY].

121. See *infra* notes 241-242 and accompanying text.

122. See RICKS, *supra* note 11, at 33-35; KATHARINA PISTOR, *THE CODE OF CAPITAL: HOW THE LAW CREATES WEALTH AND INEQUALITY* 77-107 (2019); PERRY MEHLING, *THE NEW LOMBARD STREET: HOW THE FED BECAME THE DEALER OF LAST RESORT* 113-35 (2010); BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *Money and Payments*, *supra* note 26, at 27 (2022) (“[T]he global financial crisis in 2008 was in large part a crisis of nonbank money. . .”).

123. See Dan Awrey, *Bad Money*, 106 CORNELL L. REV. 1 (2020); Gary B. Gorton & Jeffrey Y. Zhang, *Taming Wildcat Stablecoins*, 90 U. CHI. L. REV. 909, 911 (arguing that privately produced moneys are not always accepted at par and are subject to runs).

124. See, e.g., Ben S. Bernanke, Chairman, Fed. Rsr. Bd., Remarks at the Federal Reserve Bank of Kansas City’s Annual Economic Symposium, Jackson Hole: Reflections on a Year of Crisis (Aug. 21, 2009), <https://www.federalreserve.gov/newsevents/speech/bernanke20090821a.htm> [https://perma.cc/7LHC-9T8E] (defining a “panic” as “a generalized run by providers of short-term funding to a set of financial institutions”).

125. WALTER BAGEHOT, *LOMBARD STREET: A DESCRIPTION OF THE MONEY MARKET* 91 (Richard D Irwin Inc. 1962) (1873).

of both booms and depressions.”¹²⁶ Simons wrote in 1936 that “the economy becomes exposed to catastrophic disturbances as soon as short-term borrowing develops on a large scale.”¹²⁷ Another University of Chicago economist, who recently won the Nobel Prize, said that “financial crises are always and everywhere about short-term debt.”¹²⁸

Indeed, every major panic in U.S. history has been accompanied by a severe recession, and most of the worst recessions—including the Great Depression and the Great Recession—have been accompanied by panics. Analyzing banking panics in the United States prior to the Great Depression, economic historian Andrew J. Jalil found that major banking panics had large, rapid, and highly persistent negative effects on output. He estimates that output declines by roughly ten percent in the year following a major banking panic and concludes that panics have been “a primary source of business-cycle fluctuations throughout U.S. history.”¹²⁹ Milton Friedman and Anna J. Schwartz agreed: “Banking panics have occurred only during severe contractions and have greatly intensified such contractions, if indeed they have not been the primary factor converting what would otherwise have been mild contractions into severe ones.”¹³⁰ They famously showed that the banking panics of the early 1930s bore substantial responsibility for the Great Depression in the United States.¹³¹ Ben S. Bernanke has shown that the shadow money panic that started in 2007 was a principal driver of the ensuing output contraction and millions of job losses.¹³² Other research corroborates his conclusion.¹³³

126. FISHER, *supra* note 34, at xviii (1935).

127. Henry C. Simons, *Rules Versus Authorities in Monetary Policy* (1936), in ECONOMIC POLICY FOR A FREE SOCIETY, *supra* note 107, at 166, 172 (1948).

128. Becker Friedman Inst. for Rsch. in Econ., *Panel Discussion on Financial Regulation*, U. CHI. (Nov. 6, 2010), https://mfidev.uchicago.edu/events/20101106_finregulation [<https://perma.cc/8DRN-GWQ2>] (quoting panelist Douglas Diamond).

129. Andrew J. Jalil, *A New History of Banking Panics in the United States, 1825-1929: Construction and Implications*, 7 AM. ECON. J.: MACROECONOMICS 295, 328 (2015).

130. MILTON FRIEDMAN & ANNA J. SCHWARTZ, *A MONETARY HISTORY OF THE UNITED STATES, 1867-1960*, at 441-42 (1963).

131. Bernanke in 2002 described Friedman and Schwartz’s achievement as “nothing less than to provide what has become the leading and most persuasive explanation of the worst economic disaster in American history.” Ben S. Bernanke, Chairman, Fed. Rsrv. Bd., Address at the Conference to Honor Milton Friedman, University of Chicago: On Milton Friedman’s Ninetieth Birthday (Nov. 8, 2002) <https://www.federalreserve.gov/boarddocs/speeches/2002/20021108> [<https://perma.cc/Q2R9-FHRJ>]. See also Gary Richardson & William Troost, *Monetary Intervention Mitigated Banking Panics during the Great Depression: Quasi-Experimental Evidence from a Federal Reserve District Border, 1929-1933*, 117 J. POL. ECON. 1031, 1070 (2009) (showing that central bank intervention supported real economic activity during the Great Depression). Subsequent research on the Depression has stressed the causal role of the international gold standard. See, e.g., EICHENGREEN, GOLDEN FETTERS, *supra* note 10, at 18. The two explanations are complementary.

132. See generally Bernanke, *supra* note 14.

133. See, e.g., Mark Gertler & Simon Gilchrist, *What Happened: Financial Factors in the Great Recession*, 32 J. ECON. PERSPS. 3, 26 (2018) (concluding that “the recession would have been far milder in the absence of the financial turmoil”); Gabriel Chodorow-Reich, *The Em-*

Disastrous runs on private moneys are not unique to the United States; they have also driven deep recessions in other countries. Recent research suggests that banking panics in France in 1930 and 1931 led to a massive credit crunch and were major drivers of its Great Depression.¹³⁴ Proto-shadow banking panics caused deep, sharp recessions in Sweden and Finland in the early 1990s.¹³⁵ Japan experienced a major shadow banking panic in late 1997,¹³⁶ likely precipitating the acute recession that occurred immediately thereafter.¹³⁷ By ruling out defaultable moneys, the

ployment Effects of Credit Market Disruptions: Firm-Level Evidence from the 2008-9 Financial Crisis, 129 Q.J. ECON. 1, 1 (2014) (finding that “withdrawal of credit accounts for between one-third and one-half of the employment decline at small and medium firms in [his sample of 2,000 nonfinancial firms] in the year following the Lehman bankruptcy”). Other research emphasizes the role of household debt loads in driving the protracted slump. See ATIF MIAN & AMIR SUFI, *HOUSE OF DEBT: HOW THEY (AND YOU) CAUSED THE GREAT RECESSION, AND HOW WE CAN PREVENT IT FROM HAPPENING AGAIN* 4 (2015). Although there may appear to be some tension between these views, we see them as compatible and even complementary: the panic appears to have been the main driver of the contraction, while high debt levels (especially household debt) held back the recovery.

134. See Patrice Baubeau, Eric Monnet, Angelo Riva & Stefano Ungaro, *Flight-to-Safety and the Credit Crunch: A New History of the Banking Crises in France During the Great Depression*, 74 ECON. HIST. REV. 223, 225 (2021).

135. See Stefan Ingves & Göran Lind, *Stockholm Solutions*, 45 FIN. & DEV. 21, 22 (2008) (“In the Swedish crisis, finance companies played a role similar to that of SIVs.”). See also Peter Englund & Vesa Vihriälä, *Financial Crisis in Finland and Sweden: Similar But Not Quite the Same*, in THE GREAT FINANCIAL CRISIS IN FINLAND AND SWEDEN: THE NORDIC EXPERIENCE OF FINANCIAL LIBERALIZATION 71, 90 (Lars Jonung, Jaakko Kiander & Pentti Vartia eds., 2009) (“This was a sort of ‘run’; rather than actively running to the bank to withdraw deposits the holders of maturing marknadsbevis, otherwise routinely reinvesting, now refused to renew funding in the face of an imminent bankruptcy risk. The crisis spread to the whole market for marknadsbevis, which dried up in a couple of days. . . . The crisis also spread to other segments of the money market with sharply increasing spreads between t-bills and certificates of deposit.”); Klas Fregert & Jaakko Pehkonen, *The Crisis of the 1990s and Unemployment in Finland and Sweden*, in THE GREAT FINANCIAL CRISIS IN FINLAND AND SWEDEN, *supra*, at 131, 133 (non-employment rate rose by 10 percentage points in Sweden and 15 percentage points in Finland).

136. See Yasuyuki Fuchita & Kei Kodachi, *Managing Systemwide Financial Crises: Some Lessons from Japan Since 1990*, in ROCKY TIMES: NEW PERSPECTIVES ON FINANCIAL STABILITY 11, 28-29 (Yasuyuki Fuchita, Richard J. Herring & Robert E. Litan eds., 2012) (describing “the first default ever in Japan’s money market” in late 1997, leading to a broad run that “radically reduced the provision of credit to market participants and shrank liquidity throughout the financial system”); Hiroshi Nakaso, *The Financial Crisis in Japan During the 1990s: How the Bank of Japan Responded and the Lessons Learnt*, 6 BIS PAPERS 1, 9, 11 (2001) (noting that the default “paralysed the entire interbank market” and in short order “it was as though the financial system was starting to melt down”); Masazumi Hattori, Koji Koyama & Tatsuya Yonetani, *Analysis of Credit Spread in Japan’s Corporate Bond Market*, 5 BIS PAPERS 113 (2001) (describing the contemporaneous widening of short-term funding spreads and corporate bond spreads); see also Christina D. Romer & David H. Romer, *New Evidence on the Aftermath of Financial Crises in Advanced Countries*, 107 AM. ECON. REV. 3072, 3083 (2017) (constructing a new series on financial distress in 24 OECD countries for the period 1967-2007 and finding that Japan’s 1997-99 experience was by far the worst episode of financial distress—and the only “extreme” crisis—in their entire sample before 2007).

137. See Adam Posen, *It Takes More Than a Bubble to Become Japan*, in ASSET PRICES AND MONETARY POLICY 203, 227-31 (Anthony Richards & Tim Robinson eds., 2003); Tamim Bayoumi, *The Morning After: Explaining the Slowdown in Japanese Growth in the 1990s*, 53 J. INT’L ECON. 241, 242 (2001) (“[I]n 1997 the economy entered into its first recession since the early 1970s.”).

NNB system largely eliminates the leading source of macroeconomic catastrophes.¹³⁸

3. Restoring Monetary Sovereignty

Conjoined to the privatization of the money supply has been the U.S. government's loss of control of the creation of U.S. dollar-denominated money substitutes in the international sphere. Today, overseas financial entities issue dollar-denominated cash equivalents, called Eurodollars, largely outside the reach of U.S. money and banking authorities. Eurodollars are often issued to U.S.-based institutions (such as money market mutual funds) and the bulk of the proceeds is typically invested back into the U.S. credit markets (such as Treasury and agency securities). This is money creation: as Milton Friedman pointed out, "the existence of the Euro-dollar market increases the total amount of dollar balances available to be held by nonbanks throughout the world for any given amount of money (currency plus deposits at Federal Reserve Banks) created by the Federal Reserve System."¹³⁹

The Eurodollar market is enormous. By one estimate it reached a peak size of \$4.9 trillion in 2007, making Eurodollars the single largest category of dollar money-claims on the eve of the financial crisis—bigger even than insured deposits (\$4.3 trillion) and short-term repo (\$4.1 trillion).¹⁴⁰ It is also highly unstable and poses a threat to the domestic U.S. economy.¹⁴¹ Like the rest of the private money markets, it experienced severe stress during the Global Financial Crisis. In response, the Federal Reserve provided a staggering \$583 billion (peak level) in U.S. dollar loans to *foreign* institutions to support their short-term dollar funding. It provided this support indirectly, through liquidity swaps with foreign central banks.¹⁴² These liquidity swaps were the single largest Fed facility in

138. Cf. FRIEDMAN, *supra* note 10, at 38 ("[F]ederal deposit insurance has performed a signal service in rendering the banking system panic-proof."); FRIEDMAN & SCHWARTZ, *supra* note 110, at 441 ("Had federal deposit insurance been in existence in 1930, it would very likely have prevented . . . the tragic sequence of events" that followed).

139. Milton Friedman, *The Euro-Dollar Market: Some First Principles*, FED. RSRV. BANK ST. LOUIS REV., July 1971, at 16, 22.

140. See RICKS, *supra* note 11, at 238.

141. Victoria Ivashina, David S. Scharfstein & Jeremy C. Stein, *Dollar Funding and the Lending Behavior of Global Banks*, 130 Q.J. ECON. 1241, 1278-79 (2015).

142. *Assets: Central Bank Liquidity Swaps: Central Bank Liquidity Swaps: Wednesday Level*, FRED (June 6, 2024, 3:35 PM CDT), <https://fred.stlouisfed.org/series/SWPT> [<https://perma.cc/86T7-NDXA>]. The swaps have been reactivated repeatedly since then, specifically during Europe's sovereign debt crisis in 2011, the COVID crisis in 2020, and just after the SVB/Signature rescue in 2023. For an analysis of their use and effects in the 2011 episode, which implicated U.S. money funds, which were heavily exposed to Eurodollars, see Sergey Chernenko & Adi Sunderam, *Frictions in Shadow Banking: Evidence from the Lending Behavior of Money Market Mutual Funds*, 27 REV. FIN. STUD. 1717 (2014).

the crisis, as measured by peak levels, and they were reactivated during the COVID crisis, reaching a peak level of about \$450 billion.¹⁴³

Traditionally, money creation has been viewed as a matter of national sovereignty.¹⁴⁴ The NNB system would bring this traditional conception back to reality: the U.S. government would reassert control over the creation of dollar-denominated moneys and money substitutes. To be clear, the NNB system implicates only money *creation*, not use: it would not interfere with foreign central banks' purchases of U.S. Treasuries (the basis for the dollar's international "reserve currency" status) or with the use of the dollar in foreign trade.

B. Regulation and Monetary Policy

1. Curbing Too Big to Fail

The NNB system makes large financial firms much safer for failure, in two ways. First, it reduces their size.¹⁴⁵ It disallows conglomeration of member banks with Wall Street securities firms and other enterprises. It limits the ability of member banks to merge. And it withdraws public backstops that lead to financial sector bloat (see *infra* Section II.C), shrinking the size of nonbank financial firms. Second, it eliminates shadow banking, that is, the issuance of dollar-based money substitutes by entities other than chartered banks. Accordingly, nonbank financial firm failures become much less dangerous. Lehman Brothers' 2008 bankruptcy sent the U.S. economy into a tailspin not because it was a particularly important lender, nor because it was so interconnected with the rest of the financial system (though it was), but because it defaulted on its short-term borrowings, igniting a widespread panic in shadow money. By making the financial system much safer for failure, the NNB system would ameliorate Too Big to Fail (TBTF).

The effects of this shift should not be understated. Increasing the likelihood that both large banks and large nonbanks can be resolved substantially improves the oversight exercised by market actors. Arguably,

143. See Lev Menand, *The Federal Reserve and the 2020 Economic and Financial Crisis*, 26 STAN. J.L. BUS. & FIN. 295, 323 (2021).

144. See FRANCIS A. MANN, *THE LEGAL ASPECT OF MONEY* 461-78 (5th ed. 1992); ROSA M. LASTRA, *INTERNATIONAL FINANCIAL AND MONETARY LAW* 3-27 (2nd ed. 2015); Robert A. Mundell, *Monetary Unions and the Problem of Sovereignty*, 579 ANNALS OF THE AM. ACAD. OF POL. & SOC. SCI. 123, 124 (2002); Gary B. Gorton & Jeffery Y. Zhang, *Protecting the Sovereign's Money Monopoly*, 75 ALA. L. REV. (forthcoming 2024), <https://ssrn.com/abstract=4162884>, [<https://perma.cc/9C5K-QJHQ>].

145. Cf. Michael J. Hsu, Acting Comptroller of the Currency, Remarks Before the Wharton Financial Regulation Conference: Financial Stability and Large Bank Resolvability (Apr. 1, 2022), <https://www.occ.gov/news-issuances/speeches/2022/pub-speech-2022-33.pdf> [<https://perma.cc/Q2AU-KJ3Y>] (raising questions about the ability of the FDIC to resolve today's large regional banks in ways consistent with the public interest).

part of the point of outsourcing money augmentation to investor-owned firms is to harness the expertise and influence of these market participants. Our current arrangement blunts this potential source of good governance by curtailing the sorts of scenarios in which these investors will face substantial losses. Similarly, incentives in the nonbank financial sector should also improve, as these firms' stakeholders can no longer expect ad hoc government support.¹⁴⁶

2. Reducing Costs and Streamlining Regulations

The NNB system would open up opportunities to rationalize and simplify the existing U.S. financial regulatory regime. Much of the complexity of existing capital and liquidity regulation is a product of the complex activities permitted under current interpretations of bank powers. Because member banks under the NNB system would be limited to investing in diversified portfolios of credit assets, the task of regulators and supervisors would be dramatically simplified. Many off-balance-sheet items, which create difficult compliance and oversight burdens, would simply no longer exist inside the banking system proper. Member banks' deposits would be nondefaultable, largely eliminating run risk. Stress testing would be streamlined, as much or all of member banks' interest rate risk would shift via franchise royalties from the banking system to the central bank, leaving bankers and supervisors to focus on managing credit risks. Affiliations would be largely eliminated, obviating the need for the accompanying rulebook. Consumer protection oversight could be simplified as member banks would be prohibited from charging for certain services or, in the case of services directly appurtenant to account money (such as overdraft fees, seventy-five percent of which are paid by only eight percent of bank customers¹⁴⁷), their rates would be expressly regulated. Many expensive third-party service providers, such as those brokering deposits or cashing checks, would no longer be needed. Money augmentation would come out of the shadows into the deposit form, alleviating burdens to track and regulate various unstable money substitutes.

3. Improving Macroeconomic Management

The NNB system would improve both the efficacy and the distributional fairness of monetary policy. Since 2008, the Fed has influenced monetary expansion not by keeping bank reserves scarce and adjusting

146. See Macey & Holdcroft, *supra* note 78, at 1370.

147. *Data Point: Checking Account Overdraft*, CONSUMER FIN. PROT. BUREAU 5 (July 2014), https://files.consumerfinance.gov/f/201407_cfpb_report_data-point_overdrafts.pdf [<https://perma.cc/D278-LTCS>].

their supply, but by paying interest to banks on their central-bank accounts.¹⁴⁸ These payments are called interest on reserves (IOR).

In theory IOR “passes through” to market interest rates, allowing the Fed to control inflation and influence macroeconomic conditions. Pass-through, however, has been lackluster: for the great majority of the IOR era, the federal funds rate has remained below the IOR rate, and other money market rates have fallen even lower. Weak pass-through raises two problems. First, it impedes the Fed’s ability to affect the economy as desired. Second, it pads bank profits without regard to their effectiveness in carrying out their business functions. Entities receiving IOR but not passing it through earn economic rents.¹⁴⁹ The Fed has sought to address the first problem (efficacy) by paying interest to a broader set of financial institutions.¹⁵⁰ But there are reasons to think this only makes the second problem (distribution) worse.¹⁵¹ The NNB system would ameliorate and potentially eliminate the pass-through problem, because the monetary authority would directly administer the interest rate paid on bank money.

The NNB system would improve monetary policy in another way as well. It would allow the Fed to avoid “financial dominance”—the notion, real or imagined, that the Fed is limited in its ability to raise interest rates by the inability of the financial system to withstand the increases. Since

148. In 2006, Congress authorized the Federal Reserve to begin paying interest on reserves beginning October 1, 2011. Financial Services Regulatory Relief Act of 2006, Pub. L. No. 109-351, §§ 201, 203, 120 Stat. 1966, 1968-69. The effective date was subsequently accelerated to October 1, 2008. Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, § 128, 122 Stat. 3765, 3796.

149. See Ann Saphir, *Yellen Draws Fire for Fed Policy to Pay Banks*, REUTERS (Feb. 10, 2016, 3:09 PM EST), <https://www.reuters.com/article/idUSKCN0VJ2E7> [<https://perma.cc/F8BR-52EY>]; *Is the Federal Reserve Giving Banks a \$12 Billion Subsidy?*, ECONOMIST (Mar. 18, 2017), <https://www.economist.com/finance-and-economics/2017/03/18/is-the-federal-reserve-giving-banks-a-12bn-subsidy> [<https://perma.cc/52CD-ULZ6>]; Erin E. Syron Ferris, Soo Jeong Kim & Bernd Schlusche, *Confidence Interval Projections of the Federal Reserve Balance Sheet and Income*, BD. GOVERNORS FED. RSRV. SYS.: FEDS NOTES fig.5 (Apr. 5, 2017), <https://www.federalreserve.gov/econresdata/notes/feds-notes/2017/confidence-interval-projections-of-the-federal-reserve-balance-sheet-and-income-20170113.html> [<https://perma.cc/Z4ME-RXSM>].

150. See *Policy Tools: Overnight Reverse Repurchase Agreement Facility*, BD. GOVERNORS FED. RSRV. SYS. (Jan. 3, 2018), <https://www.federalreserve.gov/monetarypolicy/overnight-reverse-repurchase-agreements.htm> [<https://perma.cc/RD9T-U74F>]; Josh Frost, Lorie Logan, Antoine Martin, Patrick McCabe, Fabio Natalucci & Julie Remache, *Overnight RRP Operations as a Monetary Policy Tool: Some Design Considerations* chart 3 (Fed. Rsr. Bd., Fin. & Econ. Discussion Series No. 2015-010, 2015).

151. See Darrell Duffie & Arvind Krishnamurthy, *Pass-Through Efficiency in the Fed’s New Monetary Policy Setting*, in 2016 JACKSON HOLE SYMPOSIUM, *supra* note 97, at 21 (developing a model in which an increase in average pass-through to all money markets is achieved with a reduction in pass-through to the average rate paid on bank deposits). *But see* Simon Potter, Exec. Vice President, Fed. Rsr. Bank of N.Y., Remarks at the UCLA Master of Applied Economics’ Distinguished Speaker Series: Money Markets at a Crossroads: Policy Implementation at a Time of Structural Change (Apr. 5, 2017), <https://www.newyorkfed.org/newsevents/speeches/2017/pot170405> [<https://perma.cc/8SD7-NAYH>] (arguing that rate dispersion may be tied to idiosyncratic, one-off factors).

under current conditions the Fed must always concern itself with the disorderly contraction of the money supply—an ever-present possibility—it cannot change monetary policy in a way that would destabilize the solvency or liquidity of existing money issuers. By eliminating shadow money, the NNB system would allow the Fed to adjust interest rates without fear of inducing runs or panics.

C. Distribution and Efficiency

The NNB system would end regressive subsidies to the financial sector and restore a more level playing field for both nonfinancial businesses and nonbank financial firms.

1. Stopping Upward Redistribution

Today's liberalized and backstopped system of money and banking leads to upward redistribution—rent extraction by the financial industry, accruing predominately to financial institutions' already disproportionately well-off shareholders and professionals—in at least two ways. First, because cash equivalent instruments satisfy money demand, they are a source of extraordinarily cheap funding for their issuers.¹⁵² In essence, private money issuers extract seigniorage revenue from the public by piggybacking on the state.¹⁵³ Economists have estimated that money creation accounts for two-thirds of the median bank's equity market value.¹⁵⁴ Second, these institutions' already cheap funding costs are further suppressed by implicit public backstops—a “liquidity put” written by the public sector for the benefit of private financial institutions—resulting in what are sometimes called TBTF subsidies.¹⁵⁵ Both types of subsidies accrue ultimately to financial institutions' shareholders and highly paid professionals, as well as to certain institutional customers—for example, hedge funds, which rent broker-dealer balance sheet capacity through the dealers' prime brokerage divisions.¹⁵⁶ These effects are visible in compen-

152. See Greenwood et al., *supra* note 96, at 1687-88 (supplying evidence of a “money-like premium” on short-term Treasury bills).

153. See *supra* notes 96-97 and accompanying text.

154. Mark Egan, Stefan Lewellen & Adi Sunderam, *The Cross-Section of Bank Value*, 35 REV. FIN. STUD. 2101, 2103 (2022).

155. See Int'l Monetary Fund, *How Big Is the Implicit Subsidy for Banks Considered Too Important to Fail?*, in GLOBAL FINANCIAL STABILITY REPORT: MOVING FROM LIQUIDITY-TO GROWTH-DRIVEN MARKETS 101, 102 (2014).

156. Specifically, hedge funds hypothecate their securities to the dealers, which in turn rehypothecate them in the short-term repo markets. For a discussion of rehypothecation practices, see Manmohan Singh & James Aitken, *The (Sizable) Role of Rehypothecation in the Shadow Banking System* (Int'l Monetary Fund, Working Paper No. 10/172, 2010), <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/The-Sizable-Role-of-Rehypothecation-in-the-Shadow-Banking-System-24075> [<https://perma.cc/F8WC-S8EZ>]; and Mark Mitchell & Todd Pulvino, *Arbitrage Crashes and the Speed of Capital*, 104 J. FIN. ECON. 469 (2012). Cf. Viral V. Acharya & Bruce

sation data. “Workers in finance earn[ed] the same education-adjusted wages as other workers until 1990, but by 2006 the premium [was] 50% on average. Top executive compensation in finance follows the same pattern and timing, where the premium reach[ed] 250%.”¹⁵⁷ A substantial proportion of the pay premium is attributable to economic rents.¹⁵⁸ The NNB system would reduce financial-industry rent extraction, reversing existing wealth transfers from the public to the financial sector.

2. Countering the Economy’s Overfinancialization

The growth of private money fuels financialization: the increasing size and importance of financial institutions and financial markets relative to the overall economy. Theory suggests that implicit public backstops should make the financial sector larger and more profitable. Empirical evidence corroborates this prediction. U.S. “securities industry output” accelerated sharply in the early 1990s,¹⁵⁹ when Congress liberalized the Fed’s emergency lending powers to cover the repo and other runnable liabilities of Wall Street securities firms.¹⁶⁰ Implicit backstops are a leading culprit in this financial bloat. “[I]t is an open question,” write two leading researchers on financial crises, “to what extent implicit government insurance and the prospect of rescue operations have . . . contributed to the spectacular growth of finance and leverage within the system, creating more of the very hazards they were intended to solve.”¹⁶¹ Profitability has also soared in recent decades, as private moneys have grown: “Financial sector profits grew from less than 10 percent of total corporate profits in 1950 to nearly 30 percent of total corporate profits in 2013.”¹⁶² Researchers have also found that a bloated financial sector can become a drag on the growth of the rest of the economy.¹⁶³ By withdrawing implicit back-

Tuckman, *Unintended Consequences of LOLR Facilities: The Case of Illiquid Leverage*, 62 IMF ECON. REV. 606, 640 (2014) (noting that broker-dealer customers, such as hedge funds, may have “indirect” access to the lender of last resort).

157. Thomas Philippon & Ariell Reshef, *Wages and Human Capital in the U.S. Finance Industry: 1909-2006*, 127 Q.J. ECON. 1551, 1551 (2012).

158. See *id.*; see also Josh Bivens & Lawrence Mishel, *The Pay of Corporate Executives and Financial Professionals as Evidence of Rents in Top 1 Percent Incomes*, 27 J. ECON. PERSPS. 57, 57 (2013) (arguing that “the increase in the incomes and wages of the top 1 percent over the last three decades should be interpreted as driven largely by the creation and/or redistribution of economic rents”).

159. Robin Greenwood & David Scharfstein, *The Growth of Finance*, 27 J. ECON. PERSPS. 3, 9 fig.2 (2013).

160. See *infra* notes 242-245 and accompanying text.

161. Moritz Schularick & Alan M. Taylor, *Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870-2008*, 102 AM. ECON. REV. 1029, 1042 (2012).

162. Mike Konczal & Nell Abernathy, *Defining Financialization*, ROOSEVELT INST. 10 (2015) <https://rooseveltinstitute.org/publications/defining-financialization> [<https://perma.cc/64KM-JZ85>].

163. See Stephen G. Cecchetti & Enisse Kharroubi, *Reassessing the Impact of Finance on Growth* 3 (Bank for Int’l Settlements, Working Paper No. 381, 2012).

stops, capping money creation by member banks, and charging a fair price for the government's explicit guarantee of bank-money liabilities, the NNB system would counteract decades of overfinancialization in the American economy.

3. Arresting Asset Price Inflation

Sociologists have begun speaking of a shift toward an “asset economy” in which asset ownership (of stocks, real estate, etc.), rather than income, is the primary determinant of class and economic opportunity.¹⁶⁴

The growth of private money has fueled asset price inflation in at least two ways. First, uncontrolled private money issuance represents a perverse form of excessively “easy money” that has driven long-term risk-free interest rates ever-lower in recent decades, pushing asset prices upward in the process.¹⁶⁵ How money enters the economy affects relative prices.¹⁶⁶ Because institutional money markets are mostly collateralized by trading securities (including mortgage-backed securities), the resulting price increases manifested for decades in asset markets, such as stocks and real estate, rather than markets for goods and services.¹⁶⁷ Funneling new money creation into asset markets instead of into supporting real economic activity mutes its stimulative impact, while further enriching the already wealthy.

Second, the government's implicit backstop of private moneys further pumps up asset prices. Studying the 1997 financial turmoil in Southeast Asia, Paul Krugman has argued that in the run-up to the crisis, “implicit government guarantee[s]” of the liabilities of financial companies that “borrowed short-term money” in effect “created inflation—not of

164. See LISA ADKINS, MELINDA COOPER & MARTIJN KONINGS, *THE ASSET ECONOMY* 5-7 (2020).

165. Ben S. Bernanke, *Why Are Interest Rates so Low?*, BROOKINGS INST. (Mar. 30, 2015), <https://www.brookings.edu/articles/why-are-interest-rates-so-low> [<https://perma.cc/2674-DYJQ>]; Ben S. Bernanke, *Why Are Interest Rates so Low, Part 2: Secular Stagnation*, BROOKINGS INST. (Mar. 31, 2015), <https://www.brookings.edu/articles/why-are-interest-rates-so-low-part-2-secular-stagnation> [<https://perma.cc/5LR2-YAZ3>]; Ben S. Bernanke, *Why Are Interest Rates so Low, Part 3: The Global Savings Glut*, BROOKINGS INST. (Apr. 1, 2015), <https://www.brookings.edu/articles/why-are-interest-rates-so-low-part-3-the-global-savings-glut> [<https://perma.cc/MJU5-U6KF>]. That low rates translate to high asset prices underlies the “Greenspan Put”—the idea that the Federal Reserve will cut rates to prop up stock prices if they fall too much. See Marcus Miller, Paul Weller & Lei Zhang, *Moral Hazard and the US Stock Market: Analysing the ‘Greenspan Put,’* 112 *ECON. J.* (CONF. PAPERS) C171, C171 (2002).

166. RICHARD CANTILLON, *AN ESSAY ON ECONOMIC THEORY*, 227-230 (Mark Thornton ed., Chantal Saucier trans., Ludwig von Mises Inst. 2010) (1755); see also Andrea Zaghini, *The CSPP at Work: Yield Heterogeneity and the Portfolio Rebalancing Channel*, 56 *J. CORP. FIN.* 282 (2019) (evaluating the effects of the European Central Bank's Corporate Sector Purchase Programme on corporate bond yields and prices).

167. Cf. Alan Greenspan, Former Chairman, Fed. Rsr. Bd., Testimony Before the Financial Crisis Inquiry Commission 1-2 (Apr. 7, 2010), https://fcic-static.law.stanford.edu/cdn_media/fcic-testimony/2010-0407-Greenspan.pdf [<https://perma.cc/Q8SN-PC98>] (noting that a fall in long-term interest rates had driven asset prices, including house prices, “dramatically higher”).

goods but of asset prices.”¹⁶⁸ Krugman develops a model in which “the problem of moral hazard in financial intermediaries . . . can lead to over-investment at the aggregate level” as well as “over-pricing of assets.”¹⁶⁹ In his model, real estate and other assets take on “Pangloss values”—values that far exceed what they would be “in an undistorted economy.”¹⁷⁰ “Throughout the region,” he writes, “implicit government guarantees were helping underwrite investments that were both riskier and less promising than would have been undertaken without those guarantees, adding fuel to what would probably anyway have been an overheated speculative boom.”¹⁷¹ Krugman applies the same analysis to Japan’s gigantic debt-fueled bubble in stocks and real estate in the 1980s. “Japan, where all the usual lines—between government and business, between banks and their clients, between what was and what was not subject to government guarantee—were especially blurry, was peculiarly ill suited to a loosened financial regime,” he writes. “Japan’s banks . . . helped inflate the bubble economy to grotesque proportions.”¹⁷² Loosened financial constraints combined with unpriced government guarantees, Krugman argues, also help explain the U.S. experience in the 1980s, in the run-up to the savings and loan debacle.¹⁷³

Scholars have pointed to similar explanations for other asset booms. Gary Gorton and Andrew Metrick examined the Federal Reserve’s lender-of-last-resort policies in the 1920s, a period associated with rising household debt, a stock market frenzy, and skyrocketing real estate valuations. In the early part of the decade, hundreds of banks borrowed continuously from the Fed for extended periods and at interest rates below the market rate. According to Gorton and Metrick:

By the latter part of the 1920s, the Fed became concerned with trying to distinguish between “speculative security loans” and loans for “legitimate business.” In other words, was discount window credit being used to pump up stock market values? Was it leading to high growth in real estate prices, labeled a “bubble” by some?¹⁷⁴

168. Paul Krugman, *What Happened to Asia?*, in GLOBAL COMPETITION AND INTEGRATION 315, 317-18 (Ryuzo Sato, Rama V. Ramachandra & Kazuo Mino eds., 1999).

169. *Id.* at 316.

170. *Id.* at 322.

171. PAUL KRUGMAN, THE RETURN OF DEPRESSION ECONOMICS AND THE CRISIS OF 2008, at 84 (2009).

172. *Id.* at 65-66.

173. *Id.* at 62.

174. Gary Gorton & Andrew Metrick, *The Federal Reserve and Panic Prevention: The Roles of Financial Regulation and Lender of Last Resort*, 27 J. ECON. PERSP. 45, 52 (2013) (citations omitted).

It takes no great leap of imagination to suppose that the U.S. government's demonstrated commitment to backstopping dollar-based private money markets may bear a large measure of responsibility for recent speculative excesses and upward price spirals in real estate, stocks (including "meme" stocks), cryptocurrencies, "non-fungible tokens," special-purpose acquisition companies, and so on. By stopping uncontrolled private money creation and withdrawing the associated implicit backstops, the NNB system would reduce the incidence and severity of speculative distortions in asset prices.

D. Inclusion and Political Economy

1. Serving All Americans

Many Americans are profoundly underserved by our existing money and banking infrastructure. Some do not even have access to basic banking services—a stunning fact for an advanced economy. Unlike Canada, France, Germany, and the United Kingdom, for example, where bank account penetration exceeds ninety-nine percent,¹⁷⁵ 4.5 percent of U.S. households are currently "unbanked," meaning that no individual in the household has a bank account.¹⁷⁶ Another 14.1 percent of U.S. households are "underbanked," meaning that, despite having a bank account, they rely to some degree on expensive nonbank services—such as nonbank money orders, check cashing, and payday loans.¹⁷⁷

Un- and underbanked individuals use a mishmash of products and services to make and receive payments. They cash checks at retail stores (such as grocery, drug, or convenience stores) and standalone check-cashing businesses, typically paying 1.5 percent to 3.5 percent of face value.¹⁷⁸ They stand in line at bill pay centers to pay routine expenses in

175. See Asli Demirgüç-Kunt, Leora Klapper, Dorothe Singer & Saniya Ansar, *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*, WORLD BANK GRP. 178 (2022), <https://www.worldbank.org/en/publication/global-findex/Report> [<https://perma.cc/93PW-ZVH5>].

176. 2021 FDIC National Survey of Unbanked and Underbanked Households, FED. DEPOSIT INS. CORP. 1 (Oct. 2022) [hereinafter *2021 FDIC National Survey*], <https://www.fdic.gov/analysis/household-survey/2021report.pdf> [<https://perma.cc/GE4A-YX2Z>] ("This proportion represents approximately 5.9 million U.S. households.").

177. *Id.* at 7 ("representing approximately 18.7 million households").

178. Michael S. Barr & Rebecca M. Blank, *Savings, Assets, and Banking Among Low-Income Households: Introduction and Overview*, in *INSUFFICIENT FUNDS: SAVINGS, ASSETS, CREDIT, AND BANKING AMONG LOW-INCOME HOUSEHOLDS* 1, 3 (Rebecca M. Blank and Michael S. Barr eds., 2009). Underbanked households, which are predominately low- or moderate-income, may resort to nonbank check cashing for reasons of convenience and immediacy of payment. See Rachel Schneider & Balafama Longjohn, *Beyond Check-Cashing: An Examination of Consumer Demand and Business Innovation for Immediate Access to Check Funds*, CTR. FOR FIN. SERVS. INNOVATION 8 (June 2014), <https://finhealthnetwork.org/research/beyond-check-cashing> [<https://perma.cc/W4RR-UUF8>].

cash, and they use nonbank money orders, which are subject to fees. They transfer money domestically through expensive wire transfer outlets like Western Union and MoneyGram. And increasingly they turn to prepaid debit cards. These cards have various types of fees¹⁷⁹ and can experience service interruptions, leaving users unable to access to their accounts for days at a time.¹⁸⁰

The unbanked also save at a much lower rate,¹⁸¹ in part because they do not have checking and savings accounts.¹⁸² Low savings increases the likelihood that these households will need to use expensive nonbank credit products, such as payday loans, to cover cash shortfalls and emergency expenses.¹⁸³ Between interest and fees on short-term credit products and haircuts on earned income, the unbanked bear tens of billions of dollars in annual costs for financial services that wealthier households either get for free or do not need at all.¹⁸⁴

Banks are not meeting these households' needs. Branch locations are less prevalent in minority communities and hours of operation in these areas are inconvenient for many users and prospective users.¹⁸⁵ Minimum balance requirements, account fees, and delays in check clearing deter low- and moderate-income households from opening or retaining accounts.¹⁸⁶

Banks also find it unprofitable to service low-balance accounts.¹⁸⁷ Accordingly, when banks do maintain such accounts, they often use ques-

179. See *What types of fees do prepaid cards typically charge?*, CONSUMER FIN. PROT. BUREAU (Aug. 31, 2020), <https://www.consumerfinance.gov/ask-cfpb/what-types-of-fees-do-prepaid-cards-typically-charge-en-2053> [<https://perma.cc/CG9J-QJQE>].

180. See Liz Moyer & Jessica Silver-Greenberg, *RushCard Breakdown Affects Thousands of Prepaid Debit Card Users*, N.Y. TIMES: DEALBOOK (Oct. 20, 2015), <https://www.nytimes.com/2015/10/21/business/dealbook/after-technical-snap-fury-and-no-cash.html> [<https://perma.cc/7H5B-V8RC>]; Stacy Cowley, *Senators Press for Answers After Prepaid Debit Cards Fail*, N.Y. TIMES: DEALBOOK (June 28, 2016), <https://www.nytimes.com/2016/06/29/business/dealbook/senators-press-for-answers-after-prepaid-debit-cards-fail.html> [<https://perma.cc/X8A9-SBKQ>].

181. See *2017 FDIC National Survey of Unbanked and Underbanked Households*, FED. DEPOSIT INS. CORP. 8 (Oct. 2018), <https://www.fdic.gov/analysis/household-survey/2017/2017-report.pdf> [<https://perma.cc/X3MA-36SB>] (17% of unbanked households saved compared with 56% of underbanked households and 62% of fully banked households).

182. See MEHRSA BARADARAN, *HOW THE OTHER HALF BANKS: EXCLUSION, EXPLOITATION, AND THE THREAT TO DEMOCRACY* 213 (2015) (noting that countries with near-universal bank account penetration have substantially higher savings rates).

183. See JOHN ARMOUR, DAN AWREY, PAUL DAVIES, LUCA ENRIQUES, JEFFREY N. GORDON, COLIN MAYER & JENNIFER PAYNE, *PRINCIPLES OF FINANCIAL REGULATION* 263 (2016) (estimating that 75% of payday loans are advanced to borrowers taking out upwards of eleven loans per year).

184. See BARADARAN, *supra* note 182, at 212 (estimating \$89 billion per year).

185. See Jung Sakong & Alexander K. Zentefis, *Bank Access Across America* (Fed. Rsr. Bank of Chi., Working Paper No. 2023-15, 2023), <https://www.chicagofed.org/publications/working-papers/2023/2023-15> [<https://perma.cc/ERD3-PTBH>].

186. See *2021 FDIC National Survey*, *supra* note 176, at 3.

187. See Aaron Klein, *America's Poor Subsidize Wealthier Consumers in a Vicious Income Inequality Cycle*, BROOKINGS INST. (Feb. 6, 2018), <https://www.brookings.edu/articles/>

tionable tactics to generate revenue, such as overdraft “protection” fees (with a median fee of \$35 per overdraft).¹⁸⁸ These fees exploit behavioral biases (among other things, many people who incur these fees do not expect to overdraw their account) and fall disproportionately on low-balance households.¹⁸⁹ In 2013, one in ten Americans reported paying such fees. Estimates of annual overdraft fees vary, ranging from \$14 billion to as much as \$32 billion.¹⁹⁰ Despite federal consumer protection regulation directed at overdraft abuses,¹⁹¹ banks have succeeded at convincing vulnerable consumers to “opt in” to these fees by using aggressive and sometimes misleading marketing practices.¹⁹² And a history of overdrafts may preclude access to a bank account in the first place: banks use the private ChexSystem to screen out users who have had problems with checking accounts in the past.¹⁹³

The NNB system would reset the relationship between banks and their customers. By fully executing on a public utility approach, the system would transform the mainstream, account-based money-and-payments system into public infrastructure.¹⁹⁴ It would disallow account

americas-poor-subsidize-wealthier-consumers-in-a-vicious-income-inequality-cycle [https://perma.cc/VZJ6-CL7H] (noting that it costs banks between \$250 and \$400 to establish a new checking account and another several hundred dollars to maintain it each year on average); Adam J. Levitin, *The Financial Inclusion Trilemma*, 41 YALE J. ON REGUL. 109, 112 (2024) (arguing that it is unprofitable for financial institutions to service low-income households at scale).

188. See *Overdrawn: Persistent Confusion and Concern about Bank Overdraft Practices*, PEW CHARITABLE TRS. 1 (June 26, 2014), https://www.pewtrusts.org/-/media/assets/2014/06/26/safe_checking_overdraft_survey_report.pdf [https://perma.cc/97F9-EJK2].

189. See Willis, *supra* note 83, at 1178.

190. See Klein, *supra* note 187 (estimating \$14 billion in overdraft fees per year); LISA SERVON, *THE UNBANKING OF AMERICA: HOW THE NEW MIDDLE CLASS SURVIVES* 31 (2017) (estimating \$32 billion in overdraft fees in 2014); Theresa Schmall & Eva Wolkowitz, *2016 Financially Underserved Market Size Study*, CTR. FOR FIN. SERVS. INNOVATION 12 (Nov. 2016), <https://finhealthnetwork.org/research/2016-financially-underserved-market-size-study> [https://perma.cc/RQ3K-JRX8] (estimating \$24 billion).

191. 12 C.F.R. § 205.17 (2023).

192. See Willis, *supra* note 83, at 1186-91.

193. See James Marvin Pérez, *Blacklisted: The Unwarranted Divestment of Access to Bank Accounts*, 80 N.Y.U. L. REV. 1586, 1604-05 (2005).

194. Cf. Kenneth J. Arrow, *The Organization of Economic Activity: Issues Pertinent to the Choice of Market Versus Non-market Allocations*, in STAFF OF J. ECON. COMM., 91ST CONG., ANALYSIS AND EVALUATION OF PUBLIC EXPENDITURES: THE PPB SYSTEM 47, 48 (Comm. Print 1969) (“The creation of money is in many respects an example of a public good.”); DAVID LAIDLER, *TAKING MONEY SERIOUSLY* 47 (1990) (“[T]here is something of the nature of a public good about money.”); ROBERT Z. ALIBER & CHARLES P. KINDLEBERGER, *MANIAS, PANICS, AND CRASHES: A HISTORY OF FINANCIAL CRISES* 15 (7th ed. 2015) (“Money is a public good.”); Fed. Rsrv. Bank of Minneapolis, *Ending Too Big to Fail Symposium—Morning Session*, YOUTUBE, at 02:07:26 (May 16, 2016) (statement of John Cochran), <https://www.youtube.com/watch?v=QcidqjmxPyk> [https://perma.cc/3EZJ-LFTK] (“[T]here’s a few things that government has a natural monopoly in: national defense, courts, property rights, and I think money is one of them”); Agustin Carstens, Gen. Manager, Bank for Int’l Settlements, *Lecture at Princeton University: The Future of Money and the Payment System: What Role for Central Banks?* 7 (Dec. 5, 2019), <https://www.bis.org/speeches/sp191205.htm> [https://perma.cc/ME3T-G33T] (describing the trust in the currency underpinned by the central bank as a public good “[l]ike the legal system”).

fees and minimum balance requirements, and it would require member banks to make accounts and payment services available to all comers within their franchise areas without discrimination based on wealth.

Accordingly, the NNB system could attract millions of people who currently choose not to or are unable to maintain bank accounts, reducing the number of un- and underbanked households. These households would benefit significantly. Their payment-related costs would shrink, leaving them with more resources to meet other needs. And consumers' need for alternative credit suppliers would decrease—both because their savings would likely increase and because they would be more likely to qualify for credit cards and other forms of bank credit, which are (at least somewhat) cheaper and safer.

The benefits of inclusion would also extend to the people and businesses on the *other* side of payments, who will be better off transacting with fully banked individuals. For example, employers benefit from using direct deposit instead of cutting physical checks. Many businesses benefit from customers' use of convenient and reliable automatic bill pay. Government agencies benefit from easier administration of benefit transfers and tax refunds.¹⁹⁵ These network externalities are significant. Also, the NNB system would ease the oversight burden on state and federal consumer agencies and bank regulators, because overdraft abuses and other bank-account-related consumer protection issues would decline, as would usage of substandard credit products. Finally, by virtue of being an inclusive public utility, the NNB system would foster social cohesion and reduce marginalization. The National Bank Act's designers viewed it as a means of binding the country together,¹⁹⁶ and the NNB system would similarly advance that goal.

2. Promoting Geographic Fairness

Community banks—those with assets under \$10 billion—make up an ever-shrinking portion of the banking system. Deregulation of rules governing geographic expansion by banks in the 1980s and 1990s led to rapid consolidation and the emergence of massive nationwide conglomerates

For a contrary, laissez-faire perspective, see LAWRENCE H. WHITE, *THE THEORY OF MONETARY INSTITUTIONS* 88-119 (1999).

195. For example, the U.S. Treasury makes over one billion payments per year valued at over two trillion dollars. Each payment once cost Treasury a dollar, but because of increasing electrification payments now cost a fraction of that. See Bureau of the Fiscal Serv., *Electronic Invoicing: Why It Matters*, U.S. DEP'T OF THE TREASURY (2014), <https://www.ipp.gov/-/media/files/ipp/downloads/electronic-invoicing-why-it-matters-part1.pdf> [<https://perma.cc/S36N-L9D3>].

196. See REPORT OF THE SECRETARY 1862, *supra* note 20, at 20 (suggesting that a national banking system might have forestalled “the wild treason of secession”); CONG. GLOBE, 37th Cong., 3d Sess. 843 (1863) (statement of Sen. Sherman) (“I believe [a national banking system] would have done very much indeed to maintain the Federal Government and to prevent the great crime of secession.”).

like Wells Fargo, Bank of America, Citigroup, and JPMorgan Chase.¹⁹⁷ Today, most of the largest financial institutions are based out of New York.¹⁹⁸ The NNB system would help to reverse these trends, improving the competitive position of banks outside of a few major cities and increasing access to credit for local and regional businesses.

For well over a century, dispersion and decentralization were bywords of American industrial organization.¹⁹⁹ Bigness in business was seen as a danger to consumers and producers alike, as well as a threat to democratic self-government. Of particular concern was concentration in banking and access to bank credit.²⁰⁰ Since banks have the lowest funding costs of any lender—they have the ability, within constraints, to create new purchasing power—bank lending practices play an important role in shaping economic activity.²⁰¹ Businesses that can borrow from banks are more likely to get off the ground and succeed, and people that can use banks to finance real estate purchases are more likely to become homeowners.

Both theory and practice indicate that the size of banks and the location of their headquarters influence the sorts of borrowers that banks lend to. Small, local banks are more likely to lend to small, local businesses. This point was once so widely acknowledged that the Supreme Court, in holding that the Clayton Act applies to bank mergers, warned that “concentration in banking accelerates concentration generally.”²⁰² Small businesses, the Court explained, borrow locally, and if they have fewer options to obtain bank credit, they are likely to be “at a disadvantage *vis-à-vis* larger businesses with which [they] compete[.]”²⁰³

One reason why concentration in banking affects industrial organization is the high fixed costs of making a loan. It is more efficient for a large bank to underwrite a few large loans than many smaller loans. Large banks are also governed differently. Key decision makers across the bank do not know each other personally. They must rely on policies and pro-

197. Arthur E. Wilmarth, Jr., *The Transformation of the U.S. Financial Services Industry, 1975-2000: Competition, Consolidation, and Increased Risks*, 2002 U. ILL. L. REV 215, 250-57 (2002).

198. See *Large Holding Companies*, FED. FIN. INSTS. EXAMINATION COUNCIL (Dec. 31, 2023), <https://www.ffiec.gov/npw/Institution/TopHoldings> [<https://perma.cc/W6DM-3TJX>].

199. See generally MARK ROE, *STRONG MANAGERS WEAK OWNERS: THE POLITICAL ROOTS OF AMERICAN CORPORATE FINANCE* (1994); WU, *supra* note 102; Saule T. Omarova & Graham S. Steele, *Banking and Antitrust*, 133 YALE L.J. 1162 (2024).

200. See, e.g., BRANDEIS, *supra* note 32.

201. See Christine Desan, *How to Spend a Trillion Dollars: Our Monetary Hardwiring, Why It Matters, and What We Should Do About It* 11 (Harv. L. Sch., Pub. L. Working Paper No. 22-04, 2022), <https://ssrn.com/abstract=4056241> [<https://perma.cc/4CSV-2HF7>]; see also CANTILLON, *supra* note 166, at 156-57 (explaining that the introduction of new money into circulation has an effect on relative prices).

202. *U.S. v. Phila. Nat'l Bank*, 374 U.S. 321, 370 (1963).

203. *Id.*

cedures to align practices. As a result, large banks tend to use formal, formulaic methods to underwrite and price loans. Such approaches are often poorly suited to extending credit to small businesses, which may struggle with the additional paperwork or require more bespoke risk assessments.²⁰⁴ Moreover, local banks are more likely to employ loan officers that originate loans through community involvement, that is, to engage in relationship lending.²⁰⁵

Of course, it's possible that the increased efficiencies that accompany concentrated banking allow large banks to improve lending terms for small businesses, notwithstanding their reasons to prefer lending to larger businesses or underwriting credit in ways that make it less likely small businesses qualify. Past practice helps clarify which effect dominates. Multiple empirical analyses demonstrate that small businesses have more difficulty obtaining credit when banking system concentration increases. As one study concluded, "access to bank credit for small businesses is much less likely in markets dominated by the largest banks."²⁰⁶ And similar results have been found in other countries.²⁰⁷

These results are backed up by more granular data and findings. As of year-end 2014, when community banks accounted for just 22% of banking system lending, these institutions provided 77% of agricultural loans, 46% of commercial real estate loans, 51% of small business loans, and 25% of first-lien residential real estate loans.²⁰⁸ Numbers for loans to low- and moderate-income borrowers are even more striking. In 2020, community banks made 97% of such loans including 99% of all manufactured housing loans to minority borrowers.²⁰⁹ Relatedly, and strikingly, community banks are the only banking presence within one third of U.S.

204. For empirical evidence of this phenomenon, see Steven G. Craig & Pauline Hardee, *The Impact of Bank Consolidation on Small Business Credit Availability*, 31 J. OF BANKING & FIN. 1237 (2007).

205. Martin J. Gruenberg, Acting Chairman, Fed. Deposit Ins. Corp., Remarks at the 10th Community Banking Research Conference (Sept. 28, 2022), <https://www.fdic.gov/news/speeches/2022/spsep2822.html> [<https://perma.cc/C236-25YR>]

206. Craig & Hardee, *supra* note 204, at 1240.

207. See, e.g., Iftekhar Hasan, Krzysztof Jackowicz, Oskar Kowalewski & Łukasz Kozłowski, *Do Local Banking Market Structures Matter for SME Financing and Performance? New Evidence from an Emerging Economy*, 79 J. BANKING & FIN. 142 (2017) (finding that local banks lend more to small businesses than large domestic banks and foreign-owned banks, that local banks provide loans to small businesses at lower costs than foreign-owned banks or large domestic banks, and that SMEs perform better in counties with a large number of cooperative banks than in counties dominated by foreign-owned banks or large domestic banks).

208. Marshall Lux & Robert Greene, *The State and Fate of Community Banking* 9-13 (Harvard Mossavar-Rahmani Ctr. for Bus. and Gov. Assoc. Working Paper, Paper No. 37, 2015), <https://www.hks.harvard.edu/centers/mrcbg/publications/awp/awp37> [<https://perma.cc/TB5D-CLYG>].

209. Letter from Rebeca Romero Rainey, President & CEO, Indep. Cmty. Bankers of Am., to Rohit Chopra, Dir., Consumer Fin. Prot. Bureau 4 (Apr. 18, 2022), <https://www.icba.org/docs/default-source/icba/advocacy-documents/letters-to-regulators/letter-to-cfpb-on-rural-america> [<https://perma.cc/D89S-UPC3>].

counties and operate between four and five branches in rural areas for every one branch operated by large banks.²¹⁰

Studies which have looked at the effect of legal changes in the 1990s have found that when Congress deregulated bank branching laws, large out-of-state banks took market share from local banks, which were often acquired. The result was a reduction in lending to small businesses and ultimately a reduction in the number of small businesses. The shift also led to decreased employment and hours worked in small businesses, as many of the small businesses that survived shrunk in the process.²¹¹ The closure of bank branches in low- and moderate-income neighborhoods—which has often followed bank mergers—has been tied directly to changes in economic conditions. For example, mortgage originations decrease and interest rate spreads increase. These effects seem to be tied specifically to the presence of community banks as opposed to branches of large nationwide firms.²¹²

These effects are particularly pronounced when it matters most: during economic downturns. A study of banking lending during the Great Recession showed that regions with more local banks experienced smaller reductions in employment.²¹³ Similarly, in 2020, small banks provided an outsized share of PPP loans.²¹⁴ Small banks also outcompeted large banks in the speed with which they originated PPP loans for their small business customers.²¹⁵ Finally, survey data suggests that local banking better serves the needs of local customers. For example, the Federal Reserve’s Small Business Credit Survey revealed that in 2022 76% of small businesses were satisfied with their lenders when their lenders were small

210. *Id.* at 2-3.

211. Brad Cannon & John Lynch, Does Banking Competition Really Increase Credit for All? The Effect of Bank Branching Deregulation on Small Business Credit, (Aug. 28, 2023) (unpublished manuscript) (manuscript at 26-27), <https://ssrn.com/abstract=4314680> [<https://perma.cc/CZ36-P2HC>] (estimating a 5.4% decline in small business lending associated with the change in banking structure).

212. Ozgur Emre Ergungor, *Bank Branch Presence and Access to Credit in Low- to Moderate-Income Neighborhoods*, 42 J. MONEY, CREDIT & BANKING 1321, 1322, 1345-46 (2010).

213. Luke Petach, Stephan Weiler & Tessa Conroy, *It’s a Wonderful Loan: Local Financial Composition, Community Banks, and Economic Resilience*, 126 J. BANKING & FIN. art. no. 106077 (2021).

214. Lei Li & Philip E. Strahan, *Who Supplies PPP Loans (And Does It Matter)? Banks, Relationships, and the COVID Crisis*, 56 J. FIN. & QUANTITATIVE ANALYSIS 2411, 2412 (2021) (“Small and medium-sized banks (those with assets under \$50 billion) provide about two-thirds of the loans under the PPP program (\$310 billion out of \$494 billion by all banks, or 63%). This share exceeds their share of lending to small businesses before the COVID crisis, which was just 44% at the end of 2019.”); *see also* Tetyana Balyuk, Nagpurnanand Prabhala & Manju Puri, *Small Bank Financing and Funding Hesitancy in a Crisis: Evidence from the Paycheck Protection Program* (Fed. Deposit Ins. Corp. Ctr. for Fin. Rsch., Working Paper No. 2021-01, 2021), <https://www.fdic.gov/analysis/cfr/working-papers/2021/cfr-wp2021-01.pdf> [<https://perma.cc/C8FZ-JSLY>].

215. Christopher James, Jing Lu & Yangfan Sun, *Time is Money: Real Effects of Relationship Lending in a Crisis*, 133 J. BANKING & FIN. art. no. 106283, at 1 (2021).

banks compared with 62% for large banks, 48% for nonbank finance companies, and 34% for nonbank online lenders.²¹⁶ For all these reasons, the presence of banks headquartered locally has long been considered critical to fostering fair credit availability across the national geography and is something that the NNB system would restore.²¹⁷

3. Sustaining Democracy

Restructuring the American monetary system around a network of banks chartered, regulated, and supervised as public utilities will help to strengthen and sustain American democracy. Our current monetary architecture—by redistributing wealth upwards, funneling credit to business conglomerates and choking off small, local firms, excluding low-income and minority communities from the payments system (or connecting them only at high cost), and fueling financialization—undermines the economic preconditions for equal citizenship. Recurring government bailouts of financial firms, meanwhile, damage trust in government. And the looming prospect of economic collapse means that monetary system dysfunction threatens to create the sort of social conditions conducive to the rise of more authoritarian modes of governance.²¹⁸

By contrast, the NNB system would diffuse economic power and help support democratic politics. Universal access to basic infrastructural resources like money and payments improves the ability of all citizens to start a business or buy a home.²¹⁹ Banks with limited powers that are foreclosed from conglomerating with nonbank financial firms would have fewer resources with which to influence government. The executives of some banks today are too powerful; they are “overmighty citizens.”²²⁰ As a result, banks are hard to regulate and supervise effectively. We need look no further than the recent collapse of Silicon Valley Bank, whose CEO was on the Board of Directors of the Federal Reserve Bank of San Francisco. President Woodrow Wilson, in promoting public utility law

216. *Small Business Credit Survey: 2022 Report on Employer Firms*, FED. RSRV. SYS. 22 (2022), <https://www.fedsmbusiness.org/reports/survey/2022/2022-report-on-employer-firms> [https://perma.cc/L6GK-YC6F].

217. See also Ganesh Sitaraman, Morgan Ricks & Christopher Serkin, *Regulation and the Geography of Inequality*, 70 DUKE L.J. 1763, 1768 (2021).

218. Cf. Manuel Funke, Moritz Schularick & Christoph Trebesch, *Going to Extremes: Politics After Financial Crises, 1870-2014*, 88 EUR. ECON. REV. 227, 228 (2016); Enrique Hernández & Hanspeter Kriesi, *The Electoral Consequences of the Financial and Economic Crisis in Europe*, 55 EUR. J. POL. RSCH. 203, 221 (2016).

219. See generally BARADARAN, *supra* note 182; MICHAEL BARR, NO SLACK: THE FINANCIAL LIVES OF LOW INCOME AMERICANS (2012).

220. Cf. PAUL TUCKER, UNELECTED POWER: THE QUEST FOR LEGITIMACY IN CENTRAL BANKING AND THE REGULATORY STATE 525 (2018). The NNB system would also reduce the influence of powerful intermediaries, which would have both economic and democracy-enhancing benefits. See Kathryn Judge, *Intermediary Influence*, 82 U. CHI. L. REV. 573, 577-79 (2015).

and antimonopoly policy, remarked, “[I]f there are men in this country big enough to own the government of the United States, they are going to own it”²²¹ Under our current arrangement, bank executives have been able to use their position to extract support from the government, further strengthening their position, creating a vicious circle that undermines democracy. The NNB system would break this doom loop, limiting the size of banks, the influence of bank executives, and the supracompetitive profitability of the financial sector.

* * *

The benefits of rebuilding our monetary and financial system on a foundation of public utility banks are manifold. If adopted, we expect that the NNB system we’ve outlined would accelerate economic growth and reduce waste, foreclose a leading cause of macroeconomic disasters, and mitigate inequality by reversing the structural transfer of wealth from ordinary households and businesses to asset owners, industrial conglomerates, and concentrated financial sector interests. We suspect the changes would be at once ordinary and profound—from faster and cheaper payments for households day-to-day to greater economic and political stability year-to-year and decade-to-decade.

III. How Do We Get from Here to There?

In the aftermath of the 2008 financial crisis, policymakers pursued a far-reaching program of reform, touching virtually every aspect of American finance. Yet, because the role of private money did not figure prominently in contemporary diagnoses of what had gone wrong, the government did little to address the problems caused by shadow banking. Instead, reformers left our monetary and financial system structure largely intact, opting for a hypertechnical regulatory overlay.

The NNB system represents a very different approach—in some respects the polar opposite one. It is structural, not technocratic—banking law, not “finreg.” Consequently, it is comparatively simple. It involves fairly surgical reforms to basic underlying components of the U.S. system of money and banking. And because the NNB system largely revamps and modernizes core components of our longstanding banking laws, it can be implemented through a series of incremental reforms.

In this Part we map one way to get from here to there. Section III.A lays out a set of targeted legal changes that would produce a reasonably close approximation of the NNB system. Section III.B singles out the

221. WOODROW WILSON, *THE NEW FREEDOM: A CALL FOR THE EMANCIPATION OF THE GENEROUS ENERGIES OF THE PEOPLE* 286 (1913).

proposed unauthorized banking provision—the only component of the NNB system that applies directly to *nonbanks*—for further elaboration.

A. Modernizing Banking Law

The following legislative changes would produce—to borrow a phrase from the startup world—a “minimum viable product” version of the NNB system, that is, a version that, while not full-featured, would still be workable:

1. *Require All Depository Institutions to be Insured Member Banks.* Amend the Federal Reserve Act to require that (1) all U.S. depository institutions join the Federal Reserve System as member banks and (2) all member banks maintain federal deposit insurance.²²² All U.S. depository institutions are insured member banks.

2. *Reinstate the Utility-Style Chartering Standard for Member Banks.* Amend the National Bank Act to reinstate the “public convenience and necessity” chartering standard that was excised by the Federal Deposit Insurance Corporation Act of 1991.²²³ Require the FDIC to apply the same standard, in consultation with the other federal banking regulators, in approving deposit insurance applications. Bank chartering is franchising.

3. *Close the Unauthorized Banking Loophole.* Replace the existing unauthorized banking provision of federal law,²²⁴ which relies on a formalistic “deposit” concept and lacks a civil enforcement mechanism,²²⁵ with the unauthorized banking law described in Section III.B, *infra*, or something like it. Money creation is confined to member banks and the federal government.

4. *Cap the Amount of Money Banks Can Create.* Amend the reserve requirement provisions of the Federal Reserve Act²²⁶ to apply them to all bank money issued by Fed member banks, thereby placing a cap on the supply of bank money, which the Fed can adjust in the conduct of monetary policy. Public sector control of money creation is restored.

5. *Insure all Bank Money.* Amend the insurance coverage provisions of the Federal Deposit Insurance Act²²⁷ to fully insure, with no coverage caps, all member banks’ outstanding bank money liabilities (and *only*

222. Cf. 12 U.S.C. § 222 (2018) (“Every national bank in any State shall . . . become a member bank of the Federal Reserve System . . . and shall thereupon be an insured bank”).

223. See *supra* note 75.

224. See *supra* note 41.

225. Cf. Howell E. Jackson & Morgan Ricks, *Locating Stablecoins Within the Regulatory Perimeter*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Aug. 5, 2021), <https://corpgov.law.harvard.edu/2021/08/05/locating-stablecoins-within-the-regulatory-perimeter> [https://perma.cc/BE74-QAYV].

226. See *supra* note 47.

227. See *supra* note 43.

their bank money liabilities—terminate insurance of long-term certificates of deposit). All money is nondefaultable.

6. *Require Banks to Fully Pay for Deposit Insurance.* Amend the risk-based deposit insurance assessment provisions of the Federal Deposit Insurance Act²²⁸ to require the FDIC to keep charging such assessments even if the FDIC's insurance fund is fully funded, converting surplus fees into a fiscal revenue item. Instruct the relevant bank regulatory agencies to calibrate the fees so as to cause member banks to earn no more than a fair return on capital. The federal government earns seigniorage from member bank money creation.

7. *Reinstate Controls on Bank Money Interest Rates.* Reinstate administrative controls over interest on banks' monetary liabilities, which were largely eliminated in the Depository Institutions Deregulation and Monetary Control Act of 1980.²²⁹ The Fed can once again administer bank money rates in the conduct of monetary policy.

8. *Close the Bank Powers Loophole.* Amend the corporate powers provisions of the National Bank Act²³⁰ to tighten existing bank portfolio constraints. Implement a swaps push-out rule.²³¹ Require, as a condition of eligibility for deposit insurance, that member banks that are not national banks abide by these corporate powers limits.²³² Override the Supreme Court's decision in *Nationsbank of North Carolina, N.A. v. Variable Annuity Life Insurance Co.*²³³ to clarify that national banks' corporate powers are to be strictly construed. Member banks' investment portfolios are relatively simple and advance their monetary purpose.

9. *Restore Monetary Sovereignty.* Supplement the existing Basel capital and liquidity accords²³⁴ with an international accord in which each country agrees to prohibit its domestic financial institutions from issuing bank money denominated in nondomestic currencies. Also, empower the Federal Reserve to deny dollar clearing to foreign banks that are known issuers of dollar-denominated bank money. Monetary sovereignty is restored.

10. *Restore Structural Separations.* Reinstate the Glass-Steagall provision,²³⁵ repealed by the Gramm-Leach-Bliley Act,²³⁶ that prohibited

228. See *supra* note 53.

229. See *supra* note 51.

230. See *supra* note 39.

231. See *supra* note 61.

232. Cf. 12 U.S.C. § 1831a(c)(1) (2018) (prohibiting insured state banks from acquiring or retaining equity investments that are not permissible for national banks); *id.* § 1831a(b) (prohibiting insured state banks from engaging in insurance underwriting except to the extent permitted for national banks).

233. 513 U.S. 251 (1995).

234. See *supra* note 92.

235. See *supra* note 73.

236. See *id.*

conglomeration between commercial banks and investment banks. The separation of banking and commerce is restored.

That these measures can be described in a short list—and that they obviously would not require hundreds or thousands of pages of statutory text and implementing rules—reflects the essentially *structural* nature of the NNB system and of the existing, core body of U.S. banking law that it repairs and modernizes.

This “minimum viable” version of the NNB system omits some important features of the full system described in Part I. It doesn’t, for example, eliminate state bank charters, put a federal government appointee on each member bank’s board, place restrictions on ownership of member bank stock, specify a franchise area for each member bank, impose universal service requirements, or eliminate Fedwire charges. While not strictly needed, these additional measures would bring the public utility vision that undergirds the National Bank Act, the Federal Reserve Act, and the Banking Act of 1933 to even fuller realization.

B. Revitalizing the Federal Unauthorized Banking Statute

The NNB system’s entry restriction provision requires a bit more explication. Unauthorized banking statutes, which prohibit any person or entity that lacks a bank charter from issuing bank money, are the essential linchpin of banking law. Long experience has shown that without such provisions, money creation bypasses chartered banks and the monetary governance framework banking law is designed to effectuate. Throughout the history of Anglo-American banking, lawmakers have adopted affirmative measures to confine money creation to the government and its chartered agents—to prevent private money issue.²³⁷

Perhaps the most famous unauthorized banking law was enacted in conjunction with the National Bank Act, when Congress and the Lincoln Administration imposed a prohibitive tax on bank notes issued by entities other than national banks.²³⁸ The provision brought the issuance of bank notes (at that time, the predominant form of bank money) fully within the federal government’s monetary framework, ensuring notes were sound, stopping their uncontrolled issuance, and spreading their issuance across the country.

The unauthorized banking statute that is on the books today, which prohibits all people and entities from maintaining “deposit” balances

237. See Morgan Ricks, *Entry Restriction, Shadow Banking, and the Structure of Monetary Institutions*, 2 J. FIN. REGUL. 291 (2016) (tracing the history of unauthorized banking statutes).

238. See Act of Mar. 3, 1865, ch. 78, § 6, 13 Stat. 469, 484 (as amended by Act of Feb. 8, 1875, ch. 36, § 19, 18 Stat. 307, 311).

without appropriate governmental preclearance,²³⁹ is a dead letter in important respects. Enacted as part of the Banking Act of 1933,²⁴⁰ the provision has been actively undermined by federal officials over the decades. In the 1950s the Federal Reserve nurtured the growth of the repo market, despite warnings from congressional leaders and bankers that the repo liabilities of Wall Street broker-dealers were merely deposits by another name and hence were issued in violation of the provision.²⁴¹ In the ensuing two decades, the Fed further undermined the Banking Act by endorsing the emergence of, and then backstopping, the Eurodollar market.²⁴² In the 1970s, the SEC got in on the action, asking the Justice Department to confirm that money market mutual funds—which were created expressly to issue deposit substitutes in the form of investment company shares—did not violate the provision. (Justice acceded.²⁴³) And in 1991, under lobbying from Wall Street (with Goldman Sachs taking the lead),²⁴⁴ Congress amended the Federal Reserve Act to empower the Federal Reserve Banks to backstop all manner of private moneys, irrespective of the issuer,²⁴⁵ supercharging their growth and setting the stage for the panic of 2008 and those that have followed.

We propose reinvigorating the federal unauthorized banking statute and recasting it in functional rather than formalistic terms.²⁴⁶ Thanks in part to decades of research in the economics of money and banking, we know much more today about what types of instruments constitute money than was understood by lawmakers in 1933. But banking law has not been updated to reflect the state of our knowledge, and the concept of “deposit” on which the provision is based—never well-defined—is for-

239. See *supra* note 41.

240. Banking Act of 1933, ch. 89, sec. 21, 48 Stat. 162, 189.

241. See Lev Menand & Joshua Younger, *Money and the Public Debt: Treasury Market Liquidity as a Legal Phenomenon*, 2023 COLUM. BUS. L. REV. 224, 278-87 (2023); N.Y. CLEARING HOUSE ASS'N, A STUDY OF THE INTERRELATIONS OF THE MONEY MARKET AND GOVERNMENT SECURITIES MARKET: REPORT TO THE FEDERAL RESERVE BANK OF NEW YORK (1957) (on file with New York Clearinghouse Association Records, Columbia University Rare Book & Manuscript Library, Box 222, Folder 2); Benjamin Braun & Daniela Gabor, *Central Banking, Shadow Banking, and Infrastructural Power*, in INTERNATIONAL HANDBOOK OF FINANCIALIZATION 241, 246-48 (Philip Mader, Daniel Mertens & Nataschavan der Zwan eds., 2020).

242. See Benjamin Braun, Arie Krampf & Steffen Murau, *Financial Globalization as Positive Integration: Monetary Technocrats and the Eurodollar Market in the 1970s*, 28 REV. INT'L POL. ECON. 794, 803 (2021).

243. See Letter from Philip B. Heymann & Lawrence Lippe, Crim. Div., U.S. Dep't of Just., to Martin Lybecker, Assoc. Dir., Div. of Mktg. Mgmt., Sec. & Exch. Comm'n (Dec. 18, 1979), as retyped by Inv. Co. Inst. (Jan. 9, 1980), <https://archive.org/details/DOJLetterHeymannLippeLybeckerGlassSteagallAct> [<https://perma.cc/VHJ2-NJSW>].

244. See RICKS, *supra* note 11, at 197-98.

245. Federal Deposit Insurance Corporation Improvement Act of 1991, Pub. L. No. 102-242, § 473, 105 Stat. 2236, 2386.

246. For an interesting analogue to our approach, see the definition of “functional monetary equivalent” in the Stablecoin Classification and Regulation Act of 2020, H.R. 8827, 116th Cong. (2020).

malistic and effectively obsolete. In financial law, functional approaches are indispensable. Other cornerstone definitions in our financial laws—“security,”²⁴⁷ “investment company,”²⁴⁸ “the business of insurance,”²⁴⁹ “swap,”²⁵⁰ “proprietary trading,”²⁵¹ and so forth—are functional rather than formalistic.²⁵² While there are always some gray areas—witness recent debates over whether cryptocurrencies meet the legal definition of “security” and whether special-purpose acquisition companies meet the definition of “investment company”—this is the nature of law. By and large, these definitions *work*, and many of them have continued to work for decades without material amendment.

The appendix to this paper offers draft statutory text for an unauthorized banking provision in the NNB system. It specifies that only member banks may issue “money-claims” in meaningful quantities. Money-claims are defined as short-term debt instruments and their functional equivalents, subject to certain exclusions (such as trade credit and nonfinancial commercial paper). The proposed maturity cutoff is one year, but this could probably be shortened to as little as three months without losing much in the way of effectiveness.²⁵³ (Financial economists have provided evidence that the moneyness of even the highest-quality debt securities is small at maturities of three to six months.²⁵⁴) The provision also proscribes the issuance of “drawable facilities”—revolving credit facilities and their equivalents—by entities that are not member banks. Such facilities are functional substitutes for bank money,²⁵⁵ and they are susceptible to self-fulfilling runs. The statutory text provides for certain *de minimis*

247. Securities Act of 1933 § 2(1), 15 U.S.C. § 77b(a)(1) (2018).

248. Investment Company Act of 1940 § 3(a)(1), 15 U.S.C. § 80a-3(a)(1) (2018); cf. Edmund H. Kerr, *The Inadvertent Investment Company: Section 3(a)(3) of the Investment Company Act*, 12 STAN. L. REV. 29, 29-31 (1959) (describing how the definition of investment company in the federal securities laws can be a trap for the unwary).

249. See, e.g., N.Y. INS. LAW § 1101 (McKinney 2021).

250. 7 U.S.C. § 1a(47) (2018).

251. 12 U.S.C. § 1851(h)(4) (2018).

252. See Howell E. Jackson, *Regulation in a Multisectoral Financial Services Industry: An Exploratory Essay*, 77 WASH. U. L.Q. 319, 364-71 (1999).

253. Cf. ACCT. STANDARDS CODIFICATION § 230-10-20 (FIN. ACCT. STANDARDS BD. 2024) (three-month maturity cutoff for “cash equivalent”); Securities Exchange Act of 1934 § 3(a)(10), 15 U.S.C. § 78c(a)(10) (2018) (nine-month maturity cutoff for exemption of short-term debt from registration requirements under the federal securities laws); Basel Comm. on Banking Supervision, *Basel III: The Net Stable Funding Ratio*, BANK FOR INT’L SETTLEMENTS 2 (Oct. 2014) (lower-bound maturity cutoff of one year for definition of “stable funding” under the net stable funding ratio); 17 C.F.R. § 270.2a-7(d)(1)(i) (2023) (397 day maturity limit for MMF portfolio investments).

254. Greenwood et al., *supra* note 96, at 1687, 1688 fig.1.

255. A drawable loan commitment “behaves *just like a demand deposit*” and offers “a very similar service.” Anil K. Kashyap, Raghuram Rajan & Jeremy C. Stein, *Banks as Liquidity Providers: An Explanation for the Coexistence of Lending and Deposit-Taking*, 57 J. FIN. 33, 35 (2002).

exceptions, and it gives the monetary authority rulemaking powers for clarification and for preventing evasion.

From the standpoint of enforcement, the proposed provision has auspicious features. First, because banking is inherently a “law of large numbers” business, it is difficult to conduct clandestinely. Detecting unauthorized money augmentation is therefore easy compared to, for example, detecting currency counterfeiting, insider trading, money laundering, price fixing, and tax evasion. Second, because the provision is structural rather than technocratic, implementation would be relatively simple. Unlike, for example, capital regulation, the unauthorized banking statute does not rely on any *quantification* of risk exposures to feed into a ratio calculation. The quantification of such exposures is what makes capital regulation so vexing as applied to large, complex financial institutions.²⁵⁶

The proposed provision would have the effect of requiring all financial institutions that are not member banks to finance their operations in the capital markets and not the money markets. This prohibition would have major consequences for the financial system as it exists today. To a far greater extent than is commonly understood, our financial sector funds itself with extremely short-term debt. And the market for these private moneys is vast, far exceeding the insured deposit market in size. Under the blueprint sketched above, many financial firms that currently rely heavily on very short-term or demandable debt funding, such as the major Wall Street securities firms, would be precluded from doing so. Their current funding models would be incompatible with the NNB system. In practical terms, such firms would be required to either (1) “term out” their funding structures, that is, finance their operations in the longer-term debt and equity capital markets and not the money markets, or (2) fully reserve their account-money and cash equivalent liabilities with monetary instruments issued by the government or member banks. (The former option would be suitable, for example, for securities dealers, while the latter would be suitable, for example, for payment companies like PayPal/Venmo as well as stablecoin issuers.) This requirement would be costly for these institutions and could bring significant changes to their business models. But we see no reason to regard Wall Street’s current funding model as sacrosanct—particularly in view of the events of the past fifteen years. That the NNB system would mean big changes for Wall Street’s current liability structure only goes to show how far money creation has bypassed our system of public control.

256. Cf. Cochrane, *supra* note 115, at 216 (noting that “[d]etecting hidden run-prone financing . . . is an order of magnitude easier” than current forms of financial regulation, including capital regulation).

That said, nothing in the NNB system would lessen the financial system's capacity to produce socially valuable innovation. The blueprint above says nothing about what activities can take place outside the member banking system. It says only that those activities can't be financed with run-prone debt. In principle, we could imagine a very wide degree of latitude for nonbank firms, subject of course to appropriate standards of disclosure, antifraud, and consumer and investor protection. So securities firms and other nonbanks might be given free rein to engage in structured finance, derivatives, proprietary trading, and so forth. But they would not be allowed to "fund short."

It is sometimes suggested that securities firms and other nonbank financial firms "need" to fund themselves with short-term debt—that they somehow can't conduct their businesses otherwise. This argument needs to be put to rest. There is nothing about these firms' business models that requires unstable short-term funding. Securities firms could conduct all their current activities while financing themselves entirely in the capital markets, with equity and longer-term debt. Naturally their cost of financing would go up, reducing their profits, but so what? Nothing fundamental need change. Short-term wholesale funding is prevalent in the financial sector not because it is "necessary" or even "important," but merely because it is relatively cheap.

To be sure, the proposed unauthorized banking statute would have costs. Bid-ask spreads in at least some segments of the financial markets would probably rise, and trading would therefore get somewhat more expensive. Hedge funds would see higher prime brokerage borrowing rates, lowering their returns. And it is possible, though by no means assured, that consumers and nonfinancial businesses would see higher overall financing rates. But all of these costs are a natural incident to removing distortive subsidies from the financial sector. Removing a subsidy is always costly to its ultimate beneficiaries, but this is hardly a reason to keep the subsidy. Moreover, the market should be expected to adjust to the new constraints. For example, the proposed unauthorized banking statute would create incentives for participants in liquid securities markets to transition away from dealer-intermediated and toward "all to all" market structure based on central limit order books, which are more transparent and stable.²⁵⁷ And even if there are costs, they must be weighed against the many substantial benefits we have enumerated.

257. See, e.g., Darrell Duffie, *Still the World's Safe Haven? Redesigning the U.S. Treasury Market After the COVID-19 Crisis* (Brookings Inst., Hutchins Center Working Paper No. 62, 2020), https://www.brookings.edu/wp-content/uploads/2020/05/WP62_Duffie_v2.pdf [<https://perma.cc/HME7-HNJH>] (examining all-to-all market structures); Alain Chaboud et al., *All-to-All Trading in the U.S. Treasury Market 2* (Fed. Rsrv. Bank of N.Y., Staff Rep. No. 1036, 2022), https://www.newyorkfed.org/research/staff_reports/sr1036 [<https://perma.cc/8WBK-NFFQ>] ("[I]ncreased use of all-to-all trading in the Treasury market would encourage market resilience by providing additional opportunities for trading partners to match on a trade without

Finally, a “minimum viable” version of the unauthorized banking provision is also possible. For example, repealing the tax deductibility of interest paid on money-claims issued by entities other than member banks,²⁵⁸ and removing the entity-level tax exemption on investment funds (such as MMFs) that issue money-claims,²⁵⁹ might go a long way toward suppressing money creation outside the NNB system. Because U.S. tax law lacks the needed extraterritorial reach, such a change would still need to be coupled with measures empowering the Federal Reserve to spearhead the Basel Accord supplement described above and to deny dollar clearing to foreign financial institutions engaging in dollar-based money augmentation abroad.

Conclusion

The recent panic and associated government response should come as no surprise. We’ve seen a similar dance three other times since 2008. Changing economic conditions trigger a run on defaultable money instruments. Public officials pursue extraordinary measures to backstop money instruments that would otherwise default. The run is halted. With each iteration, however, the pattern becomes further entrenched and expectations for future government intervention become ever greater. The latest choreography was remarkable in some of its specifics. For example, the March 2023 panic involved losses almost entirely associated with interest-rate risk, as opposed to credit risk. It struck uninsured deposits within the banking system, rather than cash equivalents issued by shadow banks. And it threatened a concentrated and vocal set of economic interests. The response, meanwhile, involved an unprecedented expansion of the Fed’s emergency lending authority, with the Fed’s board concluding that a relatively routine bank failure constituted “unusual and exigent circumstances” and that banks were not able to “secure adequate credit accommodations from other banking institutions” even though they could easily borrow against the fair market value of their securities collateral.²⁶⁰

Perhaps unsurprisingly, then, the March 2023 episode has triggered a robust policy discussion in Washington. Already, the Biden Administra-

use of an intermediary.”); *Enhancing the Resilience of the U.S. Treasury Market: 2022 Staff Progress Report*, U.S. DEP’T OF THE TREASURY, BD. OF GOVERNORS OF THE FED. RSRV. SYS., FED. RSRV. BANK OF N.Y., U.S. SEC. & EXCH. COMM’N & U.S. COMMODITY FUTURES TRADING COMM’N 4 (Nov. 10, 2022), <https://home.treasury.gov/system/files/136/2022-IAWG-Treasury-Report.pdf> [<https://perma.cc/EYB2-3S76>] (“All-to-all trading can be contrasted with dealer-intermediated markets where most participants trade with dealers that hold inventories of assets on their balance sheets.”).

258. See 26 U.S.C. § 163 (2018) (tax deductibility of interest).

259. See *id.* § 852 (taxation of regulated investment companies).

260. See Federal Reserve Act § 13(3), 12 U.S.C. § 343(3) (2018); *supra* notes 1-5 and accompanying text.

tion has proposed new ways to hold bank executives accountable when their institutions fail,²⁶¹ greater capital and liquidity requirements, new stress testing rules, and long-term debt mandates.²⁶² Other policymakers and commentators have highlighted the role played by the deposit insurance framework in enabling the run on SVB and setting off a massive deposit drain at smaller banks.²⁶³ More systemic reform ideas are also circulating, including fundamental changes to bank governance²⁶⁴ and government regulation and supervision.²⁶⁵

What is missing from the debate is a framework for understanding how these various modifications fit together with each other and with the existing legal edifice for money and banking. The deposit-insurance debate is a case in point. One side sees value in having large quantities of uninsured deposits. At most minor adjustments are needed, they contend, perhaps a way to insure certain business deposits used for payroll. Another group proposes a much more expansive change in deposit insurance, which would eliminate traditional bank runs entirely. It is difficult, however, to evaluate the relative merits of these positions without understanding how they would affect the rest of the system. Our monetary architecture is an interconnected set of networks: changes in one area ramify, leading to responses in others. For example, the decision to design deposit insurance primarily for households is part of the reason a range of highly unstable shadow money instruments, including money market funds and repos, emerged in the second half of the twentieth century.²⁶⁶ The rise of these instruments is part of the reason policymakers facilitat-

261. See White House Fact Sheet, *supra* note 66.

262. See Fact Sheet: President Biden Urges Regulators to Reverse Trump Administration Weakening of Common-Sense Safeguards and Supervision for Large Regional Banks, The White House (Mar. 30, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/30/fact-sheet-president-biden-urges-regulators-to-reverse-trump-administration-weakening-of-common-sense-safeguards-and-supervision-for-large-regional-banks> [https://perma.cc/X4LY-JDTP]; see also Stephen G. Cecchetti & Kermit L. Schoenholtz, *The Extraordinary Failures Exposed by Silicon Valley Bank's Collapse*, MONEY & BANKING BLOG (Mar. 20, 2023), <https://www.moneyandbanking.com/commentary/2023/3/20/the-extraordinary-failures-exposed-by-silicon-valley-banks-collapse> [https://perma.cc/2CLB-T4TG].

263. For our view on this issue, see Lev Menand & Morgan Ricks, *Scrap the Bank Deposit Insurance Limit*, WASH. POST (Mar. 15, 2023, 7:15 AM EDT), <https://www.washingtonpost.com/opinions/2023/03/15/silicon-valley-bank-deposit-bailout> [https://perma.cc/9JG5-JZMR].

264. See Saule Omarova, *Banks Can't Be Trusted. A "Golden Share" Might Help.*, N.Y. TIMES (Mar. 23, 2023), <https://www.nytimes.com/2023/03/23/opinion/saule-omarova-bank-regulation-golden-share.html> [https://perma.cc/NFF6-YXDX].

265. See Matt Stoller, "Fire the Fed," BIG BY MATT STOLLER (Mar. 16, 2023), <https://www.thebignewsletter.com/p/fire-the-fed> [https://perma.cc/Q8V7-MBDG]; Aaron Klein, *SVB's Collapse Exposes the Fed's Massive Failure to See the Bank's Warning Signs*, BROOKINGS INST. (Mar. 16, 2023), <https://www.brookings.edu/articles/svbs-collapse-exposes-the-feds-massive-failure-to-see-the-banks-warning-signs/> [https://perma.cc/V4PN-8G44].

266. See Zoltan Pozsar, *Institutional Cash Pools and the Triffin Dilemma of the U.S. Banking System* 8-11 (Int'l Monetary Fund, Working Paper No. 11/190, 2011), <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Institutional-Cash-Pools-and-the-Triffin-Dilemma-of-the-U-S-25155> [https://perma.cc/7DBH-8N95].

ed greater banking system concentration and conglomeration. The emergence of complex universal banks, in turn, is part of the reason policymakers turned to gameable bright line capital rules and watered down discretionary bank supervision.

From our fragmented debate and patchwork approach to policymaking it may be hard to see how the dots connect. This paper, by providing a comprehensive plan for banking reform, offers a conceptual apparatus through which incremental adjustments can be evaluated. Using the NNB system as a guide, we can ask of any given proposal whether it tends to strengthen banking as a public utility or weaken it. Changes to the corporate powers and activities of banks, governance of balance sheets, constraints on ownership and control, and duties to the public that treat bank money creation more as a public function that is outsourced according to traditional public utility norms will likely be self-reinforcing across domains. Take deposit insurance. Were policymakers to uncap deposit insurance they would move the country closer to the public utility approach as regards corporate powers and activities. In turn, this shift would augur further changes to how banks are regulated and supervised, what fees they owe to the government, how deposit interest rates are set, and what sort of obligations they should be subject to when it comes to providing payment services in their communities.

We believe that rewiring our banking laws to treat banks as public utilities would have a broad range of substantial benefits. But we are under no illusions that such significant enhancements will be easy or that they can be enacted overnight. Too-big-to-fail banks, as well as certain securities firms and asset management firms that accrue rents from current arrangements, would oppose these reforms, which would cut them down to size and eat into their profits. Yet we also do not believe that a better system is outside the set of potential legal frameworks over the medium term. Getting from here to there is the sort of transformation policymakers have wrought in the past. Indeed, the NNB system would be far less disruptive than the initial passage of the National Bank Act. It would be a more modest rebalancing than the Federal Reserve Act. And in its reparative ambition it would be no more challenging than the Banking Act of 1933. Moreover, because our proposal offers something for almost everyone—with aspects that should appeal to both the left and right, community and regional banks, nonfinancial businesses, and consumer groups—it could garner political support. Often the most salutary legislation has passed in the midst of or wake of a crisis. But we need not wait until economic and financial conditions deteriorate further to start pressing forward. In this sense, the current turmoil offers a chance to begin.

Appendix: Proposed Unauthorized Banking Act²⁶⁷

This appendix offers statutory text for the unauthorized banking statute in the New National Banking system.

SECTION 101. UNAUTHORIZED BANKING.

(a) DEFINITIONS.—In this section, the following definitions shall apply:

(1) MONEY-CLAIM.—The term “money-claim” means:

(A) any debt instrument that is payable in cash or its equivalent and that has a maturity of less than one year, including any such instrument that is styled as a “deposit”;

(B) any sale and repurchase agreement that functionally resembles the instruments described in paragraph (A);

(C) any equity instrument that functionally resembles the instruments described in paragraph (A); and

(D) any other financial instrument or arrangement, regardless of form, that functionally resembles the instruments described in paragraph (A), provided that in no instance shall the term “money-claim” include:

(i) trade credit; or

(ii) any obligation to deliver cash or its equivalent that is held on a custodial or passthrough basis.

(2) DRAWABLE FACILITY.—The term “drawable facility” means:

(A) any instrument, including any revolving credit facility, pursuant to which one party has an effective option to borrow cash or its equivalent from another party (the issuer of the facility) on an ongoing basis; and

(B) any other financial instrument or arrangement, regardless of form, that functionally resembles those described in paragraph (A).

(3) TRADE CREDIT.—The term “trade credit” means:

(A) any payment obligation that is incurred as an incident to the purchase of bona fide goods or services, including any such obligation that is classifiable as “accounts payable” under generally accepted accounting principles as in effect on the date of enactment of this section; and

267. This proposal is adapted from the proposed text in RICKS, *supra* note 11, at 243-45.

(B) any ordinary settlement obligation that is incurred as an incident to the purchase of one or more financial or nonfinancial assets.

(4) MATURITY.—The term “maturity” means the length of the period from the original issuance of an instrument until the earliest to occur of:

(A) the original stated date on which the principal amount is to be repaid, provided that if the principal is to be amortized or otherwise paid in installments, then the weighted average of the principal repayment dates shall be deemed to be the date on which the principal amount is to be repaid;

(B) in the case of an instrument with an embedded put option or other demand feature, the earliest date on which any substantial portion of the principal amount can be recovered through demand;

(C) in the case of an instrument that is designed to provide investor liquidity through a periodic auction process, the date of the earliest auction; and

(D) in the case of an instrument that has been called for redemption or prepayment, in whole or in part, the date on which the earliest redemption payment or prepayment is to be made, provided that the maturity of such an instrument shall continue to be determined in accordance with paragraph (A) if the issuer did not intend as of the issuance date to exercise such early redemption or prepayment.

(5) PERSON.—The term “person” means any person, firm, corporation, association, or other similar organization.

(b) PROHIBITION.—Except as hereinafter provided, it shall be unlawful for any person to issue or have outstanding any (1) money-claims or (2) drawable facilities.

(c) EXEMPTIONS.—The restrictions under subsection (b) shall not apply to:

(1) any member bank;

(2) any person whose activities are not predominately financial in nature;²⁶⁸

268. Cf. Bank Holding Company Act § 4(k), 12 U.S.C. § 1843(k) (2018) (permitting bank holding companies to engage in certain activities that are “financial in nature”).

(3) any person (A) whose issued and outstanding money-claims are held by not more than five other persons and (B) whose issued and outstanding drawable facilities are held by not more than five other persons; or

(4) any person whose issued and outstanding money-claims, when combined with drawn amounts under the person's issued and outstanding drawable facilities, do not exceed \$1,000,000 in the aggregate.

(d) RULEMAKING.—The monetary authority may prescribe such rules and regulations, including definitions of terms, as it deems necessary to effectuate the purposes and to prevent evasions of this section.

(e) PENALTIES.—

(1) The monetary authority may impose a civil penalty of up to \$250,000 per violation on any person if it finds, on the record after notice and opportunity for hearing, that such penalty is in the public interest and that such person (A) has violated any of the provisions of this section or the rules promulgated thereunder, (B) has aided, abetted, counseled, commanded, induced, or procured such a violation by any other person, or (C) has failed reasonably to supervise another person who commits such a violation, if such other person is subject to the person's supervision.

(2) Any person who willfully violates any of the provisions of this section shall upon conviction be fined not more than \$250,000 per violation or imprisoned not more than five years, or both, and any officer, director, employee, or agent of any person who knowingly participates in any such violation shall be punished by a like fine or imprisonment or both.

(f) CEASE AND DESIST PROCEEDINGS.—If the monetary authority finds, after notice and opportunity for hearing, that any person is violating, has violated, or is about to violate any provision of this section, or any rule or regulation thereunder, the monetary authority may publish its findings and enter an order requiring such person, and any other person that is, was, or would be a cause of the violation, due to an act or omission the person knew or should have known would contribute to such violation, to cease and desist from committing or causing such violation and any future violation of the same provision, rule, or regulation.

(g) EXTRAJURISDICTIONAL MONEY-CLAIM ISSUANCE.—

(1) The monetary authority shall seek to enter into international accord, under the auspices of the Basel Committee on Banking Supervision or any successor thereto, under which countries agree to prohibit domestic institutions from issuing money-claims denominated in nondomestic currencies.

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(2) The monetary authority shall deny dollar clearing services to foreign institutions that are known issuers of dollar-denominated money-claims.