SQUEEZED: THE NARROW BANK, THE FEDERAL RESERVE, AND THE FUTURE OF FULL-RESERVE BANKING

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INTRODUCTION

To say the U.S. Federal Reserve System ("Fed") is the most important financial institution in the world is not so much a bold claim as a banal statement of fact. Since the Fed's initial charter in 1913, the U.S. economy has grown from roughly $500 billion in gross domestic product ("GDP")—a comprehensive measure of economic activity[1]—to more than $23 trillion, from less than 19% of the world's GDP, to almost 25% of it, even while other Western countries shrunk comparatively.[2] The Fed's first century of existence has not been without crises, however, and each crisis catalyzed systematic changes in the U.S. banking system, as well as accretion of the Fed's power. The most recent economic downturns are no exceptions. In the wake of the 2008 financial crisis, Congress passed the Emergency Economic Stabilization Act ("EESA") and authorized the Fed to begin paying interest

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1. *Gross Domestic Product*, BUREAU ECON. ANALYSIS, http://www.bea.gov/data/gdp/gross-domestic-product [http://perma.cc/5LZ4-J6L6].

2. *See GDP (Current US$)*, WORLD BANK, http://data.worldbank.org/indicator/NY.GDP.MKTP.CD [http://perma.cc/B7P3-MJZJ] (reporting gross domestic product ("GDP") for 2021); ANGUS MADDISON, CONTOURS OF THE WORLD ECONOMY, 1–2030 AD: ESSAYS IN MACRO-ECONOMIC HISTORY 379, 381 (2007).

on excess reserves[3] ("IOER"[4]). For the first time, a commercial bank[5] could earn interest by holding its reserves instead of loaning them out, a complete inversion of the traditional banking model. And unlike interest on loans, IOER was a virtually riskless income stream.[6]

One corporation saw the potential for a viable full-reserve, or "narrow," bank that would not lend any money, but instead collect IOER and pay depositors above-market interest on their savings, profiting a modest difference. The Narrow Bank ("TNB") received a temporary endorsement from its state chartering authority, yet its business model was dependent on a master account[7] at the Fed. After long deliberation, the Fed expressed concerns about TNB's business model and opted to continue evaluating the bank's economic implications. TNB sought a declaratory judgement of its entitlement to a master account, but its complaint was dismissed because the Fed did not officially reject its application but rather declined to rule on it.

On its face, the challenge to a central bank's discretion in determining which institutions can avail themselves of its services may seem arcane, inconsequential, and distant from the legal issues that affect most Americans. Its consequences, however, are broad and far-reaching. Since the Fed began paying IOER, interest paid on retail (consumer) savings accounts and

3. Since its charter, the Federal Reserve ("Fed") has required banks to hold a percentage of their deposits in reserves—cash or deposits in their accounts at the Fed—to ensure banks can meet their liabilities in the case of sudden withdrawals. James Chen, *Reserve Requirements: Definition, History, and Example*, INVESTOPEDIA, http://www.investopedia.com/terms/r/requiredreserves.asp [http://perma.cc/CE8Q-4Z3T]. Excess reserves are those banks are not required to hold—money they *choose* to keep in their accounts at the Fed. James Chen, *Excess Reserves: Bank Deposits Beyond What Is Required*, INVESTOPEDIA, http://www.investopedia.com/terms/e/excess_reserves.asp [http://perma.cc/5VDN-SD6X]. In response to the COVID-19 pandemic, the Fed reduced the reserve requirement to 0%, effectively eliminating it. *Reserve Requirements*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/monetarypolicy/reservereq.htm [http://perma.cc/9VRK-HWJU]; *see* 12 C.F.R. § 204.4 (2023). As of March 2023, the Fed has not announced a return of the reserve requirement to historical levels.

4. Interest on Reserve Balances ("IORB") replaced Interest on Excess Reserves ("IOER") and Interest on Required Reserves ("IORR") on July 29, 2021. *Interest on Reserve Balances (IORB) Frequently Asked Questions*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/monetarypolicy/iorb-faqs.htm [http://perma.cc/9VRK-HWJU]. The change, however, would not have affected The Narrow Bank's ("TNB") business model. To avoid confusion, this Note uses IOER when referencing any date before July 29, 2021, and it uses IORB when referencing any date after July 29, 2021.

5. "A financial institution that accepts deposits, offers checking account services, makes various loans, and offers basic financial products . . . ." Julia Kagan, *How Do Commercial Banks Work, and Why Do They Matter?*, INVESTOPEDIA, http://www.investopedia.com/terms/c/commercialbank.asp [http://perma.cc/6BTL-FC86].

6. *See infra* note 94.

7. "[A] master account is both a record of financial transactions that reflects the financial rights and obligations of an account holder and of the Reserve Bank with respect to each other, and the place where opening and closing balances are determined. For each institution, all credits and debits resulting from the use of Federal Reserve services at any Federal Reserve office are booked to this single master account at one Reserve Bank." BD. OF GOVERNORS OF THE FED. RSRV. SYS., RESERVE MAINTENANCE MANUAL 5 (2019). Put simply, a master account is a bank account for banks.

certificates of deposits ("CDs") has lagged significantly. TNB, on the other hand, was designed to pass nearly all of its earned interest to account holders, providing them a more attractive savings option and incentivizing them to save more—a nudge toward financial security in a country where the median family's bank account balances total $8 thousand.[8]

The Fed's opposition to TNB was rooted in concerns that a full-reserve bank could destabilize the economy by challenging the Fed's ability to regulate liquidity and interest rates. But beyond the economic effects of full-reserve banking, which have been debated by scholars for almost a century, the conflict between TNB and the Fed raises important, relatively unexplored legal issues and implicates sociopolitical questions related to fairness and federalism. This Note contributes to full-reserve banking scholarship by exploring those legal and social topics and situating them in an assessment of full-reserve banking's future, using *TNB USA Inc. v. Federal Reserve Bank of New York*, No. 18-cv-7978, 2020 U.S. Dist. LEXIS 62676 (S.D.N.Y. Mar. 25, 2020), as a guidepost.

The Note proceeds in three parts. Part I examines the history of the U.S. banking system and, in particular, the Fed. It also introduces full-reserve banking and outlines economic arguments for and against its adoption. Part II analyzes *TNB USA* and the legality of the Fed's decision to deny TNB a master account. Part III explores the future of full-reserve banking in the United States, explains its relevance, and argues that the Fed's restrictions on full-reserve banking are undesirable from legal and social perspectives because they rob start-up banks and depositors of the opportunity to capitalize on programs that perpetually benefit large, legacy financial institutions. A short conclusion follows.

I. BACKGROUND

A. A BRIEF HISTORY OF THE U.S. BANKING SYSTEM

From the United States' founding through the early nineteenth century, its banking system was dominated by political elites and a narrow group of financiers who strategically limited the number of bank charters.[9] Eventually, however, the centralized system was replaced with an inefficient

8. FED. RSRV. SYS., CHANGES IN U.S. FAMILY FINANCES FROM 2019 TO 2022 18 (2023).

9. CHARLES W. CALOMIRIS & STEPHEN H. HABER, FRAGILE BY DESIGN: THE POLITICAL ORIGINS OF BANKING CRISES & SCARCE CREDIT 153 (2014).

"unit bank"[10] system supported by populist farmers.[11] State laws restricted banks from establishing multiple branches both within and across state lines.[12] The unit bank system proved resilient—national banks, which began forming during the Civil War and which were granted charters by the federal government, were still subject to state branching restrictions.[13] Even the Great Depression failed to upend the system.[14] Instead, the Depression-era federal government reinforced the lowly concentrated market with developments like the Federal Deposit Insurance Corporation ("FDIC"), which insures deposits up to a limit,[15] and the Banking Act of 1933 ("Glass-Stegall Act"), which separated commercial and investment banks.[16]

But as the twentieth century progressed, the unit bank system gave way.[17] In the 1970s, high inflation turned real interest rates[18] on savings accounts negative.[19] In the 1980s, automated teller machines ("ATMs") allowed banks to circumvent prohibitions on branching, and the savings and loan crisis[20] catalyzed the failure of hundreds of small banks.[21] In the 1990s, the Riegle-Neal Interstate Branching Efficiency Act of 1994 and the Gramm-Leach-Bliley Act removed restrictions that kept commercial banks from opening branches across state lines and affiliating with securities

10. Bank with no branches. *Id.* at 153–54. While some banks operated multiple branches, unit banks were characteristic of the environment. *See id.* at 171 ("Unlike the North, . . . most Southern states allowed banks to branch within the state.").

11. *Id.* at 172.

12. Joe Mahon, *Bank Holding Company Act of 1956*, FED. RSRV. HIST. (Nov. 22, 2013), http://www.federalreservehistory.org/essays/bank-holding-company-act-of-1956 [http://perma.cc/82LY-RARH].

13. CALOMIRIS & HABER, *supra* note 9, at 179.

14. *Id.*

15. FED. DEPOSIT INS. CORP., THE FIRST FIFTY YEARS: A HISTORY OF THE FDIC 1933–1983, at 4 (1984).

16. Julia Maues, *Banking Act of 1933 (Glass-Steagall)*, FED. RSRV. HIST. (Nov. 22, 2013), http://www.federalreservehistory.org/essays/glass-steagall-act [http://perma.cc/8MJ7-523D].

17. CALOMIRIS & HABER, *supra* note 9, at 154.

18. "A real interest rate is an interest rate that has been adjusted to remove the effects of inflation. . . . [I]t reflects the real yield to the lender or to an investor." *Real Interest Rate: Definition, Formula, and Example*, INVESTOPEDIA, http://www.investopedia.com/terms/r/realinterestrate.asp [http://perma.cc/R4CP-ABU9].

19. CALOMIRIS & HABER, *supra* note 9, at 154.

20. "The term federal savings and loan (S&L) refers to a financial institution that focuses on providing checking and savings accounts, loans, and residential mortgages to consumers." Julia Kagan, *Federal Savings and Loan (S&L)*, INVESTOPEDIA, http://www.investopedia.com/terms/f/federal-savings-and-loan.asp [http://perma.cc/KRC8-RQHG]. Nearly a third of the 3,234 S&Ls in the United States failed between 1986 and 1995. Will Kenton, *Savings and Loan Crisis (S&L): What Happened and Aftermath*, INVESTOPEDIA, http://www.investopedia.com/terms/s/sl-crisis.asp [http://perma.cc/MYN9-5Y8Y].

21. *Id.*

firms,[22] respectively.[23] The twenty-first century saw even more consolidation in the banking sector: the number of banking institutions declined 11.5% during the 2000s and 28.9% during the 2010s.[24] Over this twenty-year period, a net of 1,616 banking institutions were lost.[25]

B. THE FEDERAL RESERVE

The banking system's steady march toward consolidation and centralization paralleled the growth of the Fed. In response to the Panic of 1907—a stream of bank runs and subsequent bank failures that forced J.P. Morgan and others to extend credit in an attempt to stabilize the market—the National Monetary Commission was created.[26] The Commission, which comprised bankers and government officials, proposed a central bank to reduce systematic liquidity risk.[27] The Federal Reserve Act ("FRA") was passed in 1913 and established twelve reserve banks, each within a distinct geographic district drawn based on prevailing trade regions.[28] "As envisioned by its founders, the Federal Reserve Banks would be a repository of excess reserves during times of low loan demand for their member banks and a source of additional reserves . . . during periods of high demand."[29] Since 1977,[30] the Fed has operated in accordance with a clear statutory mandate:

> The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of

22. *See* Maues, *supra* note 16 (describing separation of commercial and investment banks imposed by the Glass-Stegall Act).

23. Bill Medley, *Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994*, FED. RSRV. HIST., http://www.federalreservehistory.org/essays/riegle-neal-act-of-1994 [http://perma.cc/PT9U-D8BM]; FED. FIN. INSTS. EXAMINATION COUNCIL, GRAMM-LEACH-BLILEY: SUMMARY OF PROVISIONS 1, http://www.ffiec.gov/exam/InfoBase/documents/02-con-g-l-b_summary_of_provisions-010416.pdf [http://perma.cc/Q3V9-PF8T].

24. KYLE FEE & ERIK TIERSTEN-NYMAN, FED. RSRV. BANK OF CLEVELAND, HAS BANK CONSOLIDATION CHANGED PEOPLE'S ACCESS TO A FULL-SERVICE BANK BRANCH? 2 (2021).

25. *Id.*

26. Donald P. Morgan & James Narron, *The Financial Crisis Chronicle: The Panic of 1907 and the Birth of the Fed*, FED. RSRV. BANK N.Y: LIBERTY ST. ECON. (Nov. 18, 2016), http://libertystreeteconomics.newyorkfed.org/2016/11/the-final-crisis-chronicle-the-panic-of-1907-and-the-birth-of-the-fed [http://perma.cc/S3UG-HMLU]; CALOMIRIS & HABER, *supra* note 9, at 184.

27. CALOMIRIS & HABER, *supra* note 9, at 184.

28. *About the Federal Reserve System*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/aboutthefed/structure-federal-reserve-system.htm [http://perma.cc/93X5-RYD8].

29. CALOMIRIS & HABER, *supra* note 9, at 185.

30. FED. RSRV. SYS., THE FED EXPLAINED: WHAT THE CENTRAL BANK DOES 21–22 (11th ed. 2021).

> *maximum employment, stable prices*, and *moderate long-term interest rates*.[31]

The Board of Governors ("Board") is composed of seven members, appointed to fourteen-year terms, who are nominated by the President and confirmed by the Senate. The Chair and Vice-Chair of the Board serve four-year terms in their leadership capacities. The Board oversees the twelve reserve banks and "provides general guidance, direction, and oversight when the Reserve Banks lend to depository institutions . . . . includ[ing] oversight of the Reserve Banks' services to depository intuitions."[32] All members of the Board serve on the Federal Open Market Committee ("FOMC"), which sets monetary policy through operations that affect the federal funds rate[33] as well as the size and composition of the Fed's balance sheet.[34]

The Fed's roles conducting monetary policy, promoting financial stability, regulating financial institutions, coordinating payments, and promoting consumer protection have expanded throughout its existence.[35] In 1918, reserve banks created Fedwire, the world's first wire transfer service, which allowed users to move funds electronically in real time.[36] Amendments to the FRA in 1933 and 1935, which established the FOMC, allowed the Fed to take a more active role implementing monetary policy.[37] The Fed monitors compliance with the Community Reinvestment Act, which was passed in 1977 to stem discriminatory lending and which encourages depository institutions to meet their local communities' credit needs.[38] The Foreign Bank Supervision Enhancement Act of 1991 gave the Fed the authority to oversee foreign banks' U.S. operations.[39] And the Gramm-Leach-Bliley Act, passed in 1999, made the Fed an "umbrella regulator" with overarching regulatory authority,[40] just to highlight a few twentieth-century developments that solidified the Fed's role as the keystone of the U.S. economy.

The most dramatic change in the Fed's role, however, came in response to the 2008 financial crisis. Central banks, the Fed included, typically lower

31. 12 U.S.C. § 225a (emphasis added).
32. *Federal Reserve Board*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/aboutthefed/structure-federal-reserve-board.htm [http://perma.cc/8EUY-TSR8].
33. "The rate at which depository institutions lend to each other." *Federal Open Market Committee*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/aboutthefed/structure-federal-open-market-committee.htm [http://perma.cc/GX8A-YTME].
34. *Id.*
35. FED. RSRV. SYS., *supra* note 30, at 20, 46, 65, 84, 112.
36. *Id.* at 87, 95–96.
37. *Id.* at 4, 12.
38. *Id.* at 120–21.
39. *Id.* at 67.
40. CALOMIRIS & HABER, *supra* note 9, at 274.

short-term interest rates during economic downturns.[41] In December 2008, the Fed's target interest rate hit zero, and yet, the economy remained stunted.[42] Left unable to use its interest-rate lever, the Fed began its first tranche of large-scale asset purchases called quantitative easing ("QE").[43] The Fed rolled out additional tranches of QE, growing its assets from less than $1 trillion in 2008 to $8.6 trillion in 2023,[44] one and one-half times the assets of the largest commercial bank in the world.[45]

IOER dovetailed with the Fed's new, more active role in financial markets. The Financial Services Regulatory Relief Act of 2006 initially authorized the Fed to pay IOER as a tool by which to conduct monetary policy,[46] but the change was not scheduled to go into effect until 2011.[47] The 2008 financial crises prompted an immediate acceleration of IOER's

41. Pari Sastry & David Wessel, *The Hutchins Center Explains: Quantitative Easing*, BROOKINGS (Jan. 21, 2015), http://www.brookings.edu/blog/up-front/2015/01/21/the-hutchins-center-explains-quantitative-easing [http://perma.cc/8N2B-P5RU].

42. *Id.*

43. *Id.*

44. *Credit and Liquidity Programs and the Balance Sheet*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm [http://perma.cc/NP5Q-VAZK].

45. Yuzo Yamaguchi, Harry Terris & Rehan Ahmad, *The World's 100 Largest Banks, 2022*, S&P GLOB. (Apr. 11, 2022), http://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/the-world-s-100-largest-banks-2022-69651785 [http://perma.cc/3395-KVWY].

46. Prior to 2008, the Fed influenced the federal funds rate through open-market operations, "namely, the buying and selling of government securities from . . . banks." Peter Bondarenko, *Federal Funds Rate*, BRITANNICA (Mar. 22, 2023), http://www.britannica.com/topic/federal-funds-rate [http://perma.cc/JRW5-458J]. Buying securities increased the money supply, putting a downward pressure on rates, and selling securities tightened the money supply, putting an upward pressure on rates. *Id.* Another tool the Fed used, and continues to use, to implement monetary policy is the discount window—direct lending to depository institutions. *The Discount Window*, FED. RSRV. DISC. WINDOW, http://www.frbdiscountwindow.org/pages/general-information/the%20discount%20window#introduction [http://perma.cc/7J7B-3CA3]. The primary credit rate was set relative to the target range for the federal funds rate. For most of the 2010s, the discount rate led the fed funds rate by just over fifty basis points ("bps"). *Interest Rates, Discount Rate for the United States*, FRED, http://fred.stlouisfed.org/series/INTDSRUSM193N [http://perma.cc/53AA-7JYM]; *Federal Funds Effective Rate*, FRED, http://fred.stlouisfed.org/series/DFF [http://perma.cc/V4LD-42CS]. So, if a depository institution needed an overnight loan, theoretically, it would have refused to pay interest at or above the discount rate. IOER gave the Fed an even more direct way to conduct monetary policy because depository institutions with master accounts, theoretically, would have refused to lend money at or below IOER. *See, e.g.*, Memorandum of Law of Amicus Curiae the Board of Governors of the Federal Reserve in Support of Defendant the Federal Reserve Bank of New York's Motion to Dismiss at 18–19, TNB USA Inc. v. Fed. Rsrv. Bank of N.Y., No. 18-cv-7978, 2020 U.S. Dist. LEXIS 62676 (S.D.N.Y. Mar. 25, 2020) [hereinafter Board of Governors Amicus Brief] (quoting Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Federal Reserve Issues FOMC Statement on Policy Normalization Principles and Plans (Sept. 17, 2014), http://www.federalreserve.gov/newsevents/pressreleases/monetary20140917c.htm [http://perm.cc/FA57-L9DQ] (announcing the FOMC's intention to move the federal funds rate primarily by adjusting IOER)).

47. Memorandum of Law in Support of Defendant Federal Reserve Bank of New York's Motion to Dismiss at 18, TNB USA Inc. v. Fed. Rsrv. Bank of N.Y., No. 18-cv-7978, 2020 U.S. Dist. LEXIS 62676 (S.D.N.Y Mar. 25, 2020) [hereinafter Motion to Dismiss]; Financial Services Regulatory Relief Act of 2006, Pub. L. No. 109-351, § 202, 120 Stat. 1966, 1969.

implementation with the passage of the EESA.[48] By early 2009, IOER settled at twenty-five basis points ("bps") and stayed low through the first years of the postcrisis recovery.[49] But in 2016, as the Fed raised interest rate targets, IOER steadily grew, opening the door for a new type of bank, well known in economic circles.[50]

C. FULL-RESERVE BANKING

The first documented proposal for full-reserve banking is a 1933 memo sent by University of Chicago economics professor Frank Knight, and several of his colleagues, to President Franklin Roosevelt.[51] The United States had always employed a fractional-reserve banking system. That is, account holders deposited their savings at banks, which in turn lent those deposits to borrowers. While account holders earned interest on their savings, the interest rates were lower than what banks earned on their loans.[52] The difference, called the net interest spread or net interest margin, remains central to the commercial bank business model and is a key determinant of a bank's financial health.[53] The business model, however, is inherently unstable because at any time, banks hold just a fraction of their depositors' money. If a large number of depositors try to withdraw their money at once, known as a bank run, banks may have insufficient reserves to cover the withdrawals.[54] Though reserve requirements[55] were set in the original FRA, they were insufficient to stem the bank runs that characterized the Great Depression.[56] Knight's proposal called for one hundred percent of deposits

48. Motion to Dismiss, *supra* note 47, at 18; Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, § 128, 122 Stat. 3765, 3796.

49. Bps refers to a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001. *See* Jason Fernando, *Basis Points (BPS) Explained for Interest Rates and Investments*, INVESTOPEDIA, http://www.investopedia.com/terms/b/basispoint.asp [http://perma.cc/KTZ6-P7YF].

50. *Interest on Excess Reserves (Discontinued)*, FRED, http://fred.stlouisfed.org/series/IOER [http://perma.cc/KG4A-UFSW]; *Federal Funds Effective Rate*, FRED, http://fred.stlouisfed.org/series/DFF [http://perma.cc/9UFE-UD4U].

51. Jaromir Benes & Michael Kumhof, *The Chicago Plan Revisited* 17 (Int'l Monetary Fund, Working Paper No. 12/202, 2012); David R. Henderson, *Frank Hyneman Knight*, ECONLIB, http://www.econlib.org/library/Enc/bios/Knight.html [http://perma.cc/UQN3-NCQU].

52. The United States continues to employ a fractional-reserve banking system, hence the legal fight that is the focus of this Note.

53. Adam Hayes, *Net Interest Rate Spread: Definition and Use in Profit Analysis*, INVESTOPEDIA, http://www.investopedia.com/terms/n/net-interest-rate-spread.asp [http://perma.cc/5D4F-WNSY].

54. Adam Hayes, *What is a Bank Run? Definition, Examples, and How It Works*, INVESTOPEDIA, http://www.investopedia.com/terms/b/bankrun.asp [http://perma.cc/3WGS-PUYG].

55. "Each depository institution shall maintain reserves against its transaction accounts as the Board may prescribe by regulation solely for the purpose of implementing monetary policy . . . ." 12 U.S.C. § 461(b)(2)(A).

56. In 1917, the reserve requirement was 3% for time deposits (savings accounts and certificates

to be backed by reserves.[57] It was later endorsed by Milton Friedman, winner of the 1976 Nobel Prize in Economics.[58]

The most obvious hurdle a full-reserve banking system must overcome is credit creation. In the current fractional-reserve banking system, commercial banks "create" money through loans. A $1 thousand deposit that is loaned to a borrower essentially exists twice. The borrower can use the funds while the depositor still owns them on paper. If the depositor needs to access the funds, the bank can pull money deposited by another customer.[59] This process compounds as money moves through the banking system. Keeping with the above example, if the borrower were to use her loan to purchase a car, the car seller would likely deposit the sale proceeds into his bank account, and they would be lent by his bank to another borrower. Though reserve requirements ensure a piece of each deposit is kept by the banks that take them, money can multiply many times over.

So, while the current fractional-reserve banking system carries an indivisible risk, it augments the Fed's creation of credit, and credit is essential to economic growth.[60] If banks were, overnight, barred from lending money, the total money supply would contract significantly. Plans to implement a full-reserve banking system vary but most would mandate the Fed, in its capacity as the central bank, to serve as the sole issuer of credit, with banks serving as financial intermediaries.[61] Proponents claim that "[a]lmost all the everyday routines of the banking and financial markets would continue as if nothing happened."[62] Banks would still underwrite loans, but would just borrow money from the Fed, not depositors, to do so. The mechanics of such a scheme, however, are complicated. Further, critics of full-reserve banking claim that while it is billed as a monetary policy

of deposit) and 7–13% for demand deposits (checking accounts). Joshua N. Feinman, *Reserve Requirements: History, Current Practice, and Potential Reform*, 79 FED. RSRV. BULL. 569, 587 (1993). In 1936, the reserve requirements were increased to 4.5% for time deposits and 10.5–19.5% for demand deposits. *Id.*; Richard H. Pells & Christina D. Romer, *Great Depression*, BRITANNICA (Mar. 3, 2021), http://www.britannica.com/event/Great-Depression [http://perma.cc/39UD-QYE6].

57. Benes & Kumhof, *supra* note 51, at 19. While Knight's proposal was not adopted, other measures were implemented to limit bank runs. *See* FED. DEPOSIT INS. CORP., *supra* note 15, at 4 (describing the FDIC).

58. Bruce J. Caldwell, *Milton Friedman*, BRITANNICA (Mar. 24, 2023), http://www.britannica.com/biography/Milton-Friedman [http://perma.cc/8UHA-M86G]. *See generally* MILTON FRIEDMAN, A PROGRAM FOR MONETARY STABILITY (1960) (outlining a proposal for bank reform that includes a 100% reserve requirement).

59. *See* Hayes, *supra* note 54 (discussing bank runs).

60. FED. TRADE COMM'N, CONSUMER CREDIT LAW & PRACTICE IN THE U.S. 1, https://www.ftc.gov/sites/default/files/attachments/training-materials/law_practice.pdf [https://perma.cc/6H5N-TT8Q].

61. *See* JOSEPH HUBER & JAMES ROBERTSON, CREATING NEW MONEY: A MONETARY REFORM FOR THE INFORMATION AGE 20 (2000); BEN DYSON, GRAHAM HODGSON & FRANK VAN LERVEN, SOVEREIGN MONEY 18 (2016).

62. HUBER & ROBERTSON, *supra* note 61, at 20.

proposal, it cannot be untangled from fiscal policy.[63] That is, if the Fed were to create money through its traditional *modus operandi*, purchasing sovereign debt,[64] it could run into trouble if the United States had little or no existing debt. Congress would be forced to cut taxes or increase spending.[65] Additionally, a full-reserve banking system would require regulatory oversight to keep nonbank financial institutions from creating substitutes for deposits and subverting the full-reserve requirement.[66] Ironically, this oversight is the kind many of full-reserve banking's *laissez-faire* proponents would likely oppose.

Full-reserve banking's greatest bug, its prohibition on the creation of credit at any level below the central bank, is also its greatest feature. Full-reserve banks are, *prima facie*, secure. If every deposit were held in a bank's vault or its account at the Fed, deposits would carry virtually no default risk. Even though the FDIC insures deposits up to $250 thousand, and most Americans associate bank runs with black-and-white photographs, UC Hastings Law Professor John Crawford, who has written at length about full-reserve banking, believes "[p]anics remain the most dangerous source of instability in the financial system today."[67]

This was never more evident than during the 2023 failure of Silicon Valley Bank ("SVB"), the second-largest bank failure in U.S. history. Though SVB's financial instability stemmed from the weakness of its bond portfolio, coupled with rising inflation and stalled investment in the technology sector, its death knell was a bank run.[68] Because 88% of its depositors, largely tech startups, had more than $250 thousand in deposits, FDIC insurance did little to calm depositors' anxieties, and the FDIC placed the bank in a receivership to protect its remaining deposits.[69] The FDIC's intervention may have stayed financial catastrophe, but it could not avert the failures of Signature Bank and First Republic Bank, which together held almost $200 billion in deposits.[70]

63. Morgan Ricks, *Safety First? The Deceptive Allure of Full Reserve Banking*, 83 CHI. L. REV. ONLINE 113, 117–22 (2016).

64. U.S. Treasury securities. *See infra* note 85.

65. Ricks, *supra* note 63, at 118. As of March 21, 2023, U.S. debt exceeded $31 trillion, so it does not appear this problem would manifest any time soon. U.S. NAT'L DEBT CLOCK, http://www.usdebtclock.org [http://perma.cc/9ZUB-LYC3].

66. Ricks, *supra* note 63, at 113–16.

67. John Crawford, *Making Money Safe*, 95 NOTRE DAME L. REV. REFLECTION 1, 1 (2019).

68. University of Washington School of Law & Anita Ramasastry, *The Silicon Valley Bank Collapse Explained*, UNIV. OF WASH. SCH. OF L. (Mar. 24, 2023), https://www.law.uw.edu/news-events/news/2023/svb-collapse [https://perma.cc/G97W-RZ8M].

69. *Id.*

70. *Bank Failures in Brief – 2023*, FDIC, http://www.fdic.gov/bank/historical/bank/bfb2023.html [https://perma.cc/3VSB-QZVU].

What is more, panics do not necessarily resemble the bank runs of old. Short-term debt instruments that include money-market funds, commercial paper, and repurchase agreements act like bank accounts in the sense they "serve as a place to park one's cash so one can access it for near-term transactional needs" and "were the core of the 'shadow banking system' that lay at the heart of the [2008] financial crisis."[71] In 2015, years removed from the worst of the Great Recession, these debt-instruments or "runnable liabilities"—pay-on-demand transactions backed by defaultable promises, without full insurance from the federal government—equaled roughly 60% of GDP and 20% of total private debt,[72] giving effect to a run's potential devastation. Conversely, for full-reserve banks, the only risks of lost deposits are physical and cyber theft.[73]

Full-reserve banks also face obstacles as participants in a fractional-reserve system—namely, financial viability. Because loans drive banks' revenue, a full-reserve requirement would normally leave banks without a stable source of income. One solution is charging account holders, instead of paying them, for deposits, but it would put full-reserve banks at a competitive disadvantage.[74] Why would an average account holder pay to deposit her savings at a full-reserve bank when she could earn interest on insured deposits at a fractional-reserve bank? Another solution is using deposits to procure assets that are safer than retail and commercial loans such as treasury bills and high-grade bonds. But the exercise quickly defeats the purpose of a "full-reserve" bank. Fortunately for full-reserve bank proponents, the introduction of IOER obviated the need to choose between safety and financial viability.

Full-reserve banks are not particularly controversial as independent institutions, but rather, as the foundation of the broader banking system, or in TNB's case, as interactive participants in the fractional-reserve banking system. In 2019, the Board articulated concerns with full-reserve banks, primarily their effects on the Fed's ability to conduct monetary policy. TNB could have become so popular, the Board worried, that the Fed would have needed to expand its balance sheet to accommodate TNB's demand, in contravention of the Board's then plan to reduce the Fed's balance sheet.[75] Correspondingly, a migration of lenders from the federal funds market or

71. Crawford, *supra* note 67, at 3–4.

72. Jack Bao, Josh David & Song Han, *The Runnables*, BD. GOVERNORS FED. RSRV. SYS. (Sept. 3, 2015), http://www.federalreserve.gov/econresdata/notes/feds-notes/2015/the-runnables-20150903.html [http://perma.cc/2TWL-AQ3Q].

73. John Crawford, *Safe Money*, 104 MARQ. L. REV. 411, 436 (2020).

74. *Id.* at 437.

75. Regulation D: Reserve Requirements of Depository Institutions, 84 Fed. Reg. 8,829, 8,830 (proposed Mar. 12, 2019).

"other depository institutions, money market mutual funds, or repo markets could [have] result[ed] in smaller trading volumes across a range of unsecured and secured overnight money markets" and added volatility to reference rates like the federal funds rate and overnight bank funding rate.[76] Finally, "[t]o the extent that deposits at PTIEs[77] [were] seen as a more attractive investment for cash investors[,] . . . these investors could [have] shift[ed] some of their investments from deposits issued by banks to deposits with PTIEs. This shift in investment, in turn, could [have] raise[d] bank funding costs" and potentially depressed credit.[78]

There was reason to consider the Fed's dire prophecies hyperbolic. At the time, March 2019, reserve banks held $1.5 trillion in excess reserves, mostly concentrated among large commercial and foreign banks.[79] Moreover, IOER payments tallied $38.5 billion in 2018, so it was a stretch to believe monetary policy might have been held hostage by a bank asked to prove to the Federal Reserve Bank of New York ("FRBNY") it had lined up $500 thousand in deposits.[80]

Most importantly, the Board failed to mention in its criticism of TNB that the Fed operates two programs serving similar functions to that proposed by TNB: the Overnight Reverse Repurchase Agreement Facility ("ON RRP") and the Foreign Repurchase Agreement Pool ("FRP").[81] The ON RRP was introduced in 2014 and allows reserve banks to sell securities to eligible counterparties—including many ineligible to receive IOER, like money market funds, broker-dealers, and Federal Home Loan Banks—and repurchase them the next day.[82] In the Board's words,

> The ON RRP offering rate . . . . plays a role for ON RRP counterparties that is similar to the role played by the interest rate on excess reserves for depository institutions. That is, in general, any counterparty that can use the ON RRP facility should be unwilling to invest funds overnight with another counterparty at a rate below the ON RRP rate, just as any depository institution eligible to earn interest on reserves should be

76. *Id.*

77. *See infra* text accompanying note 106.

78. Regulation D: Reserve Requirements of Depository Institutions, 84 Fed. Reg. at 8,830.

79. Opposition to Defendant's Motion to Dismiss at 3, TNB USA Inc. v. Fed. Rsrv. Bank of N.Y., No. 18-cv-7978, 2020 U.S. Dist. LEXIS 62676 (S.D.N.Y. Mar. 25, 2020); *Excess Reserves of Depository Institutions (Discontinued)*, FRED, https//fred.stlouisfed.org/series/EXCRESNS [http://perma.cc.ZV8G-344R].

80. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 3, 10; Complaint at 12, *TNB USA Inc.*, U.S. Dist. LEXIS 62676 (No. 1:18cv7978).

81. Complaint, *supra* note 80, at 19.

82. *Id.*; *Overnight Repurchase Agreement Facility*, BD. GOVERNORS FED. RSRV. SYS., http://www.federalreserve.gov/monetarypolicy/overnight-reverse-repurchase-agreements.htm [http://perma.cc/7E4L-NAXL].

> unwilling to invest funds overnight with another counterparty at a rate below the interest rate on excess reserves.[83]

During 2018, the Fed typically sold more than $1 billion of securities per day through the ON RRP.[84] Similarly, the FRP allows foreign central banks, governments, and official institutions to enter into overnight repurchase agreements with the FRBNY. Eligible parties purchase securities from the FRBNY and sell them back the following day at a price reflecting an interest rate pegged to Treasury[85] repo markets.[86]

So, the Fed's objections to TNB's business model appeared to reflect a concern with establishing precedent, as well as a desire to maintain the status quo and control over open market-operations, more than TNB itself.

II. *TNB USA INC. V. FEDERAL RESERVE BANK OF NEW YORK*

TNB was founded in 2016 and counted among its officers and directors a former executive vice president at the FRBNY, a Cassandra[87] of the 2008 financial crisis and featured character in Michael Lewis's *The Big Short: Inside the Doomsday Machine*,[88] and a slew of distinguished academics and financial professionals.[89] It set out to operate as a paradigm full-reserve bank by taking deposits from institutional money market investors, holding the deposits in an account at the Fed, and paying a slightly lower, but attractive, interest rate to its investors.[90]

TNB applied for a charter with the Connecticut Department of Banking

83. *Overnight Reverse Repurchase Agreement Facility*, *supra* note 82.

84. *Overnight Repurchase Agreements: Total Securities Sold by the Federal Reserve in the Temporary Open Market Operations*, FRED, http://fred.stlouisfed.org/series/RRPONTTLD [http://perma.cc/9KS2-5RXU].

85. Short-term federal government bonds backed by the full faith and credit of the United States. Mark P. Cussen, *Introduction to Treasury Securities*, INVESTOPEDIA, http://www.investopedia.com/articles/investing/073113/introduction-treasury-securities.asp [http://perma.cc/UH99-LG5A].

86. *Central Bank & International Account Services*, FED. RSRV. BANK N.Y., http://www.newyorkfed.org/markets/central-bank-and-international-account-services [https://perma.cc/XGG4-U56D].

87. A Trojan prophet whose prophecies were never believed. *Cassandra*, BRITANNICA (Nov. 18, 2022), http://www.britannica.com/topic/Cassandra-Greek-mythology [http://perma.cc/37A6-GFAY].

88. A number-one New York Times bestseller and character study of some the first individuals to predict and understand the subprime mortgage collapse. Tara Nicholle-Nelson, *Book Review: 'The Big Short: Inside the Doomsday Machine,'* BUS. INSIDER, http://www.businessinsider.com/book-review-the-big-short-inside-the-doomsday-machine-2011-9 [http://perma.cc/LR6Z-WLSQ]; *The Big Short: Inside the Doomsday Machine*, MICHAEL LEWIS, http://michaellewiswrites.com/#the-big-short [http://perma.cc/BZS6-EFKJ].

89. Complaint, *supra* note 80, at 8–9.

90. *Id.* at 9–10.

("CTDOB").[91] Typically, nonmember[92] banks are regulated by the FDIC.[93] However, TNB forewent FDIC insurance—its deposits would have been virtually riskless[94] and so large as to render the $250 thousand insurance limit immaterial—so the CTDOB became its primary regulator.[95] The CTDOB eventually issued a temporary Certificate of Authority ("CoA") and conditioned a permanent CoA on evidence TNB would receive a master account at the FRBNY.

A "Master Account Agreement" is a one-page form that requires basic information such as a bank's name, address, designated contact, and routing number.[96] TNB applied for a routing number, which itself was conditioned on the bank's eligibility to maintain an account at the Fed.[97] Accuity, the official registrar of routing numbers, inquired with the FRBNY about TNB's eligibility to maintain an account, and the FRBNY responded that it would not open an account for TNB until TNB received a permanent CoA.[98] Thus, TNB could not receive a permanent CoA until it opened a master account at the Fed, which it could not open until it acquired a routing number, which it could not acquire until it proved eligibility for a master account, which it could not prove until it received a permanent CoA.

TNB was eventually issued a routing number, but the FRBNY insisted on conducting due diligence before issuing a master account because TNB was not going to be insured or regulated by the FDIC.[99] The FRBNY completed the diligence review and informed TNB that the bank would be eligible for a master account pending a permanent CoA and $500 thousand in deposits, but the FRBNY also cautioned that the Board wanted to study TNB's business model before the FRBNY actually issued a master account.[100] Ultimately, in December 2017, the FRBNY informed TNB that

91. *Id.* at 10.

92. Nonmember banks are typically state-chartered banks. Will Kenton, *Non-Member Banks*, INVESTOPEDIA, http://www.investopedia.com/terms/n/non-member-banks.asp [http://perma.cc/67R7-W3KE].

93. *Financial Institution Lists*, OFF. COMPTROLLER CURRENCY, http://www.occ.treas.gov/topics/charters-and-licensing/financial-institution-lists/index-financial-institution-lists.html [http://perma.cc/X6XJ-TCPR].

94. Because TNB was not going to loan any of its deposits, there was no risk of a bank run. And because there was no risk of the FRBNY not returning TNB's deposits, there was almost no default risk to TNB's investors. *See* Complaint, *supra* note 80, at 20.

95. *Id.* at 10.

96. *Master Account Agreement*, FED. RSRV. FIN. SERVS. (2023) (denoted as Appendix 1 to the Federal Reserve Banks Operating Circular 1), https://www.frbservices.org/binaries/content/assets/crsocms/forms/accounting/master-account-agreement-oc1-app1-rv.pdf [https://perma.cc/D6TD-ST5Z].

97. Complaint, *supra* note 80, at 11.

98. *Id.* at 12.

99. *Id.*

100. *Id.* at 13.

it expected the Board to endorse TNB's application for a master account.[101] However, a couple months later, and just more than a week after the Board confirmed a new chair, Jerome Powell, the FRBNY informed TNB it was pessimistic the Board would allow TNB to open a master account.[102]

TNB and the FRBNY spent the next few months discussing the Board's policy concerns, and TNB officially submitted an application for a master account.[103] Four months later, in August 2018, after receiving no response about the status of its application, TNB brought an action seeking a declaratory judgement and injunctive relief compelling the FRBNY to issue a master account.[104] The Board filed an Advance Notice of Proposed Rulemaking ("ANPR") seeking to amend part 204 of the U.S. Banks and Banking Regulations: Reserve Requirements of Depository Institutions ("Regulation D") and lower IOER paid to "eligible institutions that hold a very large proportion of their assets in the form of balances at Reserve Banks."[105] It designated these institutions "Pass-Through Investment Entities" ("PTIEs").[106] The FRBNY then moved to dismiss TNB's claim, and in March 2020, the U.S. District Court for the Southern District of New York granted the FRBNY's motion based on a lack of subject matter jurisdiction.

Recall that the Fed's authority stems from the FRA, which has been amended more than 200 times since 1913,[107] including by the Depository Institutions Deregulation and Monetary Control Act of 1980 ("MCA").[108] Before 1980, member banks—those that are part of the Federal Reserve system[109]—utilized Fed payment services like check clearing. Nonmember banks, meanwhile, relied on either private clearinghouses or "correspondents"—Fed member banks who leveraged their relationships with the Fed to carry out payment services on behalf of nonmember banks.[110]

101. *Id.*
102. *Id.* at 14.
103. *Id.* at 14–15.
104. *Id.* at 1, 24.
105. Regulation D: Reserve Requirements of Depository Institutions, 84 Fed. Reg. 8,829, 8,829 (proposed Mar. 12, 2019).
106. *Id.*
107. Am. Bankers Ass'n v. United States, 135 Fed. Cl. 136, 140 (2017); *see also* BD. GOVERNORS FED. RSRV. SYS., *supra* note 28.
108. Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, 94 Stat. 132.
109. 12 C.F.R. § 223.3(w) (2022). National banks are *required* to become members. 12 U.S.C. § 222. Nonmember state banks *can* become members. *Id.* § 321.
110. 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, 23–24.

These nonmember banks, as well as thrifts,[111] were put at a competitive disadvantage, particularly with the emergence of automated clearinghouse networks ("ACHs").[112] The Department of Justice ("DOJ") brought and won two antitrust lawsuits against ACHs, contending they unlawfully restricted trade to benefit Fed members.[113] In that vein, Congress passed the MCA, which requires the Fed to publish fee schedules for services provided to depository institutions. It also states the following:

> All Federal Reserve bank services covered by the fee schedule shall be available to nonmember depository institutions and such services shall be priced at the same fee schedule applicable to member banks, except that nonmembers shall be subject to any other terms, including a requirement of balances sufficient for clearing purposes, that the Board may determine are applicable to member banks.[114]

TNB argued that as a nonmember depository institution,[115] it was entitled to all Fed services.[116] Further, TNB argued that a master account is both one of those services and necessary for the provision of other services, equating the right to services without a master account with the right to play tennis without a racket.[117] Thus, TNB concluded, the Fed had no authority to deny its application for a master account.

The FRBNY and Board countered that TNB's interpretation was misguided, citing section 13 of the FRA, codified in subchapter IX of the U.S. Banks and Banking Code: Powers and Duties of Federal Reserve

111. Savings and loan associations, credit unions, and mutual savings banks. Julia Kagan, *Thrift Associations Defined*, INVESTOPEDIA (Mar. 31, 2021), https://www.investopedia.com/terms/t/thrift.asp [https://perma.cc/L2X5-RQ3R].

112. Networks of banks that facilitate electronic funds transfers. *What is an ACH?*, CONSUMER FIN. PROT. BUREAU, http://www.consumerfinance.gov/ask-cfpb/what-is-an-ach-en-1065/ [http://perma.cc/WV4N-DAJL].

113. Complaint, *supra* note 80, at 6.

114. Monetary Control Act of 1980, Pub. L. No. 96-221, Sec. 107, § 11A(c)(2), 94 Stat. 132, 141 (codified at 12 U.S.C. § 248a(c)(2)).

115. "[A]ny bank which is eligible to make application to become an insured bank under section 5 of [the Federal Deposit Insurance] Act." 12 U.S.C. § 461(b)(1)(A)(ii). "[A]ny depository institution which is engaged in the business of receiving deposits other than trust funds . . . upon application to and examination by the Corporation and approval by the Board of Directors, may become an insured depository institution." 12 U.S.C. § 1815(a)(1).

116. TNB noted that its interpretation of the Depository Institutions Deregulation and Monetary Control Act of 1980 ("MCA") as mandating the provision of Fed services to *all* nonmember depository institutions was consistent with the FRBNY's interpretation the year of the law's passage:

> The Monetary Control Act will have a significant effect on this and other Reserve Banks' services. To date, these services, such as check collection, wire transfers of funds and securities, coin and currency, and securities safekeeping, have been offered mainly to member banks and without charge. Beginning in 1981, these services will be available equally to all depository institutions and at a fee.

Complaint, *supra* note 80, at 7 n.7 (quoting FED. RSRV. BANK OF N.Y., ANNUAL REPORT: 1980, at 35 (1981)).

117. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 2.

Banks.[118] The section states that "[a]ny Federal reserve bank may receive from any of its member banks, or other depository institutions, . . . deposits of current funds in lawful money, national-bank notes, Federal reserve notes, or checks, and drafts."[119] The FRBNY cited *Farmers & Merchants Bank v. Federal Reserve Bank of Richmond*, 262 U.S. 649 (1923), to support its claim that "may" permits to the Fed to decline depository institutions' reserves.

In *Farmers & Merchants Bank*, the Federal Reserve Bank of Richmond ("FRBR") objected to a state law that challenged the Fed's attempts to route all collections through Fed banks, and the Supreme Court held that section 13 of the FRA did not "impose[] upon reserve banks any obligation to receive checks for collection" since the statute "appear[ed] to have been drawn with great care," and it distinguished "between what the Board and the reserve banks 'shall' do and what they 'may' do."[120] However, the quotes are misleading without context. The FRBR claimed the FRA imposed on it a duty to establish universal check collection, but the power was "limited by the unrestricted right of unaffiliated non-member banks to make a charge for exchange."[121] The Court did not address the Fed's obligation to comply with a nonmember bank that *sought* its services. Further, *Farmers & Merchants Bank* was decided decades before the MCA imposed stricter obligations on the Fed.

The FRBNY bolstered its claim that section 13, not section 11A, applied to the provision of master accounts by arguing that TNB's failure to distinguish "may" in section 13 from "shall" in section 11A rendered the FRA inconsistent.[122] Only *if* a nonmember depository institution were granted a master account, the FRBNY argued, could the institution seek the services enumerated in section 11A.[123] Moreover, the FRBNY cited the MCA's amendment to section 13—the addition of "other depository institutions" to those from which the Fed could receive deposits—but its failure to amend "may receive" as evidence Congress did not intend section 11A to mandate the provision of master accounts.[124] Thirdly, the FRBNY argued that interpreting its power to grant master accounts through

118. 12 U.S.C. § 342.

119. *Id.*

120. Farmers & Merchs. Bank v. Fed. Rsrv. Bank of Richmond, 262 U.S. 649, 662–63 (1923).

121. *Id.* at 666.

122. Motion to Dismiss, *supra* note 47, at 20 (citing Puello v. Bureau of Citizenship & Immigr. Servs., 511 F.3d 324, 329 (2d Cir. 2007) ("[T]he preferred meaning of a statutory provision is one that is consonant with the rest of the statute.")).

123. Motion to Dismiss, *supra* note 47, at 20.

124. *Id.* at 16–17 (citing Texas Dep't of Hous. & Cmty. Affs. v. Inclusive Cmtys. Project, 576 U.S. 519, 536 (2015) ("Congress' decision . . . to amend [a statute] while still adhering to the operative language in [some sections] is convincing support for the conclusion that Congress accepted and ratified the unanimous holdings of [a prior judicial interpretation].")).

section 13's "may," rather than section 11A's "shall," was a "matter of practical necessity."[125] Only with such discretion, it claimed, could it deny deposit requests from banks unable to cover account overdrafts or those facilitating money laundering and other illegal activity.[126]

TNB, in turn, claimed that section 13 of the FRA only gave the FRBNY discretion with respect to the *types* of deposits reserve banks could receive (for example, money, checks, national-bank notes, and so forth), not the institutions from which it could receive them.[127] In this sense, it argued, section 13 was consistent with section 11A: "If, for example, [the] FRBNY exercised its discretion under section 13 to receive checks for collection, then section 11A would require only that [the] FRBNY did so on a non-discriminatory basis for all qualified depository institutions."[128] Additionally, TNB turned the FRBNY's may/shall argument on its head by noting that both words were used in section 11A, indicating Congress intended the contrast to mandate the Board's provision of Fed services.[129]

Finally, the FRBNY argued that regardless of what section 11A "generally" mandated, forcing it to open a master account for TNB would have interfered with the Fed's ability to "carry out its statutory policy mandates."[130] The FRBNY cited section 4 of the FRA, which vests with the Board the powers granted by the FRA as well as "incidental powers as shall be necessary to carry on the business of banking within the limitations prescribed by [the FRA],"[131] and argued that paying IOER to TNB could have had a "negative impact on financial stability and financial intermediation," amplifying financial stress.[132] The Board supported the FRBNY's position, going as far as to argue that "[b]ecause Congress vested in the Board and the FOMC responsibility for monetary policy, their views . . . control[led]."[133] TNB characterized the Fed's position that the Fed's policy mandates gave it the right to flout provisions of the FRA as "extreme,"[134] citing a rule of "statutory construction that the specific

125. Motion to Dismiss, *supra* note 47, at 17.
126. *Id.*
127. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 18.
128. *Id.* at 19.
129. *Id.* at 14–15.
130. Motion to Dismiss, *supra* note 47, at 23.
131. 12 U.S.C. § 341.
132. Motion to Dismiss, *supra* note 47, at 23–24.
133. Board of Governors Amicus Brief, *supra* note 46, at 22.
134. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 19. As summarized by one commentator, "The Fed is welcome, under law, to issue rules explaining when they can or can't use this policy lever. But those rules must conform to the laws passed by Congress." Peter Conti-Brown, *The Fed Wants to Veto State Banking Authorities. But Is That Legal?*, BROOKINGS (Nov. 14, 2018),

[requirement that Fed services be provided to nonmember depository institutions] governs the general [broad policy mandates].”[135]

Though courts have not considered the provision of master accounts in the context of full-reserve banking, the master account issue was considered in *Fourth Corner Credit Union v. Federal Reserve Bank of Kansas City*, 861 F.3d 1052 (10th Cir. 2017). In *Fourth Corner*, a state-chartered credit union, which formed to provide banking services to cannabis and hemp businesses, was denied a master account at the Federal Reserve Bank of Kansas City (“FRBKC”).[136] Though marijuana had been legalized in Colorado, it remained illegal at the federal level under the Controlled Substances Act, and the DOJ warned that financial institutions transacting with marijuana-related businesses faced criminal liability.[137] Each of the three judges on the Tenth Circuit panel that heard the case wrote a separate opinion. The first expressly declined to decide whether the credit union was entitled to a master account,[138] and the second did not reach the issue, instead dismissing the appeal for lack of ripeness.[139] The third, however, held that section 11A of the FRA unambiguously entitled the credit union to a master account, citing past interpretations of the statute by the Board, courts, and academics, as well as legislative history.[140] The court ultimately remanded the case to a district court with instructions to dismiss without prejudice.[141] Eventually, the credit union agreed to limit its service to those supporting legalized marijuana, but not dispensaries themselves, and the FRBKC issued conditional approval of a master account.[142]

III. THE FUTURE OF FULL-RESERVE BANKING

A. LEGAL FUTURE

The U.S. District Court for the Southern District of New York granted the FRBNY’s motion to dismiss because the court lacked subject matter

http://www.brookings.edu/research/the-fed-wants-to-veto-state-banking-authorities-but-is-that-legal [http://perma.cc/R5HY-D5LZ].

135. Opposition to Defendant’s Motion to Dismiss, *supra* note 79, at 19 (quoting RadLAX Gateway Hotel, LLC v. Amalgamated Bank, 566 U.S. 639, 645 (2012)).

136. Fourth Corner Credit Union v. Fed. Rsrv. Bank of Kan. City, 154 F. Supp. 3d 1185, 1187 (D. Colo. 2016).

137. *Id.* at 1186.

138. Fourth Corner Credit Union v. Fed. Rsrv. Bank of Kan. City, 861 F.3d 1052, 1058 (10th Cir. 2017) (Moritz, J.).

139. *Id.* at 1063–64 (Matheson, J.).

140. *Id.* at 1068 (Bacharach, J.).

141. *Id.* at 1053 (per curiam).

142. Lalita Clozel, *Fed Backs Marijuana-Focused Credit Union*, WALL ST. J. (Feb. 5, 2018), http://www.wsj.com/articles/fed-backs-marijuana-focused-credit-union-1517870188 [http://perma.cc/6HX4-ARMR].

jurisdiction to adjudicate the case.[143] The court held both that TNB did not have standing and that its cause of action—the Fed's denial of its application for a master account—was not ripe.[144]

With respect to standing, the court held that TNB lacked an injury-in-fact because the FRBNY neither formally nor constructively denied TNB's application for a master account.[145] Rather, the FRBNY *delayed* its decision regarding TNB's application, and the harm TNB endured from the delay (loss of profits) did not emanate from its stated cause of action. In its finding that the delay was not a constructive denial, the court found the FRBNY's eighteen-month review to be "concerning," but not enough to conclude TNB's application was no longer "under consideration."[146] That a Fed form provided processing would take five to seven days was not a procedural right in itself because the estimate was just a guideline and processing was distinct from review, which had no stated timeline.[147] What is more, the court found no imminent injury, despite the Board's ANPR and the FRBNY's statement that it was unlikely to open a master account for TNB, because the injury was "contingent upon a future event" (denial of the application) and because the injury was not "certainly impending."[148] The court held the case lacked constitutional ripeness because TNB had no standing and the case lacked prudential ripeness because the court deserved an opportunity to hear the FRBNY's reasoning for denying TNB a master account before reaching the case's merits.[149]

Though the court expressly declined to reach the case's merits, its decision offers clues about full-reserve banking's legal future. The most obvious is a signal to reserve banks that prolonged "reviews" of full-reserve banks' applications for master accounts and other Fed services will not invite judicial interference. The court in *TNB USA* held that eighteen months was not a constructive denial and only stipulated that the EPA's thirty-year failure to promulgate regulations required by a federal statute constituted an unreasonable delay.[150] Few full-reserve banks are likely to wait eighteen months for a decision regarding a master account. Fewer yet are likely to wait up to thirty years. For context, in April 2018, when TNB applied for a

143. TNB USA Inc. v. Fed. Rsrv. Bank of N.Y., No. 18-cv-7978, slip op. at 8 (S.D.N.Y. Mar. 25, 2020), 2020 U.S. Dist. LEXIS 62676, at *13.
144. *Id.*
145. *Id.* at 13, 2020 U.S. Dist. LEXIS 62676, at *19–20.
146. *Id.* at 9, 15, 2020 U.S. Dist. LEXIS 62676, at *14, *22.
147. *Id.* at 10, 2020 U.S. Dist. LEXIS 62676, at *15–16.
148. *Id.* at 14, 2020 U.S. Dist. LEXIS 62676, at *20–21.
149. *Id.* at 14, 19, 2020 U.S. Dist. LEXIS 62676, at *20, *28.
150. *Id.* at 15, 2020 U.S. Dist. LEXIS 62676, at *22 (distinguishing *In re* Idaho Conservation League, 811 F.3d 502 (D.C. Cir. 2016)).

master account, IOER was 175 bps. In November 2021, it was 15 bps.[151]

Another potential issue for full-reserve banks is the Fed's ability to squeeze them through regulation.[152] In its Opposition to Defendant's Motion to Dismiss, TNB argued "the Board intend[ed] to put TNB out of business with a discriminatory regulation even if TNB [was] successful in court."[153] The brief referred to the ANPR the Board published in March 2019, which proposed paying PTIEs either no IOER, or IOER up to a point and no interest beyond it.[154] But it is not clear TNB's argument was sound.

TNB's one-count complaint alleged the FRBNY violated section 11A of the FRA because the FRBNY's "services," namely, a master account, were not "available to [all] nonmember depository institutions."[155] The same paragraph provided that "such services shall be priced at the same fee schedule applicable to member banks."[156] If TNB or another full-reserve bank succeeded in court on the premise a master account is a service the Fed is required to provide to nonmember banks, Interest on Reserve Balances ("IORB") may be considered the "price" of the service. Thus, the Fed would be prohibited from discriminating via IORB against nonmember banks, regardless of whether it codified the practice in the Code of Federal Regulations. Rather than forfeit to the Fed's ability to squeeze full-reserve banks through regulation, TNB's argument was likely an attempt to demonstrate that its application was constructively denied and, as such, that its claim was prudentially ripe.

The *TNB USA* court's decision was not without one promising development for full-reserve banks: the acknowledgement that a master account is a Fed service described in section 11A of the FRA. The court quoted Judge Moritz's opinion from *Fourth Corner Credit Union*: "A master account . . . . gives depository institutions access to the Federal Reserve System's services, including its electronic payments system. . . . Without such access, a depository institution is nothing more than a vault."[157] The

151. *Interest on Excess Reserves (Discontinued)*, FRED, *supra* note 50; *Interest Rate on Reserve Balances*, FRED, http://fred.stlouisfed.org/series/IORB [https://perma.cc/BA84-QCTG].

152. "To require bonds of Federal reserve agents, to make regulations for the safeguarding of all collateral, bonds, Federal reserve notes, money, or property of any kind deposited in the hands of such agents, and said board shall . . . make all rules and regulations necessary to enable said board effectively to perform the same." 12 U.S.C. § 248(i).

153. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 12–13.

154. Regulation D: Reserve Requirements of Depository Institutions, 84 Fed. Reg. 8,829, 8,831 (proposed Mar. 12, 2019).

155. 12 U.S.C. § 248a(c)(2).

156. *Id.*

157. Fourth Corner Credit Union v. Fed. Rsrv. Bank of Kan. City, 861 F.3d 1052, 1053 (10th Cir. 2017) (Moritz, J.) (quoting Complaint at 23, Fourth Corner Credit Union v. Fed. Rsrv. Bank of Kansas City, 154 F. Supp. 3d 1185 (D. Colo. 2016) (No. 15-cv-01633) (internal quotation marks omitted)).

FRBNY did not concede the point, and in fact, argued its own interpretation of section 11A was dispositive:

> In a strained attempt to nonetheless read a right to master accounts into Section 11A, TNB circularly alleges in conclusory fashion that master accounts are a "new service" covered by the Section 11A because other "services" are purportedly conditioned on having a master account . . . . But the fact that a master account *may* be a prerequisite to obtaining *some* Federal Reserve Bank services plainly does not mean that a master account itself is therefore a service, much less a "new service."[158]

The court's determination that a master account is necessary for banks to properly function indicates it is no less a service than those covered by the Fed's fee schedule, which "shall be available to nonmember depository institutions."[159]

Full-reserve banking is, like all legal issues, political. Recall that in December 2017, the FRBNY informed TNB it would likely approve its application for a master account.[160] However, the FRBNY quickly backtracked, citing the impending replacement of the Board's chair and the Board's reluctance to endorse TNB before the new chair was seated.[161] Shortly after Chair Powell was confirmed by the Senate, the FRBNY stated it was unlikely to approve TNB's application, and TNB alleged the prolonged delay that ensued was at Chair Powell's direction.[162] Fed chairs serve just four-year terms, although they can be reappointed and serve multiple consecutive terms.[163] Chair Powell, a Republican, was reappointed by President Biden in November 2021,[164] in keeping with the tradition of reappointment transcending party politics.[165] When Powell's tenure as chair

158. Motion to Dismiss, *supra* note 47, at 19–20 (emphasis added).

159. 12 U.S.C. § 248a(a)–(c).

160. Complaint, *supra* note 80, at 13.

161. *Id.*

162. *Id.* at 3, 14.

163. BD. GOVERNORS FED. RSRV. SYS., *supra* note 32.

164. Press Release, The White House, President Biden Nominates Jerome Powell to Serve as Chair of the Federal Reserve, Dr. Lael Brainard to Serve as Vice Chair (Nov. 22, 2021), http://www.whitehouse.gov/briefing-room/statements-releases/2021/11/22/president-biden-nominates-jerome-powell-to-serve-as-chair-of-the-federal-reserve-dr-lael-brainard-to-serve-as-vice-chair [http://perma.cc/2FJF-VCGU]. Powell's second term ends on May 15, 2026. Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Jerome H. Powell Sworn in for Second Term as Chair of the Board of Governors of the Federal Reserve System (May 23, 2022), http://www.federalreserve.gov/newsevents/pressreleases/other20220523e.htm [http://perma.cc/YW8G-MFPA].

165. President Trump broke with this tradition when he nominated Powell instead of then-Chair Janet Yellen, but the three Fed chairs preceding Yellen were reappointed by presidents of different political parties. Ana Swanson & Binyamin Appelbaum, *Trump Announces Jerome Powell as New Fed Chairman*, N.Y. TIMES (Nov. 2, 2017), http://www.nytimes.com/2017/11/02/business/economy/jerome-powell-federal-reserve-trump.html [http://perma.cc/48QM-QSQG].

ends, his replacement could take a different approach to full-reserve banking, opening the doors to banks like TNB.

Congress is the other political entity that could pave the way for full-reserve banks. Congress could amend the FRA to clarify the meaning of section 11A—itself a 1980 amendment to the FRA—or it could expressly limit the Fed's ability to discriminate against full-reserve banks through regulation.[166] But what may be a clear path legally is murkier politically. The Fed expanded the scope of its operations dramatically during the financial crisis and did so again during the COVID-19 pandemic. It cut interest rates, offered forward guidance, restarted quantitative easing, revived recession-era programs like the Primary Dealer Credit Facility and Money Market Mutual Fund Liquidity Facility, and vastly expanded the scope of its repo operations. It also established new programs to support lending directly to businesses. All of this is to say it could be politically unpopular to oppose the Fed now that it is more intertwined with the American economy than ever, particularly in the face of the Fed's pronouncements that full-reserve banks could undermine U.S. monetary policy.[167]

In fact, Congress may be more likely to clarify section 11A in line with the Fed's interpretation. Doing so would both save the Fed money and close a loophole in the IORB program. And courts are unlikely to find a right to a master account outside of the FRA. *American Bankers Ass'n v. United States*, 135 Fed. Cl. 136 (2017), in which the Court of Federal Claims held that a Fed member bank had no right to a six percent annual dividend on its Fed stock, illustrates this deferral to Congress.[168] The FRA requires nationally chartered banks to become members of the Fed[169] by purchasing a certain amount of Fed stock.[170] The FRA originally provided that member banks—stockholders—were entitled to six percent cumulative[171] annual

166. *See* Regulation D: Reserve Requirements of Depository Institutions, 84 Fed. Reg. 8,829, 8,831 (proposed Mar. 12, 2019).

167. In 2022, Congress did require the Fed to publish a list of institutions that were granted, denied, or are seeking access to a master account. Anna Hrushka, *Fed Publishes Master Account List*, BANKING DIVE (June 20, 2023), https://www.bankingdive.com/news/fed-master-account-list-fdic-insurance-custodia-bank/653374/ [https://perma.cc/Y7ZC-Z385]. The move was an attempt to shed light on the process by which the Fed grants master accounts. *Id.* As of November 30, 2023, TNB's application was still officially pending. *Database: Requests for Access*, BD. GOVERNORS FED. RSRV. SYS., https://www.federalreserve.gov/paymentsystems/master-account-and-services-database-access-requests.htm [https://perma.cc/GCC3-VXQT].

168. Am. Bankers Ass'n v. United States, 135 Fed. Cl. 136, 148 (2017).

169. *See supra* note 94 and accompanying text.

170. *Am. Bankers Ass'n*, 135 Fed. Cl. at 140.

171. "A cumulative dividend *must* be paid, whereas a regular dividend, also called a non-cumulative dividend, may . . . [be paid] at the [Fed's] discretion." Adam Hayes, *Cumulative Dividend*, INVESTOPEDIA, http://www.investopedia.com/terms/c/cumulativedividend.asp [http://perma.cc/U7ZR-DGXT].

dividends.[172] The six percent rate had stood for ninety-nine years when, in 2012, Washington Federal, a savings and loan association, rechartered as a national bank and became a Fed member.[173] However, in 2015, Congress offset appropriations for transportation infrastructure by lowering the dividend rate for banks with more than $10 billion in assets to the lesser of the interest rate on ten-year Treasury notes and six percent.[174] As a result, Washington Federal lost almost $1 million in potential revenue the year after the change went into effect.[175] The bank, along with the American Bankers Association, sued, alleging the Fed breached a contractual obligation to pay the dividend, defied the implied contractual duty of good faith and fair dealing, and violated the Takings Clause[176] by depriving the banks of the value of their investments.[177]

The court held that the FRA did not "convey a contractual or statutory right to a six percent dividend"[178] because "where Congress expressly reserves the right to amend, alter, or repeal legislation, such statutory text 'is hardly the language of contract,' "[179] and the dividend rate did not "confer[] any sort of 'vested right' in the face of precedent concerning the effects of Congress' reserved power on agreements entered into under a statute containing the language of reservation."[180] Further, the court held that because Washington Federal had no contractual right to a six percent dividend, "*ipso facto* it ha[d] no property interest in a six percent dividend rate."[181] Even if it had a contractual right to the dividend, because the remedy for breach of contract is damages, no taking could occur so long as the remedy existed.[182] That is, "a taking of a contractual property right only occurs, if the remedy for vindicating that right by legal process is eliminated."[183] Thus, if Congress were to clarify that section 11A does not require the Fed to provide master accounts to all eligible banks, courts are unlikely to extend any further their analyses of banks' rights to master accounts.

172. *Am. Bankers Ass'n*, 135 Fed. Cl. at 140.
173. *Id.* at 139, 141.
174. *Id.* at 141–42.
175. *Id.* at 142.
176. "[N]or shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.
177. *Am. Bankers Ass'n*, 135 Fed. Cl. at 142.
178. *Id.* at 146 (citing Nat'l R.R. Passenger Corp. v. Atchison, Topeka & Santa Fe Ry. Co., 470 U.S. 451, 467 (1985)).
179. *Am. Bankers Ass'n*, 135 Fed. Cl. at 146 (quoting *Nat'l R.R. Passenger Corp.*, 470 U.S. at 467).
180. *Am. Bankers Ass'n*, 135 Fed. Cl. at 146 (quoting Bowen v. Pub. Agencies Opposed to Soc. Sec. Entrapment, 477 U.S. 41, 55 (1986)).
181. *Am. Bankers Ass'n*, 135 Fed. Cl. at 147.
182. *Id.*
183. *Id.* (citing La Van v. United States, 382 F.3d 1340, 1352 (Fed. Cir. 2004)).

The Federal Circuit Court of Appeals, which affirmed the Court of Federal Claims decision in *Bankers Ass'n*, summarized this position: "[W]e discern no 'clear indication' of the government's intent to contract in either the language of the Federal Reserve Act or the circumstances under which it was passed."[184] "Absent independent evidence of a contractual undertaking, a statutory entitlement 'creates no vested right,' "[185] and "does not give rise to a compensable property interest under the Fifth Amendment."[186] Instead, the membership requirement, not unlike IORB, "reflect[s] a regulatory effort to promote stability in the banking system through collaboration, rather than a collection of private contractual undertakings"[187]—a sentiment that, absent Congressional action, could be damning for full-reserve banks, which arguably threaten that stability.

It should be noted that it is somewhat misleading to discuss full-reserve banks hypothetically because a creature of full-reserve banking existed. The Reserve Trust Company ("Reserve Trust") was a Colorado-chartered trust that was neither federally insured nor federally regulated, and it did not leverage its deposits to make loans.[188] Even so, in 2018, it became the first state-chartered trust company to receive a master account at a reserve bank, and its escrow deposits, which were held in its master account at the FRBKC, were direct liabilities of the FRBKC.[189] Reserve Trust, however, was a non-depository trust that performed the duties of an escrow depository, so presumably it did not earn IORB.[190] It appeared the Fed was not opposed to all full-reserve banks, just those with business models that took advantage of IORB. However, in 2022, Reserve Trust's master account was revoked when the FRBKC determined the company was no longer eligible for it.[191] The move came just months after Congress scrutinized the role of former a Fed governor and Reserve Trust board member in the FRBKC's grant of the master account.[192]

Finally, while IORB and *TNB USA* gave new life to the debate over full-

184. Am. Bankers Ass'n v. United States, 932 F.3d 1375, 1384 (Fed. Cir. 2019) (quoting *Nat'l R.R. Passenger Corp.*, 470 U.S. at 465).

185. *Am. Bankers Ass'n*, 932 F.3d at 1385 (quoting Dodge v. Bd. of Educ., 302 U.S. 74, 79 (1937)).

186. *Am. Bankers Ass'n*, 932 F.3d at 1385.

187. *Id.* at 1383.

188. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 6; Letter from Sen. Pat Toomey to Dave Wright, Chief Exec. Officer, Rsrv. Tr. Co. (Feb. 12, 2022), https://business.cch.com/bfld/Toomey-Reserve-Trust-Company-Letter-02112022.pdf [https://perma.cc/HLT2-7S2S].

189. Letter from Sen. Pat Toomey to Dave Wright, *supra* note 188.

190. *Id.*

191. Andrew Ackerman, *Kansas City Fed Rescinds Master Account for Payments Firm, GOP Senator Says*, WALL ST. J. (June 9, 2022), http://www.wsj.com/articles/kansas-city-fed-rescinds-master-account-for-payments-firm-gop-senator-says-11654765201 [http://perma.cc/ZC3B-J3ME].

192. *Id.*

reserve banking, the legal issue regarding the Fed's provisions of master accounts is unlikely to be settled any time soon. TNB never operated as a full-reserve bank, and the court's decision in *TNB USA* has not been reviewed by an appellate court. Undeterred, a new crop of fintechs[193] hope to circumvent traditional financial intermediaries and transact with the Fed directly.[194] Further, the business opportunity is again lucrative, with IROB rising well above pre-pandemic levels.[195] The Fed, for its part, has doubled down and issued guidance on its review of master account applications that subjects institutions exempt from federal supervision to the "strictest level of review" and reserves the right to withhold master accounts from institutions legally eligible to receive them.[196] So, the issue will likely remain salient, and far from resolution.

B. Is Full-Reserve Banking Socially Desirable?

Much has been said about the potential economic effects of full-reserve banking—most of the scholarship dedicated to the topic has been written by economists, and even the legal scholarship has an economic bent. What seems to get lost in the fold is full-reserve banks' legal and social implications, as well as their relevance to the public at-large. At its heart, the debate over full-reserve banking is one of fairness. Was it fair for TNB to be denied a master account and attendant benefits that were available to other chartered banks? Was it fair for ordinary depositors to be denied the opportunity to accrue meaningful interest on their savings while large commercial banks accrued interest on $1.5 trillion of excess reserves?[197]

In 2018, Congressman Jeb Hensarling broached the issue to Chair Powell during Powell's appearance before the House Financial Service Committee: "You're paying 150 basis points [of IOER]. Our constituents are

193. Technology companies that seek to improve and automate financial services. Julia Kagan, *Financial Technology (Fintech): Its Uses and Impact on Our Lives*, INVESTOPEDIA, https://www.investopedia.com/terms/f/fintech.asp [https://perma.cc/R4EX-ZGNJ].

194. Emily Mason, *Fintech and Crypto Firms Stew and Sue as Fed Moves into 21st Century Without Them*, FORBES (Aug. 10, 2023), https://www.forbes.com/sites/emilymason/2023/08/10/fintech-and-crypto-firms-stew-and-sue-as-fed-moves-into-21st-centurywithout-them/ [https://web.archive.org/web/20230813043020/https://www.forbes.com/sites/emilymason/2023/08/10/fintech-and-crypto-firms-stew-and-sue-as-fed-moves-into-21st-centurywithout-them/]; *see Database: Requests for Access*, *supra* note 167.

195. *Interest Rate on Reserve Balances*, *supra* note 151.

196. Carl White, *Fed Adopts Guidelines for Master Account Access to Its Payment Services*, FED. RSRV. BANK OF ST. LOUIS: ON THE ECON. BLOG (Sept. 6, 2022), https://www.stlouisfed.org/on-the-economy/2022/sep/fed-guidelines-master-account-access-payment-services [https://perma.cc/6UUB-WFC3].

197. Opposition to Defendant's Motion to Dismiss, *supra* note 79, at 3.

getting 10 basis points."[198] "Retail deposits . . . are sticky on the way up, and they generally come up with a lag," Powell responded.[199] At the time, IOER was 150 bps. It peaked on December 20, 2018, at 240 bps and stayed above 150 bps until the COVID-19 pandemic hit the United States.[200] The corresponding rates on twelve-month CDs were 29 bps around the date of Powell's testimony, 67 bps at its peak, and 48 bps just before the pandemic.[201] For depositors, the impending lag to which Powell referred never came. The phenomenon is not a new one. In a study of 2,500 branches at 900 depository institutions between 1997 and 2007, Fed economists found deposit rates consistently moved less quickly and less dramatically than the federal funds rate when rates rose but were more flexible when rates fell.[202]

In its amicus brief in support of the FRBNY, the Board noted that interest paid on balances at reserve banks is limited to the "general level of short term interest rates."[203] And to be sure, TNB was a for-profit corporation that, like other commercial banks, acted in pursuit of its own interests. Moreover, TNB marketed itself exclusively to money market institutional investors.[204] However, IOER was clearly disconnected from the rates at which most Americans accrued interest on their savings,[205] and TNB would almost certainly have offered retail depositors, if only indirectly, better access to competitive interest rates.[206] It also would have opened the door to full-reserve banks targeted at retail depositors. Considering that since 2014, between just 37% and 43% of Americans have reported they would pay for a $1 thousand emergency with savings,[207] non-negligible interest rates might both incentivize savings and reward them.

The Fed's statutory mandate[208] says nothing about fairness to retail depositors, and its recent attempts to promote economic equity have been

198. *Monetary Policy and the Economy*, C-SPAN, at 1:31:53 (Feb. 27, 2018), http://www.c-span.org/video/?440903-1/federal-reserve-chair-powell-testifies-monetary-policy-economy.

199. *Id.* at 1:31:59.

200. *Interest on Excess Reserves (Discontinued)*, *supra* note 50.

201. *National Rate on Non-Jumbo Deposits (Less Than $100,000): 12 Month CD (Discontinued)*, FRED, http://fred.stlouisfed.org/series/CD12NRNJ [http://perma.cc/Z956-AWAH].

202. John C. Driscoll & Ruth A. Judson, *Sticky Deposit Rates* 2–4 (Bd. Governors Fed. Rsrv. Sys., Working Paper No. 2013-80, 2013).

203. Board of Governors Amicus Brief, *supra* note 46, at 16.

204. *See supra* text accompanying note 90.

205. 71% of Americans have a savings account. Backman, *supra* note 8.

206. *See supra* text accompanying note 90.

207. Lane Gillespie, *Bankrate's 2023 Annual Emergency Savings Report*, BANKRATE (Jan. 23, 2023), http://www.bankrate.com/banking/savings/financial-security-january-2021 [http://perma.cc/J6GC-4BG3].

208. *See supra* text accompanying note 31.

criticized as straying from that mandate.[209] But fairness is socially desirable, and it is legally permissible with respect to full-reserve banks if the right to a master account is read under the MCA.[210] Characterized as an opportunity for Americans to realize more directly the economic benefits of the banking system, which are already available to large financial institutions, full-reserve banking looks less like a wonky, fringe debate over monetary policy than the ilk of prevailing sociopolitical issues like economic and social equity.

Another issue enmeshed in the debate over full-reserve banking is federalism. While seldom discussed outside of law schools and think tanks, federalism undergirds the American system and has been particularly visible in the last decade as increased political polarization has pitted states against the federal government. One of the Fed's principal objections to full-reserve banks like TNB is that they would "would not be subject to federal prudential regulation and would not be subject to the same set of capital and other prudential requirements as other federally regulated banks."[211] This is because they would not be "subject to supervision by a federal banking agency (*e.g.*, the Board, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, or the National Credit Union Administration)," but a state banking agency.[212] The Fed's attitude toward federal control of TNB is unsurprising given its growth and the banking system's centralization over the last century. But its attitude is concerning.

The Fed was aware of the risk that TNB could skirt regulatory oversight when it considered TNB's application for a master account. Because TNB declined federal deposit insurance, thus avoiding regulation by the FDIC, the Fed conducted an extraordinary due diligence review, which focused on creditworthiness and anti–money laundering issues.[213] This review was in addition to the CTDOB's rigorous, year-long review of TNB's operations.[214] The "FRBNY did not identify any operational basis to deny" TNB a master account.[215] Moreover, capital requirements, which mandate banks keep

209. *See* Michael T. Belongia & Peter N. Ireland, Opinion, *The Fed's Duty Is to the Economy, Not 'Equity,'* WALL ST. J. (Jun. 9, 2021, 6:21 PM), http://www.wsj.com/articles/the-feds-duty-is-to-the-economy-not-equity-11623277274 [http://perma.cc/3RLB-Q5P3] (criticizing the Federal Reserve Bank of St. Louis's Institute of Economic Equality, which seeks "to support an economy in which everyone can benefit regardless of race, ethnicity, gender, or where they live").

210. The MCA was in fact passed in response to Fed policies that favored member banks at the expense of smaller nonmembers. *See supra* text accompanying notes 108–14.

211. Regulation D: Reserve Requirements of Depository Institutions, 84 Fed. Reg. 8,829, 8,829 (proposed Mar. 12, 2019).

212. *Id.*

213. Complaint, *supra* note 80, at 12.

214. *Id.* at 10.

215. *Id.* at 13.

certain levels of liquid assets,[216] would be superfluous for banks whose sole assets are cash reserves. Despite the CTDOB's authority to charter and regulate banks, and the Fed's failure to articulate any potential issues with TNB that the CTDOB was ill-equipped to regulate, the Fed held TNB hostage.

CONCLUSION

Full-reserve banking has the potential to alter monetary policy and the broader economy for years to come. The extent, nature, and desirability of those alterations continue to be debated by economists and financial experts, but what is almost certain is that the legal fight between the Fed and full-reserve banks will continue for some time. *TNB USA* opened the door for future debates and left unsettled whether the Fed has the authority to deny nonmember banks access to its services. Moreover, the stakes are not purely economic. Fairness and federalist concerns highlight the danger of the Fed's position and will continue to as long as full-reserve banks are squeezed out of the system.

216. James Chen, *Capital Requirements: Definition and Examples*, INVESTOPEDIA, http://www.investopedia.com/terms/c/capitalrequirement.asp [http://perma.cc/V8CV-PQ2E]; 12 C.F.R. § 3.10.