Money and Federalism

Law Working Paper N° 775/2024
August 2025

Dan Awrey
Cornell University and ECGI

ECGI Working Paper Series in Law

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Abstract

There is a ticking timebomb at the heart of the U.S. monetary system. The explosive material is an ever expanding universe of new monetary institutions like PayPal, Cash App, and so-called “stablecoins” that reside outside the perimeter of conventional bank regulation and the modern financial safety net. But the fuse was lit more than two hundred years ago in Philadelphia, where the delegates to the Constitutional Convention failed to clearly specify the division of regulatory responsibility between the federal government and the states over money and monetary affairs. As a direct consequence of this failure, the United States is today the only country in the world in which both the federal and state governments possess independent and yet overlapping authority for bank chartering, regulation, and supervision. Beginning with the landmark Supreme Court decision in Maryland v. McCulloch, this unique “dual banking” system has been a wellspring of jurisdictional conflict. Yet over time it has also produced strong federal oversight and a financial safety net that protects bank depositors, prevents destabilizing runs, and promotes monetary stability. This system is now under stress. The source of this stress is a new breed of technology-driven monetary institutions licensed and regulated almost entirely at the state level. This Article examines the rise of these new monetary institutions, the state-level regulatory frameworks that govern them, and the nature of the threats they may one day pose to monetary stability. It also examines the legal and policy cases for federal supremacy over the regulation of these new institutions and advances two potential models: one based on complete federal preemption, the other more tailored to reflect the narrow yet critical objective of promoting public confidence and trust in our monetary system.

Keywords: Money, banking, payments, dual banking system, federalism, money transmitters, stablecoins, cryptocurrency, bankruptcy, consumer protection, runs, monetary stability

JEL Classifications: G2, K2, N2

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LEGAL STUDIES RESEARCH PAPER SERIES

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Cornell Law School research paper No. 24-19

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INTRODUCTION

There is a ticking timebomb at the heart of the U.S. monetary system. The explosive material is an ever expanding universe of new monetary institutions—from money market funds, to PayPal and Venmo, to so-called "stablecoins"—that reside outside the perimeter of modern bank regulation and the financial safety net.[1] But the fuse was lit more than two

[1] For a small sample of the burgeoning academic literature exploring this universe of new monetary institutions, see Gary Gorton & Jeffrey Zhang, *Taming Wildcat Stablecoins*, 90 University of Chicago Law Review 909 (2023); ESWAR PRASAD, *THE FUTURE OF MONEY: HOW THE DIGITAL REVOLUTION IS TRANSFORMING CURRENCIES AND FINANCE* (2021); Robert Hockett & Saule Omarova, *The Finance Franchise*, 102 Cornell Law Review 1143 (2017); MORGAN RICKS, *THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION* (2016); Anna Gelpern & Erik Gerding, *Inside Safe Assets*, 33 Yale Journal on Regulation 365 (2016); Zoltan Pozsar, Tobias Adrian, Adam Ashcraft & Hayley Boesky, "Shadow Banking", 19 Federal Reserve Bank of New York Economic Policy Review 1 (2013), and Jonathan Macey & Geoffrey Miller, *Nondeposit Deposits and the Future of Bank Regulation*, 91 Michigan Law Review 237 (1992).

hundred years ago in Philadelphia, where the delegates to the Constitutional Convention failed to clearly specify the division of regulatory responsibility between the federal government and the states over money and monetary affairs.

The Founding Fathers spilled remarkably little ink—a total of just thirty words—specifying the powers of Congress over the monetary affairs of the fledgling nation.[2] They used even fewer words to limit the powers of the states in this all-important economic and political realm.[3] Perhaps even more remarkably, not one of these thirty words envisions the Federal Reserve System, banks, deposits, checks, bank notes, or any of the myriad other things that we today so closely associate with the legal and institutional machinery of money. Yet on this sparse and antiquated language rests the constitutionality of the world's most important currency, the banks and other financial institutions that create it, and the sophisticated regulatory architecture that ensures the safety and soundness of these institutions and supports the stability of our monetary system.

The Constitution's silence on questions of money and banking has been a wellspring of jurisdictional conflict between the federal government and the states. These jurisdictional turf wars began even before confederation, came to a head in the landmark Supreme Court decision in *Maryland* v. *McCulloch*,[4] reignited during Reconstruction, and continue to simmer—and occasionally boil over—to this very day.[5] These conflicts have spawned a unique "dual" banking system in which federal and state regulators have independent and yet overlapping authority for bank chartering, regulation, and supervision. Yet over time this highly fragmented and hotly contested system has also produced strong federal oversight and a robust financial safety net for both federal and state-chartered banks.[6] For almost a century, this system has protected bank depositors, prevented destabilizing runs, supported monetary stability, and promoted public confidence and trust in the increasingly ethereal promises that we call money. It's definitely not pretty, but for the most part it works.

For most of the nation's history, the relationship between money and federalism has been intricately intertwined with the emergence, growth, failure, and rescue of banks and, by extension, the wider banking system. It is not hard to see why. Today, almost 90 percent of all the money in the United States exists in the form of bank deposits.[7] Banks are also the principal

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[2] *See* U.S. Const. art. 1, § 8, cl. 5 ("The Congress Shall have the Power To… coin Money, regulate the Value thereof, and of foreign coin… [and] provide for the Punishment of Counterfeiting the… current Coin of the United States").

[3] *See* U.S. Const. art. 1, § 10, cl. 1 ("No state shall… coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts").

[4] 17 U.S. 316 (1819).

[5] *See* Part I.A for a more detailed description of these historical disputes, and Part I.C for a brief overview of some of the more recent preemption battles.

[6] *See* Part I.B for a more detailed description of this federal oversight and the financial safety net.

[7] Excluding reserve balances; see Federal Reserve Bank of St. Louis, Money Stock Measures – H.6 (November 2024), reporting bank M2 (deposits minus currency in circulation) of $19.087 trillion and currency in circulation of $2.359 trillion).

owners, gatekeepers, and custodians of the electronic payment networks that Americans use to move these deposits across the economy: whether to buy goods and services, discharge their debts, or pay their taxes.[8] And it is banks that serve as the primary channels through which the Federal Reserve System—America's central bank—seeks to implement its monetary policy decisions.[9] Viewed in this light, the power to charter, regulate, and supervise *banks* has long been one of the most important ways that we regulate *money*.

Yet this time-tested monetary system—built on strong federal oversight, a robust financial safety net and, ultimately, banks—is now under stress. The source of this stress is a new breed of technology-driven financial institutions licensed, regulated, and supervised almost entirely at the state level.[10] These new monetary institutions include household names like PayPal, Venmo, and Cash App. They also include a rapidly expanding universe of new institutions—like Coinbase, Circle, and Custodia—and instruments—like so-called "stablecoins"—at the frontier of finance and technology. While their business models and technologies vary, the defining feature of these new monetary institutions and instruments is that they operate outside the perimeter of both conventional bank regulation and the modern financial safety net.

At present, these new monetary institutions and instruments are licensed, regulated, and supervised under a sundry collection of state laws that are almost as diverse as the institutions and instruments themselves.[11] These laws range from antiquated state money transmitter statutes to bespoke regulatory frameworks like the New York Bitlicense and Wyoming special purpose depository charter that were created specifically to support new technological experiments in money and payments. Across different states and frameworks, these laws vary widely in terms of the range of financial activities that licensed institutions are permitted to undertake. They also vary greatly in terms of the nature and level of the legal protections they provide to the customers of these institutions. Collectively, these differences are a catalyst for growing monetary heterogeneity: introducing economically important variance across different types of monetary instruments that can drive consumer behavior in both good times and bad.[12] This heterogeneity generates risks for consumers, heightens the threat of destabilizing runs and, especially as these institutions and instruments continue to grow in popularity, may perhaps one day even endanger wider monetary stability.

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[8] For a more detailed description of the relationship between banking, money, and payments, see Dan Awrey, *Unbundling Banking, Money and Payments*, 110:4 Georgetown Law Journal 715 (2022); Dan Awrey, Joshua Macey & Jeffrey Zhang, "The Problem with Payments" (2025) [working paper on file with author].

[9] *See e.g.* Ben Bernanke & Alan Blinder, *The Federal Funds Rate and the Channels of Monetary Transmission*, 83:4 American Economic Review 902 (1992); Anil Kashyap & Jeremy Stein, *What Do a Million Observations on Banks Say about the Transmission of Monetary Policy?*, 90:3 American Economic Review 407 (2000) (both describing the impact of monetary policy decisions on bank deposits and lending).

[10] *See* Part II for a more detailed description of these new monetary institutions and their regulation.

[11] *See* Dan Awrey, *Bad Money*, 106:2 Cornell Law Review 1 (2020) (describing in depth the key differences between state money transmitter laws).

[12] For a more in-depth discussion of how monetary heterogeneity can drive consumer behavior, see DAN AWREY, *BEYOND BANKS: TECHNOLOGY, REGULATION, AND THE FUTURE OF MONEY* (2024).

More fundamentally, the fact that none of these new institutions are caught by the conventional financial safety net has important implications for the credibility of their monetary commitments. For banks, this safety net includes the Federal Reserve's emergency lending facilities, a comprehensive deposit insurance scheme, and a special resolution framework designed specifically for failing banks.[13] The practical effect of this safety net is to insulate banks and their depositors from the harsh outcomes that would otherwise await them under general corporate bankruptcy law.[14] This insulation is a critical ingredient in building public confidence and trust in banks and bank deposits as a source of money.

The new breed of monetary institutions enjoys no such insulation. This simple and inescapable fact undermines the credibility of their commitments to accept, hold, transfer, and return their customers' money—especially in the cold shadow of bankruptcy. This separation of *state-level* responsibility for licensing, regulation, and supervision from the *federal* administration of the financial safety net exposes a fundamental tension: while states have long been laboratories of monetary innovation, it is the federal government that ultimately controls the legal and institutional machinery necessary to make these innovations safe and ensure that they do not pose a threat to monetary stability. Accordingly, no matter how many new monetary experiments emerge and flourish under state regulatory frameworks, it is inevitably the federal government and banking agencies that are forced to clean up the mess if and when these experiments go wrong.

This tension foregrounds three central questions in the context of the complex and evolving relationship between money and federalism. Answering these questions is critical if we are to have any hope of diffusing this timebomb before it's too late. The first question is whether the Constitution gives Congress the power to charter, regulate, and supervise this new breed of monetary institutions. This question is more complicated than it might first appear. One of the peculiar byproducts of a monetary system that has for so long been dominated by a single species of financial institutions is that the constitutional debates around the power of Congress to regulate *money* have almost exclusively been projected through the narrow and fractured prism of *banks*. And even where courts have weighed into these debates, they have typically grounded their reasoning in the fiscal, as opposed to regulatory, dimensions of monetary design. In many cases, they have also eschewed in-depth substantive, historical, or economic analysis in favor of a more pragmatic approach. As a result, *Maryland* v. *McCulloch* and its progeny offer only limited guidance in answering this all-important question.

The second question is whether there are strong policy grounds for federal intervention. Here the answer is a clear and resounding yes. First, despite their valiant efforts, the states have failed time and time again to provide strong and consistent legal protections for the customers of these new monetary institutions. The significant divergence in legal protections across states and frameworks is responsible for growing monetary heterogeneity. This heterogeneity generates significant information costs: forcing customers to either

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[13] For a more detailed description of this financial safety net, see MICHAEL BARR, HOWELL JACKSON & MARGARET TAHYAR, *FINANCIAL REGULATION: LAW AND POLICY* (3d., 2021), chapters 2.4 and 9.1-9.3.

[14] *See* Part III.B.1 for a more detailed description of these outcomes and how bankruptcy destroys the value of contractual commitments to accept, hold, transfer, and return customer funds.

conduct costly due diligence or take a leap of monetary faith. Second, during periods of institutional or wider financial instability, these information costs can become a catalyst for destabilizing runs as customers rationally decide to withdraw first and ask questions later. Third, under certain conditions, these runs could potentially metastasize into wider panics that threaten the stability of the entire monetary system. Preventing these destructive dynamics requires strong and fully harmonized legal protections, the disapplication of federal bankruptcy law, and a bespoke resolution framework that ensures that the customers of failed institutions are repaid rapidly and in full. Having addressed these challenges, new monetary institutions should also be better integrated with the clearinghouses and other networks at the heart of the modern payment system. The federal government—*and only the federal government*—can provide these key ingredients of monetary stability.

The third and final question is how Congress should design and implement any policy intervention. This includes complex and thorny questions about how to fit a new regulatory framework within the existing federalist structure. In theory, the options range from competing federal and state frameworks to exclusive federal chartering, regulation, and supervision. In between, there is also the possibility of shared federal and state responsibility within a single overarching framework. In practice, both Congress and federal bank regulators have already put forward several proposals that have run aground on federalism's rocky shores. These proposals include the Responsible Financial Innovation Act released by Senators Cynthia Lummis and Kirsten Gillibrand in June 2022[15] and the Clarity for Payment Stablecoins Act voted out of the House Financial Services Committee in July 2023.[16] While these bills were not without merit, neither would have successfully navigated the complex challenges posed by the emergence of new monetary institutions.

This Article explores these three important questions. The stakes are extremely high. During the late 19th and early 20th centuries, the U.S. financial system and economy were routinely disrupted by periods of paralyzing monetary instability.[17] Monetary instability was also at the root of the Great Depression: with widespread bank failures leading to a broad contraction in the money supply that undercut investment, destroyed jobs, and stifled economic growth.[18] The modern financial safety net for banks was created to prevent this type of monetary instability, along with the economic devastation that inevitably follows in its wake. Yet given the recent emergence of new monetary institutions, preventing future crises

[15] *See* S.4356, 117th Congress, 2nd Session (2021-2022) (June 7, 2022). The bill was subsequently re-released in July 2023; see Kirsten Gillibrand, Press Release, "Lummis, Gillibrand Reintroduce Comprehensive Legislation To Create Regulatory Framework for Crypto Assets (July 12, 2023).

[16] *See* H.R. 4766, 118th Congress, 1st Session (2023-2024); House Financial Services Committee, Press Release, "House Financial Services Committee Reports Digital Asset, ESG Legislation to Full House for Consideration" (July 27, 2023).

[17] *See* Part I.B for a more detailed description of these periods of monetary instability and the role of the national banking system in amplifying them.

[18] *SEE* MILTON FRIEDMAN & ANNA SCHWARTZ, *A MONETARY HISTORY OF THE UNITED STATES 1867–1960* (rev. ed. 1971).

demands that we rethink our approach toward the sources of money, the potential vectors of monetary instability, and how to effectively regulate them.

The stakes are further heightened by what many view as an ongoing war against the administrative state.[19] Over the past several years, U.S. financial regulators have increasingly found themselves in the crosshairs of politicians, industry groups, and even regulated financial institutions seeking to roll back the power of federal agencies.[20] This trend has emerged in parallel with jurisprudential developments like the so-called "major questions" doctrine,[21] along with the Supreme Court's recent decision in *Loper Bright Enterprises* v. *Raimondo* curtailing the level of deference that future courts will give to agency decision-making.[22] While this war has to date yielded only modest—yet expanding—territorial gains, the reality is that public confidence and trust in our monetary system is simply too important to get caught in the crossfire.

This Article proceeds as follows. Part I chronicles the evolution of the dual banking system: from the Constitutional Convention, to the battles over the First and Second Banks of the United States, to the creation of the national banking system, and ultimately the process of federal encirclement that produced the modern financial safety net. Part II describes the new breed of technology-driven monetary institutions that have emerged, grown, and proliferated outside this safety net, along with the patchwork collection of state licensing, regulatory, and supervisory frameworks that currently govern them. Part III then appraises the legal and policy cases supporting federal supremacy over the regulation of these new monetary institutions. The legal case rests on a combination of the Coinage, Commerce, and Bankruptcy clauses. The policy case rests on the federal government's unparalleled ability to harmonize consumer protection and bankruptcy law, prevent destabilizing runs, and effectively respond to any extant or future threats to monetary stability. Part IV concludes by advancing two possible models of federal supremacy: one based on complete federal preemption, the other more tailored to reflect the narrow yet critical objective of promoting public confidence and trust in our monetary system.

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[19] *See* Declan Harty, Josh Sisco & Josh Gerstein, "The Campaign to gut Washington's Power over Corporate America", *POLITICO* (May 22, 2024), https://www.politico.com/news/2024/05/21/supreme-court-jarkesy-administrative-state-00158948.

[20] *See e.g. Securities and Exchange Commission* v. *George R. Jarkesy Jr.*, et al., Sup. Ct. No. 22-859 (docketed March 9, 2023); and *Consumer Financial Protection Bureau et al.* v. *Community Financial Services Association of America, Ltd., et al.*. Sup. Ct., No. 22-448 (May 16, 2024).

[21] *See West Virginia* v. *Environmental Protection Agency*, 142. Sup. Ct. 2587 (2022) (using the term "major questions doctrine" for the first time and holding that agency decisions with vast "economic and political significance" require a clear grant of authority from Congress). *See also* Daniel Deacon & Leah Litman, *The New Major Questions Doctrine*, 109 Virginia Law Review 1009 (2023).

[22] 603 U.S. 369 (2024) (abandoning the framework for determining the level of deference afforded to administrative agencies under *Chevron* v. *Natural Resources Defense Council*, 467 U.S. 837 (1984)).

I. MONEY AND THE CONSTITUTION

In the summer of 1787, as the Founding Fathers gathered in Philadelphia, the 55 delegates to the Constitutional Convention found themselves at a very specific moment in monetary history. Gold and silver coins—known as *specie*—were almost universally viewed as the first, best, and yet often decidedly scarce source of money. The delegates had also been deeply scarred by experiments with the issuance of paper money—then known as *bills of credit*—by both the Continental Congress and individual states to finance the War of Independence.[23] In theory, the issuers of these bills promised that the people and businesses that held them could always exchange them for specie, thereby anchoring their value to that of gold and silver coins. Yet in practice, the widespread and often unregulated issuance of these bills gave rise to mounting concerns that there was simply not enough specie to honor these paper promises. While the Continental Congress eventually took measures to limit their supply, these concerns were ultimately reflected in a steady and inexorable decline in the value of these bills, contributing to rampant inflation, and leaving the fledgling republic in a perilous fiscal state as it sought to turn swords into ploughshares.[24]

The scars from these early monetary experiments are sketched in ink on the pages of the Constitution itself. Article I, Section 8, Clause 5 gives Congress the power to "coin Money" and "regulate the Value thereof"[25], while Clause 6 gives it the power to "provide for the Punishment of counterfeiting the… current Coin of the United States."[26] Article I, Section 8, Clause 2 authorizes Congress "to borrow money on the credit of the United States."[27] While early drafts of Clause 2 authorized Congress "to borrow money *and emit bills of credit*"—i.e. to print paper money—this language was eventually struck at the urging of James Madison and others.[28] Meanwhile, Article I, Section 10, Clause 1 prohibits individual states from coining

[23] The first paper money in the United States was issued by the Massachusetts colony in the early 1690s; *see* DROR GOLDBERG, *EASY MONEY: AMERICAN PURITANS AND THE INVENTION OF MODERN CURRENCY* (2023). By the early 1700s, most other New England colonies had followed suit; *see* BENJAMIN KLEBANER, *AMERICAN COMMERCIAL BANKING: A HISTORY* 3-4 (1990). These early monetary experiments were the subject of considerable discussion and debate in the Continental Congress; *see e.g.* 3 J. Continental Cong. 390, 407 (1775); 2 J. Continental Cong. 220, 220-23 (1775); 3 J. Continental Cong. 367, 367 (1775); 4 J. Continental Cong. 49 (1776); 13 J. Continental Cong. 492-493 (1779).

[24] As observed by a committee appointed by the Continental Congress to examine the problem, "so much paper money has been, from time to time emitted, that the quantity greatly exceeds what is proper for a medium of commerce, whereby its value is progressively declining..."; 13 J. Continental Cong. 492 (1779). The committee concluded that the circulation of bills of credit should be "considerably reduced… to prevent discontents and mischiefs which must follow from a further depreciation of the paper money."; *id.*, at 493.

[25] U.S. Const. art. 1, § 8, cl. 5.

[26] *Id.*, art. 1, § 8, cl. 6.

[27] *Id.*, art. 1, § 8, cl. 2.

[28] *See* JONATHAN ELLIOT, *DEBATES ON THE FEDERAL CONSTITUTION* (1861), 147 and 226 (reporting the text of earlier drafts of what would become Clause 2) and 271 (reporting the motion to delete the words "and emit bills of credit" from the draft text). The deleted text tracked language contained in Article IX of the Articles of Confederation.

money, issuing bills of credit, or making anything other than gold or silver legal tender in connection with the payment of debts.[29] Taken together, these provisions reflect the collective desire of the Founding Fathers to create a federal system in which Congress was sovereign over monetary affairs. They also reflect what was then the conventional wisdom that paper money was a harbinger of inflation and, accordingly, that gold and silver bullion should remain the one and true currency of the realm.[30]

Conspicuous by their absence from this pivotal moment in constitutional and monetary history are what we would today view as the largest and most ubiquitous sources of money: *banks*. In 1787, there were only three chartered banks in the entire United States: the Bank of North America, Bank of Massachusetts, and Bank of New York.[31] At the time, these banks were still in their infancy—the oldest having been chartered in 1781—and represented only a small fraction of the outstanding money supply. Yet less than a century later, the United States would be home to almost 2,000 national and state-chartered banks.[32] In addition to issuing physical bank notes, these banks would eventually offer their customers the ability to open bank accounts, write checks on the funds deposited in these accounts and, with the advent of the telegraph, send domestic and international wire transfers. By 1867, these bank notes and deposits had eclipsed gold and silver coins as the dominant sources of money.[33] Flash forward to the present day and there are almost 10,000 banks and other insured depository institutions operating in the United States. These institutions are collectively responsible for over $19 *trillion* dollars in deposits, representing almost 90 percent of the total money supply.[34]

The fact that the new Constitution did not explicitly mention banks did not mean that its drafters were completely unaware of these new-fangled financial institutions. In fact, it was the Continental Congress that had chartered the first bank in 1871. More importantly, the delegates to the Constitutional Convention had vigorously debated whether Congress should explicitly be given the power to grant bank charters.[35] In the build-up to the Convention, they also debated whether the establishment of a national bank was necessary to fix the nation's perilous finances, bolster the money supply, and "provide a ready source of funds in the event

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29 U.S. Const., art 1, §10, cl. 1.

30 The prevailing sentiment was captured by William Morris, who saw paper money as a "ruinous expedient", paving the way for inflation and even war; *see* MAX FARRAND (ED.), *THE RECORDS OF THE FEDERAL CONVENTION OF 1787: VOLUME 2* 299 (1966).

31 *SEE* HAROLD UNDERWOOD FAULKNER, *AMERICAN ECONOMIC HISTORY* 298 (1949).

32 *See* Emmette Redford, *Dual Banking: A Case Study in Federalism*, 31 Law & Contemporary Problems 749, 755 (1966) (reporting the existence of 1,617 national and 259 state-chartered banks in 1869).

33 *SEE* FRIEDMAN & SCHWARTZ, *A MONETARY HISTORY*, *supra* note __, at 704.

34 *See* Federal Reserve Bank of St. Louis, Money Stock Measures, *supra* note __.

35 *SEE* DANIEL FARBER & SUZANNA SHERRY, *A HISTORY OF THE AMERICAN CONSTITUTION* 141-142 (1990).

of war".[36] As we shall see, while the Founding Fathers did not resolve these debates in the summer of 1787, it would not be long before they returned to them in earnest.

The Constitution's silence with respect to banking and banks did have one more enduring consequence. By failing to clearly articulate who had the authority to charter and regulate banks, the Constitution in theory opened the door for both the federal government and state legislatures to enter the field. And in practice, that is exactly what they did. Over time, and through a series of legal twists and turns, the result has been the development of the so-called "dual" banking system. Distilled to its essence, this system enables aspiring bankers to choose whether to obtain a national or state bank charter.[37] In general, this choice will then determine whether a newly chartered bank is subject to regulation and supervision by federal or state bank regulators.[38] Today, for example, an aspiring banker could decide to obtain a national bank charter from the federal Office of the Comptroller of the Currency (OCC). But they could equally decide to obtain a state bank charter from the New York State Department of Financial Services (NYDFS). Accordingly, as the prominent J.P. Morgan banker Thomas Lamont observed in 1933: "In banking, our country has forty-nine different sovereigns"[39]—one for the federal government and each of the then forty-eight states.

The dual banking system has often been described as an "historical accident".[40] Former Federal Reserve Board Governor John Sheehan once called it "a hodgepodge."[41] And Senator Carter Glass, one of the principal architects of 20th century U.S. bank regulation, lambasted it as an "almost insuperable obstacle in the way of sound banking legislation."[42] Yet this system has also been described as a "sacred cow"[43] and "the object of almost universal veneration".[44]

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[36] *See* James Wilson, "Consideration of the Bank of North America, 1785" in NEIL COGAN, CONTEXTS OF THE CONSTITUTION 383 (1999). *See also* Daniel Farber, *The Story of McCulloch: Banking on National Power*, 20 Constitutional Commentary 679, 681 (2003) ("When the Constitutional Convention met in the summer of 1787, the question of a national bank was still on people's minds.").

[37] *See* Geoffrey Miller, *The Future of the Dual Banking System*, 53 Brooklyn Law Review 1, 1 (1987) ("Unique among the nation's private industries, banks and thrift institutions can be chartered either by a state or by the federal government. By selecting one chartering authority rather than another, depository institutions can, to a substantial extent, determine the nature of the regulations to which they will be subject, as well as the identity of the government agency that exercises the regulatory function."). *See also* Redford, *supra* note __, at 749-750.

[38] Although as we shall see, the ongoing process of federal encirclement now means that almost all state banks will also be subject to regulation and supervision by federal banking regulators.

[39] Thomas Lamont, *Should America Adopt a Unified Banking System? Pro*, 12. Cong. Dig. 108, 108 (1933).

[40] *See e.g.* Carl Felsenfeld & Genci Bilali, *Is There a Dual Banking System?*, 2:1 Pepperdine Journal of Business, Entertainment, and the Law 30, 44 (2008).

[41] Address by Federal Reserve Board Governor John Sheehan, "The Year for Federal Bank Regulation Reform" Institutional Investors Institute (December 10, 1974), quoted in Kenneth Scott, *The Dual Banking System: A Model of Competition in Regulation*, 30 Stanford Law Review 1, 2 (1077).

[42] Sen. Carter Glass, Hearings Pursuant to S. Res. 71 Before the Senate Subcommittee on Banking and Currency, 71st Cong., 3d Sess., pt. 1. 265 (1931).

[43] Miller, *supra* note __, at 1.

[44] Scott, *Dual Banking*, *supra* note __, at 1.

Scholars meanwhile have long debated whether the dual banking system should be viewed a source of efficient legal rules or simply an efficient vehicle for rent extraction and regulatory arbitrage.[45] Ultimately, perhaps the most anodyne word to describe the dual banking system is *unique*. In fact, amongst the 27 countries that have adopted a federal system, the United States is the only one that forces federal and state governments to share responsibility for bank chartering, regulation, and supervision (*see* Figure 1).[46]

Figure 1

Banking Systems by Jurisdiction

This Part describes the origins and evolution of the dual banking system from 1787 to the present day. As we shall see, this once highly fragmented and heterogeneous system of bank chartering, regulation, and supervision has over time become increasingly centralized and standardized. In the process, it has also given the federal government a high degree of control over both banking and monetary affairs. The practical effect of this control has been to eliminate any material legal or economic differences between the deposit liabilities of different banks: thereby supporting the development of a single, stable, and universally accepted source of money. Part II then describes how a flurry of new monetary experiments—taking place at the state level and outside the perimeter of conventional bank regulation—are rapidly

[45] For a flavor of this debate, *see e.g.* Arthur Wilmarth, *The Expansion of State Banking Powers, the Federal Response, and the Case for Preserving the Dual Banking System*, 58:6 Fordham Law Review 1133 (1990); Henry Butler & Jonathan Macey, *The Myth of Competition in the Dual Banking System*, 73:4 Cornell Law Review 677 (1998); Daniel Fischel, Andrew Rosenfield & Robert Stillman, *The Regulation of Banks and Bank Holding Companies,* 73 Virginia Law Review 301 (1987); Miller, *supra* note __; Scott, *Dual Banking*, *supra* note __.

[46] Notably, while both Canada and Germany technically permit some deposit-taking institutions to obtain state (or provincial) charters, the institutions holding these charters are still exclusively subject to regulation and supervision by federal bank regulators.

changing the constitution of money and, with it, the dynamics of joint federal and state control over the legal and institutional machinery of our monetary system.

A. The Origins of the Dual Banking System

Almost before the ink was dry on the new Constitution, Congress returned to the question of how to resolve its mounting fiscal crisis. The War of Independence left the Continental Congress and original thirteen colonies with over $77 million in debt, much of it owed to foreign creditors.[47] To repay this debt, Treasury Secretary Alexander Hamilton hatched an ambitious restructuring plan. In addition to having the federal government assume colonial war debts, one of the lynchpins of this plan was the creation of a new quasi-public national bank: the First Bank of the United States.[48] While not strictly speaking a central bank, Hamilton modelled the First Bank on the Bank of England, which had long played a number of critical and intertwined roles in supporting the English government, monetary system, and economy.[49] In addition to its deposit-taking and commercial lending activities, Hamilton thus charged the First Bank with responsibility for serving as the chief fiscal agent to the U.S. Treasury Department: coordinating tax collection, managing the government's finances, holding its deposits, and raising capital on its behalf.[50] Importantly, the First Bank was also authorized to issue paper bank notes, redeemable in specie, which Hamilton viewed as critical to expanding the nation's anemic money supply and stimulating economic growth.[51]

The First Bank opened for business on December 12, 1791 and almost immediately started paying policy dividends. Within months, the First Bank was thrust into the position of managing the nation's first financial crisis, the Panic of 1792.[52] And in time, its paper bank

[47] *See* U.S. Treasury Department, Fiscal Data, "Historical Debt Outstanding", https://fiscaldata.treasury.gov/datasets/historical-debt-outstanding/historical-debt-outstanding (reporting $77,227,942.66 in government debt as of January 1, 1792, the first reporting period after Congress passed Hamilton's plan for the federal government to assume colonial war debts).

[48] *See* Alexander Hamilton, "The Report of the Secretary of the Treasury on the Subject of a National Bank" (December 13, 1790).

[49] RON CHERNOW, *ALEXANDER HAMILTON* 347 (2004).

[50] *See* Federal Reserve Bank of Philadelphia, "The First Bank of the United States: A Chapter in the History of Central Banking" (March 2021), https://www.philadelphiafed.org/education/the-first-bank-of-the-united-states-a-chapter-in-the-history-of-central-banking.

[51] *See* The Funding Act of 1790, § 3, 1 Stat. 138. 1st Congress, 2d Session, Ch. 34. *See also* Hamilton, *supra* note __, at 7 ("This additional employment given to money, and the faculty of a bank to lend and circulate a greater sum than the amount of its stock in coin, are, to all the purposes of trade and industry, an absolute increase of capital.").

[52] *See* Richard Sylla, Robert Wright & David Cowen, *Alexander Hamilton, Central Banker: Crisis Management during the U.S. Financial Panic of 1792*, 83 Business History Review 61 (Spring 2009) (although, as the authors also acknowledge, the First Bank's policies had also contributed to the bubble that led to the panic).

notes enjoyed widespread acceptance and circulation across the country.[53] Yet both Hamilton and his creation also had powerful enemies. Thomas Jefferson, James Madison, and other Republicans objected to the First Bank on both constitutional grounds and as an unwarranted concentration of economic and political power in the hands of the federal government and its financiers.[54] A small but growing population of state-chartered banks were also concerned about the potential competitive distortions created by what they viewed as the First Bank's cozy relationship with the federal government.[55] When the First Bank's initial 20-year charter expired in 1811, these enemies were able to successfully coordinate and mobilize their opposition, with the Senate eventually voting—by the slimmest of margins—not to renew its federal charter.[56]

It would not be long before Congress was forced to reconsider this decision. The financial exigencies of the War of 1812, coupled with the growth of state-chartered banks issuing a rapidly expanding supply of paper bank notes, soon triggered renewed inflationary pressures.[57] Successful British attacks on both Washington, DC and Baltimore also produced the nation's first bank runs.[58] These bank runs eventually spread across the country: with many banks unwilling, or simply unable, to honor their contractual commitments to redeem their bank notes for gold or silver coins.[59] Predictably, the resulting freefall in the price of these bank notes only served to reinforce the surging inflationary dynamics. Faced with these escalating and interconnected crises,[60] now President Madison set aside his longstanding constitutional objections and abruptly changed course: signing the law establishing the Second Bank of the United States on April 10, 1816.[61]

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53 Federal Reserve Bank of Philadelphia, *supra* note __, at 9. At least one estimate suggests that the First Bank's notes represented around 20 percent of the total U.S. money supply as of 1811; SEE EDWARD SYMONS, JR. & JAMES WHITE, *BANKING LAW* 11 (1984).

54 For a more detailed description of these debates, see generally BRAY HAMMOND, *BANKS AND POLITICS IN AMERICA FROM THE REVOLUTION TO THE CIVIL WAR* 89–114 (1957) (describing the disagreements among the Founding Fathers over the role that the federal government should play in the banking system); Farber, *supra* note __, at 683-690 (2004) (describing the debates between Hamilton, on the one hand, and Jefferson and Madison, on the other).

55 For a more detailed discussion, see ERIC LOMAZOFF, *RECONSTRUCTING THE NATIONAL BANK CONTROVERSY: POLITICS AND LAW IN THE EARLY AMERICAN REPUBLIC* (2018); HAMMOND, *supra* note __.

56 Technically, the Senate's vote to reauthorize the First Bank resulted in a tie, with the casting vote going to Republican Vice President George Clinton.

57 LOMAZOFF, *supra* note __; HAMMOND, *supra* note __.

58 LOMAZOFF, *supra* note __; HAMMOND, *supra* note __.

59 LOMAZOFF, *supra* note __; HAMMOND, *supra* note __.

60 For a detailed description of the political dynamics leading to the establishment of the Second Bank, see generally Raymond Walters, Jr., *The Origins of the Second Bank of the United States*, 53 Journal of Political Economy 115 (1945); RALPH CATTERALL, *THE SECOND BANK OF THE UNITED STATES* (1903).

61 14 Stats. 266 (1816). In fact, in vetoing an earlier version of the Act, the President expressly stated that he was "[w]aiving the question of the constitutional authority of the Legislature to establish an incorporated

The creation of the Second Bank set the stage for the first real test of the federal government's constitutional authority over monetary affairs. Today, every first year law student knows *Maryland* v. *McCulloch*[62] as the first Supreme Court decision examining the limits of federal legislative authority, as the source of the implied powers doctrine, and for Chief Justice Marshall's famous line that "the power to tax is the power to destroy".[63] Constitutional scholars have described *McCulloch* as "one of the monumental decisions of American federalism"[64] and even "the single most important opinion in the Court's history."[65] Yet at the heart of this groundbreaking case is the relatively narrow and highly technical question of whether the Constitution gave Congress the power to charter and regulate banks.

The specific question in *McCulloch* revolved around of whether Maryland could impose a tax on "out-of-state" banks that had not been chartered by the Maryland state legislature in connection with their issuance of paper bank notes. This included the Maryland branch of the Second Bank, which employed a young cashier by the name of James William McCulloh.[66] The Supreme Court was asked to consider two issues: *first*, whether the Constitution granted Congress the power to incorporate a bank; and *second*, if so, whether the Constitution prohibited the states from imposing a tax on that bank.[67] Writing for a unanimous Court, Chief Justice Marshall dismissed the first issue almost out of hand. Observing that the establishment of the First Bank had not been subject to any constitutional challenge, and that after "a short experience of the embarrassments to which the refusal to revive it exposed the government"[68] it was the principal opponents of the First Bank that had proposed the establishment of the Second Bank, Chief Justice Marshall concluded that the federal government's power to charter a bank "can scarcely be considered as an open question."[69]

Turning to the second issue, Chief Justice Marshall begins by stating what he viewed as an axiomatic principle: "that the constitution and the laws made in pursuance thereof are supreme; that they control the constitution and laws of the respective states, and cannot be controlled by them."[70] On the basis of this principle, Chief Justice Marshall then articulates three corollary principles. First, "the power to create implies a power to preserve."[71] Second,

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bank"; see James Madison, "Veto Message on the National Bank" (January 15, 1815), National Archives [on file with author].

[62] 17 U.S. 4 Wheat. 316 (1819).

[63] *Id.,* at 327 ("An unlimited power to tax involves, necessarily, a power to destroy.").

[64] *See* Redford, *supra* note __, at 752.

[65] *See* Farber, *supra* note __, at 679.

[66] In what must be one of the most unfortunate typos in constitutional history, the Court clerk actually misspelled McCulloh's last name, incorrectly adding a 'c' before the final 'h'.

[67] *McCulloch*, 17 U.S., at 401 and 425.

[68] *Id.*, at 402.

[69] *Id.*, at 401.

[70] *Id.*, at 426.

[71] *Id.*

"a power to destroy, if wielded by a different hand, is hostile to, and incompatible with these powers to create and to preserve."[72] And third, where this hostility or incompatibility exists, the "authority which is supreme must control, not yield to that over which it is supreme."[73] Applying these principles, the Court concludes that because Congress has the power to incorporate banks, and because the unconstrained power of the states to tax these banks would pose a threat to the legitimate exercise of this power, any such tax must necessarily be unconstitutional.

The Supreme Court's decision in *McCulloch* famously avoids the question of where exactly Congress gets the constitutional authority to charter banks. Nor did the Court directly address the merits of various constitutional theories—including those advanced by Hamilton himself[74]—supporting the existence of this authority. Instead, Chief Justice Marshall holds that these "minor ingredients" are contained within the "great powers" expressly enumerated in the Constitution:

> "Although, among the enumerated powers of government, we do not find the word 'bank' or 'incorporation,' we find the great powers, to lay and collect taxes; to borrow money; to regulate commerce; to declare and conduct a war; and to raise and support armies and navies. The sword and the purse, all the external relations, and no inconsiderable portion of the industry of the nation, are intrusted [sic] to its government."[75]

The Court ultimately grounds this doctrine of implied powers in Article I, Section 8, Clause 18, which gives Congress the power "to make all Laws which shall be necessary and proper for carrying into Execution"[76] these enumerated powers.[77] Yet even then, the Court—like President Madison[78]—did not expressly articulate *which* great power the government was relying on to incorporate the Second Bank, or *why* the exercise of this power was necessary and proper.[79]

While the Supreme Court's decision in *McCulloch* was a clear victory for federalists, it was hardly a death knell for state-chartered banks. While Article I, Section 10, Clause 1

[72] *Id.*

[73] *Id.*

[74] *See e.g.* Alexander Hamilton, "Opinion on the Constitutionality of an Act to Establish a Bank" (February 23, 1791), National Archives [on file with author].

[75] *McCulloch*, 17 U.S., at 407.

[76] U.S. Const. art. 1, § 8, cl. 18.

[77] *McCulloch*, 17 U.S., at 411-412.

[78] *See* David Schwartz, *Misreading McCulloch v. Maryland*, 18 University of Pennsylvania Journal of Constitutional Law 1, 43 (2015) ("Given Madison's peculiar admixture of pragmatism and strict constructionism, it is not surprising that he cagily declined to specify which… grounds he was relying on, since none of them are quite consistent with strict construction.")

[79] Although the Supreme Court's decision in *McCulloch* was subsequently reaffirmed in *Osborn* v. *Second Bank of the United States*, 22 U.S. 738 (1824), which suggested that the creation of the Second Bank was necessary and proper for "carrying on the fiscal operations of the government".

prohibited the states themselves from coining money or issuing bills of credit, it was completely silent on the question of whether state-chartered banks were permitted to do so. In *Briscoe* v. *Bank of Commonwealth of Kentucky*,[80] the Supreme Court would subsequently answer this question in the affirmative: holding that the issuance of paper bank notes by state-chartered banks was constitutional, even where the state itself was the sole shareholder in the bank.[81] As a consequence, after the Second Bank's charter expired in 1836, responsibility for chartering and regulating banks fell exclusively to the states.[82]

The expiry of the Second Bank's federal charter was followed by a period of experimentation in bank business models and regulatory frameworks known, somewhat inaccurately, as the "free banking" era.[83] By 1836, legislatures in many states had already adopted relatively strict bank licensing and prudential regulatory requirements. In New York, for example, legislation was passed in 1829 that required banks to contribute a small percentage of their capital to a state-managed fund established for the purposes of compensating the noteholders of failed banks.[84] In Massachusetts, the Suffolk Bank operated a private clearinghouse for bank notes issued by other New England banks.[85] In exchange for accepting their bank notes at face value, the Suffolk Bank required its members to maintain minimum deposits of gold and silver specie and subjected them to basic prudential supervision.[86] Meanwhile, several other states passed legislation that contemplated "free" entry into the business of banking on the condition that banks post government bonds as collateral against the issuance of new bank notes.[87] Yet while the free banking era witnessed an explosion

[80] 36 U.S. 257 (1837).

[81] The Court in *Briscoe* arrived at this conclusion by adopting an extremely narrow definition of what constituted a "bill of credit": essentially limiting it to instruments issued directly by a government and backed only by its full faith and credit; *id.*, at 278.

[82] *SEE* HAMMOND, *supra* note __, at 369–450 (describing President Andrew Jackson's assault on the Second Bank, its eventual privatization, and ultimate de-chartering).

[83] For a detailed comparative assessment of the successes and failures of various free banking regimes in the United States and other jurisdictions, see LAWRENCE WHITE (ED.), *FREE BANKING, VOLUMES 1-3* (1993); KEVIN DOWD (ED.), *THE EXPERIENCE OF FREE BANKING* (1992).

[84] For a more detailed description of this safety fund system, see ROBERT CHADDOCK, *THE SAFETY FUND BANKING SYSTEM IN NEW YORK, 1829–1866* (1910).

[85] For a more detailed description of the Suffolk Bank system, see GEORGE TRIVOLI, *THE SUFFOLK BANK: STUDY OF A FREE-ENTERPRISE CLEARING SYSTEM* (1979); Charles Calomiris & Charles Kahn, *The Efficiency of Self-Regulated Payments Systems: Learning from the Suffolk System*, 28 Journal of Money, Credit & Banking 766 (1996).

[86] David Whitney, for example, documents several cases where the Suffolk Bank intervened to warn member banks that they were extending too much credit or issuing too much debt; SEE D.R. WHITNEY, *THE SUFFOLK BANK* 35–38 (1878).

[87] States adopting free banking statutes included Michigan (1837), Georgia (1838), New Jersey (1850), Illinois (1851), Ohio (1851), Connecticut (1852), Indiana (1852), Minnesota (1858), and Pennsylvania (1860). While New York (1850) and Massachusetts (1851) also technically adopted free banking statutes, it would be incorrect to include them in this category given the existence of other public and private regulatory frameworks

in the number and variety of state regulatory frameworks, it was also characterized by widespread fraud and bank failures, along with significant volatility—and depreciation—in the value of the bank notes issued by many state-chartered banks.[88]

The federal government's two decade absence from bank chartering and regulation—and with it the free banking era—would effectively come to an end with the enactment of the National Banking Acts of 1863-1865.[89] The National Banking Acts were designed to promote the development of a national banking system, raise much needed finance for the Civil War, and prevent further financial instability and inflationary pressures stemming from the widespread issuance of legally and economically heterogeneous state-chartered bank notes.[90] The Acts achieved the first objective by establishing the OCC and giving it the authority to charter, regulate, and supervise a newly created species of "national" banks. They achieved the second and third objectives through two principal means. First, they required national banks to purchase government bonds and conditioned their ability to issue new bank notes on the size of their bond holdings. This had the double-barreled effect of stimulating demand for government bonds while also imposing a binding constraint on the issuance of new and potentially undercollateralized bank notes. Second, taking a page out of Maryland's playbook for undermining the First Bank, they imposed a 10 percent tax on the circulating bank notes of all state-chartered banks.

The overarching objective of the National Banking Acts was to create a single, national currency "licensed, manufactured, and guaranteed by the federal government."[91] To achieve this objective, Congress effectively sought to destroy the state-chartered banking system: forcing state-chartered banks to either recharter as national banks or pay the punitive 10 percent tax.[92] In the first several years following the adoption of the Acts, this ride-or-die strategy proved highly successful. At the end of 1863, there were a total of 1,466 state-chartered banks operating in the United States, compared with only 66 national banks.[93] Yet

within these states—e.g. the New York safety fund system and New England Suffolk banking system—that, strictly speaking, deviated from the free banking model.

[88] *See e.g.* Gary Gorton, *Pricing Free Bank Notes*, 44 Journal of Monetary Economics 33 (1999); Matthew Jaremski, *Bank-Specific Default Risk in the Pricing of Bank Note Discounts*, 71 Journal of Economic History 950 (2011); Gerald Dwyer, Jr., "Wildcat Banking, Banking Panics, and Free Banking in the United States", Federal Reserve Bank of Atlanta Economic Review 1 (December 1996). Although the precise causes and consequences of these phenomena are still hotly contested; see e.g. Hugh Rockoff, *The Free Banking Era: A Reexamination*, 6 Journal of Money Credit & Banking 141 (1974).

[89] National Bank Act of 1863, 12 Stat 665, superseded by the National Bank Act of 1864 § 62, 13 Stat 99, 118; National Bank Act of 1864 § 16, 13 Stat at 104.

[90] *SEE* WILLIAM SWANSON, *THE ESTABLISHMENT OF THE NATIONAL BANKING SYSTEM* 22-57 (1910); HAMMOND, *supra* note __, at 720-725 and 732-733.

[91] Calomiris & Kahn, *supra* note __, at 780.

[92] HAMMOND, *supra* note __, at 732-733; Redford, *supra* note __, at 756 ("Congress attempted to destroy the state banks outright by imposing a punitive tax on state bank notes").

[93] *SEE* FEDERAL RESERVE BOARD, *BANKING STUDIES* 418 (1941), https://fraser.stlouisfed.org/files/docs/publications/books/1941fed_bankingstudies.pdf

only two years later, those figures had almost completely reversed: with a total of 1,294 national banks to only 349 state-chartered banks.[94] The federal government was back in the game, and clearly in it to win it.

The future of state-chartered banks appeared especially bleak after the Supreme Court subsequently affirmed the constitutionality of the 10 percent tax in *Veazie Bank* v. *Fenno*.[95] In a 5-2 decision, Chief Justice Salmon Chase—who in his previous position as Treasury Secretary had actually been one of the principal architects of the National Banking Acts—held that the tax was not only a valid exercise of Congress's taxing power but also, and crucially, its implied power to provide for a national currency.[96] In arriving at this decision, the Court looked beyond the power of Congress to "Coin money" under Article I, Section 8, Clause 5 and articulated an additional implied power "settled by the uniform practice of the government and by repeated decisions"[97] to authorize and regulate the issuance of paper bank notes.[98] In furtherance of this power, the Court then acknowledged that "Congress may restrain, by suitable enactments, the circulation as money of any notes not issued under its own authority," explaining that "[w]ithout this power… its attempts to secure a sound and uniform currency for the country must be futile."[99] Building on the rickety scaffolding first erected in *McCulloch*, the Court in *Veazie* thus both explicitly expanded the constitutional definition of money and firmly established federal supremacy over monetary affairs.[100]

At least that was the theory. Like *McCulloch* and *Briscoe* before it, the Supreme Court in *Veazie* did not abrogate the power of states to charter and regulate banks. Not for the last time, this opened the door for monetary innovation.[101] Instead of continuing to rely on the issuance of taxable bank notes, state-chartered banks increasingly turned to deposit accounts as a way of raising capital and providing customers with a convenient source of money.[102] Customers could draw deposited funds from these accounts by writing checks: negotiable paper instruments enabling a payor to direct payment at a specific time, in a specific amount, to a specific payee. These checks were advantageous for banks because they were not technically bank notes, and thus avoided the 10 percent tax. They were also safer and more

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[94] *Id.*

[95] 75 U.S. 533 (1869).

[96] *Id.*, at 533.

[97] *Id.*, at 548.

[98] *Id.*

[99] *Id.*, at 549.

[100] *See* Note, *Constitutionality of Exclusive Federal Control Over Commercial Banking*, 43 Yale Law Journal 454, 464 (1934) ("The Court thus expanded the constitutional conception of the nation's monetary system to include commercial bank notes, and recognized the paramount authority of the federal government over all forms of money").

[101] Or, perhaps more accurately, borrowing from monetary innovations already in use in the United Kingdom and Continental Europe.

[102] *See* Matthew Jaremski & Peter Rousseau, *The Dawn of an 'Age of Deposits' in the United States*, 87 Journal of Banking & Finance 264 (2018) (tracing the rise of deposit accounts in the U.S. between 1863 and 1913).

convenient for bank customers, who could transfer larger sums of money using a single instrument without leaving themselves exposed to the risks of loss, theft, or destruction associated with paper bank notes.[103] Combined with more permissive regulation, the emergence of checkable deposit accounts led to a resurgence in new state charters: with the total number of state chartered-banks increasing from a low of 247 in 1868 to over 4,000 in 1893, surpassing the total number of national banks.[104] Fearing a potential exodus of customers, many national banks soon began offering their own checkable deposit accounts.

Rather than destroying the state banking system, the National Banking Acts ultimately provided the catalyst for the development and widespread adoption of new types of money not envisioned by the Founding Fathers. Indeed, the practical effect was to introduce the dynamics that would come to define the dual banking system over the next several decades: with the OCC and state banking regulators offering alternative, and often dueling, frameworks for bank chartering, regulation, and supervision.

B. Federal Encirclement and Its Impact

The national banking system suffered from far deeper structural flaws than its vulnerability to tax and regulatory arbitrage. Perhaps most importantly, the system permitted banks to hold a proportion of their required reserves in the form of deposits held with other banks. As a consequence, many rural banks would deposit reserves with banks located in larger towns or cities, which would in turn deposit reserves with banks in financial centers like St. Louis, Chicago, and New York. The problem was that this "pyramiding" of reserves exposed the banks at the top of this system to the risk of highly correlated withdrawals by those at the bottom. This risk was particularly acute in parts of the country still dominated by small-scale agriculture, where the spring planting and fall harvest seasons were associated with predictable spikes in both loan and currency demand from farmers and ranchers. These correlated spikes then forced the rural banks that served them to withdraw reserves from banks higher up in the system.[105] Further compounding matters, the requirement that national banks hold government bonds as collateral against the issuance of new bank notes rendered the money supply extremely inelastic.[106] Specifically, during periods of widespread panic and instability, national banks were understandably reluctant to use their remaining reserves to purchase additional bonds, thereby limiting the capacity of the banking system to expand the money supply in response to an escalating crisis. In the absence of a central bank, this rendered the

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103 Although the risk of theft remained insofar as these checks were made payable to the bearer: i.e. the person in physical possession of the check.

104 *SEE* FEDERAL RESERVE BOARD, *BANKING STUDIES*, *supra* note __, at 418. *See also* Redford, *supra* note __, at 751 and 756.

105 *See* O.M. Sprague, "History of Crises under the National Banking System", in *The National Banking System* 5–35 (1910) (describing the spread of crises under the National Banking System). *See also* Asaf Bernstein, Eric Hughson & Marc Weidenmier, *Identifying the Effects of a Lender of Last Resort on Financial Markets: Lessons from the Founding of the Fed*, 98 Journal of Financial Economics 40, 42 (2010) (describing the drivers of demand during the spring planting and fall harvest seasons).

106 *See* Sprague, *supra* note __.

U.S. banking system and wider economy uniquely vulnerable to bouts of paralyzing illiquidity, along with the resulting contractions in the supply of both money and credit.

Following the Panic of 1907, the desire to "furnish a more elastic currency"[107] became one of the principal drivers behind the enactment of the Federal Reserve Act (FRA).[108] The FRA established the Federal Reserve System: comprised of the Federal Reserve Board in Washington, D.C., along with a network of 12 regional Federal Reserve banks spread out across the country. In addition to mandating that all national banks become members of this new system, the FRA extended the option of membership to state-chartered banks. Fed membership came with several unique privileges.[109] In order to help manage short-term spikes in loan and currency demand, member banks were permitted to borrow money from regional reserve banks.[110] Member banks were also eligible to participate in the Fed's check clearing and collection facilities, and to use its internal telegraph network—known as Fedwire—to send and receive wire transfers.[111] Lastly, member banks enjoyed a variety of other benefits: from subsidized transportation of physical notes and coins, to free custody of government securities, to access to periodic reports written by the regional reserve banks containing granular data and analysis regarding prevailing agricultural, industrial, commercial, and financial conditions.[112] By the end of 1921, these advantages had persuaded 1,631 state-chartered banks—representing a modest 7.7 percent of the national total—to join the Federal Reserve System.[113]

In exchange for these unique privileges, state-chartered banks that elected to become members of the Federal Reserve System became subject to regulation and supervision by federal bank regulators. This included the imposition of bank capital and minimum reserve requirements, ongoing reporting obligations, and periodic inspections by the Fed's regional reserve banks.[114] Member banks were also required to invest a minimum of 6 percent of their capital and any surplus in the stock of the regional reserve bank of which they were a

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107 Ch. 6, 38 Stat. 251 (December 23, 1913), Preamble.

108 For a more detailed description of the circumstances and events culminating in the passage of the FRA, see ROGER LOWENSTEIN, *AMERICA'S BANK: THE EPIC STRUGGLE TO CREATE THE FEDERAL RESERVE* (2015); PETER CONTI-BROWN, *THE POWER AND INDEPENDENCE OF THE FEDERAL RESERVE* (2016).

109 The Federal Reserve even went so far as to publish a brochure extolling the advantages of Fed membership; *see* Federal Reserve Bank of St. Louis, "Advantages of Membership in the Federal Reserve System" (January 25, 1922), https://fraser.stlouisfed.org/files/docs/historical/frbsl_history/general_advantages_membership_1922.pdf.

110 FRA, §§ 10B, 13(2), and 13A.

111 Federal Reserve Bank of St. Louis, *supra* note __, at 3.

112 *Id.*, at 4-5.

113 *Id.*, at 2. There were 21,267 state-chartered banks operating in the U.S. at the end of 1921; *SEE* FEDERAL RESERVE BOARD, *BANKING STUDIES*, *supra* note __, at 418 (1,631/21,267 = 0.0767).

114 *See e.g.* FRA, § 9.

member.[115] Accordingly, while these banks technically retained their state charters, the FRA effectively extended the reach of federal banking regulation and supervision to encompass this small population of state-chartered member banks.[116]

The reach of federal bank regulators would be extended even further in the aftermath of the Great Depression. Between 1930 and 1933, the number of banks operating in the United States fell from 23,045 to 14,233—a dizzying 38 percent drop.[117] Almost 78 percent of this drop was attributable to the failure of state-chartered banks, the vast majority of which were not members of the Federal Reserve System.[118] This unprecedented wave of bank failures wiped out billions of dollars in deposits, representing the accumulated savings of millions of Americans.[119] In response, Congress passed the Banking Act of 1933 establishing the Federal Deposit Insurance Corporation (FDIC) and creating a comprehensive federal deposit insurance scheme.[120] The banks protected by this new scheme—known as "insured depository institutions"—were then subject to prudential regulation and supervision by the FDIC.[121] Importantly, while participation in this new scheme was technically optional for state-chartered banks that were not members of the Federal Reserve System, the competitive advantages of deposit insurance quickly drove widespread adoption.[122] As a consequence, by the end of 1940, over 93 percent of all banks in the United States had become insured depository institutions.[123] Once again, the federal government had successfully expanded its regulatory dominion over state-chartered banks without directly interfering with the power of the states to charter them.

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115 FRA, § 9.1. This investment paid a healthy 6 percent dividend; Federal Reserve Bank of St. Louis, *supra* note __, at 6.

116 *See* Redford, *supra* note __, at 768 ("The state member banks are allowed to retain charter rights as state banks, but they have become subject additionally to the Federal Reserve's authority in the same way that national banks are."); Note, *Constitutionality of Exclusive Federal Control*, *supra* note __, at 465-457 ("The history of American banking legislation has thus been that of a progressive strengthening of power in the national government").

117 *SEE* FEDERAL RESERVE BOARD, *BANKING STUDIES*, *supra* note __, at 418.

118 *Id.*, at 419. *See* also Redford, *supra* note __, at 758, citing T.J. ANDERSON, *FEDERAL AND STATE CONTROL OF BANKING* 312 (1934).

119 Milton Friedman and Anna Schwartz estimate that between 1929 and 1933 these bank failures contributed to a 33 percent decrease in the U.S. money supply; FRIEDMAN & SCHWARTZ, *supra* note __, at 15-17.

120 Ch. 89, 48 Stat. 162 (June 16, 1933).

121 For a detailed description of FDIC regulation and supervision of insured depository institutions, see e.g. 12 U.S.C. §§ 1814-1818, 1828-1829, and 1831.

122 For a detailed description of these competitive advantages, see Butler & Macey, *supra* note __, at 699. Today, much of this optionality has been eliminated.

123 *SEE* FEDERAL RESERVE BOARD, *BANKING STUDIES*, *supra* note __, at 418 (reporting 14,402 national and state-chartered banks as of 1940) and FDIC, Historical Bank Data, http://banks.data.fdic.gov (reporting 13,442 insured banks as of 1940).

The gradual expansion of federal regulation and supervision of state-chartered banks under both the FRA and Banking Act of 1933 has been described as a process of "encirclement".[124] As explained by Professor Emmette Redford in 1966:

> "…the regulatory position of the states is being encircled and partially eclipsed by the assertion of national policy on matters affecting banking. Encirclement leaves state chartering undisturbed but confines or overrides the policy of the state—either directly by enactments having compulsory effect or indirectly by absorption of state banks into national systems by their option."[125]

This encirclement has resulted in a regulatory equilibrium characterized by three core features. First, reflecting the Supreme Court's decisions in *McCulloch*, *Briscoe*, and *Veazie*, both the federal government and states technically retain independent yet overlapping power to charter, regulate, and supervise banks. Second, despite the existence of this dual banking system, the introduction of the Federal Reserve System, FDIC deposit insurance, and other elements of encirclement have given federal bank regulators a high degree of control over the regulation and supervision of state-chartered banks. Third, as described below, the fact that banks are subject to regulation and supervision at both the federal and state level has opened the door to periodic legislative and regulatory turf wars and ongoing coordination problems.[126]

Importantly, while this equilibrium has been a source of frequent jurisdictional conflict, it has also played a critical role in promoting homogeneity, stability, and public confidence in the U.S. money supply. To understand why, we first need to understand the nature of a bank's obligations to its depositors. These obligations are based on a constellation of contractually enforceable promises to accept deposits from customers, credit these deposits to their account with the bank, transfer them in accordance with their instructions, and withdraw them on demand.[127] Like any other business, the ability of a bank to honor these promises depends on its creditworthiness, along with the strength of any prudential regulatory framework that governs it.

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[124] *See* Redford, *supra* note __, at 750. This encirclement was further reinforced by both the Bank Holding Company Act of 1956, 12 U.S.C. § 1841 *et seq*. (BHCA) and Federal Deposit Insurance Corporation Improvement Act of 1991, 12 U.S.C. § 1811 (FDICIA). The BHCA imposes an additional layer of federal supervision, activity restrictions, and other regulatory requirements on the holding companies, subsidiaries, and affiliates of both federal and state-chartered banks. The FDICIA prohibited state-chartered banks from making any investments or engaging in activities as principal that national banks were not permitted to make or undertake without the prior approval of the FDIC (12 U.S.C. § 1831a and 12 C.F.R. § 362); SEE BARR, JACKSON & TAHYAR, *supra* note __, at 59 and 183.

[125] Redford, *supra* note __, at 750.

[126] *See* Kenneth Scott, *The Patchwork Quilt: State and Federal Roles in Bank Regulation*, 32 Stanford Law Review 687, 688 (1980) (describing four major patterns in the dynamics between state and federal law in the domain of banking regulation depending, *inter alia*, on the specificity with which Congress has authorized or prohibited state regulation on a particular matter).

[127] For a more detailed understanding of bank deposits as contractual promises, *see* AWREY, *BEYOND BANKS, supra* note __.

Historically, the confluence of these factors was reflected in the fact that while the bank notes of financially healthy and well-regulated banks were typically accepted at or near face value, those of weaker banks would often change hands at a discount.[128] This legal and economic heterogeneity was most evident during the free banking era, when publications like *Thompson's Bank Note Reporter* regularly reported on the creditworthiness of different banks, thereby enabling bankers and merchants to differentiate between the value of different bank notes.[129] This heterogeneity generated strong incentives for noteholders—and later depositors—to conduct due diligence into the creditworthiness of different banks. In turn, the need to conduct due diligence drove high information costs, thus making noteholders and depositors more likely to run at the first sign of trouble.

The process of federal encirclement has greatly reduced this legal and economic heterogeneity. The principal means by which it has achieved this objective has been the creation of a single financial safety net for both national and state-chartered banks. Today, this safety net has three core pillars. The first is the Federal Reserve System and its arsenal of emergency lending facilities. These "lender of last resort" facilities enable banks facing an incipient run to sell assets or obtain short-term loans, the proceeds of which can then be used to pay their depositors and other creditors.[130] The second pillar is the FDIC's deposit insurance scheme. At present, this scheme guarantees 100 percent of covered deposits held by a failed bank up to a maximum of $250,000 per depositor.[131] Lastly, the FDIC's resolution framework enables the FDIC to take control of a failing bank and endows it with a range tools designed to minimize any further losses.[132] These tools include the ability to write down a bank's uninsured liabilities, convert its outstanding debt into equity, and transfer its assets to either a private sector purchaser or public sector bridge bank.[133] Armed with these tools, the FDIC will typically trigger the resolution process after the close of business on Friday afternoon,

[128] *See* Hugh Rockoff, *The Free Banking Era: A Reexamination*, 6 Journal of Money Credit & Banking 141, 150 (1974); Gary Gorton, *Pricing Free Bank Notes*, 44 Journal of Monetary Economics 33 (both exploring the causes of the discounts applied to the notes issued by different banks during the free banking era).

[129] *See* Awrey, *Bad Money*, *supra* note __, at 13-17.

[130] Banks that are members of the Federal Reserve can obtain advances under § 10D of the FRA or sell securities to the Fed under § 13.1. Banks that are not members of the Federal Reserve can only sell securities to the Fed under section § 13.1.

[131] *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111–203, 124 Stat. 1376 (July 21, 2010), § 335(a) (making permanent the increase of FDIC insurance coverage to $250,000). The $250,000 limit is calculated per depositor, per account category, per bank.

[132] *See* Federal Deposit Insurance Act § 2; 12 U.S.C. § 1821(d)(13)(E) (requiring the FDIC to maximize the net present value, or minimize any loss, from the sale of a failed bank's assets); 12 C.F.R. § 360.1 (2021) (requiring the FDIC to pursue the resolution option that would impose the lowest costs on the deposit insurance fund). For a more detailed description of the rationale for, and mechanics of, the resolution process, see FDIC, "About FDIC: What We Do", (May 15, 2020), https://www.fdic.gov/about/what-we-do/index.html; John Armour, "Making Bank Resolution Credible", in NIAMH MOLONEY ET AL. (EDS), *THE OXFORD HANDBOOK OF FINANCIAL REGULATION* 453 (2015).

[133] *See* 12 U.S.C. §§ 1818, 1819 and 1821(c) (articulating the FDIC's full powers as receiver).

with the newly acquired or restructured bank then opening its doors for business as usual first thing on Monday morning.

The three pillars of the financial safety net support the stability of the U.S. monetary system in a variety of important ways. First, from the perspective of the vast majority of depositors with less than $250,000 in their bank account, FDIC deposit insurance completely eliminates their exposure to changes in their bank's creditworthiness. It also renders them insensitive to differences between the creditworthiness of different banks. As a consequence, depositors have a high level of confidence that their money is safe, and that people will be willing to accept these deposits as money "no questions asked".[134] Second, from the perspective of a bank's uninsured depositors, the FDIC resolution process typically delivers far higher recovery rates, far more quickly than would be the case if they were treated as general unsecured creditors.[135] Indeed, in recent decades, uninsured depositors have been almost completely insulated from any losses whatsoever.[136] Third, by providing a bulwark against financial panics, the Federal Reserve's emergency lending facilities help reduce the probability and impact of both idiosyncratic bank failures and the prospect of broad contractions in the money supply triggered by more widespread banking panics. Together, these pillars can be understood as driving a virtuous circle: with the financial safety net promoting public confidence in bank deposits as a source of money, public confidence in deposits reducing the probability of destabilizing bank runs, and fewer bank runs bolstering the stability of the monetary system—thus promoting greater confidence.

C. The Dual Banking System Today

This unique regulatory equilibrium has remained relatively stable for almost a century. Yet it has not remained completely static. Reflecting jurisdictional differences in the intensity of bank regulation, supervision, and enforcement, there have been periodic oscillations in both the relative popularity of state versus federal bank charters and in the perceived desirability of membership in the Federal Reserve System (*see* Figure 2).[137] For example, in the midst of a significant spike in interest rates during the late 1970s, the Federal Reserve's relatively onerous reserve requirements prompted many state-chartered banks to relinquish their status as

134 *See* Gary Gorton, Chase Ross & Sharon Ross, "Making Money", National Bureau of Economic Research Working Paper No. 29710 (January 2022); Bengt Holmstrom, "Understanding the Role of Debt in the Financial System", Bank for International Settlements Working Paper No. 479 (January 2015).

135 Indeed, prior to the creation of the FDIC resolution framework, the standard practice in bankruptcy proceedings was to treat the depositors of a failed bank as simply another class of unsecured creditors; *see* FDIC, *RESOLUTIONS HANDBOOK* 24–25 (2014).

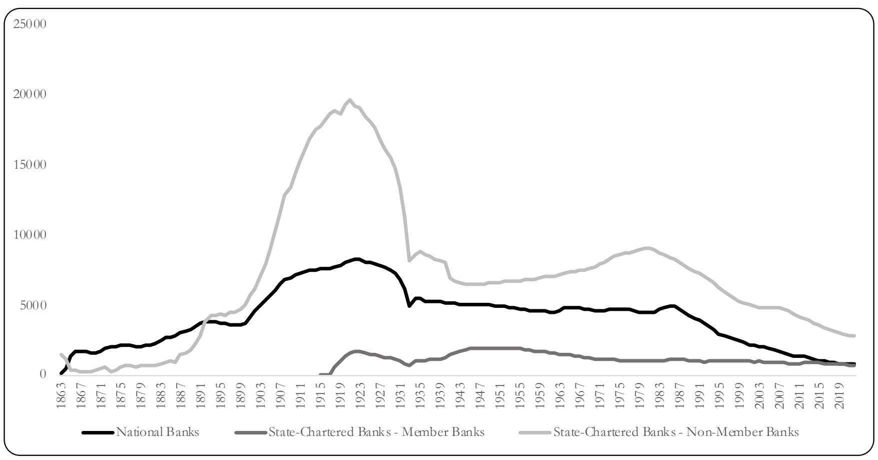
136 *See* Michael Ohlrogge, *Why Have Uninsured Depositors Become De Facto Insured?*, 100 NYU Law Review [forthcoming].

137 *See* Scott, *Dual Banking*, *supra* note __, at 24-29 (reporting the number of new state and national bank charters and charter conversions between 1950 and 1974).

member banks.[138] Congress responded by passing the Monetary Control Act of 1980,[139] which effectively imposed the Fed's reserve requirements on *all* state-chartered depository institutions regardless of their membership status.[140] Cutting in the other direction, New York-chartered Marine Midland Bank, frustrated with the refusal of the NYDFS to approve its proposed merger with HSBC, converted to a national charter in 1980—paving the way for what was then the largest bank merger in U.S. history.[141] And perhaps most infamously, venerable JPMorgan converted from a New York state to a national bank charter in 2004, allegedly in response to restrictive and conflicting state banking laws and what it viewed as the overly aggressive enforcement posture of the NYDFS.[142]

Figure 2

Number of National versus State-Chartered Banks



Source: Federal Reserve (1863-1940), FDIC (1941-1980), and FFIEC (1981-2022)

Perhaps not surprisingly, the dual banking system has also been a battleground for disputes over the nature and scope of federal preemption.[143] In recent decades, the federal

[138] *SEE* EDWARD SYMONS & JAMES WHITE, *BANKING LAW* 75 (2d ed. 1984). *See also* Butler & Macey, *supra* note __, at 694-695.

[139] 94 Stat. 132 Pub. L. 96-221 (March 31, 1980).

[140] 12 U.S.C. § 461. In exchange for the imposition of these reserve requirements, non-member depository institutions were permitted to use the services that were previously only available to members of the Federal Reserve System.

[141] *See* Judith Miller, "Midland Conversion Approved; National-Bath Status Clears Path for Merger 'Sound' and 'Well Managed' Midland", *NEW YORK TIMES* (January 29, 1980). *See also* Felsenfeld & Bilali, *supra* note __, at 53-55.

[142] *See* discussion in Felsenfeld & Bilali, *supra* note __, at 57.

[143] For an overview of the jurisprudence on federal preemption of state banking laws over the course of the twentieth century, see generally John Duncan, *The Course of Federal Pre-emption of State Banking Law*, 18 Annual Review of Banking Law 221 (1999).

government has clashed with various states over a wide range of banking issues: everything from the ability of national banks to underwrite insurance[144] and the application of state usury laws,[145] to the regulatory treatment of "rent-a-bank" strategies[146] and the legality of marijuana banking.[147] In the years leading up to the global financial crisis, preemption disputes arose over attempts to regulate predatory lending practices within the mortgage, credit card, and auto loan markets.[148] In its aftermath, disputes have also arisen over Congress's legislative response to the crisis: including the creation of the federal Consumer Financial Protection Bureau (CFPB).[149] And most recently, state and federal regulators have fought over whether the National Banking Acts empower the OCC to issue special purpose charters to non-bank "fintech" platforms.[150] These frequent border disputes have become a fixture of the dual banking system: with new preemption cases arising in connection with almost every significant new market development and regulatory intervention.[151]

Viewed in wider perspective, these preemption battles have done little to dent federal supremacy over bank regulation and supervision. In addition to the *de jure* supremacy created

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[144] *See e.g. NationsBank* v. *VALIC*, 513 U.S. 251 (1995).

[145] *See Madden* v. *Midland Funding, LLC*, 786 F.3d 246 (2d Cir. 2015), *cert. denied*, 136 S. Ct. 2505 (2016); *Consumer Financial Protection Bureau* v. *CashCall, Inc. et al.*, 2016 WL 4820635 (C.D. Cal. Aug. 31, 2016). For academic commentary on *Madden* and some of the proposed legislative responses, see Adam Levitin, "'*Madden* Fix' Bills are a Recipe for Predatory Lending", *AMERICAN BANKER* (August 28, 2017), https://www.americanbanker.com/opinion/madden-fix-bills-are-a- recipe-for-predatory-lending.

[146] *See* Adam Levitin, *Rent-a-Bank: Bank Partnerships and the Evasion of Usury Laws*, 71 Duke Law Journal 329 (2021).

[147] *See* Julie Hill, *Banks, Marijuana, and Federalism*, 65:3 Case Western Reserve Law Review 597 (2015).

[148] *See e.g. Cuomo* v. *Clearing House Ass'n, L.L.C.*, 557 U.S. 519 (2009); *Watters* v. *Wachovia Bank, N.A.*, 550 U.S. 1 (2007); *Barnett Bank of Marion County, N.A.* v. *Nelson*, 517 U.S. 25 (1996). The decisions in *Cuomo* and *Watters* followed the OCC's adoption in 2004 of a regulation pre-empting the application of state predatory lending laws to national banks; 12 C.F.R. §34.4a. For academic commentary, see e.g. Kathleen Engel & Patricia McCoy, *Federal Preemption and Consumer Financial Protection: Past and Future*, 3 Banking & Financial Services Policy Reports 25 (2012); Adam Levitin, *Hydraulic Regulation: Regulating Credit Markets Upstream*, 26 Yale Journal on Regulation 143 (2009); Nicholas Bagley, *The Unwarranted Regulatory Preemption of Predatory Lending Laws*, 79 NYU Law Review 2274 (2004).

[149] In addition to creating the CFPB, section 1044 of the Dodd-Frank Act established a new standard for OCC review in cases involving the possible preemption of state consumer protection laws. The impact of this new standard is contested and border disputes between federal banking agencies and the states are still frequent; see e.g. Letter from Letitia James, Attorney General of the State of New York to Michael Hsu, Acting Comptroller of the Currency, "Supervisory Guidance Requested: State Investigation of Federally Chartered Banks" (December 6, 2023), https://ag.ny.gov/sites/default/files/letters/multistate-ltr-to-occ.pdf.

[150] *See Lacewell* v. *Office of the Comptroller of the Currency*, 999 F.3d 130 (2d Cir. 2021). For academic commentary on the issues in *Lacewell*, see Brief of Professor David Zaring as Amicus Curiae in Support of the Appellants, No. 19-4271 (2d Cir. April 30, 2020) and Brief of Thirty-Three Banking Law Scholars as Amicus Curiae in Support of the Appellee, No. 19-4271 (2d Cir. July 29, 2020) [briefs on file with author].

[151] Continuing this trend, in February 2024 the Supreme Court heard arguments in *Cantero et al.* v. *Bank of America*, N.A., challenging the applicability of state laws requiring the payment of interest on mortgage escrow accounts to national banks; *see* 49 F.4th 121 (2d Cir. 2022). The case was decided on May 30, 2024.

and exercised through mechanisms like FDIC deposit insurance and membership in the Federal Reserve System, the federal government and bank regulators also wield enormous *de facto* power. While state-chartered banks outnumber national banks by a ratio of approximately five-to-one, national banks still account for almost two thirds of all U.S. bank assets and deposits.[152] The Federal Reserve is also the consolidated supervisor for all eight of the "global systemically important" U.S. banking groups designated by the Financial Stability Board.[153] And of course, it is Congress—not the states—that is inevitably left holding the bag when these banks become too big to fail.

For well over a century, federal supremacy over banking and banks has translated into almost complete control over monetary affairs. This control has been wielded to erect a financial safety net for both national and state-chartered banks: thereby promoting homogeneity, stability, and public confidence in the bank deposits that make up the vast majority of our money. Yet as described in Part II, this control is now under threat from a new breed of technology-driven financial institutions, chartered and regulated almost entirely at the state level, that provide money and payments outside the perimeter of both conventional bank regulation and the financial safety net. These experiments are slowly but inexorably changing the constitution of money.

II. THE CHANGING CONSTITUTION OF MONEY

There is no question that banks still reside at the apex of the U.S. monetary system. Not only do bank deposits represent over 90 percent of all the dollars currently in circulation, the legal and institutional machinery of the monetary system has long been specifically designed by and for banks.[154] But no monetary, regulatory, or technological equilibrium lasts forever. Over the past several decades, the U.S. banking system has been remarkably slow to embrace a wide range of transformative technological advances—everything from the internet, to smartphones, to modern web-based application programming interfaces (APIs).[155] The

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152 *See* FDIC, State Tables, https://state-tables.fdic.gov/ (reporting total assets of $23,408,839,000,000 (with $14,887,014,000,000 attributable to national banks) and total deposits of $18,553,521,000,000 (with $11,710,870,000,000 attributable to national banks)).

153 *See* Financial Stability Board, "2023 List of Global Systemically Important Banks (G-SIBs)" (November 27, 2023), https://www.fsb.org/2023/11/2023-list-of-global-systemically-important-banks-g-sibs/.

154 *See* Awrey, *Unbundling*, *supra* note __ (describing the financial safety net and privileged payment system access enjoyed by banks).

155 *See* U.S. Department of the Treasury, "A Financial System that Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation" 156 (2018); Morten Bech, Yuuki Shimizu & Paul Wong, "The Quest for Speed in Payments", BIS Quarterly Review: International Banking and Financial Market Developments 57, 59–60 (2017); Kathleen Elkins, "Why It Took the US So Long to Adopt the Credit Card Technology Europe Has Used for Years", *Business Insider* (September 27, 2015), https://www.businessinsider.com/why-it-took-the-

failure to capitalize on these advances has in turn opened the door for the emergence of a new breed of technology-driven financial institutions. Amongst a variety of other benefits, these institutions promise their customers faster, cheaper, safer, more convenient, and more accessible money and payments. Accordingly, while today these new institutions only represent a tiny fraction of the total money supply, they are also steadily growing in popularity, size, and economic importance.

This new and rapidly expanding universe of monetary institutions encompasses a diverse range of technologies and business models. Yet one thing almost all of these institutions share in common is the fact that they carry on business outside the perimeter of federal and state bank regulation.[156] This raises two important questions from the perspective of money and federalism. First, who exactly regulates these new monetary institutions? Second, do the regulatory frameworks that govern them protect customers, prevent runs, and promote public confidence and trust in the monetary system? To help answer these questions, this Part examines three of the state-level regulatory frameworks that currently govern these institutions: state money transmitter licenses, New York's Bitlicense, and Wyoming's special purpose depository charter. As we shall see, these regulatory frameworks have solidified the longstanding role of the states as laboratories of monetary innovation. In the process, they have also emerged as a new front in the centuries-old war between Congress and the states for control of the monetary system.

A. State Money Transmitter Licenses

Long before the invention of the internet, smartphones, or web-based APIs, there was another technological breakthrough that promised to revolutionize finance: the telegraph. In the United States, firms like Western Union quickly emerged to capitalize on this new technology, offering their customers the ability to transfer money rapidly and across long distances using the country's expanding network of telegraph lines. The process of sending a telegraphic wire transfer would begin when a customer delivered funds—typically cash or a check—to a local branch office of one of these money transmitters. The branch office would then take possession of these funds and send a coded message to another branch office instructing them to deliver funds to a designated recipient. Thus, for example, Katie could walk into a branch of Western Union in Albuquerque, New Mexico with a crisp $100 bill and instruct the clerk to deliver equivalent funds to her sister Sarah in Bar Harbor, Maine. The clerk in Albuquerque would then send a telegraph to her counterpart in Bar Harbor authorizing the payment of $100 to Sarah. While the underlying technology would in time shift from the telegraph to the telex, and eventually to the internet, these money transmitters remain an important cog in the vast institutional machinery at the heart of both the domestic and international payment systems.

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us-so-long-to-adopt-emv-2015-9 (all exploring why the U.S. has been a global laggard in the adoption of new payment technologies).

[156] And indeed, even those that fall partially within this perimeter—like Wyoming special purpose depository institutions—are clearly distinguishable from conventional deposit-taking banks.

In the United States, responsibility for the licensing and regulation of these money transmitters has historically fallen to each of the 50 states.[157] Over time, the regulatory frameworks governing money transmitters have come to revolve around three principal tools.[158] First, *permissible investment restrictions* dictate the type of investments that money transmitters can make with the funds they receive from their customers.[159] In theory, by limiting their investments to bank deposits, government bonds, and other highly liquid short-term money market instruments, these restrictions can reduce the probability that large fluctuations in the value of these investments might force money transmitters into bankruptcy. Second, building on these permissible investment restrictions, *minimum net worth requirements* ensure that money transmitters have enough equity capital and retained earnings to survive a significant fall in the value of their investment portfolios.[160] And third, *security requirements* ensure that—in the unlikely event a money transmitter is forced into bankruptcy—a pool of assets will be set aside for the benefit of its customers.[161] Together, these regulatory strategies are designed to "preserve public confidence in the financial services sector" and "protect customers from harm".[162]

These regulatory strategies were perhaps sufficient in a world where money transmitters only owed money to their customers for however long it took Katie's sister Sarah to get down to the nearest branch. In effect, the fleeting nature of these obligations meant both that money transmitters were not generally in a position to make risky investments with customer funds, and that customers were only briefly exposed to the risk that the money transmitter might go bankrupt.

Yet that is no longer the world in which we live. Today, popular money transmitters like PayPal and its sister platform Venmo hold far more customer funds, often for far longer periods of time, thereby enabling them to accumulate vast pools of longer term investment capital (*see* Figure 3). This change is being driven, at least in part, by the growing number of Gen Z and millennial customers that use these peer-to-peer (P2P) payment platforms as a substitute for conventional checking accounts.[163] State-level money transmitter licenses have

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[157] The notable exception being for the purposes of anti-money laundering and counter-terrorism financing, where federal law applies to the activities of financial institutions and "money services businesses," including state-licensed money transmitters; *see* 31 U.S.C. §5330 *et seq.* and 18 U.S. § 1960 *et seq.*

[158] *See* Uniform Law Commission, *Uniform Money Services Act* (2004), https://www.uniformlaws.org/viewdocument/final-act-8?CommunityKey=cf8b649a-114c-4bc9-8937-c4ee17148a1b&tab=librarydocuments.

[159] *Id.*, sections 701 and 702 (model provisions and commentary on permissible investment restrictions).

[160] *Id.*, section 207 (model provisions and commentary on minimum net worth requirements).

[161] *Id.*, section 204 (model provisions and commentary on security requirements). These security requirements can include surety bonds, ring-fenced bank accounts, or letters of credit.

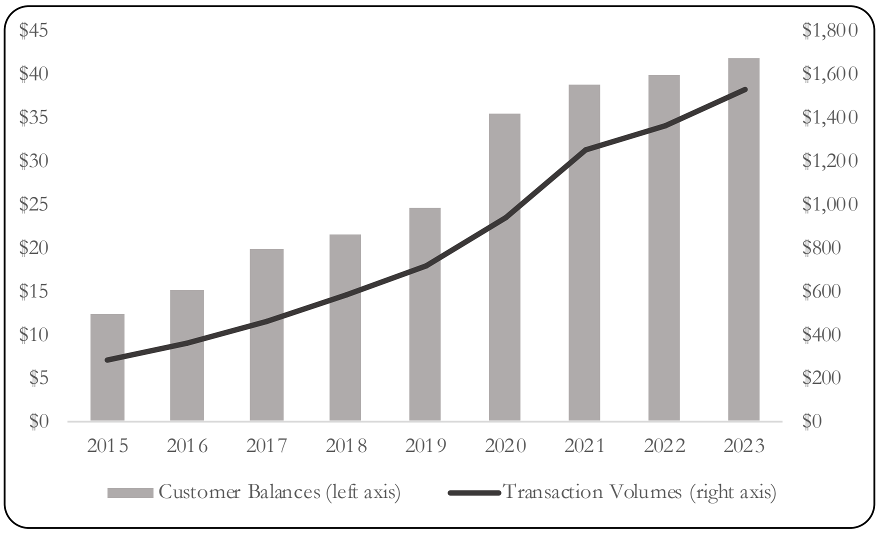
[162] *Id.*, 2.

[163] *See* Ron Shevlin, "The Growing Domination of Chime, Cash App, and PayPal in Banking", *FORBES* (March 1, 2022) (reporting on the findings of a report from Cornerstone Advisors suggesting that the use of platforms like PayPal, CashApp, and Chime as a "primary checking account" effectively tripled between 2020 and 2022). *See also* Raul Carrillo, *Platform Money*, Yale Journal on Regulation [forthcoming].

also become the U.S. regulatory frameworks of choice for many cryptocurrency exchanges and lending platforms.[164] While we might not yet think of these new intermediaries as important providers of money and payments, industry leaders like Coinbase have spent millions on high profile advertising campaigns positioning themselves as "the future of money".[165] And most recently, the social media platform X—formerly known as Twitter—has sought and obtained money transmitter licenses in contemplation of launching its own integrated web-based payment platform.[166]

Figure 3

Growth in PayPal Customer Balances (USD billions)



Source: PayPal Holdings, Inc. Annual Reports (2015-2023)

In strictly financial terms, this new generation of money transmitters is still nowhere close to rivalling the enormous scale, scope, or economic importance of conventional deposit-taking banks. Yet in broader social terms, PayPal, Venmo, and other payment platforms are already deeply embedded in modern financial and technological culture: with the word Venmo even entering the *Urban Dictionary* in 2016 as a noun meaning "to send money".[167] And as the advertising campaigns of Coinbase and other crypto intermediaries—sometimes cynically—

164 *SEE* AWREY, *BEYOND BANKS*, *supra* note __, chapter 6.

165 *See e.g.* Coinbase, "The Future of Money is Here—And It's Crypto", Blog (December 19, 2023), https://www.coinbase.com/de/blog/the-future-of-money-is-here-and-its-crypto; Coinbase, "Future of Money" TV Advertisement, https://www.youtube.com/watch?v=BHP_S2qi1eo.

166 *See* James Pothen, "X Adds State Money Licenses in Pursuit of Payments", *PAYMENTSDIVE* (August 28, 2023), https://www.paymentsdive.com/news/x-twitter-payments-app-elon-musk-money-transmitter-license-maryland-georgia/691943/.

167 *See* Urban Dictionary, definition of "Venmo" (noun), https://www.urbandictionary.com/define.php?term=Venmo.

remind us, money is as much a social construct as it is a legal, institutional, or technological one. Looking ahead, this makes the regulation of these new monetary institutions extremely important if financial policymakers want to preserve public confidence in the integrity and stability of the monetary system.

Yet this brave new world of PayPal, Venmo, Coinbase, and Twitter is not the world for which state money transmitter laws were originally created. Despite recent attempts to modernize them, many of these state laws have still not been updated to reflect changing technology, business models, or consumer behavior.[168] Compounding matters, permissible investment restrictions vary significantly from state to state: with many states permitting investments in a variety of longer term, risky, and illiquid assets like stocks, bonds, mortgage-backed securities, and opaque intragroup debt.[169] In many cases, minimum net worth requirements also only provide a very thin layer of protection against losses on these investments, thereby increasing the probability of bankruptcy. And if and when these money transmitters do go bankrupt, lax security requirements mean that customers will often only get back a fraction of their money. As explored in greater detail in Part III.B, these antiquated state laws thus pose significant and growing risks for consumers and, perhaps one day, for the stability of the monetary system.

B. The New York Bitlicense

Reflecting in part the inadequacy of state money transmitter laws, a small handful of states have unveiled bespoke licensing and regulatory frameworks for these new monetary institutions.[170] Yet despite the growing popularity of P2P payment platforms like PayPal, Venmo, and Cash App, the vast majority of these frameworks have been specifically created to support the development of the emerging ecosystem for so-called digital assets—more commonly known as crypto. The crypto ecosystem revolves around digital assets like Bitcoin, Ethereum, and Tether that are based on pairs of cryptographic keys: a "public" key that can be seen by anyone, and a "private" key known only to the owner of the digital asset.[171]

168 *See* Conference of State Bank Supervisors (CSBS), "Model Money Transmission Modernization Act" (October 30, 2024), https://www.csbs.org/csbs-money-transmission-modernization-act-mtma. As of October 2024, the CSBS reports that 26 states have adopted its model law either in whole or in part.

169 For a comprehensive survey of state money transmission laws, their heterogeneity, and shortcomings, see Awrey, *Bad Money*, *supra* note __.

170 States that have created new licensing frameworks specifically for crypto intermediaries include Louisiana and New York. States that have incorporated digital assets into their existing money transmitter laws include Arkansas, Colorado, Connecticut Georgia, Idaho, Illinois, Maine, Maryland, North Carolina, Ohio, Rhode Island, South Dakota, Utah, and Washington.

171 *See generally* Igor Makarov & Antoinette Schoar, *Cryptocurrencies and Decentralized Finance*, National Bureau of Economic Research Working Paper No. 30006 (2022) (providing an extensive treatment of cryptocurrencies); Council of Economic Advisers, Economic Report of the President 237-273 (2023), https://www.whitehouse.gov/wp-content/uploads/2023/03/erp-2023.pdf. *See also* Hilary Allen, *$=€=Bitcoin?*, 76 Maryland Law Review 877, 886-87 (2017) (describing Bitcoin basics); Giordano De Marzo, Francesco Pandolfelli & Vito Servedio, *Modeling Innovation in the Cryptocurrency Ecosystem*, 12 Scientific Reports 12942 (2022) (defining blockchain).

Together, these public and private keys enable the users of a given network to authenticate the ownership of these assets, and to transfer them to other network users. The networks themselves are built on a type of decentralized database known as a distributed ledger or "blockchain". While the features of these blockchains vary from network to network, most envision some type of direct participation by their users in ongoing network governance, technological development, and even the verification of individual transactions. They also typically record final settlement using a unique cryptographic signature, creating a publicly verifiable record of all transactions on the network.

Amongst the new licensing and regulatory frameworks created specifically to support the crypto ecosystem is New York state's groundbreaking "Bitlicense".[172] Launched by the NYDFS in 2015, the Bitlicense framework applies to all "virtual currency business activity" that has a connection with the state of New York or one of its residents.[173] The activities captured by this definition include a wide range of financial products and services, including issuing, administering, or controlling a "virtual currency," or receiving, holding, or transmitting virtual currency as a business on behalf of customers.[174] This broad definition reflects both the evolving structure of the crypto ecosystem, together with the corresponding desire on the part of the NYDFS to capture the widest possible range of crypto-related activities.

Importantly for our purposes, the definition of a virtual currency under the Bitlicense framework captures a species of cryptocurrency known as "stablecoins".[175] In a nutshell, stablecoins are virtual currencies that are designed to maintain a stable nominal value in relation to an underlying reference asset like the U.S. dollar, euro, or Chinese yuan.[176] Thus, for example, the value of a U.S. dollar denominated stablecoin like Tether or Circle's USDC should in theory be capable of being bought, sold, or redeemed at any time for exactly one dollar—just like the U.S. dollar itself.[177] At least in theory, this stable nominal value makes stablecoins a potential substitute for conventional bank deposits.

In order maintain this stable nominal value, stablecoins are typically either collateralized by assets denominated in the same currency or use sophisticated algorithms that automatically change their outstanding supply in response to changes in demand.[178] While

[172] *See* New York Regulations, 23 CRR-NY § 200 *et seq.*

[173] 23 CRR-NY § 200.2.

[174] *Id.*

[175] A "virtual currency" is defined to include "any type of digital unit that is used as a medium of exchange or a form of digitally stored value"; 23 CRR-NY § 200.2(p).

[176] For a more detailed description of stablecoins and their mechanics, see Dan Awrey, *Bad Money*, *supra* note __; Gorton & Zhang, *supra* note __. *See also* Garth Baughman, Francesca Carapella, Jacob Gerszten & David Mills, *The Stable in Stablecoins*, FEDS NOTES (December 16, 2022) (explaining the mechanics of stablecoins).

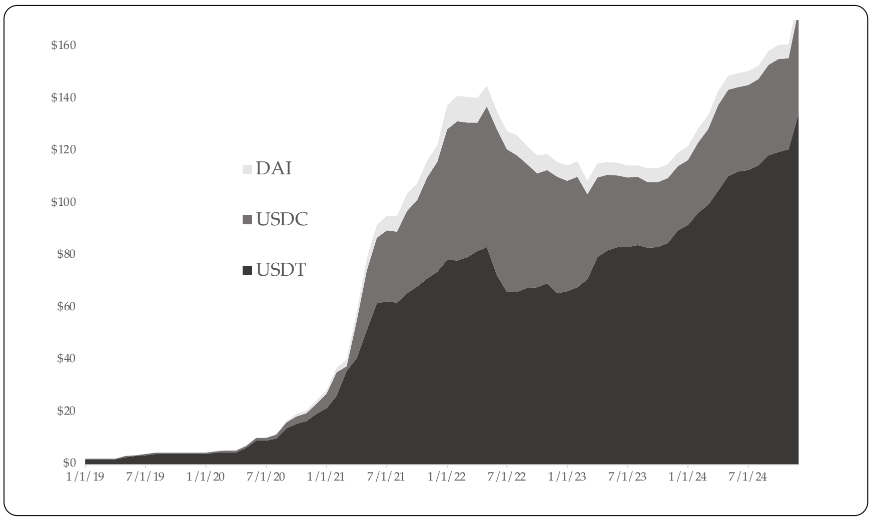
[177] Not including any transaction fees associated with the sale or redemption.

[178] Although significant questions remain around how successful collateralization and algorithmic stabilization are in ensuring that stablecoins can maintain their nominal value, especially during periods of market stress; see e.g. Anneke Kosse, Marc Glowka, Ilaria Mattei & Tara Rice, "Will the Real Stablecoin Please Stand

stablecoins were originally created as a technological bridge between otherwise incompatible blockchain networks, many observers now view them as the potential backbone of a new and better monetary system.[179] While it remains to be seen whether this new system will eventually emerge and take root, the market capitalization of the three five stablecoins has exploded in the last several years: from roughly $2 billion in January 2019 to almost $170 billion in December 2024 (*see* Figure 4).

Figure 4

Market Capitalization of Top Three Stablecoins (USD billions)



Source: CoinMarketCap.com (own calculations; top three as of December 2024)

The Bitlicense framework requires any crypto intermediary involved in the issuance, administration, control, custody, or transfer of a stablecoin to obtain a license from the NYDFS.[180] Licensed intermediaries are then subject to ongoing prudential regulation and supervision: including capital, examination, reporting, recordkeeping, and cybersecurity requirements.[181] The Bitlicense framework also requires these licensees to fully disclose all material risks to their customers. This includes the fact that stablecoins are not legal tender, that customers are not protected by FDIC or other deposit insurance schemes, and that

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Up?", Bank for International Settlements Paper No. 141 (November 2023) (classifying stablecoins and evaluating the ability of each class to maintain its nominal value).

179 *See e.g.* Christian Catalini & Jai Massari, "Stablecoins and The Future of Money", Harvard Business Review (August 10, 2021) ("the benefits of stablecoins include lower-cost, safe, real-time, and more competitive payments compared to what consumers and businesses experience today.").

180 23 CRR-NY § 200.3. The framework contemplates exemptions for banks chartered in New York that have been authorized to engage in virtual currency business activity, and for merchants and customers that use virtual currency solely for the purchase or sale of goods or services or for investment purposes; *id.*

181 *See* 23 CRR-NY § 200.8 (capital requirements), § 200.12 (recordkeeping requirements), § 200.13 (examination requirements), § 200.14 (reporting requirements), and § 200.16 (cybersecurity requirements).

measures designed to protect customer assets may not be sufficient to completely insulate them from future losses.[182]

The Bitlicense framework also incorporates several measures specifically designed to protect customer assets in the event of a licensee's bankruptcy. All licensees are required to maintain a U.S. dollar surety bond or trust account for the benefit of their customers.[183] Where a licensee elects to directly store, hold, or maintain custody or control of a virtual currency on behalf of its customers, it will then also be subject to permissible investment restrictions that require it to hold the same type and amount of virtual currency.[184] For example, if a customer holds 100 USDC through their account with a licensee, the licensee must also hold 100 USDC—thus effectively mirroring its customer's position. Licensees are also prohibited from selling, transferring, assigning, lending, hypothecating, pledging, or otherwise using or encumbering customer assets, except in connection with the sale, transfer, or assignment of these assets at the customer's direction.[185] These permissible investment restrictions are designed to minimize any mismatches between a licensee's assets and liabilities that might otherwise increase the threat of destabilizing runs, along with the corresponding probability and potential impact of bankruptcy.

Conversely, where a licensee elects to hold customer assets indirectly through a trust account, this account must be maintained with a qualified custodian licensed by the NYDFS to engage in virtual currency business activities.[186] As of writing, these qualified custodians include New York limited purpose trust companies like Paxos Trust Company, Coinbase Custody Trust, and Fidelity Digital Asset Services.[187] By holding customer assets through a qualified arm's length party, these custody requirements are designed to legally and economically separate the assets of the licensee from those of its customers—thereby ringfencing them in the event of the licensee's bankruptcy.

The Bitlicense framework has often been held up as the "gold standard" [188] of crypto regulation in the United States: with industry leaders like Coinbase, Circle, Robinhood, and

182 23 CRR-NY § 200.19(a).

183 23 CRR-NY § 200.9(a).

184 23 CRR-NY § 2009(b). In response to the 2022 "crypto winter", the NYDFS has also issued guidance to both licensees and limited purpose trust companies regarding the custody of virtual assets; see NYDFS, Industry Letter, "Guidance on Custodial Structures for Consumer Protection in the Event of Insolvency" (January 23, 2023).

185 23 CRR-NY § 2009(c).

186 *Id.*

187 For an overview of New York limited purpose trust companies and their regulation, see NYDFS, "Organization of a Trust Company for the Limited Purpose of Exercising Fiduciary Powers", https://www.dfs.ny.gov/apps_and_licensing/banks_and_trusts/procedure_certificate_merit_trust_comp.

188 *See e.g.* NYDFS Press Release, "Superintendent Linda A. Lacewell Announces PayPal to be the First Approved Entity for DFS Conditional BitLicense" (October 21, 2020) (quoting Charles Cascarilla, then CEO of Paxos, as referring to New York as "the gold standard of cryptocurrency regulation").

Ripple all amongst the first wave of licensees.[189] Yet buried deep within the fine print of this new framework are a number of serious, and potentially fatal, flaws. As a starting point, the Bitlicense only permits licensees to operate in the state of New York. Crypto intermediaries looking to carry on business nationally must therefore obtain money transmitter (or other equivalent) licenses in each and every other state. Second, the capital, surety bond, and other key prudential requirements are generally left to the discretion of the NYDFS on a case-by-case basis: raising the troubling prospect of significant divergence in the rules applied to different licensees. These licensee-specific requirements are also not publicly disclosed—leaving customers to speculate about the precise substance, scope, and effectiveness of the relevant regulatory safeguards.

This combination of discretion and opacity is particularly concerning in light of an audit report published by the New York State Comptroller in January 2024 highlighting significant failures by the NYDFS in its oversight of the Bitlicense framework.[190] Compounding matters, while the framework contemplates relatively tight permissible investment restrictions in connection with a customer's *crypto* assets, there is no specific mention of any corresponding restrictions on how a licensee can invest U.S. dollar and other fiat currency balances. And most importantly, both licensees themselves and the limited purpose trust companies that serve as qualified custodians are still subject to general corporate bankruptcy law.[191] Just like state money transmitter laws, this introduces the risk that the customers of a failed licensee may ultimately only get back a fraction of their money at the conclusion of a complex and lengthy bankruptcy process.

C. Wyoming Special Purpose Depository Institutions

Another example of a novel state-level licensing and regulatory framework created to support the emerging crypto ecosystem is Wyoming's special purpose depository institution (SPDI) charter.[192] Introduced in 2019 as part of Wyoming's efforts to create a new "Silicon Prairie,"[193] SPDIs are technically "fully-reserved" banks: prohibited by law from making loans

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[189] *See* NYDFS, "Virtual Currency Businesses" (listing all Bitlicense holders and limited purpose trust companies licensed to engage in virtual currency business activities), https://www.dfs.ny.gov/virtual_currency_businesses.

[190] *See* Office of the New York State Comptroller, "Audit of the Department of Financial Services: Virtual Currency Licensing", Report 2022-S-18 (January 2024), https://www.osc.ny.gov/files/state-agencies/audits/pdf/sga-2024-22s18.pdf

[191] By construction, licensees do not include New York chartered "banks": see the exemption under 23 CRR-NY § 200.3. New York banking law also expressly excludes limited purpose trust companies from the definition of a "bank"; see N.Y Laws, Chapter 2, Article 1, § 2.

[192] Wyo. Stat. § 13-12-101 *et seq.*

[193] *See* comments of Wyoming Banking Commissioner Albert Forkner in Carolyn Duren, "Wyoming Aims to Become 'Silicon Prairie' with 1st Cryptocurrency Bank", *S&P Global Market Intelligence* (September 23, 2020), https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/wyoming-aims-to-become-silicon-prairie-with-1st-cryptocurrency-bank-60423622

or other long-term, risky, and illiquid investments.[194] Instead, SPDIs are authorized to engage in a narrow range of activities deemed to be incidental to the business of banking. These activities include receiving customer deposits, asset custody and safekeeping, and acting as a fiduciary, along with any other activity incidental to the business of banking that the Wyoming Banking Commissioner determines will not adversely affect the solvency or safety and soundness of an SPDI.[195] One of the principal rationales for the creation of the SPDI charter was thus to promote the development of a highly stable institutional bridge connecting crypto asset markets with conventional banking, securities, payments, and other financial market infrastructure.[196]

Like other banks, SPDIs are subject to capital, risk management, reporting, and resolution and recovery requirements, along with ongoing prudential supervision by the Wyoming Division of Banking.[197] As fully reserved narrow banks, SPDIs must also at all times maintain unincumbered high quality liquid assets valued at not less than 100 percent of their total deposits.[198] For these purposes, eligible assets are restricted to vault cash, balances held with a regional Federal Reserve bank or insured depository institution, and U.S. government, state, and municipal debt.[199] SPDIs that serve as digital asset custodians—holding Bitcoin, stablecoins, or other digital assets on behalf of their customers—are also subject to bespoke requirements governing the segregation of customer assets, control over a customer's private keys, transaction execution and processing, and financial, operational, and technological risk management.[200] These requirements have been complemented by amendments to Wyoming's Uniform Commercial Code which, amongst other matters, clarify the property rights, priority, and perfection of security interests in digital assets.[201]

The Wyoming SPDI charter is superior to both state money transmitter licenses and the New York Bitlicense in several key respects. First, unlike other state-level licensing frameworks, the fact that SPDIs are technically banks means that they can operate anywhere in the United States without having to obtain additional licenses in each state in which they

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194 Wyo. Stat. § 13-12-103(c).

195 *Id.*, § 13-12-103(b)(vii).

196 *See* Wyoming Division of Banking, "Special Purpose Depository Institutions", https://wyomingbankingdivision.wyo.gov/banks-and-trust-companies/special-purpose-depository-institutions.

197 *See e.g.* Wyo. Administrative Rules, Chapter 20: Special Purpose Depository Institutions, § 2 (capital), § 4 (resolution and recovery planning), § 6 (receivership), and § 12 (reports and examinations).

198 Wyo. Stat. § 13-12-105(a).

199 Wyo. Stat. § 13-12-105(b); Wyo. Administrative Rules, Chapter 20, § 9 (investments and liquid assets). SPDIs are also required to ensure that these investments are managed prudently, consistent with safe and sound banking practices, and in a manner that addresses interest rate risk, prevents liquidity and maturity mismatches, and accounts for potential stress scenarios; *id.*, § 9(d).

200 *See e.g.* Wyo. Administrative Rules, Chapter 19: Enhanced Digital Asset Custody Framework, § 4 (digital asset custodial services), § 5 (customer protections), § 7 (risk management), § 9 (technology control and custody safekeeping), and § 10 (transaction handling).

201 *See* Wyo. Stat. 34-29-101 *et seq.*

carry on business. Second, the fact that customer deposits are fully collateralized by high quality liquid assets reduces both the probability and potential impact of a SPDI's bankruptcy. The risks of bankruptcy are further reduced by virtue of Wyoming's detailed substantive requirements governing the custody arrangements, property rights, and priority rules for digital assets, along with a special receivership process for SPDIs that gives customer claims priority over those of other creditors.[202] Collectively, these substantive and procedural rules provide the customers of a SPDI with a considerably higher level of protection than other state-level licensing and regulatory frameworks.

Yet despite this apparent superiority, Wyoming has to date granted a total of only four SPDI charters.[203] As described in greater detail in Part III.B, one of the most likely reasons for this relatively weak demand stems from ongoing litigation between the state of Wyoming, the Federal Reserve, and one of the first charterholders over the question of whether SPDIs should be entitled to the same legal and institutional privileges that have for so long entrenched banks at the apex of the monetary system.

This is just a small sample of the new monetary experiments taking place all across the United States.[204] The key takeaway for our purposes is that these experiments have produced a variety of new species of money that vary significantly from state to state, from regulatory framework to regulatory framework, and even from institution to institution. As we shall see, this legal and economic heterogeneity poses precisely the same type of threats to monetary stability that conventional bank regulation and the financial safety net were designed to eliminate. This heterogeneity exposes customers to potentially significant losses, exacerbates the risk of destabilizing runs, and—especially if left to grow unchecked—may one day pose a threat to monetary stability. Together, these risks motivate and frame the question of whether federal encirclement can and should be expanded to encompass this new breed of monetary institutions.

III. THE CASE FOR FEDERAL SUPREMACY

The emergence, proliferation, and growing popularity of these state-level monetary experiments demand that policymakers reexamine age-old—and yet in many ways still

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[202] Wyo. Administrative Rules, Chapter 20, § 6 (receivership) and § 6(j) (priority rules). The only claims more senior than those of customers are the administrative expenses of the Commissioner of Banking, and only to the extent that those expenses exceed any pledged capital or surety bond posted by the relevant SPDI as contemplated by the chartering framework.

[203] To date, SPDI charters have been granted to Kraken Bank, Custodia Bank, Wyoming Deposit and Transfer, and Commercium Financial, Inc.

[204] As of writing, Illinois was the latest state to propose a new licensing and regulatory framework specifically targeting crypto and crypto intermediaries; see Press Release, Senator Laura Elmann, "Ellman legislation to establish cryptocurrency protections for consumers" (April 18, 2024) (describing Illinois Senate Bills 3666 and 3765).

unanswered—questions about the proper scope of Congress's authority over monetary affairs. This Part explores these questions from both a legal and policy perspective: identifying not only what Congress *can* do to regulate these new monetary institutions, but also why it *should* regulate them in order to protect customers, prevent destabilizing runs, and address potential future threats to monetary stability.

There are two key takeaways. The first takeaway is that the legal case for federal supremacy over the regulation of new monetary institutions is surprisingly underdeveloped. Not only does *Maryland* v. *McColloch* and its progeny fail to identify a clear and consistent constitutional basis for federal supremacy over monetary affairs, the Supreme Court's scant analysis around why federal regulation is necessary and proper begs more questions than answers. The second takeaway is that, putting aside the outstanding questions surrounding the legal case for federal supremacy, the policy case for federal intervention rests on solid ground. This strong policy case reflects the unique position of the federal government to harmonize consumer protection regulation, disapply federal bankruptcy law, and coordinate the regulatory, fiscal, and other resources necessary to mount an effective response to both the failure of individual institutions and more systemic threats to monetary stability.

A. The Legal Case

One could be forgiven for thinking that the legal case for federal supremacy over the regulation of new monetary institutions is relatively straightforward. While the Constitution does not explicitly give Congress the power to regulate money other than gold and silver coins, the Supreme Court decisions in *McCulloch* and *Veazie* both recognized federal supremacy over this important economic and political realm. Federal supremacy was also recognized in two distinct but parallel lines of cases. The first line includes the so-called *Legal Tender Cases* affirming the power of Congress to issue paper money, and thus upholding the constitutionality of the United States Notes—also known as "greenbacks"—issued during the Civil War.[205] The second includes the so-called *Gold Clause Cases* upholding a series of Depression-era policy decisions by the Roosevelt Administration designed to prevent economically damaging deflation by abrogating the contractual rights of creditors to be repaid in gold.[206] Collectively, these three strands of jurisprudence are often and understandably held out as standing for the proposition that Congress enjoys broad plenary power over money and monetary affairs.

Yet once we begin to drill a little deeper, it becomes difficult to escape the conclusion that the power of Congress to regulate new monetary institutions does not necessarily rest on clear, consistent, or well-grounded jurisprudential foundations. First, for a question of such great importance, the Supreme Court has often seemed remarkably uninterested in articulating a precise answer to the question of where Congress gets its powers over money and monetary

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[205] *See Knox* v. *Lee* with *Parker* v. *Davis*, 79 U.S., 12 Wall. 457 (1871) and *Juilliard* v. *Greenman*, 110 U.S. 421 (1884).

[206] *See Norman* v. *Baltimore & Ohio Railroad Co.* with *United States* v. *Bankers Trust Co.*, 294 U.S. 240 (1935); *Nortz* v. *United States*, 294 U.S. 317 (1935); *Perry* v. *United States*, 294 U.S. 330 (1935).

affairs. We have already seen how Chief Justice Marshall in *McCulloch* took Congressional authority to establish the First Bank for granted: dismissing it as something that "can scarcely be considered as an open question."[207] The Chief Justice then goes on to cite a laundry list of Congressional powers, but without explaining why the establishment of the First Bank was rationally connected to any of them, or why its establishment was a necessary and proper means of executing these powers.[208] A generation later, Chief Justice Chase adopted a similar stance in *Veazie*: stating that "there can be no question" of the federal government's "undisputed" power to print paper money.[209]

Second, in those rare instances where the Supreme Court has reluctantly attempted to answer this question, it has typically grounded this power in the wide-ranging authority of Congress to tax, borrow, and spend under Article I, Section 8.[210] In many ways, this makes perfect sense. At their core, both *McCulloch* and *Veazie* are essentially tax cases: concerned less with money, banking, and their regulation than with the power of the purse and, more specifically, whether this power could be wielded as a weapon in the jurisdictional tug-of-war between the federal government and the states. The *Legal Tender Cases* are similarly concerned not with money *per se*, but rather with the power of the federal government to use the printing press as a means of raising revenue to finance the soldiers, ships, and armaments necessary to fight the Civil War.[211]

Together with the *Gold Clause Cases*, it is also worth observing that each strand of this jurisprudence was decided against the backdrop of a severe fiscal crisis: whether it was the War of 1812, the Civil War and Reconstruction, or the Great Depression. Yet even in these unusual and exigent circumstances—and perhaps because of them—the Supreme Court did not make any meaningful attempt to clearly ground Congressional action in one or more specific enumerated powers, to identify the incidental powers necessary to carry this action out, or to comprehensively evaluate whether and why this action was necessary and proper. This reflexive and underdeveloped reliance on the powers of Congress to tax, borrow, and spend also means that these cases offer very little direct jurisprudential support for federal supremacy over the regulation of new monetary institutions in circumstances where there is not a clear and obvious impact on wider issues of fiscal policy.

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[207] *McCulloch*, 17 U.S., at 401.

[208] Chief Justice Marshall's laundry list would be cited with approval, but again without further explanation, in the *Gold Clause Cases*; see *Norman*, 294 U.S., at 303.

[209] *Veazie*, 75 U.S., at 548.

[210] *See e.g. McCulloch,* 17 U.S., at 407; *Veazie*, 75 U.S., at 540-548; *Legal Tender Cases*, 79 U.S., at 232 (identifying in obiter the commerce, revenue, and currency powers as the source of Congressional authority for the creation of the First Bank); *Norman*, 294 U.S., at 303 (citing Chief Justice Marshall's laundry list and adding the powers over commerce, to coin money, and to fix the standards for weights and measures).

[211] *See Legal Tender Cases*, 79 U.S, at 238 ("Suffice it to say that a civil war was then raging which seriously threatened the overthrow of the government and the destruction of the Constitution itself. It demanded the equipment and support of large armies and navies, and the employment of money to an extent beyond the capacity of all ordinary sources of supply. Meanwhile the public treasury was nearly empty, and the credit of the government, if not stretched to the utmost tension, had become nearly exhausted.").

Last but not least, these strands of jurisprudence do not address the awkward constitutional questions arising from the existence of the dual banking system itself. To be clear, *McCulloch*, *Veazie*, and other cases all tacitly acknowledge the constitutionality of the dual banking system.[212] Yet none of these cases grapple with the complex legal and institutional realities of the *shared sovereignty* at the heart of this system. In this respect, *McCulloch* starts off on exactly the wrong foot, explaining that "In America, the powers of sovereignty are divided between the government of the Union, and those of the states. They are each sovereign, with respect to the objects committed to it, and neither sovereign, with respect to the objects committed to the other."[213] Meanwhile, in support of federal supremacy, the *Legal Tender Cases* invoke "that general power over the currency which has always been an acknowledged attribute of sovereignty in every other civilized nation."[214] These and other vague and overly simplistic conceptions of monetary sovereignty are patently unhelpful in the context of a federal system where both Congress and state legislatures have clear constitutional authority to regulate banks and, at least in theory, other monetary institutions. They are even more unhelp where, as we have already seen, the states have an enormous head start in regulating these institutions.

Together, these features make *McCulloch* and its progeny an extremely important but frustratingly incomplete collection of precedents for determining whether Congress has the power to regulate an emerging new breed of monetary institutions. As a starting point, we must therefore determine which of the Constitution's enumerated powers would grant Congress the authority to regulate these institutions. Having answered this question, we must then determine whether the exercise of any power incidental to this authority would be necessary and proper. As explained by Alexander Hamilton in a letter to George Washington defending the constitutionality of the First Bank: "If the end be clearly comprehended within any of the specified powers, and if the measure ha[s] an obvious relation to that end, and is not forbidden by any particular provision of the Constitution, it may safely be deemed to come within the compass of the national authority."[215] In this spirit, this Part seeks to articulate the case for federal supremacy over the regulation of new monetary institutions.

1. The Coinage Clause

The first and in many ways most obvious source of constitutional authority is the expansive interpretation of the Coinage Clause first articulated by the Supreme Court in *Veazie*.[216] As argued by Chief Justice Chase for the majority: "It cannot be doubted that under

[212] The notable exception being *Briscoe*, which was decided in the interregnum between the fall of the Second Bank and the enactment of the National Banking Acts.

[213] *McCulloch*, 17 U.S., at 427.

[214] *Legal Tender Cases*, 79 U.S., at 243.

[215] Alexander Hamilton, Letter to President George Washington, "Opinion as to the Constitutionality of the Bank of the United States" (February 22, 1791), https://avalon.law.yale.edu/18th_century/bank-ah.asp.

[216] In a recent book, Professor Erik Lomazoff argues that this expansive interpretation of the coinage clause can be traced back to President Madison and the debates surrounding the Second Bank; LOMAZOFF,

the Constitution the power to provide a circulation of coin is given to Congress. And it is settled by the uniform practice of the government and by repeated decisions, that Congress may constitutionally authorize the emission of bills of credit."[217] Chief Justice Chase then goes on to specify a range of powers that Congress may exercise pursuant to this authority. These powers include accepting bills of credit in connection with the payment of taxes, providing for their redemption, ensuring that they are fit for use in commercial transactions, and making them "*a currency, uniform in value and description, and convenient and useful for circulation*".[218] This broad plenary power over monetary affairs in order "to provide a currency for the whole country"[219] was subsequently affirmed by the Supreme Court in both the *Legal Tender* and *Gold Clause Cases*.

The weakness of *Veazie* and the Coinage Clause as a source of congressional power over money and monetary affairs is arguably its vulnerability to an originalist critique. As we have already seen, the Founding Fathers actually rejected a proposal to give Congress the express power to "emit bills of credit" under what eventually became Article I, Section 8.[220] Given their general skepticism toward paper money, this might be interpreted as evidence that the delegates to the Constitutional Convention wanted to limit the power of Congress over money to gold and silver specie. Yet it is also possible to overstate the originalist case.[221] As a preliminary matter, the Supreme Court in the *Legal Tender Cases* actually directly addresses the decision of the Founding Fathers to delete the words "emit bills of credit",[222] dismissing it on the basis that it reflected a diversity of views amongst the founders about whether the proposed language was necessary or useful.[223] Driving this point home, the Court goes on to conclude that "No one doubts at the present day nor has ever seriously doubted that the power of the government to emit bills exists."[224]

Furthermore, one might reasonably seek to draw a distinction between the power to *emit* bills of credit and the power to *regulate* bills of credit issued by private firms. Indeed, this is precisely the approach adopted by the Supreme Court in *Briscoe*: where the Court distinguishes between the state of Kentucky's authority to directly emit bills of credit (deemed unconstitutional) versus its authority to charter and regulate banks that engage in the exact

RECONSTRUCTING THE NATIONAL BANK CONTROVERSY, supra note __. For a partial rebuttal, see David Schwartz, *Coin, Currency, and Constitution: Reconsidering the National Bank Precedent,* 118 Michigan Law Review 1005 (2020).

217 *Veazie*, 75 U.S., at 548.

218 *Id.* [emphasized added].

219 *Id.*, at 549.

220 *See* ELLIOT, *DEBATES ON THE FEDERAL CONSTITUTION*, *supra* note __.

221 For a different if still critical perspective on the originalist case, see Robert Natelson, *Paper Money and the Original Understanding of the Coinage Clause*, 31 Harvard Journal of Law and Public Policy 1017 (2008).

222 *Legal Tender Cases*, 79 U.S., at 263.

223 *Id.*

224 *Id.*, at 265.

same activity (deemed constitutional).[225] Accordingly, even if one adopts a narrow interpretation of the Coinage Clause, this does not strictly foreclose the power of Congress to regulation private money creation.

Finally, the Constitution explicitly prohibits the individual states from coining money, issuing bills of credit, or designating anything other than gold or silver coins as legal tender.[226] If we take this blanket prohibition at face value, the originalist critique yields only two possible conclusions. The first conclusion is that the Founding Fathers did not want either the federal government or the states to exercise any authority over monetary affairs not directly connected to coinage. The second, far more reasonable, conclusion is that the Founders intended to give Congress broad residual authority over monetary affairs: authority that could grow and evolve over time in response to future changes in the nature and sources of money.[227]

Notably, this second conclusion is consistent with the Supreme Court's decisions in *McCulloch*, *Veazie*, the *Legal Tender Cases*, and the *Gold Clause Cases*.[228] Over 200 years later, it is also consistent with a long line of legislative precedents: from the First Bank and National Banking Acts, to the Federal Reserve Act and Banking Act of 1933.[229] And while the Supreme Court has recently displayed an unsettling tendency to ignore past precedent and policy,[230] the reality is that reversing course at this point would effectively render the OCC, FDIC, and Federal Reserve System unconstitutional—thus posing an even more serious threat to monetary stability than the emergence of any new breed of monetary institutions.

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[225] The Court in *Briscoe* arrives at this conclusion in part by holding that notes issued by banks are not "bills of credit" for the purposes of the Constitution—effectively because they are not issued by a *sovereign* power. This only further supports the conclusion that the rejection of the proposal to include an explicit reference to "bills of credit" in Article I, Section 8 is irrelevant for the purposes of understanding the power of Congress to regulate *private* money creation.

[226] U.S. Const. art. 1, § 8.

[227] Indeed, the Court in the *Legal Tender Cases* effectively acknowledges these as the only possible conclusions; *Legal Tender Cases*, 79 U.S., 243 ("The States can no longer declare what shall be money, or regulate its value. Whatever power there is over the currency is vested in Congress. *If the power to declare what is money is not in Congress, it is annihilated.*" [emphasis added]).

[228] *See e.g. Knox*, 12 Wall., at 545 ("Whatever power there is over the currency is vested in Congress") *Greenman*, 110 U. S., at 445 ("The constitutional authority of Congress to provide a currency for the whole country is now firmly established.").

[229] Although, as described in the next section, Senator Carter Glass did express reservations about the constitutionality of the Banking Act of 1933.

[230] *See e.g. Dobbs* v. *Jackson Women's Health Organization*, 597 U.S. 215 (2022) (overturning the right to abortion first recognized in *Roe* v. *Wade*, 410 U.S. 113 (1973)) and *Loper Bright* v. *Raimondo,* 603 U.S. (abandoning the doctrine articulated in *Chevron U.S.A., Inc.* v. *Natural Resources Defence Council, Inc.,* 468 U.S. 837 (1984) for determining the level of deference that should be afforded to agency decision making).

2. The Commerce Clause

A second and entirely independent source of constitutional authority resides in the power of Congress to regulate interstate and foreign commerce.[231] For legal scholars, the Commerce Clause is often the first thing they think of when asked to identify the source of Congressional authority over money and monetary affairs.[232] This is entirely understandable. As we have seen, Chief Justice Marshall includes the Commerce Clause in his laundry list of federal powers in *McCulloch*. Both *Veazie* and the *Legal Tender Cases* also make passing reference to the commerce power.[233] Yet the Supreme Court's only sustained treatment of the Commerce Clause as a source of Congress's power over money is in the 1884 decision in *Julliard* v. *Greenman*.[234] As explained by Justice Gray for the Court:

> "Congress has authority to issue [United States Notes] in a form adapted to circulation from hand to hand in the ordinary transactions of commerce and business. In order to promote and facilitate such circulation, to adapt them to use as currency, and to make them more current in the market, it may provide for their redemption in coin or bonds, and may make them receivable in payment of debts to the government…"[235]

Justice Gray continues:

> It is equally well settled that congress has the power to incorporate national banks, with the capacity, for their own profit as well as for the use of the government in its money transactions, of issuing bills which, under ordinary circumstances, pass from hand to hand as money at their nominal value, and which, when so current, the law has always recognized as a good tender in payment of money debts".[236]

While this explanation is factually accurate, it offers little in-depth analysis regarding the critical role of the federal government in promoting public trust and confidence in different types of money. Nor does it explain why this trust and confidence is a necessary precondition for the widespread use of money in commercial transactions.

This is not to suggest that the Commerce Clause does not provide a solid foundation upon which to build the legal case for federal supremacy. The list of industries and commercial activities regulated by the federal government under the Commerce Clause is long and

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[231] U.S. Const. art. 1, § 8, clause 3 ("The Congress shall have the Power… To regulate Commerce with foreign Nations, and among the several States").

[232] This was confirmed by my own informal survey of constitutional law scholars, almost all of whom immediately cited the Commerce Clause when asked to identify the source of Congress's power over money and monetary affairs.

[233] *See Veazie*, 75 U.S., at 548; *Legal Tender Cases*, 79 U.S., at 234 and 242-243.

[234] 110 U.S. 421 (1884).

[235] *Id.*, at 444-445.

[236] *Id.*

distinguished. This list includes: navigation and shipping,[237] railways,[238] air travel,[239] stockyards,[240] grain exchanges,[241] agriculture,[242] healthcare,[243] drugs,[244] and telecommunications.[245] It also includes instrumentalities—like bills of lading—that facilitate interstate or foreign commerce but that do not themselves necessarily move across state or international borders.[246] Critically, these industries and activities all share one important thing in common: they all rely on *money* to grease the wheels of trade. Indeed, as Alexander Hamilton observed in 1791: "Money is the very hinge on which commerce turns."[247] More than a century later, Justice Oliver Wendell Holmes expressed a similar sentiment, observing that paper checks had become "the primary condition of successful commerce".[248] Applying this same logic, if money—whether it be coins, bank notes, checks, stablecoins, or something we haven't even imagined yet—is ultimately what makes the commercial world go around, it is hard to fathom why Congress would not have the power to regulate it and, thereby, provide for a single national currency.

Yet there have also been some very high profile skeptics. Perhaps the most prominent was none other than Senator Carter Glass, co-sponsor of the Banking Act of 1933—better known as the *Glass-Steagall Act*—and one of the principal architects of modern U.S. bank regulation. During a hearing of the Senate Committee on Banking and Currency in late 1933, Senator Glass expressed his deep reservations about the constitutionality of what would become §21(a)(2) of the *Glass-Steagall Act*: stating that its constitutionality was "very doubtful

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237 *Gibbons* v. *Ogden*, 22 U.S. 1 (1824).

238 *Wabash, St. Louis & Pacific Railway Company* v. *Illinois*, 118 U.S. 557 (1886).

239 *See e.g.* the Air Commerce Act of 1926, c. 344, 44 Stat. 576 (May 20, 1926) (enacted to regulate interstate and foreign air commerce).

240 *Stafford* v. *Wallace*, 258 U. S. 495 (1922); *Tagg Bros. and Moorhead* v. *United States*, 280 U. S. 420 (1930).

241 *Board of Trade* v. *Olsen*, 262 U. S. 1 (1923).

242 *Wickard* v. *Filburn*, 317 U.S. 111 (1942).

243 *Gonzales* v. *Raich*, 545 U.S. 1 (2005). Although see also *National Federation of Independent Business* v. *Sebelius*, 567 U.S. 519 (2012).

244 *Gonzalez*, 545 U.S. 1.

245 *See e.g.* the Telecommunications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (June 19, 1934) (enacted to regulate interstate and foreign commerce in communication by wire and radio).

246 *United States* v. *Ferger*, 250 U.S. 199 (1919) ("the efficient means of credit resorted to for the purpose of securing and fructifying the flow of a vast volume of interstate commerce upon which the commercial intercourse of the country, both domestic and foreign, largely depends."). *See also* the discussion in Note, *Constitutionality of Exclusive Federal Control*, *supra* note __, at 462-463. A bill of lading is a legal document stipulating the contractual rights and obligations between a shipper and carrier and evidencing title of the goods being shipped.

247 *See* Hamilton, Letter to President George Washington, *supra* note __.

248 *Noble State Bank* v. *Haskell*, 219 U.S. 104, 111 (1911).

according to the best legal advice that we could get."[249] Glass continued: "but so intent were we upon curing the abuses that have developed since 1927… that we risked the validity of [the *Glass-Steagall Act*]."[250] This position echoed earlier debates regarding the draft bill on the Senate floor, during which one senator stated point blank that "The Federal Government has no jurisdiction over State banks."[251] While the Commerce Clause was not directly referenced in these debates, it is clear by inference that Senator Glass and others did not believe that it provided a constitutional basis for these sweeping legislative reforms.

However, this skepticism should be taken with a grain of salt. The debates over the constitutionality of the *Glass-Steagall Act* took place during a period in which courts often adopted a relatively narrow interpretation of the Commerce Clause that hinged on whether an activity took place "in the '*current*' or '*flow*' of interstate commerce".[252] Today, the Supreme Court has embraced a much broader interpretation based simply on whether federal regulation targets an "economic activity" that substantially affects interstate commerce, irrespective of whether individual transactions take place on a purely intrastate basis.[253] Once again, it is hard to imagine how the regulation of money and monetary institutions would not fall within the scope of this more expansive interpretation. As a consequence, the only real question is whether the Court will continue to follow this line of precedent in future cases, or whether it will change course in furtherance of its ongoing efforts to curtail the powers of the administrative state.

3. The Bankruptcy Clause

A third and final source of constitutional authority over money resides in the power of Congress to establish "uniform Laws on the subject of Bankruptcies throughout the United States".[254] At first glance, the nexus between bankruptcy law and money may not be immediately apparent. Yet upon closer inspection, the entire foundation of the financial safety net for banks rests on the ability to circumvent conventional corporate bankruptcy law.[255] The practical effect of the Federal Reserve's emergency lending facilities is to relax a bank's liquidity

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[249] *See* Hearings Before the Senate Committee on Banking & Currency, Stock Exchange Practices, Part 8 (November 23-Decemver 7, 1933) at 4030-4031. I am indebted to Todd Phillips for bringing Senator Glass's remarks during these hearings to my attention.

[250] *Id.*

[251] 75 Cong. Rec. 9905 (May 10, 1932) (remarks of Senator Walcott).

[252] *See A.L.A. Schechter Poultry Corp.* v. *United States*, 295 U.S. 495, 543 (1914) [emphasis in original]. *See also Stafford* v. *Wallace*, 258 U.S. 495, 517 (1922) ("The only real question here is whether the business… is part of interstate commerce or is so associated with it as to bring it within the power of national regulation.").

[253] *See Wickard* 317 U. S., 125 ("[E]ven if appellee's activity be local and though it may not be regarded as commerce, it may still, whatever its nature, be reached by Congress if it exerts a substantial economic effect on interstate commerce"). *See also United States* v. *Darby*, 312 U. S. 100 (1941); *United States* v. *Lopez*, 514 U.S. 549 (1995); *United States* v. *Morrison*, 529 U. S. 598 (2000), and *Gonzalez*, 545 U.S 1.

[254] U.S. Const. art. 1, § 8, clause 4.

[255] *SEE* AWREY, *BEYOND BANKS*, *supra* note __, chapter 5.

and solvency constraints: throwing them a financial lifeline under circumstances when most other businesses would be forced to file for bankruptcy. Similarly, the FDIC deposit insurance scheme and bank resolution framework enable both insured depositors and a bank's other creditors to avoid a potentially lengthy, expensive, and uncertain bankruptcy process. The deposit insurance scheme does so by requiring the FDIC to step into the shoes of a failed bank and honor its contractual commitments to insured depositors. The resolution framework does so by appointing the FDIC as receiver of a failed bank and giving it wide-ranging and unilateral powers to override the property and other rights that creditors typically enjoy in bankruptcy, the exercise of which might otherwise interfere with a fast, orderly, and efficient sale or restructuring.[256] To achieve this result, the U.S. Bankruptcy Code explicitly exempts banks from the application of general corporate bankruptcy law.[257] Viewed in this light, federal bankruptcy law—or at least its legislated *disapplication*—is a critical component of modern bank regulation. As described in Part IV, changes to federal bankruptcy law are also critical to addressing the threats to monetary stability posed by the emergence of monetary institutions operating outside this safety net.

Together, the Coinage, Commerce, and Bankruptcy clauses provide Congress with ample constitutional authority to enact legislation establishing a federal regulatory framework governing new monetary institutions. This legal authority is backed by almost two centuries of federal legislation asserting federal supremacy over monetary affairs. The question thus becomes whether there is also a clear *policy* case for the exercise of this authority, whether this exercise would be necessary and proper and, ultimately, how Congress should approach the design of this new regulatory framework.

B. The Policy Case

The fact that Congress has constitutional authority over money and monetary affairs does not necessarily mean that it should use this authority to expand the reach of federal regulation to encompass the diverse and rapidly expanding universe of new monetary institutions. As always, the key question is ultimately whether the judicious exercise of this power would serve to advance important policy objectives better than the menagerie of state-level regulatory frameworks that currently govern them. This Part explores this question in greater depth.

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256 These rights include the right to file a bankruptcy petition, the application of an automatic stay preventing other (secured) creditors from unilaterally exercising their rights in connection with the property of the debtor after a petition is filed, the right to vote on any plan of reorganization, and the right to equal treatment amongst creditors of the same class. *See* Edward Morrison, *Is the Bankruptcy Code an Adequate Mechanism for Resolving the Distress of Systemically Important Institutions?*, 82 Temple Law Review 449 (2010); Armour, "Making Bank Resolution Credible", *supra* note __, at 5-7 (both describing how the substantive and procedural rules associated with conventional corporate bankruptcy processes are inappropriate for the resolution of banks and other systemically important financial institutions).

257 11 U.S.C. § 109.

1. Money in the Shadow of Bankruptcy

The policy case for federal supremacy rests on six intertwined pillars. The first reflects the toxic relationship between money, bankruptcy, and consumer protection. As we have already seen, state money transmitter laws typically permit licensees to invest customer funds in a wide range of risky and illiquid assets: from publicly-traded stocks and exotic debt securities, to opaque and illiquid loans to their corporate parent companies, subsidiaries, and affiliates.[258] Similarly, the New York Bitlicense does not automatically impose any binding constraints on the range of activities in which licensees can engage, or how they can invest the fiat currency balances held by customers.[259] When licensees invest in these risky and illiquid assets, they are also typically only required to hold a tiny sliver of equity capital to absorb any resulting losses. As a consequence, in the event that licensees experience large losses on these investments, there exists a distinct possibility that these losses will translate into institutional liquidity and even solvency problems: thus undermining their ability to honor their contractual commitments to customers.

This is not just a theoretical possibility. In 2008, MoneyGram—then one of the country's largest money transmitters—was pushed to the brink of failure by large and poorly-timed investments in risky mortgage-backed securities. As the market value of these securities tumbled during the global financial crisis, MoneyGram experienced an acute liquidity crisis.[260] Facing bankruptcy, MoneyGram was eventually sold to a consortium led by Goldman Sachs and Thomas H. Lee Partners that collectively injected over $1.5 billion in new equity and debt.[261] Without this last minute capital injection, it is likely that MoneyGram's customers would have lost hundreds of millions of dollars.

These consumer protection problems are heightened by the application of general corporate bankruptcy law. Corporate bankruptcy is a legal process whereby the assets and liabilities of struggling firms are restructured, sold, or wound down.[262] In the United States, federal bankruptcy law includes two important rules that interfere with the rights of customers once they become creditors of a bankrupt firm. The first rule is a procedural requirement—known as the *automatic stay*—that prevents creditors from bringing any enforcement action to

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[258] *See* Awrey, *Bad Money*, *supra* note __. *See also* discussion in Part II.A.

[259] Although given the broad discretion wielded by the NYDFS, it is entirely possible that it could impose such constraints in specific circumstances.

[260] *See* MoneyGram International, Inc., Form 10-K, 9 (March 25, 2008) http://ir.moneygram.com/static-files/5090f7d4-214b-484d-92bf-becc053403da (reporting that it was forced to sell certain investments in mortgage-backed securities at a realized loss of $260.6 million).

[261] *See* Press Release, "MoneyGram Completes Comprehensive Recapitalization with Investor Group Led by Thomas H. Lee Partners, L.P. and Goldman Sachs" (March 25, 2008), http://www.thl.com/newsroom/press-release?year=2008 &id=1442.

[262] For a more detailed overview of the logic and purposes of corporate bankruptcy law, see Thomas Jackson & Douglas Baird, *Corporate Reorganizations and the Treatment of Diverse Ownership Interests: A Comment on Adequate Protection of Secured Creditors in Bankruptcy*, 51 University of Chicago Law Review 97 (1984); Kenneth Ayotte & David Skeel, *Bankruptcy Law as a Liquidity Provider*, 80:4 University of Chicago Law Review 1557 (2013).

seize the assets of the bankrupt firm for the duration of the bankruptcy process.[263] The second rule is a substantive requirement—known as the *pari passu rule*—that forces unsecured creditors to share in any distribution of the bankrupt firm's assets on an equal or *pro rata* basis.[264] In practice, the application of the *pari passu* rule means that all the debts owed by a bankrupt firm to its unsecured creditors will be pooled together, with each creditor eventually paid on a proportionate basis out of any assets that remain after other more senior or secured creditors have been fully repaid.

Together, these bankruptcy rules cripple the ability of a bankrupt firm to honor its contractual obligations to customers. This is especially true where these obligations are used as a source of money. The automatic stay prevents consumers holding a purely contractual claim—whether it's a PayPal balance, a stablecoin, or funds held in a digital wallet with a crypto intermediary—from transferring or withdrawing their money until the conclusion of the bankruptcy process.[265] Given that this process can take several years, the practical effect is to freeze this money on the balance sheet of the bankrupt firm—rendering it completely useless as a means of payment.

Further compounding matters, where these consumers are treated as unsecured creditors, the application of the *pari passu* rule may eventually force them to write down the value of their claims against the bankrupt firm. Indeed, depending on the value of the firm's remaining assets, the number of other creditors, their relative priority, and the value of their outstanding claims, these customers may only get back pennies on the dollar. Against this backdrop, the relatively weak security requirements imposed under state money transmitter laws offer customers only a modest level of protection. While the trust and custody requirements under the New York Bitlicense may offer a somewhat higher level of protection, the opacity currently surrounding this framework makes this difficult to determine with any degree of certainty.

Ultimately, the prospect that a customer would not be able to *use* their money, and might potentially *lose* it, stands in sharp and irreconcilable contrast with the basic bundle of rights that we typically associate with money—robbing it of its essential moneyness. It is for precisely this reason that banks, their deposits, and depositors are exempt from the application of general corporate bankruptcy law.

2. Growing Monetary Heterogeneity

The second pillar of the policy case for federal supremacy stems from the high information costs associated with growing monetary heterogeneity. The problem of monetary heterogeneity is as old as money itself: reflected in the centuries-old observation, known as

[263] 11 U.S.C. § 362(a).

[264] 11 U.S.C. § 726(b).

[265] *See* Adam Levitin, *Not Your Keys, Not Your Coins: Unpriced Credit Risk in Cryptocurrency*, 101:4 Texas Law Review 877 (2023) (describing the likely treatment of the customers of crypto intermediaries in bankruptcy).

Gresham's Law, that "bad money drives out good".[266] Today, the principal sources of this heterogeneity are the stark differences between conventional bank regulation and the financial safety net versus the patchwork quilt of state-level regulatory frameworks that currently govern new monetary institutions. Importantly, it is also a function of the growing divergence between these state-level regulatory frameworks themselves. As we already have seen, the permissible investment restrictions, net worth requirements, and security requirements imposed under state money transmitter laws vary significantly from state to state. They also provide very different levels of protection in comparison with both the New York Bitlicense and Wyoming SPDI charter. Indeed, insofar as the NYDFS exercises its discretion to tailor regulatory requirements to specific firms, there may even be material and yet hard to detect differences between the regulation of different licensees. Especially in the shadow of bankruptcy, these differences can be understood as translating into potentially significant heterogeneity in the creditworthiness, and therefore value, of the contractual obligations that these new monetary institutions owe to their customers.

There is perhaps nothing more alien to most of us than having to ask questions about the creditworthiness and value of our money. After all, one dollar should always be worth exactly one dollar—regardless of whether it's deposited in your bank account or crumpled up at the bottom of your purse. Yet as described in Part II.B, this universal homogeneity is legally engineered: the product of a sophisticated financial safety net that has almost completely eliminated monetary heterogeneity for retail bank depositors. This observation has an important upshot. The emergence of new monetary institutions operating outside the perimeter of this safety net introduces the troubling prospect—embodied two centuries ago by the free banking era and the resulting emergence of publications like *Thompson's Banknote Reporter*—that people and businesses will once again be forced to conduct due diligence into the nature, sources, and value of their money.

At best, the resulting increase in information costs would represent a deadweight loss for society as these people and businesses shifted scarce resources away from more productive activities. At worst, the high level of legal and financial expertise needed to successfully differentiate between the value of different types of money would generate acute asymmetries of information: opening the door to potential exploitation, further compounding consumer protection problems, and perhaps even contributing to the erosion of public confidence and trust in the money supply.[267] This is ultimately why it's so important to legal engineer money that can be used and accepted no questions asked.

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[266] While this observation is often attributed to Sir Thomas Gresham, the phrase "bad money drives out good" and its identification as "Gresham's Law" are actually both the product of Henry Dunning MacLeod's 19th century work on English political economy; SEE HENRY DUNNING MACLEOD, *THE ELEMENTS OF POLITICAL ECONOMY* 476-478 (1858).

[267] In theory, these information asymmetries could be reduced through the due diligence and arbitrage activities of more sophisticated money market investors. However, relying on incentives of these investors would represent a structural weakness of this type of monetary system—especially during periods of systemic instability where these investors may rationally decide to hoard liquidity. By the same token, it is equally possible that these asymmetries would result in a shrouded equilibrium in which these sophisticated investors reaped benefits from their superior information without generating any positive spillovers for less sophisticated parties; see Xavier

3. The Risk of Destabilizing Runs

Predictably, many people and businesses will ultimately decide not to conduct rigorous due diligence into the provenance, legal protections, and value of different types of money. These decisions will be *individually* rational where these people and businesses do not have the legal or financial expertise to know which questions to ask, how to effectively interrogate the answers, or fully understand the range of available options. They may also simply place a high subjective value on the cost, speed, accessibility, convenience, or other features associated with a particular type of money. Collectively, these decisions may also be rational on a *societal* level: ensuring that the price of goods and services does not vary depending on whether we pay for them using cash, bank deposits, PayPal balances, or stablecoins. Putting aside the dangers of asymmetric information and potential exploitation, this makes cultivating "a blissful state of symmetric ignorance"[268] a relatively attractive option for customers faced with a constantly expanding universe of new monetary institutions and instruments.

But there is a catch. During periods of pronounced institutional and wider financial instability, monetary heterogeneity can become a highly salient catalyst for collective action: driving these very same people and businesses to shift their hard-earned savings into what they view as the safest types of money. At this critical inflection point, eliminating the need for costly due diligence will morph from a highly desirable feature of monetary systems into a potentially destabilizing bug. For having failed to ask questions about the credibility and value of their money in good times, the most rational thing for these people and businesses to do in bad times is immediately head for the exits—to withdraw their money first, and ask questions later.[269] For centuries, these destructive dynamics have been at the root of both idiosyncratic bank runs and more generalized banking panics.[270] Perhaps not surprisingly, both logic and recent experience suggest that these same dynamics can trigger instability within wholesale money, stablecoin, and other markets far outside the conventional banking system.[271] Once

Gabaiz & David Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, 121 Quarterly Journal of Economics 505 (2006).

[268] *See* Holmstrom, "Understanding the Role of Debt", *supra* note __, at 6.

[269] For a more detailed discussion, see AWREY, *BEYOND BANKS*, *supra* note __, chapter 3.

[270] *See e.g.* WALTER BAGEHOT, *LOMBARD STREET: A DESCRIPTION OF THE MONEY MARKET* (1873); IRVING FISHER, *THE PURCHASING POWER OF MONEY* (1911); ROBERT MERTON, *SOCIAL THEORY AND SOCIAL STRUCTURE* (1949); Douglas Diamond & Philip Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 Journal of Political Economy 401 (1983); Charles Jackin & Sudipto Bhattacharya, *Distinguishing Panics from Information-based Bank Runs: Welfare and Policy Implications*, 96:3 Journal of Political Economy 568 (1998); RICKS, *supra* note __; Holmstrom, "Understanding the Role of Debt", *supra* note __; Gorton & Zhang, *supra* note __ (all examining from different perspectives the role of these informational dynamics in triggering destabilizing runs).

[271] *See* e.g. Gary Gorton & Andrew Metric, *Securitized Banking and the Run on Repo*, 104:3 Journal of Financial Economics 425 (2012) (examining the run within repurchase agreement or "repo" markets during the global financial crisis); Kosse, Glowka, Mattei & Rice, *supra* note __ (creating a taxonomy of stablecoins and evaluating their historical ability to maintain their pegs). To take one example, the day after SVB was taken into FDIC receivership in March 2023, news that Circle, issuer of the USDC stablecoin, held $3.3 billion in collateral with SVB caused USDC to lose its peg and fall to a low of $0.8774 on the dollar before eventually rebounding; see Arijit Sarkar, "USDC Depegs as Circle Confirms $3.3B Stuck with Silicon Valley Bank", *Coin Telegraph* (March

again, while the financial safety net for banks is far from perfect, these are precisely the dynamics that the Federal Reserve's lender of last resort facilities, the FDIC's deposit insurance scheme, and special resolution framework were designed to arrest.

4. Future Threats to Monetary Stability

The fourth pillar of the policy case for federal supremacy stems from the potentially devastating impact of widespread runs on monetary stability. While it is perhaps difficult to imagine today, new monetary institutions may one day grow to rival the conventional banking system as a source of money. If this happens, the correlated and uncoordinated bankruptcy of these institutions could trigger a loss of confidence that in turn spills over into the wider monetary system. This unsettling prospect will be especially likely where people and businesses, having failed *ex ante* to differentiate between different types of money, run indiscriminately from all monetary institutions.[272] As evidenced by the Great Depression, this loss of confidence can lead to broad-based contractions in the money supply: unleashing damaging deflation, driving a sharp reduction in investment and economic activity, and ultimately lowering the trajectory of economic growth.[273] Even outside these extreme scenarios, recessions caused by financial instability typically last longer and are more economically damaging than those caused by fluctuations in the general business cycle.[274]

Importantly, government intervention designed to prevent or reduce this damage also requires access to enormous fiscal resources. Congress spent over $440 billion under the Troubled Asset Relief Program during the global financial crisis.[275] At its peak in December 2008, the Federal Reserve also provided $1.5 trillion in emergency liquidity assistance.[276] To

11, 2023), https://cointelegraph.com/news/usdc-depegs-as-circle-confirms-3-3b-stuck-with-silicon-valley-bank.

[272] Indeed, even where people and businesses do successfully differentiate between different types of money *ex ante*, they may still decide to run in response to the correlated behavior of less well-informed people and businesses. For possible explanations for this behavior, see Matthew Elliott, Benjamin Golub & Matthew Jackson, *Financial Networks and Contagion*, 104:10 American Economic Review 3115 (2014) (relying on so-called "information cascades" as an explanation) and Diamond & Dybvig, *supra* note __ (relying on coordination problems in the shadow of bankruptcy).

[273] FRIEDMAN & SCHWARTZ, *A MONETARY HISTORY*, *supra* note __, at 15-17. Notably, these effects are likely to be more muted where monetary institutions do not engage in meaningful levels of financial intermediation. However, given that many state laws do not eliminate the potential for intermediation, it would be imprudent to dismiss this possibility out of hand.

[274] *See* Stijn Claessens, M. Ayhan Kose & Macro Terrones, *The Global Financial Crisis: How Similar? How Different? How Costly?*, 21 Journal of Asian Economics 247 (2010).

[275] *See* U.S. Treasury Department, Troubled Asset Relief Program (TARP), https://home.treasury.gov/data/troubled-asset-relief-program.

[276] *See* Mark Carlson, Burcu Duygan-Bump & William Nelson, "Why Do We Need Both Liquidity Regulations and a Lender of Last Resort? A Perspective from the Federal Reserve Lending During the 2007-09 U.S. Financial Crisis", Federal Reserve System, Division of Research & Stat. & Monetary Affairs, Fin. & Econ. Discussion Series, Working Paper No. 2015-011 2 (2015).

put these figures into perspective: the amount of money deployed by Congress and the Fed fighting the global financial crisis was larger than the 2022 gross domestic product of every state in the Union other than California, Texas, and New York.[277]

The scale and scope of the potential future threats to monetary stability highlight two important limits of state-by-state regulation of new monetary institutions. The first is that states generally do not possess the arsenal of policy tools needed to support these institutions during periods of institutional or systemic distress. In a crunch, there is no such thing as the Texas emergency lending facility, nor the Florida deposit insurance scheme. The second is that individual states are typically not in a position to marshal the fiscal resources needed to mount effective responses to incipient crises. This is perhaps best illustrated by the abortive attempts by several Midwest states to create state-level deposit insurance schemes between 1908 and 1917: schemes that were quickly overwhelmed, and eventually dismantled, following a string bank failures in the early 1920s.[278] Especially when viewed from this perspective, separating responsibility for the regulation and supervision of new monetary institutions from the ultimate responsibility for supporting them in times of crisis seems like a recipe for potentially significant moral hazard, coordination, and other problems.

5. Jurisdictional Disputes

Even outside the context of crisis management, the distinct but overlapping roles of state and federal regulators can lead to coordination problems, jurisdictional disputes, and even litigation. A recent and illustrative example is an ongoing dispute between the Federal Reserve and a Wyoming SPDI over access to what is known as a "master account". A master account is an account that member banks can open with a regional Federal Reserve bank that enables them to make payments to other banks using the Federal Reserve's own liabilities—known as reserve balances—as the ultimate risk-free settlement asset.[279] For this reason, access to a master account has long been a legal and operational precondition for direct participation in the clearinghouses and other financial market infrastructure through which the vast majority of U.S. payments currently flow.[280]

One of the first financial institutions to obtain a Wyoming SPDI charter was Custodia Bank, Inc. Custodia was founded to serve as a bridge between digital assets like Bitcoin and the conventional U.S. dollar payment system: an interoperable hub standing between two otherwise technologically incompatible financial networks. This made access to a Federal

[277] *See* U.S. Bureau of Economic Analysis, GDP by State (December 22, 2023), https://www.bea.gov/data/gdp/gdp-state.

[278] For a more detailed history and description of these state-level deposit guarantee schemes, see FDIC, "A Brief History of Deposit Insurance in the United States", 1-11 (1998), https://www.fdic.gov/bank/historical/brief/brhist.pdf.

[279] For a more detailed description of these master accounts and their important role in the payment system, see Awrey, *Unbundling*, *supra* note __, at 744-747. *See also* Julie Hill, *Opening a Federal Reserve Master Account*, 40 Yale Journal on Regulation 453 (2023).

[280] Awrey, *Unbundling*, *supra* note __, at 744-747.

Reserve master account a critical component of Custodia's business model. In October 2020, Custodia thus duly completed and submitted the standard one-page application form to the Federal Reserve Bank of Kansas City.[281] This application form states that applicants should expect to receive a decision within 5-7 business days.[282]

Almost 600 business days later, Custodia sued the Federal Reserve Board and Kansas City Fed claiming that they had engaged in a "patently unlawful delay" in processing its application.[283] The Federal Reserve responded that it was under no legal obligation to open a master account in Custodia's name,[284] and furthermore that the crypto-related activities that Custodia seeks to undertake are "highly likely to be inconsistent with safe and sound banking practice".[285] In response to Custodia's claim that the application process is extremely opaque, the Fed has also recently published guidance regarding the factors that regional reserve banks will henceforth use to evaluate master account applications.[286] The case was dismissed in early 2024 and is currently being appealed by Custodia.[287]

For our purposes, the most important thing to take away from this episode is that the Fed's stance is directly at odds with one of Wyoming's stated policy objectives in creating the SPDI charter: to promote the development of the emerging crypto ecosystem. While perhaps not a core pillar in the case for federal supremacy, this dispute thus demonstrates how a lack of policy coordination between federal and state regulators over their approach toward new monetary institutions can result in the same type of jurisdictional disputes that have long plagued the dual banking system.

6. International Coordination

More effective policy coordination is not just important at the domestic level. At the international level, jurisdictions around the world are developing their own regulatory frameworks in response to the emergence of new monetary institutions. Indeed, jurisdictions like China, the European Union, the United Kingdom, and Canada are already deep in the

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281 *See* Compliant, *Custodia Bank, Inc.* v. *Federal Reserve Board of Governors and the Federal Reserve Bank of Kansas City*, Case 1:22-cv-00125-SWS (filed June 7, 2022).

282 *Id.*

283 *Id.*

284 *See Custodia Bank, Inc.* v. *Federal Reserve Board of Governors and the Federal Reserve Bank of Kansas City*, Case 1:22-cv-00125-SWS, Defendant Board of Governors of the Federal Reserve System's Memorandum of Points and Authorities in Support of Its Motion to Dismiss 10-26 (August 16, 2022).

285 On these same grounds, the Federal Reserve Board also denied Custodia's application for membership in the Federal Reserve System; *see* Federal Reserve Board, Press Release, "Federal Reserve Board Announces Denial of Application by Custodia Bank, Inc. to become a member of the Federal Reserve System" (January 27, 2023), https://www.federalreserve.gov/newsevents/pressreleases/orders20230127a.htm

286 *See* Federal Reserve System, Guidelines for Evaluating Account and Services Requests, 87 Fed. Reg. 51,099 (effective as of August 19, 2022)

287 *See* Kyle Campbell, "Judge Rules Against Custodia in Fed Master Account Case," *AMERICAN BANKER* (April 1, 2024).

process of implementing these new frameworks.[288] In order to preserve its longstanding role at the apex of international finance, it makes sense for the United States to be at the forefront of these developments. This is especially true given the importance of the U.S. dollar in international trade and investment, along with the potential financial stability and national security implications stemming from the growing popularity of digital assets—like the stablecoin Tether—that are denominated in U.S. dollars but operate and trade overseas, largely out of the reach of U.S. regulators.[289]

The fact that the United States has not been at the forefront of these developments reflects the absence of federal leadership and regulatory oversight. As we have seen, this has thrust state-level regulators into a leadership role. Yet state banking regulators do not necessarily speak with one voice on policy issues. Nor are they typically represented on international standard setting bodies like the Basel Committee on Banking Supervision or Financial Stability Board. And while the NYDFS and Wyoming Division of Banking are serious regulators, their influence on the international stage pales in comparison to the U.S. Treasury Department, Federal Reserve Board, and other U.S. banking agencies. What this suggests is that there are clear geopolitical and policy dividends from shifting responsibility for the regulation of new monetary institutions to the federal level.

The policy case for federal supremacy rests on the simple and inescapable fact that the states are not well-positioned to address these critical challenges. States have thus far failed to promote strong and uniform laws governing money transmitters and other new monetary institutions. States are not empowered to amend federal bankruptcy law, nor grant financial institutions access to basic financial market infrastructure. And most importantly, states lack the policy toolkit and fiscal resources to effectively respond to both idiosyncratic runs and more widespread monetary instability. Taken together, these observations suggest that the key question is not *whether* the federal government should expand the footprint of federal regulation to encompass new monetary institutions, but *how*.

IV. THE FOOTPRINT OF FEDERAL SUPREMACY

It is one thing to lay out the legal and policy cases for federal supremacy over the regulation of new monetary institutions. It is quite another to design a legal framework that

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[288] For a detailed description of some of these new regulatory frameworks, see AWREY, *BEYOND BANKS*, *supra* note __, chapter 6.

[289] For a more detailed overview of the resulting policy challenges, see Tim Massad, "Stablecoins and National Security: Learning the Lessons of Eurodollars", *BROOKINGS INSTITUTION* (April 17, 2024), https://www.brookings.edu/articles/stablecoins-and-national-security-learning-the-lessons-of-eurodollars/ and John Crawford, *The Dollar Dilemma: Hegemony, Control, and the Dollar's International Role*, Virginia Law & Business Review [forthcoming].

protects consumers, prevents runs, and promotes public confidence and monetary stability. While the cut and thrust of constitutional debates are often expressed in poetry, policymakers must inevitably regulate in prose. This final Part outlines two potential regulatory models. The first—*maximum supremacy*—envisions the creation of an entirely new federal charter, regulatory and supervisory rulebook, and resolution framework that would supplant existing state money transmitter laws, the New York Bitlicense, Wyoming SPDI charter, and other state-level regulatory experiments. The second—*tailored supremacy*—envisions the targeted use of federal preemption to address the specific technical challenges that these state-level regulatory frameworks have yet to successfully address.

A. Maximum Supremacy

The most straightforward way for Congress to assert federal supremacy over the regulation of new monetary institutions would be to enact legislation authorizing the creation of a new federal charter. Like conventional bank charters, this "payments" charter would permit firms obtaining a charter to legally engage in certain prescribed activities, while simultaneously making it illegal for firms without a charter to engage in them.[290] In the case of the federal payments charter, these activities could be defined in functional terms to include "the sale or issuance of instruments representing money or monetary value" and "accepting, transmitting, or storing money or monetary value on behalf of customers".[291] Firms seeking to provide money and payments in the United States would then have two basic options: obtain either a state or federal bank charter or a new payments charter.[292] While in theory states could continue to grant money transmission and other licenses, the fact that the activities permitted under these licenses would still be illegal under federal law—at least without a federal charter—would in all likelihood bring an abrupt end to these state-level regulatory experiments. To ensure this result, the legislation authorizing the creation of the federal payments charter would also explicitly preempt any state laws that would otherwise govern money or payments.

Firms obtaining a federal payments charter would be subject to a bespoke prudential regulatory framework. This framework would include several key components. First, in sharp contrast with conventional deposit-taking banks, chartered firms would be completely

[290] *See* 12 U.S.C. § 378(a)(2) (making it illegal to engage in the business of receiving deposits subject to repayment without being subject to appropriate state or federal regulation). For a critical evaluation of the design and enforcement of this prohibition, see Howell Jackson & Morgan Ricks, "Locating Stablecoins within the Regulatory Perimeter", Harvard Law School Forum on Corporate Governance (August 5, 2021), https://corpgov.law.harvard.edu/2021/08/05/locating-stablecoins-within-the-regulatory-perimeter/.

[291] This language effectively mirrors the range of activities captured by the CSBS model money transmitter law's definition of "money transmission"; *see* CSBS, "Model Money Transmission Modernization Act", *supra* note __. Under the CSBS's model law, "money" is defined as "a medium of exchange that is authorized or adopted by the United States or a foreign government"; § 2.01(o). "Monetary value" is defined as "a medium of exchange, whether or not redeemable in money"; § 2.01(p).

[292] This could be achieved by explicitly carving out banks and other insured depository institutions from the new chartering requirement and corresponding prohibition.

prohibited from using customer funds to engage in financial intermediation. No stocks, no corporate bonds, no mortgage-backed securities—no risky investments of any kind.[293] Instead, chartered firms would be required to hold all funds they receive from customers in a risk-free master account opened with one of the Fed's twelve regional reserve banks. Second, chartered firms would be strictly prohibited from lending money to, or borrowing money from, any parent firm, subsidiary, or affiliate. Where these parents, subsidiaries, or affiliates were engaged in any business other than prescribed activities, they would also be required to incorporate a wholly-owned bankruptcy-remote subsidiary to serve as the chartered firm.[294] While this new framework would then not place any additional restrictions on the activities or financing of the wider corporate group, the chartered firm itself would be prohibited from undertaking any business not directly related to providing money and payments.

Compliance with this new regulatory framework would require ongoing supervision by a federal regulatory authority: most likely an existing bank regulator like the Federal Reserve or OCC. Yet given the narrow range of prescribed activities, combined with the complete absence of financial intermediation, this supervision would not need to resemble the type of highly costly and intrusive supervision to which banks are generally subject. Indeed, rather than focusing on complex and highly technical policy levers like capital adequacy, asset quality, earnings, and liquidity management, supervisors could instead focus on simply verifying ongoing compliance with the core rules prohibiting financial intermediation and intragroup exposures. Supervisors would also need to ensure that chartered firms kept accurate and up-to-date customer records, and had in place adequate systems, processes, and controls governing compliance with anti-money laundering rules, fraud detection, and operational resilience.[295] By tailoring this supervisory framework to reflect the narrow business model of chartered firms, the federal payments charter would thus create valuable optionality: giving technology-driven firms developing products and services at the frontier of money and payments a potentially more viable alternative to obtaining a conventional bank charter.

Together, these new regulatory and supervisory frameworks would greatly reduce the risk that a chartered firm would be forced into bankruptcy. Yet even with customer funds safely invested in risk-free reserve balances, it is still technically possible that poor management, fraud, successful cyber attacks, or other operational failures could threaten a

[293] In this one narrow respect, the federal payments charter would resemble a range for previous proposals calling for so-called "narrow banking"; see e.g. IRVING FISHER, *100% MONEY* (1936); Henry Simons, "A Positive Program for Laissez Faire: Some Proposals for a Liberal Economic Policy" in HARRY GIDEONSE (ED.), *PUBLIC POLICY PAMPHLET NO. 15* (1934); MILTON FRIEDMAN, *A PROGRAM FOR MONETARY STABILITY* (1963). However, whereas these narrow banking proposals typically contemplate the complete dismantling of the conventional banking system, the new payments charter would represent a separate, additional path for the chartering and regulation of new monetary institutions.

[294] In practice, it may be desirable to identify a narrow range of carveouts from this requirement for activities such as hardware and software development that are directly connected to the delivery of prescribed activities.

[295] In theory, any residual operational risks impacting customers could be mitigated by requiring the chartered firm or its parent to obtain an insurance policy against these risks. Ideally, this policy should be for the express benefit of customers.

chartered firm's solvency and potentially trigger destabilizing customer runs. In order to completely foreclose this possibility, Congress would need to take two additional steps. The first step would be to explicitly exempt chartered firms from the application of general corporate bankruptcy law.[296] The second step would then be to replace the Bankruptcy Code with a tailormade resolution framework. Once again, given the narrow business model of chartered firms, this resolution framework would be far more streamlined than the FDIC's existing resolution framework for banks. In most cases, the process would involve simply confirming the identity of the chartered firm's customers, determining how much they were owed, and soliciting their instructions for where to send their money. Given this relatively straightforward process, it seems reasonable to expect that it could be completed within a relatively short span of time: ideally matching the next business day standard targeted by the FDIC under its current deposit insurance scheme. The practical effect would thus be to put the customers of chartered firms in the same position as a bank's insured depositors.

The creation of a federal payments charter would represent a significant improvement over existing state chartering, regulatory, and supervisory frameworks. The prohibitions on financial intermediation and intragroup exposures would effectively eliminate the market and credit risks most likely to trigger the failure of a chartered firm. In the event that a chartered firm did fail, the resolution framework would then ensure that any losses were not borne by the firm's customers. Lastly, requiring chartered firms to hold customer funds through a Federal Reserve master account would remove a major legal and institutional barrier to their full participation in the payment system—not to mention a growing source of jurisdiction friction. Viewed from this perspective, a federal payments charter would thus put new monetary institutions on more equal footing with banks in the increasingly competitive realm of money and payments. Importantly, by providing customers with greater legal protection, and thereby reducing the risk of destabilizing runs, it would also help support monetary stability and promote public confidence in the constantly expanding universe of institutions that create, hold, and move our money.

Elements of a federal payments charter have already found their way into several recent policy proposals. Introduced in 2018, the OCC's now-abandoned "fintech" charter would have provided non-bank payment platforms like PayPal with a pathway to federal regulation and supervision.[297] In September 2022, the U.S. Treasury Department released a report on the future of money and payments that recommended the creation of a federal payments framework.[298] In July 2023, the House Financial Services Committee (HFSC) voted a marked-up bill out of committee that would have created a new federal charter designed

[296] This could be implemented through an amendment to § 109(b) of the Bankruptcy Code to include chartered firms.

[297] *See* OCC, Comptroller's Licensing Manual Supplement: Considering Applications From Financial Technology Companies (July 2018), https://www.occ.treas.gov.

[298] *See* U.S. Treasury Department, *The Future of Money and Payments: Report Pursuant to Section 4(b) of Executive Order 14067* 47-48 (September 2022), https://home.treasury.gov/system/files/136/Future-of-Money-and-Payments.pdf.

specifically and exclusively for "payment stablecoin" issuers.[299] And in April 2024, Senators Cynthia Lummis and Kristen Gillibrand unveiled an eponymous draft Payment Stablecoin Act designed to "protect consumers, enable innovation and promote U.S. dollar dominance while preserving the dual banking system."[300]

As of writing, none of these proposals has gained any real traction—and with good reason. Both the OCC and Treasury proposals lacked a clear and detailed vision for what types of firms would be eligible to apply for the new charter or the specific regulatory requirements to which these firms would be subject. While far more detailed, the HFSC stablecoin bill was also deeply flawed. As a threshold matter, the bill contemplated that federally-chartered payment stablecoin issuers would coexist alongside state-chartered monetary institutions. The bill would have therefore *exacerbated*, rather than *ameliorated*, the growing problem of monetary heterogeneity. The HFSC bill also contemplated that chartered payment stablecoin issuers would be permitted to invest customer funds in short-term U.S. Treasury securities and other money market instruments. Yet as the failure of Silicon Valley Bank and Signature Bank in March 2023 clearly demonstrated, even these ostensibly "safe" investments can still expose investors to potentially significant interest rate and market risks.[301] Despite these risks, the bill also failed to provide chartered firms or their customers with any relief from the strict application of general corporate bankruptcy law. Last but not least, the HFSC bill violated the basic principle of technological neutrality: giving monetary institutions that used "a cryptographically secured distributed ledger"[302] the valuable option of obtaining a federal charter, while leaving their competitors using other—often far more proven—technologies with little choice but to obtain state money transmitter licenses in each of the states in which they carry on business. Accordingly, while these and other proposals reflect a growing consensus in Washington that a federal payments charter is both necessary and proper, this consensus has yet to yield an effective plan for monetary stability.

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[299] *See* HFSC Press Release, "House Financial Services Committee Reports Digital Asset, ESG Legislation to Full House for Consideration" (July 27, 2023) (announcing that H.R. 4766, the "Clarity for Payment Stablecoins Act of 2023," had been voted out of committee).

[300] *See* Press Release, "Lummis, Gillibrand Introduce Bipartisan Landmark Legislation to Create Regulatory Framework for Stablecoins" (April 17, 2024), https://www.lummis.senate.gov/press-releases/lummis-gillibrand-introduce-bipartisan-landmark-legislation-to-create-regulatory-framework-for-stablecoins/.

[301] *See* Liz Capo McCormick, Ben Holland & Edward Harrison, "SVB's Collapse Shows the World's Favorite Safe Asset Isn't Risk-Free", *BLOOMBERG* (March 29, 2023).

[302] *See* H.R. 4766, § 5 (requiring non-bank payment stablecoin issuers other than state qualified payment stablecoin issuers to file an application with the primary federal payment stablecoin regulation for a charter), § 1(13) (defining a payment stablecoin as a digital asset that is or is designed to be used as a means of payment), and § 1(5) (defining a digital asset as any digital representation of value which is recorded on a *cryptographically-secured distributed ledger*" [emphasis added]).

B. Tailored Supremacy

Perhaps not surprisingly, both the OCC's fintech charter and HFSC stablecoin bill were greeted with skepticism from states like New York and Wyoming that viewed these proposals as an unwelcome and unnecessary federal incursion into what had long been almost exclusively state turf.[303] Behind closed doors, these states—through their representatives in Congress—were also able to exert a degree of influence over the substance of the HFSC stablecoin bill.[304] Looking ahead, this skepticism and influence could make it difficult for Congress to enact legislation creating a fully-fledged federal payments charter—especially one that would give the federal government maximum supremacy over monetary affairs. Accordingly, while the maximum supremacy model would likely be the most effective, it makes sense to canvas other, perhaps more politically feasible, models that would still protect consumers, prevent runs, and promote monetary stability.

One possible model is what we might call *tailored* supremacy. Tailored supremacy envisions the introduction of federal law and regulation specifically targeting the shortcomings of existing state-level regulatory frameworks. This more targeted federal intervention would preempt only those elements of state law that undermine monetary stability, while otherwise leaving state-level chartering, regulatory, and supervisory frameworks fully intact. Three potential targets stand out. The first target would be the often lax and heterogeneous permissible investment restrictions under state money transmitter and other licensing frameworks. These restrictions could be replaced with a single federal rulebook governing the use of customer funds. In theory, this rulebook could impose precisely the same type of prohibition on financial intermediation as the proposed federal payments charter: requiring all customer funds to be deposited in a Federal Reserve master account. This rulebook could also be used to place guardrails around—or even completely prohibit—intragroup lending, borrowing, or other activities that might jeopardize institutional solvency and, thereby, impose potential losses on customers.[305]

The second target would be the application of general corporate bankruptcy law and the absence of state-level resolution frameworks. Once again, the federal payments charter offers a possible template. First, Congress could explicitly exempt money transmitters and other state-chartered monetary institutions from the automatic stay, *pari passu* rule, and other

[303] The NYDFS would eventually sue the OCC on the grounds that the OCC did not have the legal authority to create or issue fintech charters; *Lacewell*, 999 F.3d 130. While the case was dismissed on standing grounds, the chartering program was abandoned following the 2020 presidential election and a change of leadership at the OCC.

[304] For example, it was widely rumored that representatives from several key states objected to a proposal that would have exempted chartered payment stablecoin issuers from the application of general corporate bankruptcy law. New York also went so far as to propose the creation of its own regulatory framework for stablecoins; see New York State Attorney General, Press Release, "Attorney General James Proposes Nation-Leading Regulations on Cryptocurrency Industry" (May 5, 2023), https://ag.ny.gov/press-release/2023/attorney-general-james-proposes-nation-leading-regulations-cryptocurrency.

[305] Along the same vein, this rulebook could also be used to require that customer funds be held in a bankruptcy remote entity or with a third party custodian.

substantive and procedural mechanisms imposed under federal bankruptcy law. Second, Congress could replace these mechanisms with a streamlined resolution framework, possibly under the oversight of OCC or Federal Reserve, designed to ensure that the customers of failed monetary institutions were repaid rapidly and in full. Critically, this federal resolution framework would supplant not only bankruptcy law itself, but also the patchwork of state-level security, surety bond, insurance, and other consumer protection requirements that currently provide customers with uneven, and too often inadequate, protection.

Having effectively eliminated the market, credit, and bankruptcy risks associated with these new monetary institutions, the third and final target would be their eligibility to access basic financial market infrastructure. As a starting point, the FRA could be amended to expand the universe of institutions eligible to open a Federal Reserve master account to include money transmitters, New York Bitlicensees, Wyoming SPDIs, and other state-chartered monetary institutions. To eliminate the possibility of regulatory arbitrage, the relevant eligibility requirements could expressly include both compliance with the new federal rulebook governing the use of customer funds and participation in the new federal resolution framework. This expanded eligibility could then be combined with interoperability rules designed to ensure that these newly-eligible firms were not illegally excluded from full participation in the bank-owned clearinghouses and other network infrastructure at the heart of the U.S. payment system.[306]

In theory, tailored supremacy could potentially yield many of the same benefits as a fully-fledged federal payments charter. A single set of federal rules governing permitted activities, the use of customer funds, intragroup exposures, bankruptcy treatment, and resolution would help put an end to the growing monetary heterogeneity unleashed by antiquated, inadequate, and uncoordinated state laws. In the process, this single rulebook would provide customers with a higher level of legal protection: thereby reducing the risk of destabilizing runs and promoting monetary stability. And it would do so while continuing to give states and state-chartered institutions the scope to experiment with new technologies, regulatory frameworks, and business models.

But there are tradeoffs. Tailored supremacy would not necessarily eliminate the need for these new monetary institutions to apply for a license in each state in which they carry on business.[307] More importantly, the remaining differences in state-level chartering, regulation, and supervision could lead to dangerous gaps in their oversight: opening the door to potentially destabilizing regulatory arbitrage and perhaps even sowing the seeds of future instability. Similarly, continuing to regulate and supervise these institutions primarily at the state level while shifting responsibility for safekeeping customer funds and resolution to federal banking regulators is a recipe for coordination problems and potential moral hazard.

[306] For a more detailed description of the rationale, mechanics, and limitations of these interoperability requirements, see Dan Awrey & Joshua Macey, *Open Access, Interoperability, and the DTCC's Unexpected Path to Monopoly*, 3132:1 Yale Law Journal 1 (2022).

[307] In effect, while depository institutions like Wyoming SPDIs would likely be able to operate nationally, firms licensed under state money transmitter laws or the New York Bitlicense would still need to obtain a license in each state.

Accordingly, while tailored supremacy may indeed be more feasible, it would still represent a second-best solution to the problem of monetary stability.

CONCLUSION

Federalism has played a critical role in shaping the structure and regulation of the U.S. monetary system. For over two centuries, this role has revolved around, and evolved with, the emergence, growth, failure, and rescue of conventional deposit-taking banks. Over time, this evolutionary process has produced both the dual banking system and strong federal oversight and a robust financial safety net. But this evolutionary process did not end with banks. The recent emergence of a new breed of technology-driven monetary institutions, regulated almost entirely at the state level, has started to put pressure on these sturdy but now rapidly aging legal and institutional frameworks. It has also forced policymakers to confront the threats that these new institutions may one day pose to monetary stability and, ultimately, how best to address them. This includes answering complex and thorny questions about how to fit any new federal regulatory framework within the existing federalist structure. This Article has explored these questions and advanced two potential models of federal supremacy: one based on complete federal preemption, the other on shared responsibility and coordination between state and federal regulators. Inevitably, these models involve different tradeoffs. Yet they would both represent a significant improvement over the antiquated, inadequate, and increasingly diverse patchwork of state-level regulatory frameworks that currently govern these new monetary institutions.

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