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ARTICLE

Shadow Banking and Securities Law

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Abstract. Shadow banking may be the single greatest challenge facing financial regulation. Financial institutions that function like banks, but fall outside the scope of banking regulation—aptly termed "shadow banks"—were at the heart of the Global Financial Crisis and most episodes of serious financial stress since then. Scholars have largely focused on one response to this problem: extending traditional banking regulation to shadow banks. Yet more than fifteen years after the crisis, major regulatory efforts along this route have stalled.

In this Article, we explore the uneasy case for greater regulation of shadow banking through a different route—*securities law*. Our first contribution is analytical. We demonstrate the vast but varied jurisdiction that securities regulators already enjoy over shadow banking, which has deep roots in the architecture of U.S. financial regulation. While banking law adopts a narrow and formalistic definition of banking, securities law does the opposite, adopting a set of open-ended, capacious, and functional definitions of its core categories—"security," "investment company," "dealer," and the like—that end up encompassing almost all financial investments. As a result, securities regulators *can* regulate shadow banking. Just as importantly, we show that *how* shadow banking falls under securities law matters. Each categorization comes with its own statutory basis governed by distinct policy levers. The contours of these authorities will only prove more important in an era of judicial skepticism of agency power.

Our second contribution is to explore the promise and limits of regulating shadow banking through securities law. The core affirmative case lies in the fact that securities regulators have clear authority to act, and that shadow banking poses grave dangers to financial stability. In fact, securities regulators *already* address financial instability to a greater extent than is widely appreciated. The case remains uneasy, however, because the

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SEC's mandate and tools are limited, and there are legitimate concerns about the agency's ability to effectively craft ex ante regulations aimed at shadow banking. Nonetheless, we argue that greater action in certain arenas is justified. Our account has important implications for policy as well as for understanding the architecture of financial regulation.

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Introduction

Financial panics are back with a vengeance. In March 2023, Silicon Valley Bank collapsed after its customers attempted to withdraw $42 billion *in a single day*.[1] By the next afternoon, federal regulators had seized control of the bank and placed its deposits of nearly $175 billion under their control.[2] Two days later, regulators took control of Signature Bank, which had over $110 billion in assets.[3] In total, that spring saw three of the four largest bank failures in U.S. history as well as the emergency acquisition of Credit Suisse by UBS—the first collapse of a systemically important bank since the Global Financial Crisis of 2007-2008 (GFC).[4]

Ironically, one of the principal consequences of this unrest in commercial banking has been further growth in the "shadow banking" sector.[5] Shadow banks are financial institutions that function like banks but operate outside the scope of banking law.[6] Shadow banks finance their activities by issuing claims that investors can demand back at almost any time, just as a traditional bank funds its portfolio of loans through its customers' demand deposits.[7] As a result, shadow banks face the same basic danger as a bank: a run in which

1. BD. OF GOVERNORS OF THE FED. RSRV. SYS., REVIEW OF THE FEDERAL RESERVE'S SUPERVISION AND REGULATION OF SILICON VALLEY BANK, at i (2023); Austin Weinstein, *SVB Depositors, Investors Tried to Pull $42 Billion Thursday*, BLOOMBERG (updated Mar. 10, 2023, 8:32 PM EST), https://perma.cc/U4Z6-T5KX.
2. Andrew Metrick & Paul Schmelzing, *The March 2023 Bank Interventions in Long-Run Context—Silicon Valley Bank and Beyond* 3 (Nat'l Bureau of Econ. Rsch., Working Paper No. 31,066, 2023), https://perma.cc/656F-N4SQ; Vivian Giang & Mike Dang, *10 Days that Have Roiled Markets: A Timeline of the Banking Chaos*, N.Y. TIMES (Mar. 20, 2023), https://perma.cc/78DL-JVU2.
3. Hannah Lang & Nupur Anand, *Signature Bank Becomes Next Casualty of Banking Turmoil After SVB*, REUTERS (Mar. 13, 2023, 8:19 AM EDT), https://perma.cc/7XXP-EEW8.
4. *See* Giang & Dang, *supra* note 2; Elizabeth Aldrich, *Failed Banks in the US: An Analysis by Year, Size and More*, FORBES (updated Apr. 29, 2024, 12:53 PM), https://perma.cc/6X94-7MSN; FIN. STABILITY BD., 2023 BANK FAILURES: PRELIMINARY LESSONS LEARNT FOR RESOLUTION 1, 4 (2023), https://perma.cc/S6M8-UGEQ.
5. In the first week following Silicon Valley Bank's collapse, investors transferred nearly $130 billion to money market funds (a type of shadow bank), bringing the total size of the sector to an unprecedented $5.4 trillion. *See* Joseph Adinolfi, *Money-Market Funds Swell to Record $5.4 Trillion as Savers Pull Money from Bank Deposits*, MARKETWATCH, https://perma.cc/YDS2-WNMD (last updated Mar. 22, 2023, 11:06 AM ET).
6. *See* Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Rsrv. Sys., The Crisis as a Classic Financial Panic, Remarks at the Fourteenth Jacques Polak Annual Research Conference 4 & n.1 (Nov. 8, 2013), https://perma.cc/73EC-Y97Y (stating that "in the [GFC], much of the panic occurred outside the perimeter of traditional bank regulation, in the so-called shadow banking sector").
7. *See* Bryan J. Noeth, *Traditional Versus Shadow Banking*, FED. RSRV. BANK OF ST. LOUIS (Feb. 1, 2012), https://perma.cc/V6VF-LKHM; Steven L. Schwarcz, *Regulating Shadow Banking*, 31 REV. BANKING & FIN. L. 619, 621 & n.8 (2012).

investors demand their money or money-like claims back abruptly and en masse.[8] While much of banking law is designed to mitigate this precise danger, these laws do not apply to shadow banks.

Shadow banking has been the defining problem of financial regulation since the GFC.[9] The problem remains vast, as the financial system repeatedly reminds us. Since 2008, the United States has been rocked by periodic episodes of financial instability or near-panic involving entities outside the banking sector: "repo madness" in 2019,[10] runs on money market funds and massive dysfunction in Treasury markets in 2020,[11] and, most recently, the collapse of major "algorithmic stablecoins" and cryptocurrency lenders in 2022 and 2023.[12] It is likely that only unprecedented central bank intervention in the shadow banking sector has kept some of these episodes from precipitating broader economic crisis.[13]

What's the solution to the shadow banking problem? For the most part, leading economists and legal scholars have converged on a shared approach: allow banking regulation to govern the nonbank issuers of money-like claims.[14] In essence, shadow banking should be encompassed within the

8. *See* Schwarcz, *supra* note 7, at 625, 629-30.

9. *See* Daniel K. Tarullo, Member, Bd. of Governors of the Fed. Rsrv. Sys., Shadow Banking After the Financial Crisis, Remarks to the Federal Reserve Bank of San Francisco Conference on Challenges in Global Finance 10 (June 12, 2012), https://perma.cc/SX4R-H96U (discussing the need to study shadow banking); *see also* MORGAN RICKS, THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION, at ix-x (2016). Even narrow measures show that shadow banks in the United States held more than $19 trillion in total assets as of 2022. FIN. STABILITY BD., GLOBAL MONITORING REPORT ON NON-BANK FINANCIAL INTERMEDIATION 33 (2023), https://perma.cc/S493-D2QR.

10. *See* Sriya Anbil, Alyssa Anderson & Zeynep Senyuz, *What Happened in Money Markets in September 2019?*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (Feb. 27, 2020), https://perma.cc/VNJ7-RVRY; Robert Mackenzie Smith, *All Clear? Structural Shifts Add to Repo Madness*, RISK.NET (Nov. 5, 2019), https://perma.cc/LB5M-U98V.

11. *See, e.g.*, Kenechukwu Anadu, Marco Cipriani, Ryan Craver & Gabriele La Spada, *The Money Market Mutual Fund Liquidity Facility*, ECON. POL'Y REV., June 2022, at 139, 139; Darrell Duffie, *Still the World's Safe Haven? Redesigning the U.S. Treasury Market After the COVID-19 Crisis* 6 (Hutchins Ctr., Working Paper No. 62, 2020), https://perma.cc/J5ZK-WEFA; Gabriel Rauterberg & Joshua Younger, Book Review, *What is the Law's Role in a Recession?*, 135 HARV. L. REV. 1351, 1365 (2022) (reviewing YAIR LISTOKIN, LAW AND MACROECONOMICS: LEGAL REMEDIES TO RECESSIONS (2019); and ADAM TOOZE, SHUTDOWN: HOW COVID SHOOK THE WORLD'S ECONOMY (2021)).

12. *See* Gary B. Gorton & Jeffery Y. Zhang, *Bank Runs During Crypto Winter*, 14 HARV. BUS. L. REV. 297, 336-37 (2024); Russell Wong, *Why Stablecoins Fail: An Economist's Post-Mortem on Terra*, FED. RSRV. BANK OF RICH. (July 2022), https://perma.cc/F8ZT-6UBR.

13. Rauterberg & Younger, *supra* note 11, at 1368-69.

14. *See, e.g.*, Gary Gorton & Andrew Metrick, *Regulating the Shadow Banking System*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2010, at 261, 289 ("Like previous reforms of banking, our proposals seek to preserve banking and bank-created money but

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regulation of traditional banking law (i.e., the "bank regulatory perimeter").[15] We do not disagree that this is the right approach in principle. Indeed, U.S. banking regulators, and the Federal Reserve in particular, possess a powerful set of tools and an immense balance sheet to address the risks of shadow banking.[16] The Federal Reserve is also the federal institution designed to administer the monetary architecture of the United States.[17] But banking regulators do not possess clear legal authority over the shadow banking sector.[18] In the fifteen years since the GFC, regulators and politicians have made little headway in adopting more dramatic reform proposals, and experts still strongly disagree on the extent to which shadow banks should be regulated like banks.[19]

This Article explores a different approach to the problem of shadow banking: *securities regulation*. It develops the case for regulating shadow banking by means of securities law. While we are the first to systematically explore the possibilities of securities law in addressing shadow banking, the claim that the SEC should take a greater role in addressing financial stability is not as alien as it might seem. Many senior regulators, whether during their regulatory tenures or afterward, have noted that the SEC should pay greater attention to systemic risk and financial stability.[20] In systematically exploring this proposition, we make two contributions to the literature.

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eliminate bank runs."); *see also* Lev Menand & Morgan Ricks, *Rebuilding Banking Law: Banks as Public Utilities*, 41 YALE J. ON REGUL. 591, 599-601, 622 (2024).

15. *See* Katherine E. Di Lucido, Nicholas K. Tabor & Jeffery Y. Zhang, Essay, *Fenceposts Without a Fence*, 76 VAND. L. REV. 1215, 1218-20 & n.14 (2023) (defining the regulatory perimeter). For a more thoroughgoing revisionist vision of banking law—designed to also encompass shadow banking—see generally Menand & Ricks, *supra* note 14. Sometimes lost in this debate is the fact that banking regulation itself serves a broad number of goals other than stability. Kathryn Judge, *Financial Regulation Beyond Stability*, 19 J. L. ECON. & POL'Y 194, 194-96 (2024).

16. *See infra* Part I.A.

17. David T. Zaring & Jeffery Y. Zhang, *The Federal Reserve's Mandates*, 108 MINN. L. REV. 333, 336, 363 (2023).

18. *See infra* Part II.

19. *See infra* Part III.A. For a sample of the diverse views on the causes and regulation of shadow banking, see Howell E. Jackson, *A Pragmatic Approach to the Phased Consolidation of Financial Regulation in the United States* 3-7 (Harv. L. Sch., Pub. L. & Legal Theory Working Paper Series, Working Paper No. 09-19, 2008), https://perma.cc/3NBJ-MWZP; Kathryn Judge, *Information Gaps and Shadow Banking*, 103 VA. L. REV. 411, 416, 419 (2017); and Yesha Yadav, *The Failed Regulation of U.S. Treasury Markets*, 121 COLUM. L. REV. 1173, 1180, 1184-85 (2021). Additionally, some scholars have warned that increasing the stringency of banking regulations only serves to push banking activities into the shadows, thereby worsening the financial stability problem. *See, e.g.*, Andrew F. Tuch, *The Remaking of Wall Street*, 7 HARV. BUS. L. REV. 315, 317-19 (2017).

20. Daniel Tarullo, a storied financial regulator, has suggested as much. *See* Daniel K. Tarullo, *The SEC Should—And Can—Pay More Attention to Financial Stability*, BROOKINGS

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Our first contribution is analytical: We show how securities regulators *already enjoy* enormous jurisdictional authority over shadow banking.[21] While shadow banking is often said to be unregulated,[22] in reality, it does not fall completely through the regulatory cracks. Instead, under existing law, most forms of shadow banking lie within the jurisdiction of securities regulators. Sometimes this is obvious. Money market mutual fund shares are securities.[23] Any form of commercial paper (i.e., short term corporate debt)—whether nonfinancial, financial, or asset-backed—clearly constitutes a security, except when an explicit carveout from the definition of "security" is applicable under the Securities Act of 1933 (Securities Act) and Securities Exchange Act of 1934 (Exchange Act).[24] Other times, determining that a form of shadow banking falls under securities law is complex and fact-sensitive, as with some forms of shadow banking in crypto markets.

As importantly, we show that it does not just matter *that* a form of shadow banking falls under the authority of securities law; *how* it falls under that jurisdiction matters enormously. Some securities statutes give the SEC sprawling and potent regulatory levers while others provide more limited tools. For instance, money market mutual funds are registered investment companies over which the SEC enjoys enormous regulatory leverage.[25] Hedge

(May 13, 2021), https://perma.cc/9TEE-TTEF; *see also* Jennifer E. Bethel & Erik R. Sirri, *Securities Regulation During and After the 2008 Financial Crisis*, *in* THE NEW INTERNATIONAL FINANCIAL SYSTEM: ANALYZING THE CUMULATIVE IMPACT OF REGULATORY REFORM 215, 217-18 (Douglas D. Evanoff, Andrew G. Haldane & George G. Kaufman eds., 2016) (exploring the SEC's role in mitigating financial instability during the GFC). Scholars have also noted that the SEC could play an enhanced role in regulating various forms of financially risky activities. Cary Shelby has argued that as the principal regulator of hedge funds, the SEC should regulate the systemic risk concerns posed by such firms. Cary Martin Shelby, *Closing the Hedge Fund Loophole: The SEC as the Primary Regulator of Systemic Risk*, 58 B.C. L. REV. 639, 646 (2017); *see also* Patrick M. Corrigan, *Shining a Light on Shadow Banks*, 49 J. CORP. L. 1, 7-8 (2023) (arguing that the Investment Company Act could be used to enhance financial stability in the context of regulating securitization as a form of shadow banking).

21. *See infra* Part II.

22. *See, e.g.*, Laura Kodres, *Shadow Banks: Out of the Eyes of Regulators*, INT'L MONETARY FUND FIN. & DEV. MAG., https://perma.cc/7WC6-S9VA (archived Dec. 16, 2024) (noting that shadow banks "were either lightly regulated or outside the purview of regulators").

23. John Morley, *The Regulation of Mutual Fund Debt*, 30 YALE J. ON REGUL. 343, 346-47 (2013).

24. *See* 15 U.S.C. §§ 77b(a)(1), 78c(a)(10); Asset-Backed Securities, 75 Fed. Reg. 23,328, 23,330 n.30 (May 3, 2010) (to be codified at 17 C.F.R. pts. 200, 229, 230, 232, 239, 240, 243, 249) ("Another type of asset-backed security that is privately offered is asset-backed commercial paper . . . .").

25. MICHAEL S. BARR, HOWELL E. JACKSON & MARGARET E. TAHYAR, FINANCIAL REGULATION: LAW AND POLICY 1395-96 (3d ed. 2021).

funds, on the other hand, are private funds that the SEC has only more limited and indirect authority to regulate.[26]

This pattern—where financial activities designed to evade banking law end up qualifying as securities—is not a simple accident of history. It has deep roots in the architecture of U.S. financial regulation and in market participants' desire to avoid banking regulation. Famously, banking law adopts a narrow and formalistic definition of banking.[27] This has been called banking law's "original sin."[28] Securities law does no such thing. Instead, it defines its foundational categories in extraordinarily capacious, open-ended, and functional terms. As a notable example, securities laws define "security" to include not only familiar financial instruments like stocks and bonds, but also catch-all categories like "investment contract" and "any note."[29] The result captures Congress's intent to "enact[] a definition of 'security' sufficiently broad to encompass *virtually any instrument that might be sold as an investment*."[30] Perhaps even more importantly to our analysis, securities laws define the category of "investment company"—colloquially, an investment fund—with similar breadth. This category of fund encompasses not only any entity whose primary business is investing in securities, but also a business that holds securities and whose assets consist in significant part (exceeding 40%) of securities.[31]

As a result, categories like "security" and "investment company" encompass almost any major financial activity, unless there is an explicit carveout. A bank account, without preemption by banking law, would be a security. A bank, without an explicit exclusion, would be an investment company.[32] All of this will become clear when we turn to various investment products offered by financial institutions in the crypto space.[33] Consider BlockFi, a financial institution that offered individuals accounts where they could deposit crypto or fiat assets that BlockFi would lend out or invest.[34] Investors received a variable interest rate in return for depositing their assets with BlockFi and

26. *Id.* at 23; *see also* Corrigan, *supra* note 19, at 17-18 (discussing the more limited authority that the SEC possesses over entities that qualify for an exemption from the definition of "investment company").

27. *See* RICKS, *supra* note 9, at 4-7 (suggesting that the starting point for banking law should have been a functional approach to money creation).

28. *Id.* at 237.

29. 15 U.S.C. § 77b(a)(1).

30. Reves v. Ernst & Young, 494 U.S. 56, 61 (1990) (emphasis added).

31. 15 U.S.C. § 80a-3(a)(1).

32. *See id.* § 80a-3(c) (exempting banks from the definition of an investment company).

33. *See infra* Parts II.C-.D.

34. BlockFi Lending LLC, Securities Act Release No. 11029, Investment Company Act Release No. 34503, at 3-5 (Feb. 14, 2022), https://perma.cc/9D2Z-KRJ3.

could demand their assets back at any time.[35] In essence, BlockFi was a crypto bank, funded by demand deposits that it used to make longer-term loans. Yet, banking law did not apply to BlockFi. Instead, as the SEC eventually insisted, BlockFi was an investment company, and its crypto bank accounts were securities.[36] Securities law governed this shadow bank.

Our second contribution is to explore the uneasy policy case for attacking shadow banking through securities law.[37] The core case for action lies in the fact that securities regulators have the authority to mitigate the dangers posed by shadow banking. Securities regulators also have underappreciated experience with some of banking law's widely used regulatory tools, such as minimum capital requirements.[38] To be sure, there are serious concerns about the ability of securities regulators to competently implement this approach. We weigh the advantages, disadvantages, and limits of SEC action before concluding that modest, further steps are warranted.

A reader may ask: "Why should we expect the SEC to do anything (if banking regulators have not), and if it does, to do something useful?" Broadly speaking, our response to the issue of political will is that the SEC has far clearer and broader statutory authority to address shadow banking than banking regulators. As a result, it would be easier for the SEC to act, should it decide to do so. Our response to the concern of institutional competence is to suggest where SEC action is most likely to succeed and to show that the SEC already regulates shadow banks, so it should build the competence to do so systematically.

That being said, securities regulation is at best only a partial substitute for banking regulation. Securities regulators simply cannot play a role as a monetary authority, which limits their ability to adequately mitigate the systemic risk associated with shadow banks. Nevertheless, in the absence of improved banking regulation, securities regulators should cautiously pursue an agenda to further regulate shadow banks. As a practical matter, the question is not whether the SEC should enjoy authority over shadow banking activities. It does already. The question is whether it should (1) do nothing with that authority or (2) build competence in the areas where it can plausibly exercise its authority and regulate with an eye to the financial stability risks posed by actors under its control.

This Article proceeds as follows. In Part I, we provide the necessary legal and economic building blocks for understanding the relevant features of banking and securities law. In Part II, we present a historical pattern in which

35. *Id.* at 5.

36. *Id.* at 6-7.

37. *See infra* Part III.B.

38. *See infra* Part III.B.

forms of shadow banking came to be regulated as securities although they are functionally banking substitutes. We do so through a series of case studies that include familiar forms of shadow banking (money market mutual funds and repurchase agreements ("repos")) as well as new digital forms of shadow banking (stablecoins and cryptocurrency lending platforms). The latter illustrations highlight one of our central points: Securities regulators already have authority over many existing forms of shadow banking, and this is likely to remain the case, as evidenced by shadow banking's newest forms. In Part III, we discuss potential reforms designed to address this problematic pattern of regulatory arbitrage leading to financial crises. Finally, in Part IV, we discuss potential objections and qualifications.

I. Banking and Securities Law Are Substitutes, Not Complements

To understand why financial institutions that function like banks are regulated by securities law requires grasping some basic building blocks of both banking and securities regulation. Part I.A outlines what banking is, as an economic matter, and how certain financial activities mimic the function of banks. It also describes banking regulators' regulatory toolkit and legal jurisdiction. Part I.B then turns to securities. While banking regulators possess powerful tools for regulating the risks of banking, their jurisdiction is relatively narrow. Securities regulators, on the other hand, enjoy near catch-all jurisdiction, but their regulatory tools have traditionally been a poor fit for the risks of banking.

A. Banking, Money, and Banking Law

Modern banks are financial institutions that essentially provide three bundled services: taking deposits, making loans, and facilitating payments.[39] A core function of this bundle is money creation. We first explain the economic definition of what makes an instrument "money" and then illustrate why the proliferation of money-like instruments that are created by financial institutions but not subject to banking law—"private money"—oftentimes leads to the deterioration of system-wide financial stability. As we discuss later in this Article, although policymakers and scholars have long argued that private money should fall under the jurisdiction of banking law because it is created

39. Michael J. Hsu, Acting Comptroller, Off. of the Comptroller of the Currency, Modernizing the Financial Regulatory Perimeter, Remarks Before the Federal Reserve Bank of Philadelphia's Fifth Annual Fintech Conference 2 (Nov. 16, 2021), https://perma.cc/P6QA-FJLY; *see also* Dan Awrey, *Unbundling Banking, Money, and Payments*, 110 GEO. L.J. 715, 720 (2022) (noting "the historically intertwined relationship between banking, money, and payments").

through the economics of banking, the vast majority of private money is actually regulated by securities law.[40]

According to economic principles, money has three core properties: It functions as a store of value, a unit of account, and a medium of exchange.[41] A store of value suggests that the asset will hold its worth over time, unlike a basket of perishable goods. A unit of account refers to its measured quantity and its ability to be used as a standard of comparison. A medium of exchange simply means that it is widely accepted as a method of payment. Historically, gold and silver often served as a basis for money; today, central bank liabilities serve as the basis for money.[42]

These three properties, however, do not paint a full picture of what makes an asset work well as "money." In order for an asset to effectively serve as money, it must satisfy the No-Questions-Asked (NQA) principle.[43] That is, the asset must be designed to circulate at par (i.e., at its nominal or face value) with no questions asked.[44] When this condition is satisfied, no actor knows more about the value of the asset than anyone else. No one would find it profitable to produce (private) information about the asset's value, and everyone would know that this is the case. Said differently, money is supposed to be *information insensitive*. This is why many securities—for example, Apple stock—are not money. While it's true that securities can store value, be a unit of account, and be used as a medium of exchange, massive amounts of private information are relevant to their value. Given the NQA principle, price adjustments that typically occur because of changes in supply and demand—like the price adjustments for Apple stocks—should not apply to money. A one dollar bill is accepted in transactions as one dollar without question.[45]

This NQA principle has profound implications for the stability of a financial system. If the NQA principle is not satisfied, then new information can lead holders of an asset to lose faith in its value and seek to reduce the

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40. *See infra* Part II.

41. The Economic Lowdown Podcast Series, *Functions of Money*, FED. RSRV. BANK OF ST. LOUIS, at 00:53-02:12, https://perma.cc/QW4G-FJVF (archived Dec. 16, 2024).

42. Notice that the cash in your wallet is labeled as a "Federal Reserve Note." *See Banknote Identifiers and Symbols*, U.S. CURRENCY EDUC. PROGRAM, https://perma.cc/FWP5-5NEL (archived Dec. 18, 2024). This means that the cash is a liability of the Federal Reserve. *See Credit and Liquidity Programs and the Balance Sheet*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://perma.cc/A93F-CCGD (last updated Nov. 15, 2021).

43. *See* Gary B. Gorton & Jeffery Y. Zhang, *Taming Wildcat Stablecoins*, 90 U. CHI. L. REV. 909, 911-12 (2023).

44. *Id.*

45. The finance literature has formalized the NQA principle. *See, e.g.*, Tri Vi Dang, Gary Gorton & Bengt Holmström, *The Information View of Financial Crises*, 12 ANN. REV. FIN. ECON. 39, 43-46, 49 (2020).

quantity they hold. Importantly, *private* money—that is, money produced by private entities instead of the sovereign—does not necessarily satisfy the NQA principle. Historically, its proliferation has sometimes led to financial panics.[46]

The failure of money creation can have tremendous societal costs. In reviewing the aftermath of the GFC, the International Monetary Fund noted that "economic activity declined in half of all countries in the world," and that "the crisis may have had lasting effects on potential growth."[47] In the United States, between 2008 and 2013, almost 500 banks failed, and the federal government deployed $245 billion to stabilize financial institutions.[48] Stock prices fell by more than 50% from peak to trough;[49] over fifteen million Americans were unemployed;[50] over six million families lost their homes to foreclosure;[51] and almost $17 trillion in household wealth was wiped out.[52] In addition, there was a marked uptick in suicidal behavior, diagnosed psychiatric disorders, psychological distress, and negative health outcomes for children.[53] What started as a "money problem" transformed into a full-blown economic and societal nightmare.

Given the importance of money creation to a country's economic growth and stability, it's no wonder that governments around the world have created complex apparatuses to regulate it. To operate a bank in the United States, for instance, one must first obtain a charter from a proper federal or state government authority.[54] Banks that have acquired a charter and are regulated accordingly are deemed *within the regulatory perimeter*.[55]

46. *See* Gary B. Gorton & Jeffery Y. Zhang, *Protecting the Sovereign's Money Monopoly*, 75 ALA. L. REV. 955, 969-88 (2024) (reviewing the history of privately produced monies in Scotland, England, Canada, Sweden, and the United States).

47. Wenjie Chen, Mico Mrkaic & Malhar Nabar, *Lasting Effects: The Global Economic Recovery 10 Years After the Crisis*, IMF BLOG (Oct. 3, 2018), https://perma.cc/FR78-NGUN.

48. *See* FDIC, CRISIS AND RESPONSE: AN FDIC HISTORY, 2008-2013, at xiii (2017).

49. *See* Gerald P. Dwyer, *Stock Prices in the Financial Crisis*, FED. RSRV. BANK OF ATLANTA (Sept. 2009), https://perma.cc/2H7E-URGR.

50. Evan Cunningham, *Great Recession, Great Recovery? Trends from the Current Population Survey*, U.S. BUREAU OF LAB. STATS. (Apr. 2018), https://perma.cc/SSA2-T3R6.

51. *Starting Over: Michael Ohlrogge Tracks Post-Foreclosure Outcomes During the Great Recession*, NYU L. NEWS (Jan. 6, 2021), https://perma.cc/5DWM-WXV4.

52. *See* William R. Emmons & Bryan J. Noeth, *Household Financial Stability: Who Suffered the Most from the Crisis?*, FED. RSRV. BANK OF ST. LOUIS (July 1, 2012), https://perma.cc/M6V5-3S62.

53. *See* Claire Margerison-Zilko, Sidra Goldman-Mellor, April Falconi & Janelle Downing, *Health Impacts of the Great Recession: A Critical Review*, 3 CURRENT EPIDEMIOLOGY REPS. 81, 83, 85-86 (2016).

54. *How Can I Start a Bank?*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://perma.cc/MZ9V-X6UA (last updated Aug. 2, 2013).

55. *See* Lucido et al., *supra* note 15, at 1218-19.

Entities whose business models are similar but do not have a charter, and consequently are not regulated as banks, engage in shadow banking. These entities issue money-like claims that qualify as *private* money. To be clear, when we say "whose business models are similar," we mean the entity is engaged in the business of issuing short-term debt similar to demand deposits and then using that short-term debt to fund a portfolio of less liquid, longer-term loans. From an economic theory perspective, that is the quintessential feature of a bank.[56] Thus, the business model of shadow banks has motivated scholars and policymakers to advocate bringing shadow banks within the regulatory perimeter.[57]

In order to preserve system-wide financial stability—which entails ensuring that money-like claims produced by banks satisfy the NQA principle—regulatory agencies have developed an elaborate set of safeguards. These safeguards constitute the bank regulatory perimeter referenced previously. At a high level, two broad categories of regulation apply to banks. One category is enabling: a grant of rights and privileges, typically via a charter for an entity, to engage in banking.[58] The second is restrictive: a set of conditions on those rights and privileges that limit conduct and impose a program of oversight and enforcement.[59]

Here are a few key examples to consider. On the positive side, banks' deposits are insured by the FDIC up to a threshold amount.[60] Up until that threshold (i.e., $250,000), depositors know that they will get their money back, no questions asked. Thus, the banks' deposit liabilities satisfy the NQA principle. In addition, banks have access to a standing lender of last resort, the Federal Reserve's discount window.[61] Banks that do not have enough liquidity on hand—but one that is solvent—may pledge collateral to the Federal Reserve in exchange for an emergency loan.[62] The idea is to provide a backstop that is always available.[63]

On the negative side of the ledger, banks are subject to strict regulatory requirements. For decades, the main regulatory lever was adjusting the

56. *See, e.g.*, Tri Vi Dang, Gary Gorton, Bengt Holmström & Guillermo Ordoñez, *Banks as Secret Keepers*, 107 AM. ECON. REV. 1005, 1005 (2017).

57. *See, e.g.*, Gorton & Metrick, *supra* note 14, at 267-68.

58. Lucido et al., *supra* note 15, at 1219.

59. *Id.*

60. *Deposit Insurance FAQs*, FDIC, https://perma.cc/F863-LMC3 (last updated Apr. 1, 2024).

61. *See, e.g.*, FED. RSRV., BANK TERM FUNDING PROGRAM: FREQUENTLY ASKED QUESTIONS 3 (rev. 2024), https://perma.cc/N8GD-RZ6P.

62. *Id.*; *see Discount Window Lending*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://perma.cc/DZ2Z-EUNM (last updated Dec. 31, 2024).

63. *Discount Window Lending*, *supra* note 62.

minimum requirements for bank regulatory capital, with the idea being that more capital translated into a larger buffer to absorb shocks.[64] The GFC exposed that framework as inadequate. The GFC showed that maintaining minimum capital levels was not sufficient to protect the financial system, as investors lost confidence in banks before their capital minimums were breached;[65] and institutions that were excessively leveraged received taxpayer-funded government assistance.[66] Regulators responded with an array of strategies to fill these gaps, including the implementation of annual stress tests, liquidity regulations, single-counterparty credit limits, resolution requirements, and mandatory central clearing.[67]

Given that poorly designed private money—money that does not satisfy the NQA principle—can cause bank runs that lead to financial crises, one understands why governments around the world regulate creators of money. To use our vocabulary, governments want to bring private money issuers into the bank regulatory perimeter to regulate them under banking law. However, as we argue later in this Article, most forms of private money currently fall under the jurisdiction of securities law. Thus, instead of trying to expand the jurisdiction of banking law—a mission that has received little political support[68]—we believe that regulators should ask what can be done under securities law to solve the problem, even if it is not the best approach.

B. Securities Law

Securities regulation is a sprawling and complex body of law designed to regulate the issuance and trading of the instruments that companies and financial institutions sell to raise capital.[69] Luckily, only some broad features of its regulatory framework are important to our argument. This Subpart argues

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64. *See* Jeremy Kress & Jeffery Zhang, *Bank Capital, Endgame Edition*, BRIEFING BOOK (Jan. 8, 2024), https://perma.cc/4JWW-VKMJ [hereinafter Kress & Zhang, *Bank Capital*] ("[B]ank capital refers to shareholders' equity that banks redeploy through lending, trading, and other activities. Thus, bank capital requirements establish the extent to which a bank must fund itself through equity rather than through debt, such as deposits."); *see also* Jeremy C. Kress & Jeffery Y. Zhang, *The Macroprudential Myth*, 112 GEO. L.J. 569, 593 (2024) ("Capital is a quintessential microprudential device, one that predated the global financial crisis by decades.") [hereinafter Kress & Zhang, *Macroprudential Myth*].

65. Mark E. Van Der Weide & Jeffery Y. Zhang, *Bank Capital Requirements After the Financial Crisis*, *in* THE OXFORD HANDBOOK OF BANKING 707, 721 (Allen N. Berger, Philip Molyneux & John O.S. Wilson eds., 3d ed. 2019).

66. *See* Kress & Zhang, *Bank Capital*, *supra* note 64.

67. *See* Kress & Zhang, *Macroprudential Myth*, *supra* note 64, at 589-609 (detailing the main bank regulatory changes that have been put in place since the GFC).

68. *See infra* Part IV.C.1.

69. BARR ET AL., *supra* note 25, at 453-59.

that most of shadow banking is and will continue to fall under the purview of securities regulation. More importantly, we articulate why and how.

Shadow banking falls under securities regulation because securities laws are built around extraordinarily capacious statutes that trigger a variety of obligations. Key statutory terms—"security," "investment company," "broker-dealer," and so on—bring with them their own body of statutory law, regulation, and jurisprudence.[70] Because of the breadth of these categories, and the narrowness of banking law, securities regulation enjoys broad jurisdiction over shadow banking.

How shadow banking falls under the jurisdiction of securities regulators is equally important. The law regulating each statutory term not only covers most shadow banking activities but also defines *widely different* opportunities for regulation. Hence, the degree to which the SEC can regulate shadow banking is determined by the scope of each statutory term. This will only prove more important given the increasing skepticism of certain courts toward agency power and the downstream demand for precise and certain legal authority for agency action.[71]

Security.—Securities law's central concept of "security" is understood in functional, open-ended, and expansive terms.[72] The key definitions appear in section 2(1) of the Securities Act[73] and section 3(a)(10) of the Exchange Act.[74] These two statutory provisions each offer a (similar) laundry list of financial instruments that count as securities. These lists include the familiar, such as stocks and bonds—the most common instruments that companies use to raise capital from outside investors—and strikingly open-ended categories of instruments. Two specific terms have proved to be of fundamental importance and have each been interpreted by a seminal Supreme Court decision: "investment contract" in *SEC v. W.J. Howey Co.*,[75] and "note" in *Reves v. Ernst & Young*.[76]

70. *See infra* notes 72-112 and accompanying text.

71. *See infra* Part IV.D.

72. The Supreme Court famously noted that Congress's intent in defining "security" was "to define 'the term "security" in sufficiently broad and general terms so as to include within that definition the many types of instruments that in our commercial world fall within the ordinary concept of a security.'" Reves v. Ernst & Young, 494 U.S. 56, 61 (1990) (internal quotation marks omitted) (quoting United Hous. Found., Inc. v. Forman, 421 U.S. 837, 847-48 (1975)).

73. Pub. L. No. 117-263, § 2(1), 48 Stat. 74, 74 (codified as amended at 15 U.S.C. § 77b(a)(1)) ("The term 'security' means any note, stock, treasury stock, bond, debenture, evidence of indebtedness . . . .").

74. Pub. L. No. 73-291, § 3(a)(10), 48 Stat. 881, 883-84 (codified as amended at 15 U.S.C. § 78c(a)(10)).

75. 328 U.S. 293 (1946).

76. 494 U.S. 56 (1990).

The first catch-all term included in the statutory definition is "investment contract."[77] No other part of the statutory definition has so expanded securities law's ambit.[78] In 1946, the Supreme Court confronted the unusual question of whether an offering of units in the ownership and development of a citrus grove constituted an investment contract.[79] In response, the Court developed a canonical definition of what a "security" encompasses in the context of interpreting "investment contract."[80] Four elements are required beyond the existence of a contract, transaction, or scheme: (1) an investment of money; (2) in a common enterprise; and (3) the expectation of profits; (4) from the efforts of others.[81] In other words, the test requires an investment in a common enterprise based on the expectation of profits derived from the efforts of others. As we will see, the Court's holding, popularly known as the *Howey* test, plays an important role in regulating shadow banking because its reach is so broad.

Importantly, however, the reach of the statutory definition of "security" does not end there. Various forms of debt claims are also included in "security," including "any note, . . . bond, debenture, [or] evidence of indebtedness."[82] The federal courts have developed a body of jurisprudence distinct from *Howey* to categorize various financial claims that are better understood as a note or evidence of indebtedness, rather than an investment contract.

In *Reves*, the Supreme Court confronted the question of how to interpret the inclusion of "any note" within the statutory definition of "security," given that the use of promissory notes is ubiquitous in commerce.[83] The dispute involved the sale by a farmers' cooperative of uncollateralized promissory notes entitling holders to payment upon demand.[84] The Court began by observing that while Congress aimed to broadly regulate any notes used as investments, not all notes involve investment, which necessitated a judicially crafted test.[85]

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77. 15 U.S.C. § 77b(a)(1) ("The term 'security' means any . . . investment contract . . . or, in general, any interest or instrument commonly known as a 'security', or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing.").
78. Leslie J. Crocker, *Investment Contracts Under Federal and State Law*, 17 CASE W. RES. L. REV. 1108, 1125 (1966) ("A careful examination of the investment contract aspect of securities reveals, in general, a trend toward expansion of that concept.").
79. *Howey*, 328 U.S. at 294, 297.
80. *Id.* at 298-99.
81. *Id.*
82. 15 U.S.C. § 77b(a)(1).
83. 494 U.S. 56, 58, 62-63 (1990).
84. *Id.* at 58.
85. *Id.* at 62-63.

Accordingly, the Court designed a test to distinguish notes that involve investment, making them securities, and notes that do not involve investment and are not securities. Under this test, a note should be presumed to be a security unless it strongly resembled one of a list of enumerated notes that are not securities, such as a note secured by a residential mortgage.[86] The question of resemblance was to be decided by a four-factor test designed to capture the common characteristics of the notes that are not securities. The factors are: (1) the transaction's purpose;[87] (2) the instrument's "plan of distribution," turning on whether there is "common trading for speculation or investment"; (3) the "reasonable expectations of the investing public"; and (4) whether the instrument's risk is reduced by some other factor, such as the applicability of a different regulatory scheme.[88] Ultimately, the Court found that the cooperatives' notes qualified as securities.[89] *Reves* is the lodestar for determining whether a variety of debt instruments are securities under federal law.[90]

Together, *Howey* and *Reves* cast a very wide net to bring novel financial instruments under the purview of securities regulators. Indeed, the broadness of the definition of "security," as interpreted by courts, makes securities law a kind of catch-all regulatory body for a wide array of financial innovations.

Investment Company.—While the definition of "security" is familiar to most lawyers, the category of "investment company" may prove even more important, not only for our analysis but for the future of financial regulation. Almost every arena of shadow banking—the markets for repos, commercial paper, mortgage-backed securities, and crypto assets—both past and present, involves investment companies in central respects. So we now turn there.

Securities law uses the term "investment company" for what is typically called an investment fund. The underlying statute governing funds is the Investment Company Act of 1940 (40 Act).[91] The 40 Act establishes two distinct, if overlapping, definitions of an investment company and provides a range of exclusions and exemptions. The primary definition is that an investment company is any issuer which "is or holds itself out as being engaged

86. *Id.* at 67.

87. More specifically, the purpose factor considers whether the transaction's purpose for the seller is to obtain financing for investment or operations and for the buyer to make a profit (suggesting an instrument is a security) or to facilitate some particular commercial or consumer purpose (suggesting an instrument is not a security). *Id.* at 66.

88. *Id.* at 66-67 (quoting SEC v. C.M. Joiner Leasing Corp., 320 U.S. 344, 351, 353 (1943)).

89. *Id* at 67.

90. *See* Marc I. Steinberg, *Notes as Securities: Reves and Its Implications*, 51 OHIO ST. L.J. 675, 684 (1990).

91. Pub. L. No. 76-768, ch. 686, 54 Stat. 789 (codified as amended in scattered sections of 12, 15 U.S.C.).

primarily . . . in the business of investing, reinvesting, or trading in securities."[92]

The second definition dispenses with the requirement of investing or trading securities constituting the "primary" business of the issuer. Instead, an issuer is also an investment company if it (1) is "engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities"; and (2) "owns or proposes to acquire investment securities having a value exceeding 40 per centum of the value of such issuer's total assets (exclusive of Government securities and cash items) on an unconsolidated basis."[93] In other words, an issuer that invests or trades securities and holds over 40% of its total assets in securities is an investment company, even if it is dedicated to another business as well.

The reach of the definition is vast. It encompasses legal entities holding more than $50 trillion in assets: Mutual funds hold $25.5 trillion, exchange-traded funds (ETF) $8.1 trillion,[94] hedge funds $10.2 trillion, and private equity funds $6.7 trillion.[95] (The total assets of commercial banks are $23.5 trillion, by comparison.)[96] It also may encompass entities holding hundreds of billions more in the form of special-purpose acquisition companies ("SPACs") and stablecoin issuers, both of which are arguably investment companies, as we will see.[97]

Crucially, funds come in two varieties: (1) those that must register with the SEC and are subject to the full panoply of investment company regulation (often called "registered funds," "40 Act funds," or "RICs" for registered investment companies), and (2) those that are more lightly regulated ("exempt," "unregistered," or "private" funds).[98] Mutual funds and ETFs are the most important registered funds, although publicly traded closed-end funds that invest in private market assets are now quite important.[99] Among private

92. 15 U.S.C. § 80a-3(a)(1)(A). An issuer is any person who "issues or proposes to issue any security." *Id.* § 77b(a)(4).

93. *Id.* § 80a-3(a)(1)(C).

94. INV. CO. INST., 2024 INVESTMENT COMPANY FACT BOOK: A REVIEW OF TRENDS AND ACTIVITIES IN THE INVESTMENT COMPANY INDUSTRY 43, 59 (2024), https://perma.cc/A6HW-TYNY.

95. *See* DIV. OF INV. MGMT. ANALYTICS OFF., SEC, PRIVATE FUNDS STATISTICS: THIRD CALENDAR QUARTER 2023, at 5 (2024), https://perma.cc/EC5F-HL7T.

96. *See Total Assets; All Commercial Banks*, FED. RSRV. BANK OF ST. LOUIS, https://perma.cc/EWT3-NAHQ (last updated Dec. 13, 2024, 3:22 PM CST).

97. *See infra* Part II.C.

98. *See Private Funds*, SEC, https://perma.cc/F7KN-LFX4 (last updated Sept. 19, 2024) (differentiating between private funds and investment companies).

99. *See* INV. CO. INST., *supra* note 94, at 23.

funds, the most prominent are hedge funds, private equity, and venture capital.[100]

Many of the central forms of shadow banking will either turn out to be investment companies or will trade in markets whose most important investors and/or intermediaries are investment companies. The ever-growing "empire of the fund" means that investment funds have become a primary way in which individuals invest their savings, whether for short-term yield or longer gain.[101] And as funds continue to raise enormous sums, they find themselves pressed into an ever-expanding menu of new asset classes.

Broker-Dealer.—Our last category is the "broker-dealer," which encompasses entities that engage in either a broker or dealer function. In economic terms, a dealer is an intermediary in trading markets that facilitates others' trading interests by routinely buying and selling from counterparties or "providing liquidity."[102] The Exchange Act defines "dealer" broadly as "any person engaged in the business of buying and selling securities . . . for such person's own account," and excludes a person who buys and sells securities "not as a part of a regular business."[103] The last proviso is known as the "trader" exception.[104] In combination, the definition of dealer encompasses persons whose business is not buying and selling securities as part of a wider investment objective, but whose business is fundamentally that of market making. A "broker" is defined as "any person engaged in the business of effecting transactions in securities for the account of others."[105]

As with "security" and "investment company," the first consequence of qualifying as a broker or dealer is that the actor must register with the SEC as a "broker-dealer" and comply with the obligations attendant to registration.[106] These include compliance with net capital requirements, the customer protection rule, membership in a self-regulatory organization, and a number of other substantive obligations.[107] Moreover, the dealer status can be important even when the instruments traded are not securities. A significant portion of short-term debt securities issued by corporations, known as commercial paper,

100. *See* DIV. OF INV. MGMT. ANALYTICS OFF., *supra* note 95, at 4.

101. *See* WILLIAM A. BIRDTHISTLE, EMPIRE OF THE FUND: THE WAY WE SAVE NOW 2 (2016) (explaining the term).

102. *See* MERRITT B. FOX, LAWRENCE R. GLOSTEN & GABRIEL V. RAUTERBERG, THE NEW STOCK MARKET: LAW, ECONOMICS, AND POLICY 73 (2019).

103. 15 U.S.C. § 78c(a)(5)(A)-(B).

104. *See* Gary Gensler, Chair, SEC, Statement on the Further Definition of a Dealer Trader, (Mar. 28, 2022), https://perma.cc/JEZ4-8ABL.

105. 15 U.S.C. § 78c(a)(4)(A).

106. *See Guide to Broker-Dealer Registration*, DIV. OF TRADING & MKTS., SEC, https://perma.cc/2W6N-D6UU (last updated Dec. 12, 2016).

107. *See id.*

is exempt from the reach of "security" under the Securities Act and Exchange Act.[108] So too are debt securities issued by the federal government, known as Treasuries, although they *are* "securities" for purposes of the 40 Act.[109] Yet the principal participants in those markets—other than the issuers—are investment companies and broker-dealers whose principal regulator is the SEC. Historically, money market mutual funds have been the largest investors in commercial paper, and even after a significant reduction in holdings, mutual funds remain close to majority holders.[110] Given the breadth of these categories, the jurisdictional reach of securities laws is extraordinarily broad, as we will further illustrate in Part II.

It is worth dwelling on the *mandate* of securities regulators as well. The SEC has no explicit mandate to address financial stability or systemic risk. The explicit mandates of the SEC are to protect investors, facilitate capital formation, and promote efficiency and competition.[111] Yet, as Hilary Allen has observed, the SEC's mandates may implicitly cover the consideration of financial stability and systemic risk because the realization of those risks endangers the portfolios of investors, the ability of firms to access capital, and the efficient functioning of securities markets.[112]

II. What's the Problem? Innovation, Arbitrage, and Fragility

In Part I, we introduced the narrow remit of banking law and the expansive remit of securities law. This Part illustrates, through a series of case studies, our claim that the SEC enjoys substantial or exclusive jurisdiction over every major domestic form of shadow banking.[113] The case studies serve different functions. The first case study takes one of the clearest and most

108. *See About Commercial Paper*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://perma.cc/P53G-RY6V (last updated Mar. 12, 2024) ("[Commercial paper] is exempt from SEC registration if its maturity does not exceed 270 days.").

109. *See* 15 U.S.C. § 77c(a)(2) (listing exempted securities, including those issued or guaranteed by the United States government).

110. *See* VIKTORIA BAKLANOVA, ISAAC KUZNITS & TREVOR TATUM, DIV. OF INV. MGMT. ANALYTICS OFF., SEC, PRIMER: MONEY MARKET FUNDS AND THE COMMERCIAL PAPER MARKET 1-2 (2020), https://perma.cc/5QSL-TFXK.

111. 15 U.S.C. §§ 77b(b), 78c(f) (requiring the SEC to consider whether, in addition to investor protection, agency action promotes "efficiency, competition, and capital formation").

112. *See* Hilary J. Allen, *The SEC as Financial Stability Regulator*, 43 J. CORP. L. 715, 728-29 (2018).

113. Morgan Ricks, one of shadow banking's ablest critics, once provided an extensive list of forms of private money that included asset-backed commercial paper, Eurodollars, short-term repurchase agreements, and money market mutual fund shares. *See* RICKS, *supra* note 9, at 50-51.

significant forms of shadow banking, money market mutual funds, and shows how its current legal regime is a product of regulatory arbitrage, interagency turf wars, and the SEC's explicit legal authority emerging victorious over banking authorities' arguably more natural claim to regulation. The second case study covers another vast shadow banking market, the repo market, to illustrate a narrower, more complex, and contested form of SEC jurisdiction over one of the longest standing forms of shadow banking. Together, these first two markets are the largest and most panic-prone elements of today's domestic shadow banking system. The third and fourth case studies of stablecoins and cryptocurrency lending platforms, respectively, illustrate our claim that the SEC is likely to remain the regulator of whatever forms of shadow banking emerge by showing how shadow banking's newest forms are also caught up in securities law's broad statuses. In each case study, we define the financial innovation, discuss how it fits in the balance between banking and securities law, and then note the existing or potential risks associated with its growth.

A. Money Market Mutual Funds

Money market funds have been at the center of recent financial meltdowns, whether that be during the early stages of the GFC following the failure of Lehman Brothers or during the onset of the COVID-19 pandemic in the United States. Both times, investors ran on the funds in a manner similar to a bank run.[114] Both times, the Federal Reserve had to intervene and backstop an industry in freefall.[115] Here, we describe the origin story of these funds, why they are similar to banks, why they are not regulated as banks, and the categorization of their shares as securities. More than any other example, money market funds highlight the importance of our thesis. If there is no political willpower to expand the jurisdiction of banking law to cover entities like money market funds, then we must see if securities law can be leveraged to mitigate these funds' financial risks.

1. What are money market funds?

A money market fund is a type of mutual fund that buys and holds short-term, high-quality government or corporate debt.[116] Money market funds hold over $6.8 trillion in total assets, making them one of the largest fund classes in

114. *See* Mark E. Van Der Weide & Jeffery Y. Zhang, *Tale of the Tape: Lessons from the 2008 and 2020 Financial Crises*, 26 STAN. J. L., BUS. & FIN. 413, 426 (2021).

115. *Id.* at 430.

116. *See* Jill Fisch & Eric Roiter, *A Floating NAV for Money Market Funds: Fix or Fantasy?*, 2012 U. ILL. L. REV. 1003, 1008 (2012).

the United States.[117] Like other mutual funds, they offer investors daily redemption of their shares.[118] Unlike other mutual funds, they seek to maintain a constant price of $1.00 per share.[119]

Money market funds are widely considered one of the paradigmatic forms of shadow banking. They are in the business of serving as substitutes for banks, as they quite literally arose to serve individuals in the same manner as bank accounts but without facing the restrictions of banks. Their history is telling.

That history begins with the Glass-Steagall Act of 1933,[120] which authorized the Federal Reserve to cap interest rates paid by commercial banks on deposits—subsequently codified in Regulation Q.[121] Amid rising inflation in the 1960s, the maximum interest rates stated in Regulation Q suddenly became binding, limiting the interest that banks could pay.[122] Depositors naturally sought a higher return on their savings. While banks could not offer higher rates because of Regulation Q, a small type of financial institution, money market funds, emerged as a form of regulatory arbitrage—offering interest rates exceeding those permitted by Regulation Q.

As chronicled by Michael Barr, Howell Jackson, and Margaret Tahyar, the rise of money market funds to prominence in the 1970s and 1980s was aided by "a series of accounting innovations and new SEC regulations that created special rules about the ways that shares in these funds could be valued."[123] Securities held by mutual funds are typically valued based on market value, which are then reflected in the net asset value of fund shares at the end of each trading day.[124] But if a security has no active secondary market rate, these funds may value their securities holdings "at fair value as determined in good faith."[125] Money market funds began to use amortized cost accounting to value their holdings, which allowed them "to be valued at their acquisition cost while

117. *Money Market Funds; Total Financial Assets, Level*, FED. RSRV. BANK OF ST. LOUIS (updated Dec. 12, 2024, 2:34 PM CST), https://perma.cc/5TT5-WXEM; *Distribution of Investment Fund Assets Under Management (AUM) in the United States in 2023, By Asset Class*, STATISTA (June 18, 2024), https://perma.cc/26RT-6YH7.

118. FIN. STABILITY BD., THEMATIC REVIEW ON MONEY MARKET FUND REFORMS: PEER REVIEW REPORT 8 (2024), https://perma.cc/89VJ-WH3Z.

119. Fisch & Roiter, *supra* note 116, at 1005.

120. Pub. L. No. 73-66, ch. 89, 48 Stat. 162 (codified as amended in scattered sections of 12 U.S.C.).

121. R. Alton Gilbert, *Requiem for Regulation Q: What It Did and Why It Passed Away*, FED. RSRV. BANK ST. LOUIS REV., Feb. 1986, at 22, 22. The current version of Regulation Q is located at 12 C.F.R. 217.

122. *See* Gilbert, *supra* note 121, at 26-28.

123. BARR ET AL., *supra* note 25, at 1396.

124. *Id.*

125. *Id.* (quoting 17 C.F.R. § 270.2a-4 (2015)).

allowing any income (receipt of interest payments) to accrue smoothly over time, or, if the instrument was purchased at a discount, allow a constant increase in value until maturity."[126]

This use of amortized cost accounting was not without controversy. In the late 1970s, while facing litigation, the SEC issued interpretive guidance as well as individual exemptive orders.[127] In 1983, the SEC adopted Rule 2a-7 to permit money market funds to use amortized cost valuation or penny-rounding, which allowed shares of money market funds to be bought and sold for $1.00 each.[128] The Rule, in turn, ensured that money market funds could be a bank outside of the bank regulatory perimeter.

2. Banking or securities?

Should banking or securities law regulate money market mutual funds? Economic theory strongly suggests the former because the shares issued by money market funds are functionally demand deposits; they are a form of money that can be redeemed upon request. Without adequate regulations and safeguards, this form of money deposit is highly vulnerable in times of market distress.

The industry had other plans, however, and focused on the legal distinction between equity and debt. As the money market fund industry boomed, critics alleged that the industry was essentially taking deposits and therefore in violation of the Glass-Steagall Act (section 21 of the Act prohibits an entity other than a bank from engaging in deposit-taking, and money market funds were not banks).[129]

In 1979, one of these critics sent a letter to the SEC, questioning whether money market funds indeed violated section 21.[130] The critic also sent the question to the DOJ. The DOJ, however, issued an interpretive letter arguing

126. *Id.* (citing Timothy Q. Cook & Jeremy G. Duffield, *Money Market Mutual Funds: A Reaction to Government Regulations or a Lasting Financial Innovation?*, FED. RSRV. BANK RICH. ECON. REV., July/Aug. 1979, at 15, 20).

127. *Id.* at 1397.

128. *Id.* (citing Valuation of Debt Instruments and Computation of Current Price Per Share by Certain Open-End Investment Companies (Money Market Funds), Investment Company Act Release No. 13,380, 48 Fed. Reg. 32,555 (July 11, 1983)).

129. *See* Gorton & Zhang, *supra* note 43, at 920-21 (noting the complaint by the Chairman of the Board of the Bowery Savings Bank of New York); 12 U.S.C. § 378(a)(2); *see also* Howell E. Jackson & Morgan Ricks, *Locating Stablecoins Within the Regulatory Perimeter*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Aug. 5, 2021), https://perma.cc/SV3T-DR2A.

130. Gorton & Zhang, *supra* note 43, at 920-21.

that money market funds were *not* engaged in deposit taking.[131] In particular, the DOJ argued that "depositors are *creditors,* yet holders of money market fund shares are *owners.*"[132] The investor in a money market fund did not deposit funds; they owned shares—securities.[133] So, the argument concluded, money market funds and deposit accounts were fundamentally different and there was no violation of section 21.[134] Instead, it was left to the SEC to regulate money market funds as a species of investment company.

3. Fragility

Securities law's victory in the jurisdictional battle over money market funds had profound implications decades later. Not surprisingly, a financial instrument designed to replicate an uninsured demand deposit has the same upsides and downsides as an uninsured demand deposit. Does this type of account-based private money consistently satisfy the NQA principle? No. When money market funds "break the buck"—that is, when the price per share falls below $1.00—investors become stuck in a bank-run dynamic.[135]

Such a market-wide panic occurred in September 2008. One day after Lehman Brothers declared bankruptcy, a money market fund (dubbed the "Reserve Primary Fund") broke the buck because of its exposure to debt issued by Lehman Brothers.[136] This caused many investors to seek redemptions from the fund.[137] That same week, as contagion spread through the market, other money market funds experienced substantial redemption requests as well.[138] Crucially, runs on money market funds—like runs on banks—are not isolated

131. *See id.* at 921-22 (citing Letter from Phillip B. Heymann, Assistant Att'y Gen., U.S. DOJ Crim. Div., to Marty Lybecker, Assoc. Dir., SEC Div. of Mktg. Mgmt. 3-5 (Mar. 6, 1981)).

132. *Id.*

133. *Id.*

134. *Id.*

135. *See* William A. Birdthistle, *Breaking Bucks in Money Market Funds*, 2010 WIS. L. REV. 1155, 1157-59 & n.7 (2010) (criticizing the SEC regulations that were designed to respond to mutual fund dysfunction during the financial crisis).

136. *See* Press Release, SEC, Reserve Primary Fund Distributes Assets to Investors (Jan. 29, 2010), https://perma.cc/U668-8KVC ("On Sept. 15, 2008, the Reserve Primary Fund, which held $785 million in Lehman-issued securities, became illiquid when the fund was unable to meet investor requests for redemptions. The following day, the Reserve Fund declared it had 'broken the buck' because its net asset value had fallen below $1 per share.").

137. *Id.*

138. *See* David Skeel, *History Credits Lehman Brothers' Collapse for the 2008 Financial Crisis. Here's Why that Narrative Is Wrong*, BROOKINGS (Sept. 20, 2018), https://perma.cc/24GD-FP48 (noting that the collapse of the Reserve Primary Fund "triggered a run on money market funds").

events. They can harm the real economy by harming short-term credit markets.[139] When a money market fund has insufficient cash to meet redemption requests, the fund typically sells its assets in illiquid markets in what can quickly become a fire sale.[140] Thus, runs on money market funds end up reducing the availability of credit in the economy.[141]

After the GFC, SEC regulators understood that reform was necessary.[142] Unfortunately, they did not address the underlying issue of private money creation. When market volatility spiked once more in March 2020, investors again lined up for redemptions.[143] And just like in 2008, the Department of the Treasury and the Federal Reserve had to intervene to backstop the industry.[144]

B. Repurchase Agreements

Alongside money market funds, the repo market has played a role in almost every episode of major financial instability of the last fifteen years,[145] and it is a prominent example of shadow banking. However, it is not obvious who the primary regulator of the repo market should be as a matter of legal jurisdiction. In this Subpart, we discuss the striking fact that the question of whether a repo is a *security* has never been authoritatively resolved. Nonetheless, we show that central actors in the repo market, such as investors and intermediaries, are *investment companies*. Securities regulators thus enjoy substantial jurisdiction over the repo market, whether or not repos are treated as securities.

1. What are repos?

Sale and repurchase agreements or "repos," as they are popularly known, involve the sale of a security from one party to another coupled with a commitment by the initial seller to buy back the security at a specific higher price at a later date.[146] In economic terms, the repo is a collateralized loan,

139. *See* Van Der Weide & Zhang, *supra* note 114, at 427-28.

140. *Id.*

141. *Id.*

142. *See* Mary Jo White, Chair, SEC, The SEC After the Financial Crisis: Protecting Investors, Preserving Markets, Speech at the Economic Club of New York (Jan. 17, 2017), https://perma.cc/M9UX-WHVW (describing the SEC's mission after the GFC).

143. Van Der Weide & Zhang, *supra* note 114, at 426.

144. *See id.* at 432.

145. *See* Gary Gorton & Andrew Metrick, *Securitized Banking and the Run on Repo*, 104 J. FIN. ECON. 425, 426, 428 (2012); Anbil et al., *supra* note 10.

146. KATIE KOLCHIN, JUSTYNA PODZIEMSKA & ALI MOSTAFA, SEC. INDUS. & FIN. MKTS. ASS'N, THE US REPO MARKETS: A CHART BOOK 3 (2022), https://perma.cc/LG3Q-YRS6 ("A repurchase agreement (repo) is a financial transaction in which one party sells an asset

footnote continued on next page

secured by the underlying security that is sold and repurchased. The purchaser of the security provides the seller with financing (i.e., money upfront), holds the security, and then resells the same or a fungible security specified in the agreement.[147] The later sale occurs at a slightly higher price with the premium representing the interest for the loan. The maturity of a repo is typically very short and often overnight.[148]

The repo market is enormous in size. On average, there is between $4 and $5 trillion in repos outstanding daily.[149] Repos are also a principal piece of the plumbing of world financial markets.[150] This includes the Treasury market and the wholesale, short-term funding markets for banks and certain other financial institutions.[151] Since the GFC, it has become widely recognized that repos operate as a form of shadow banking or private money.[152] The party that sells a security in a repo creates a short-term debt claim and uses it (at least in part) to finance a financial portfolio.

2. Banking or (shadow) securities?

Given the pivotal role of repos in financial markets, it would be reasonable to expect their legal status to be well-defined.[153] Yet their regulatory status is shrouded in ambiguity that has persisted for almost half a century.[154] The SEC seems to have studiously avoided offering a decisive characterization of repos

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to another party with a promise to repurchase the asset at a pre-specified later date (a reverse repo is the same transaction seen from the perspective of the security buyer).").

147. *What Is a Repo?*, INT'L CAP. MKTS. ASSOC., https://perma.cc/9U3M-7SJQ (archived Feb. 13, 2025).

148. *See* COMM. ON THE GLOB. FIN. SYS., BANK FOR INT'L SETTLEMENTS, PAPER. NO. 59, REPO MARKET FUNCTIONING 2 (2017), https://perma.cc/2N2G-QZTQ ("The maturity of repos is very short . . . ."); *see also* Mark E. Paddrik, Carlos A. Ramírez & Matthew J. McCormick, *The Dynamics of the Overnight Triparty Repo Market*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (Aug. 2, 2021), https://perma.cc/NQ5U-TD9D (noting that "most repos are overnight transactions").

149. *See* KOLCHIN ET AL., *supra* note 146, at 6.

150. *See* Gabriel Rauterberg & Joshua Younger, *The Hidden Monetary State*, 56 ARIZ. ST. L.J. 987, 998-99 (2024).

151. *Id.* at 1033-34.

152. *See* Gorton & Metrick, *supra* note 14, at 276-79.

153. *See* Kenneth C. Kettering, *Securitization and Its Discontents: The Dynamics of Financial Product Development*, 29 CARDOZO L. REV. 1553, 1641 (2008).

154. We are not the first to remark on this puzzling ambiguity, although the last time it was afforded in-depth treatment seems to have been almost thirty years ago. *See, e.g.*, Jeanne L. Schroeder, *Repo Madness: The Characterization of Repurchase Agreements Under the Bankruptcy Code and the U.C.C.*, 46 SYRACUSE L. REV. 999, 1002-04 (1996); Elizabeth M. Osenton, Comment, *The Need for a Uniform Classification of Repurchase Agreements: Reconciling Investor Protection with Economic Reality*, 36 AM. U. L. REV. 669, 686-88 (1987).

under securities laws.[155] Although courts have sometimes considered repos' regulatory status, no federal appellate court has ever rendered an authoritative judgment on their status as a matter of federal law. For instance, in *County of Orange (In re County of Orange) v. Fuji Securities, Inc.*, a federal district court suggested that repos were securities for California state regulatory purposes,[156] while in *First National Bank of Las Vegas v. Estate of Russell*, the Fifth Circuit suggested that repos were plausibly securities under federal law.[157]

Despite this ambiguity, the weight of case law holds that securities laws are applicable to transactions involving repos. This is because the reach of various securities law provisions is even broader than the definition of a security. The principal anti-fraud provision, section 10(b), is illustrative. Section 10(b) prohibits fraud "in connection with the purchase or sale of a[] security."[158] In *SEC v. Drysdale Securities Corp.*, the Second Circuit explained that the "purpose of § 10(b) and Rule 10b-5 is to protect persons who are deceived in securities

155. In various marginal or opaque ways, the SEC has characterized repos as securities. *See, e.g.*, Securities Trading Practices of Registered Investment Companies, 44 Fed. Reg. 25,128, 25,128 (Apr. 27, 1979) (to be codified at 17 C.F.R. pt. 271); Baker, Watts & Co., SEC Interpretive Letter, 1982 WL 29238 (May 6, 1982) ("We would regard retail repurchase agreements as bank debt instruments and, hence, securities for purposes of section 3(a)(3) of the [Investment Company] Act.").

156. 31 F. Supp. 2d 768, 771-72 (C.D. Cal. 1998).

157. 657 F.2d 668, 674 (5th Cir. Unit A Sept. 1981); *cf.* SEC v. Drysdale Sec. Corp., 785 F.2d 38, 41 n.2 (2d Cir. 1986) (noting that because the SEC did not argue that repos are securities under the Exchange Act, the court's "discussion is based on the assumption that they are not"). Myriad other federal cases struggle with the status of repos under securities law. *See, e.g.*, Mfrs. Hanover Tr. Co. v. Drysdale Sec. Corp., 801 F.2d 13, 19 (2d Cir. 1986) (noting that fraud involving repos is "in connection with" the purchase and sale of a security and thus subject to section 10(b) of the Exchange Act, and that "[e]ven assuming that repos are not securities, they are subject to section 10(b) and Rule 10b-5"); Cohen (*In re* Bevill, Bresler & Schulman Asset Mgmt. Corp.) v. Army Moral Support Fund, 67 B.R. 557, 594 (D.N.J. 1986) ("The clear trend in cases brought under Section 10(b) of the Securities and Exchange Act of 1934 has been to treat repo and reverse repo transactions as 'purchases and sales' of securities for purposes of applying the anti-fraud provisions of the Act."); City of Harrisburg v. Bradford Tr. Co., 621 F. Supp. 463, 470 (M.D. Pa. 1985) (holding that repos are "considered to be 'securities' governed by the provisions of the Securities and Exchange Act, and thus the 'purchase or sale' requirement is met"); *cf.* IRPC, Inc. v. Hudson United Bancorp, No. 0474, 2002 WL 372945, at *5-6 (Pa. Ct. Com. Pl. Jan. 18, 2002) (discussing whether repos are securities under Pennsylvania law, but leaving the question open). *But see* Carval Invs. UK Ltd. (*In re* Lehman Bros. Inc.) v. Giddens, 506 B.R. 346, 355 & n.6 (S.D.N.Y. 2014) (noting that the debate of whether repos "are better understood as purchases and sales of securities or as loans secured by the securities" is "unnecessary" because "[t]he weight of authority in [the Second Circuit] supports the conclusion that repurchase agreements are more akin to secured loans"), *aff'd*, 791 F.3d 277 (2d Cir. 2015).

158. 15 U.S.C. § 78j(b).

transactions."[159] Repos, the court held, fall within section 10(b) and Rule 10b-5 because they are clearly transactions in connection with securities[160] ("securities transactions"). In so doing, the Second Circuit extended the ambit of section 10(b) to repos while allowing the court to remain agnostic as to the question of whether a repo itself is a security.

The effect of this ambiguity has been to permit the SEC to play little, if any, regulatory role as to repos. Instead, in practice, the Federal Reserve Board and Federal Reserve Bank of New York (FRBNY) are the institutions primarily engaged in the repo market on a daily basis.[161] The operation of the repo market is of enormous interest to the Federal Reserve because it is an important source of short-term secured funding for key financial institutions and because it provides liquidity to major government debt markets, such as Treasuries and agency securities.[162] One can speculate that the SEC implicitly ceded regulatory terrain to the Federal Reserve in view of the fact that repos are far more important to Treasury markets, banks, and wholesale funding markets than to traditional securities markets.

It is worth noting, however, that while the SEC's direct authority over repos is ambiguous, it enjoys wide-ranging and explicit jurisdiction over much of the repo *market*. As we later discuss, major financial participants in the repo market are investment funds and clearing entities for which the SEC is the principal regulator.[163]

3. Fragility

Over the last fifteen years, the repo market has repeatedly been the site of dysfunction or panic. During the GFC, a "run" in the repo market was arguably

159. 785 F.2d at 42 (quoting Chem. Bank v. Arthur Andersen & Co., 726 F.2d 930, 943 (2d Cir. 1984)).

160. *See id.* (analyzing repos and reverse repos as securities transactions).

161. The Federal Reserve has been a regular participant in the repo market by entering into repos with primary dealers to achieve monetary policy objectives. *See* Mark Carlson, Zack Saravay & Mary Tian, *Use of the Federal Reserve's Repo Operations and Changes in Dealer Balance Sheets*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (Aug. 6, 2021), https://perma.cc/W6CM-UCSM. Since the GFC, during times of dysfunction, the Federal Reserve has maintained facilities designed to ensure the liquidity of repo markets. Huberto M. Ennis & Jeff Huther, *The Fed's Evolving Involvement in the Repo Markets*, FED. RSRV. BANK OF RICH. (Sept. 2021), https://perma.cc/H7Z6-STFM. The FRBNY publishes daily data on repos, reverse repos, and tri-party repos through its Markets Data Dashboard. *See Markets Data Dashboard: Market Operations, Data, Surveys & Reports*, FED. RSRV. BANK OF N.Y., https://perma.cc/NBQ8-RPGR (archived Dec 17, 2024).

162. *See* Carlson et al., *supra* note 161.

163. *See infra* Part III.B.2, Appendix (providing data on investment funds' central role in the repo market).

the principal vector of panic in the short-term money markets.[164] Indeed, the work of scholars such as Gary Gorton and Andrew Metrick on the repo market is at the core of the now-standard model of the GFC as fundamentally a bank run in the shadow banking sector.[165] When the value of various mortgage-backed assets held by these banks and securing their repos was called into question, lenders stopped rolling over funding or demanded far more interest or collateral.[166] This caused several major financial institutions to rapidly become incapable of financing themselves.[167] Since the GFC, the repo market has also seen other episodes of instability. In September 2019, "repo madness" involved major spikes in the costs of repos and extremely high volatility between different segments of the repo market.[168]

C. Stablecoins

Over the past few years, stablecoins have taken the financial world by storm. The industry's market value has skyrocketed in a very short time, alarming financial regulators and sparking legislative proposals.[169] In this Subpart, we explain what a stablecoin is, why it represents a form of shadow banking, and why certain kinds of stablecoins likely fall under the jurisdiction of securities regulators.

1. What is a stablecoin?

Cryptocurrencies—digital tokens used as currency—have become commonplace in financial markets over the last decade. The most familiar of them, like Bitcoin or Ethereum, are "fiat cryptocurrencies" that have no intrinsic value but, like gold, can be used as a medium of exchange and a store of value.[170] In the past few years, a subset of cryptocurrencies called "stablecoins" has gained prominence.[171] Unlike fiat cryptocurrencies, stablecoins aspire to NQA status. Their defining feature is that they aim to trade at the same value as a referent, and many stablecoins are backed by safe

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164. *See* Gorton & Metrick, *supra* note 145, at 426, 428.

165. *Id.* at 425.

166. *Id.* at 425-27, 448.

167. *Id.*

168. Anbil et al., *supra* note 10; *see also* Sriya Anbil, Alyssa Anderson & Zeynep Senyuz, *Are Repo Markets Fragile? Evidence from September 2019*, at 2 (Fin. & Econ. Discussion Series, Working Paper No. 2021-028, 2021), https://perma.cc/2X7B-J2QR.

169. *See* Andrew Ross Sorkin et al., *Regulators Sound the Alarm on Stablecoins*, N.Y. TIMES (Nov. 2, 2021), https://perma.cc/93Z9-XCKV; Gorton & Zhang, *supra* note 46, at 957-58.

170. Gorton & Zhang, *supra* note 43, at 910-12.

171. *Id.* at 911.

assets, such as commercial paper and Treasuries.[172] As such, stablecoins represent the newest iteration of private money.

There are numerous stablecoin designs in existence. For example, one class of stablecoins are so-called "algorithmic stablecoins." Algorithmic stablecoins attempt to maintain their par value not through having safe assets in reserve, but through an arbitrage relationship with another digital token.[173] In the case of the now-collapsed stablecoin Terra, the other underlying token was Luna (a fiat cryptocurrency).[174] Terra could always be exchanged for $1 worth of Luna, but Luna itself traded freely at a price fluctuating with market forces.[175] If Luna was trading at say, $5, and Terra ever dropped below $1 to say, $0.50, then traders could make profits by purchasing two Terra tokens for $1 and exchanging them for $2 worth of Luna. Conversely, if Terra were trading at $2, then traders would exchange $1 worth of Luna for a Terra token and make double in profits. Basic arbitrage should theoretically ensure the stability of the $1 Terra price as long as the market for Luna is robust.

2. Banking or securities?

Stablecoins are a recent phenomenon, and the regulatory regime that will ultimately govern them has not yet been settled. So while only banking scholars may remember when the regulatory status of money market mutual funds was contested, the pitched battle between regulators over the status of stablecoins is very much the stuff of op-eds and current regulatory releases.[176] Here, we present two arguments: (1) certain stablecoins, particularly algorithmic stablecoins, are likely to be categorized as securities; and (2) major stablecoin issuers are plausibly investment companies under securities law.

Recall that a financial product qualifies as an investment contract—and hence a security—when it involves investing money in a common enterprise in expectation of profits derived solely from the efforts of others.[177] The

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172. *Id.* at 910-12.

173. *See* Gorton & Zhang, *supra* note 12, at 306-07 (describing the dynamics of an algorithmic stablecoin).

174. *Id.*

175. *Id.*

176. *See, e.g.*, Sheila Bair, Opinion, *Regulate Stablecoins. Please!*, FIN. TIMES (June 9, 2022), https://perma.cc/CLK2-VYS2 (suggesting that the SEC apply the regulatory model of government money market mutual funds to stablecoins); Andy Kessler, Opinion, *Who Pays for Crypto's Collapse?*, WALL ST. J. (June 12, 2022, 4:40 PM ET), https://perma.cc/7G53-54TW (tracing the recent evolution of whether cryptocurrency falls within the definition of securities).

177. *See supra* Part I.A.

securities jurisprudence provides useful guidance.[178] Relevant analysis lies in courts' developing case law addressing fiat cryptocurrencies. One telling opinion was *SEC v. Kik Interactive Inc.*[179] There, the company Kik operated a widely adopted messaging service.[180] It also created and sold "Kin," a fiat cryptocurrency.[181] To help profitably launch Kin, Kik sold rights to tokens in private and public distributions.[182] Kik used the capital it raised in these offerings to help construct a digital ecosystem in which purchasers would (eventually) be able to use their tokens.[183] To the extent that this ecosystem was a success, the holders of Kin tokens would reap rewards either directly or in the form of those tokens increasing in value for resale.[184] The SEC sued Kik, claiming that it had offered securities to the public without registering them, violating one of the cardinal rules of securities law.[185]

The court in *Kik* found that the *Howey* test was satisfied. Purchasers of Kin tokens clearly invested money.[186] The court viewed the purchasers as also investing that money in a common enterprise.[187] Kik, the court found, established a shared community of interest among investors through actions such as depositing investor funds in a single bank account and then using those funds to finance the company's operations.[188] Those operations determined "demand for Kin" and "dictated investors' profits," and "investors reaped their profits in the form of the increased value of Kin."[189] There was also an expectation of profits derived solely from others' efforts because investors purchased tokens in anticipation of those tokens increasing in value due to the company's efforts.[190]

While cryptocurrencies vary significantly in details, the analysis of *Kik* is likely to apply to at least some stablecoins—particularly to algorithmic

178. *See* William Hinman, Dir., SEC Div. of Corp. Fin., Digital Asset Transactions: When *Howey* Met *Gary* (*Plastic*), Remarks at the Yahoo Finance All Markets Summit: Crypto (June 14, 2018), https://perma.cc/ALG3-762H.

179. 492 F. Supp. 3d 169 (S.D.N.Y. 2020). For a useful overview of this issue of whether stablecoins are securities, see *Are Stablecoins Securities?*, QUINN EMMANUEL (July 21, 2021), https://perma.cc/LUG2-32C9.

180. *Kik*, 492 F. Supp. 3d at 173.

181. *Id.*

182. *Id.* at 174.

183. *Id.*

184. *Id.*

185. *Id.* at 176.

186. *Id.* at 177-78.

187. *Id.* at 178.

188. *Id.*

189. *Id.*

190. *See id.* at 179-80.

stablecoins, as we explain below. Roughly put, many individuals purchase stablecoin tokens in hopes that the ecosystem managing the stablecoin will succeed in maintaining its prominence so that the individuals can reap rewards from holding the token through the efforts of others.[191] While it may seem that stablecoins are not held for investment or profit purposes because they are designed to maintain their pegged value, this is often not the case.[192]

To illustrate, consider the case of the algorithmic stablecoin Terra. More precisely known as TerraUSD (UST), Terra was the stablecoin of a broader digital ecosystem that was also called Terra.[193] The broader Terra ecology includes a specific version of "decentralized finance," Terra's Anchor Protocol, which provided an implausibly high 20% return for depositing Terra in a digital wallet.[194]

There is a strong case for viewing Terra tokens as securities under *Howey*. Holders of Terra tokens anticipated making a profit from the efforts of the issuer of Terra and the operators of the Terra Anchor Protocol. The common enterprise element is perhaps the most complex aspect of *Howey*, but it too seems satisfied. A common enterprise under *Howey* can be established by demonstrating either "horizontal" or "vertical" commonality.[195] Under horizontal commonality, the form more relevant here, individual investor fortunes must "depend upon the profitability of the enterprise as a whole."[196] This was certainly the case for Terra. In *SEC v. Terraform Labs*, a federal district court judge agreed and held as a matter of law that UST, among other tokens issued in the Terra ecosystem, constituted securities under *Howey*.[197] The court ruled that UST was an investment contract despite the price of each stablecoin remaining stable because of users' ability to gain profits from Anchor.[198]

To be sure, another recent case addressing cryptocurrencies complicates how federal courts will address these instruments. In *SEC v. Ripple Labs, Inc.*, a federal district court issued a surprising decision on competing summary judgment motions, ruling that XRP, Ripple's digital token, "is not in and of

191. Alexander Osipovich, *Crypto 'Yield Farmers' Chase High Returns, But Risk Losing It All*, WALL ST. J. (July 21, 2021, 5:30 AM ET), https://perma.cc/4STX-XTMF.

192. *Id.*

193. Gorton & Zhang, *supra* note 12, at 306.

194. Elizabeth Lopatto, *How the Anchor Protocol Helped Sink Terra*, VERGE (May 20, 2022, 8:20 AM PDT), https://perma.cc/DZF6-EML8. Decentralized finance or "DeFi" is a catch-all term for financial activities occurring through public blockchains. *See* Hilary J. Allen, *DeFi: Shadow Banking 2.0?*, 64 WM. & MARY L. REV. 919, 934-37 (2023) (discussing the concept of DeFi).

195. *See* Revak v. SEC Realty Corp., 18 F.3d 81, 87 (2d Cir. 1994).

196. *Id.*

197. SEC v. Terraform Labs Pte. Ltd., 708 F. Supp. 3d 450, 472 (S.D.N.Y. 2023).

198. *Id.* at 472-73.

itself a 'contract, transaction[,] or scheme' that embodies the *Howey* requirements of an investment contract" in three of the four situations at issue.[199] The court reasoned that "the totality of circumstances surrounding [Ripple's] different transactions and schemes involving the sale and distribution of XRP" did not amount to a *Howey* investment contract in three instances: programmatic sales to public buyers, other distributions for "consideration other than cash" as compensation to employees and third parties, and sales by Ripple executives on digital asset exchanges to the public.[200] Because sales on "digital asset exchanges" to "public buyers" in "blind bid/ask transactions" do not "establish" that public buyers could reasonably expect the price of XRP to increase, the court reasoned that the third *Howey* prong was not met.[201] The SEC has since appealed this decision.[202]

A second potential basis for SEC jurisdiction is to treat stablecoin *issuers* as investment companies. While there is room for disagreement, many of these issuers may qualify as investment companies and may have been violating the 40 Act by failing to adhere to its many requirements.[203] As we noted in Part II, there are two definitions of an investment company: one that turns on whether an issuer's primary business is investing or trading securities, and one that examines whether an issuer invests or trades securities that account for 40% of its assets.[204] The first definition does a lot of work in this context.

The more intuitive thought may be that stablecoin issuers satisfy the second definition because, regardless of their primary business, their assets must overwhelmingly consist of securities. Indeed, the issuer of Tether, the largest stablecoin,[205] reports that it holds securities and cash exceeding its total liabilities.[206] The majority of those securities, however, are short-term Treasuries,[207] which are expressly excluded from both the numerator and

199. 682 F. Supp. 3d 308, 324, 333 (S.D.N.Y. 2023) (quoting SEC v. W.J. Howey Co., 328 U.S. 293, 298-99 (1946)).

200. *Id.* at 324, 333 (quoting Reply Memorandum of Law in Further Support of Plaintiff's Motion for Summary Judgment at 5, *Ripple Labs, Inc.*, 682 F. Supp. 3d 308 (S.D.N.Y. 2023) (No. 20-cv-10832), 2022 WL 22296789).

201. *Id.* at 326-31 (citing United Hous. Found., Inc. v. Forman, 421 U.S. 837, 852 (1975)).

202. Page Proof Brief of the SEC, SEC v. Ripple Labs, Inc., No. 24-2705 (2d Cir. Jan. 15, 2025), ECF No. 45.

203. *See Investment Company Registration and Regulation Package*, SEC, https://perma.cc/T7FG-4V8C (last updated Nov. 7, 2022).

204. *See supra* notes 92-93 and accompanying text.

205. David Pan, *Tether Says Its Reserves in Cash, Equivalents Are at the Highest Ever*, BLOOMBERG (updated Oct. 31, 2023, 10:31 AM PDT), https://perma.cc/BF7M-3HBL.

206. *See Transparency*, TETHER, https://perma.cc/LN9G-SSF2 (last updated Dec. 17, 2024, 11:59 PM UTC) (claiming that "combined assets exceed their combined liabilities").

207. Pan, *supra* note 205.

denominator of the ratio in the second definition.[208] As a result, Tether may not be an investment company under the second definition.

Is Tether primarily engaged in the business of investing in securities? The seminal *Tonopah Mining Co. of Nevada* case provides a series of factors (known as the *Tonopah* factors) to guide the analysis of whether a company is in fact an investment company.[209] The five "principal" factors are: (1) "the company's historical development"; (2) "its public representations of policy"; (3) "the activities of its officers and directors; and, most important" (4) "the nature of its present assets"; and (5) "the sources of its present income."[210] Factors four and five—the most important factors—weigh strongly toward the answer being yes.[211] Tether's assets are overwhelmingly securities.[212] Its income arises in part from net interest income from its stable securities and appreciation in price from its crypto assets. For instance, as of its June 2024 financial disclosures, Tether's total assets were valued at $125.7 billion.[213] Of that number, roughly $100 billion were securities.[214] Tether reported $80.9 billion in Treasury securities, $11.3 billion in overnight repos, $6.4 billion in money market fund shares, and $4.7 billion in Bitcoin.[215] Put simply, it is hard to say what Tether's business would be if it were not investing in securities. Like a bank, Tether takes deposits and issues liabilities that are used as money and traded, ideally, at par. Of course, Tether is typically characterized as a shadow bank that issues private money precisely because it is not regulated as a bank and its liabilities are neither issued, nor do their issuers enjoy access to the Federal Reserve.[216] Yet, like a bank, Tether's income arises from profitably investing funds from its deposit base. If this is accurate, then a stablecoin issuer may satisfy the first definition because its primary business is investing in securities (i.e., investing the money that is deposited with the issuer in securities).

208. *See supra* note 109 (citing exemptions from definition of "security").

209. Investment Company Act Release No. 1084, 26 SEC Docket 426, 427 (July 21, 1947); *see also* Certain Prima Facie Investment Companies, Investment Company Act Release No. 10937, 44 Fed. Reg. 66,608, 66,610 n.24 (Nov. 20, 1979) (to be codified at 17 C.F.R. pt. 270).

210. *Tonopah Mining Co. of Nev.*, *supra* note 209, at 427.

211. JURISDICTION WORKING GRP., AM. BAR ASS'N, DIGITAL AND DIGITIZED ASSETS: FEDERAL AND STATE JURISDICTIONAL ISSUES 184 (2020), https://perma.cc/M6LC-HUKM ("The last two factors are the most important and are weighed most heavily in the analysis.").

212. *See Transparency*, *supra* note 206.

213. TETHER HOLDINGS LTD., INDEPENDENT AUDITORS' REPORT ON THE CONSOLIDATED FINANCIALS FIGURES AND RESERVES REPORT 1 (2024), https://perma.cc/PVH6-S49L.

214. *Id.* at 4.

215. *Id.*

216. Gorton & Zhang, *supra* note 43, at 912 (arguing that stablecoin issuers are "unregulated banks").

3. Fragility

It should not be surprising that entities issuing private money but evading regulation as banks might be expected to suffer the traditional fate of unregulated, unsupervised commercial banks. NQA has not been satisfied. Indeed, many forget that bank runs were a common occurrence for most of U.S. financial history prior to the advent of deposit insurance in the 1930s.[217]

Markets witnessed a stablecoin collapse in the summer of 2022.[218] The risk that materialized was precisely the one that had been widely discussed, and in the case of stablecoin skeptics, prophesied. There was a run on Terra, which was designed to trade at par with the U.S. dollar.[219] On May 9, 2022, Terra fell to trading at $0.60 during a market panic.[220] The cryptocurrency Luna, whose arbitrage relationship with Terra was supposed to ensure its peg, collapsed to $0.00.[221] There was nothing backing Luna except TerraUSD, and nothing backing TerraUSD except Luna.[222] The arbitrage mechanism that kept the peg in place quickly collapsed once market panic became overwhelming.

Tether, which is not an algorithmic stablecoin, "broke the buck" as well. Tether is also pegged to the U.S. dollar.[223] It is the largest stablecoin—with a market capitalization of over $140 billion by the end of 2024—and its issuer claims that the cryptocurrency is backed by non-fiat-cryptocurrency safe assets, such as cash, U.S. Treasuries, and corporate bonds.[224] Yet in the week following Terra's run, Tether also lost its peg temporarily, falling to $0.95 on May 12, 2022.[225] This was a warning sign for investors and policymakers. In the future, a large market panic could break Tether's peg sufficiently to force the issuer to rapidly sell its assets to meet redemptions. That could then unleash a fire sale and market contagion.

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217. Gorton & Zhang, *supra* note 12, at 301.

218. *Id.* at 306.

219. *Id.* at 306-07.

220. Stacy-Marie Ishmael, *Crypto's Audacious Algorithmic Stablecoin Experiment Crumbles*, BLOOMBERG (updated May 10, 2022, 4:17 AM PDT), https://perma.cc/ZK9R-E4FM.

221. Arjun Kharpal, *TerraUSD Collapse Will 'Probably Be the End' of Most Algorithmic Stablecoins, Crypto Exec Says*, CNBC (updated June 29, 2022, 12:23 AM EDT), https://perma.cc/B6QX-N7T6.

222. Gorton & Zhang, *supra* note 12, at 306-07.

223. Gorton & Zhang, *supra* note 46, at 989.

224. *Top Stablecoin Tokens by Market Capitalization*, COINMARKETCAP, https://perma.cc/KR67-GUK2 (archived Dec. 18, 2024).

225. *See* Ryan Browne, *World's Biggest Stablecoin Regains Dollar Peg After $3 Billion in Withdrawals*, CNBC (updated May 13, 2022, 8:58 PM EDT), https://perma.cc/5GJK-LZZZ.

D. Cryptocurrency Lending Platforms

Cryptocurrency lending platforms are prominent players in the digital finance ecology. Customers provide a platform with crypto assets or fiat currency and earn interest on the assets they deposit.[226] The platform then lends out those assets to financial institutions in the crypto universe.[227] As the Introduction noted and many have observed, cryptocurrency lending platforms function as crypto banks.[228] In the months following the collapse of Terra, there were significant ripple effects in the cryptocurrency lending universe. Platforms like Celsius and Voyager declared bankruptcy.[229] In this Subpart, we briefly discuss the platforms in greater detail before arguing that the products they offer customers function as bank accounts. Yet these cryptocurrency lending platforms are not regulated as banks, and they almost certainly fall beyond the jurisdiction of current banking law as it is commonly understood. The accounts they provide are under the jurisdiction of securities law, however, and will typically qualify as securities.

1. What is a cryptocurrency lending platform?

Within the realm of cryptocurrencies, cryptocurrency lending platforms constitute a second form of private money creation that exists outside of the bank regulatory perimeter. A cryptocurrency lending platform is an entity that accepts "deposits" in the form of cryptocurrencies and then lends them out.[230] In return, the "depositors" earn regular interest payments, sometimes advertised to be as high as 20%.[231] Depositors can also "stake" their cryptocurrencies—lock up the deposit for a period of time—in exchange for a higher return.[232] These lending platforms are functionally banks that offer a cryptocurrency version of savings accounts and certificates of deposit.

The similarity of certain cryptocurrency lending accounts to a certificate of deposit is instructive. In the seminal case *Marine Bank v. Weaver*, the Supreme Court concluded that a certificate of deposit is *not* a security,[233] but

226. Gorton & Zhang, *supra* note 12, at 303.

227. *Id.*

228. *See, e.g.*, Rachel Louise Ensign & Angel Au-Yeung, *They Thought 'Crypto Banks' Were Safe, and Then Came the Crash*, WALL ST. J. (July 23, 2022, 5:33 AM ET), https://perma.cc/ALE2-8TRL; Matt Levine, *Crypto Banks Owe Themselves Money*, BLOOMBERG (Jan. 10, 2023, 10:59 AM PST), https://perma.cc/NHD5-KPDS.

229. Gorton & Zhang, *supra* note 12, at 307-09.

230. *Id.* at 303.

231. *See id.* at 304 tbl.2.

232. *Id.* at 303 n.27.

233. 455 U.S. 551, 559-60 (1982).

for reasons inapplicable to a cryptocurrency lending account. The Court rejected the lower court's reasoning that "a certificate of deposit is similar to any other long-term debt obligation commonly found to be a security,"[234] because, the Court noted, a certificate of deposit is subject to banking law, and banking law effectively guarantees repayment.[235] In other words, the Supreme Court decided that the reason a regulated commercial bank's certificate of deposit was not a security was because it was *created* by a regulated commercial bank, not because of its mechanics.

Cryptocurrency lending platforms are most definitely not regulated commercial banks, even though lending platforms like Celsius advertised a "new way to bank" and told investors that depositing cryptocurrencies with Celsius was "safer than if it were held in a bank."[236] These public marketing campaigns played into anti-big-bank sentiments. But the cryptocurrency lending platforms were recreating banking in the crypto space, outside the purview of bank regulators—banking that was unregulated, unsupervised, and uninsured, and thus subject to debilitating runs. These runs materialized in the summer of 2022, during the period some refer to as "Crypto Winter."[237] Within a matter of weeks, these cryptocurrency lending platforms were crushed by a wave of redemption requests and had to suspend convertibility.[238] Bankruptcies soon followed.[239]

2. Banking or securities?

Cryptocurrency lending platforms have not been regulated or supervised as banks. Instead, securities regulators have brought enforcement actions against them. It's very likely that the SEC has jurisdiction over these cryptocurrency lending platforms because the products that they offer are

234. *Id.* at 557.

235. *Id.* at 557-58 ("[T]here is an important difference between a bank certificate of deposit and other long-term debt obligations. This certificate of deposit was issued by a federally regulated bank which is subject to the comprehensive set of regulations governing the banking industry. Deposits in federally regulated banks are protected by the reserve, reporting, and inspection requirements . . . . In addition, deposits are insured by the Federal Deposit Insurance Corporation." (footnotes omitted)). As the Court explained, "the purchaser of a certificate of deposit is virtually guaranteed payment in full, whereas the holder of an ordinary long-term debt obligation assumes the risk of the borrower's insolvency." *Id.* at 558. Therefore, "[i]t is unnecessary to subject issuers of bank certificates of deposit to liability [in securities law] since the holders [are] abundantly protected under the federal banking laws." *Id.* at 559.

236. *Excerpts from Letters to the Judge in the Celsius Network Bankruptcy Case*, MOLLY WHITE BLOG (July 22, 2022), https://perma.cc/T6BZ-LC4L (quoting investor letters).

237. Gorton & Zhang, *supra* note 12, at 298.

238. *See id.* at 307-08 & tbl.3.

239. *See id.* at 309-10.

securities under the *Howey* test. Recall that beyond a contract, transaction, or scheme, four elements are required for an investment contract to be a "security": (1) an investment of money; (2) in a common enterprise; (3) with the expectation of profits; (4) solely from the efforts of a promoter or third party.[240]

After working through the business model of cryptocurrency lending platforms, one would have little doubt that some platforms were offering an investment contract. For example, Celsius's terms of use characterized deposits as debt contracts that depositors could redeem at any time, explaining: "You may terminate any loan [i.e., deposit] to Celsius at any time, and request that Celsius return the borrowed Eligible Digital Assets and deliver any Rewards accrued from the Earn Service, by transferring such Eligible Digital Assets and Rewards to your external Virtual Wallet."[241] The deposit provided by the investor satisfies *Howey*'s "investment of money" element. The lending platform itself is "a common enterprise." The return promised by the lending platform to the depositor shows that there is an "expectation of profits." Finally, the interest rate provided by the lending platform to the depositor is generated "solely from the efforts of a promotor or third party." Therefore, the *Howey* elements are satisfied. These cryptocurrency lending platforms, while engaging in the business of banking in the crypto ecosystem, were offering unregistered securities.[242]

In January 2023, the SEC flexed its jurisdictional muscle over cryptocurrency lending platforms. Specifically, the agency filed a complaint alleging that "Genesis, part of a subsidiary of Digital Currency Group, entered into an agreement with Gemini to offer Gemini customers, including retail investors in the United States, an opportunity to loan their crypto assets to Genesis in exchange for Genesis' promise to pay interest."[243] This lending platform business model was able to raise billions of dollars from hundreds of thousands of investors,[244] which ran afoul of securities law because it was an offer and sale of notes under *Reves*,[245] as well as an offer and sale of investment contracts under *Howey*.[246]

240. *See* SEC v. W.J. Howey Co., 328 U.S. 293, 298-99 (1946).

241. *Terms of Use*, CELSIUS, https://perma.cc/E2JW-GAUW (last updated Sept. 29, 2022).

242. *See* Gorton & Zhang, *supra* note 12, at 303-05 (showing the common business models of cryptocurrency lending platforms).

243. Press Release, SEC, SEC Charges Genesis and Gemini for the Unregistered Offer and Sale of Crypto Asset Securities through the Gemini Earn Lending Program (Jan. 12, 2023), https://perma.cc/6L2X-TAXS.

244. *Id.*

245. Complaint at 13, SEC v. Genesis Glob. Cap., LLC, 2024 WL 1116877 (S.D.N.Y. Jan. 12, 2023) (No. 23-cv-387), ECF No. 1.

246. *Id.* at 17.

3. Fragility

Following the collapse of Terra-Luna, Three Arrows Capital—a high-flying cryptocurrency hedge fund with a large position in Luna and loans from multiple lending platforms in the crypto ecosystem—also filed for bankruptcy.[247] The collapse of Three Arrows Capital led to a series of "bank runs" on cryptocurrency lending platforms.[248] Notably, the SEC's January 2023 complaint against Genesis and Gemini clearly paints the picture of a classic bank run:

> In November 2022, Genesis unilaterally announced that it would not allow hundreds of thousands of retail investors to withdraw their crypto assets from Gemini Earn because of "withdrawal requests which have *exceeded our current liquidity* following volatility in the crypto asset market. At the time, Genesis held approximately $900 million in investor assets from approximately 340,000 Gemini Earn investors . . . . As of the date of this Complaint, these investors have still cannot withdraw their assets . . . . "[249]

While investors lost substantial sums of money, the fallout from the collapse of these lending platforms was contained within the crypto ecosystem.[250] Said differently, the events during Crypto Winter had no larger impact on financial institutions outside of the crypto ecosystem and did not cause an economic recession despite billions of dollars in losses. The cryptocurrency collapse did not destabilize the broader economy like the GFC. This strongly suggests that, so far, the crypto ecosystem is not systemically important to the traditional financial system and real economy.

In the future, however, if the crypto system links up with the real economy, a financial panic in the realm of cryptocurrencies could lead to a systemic problem in the real economy. Notably, the events of Crypto Winter suggest to the founders of future cryptocurrency lending platforms that profits cannot be made in circular investments. In the coming months and years, the second generation of cryptocurrency lending platforms will likely attempt to link up with the real economy—lending their deposits to firms that generate real economic activity.[251] This means that there is the potential for a real financial crisis the next time around. If banking law will not be expanded to mitigate the risk, then we should focus on the existing securities law infrastructure.

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247. Gorton & Zhang, *supra* note 12, at 309.
248. *Id.* at 309-11.
249. Complaint, *supra* note 245, at 3 (emphasis added).
250. Gorton & Zhang, *supra* note 12, at 311.
251. *Id.* at 315-16 (observing that cryptocurrency firms are looking for new connections); Press Release, Visa, Visa Expands Stablecoin Settlement Capabilities to Merchant Acquirers (Sept. 5, 2023), https://perma.cc/GVU3-5XCV.

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The case studies have raised a point that would have been too abstract to make earlier. The interface between banking and securities law does not just involve the creation of money-like claims that end up being treated as securities. Even issuers of those money-like claims (i.e., the "shadow banks" themselves) fall under the jurisdiction of securities law. As an illustration, consider an institutionally simple form of shadow banking: a money market fund. The fund is a legal entity that issues financial claims.[252] Both the legal entity itself and the claims it issues occupy distinct statuses under securities law, giving the SEC two independent sources of authority over these funds. The fund is a "registered investment company" under Rule 2a-7 of the 40 Act,[253] and the claims it issues are securities under sections 2(a)(1) and 3(a)(10) of the Securities Act and Exchange Act, respectively.[254] Thus, at both the levels of the entity and the financial claim, money market funds fall under SEC jurisdiction.

Our aim is simply to illustrate an important point: The banking/securities interface involves the fact that large portions of the shadow banking *ecology* fall under the regulatory environment provided by securities law. There are many levels, statuses, and categorizations through which that happens. This will be important in the next Part, where we suggest some indirect securities tools that may be used to address forms of shadow banking.[255]

III. Reforming the Banking/Securities Interface

What we call the banking/securities interface emerges from the fact that financial instruments designed to act like money but avoid banking law are usually subject to securities law. To be clear, we are *not* arguing that shadow banking is best regulated by securities law as a kind of "first-best" (or perhaps even second- or third-best) regulatory option. Rather, we are arguing that given the lack of regulatory reform in banking law, *and* the regulatory authority over shadow banking already enjoyed by securities regulators, securities law should do far more to minimize the risks of shadow banking.

For the benefit of comparison, we begin our discussion with a brief overview of the traditional approach to shadow banking, so that we might bring it, in part or in whole, within the banking perimeter. This approach has

252. *See supra* Part II (defining money market funds and their issuance of shares that are redeemable like bank deposits).

253. 17 C.F.R. § 270.2a-7 (2024).

254. 15 U.S.C. §§ 77b(a)(1), 78c(a)(10).

255. We also present data illustrating the central role of investment companies in shadow banking in the Appendix.

dominated the academic literature and most of the policymaking discussion. We then turn to its reverse. Our main analytical claim has been that much of shadow banking falls under the purview of securities law and will continue to do so. Our principal normative approach follows naturally—we focus on how securities regulators already possess a vast and sprawling suite of tools for addressing shadow banking and how, with a few reforms, they could do even more. We identify several actions that the SEC could take *now* to rein in existing versions of shadow banking and to mitigate systemic dangers to the financial system. Finally, we close with a discussion of reforming securities law to better enable the SEC to build ex ante regulatory guardrails for future forms of shadow banking.

The case for securities law is an uneasy one, and we will turn to addressing the most significant counterarguments in the next Part. However, it is important to keep the stakes in mind. Financial crises impose enormous social costs, and banking regulation has failed to rein in shadow banking. The question may thus be: Can and should any other regulator act? By considering "the money problem" from not just the banking side, but also from the securities point of view, we hope to advance the debate on a problem that has vexed a generation of policymakers.[256] In Subpart A, we briefly survey the traditional, banking-centric approach for the purposes of comparison, before turning, in Subpart B, to securities law.

A. The Banking Side

Perhaps the clearest proposal for regulating shadow banking is to expand the remit of federal banking regulators to encompass all shadow banking. Variations of this idea have been discussed and debated within the scholarly literature for decades.[257] In this view, financial crises occur because these money-like instruments are created outside of the bank regulatory perimeter, yet they are redeemable short-term debt like bank deposits.[258] To regulate these bank-like entities as banks, Congress would have to expand the narrow jurisdiction of bank regulators. But this expansion has failed to materialize.

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256. *See supra* note 9 and accompanying text.

257. *See, e.g.*, Anita Ingrid Lotz, *Deregulation or Regulation: Money Market Mutual Funds and Other Illegitimate Offspring of the Banking and Securities Industry*, 1 ANN. REV. BANKING L. 187, 187 (1982) (noting that "[d]epository institutions, already struggling with high inflation and interest rates, argue that permitting investment institutions to offer checking accounts and trust services is unfair, and violates the policies underlying the bank regulatory framework" (footnote omitted)); Gorton & Metrick, *supra* note 14, at 267-68 (writing that "[h]istory has demonstrated two methods for reducing the probability of runs in a system": standardized collateralization and government insurance).

258. *See supra* Part I.A.

To be sure, some may point to the creation of the Financial Stability Oversight Council (FSOC) as an intermediate expansion. Congress created the FSOC to mitigate systemic fragility through the "designations" of institutions or activities.[259] Designated entities or activities are subject to heightened regulatory and supervisory standards imposed by the Federal Reserve.[260] Similarly, Title VIII of the Dodd-Frank Act permits FSOC to designate "systemically important payment, clearing, and settlement activities."[261] Thus, the FSOC could bring designated entities closer to bank-like regulations. We suspect, however, that FSOC is unlikely to prove an adequate first line of defense against shadow banking.

One problem is that there are too many cooks in the kitchen. FSOC is composed of ten voting members and five nonvoting members.[262] Finding consensus among this group is easier said than done, particularly since the voting members are drawn from different regulatory agencies[263]—each with its own objectives and constraints.

A second problem is that prior litigation has diminished the threatening stature of FSOC by revoking its jurisdiction over certain designated entities. For example, on December 18, 2014, FSOC voted to designate MetLife as a "systematically important" entity under section 113 of the Dodd-Frank Act.[264] FSOC concluded that "material financial distress at MetLife could lead to an impairment of financial intermediation or of financial market functioning that would be sufficiently severe to inflict significant damage on the broader economy."[265]

MetLife challenged the designation in court on multiple counts, including that FSOC acted arbitrarily and capriciously; the U.S. District Court for the District of Columbia agreed, holding that the designation was indeed arbitrary

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259. Jeremy C. Kress, Patricia A. McCoy & Daniel Schwarcz, *Regulating Entities and Activities: Complementary Approaches to Nonbank Systemic Risk*, 92 S. CAL. L. REV. 1455, 1458 (2019).

260. *See Designations*, U.S. DEP'T OF THE TREASURY, https://perma.cc/H7PN-MQRA (archived Dec. 23, 2024) (explaining that such institutions "will be subject to consolidated supervision" and "enhanced prudential standards").

261. Pub. L. No. 111-203, § 802(b)(1)(B), 124 Stat. 1376, 1803 (2010) (codified at 12 U.S.C. § 5461(b)). Importantly, the definition of "payment, clearing, or settlement activity" specifically excludes "any offer or sale of a security under the Securities Act of 1933." 12 C.F.R. § 1320.2 (2024).

262. *Council Members*, U.S. DEP'T OF THE TREASURY, https://perma.cc/J3FM-KV2K (archived Dec. 23, 2024).

263. *See id.*

264. FIN. STABILITY OVERSIGHT COUNCIL, FINAL DETERMINATION REGARDING METLIFE, INC. 2 (2014), https://perma.cc/T3K8-XSRD; *see also Designations*, *supra* note 260.

265. FIN. STABILITY OVERSIGHT COUNCIL, *supra* note 264, at 2.

and capricious under the Administrative Procedure Act.[266] In general, FSOC's track record provides no basis to view it as a major force for subjecting financial activities or institutions to banking regulation.

Despite these limitations, we still believe FSOC is capable of playing a constructive role in our proposed framework, though more in a coordinating manner as opposed to direct intervention with its designation authority.[267] Since the SEC does not presently have a division of macroeconomists who can study the issue and advise the agency principals, FSOC could act as a coordinator and conduit of knowledge to the SEC, allowing it to absorb more information about systemic risk via the Treasury, Federal Reserve, and other FSOC member agencies.

B. The Securities Side

The core of our policy approach is that securities regulators should make more extensive use of their existing statutory authority to address core risks of shadow banking. Broadly speaking, there are two distinct routes for pursuing this general proposal. The first we could broadly call an incremental, complementarity approach that favors reforms within the SEC's traditional institutional expertise, with more modest ambition, and which would aim to complement any reforms adopted by banking regulators. The second is a more broadly structural and convergent approach that favors reforms requiring the SEC to develop new competencies, with more dramatic policy ambition, and which would more closely parallel reforms advocated in banking regulation. We first introduce the general idea of using existing SEC authority to address shadow banking before illustrating each of the two approaches. We choose our examples with preexisting literature in mind. In particular, Andrew Metrick and Daniel Tarullo's important work explores repo haircuts and capital requirements.[268] We aim to show the usefulness of our securities-centric approach by zeroing in on these two examples and illustrating how a focus on securities regulation allows for a more complete analysis of the plausibility and desirability of reform.

1. Using the SEC's existing authorities

Our main analytical contribution in this Article is to demonstrate that most forms of shadow banks are already within securities regulators'

266. MetLife Inc. v. Fin. Stability Oversight Council, 177 F. Supp. 3d 219, 230 (D.D.C. 2016).

267. We thank Howell Jackson for providing this insight regarding the potential role of FSOC.

268. *See* Andrew Metrick & Daniel Tarullo, *Congruent Financial Regulation*, BROOKINGS PAPERS ON ECON. ACTIVITY, Spring 2021, at 143, 167-68.

jurisdiction. As a result, we should seriously explore the SEC's potential as a direct regulator of shadow banking. Indeed, our securities analysis leads naturally to a policy approach: Much of shadow banking could be regulated *right now* without any congressional action because the SEC already possesses regulatory authority over shadow banking institutions and may possess more banking law-like regulatory tools and expertise than is usually appreciated.

Securities law is worth considering as a toolkit, despite the difficulties of fit. Large-scale shadow banking reform has not occurred, and there is no clear reason to believe that the next decade will be different. If banking reforms continue to stall, then it is vitally important to ascertain whether and how the SEC could more effectively regulate private money.[269]

2. The incremental complementarity approach

The repo market usefully illustrates this modest approach. In particular, the SEC could adopt reforms to mitigate important risks of the repo market without leaving the domain of its traditional competence and expertise.

The first step to appreciating the SEC's role in the repo market is to see that the SEC enjoys regulatory authority over central participants in the repo market, even if repo instruments themselves are not classified as securities. For instance, the SEC is the principal regulator of both the National Securities Clearing Corporation (NSCC) and its subsidiary, the Federal Income Clearing Corporation (FICC).[270] The NSCC is a massive clearinghouse that clears, settles, and acts as a central counterparty to virtually all equity and corporate securities transactions.[271] Its subsidiary, the FICC, plays a pivotal role in the repo market, where it acts as the central counterparty to a large number of trades; the FICC manages repo transactions valued at approximately $3.7 trillion a day.[272]

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269. There is also substantial disagreement among experts about the appropriate regulation for various forms of shadow banking. *Compare* Hal S. Scott, Professor, Harv. L. Sch., Connectedness and Contagion: A Global Perspective, Address to the International Monetary Fund 1, 3-5, 16 (Nov. 7, 2016) https://perma.cc/9PQK-6BVB (arguing that the lender of last resort tool is the most important to mitigate systemic risk), *with* Ricks, *supra* note 9 (arguing that runnable funds should be brought within the framework of insured depository institutions).

270. *National Securities Clearing Corporation (NSCC)*, DEPOSITORY TRUST & CLEARING CORP., https://perma.cc/F4MX-RM76 (archived Dec. 23, 2024); *Fixed Income Clearing Corporation (FICC)*, DEPOSITORY TRUST & CLEARING CORP., https://perma.cc/TPD8-2EBP (archived Dec. 23, 2024).

271. *Equities Clearing Services*, DEPOSITORY TRUST & CLEARING CORP., https://perma.cc/6PK2-W3Z9 (archived Dec. 23, 2024).

272. *Repo Services*, DEPOSITORY TRUST & CLEARING CORP., https://perma.cc/K58L-J9XP (archived Dec. 23, 2024).

The SEC exercises jurisdiction and supervisory control over the FICC and the NSCC because each of them is a registered "clearing agency" under the Exchange Act.[273] Pursuant to its statutory authority, the SEC exercises considerable power over registered clearing agencies, including the FICC. Section 17A of the Exchange Act broadly empowers the SEC to "facilitate the establishment of a national system for the prompt and accurate clearance and settlement of transactions in securities" and to prescribe rules and regulations for clearing agencies that are in the public interest and protect investors.[274] For instance, under regulations adopted in 2016, the SEC requires the FICC to establish and enforce procedures reasonably designed to effectively manage its liquidity risks.[275]

There has been a raft of thoughtful proposals for reforming the repo market.[276] One of the most promising involves mandating *counter-cyclical haircuts*, and we will focus on regulating haircuts as a promising illustration of the incremental complementarity approach.[277] It is worth being clear upfront about precisely what haircuts are and what counter-cyclical haircuts would involve. Recall that a repurchase agreement consists of the sale of an asset coupled with an agreement to repurchase the asset at a slightly higher price.[278] To illustrate, a money market fund can make a loan to a hedge fund structured as a repo wherein the hedge fund sells the money market fund Treasuries with a face value of $100,000, and the hedge fund agrees it will repurchase the Treasuries the next day for $101,000.[279] There are several important terms to a repo agreement. One is the repurchase price, which represents the interest rate on the collateralized loan. Here, the interest rate is 1% ($1,000 on $100,000).

273. DIV. TRADING & MKTS., SEC, STAFF REPORT ON THE REGULATION OF CLEARING AGENCIES, at iii, 1 (2020), https://perma.cc/RXV6-GTHR.

274. 15 U.S.C. §§ 78q-1(a)(2)(A)(i), (b).

275. 17 C.F.R. § 240.17Ad-22(e)(3) (2024). For another example, see Treatment of Repurchase Agreements and Refunded Securities as an Acquisition of the Underlying Securities, Investment Company Act Release No. 25058, 66 Fed. Reg. 36,156, 36,160 (July 11, 2001) (to be codified at 17 C.F.R. pts. 270, 274) (enabling investment funds to "look through" repurchase agreements and treat the securities collateralizing repos as investments for various provisions of the 40 Act).

276. *See, e.g.*, Bryce Elder, Repo Reform Is a $2tn Mystery Wrapped in an Enigma of Dodgy Data, FIN. TIMES (Oct. 12, 2023), https://perma.cc/PX47-VT33; John Mullin, The Repo Market is Changing (and What is a Repo, Anyway?), FED. RSRV. BANK OF RICHMOND (2020), https://perma.cc/ECY6-75FX.

277. Daniel Tarullo, Monetary Policy and Financial Stability, Speech at the 30th Annual National Association for Business Economics Economic Policy Conference (Feb. 25, 2014) ("Countercyclical or even through-the-cycle minimum haircuts on [repos] bolster resilience by reducing the amount that haircuts might jump when conditions weaken.").

278. *See supra* Part II.

279. For the sake of convenience, we represent the interest rate as an annualized rate.

Another is the *haircut*, which involves the degree of over-collateralization required for the loan. In this repo, the haircut is 0%. If the loan were for $100,000, but the lender demanded collateral worth $110,000 to secure the loan, then the haircut would be 9.1%, as the lender would be demanding over-collateralization by that percent of the face amount of the loan (i.e., $10,000/$110,000).

Repo haircuts were a principal channel of contagion during the GFC. Indeed, Gary Gorton and Andrew Metrick, perhaps the leading authorities on the economics of the crisis, describe the GFC as "a run on repo."[280] Repos had become a major source of funding for both investment banks and commercial banks involved in securitization.[281] During the peak of the crisis, lenders withdrew funding from those banks en masse.[282] The mechanism for the run was a dramatic increase on the haircuts in repos.[283] Gorton and Metrick document that the average haircut for collateral in repos (excluding Treasuries) rose from zero in early 2007 to nearly 50% during the height of the crisis.[284] The size of this run served to render even enormous financial institutions illiquid because they now required—in the case of a 50% haircut—fully twice as much collateral to obtain the same funds, even as the value of collateral fell. The run caused some of the world's largest financial institutions to collapse.[285] In essence, repo haircuts were a major conduit for the withdrawal of liquidity from the financial system, precisely when the funded entities needed liquidity most, exacerbating the crisis.

Regulating haircuts is thus effectively a form of regulating runs on a portion of the shadow banking sector. The easiest way to see this is to think of a repo haircut as equivalent to the margin that counterparties in a market demand of one another. Margin generally involves sums of money investors must place in a counterparty's or intermediary's hands to cover various risks involved in the clearing and settlement of trades. Over-collateralization is a kind of margin demanded of a borrower upfront before a loan is made. Regulation that would mandate counter-cyclical haircuts would aim to decrease margin when counterparties are in most need of liquidity. Hence,

280. Gorton & Metrick, *supra* note 164, at 425.

281. *See id.* ("Securitized-banking activities were central to the operations of firms formerly known as investment banks (e.g. Bear Stearns, Lehman Brothers, Morgan Stanley, and Merrill Lynch), but they also play a role at commercial banks, as a supplement to traditional-banking activities of firms such as Citigroup, J.P. Morgan, and Bank of America.").

282. *Id.* at 448.

283. *See id.* at 429 fig.4.

284. *Id.* at 428, 429 fig.4.

285. *See id.* at 448 ("This pressure contributed to the forced rescue of Bear Stearns in March 2008 and the failure of Lehman Brothers in September 2008.").

counter-cyclical haircuts would dampen the withdrawal of funds from financial institutions, rather than heightening run-like demand.

If the SEC has the authority to regulate haircuts, might it be willing to do so? And is it likely to effectively design such regulations? We believe, cautiously, that the answer could be yes in both cases. The basic rationale for our view is that the SEC already administers many carefully tailored margin requirements. For instance, the SEC oversees and approves the rules of the NSCC.[286] Broker-dealer members of the NSCC post money with it to secure clients' trades.[287] The NSCC manages its risks in part by imposing on each member a compound margin requirement with several components reflecting different risks. Typically, the most important component is the "core charge" based on the volatility of a broker's unsettled transactions, which varies with the dollar value of a member's unsettled trades and their volatility.[288] However, an important additional component, known as the "excess capital premium," can gain enormous significance when a member's core margin becomes large relative to their capitalization.[289] Importantly, the SEC has considered the concerns raised by the pro-cyclicality of central counterparties' margin practices,[290] and has already approved a revised policy framework for the management of pro-cyclicality in the risk models of a different clearing agency.[291] Consideration of the pro-cyclical effects of the repo market's margin practices is not a huge leap. Simply put, the SEC enjoys clear authority already over the aspects of the repo market operating through registered clearing

286. DEPOSITORY TRUST & CLEARING CORP., NATIONAL CLEARING CORPORATION: DISCLOSURE FRAMEWORK FOR COVERED CLEARING AGENCIES AND FINANCIAL MARKET INFRASTRUCTURES 15 (2023), https://perma.cc/ADQ5-T7XL; *see also National Securities Clearing Corporation Rulemaking*, SEC, https://perma.cc/8VDW-9ANM (archived Dec. 23, 2024).

287. *See* DEPOSITORY TRUST & CLEARING CORP., *supra* note 286, at 48 (describing margin requirements).

288. STAFF OF H. COMM. ON FIN. SERVS., 117TH CONG., GAME STOPPED: HOW THE MEME STOCK MARKET EVENT EXPOSED TROUBLING BUSINESS PRACTICES, INADEQUATE RISK MANAGEMENT, AND THE NEED FOR LEGISLATIVE AND REGULATORY REFORM 82 n.400 (2022) ("Typically, the largest component of such charges during ordinary trading days is the VaR charge, which represents risk associated with unsettled trades in a member firm's cleared portfolio. In addition, NSCC rules provide for the assessment of an Excess Capital Premium charge when 'core' margin charges for a member firm are greater than such firm's 'excess net capital' . . . .").

289. *Id.* at 117-18 (capitalization altered).

290. *See* DIV. TRADING & MKTS., *supra* note 273, at 19.

291. *See* Self-Regulatory Organizations; ICE Clear Europe Limited; Order Approving Proposed Rule Change Relating to the ICE Clear Europe Procyclicality Framework, Release No. 34-82,313, 82 Fed. Reg. 60,254 (Dec. 13, 2017) (addressing the pro-cyclicality in ICE Clear Europe Limited's risk models).

agencies and already enjoys experience in administering the design of counter-cyclical haircuts.

3. The structural convergence approach

The prior approach is meant to be a more limited proposal to address the dangers associated with private money creation. But imagine if the SEC were to use regulatory tools that were more closely aligned to those used by bank regulators.[292] What would such a structural convergence (toward banking regulation) look like in practice? Below, we provide a detailed example for the regulation of money market funds.

Recall that money market mutual funds are a type of open-end investment company registered with the SEC under the 40 Act and that they were at the center of financial instability in both September 2008 and March 2020.[293] In both instances, investors made mass withdrawals from the funds as a kind of "run" in the shadow banking sector.[294] Both times, the Federal Reserve intervened by providing an emergency backstop to the market.[295]

As a matter of regulation, money market funds are subject to risk-limiting requirements in the SEC's Rule 2a-7,[296] and they are the only mutual funds entitled to maintain a stable net-asset value through the use of amortized cost valuation rather than market valuation.[297] They are also vulnerable to bank-like runs during times of stress. Investors during a period of stress do not believe that their shares in the fund will maintain a $1.00 stable value and so they rush to redeem before the value falls further.

One prominent proposal to improve the stability of money market funds is to impose *bank-like* capital requirements on them. FSOC endorsed this reform in 2012 after the Federal Reserve and Treasury rescued money market funds during the GFC,[298] and the President's Working Group returned to it in

292. These are typically referred to as "prudential" regulatory tools. *See* Daniel K. Tarullo, Member, Bd. of Governors of the Fed. Rsrv. Sys., Remarks on Rethinking the Aims of Prudential Regulation 1 (May 8, 2014), https://perma.cc/AS6M-47HW.

293. Van Der Weide & Zhang, *supra* note 114, at 426.

294. *Id.*

295. *Id.* at 432.

296. *See* 17 C.F.R. § 270.2a-7(d) (2024); *see also* Fisch & Roiter, *supra* note 116, at 1005 (noting that money market funds are restricted in the assets they can hold).

297. Hilary J. Allen, *Money Market Fund Reform Viewed Through a Systemic Risk Lens*, 11 J. BUS. & SEC. L. 87, 90-91 (2010).

298. *See* Proposed Recommendations Regarding Money Market Mutual Fund Reform, 77 Fed. Reg. 69,455, 69,456 (Nov. 19, 2012) (describing NAV buffers to absorb fluctuations).

2020 after the government rescued money market funds again during the onset of the COVID-19 pandemic.[299]

Understanding this proposal requires defining "capital requirements." This is an important inquiry because what the SEC currently treats as capital requirements are *not* what banking agencies think of as capital requirements. Rule 15c3-1 is the SEC's "net capital rule."[300] The purpose of the SEC's net capital rule is to ensure that broker-dealers "have sufficient cash or liquid assets to protect the cash or securities positions in their customers' accounts."[301] The provision is based on sections 8(b) and 15(c)(3) of the Exchange Act and generally governs broker-dealers registered with the SEC.[302]

The banking agencies, on the other hand, view capital regulations as living on the equity component of the balance sheet. Instead of having sufficient cash or liquid assets on hand to guard against *illiquidity*, capital regulations are used as shock absorbers to prevent *insolvency*.[303] From a bank's perspective, capital is necessary to absorb losses that it takes from falling asset values.[304] Specifically, "capital is the money that a bank has obtained from its shareholders and other investors and any profit that it has made and not paid out."[305]

In the context of money market funds, the idea of imposing a capital buffer is to absorb fluctuations in the value of a fund's assets.[306] There are many ways to create such a buffer. One is to simply set aside a certain percentage of profits, similar to banks increasing capital by retaining profits. Another way, proposed by Harvard economists Samuel Hanson, David Scharfstein, and Adi Sunderam, is to create so-called "subordinated capital buffer[s]."[307] In essence, money market funds would issue two classes of securities: "a subordinated capital

299. *See* PRESIDENT'S WORKING GRP. ON FIN. MKTS., OVERVIEW OF RECENT EVENTS AND POTENTIAL REFORM OPTIONS FOR MONEY MARKET FUNDS 30-31 (2020), https://perma.cc/FBP6-2GA7 (listing the potential benefits and drawbacks of capital buffers).

300. SEC, KEY SEC FINANCIAL RESPONSIBILITY RULES 130, https://perma.cc/5BS3-YPRE (archived Dec. 23, 2024).

301. Nicholas Wolfson & Egon Guttman, *The Net Capital Rules for Brokers and Dealers*, 24 STAN. L. REV. 603, 604 (1972).

302. Steven L. Molinari & Nelson S. Kibler, *Broker-Dealers' Financial Responsibility Under the Uniform Net Capital Rule—A Case for Liquidity*, 72 GEO. L.J. 1, 4 (1983).

303. *What Is the Difference Between a Bank's Liquidity and its Capital?*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://perma.cc/J9U7-JCAQ (last updated Dec. 31, 2019).

304. *Why Do Banks Need to Hold Capital?*, EUR. CENT. BANK (May 23, 2019), https://perma.cc/TTU4-H5EX.

305. *Id.*

306. Craig M. Lewis, *Money Market Funds and Regulation*, 8 ANN. REV. FIN. ECON. 25, 46 (2016).

307. Samuel G. Hanson, David S. Scharfstein & Adi Sunderam, *An Evaluation of Money Market Fund Reform Proposals*, 63 IMF ECON. REV. 984, 999 (2015).

security that bears first loss and ordinary, senior [money market fund] shares."[308] Ordinary shareholders would be protected from loss by subordinated shareholders.[309] Thus, the subordinated shares are functionally a type of capital buffer. Of course, risk is not assumed for free. The subordinated shareholders would receive higher yields while the ordinary shares would receive lower yields.[310]

Notably, the SEC has contemplated imposing bank-like capital buffers on money market funds twice since the GFC.[311] Thus, while this capital proposal is aggressive in the sense that it is bank-like, it is far from radical. So, this begs the trillion-dollar question: Can we expect the SEC to plausibly endorse capital requirements when it has (twice) rejected them on the grounds of being too burdensome on regulated entities?[312] There are some good reasons to think so, although we use capital requirements as an illustration of the structural convergence approach precisely because it would be a more dramatic change of pace for the SEC and lie further from its traditional areas of expertise. We could see the SEC taking action in this way if it more seriously grappled with the social costs of disruption in the money market fund industry. For instance, in its most recent rule rejecting capital buffers, the SEC spent several pages carefully assessing the direct and indirect costs of imposing a capital buffer, but spent no time on the enormous macroeconomic costs stemming from disruptions in the money market fund sector.[313] We think that an SEC focused on the risks of shadow banking as a central part of its purview might have come to quite a different decision.

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308. *Id.*

309. *Id.*

310. *Id.* at 1000. Note that this structure is pure subordination rather than "bail-in" capital.

311. In 2014, the SEC finalized its rulemaking on money market funds and explicitly discussed the merits of adopting a capital buffer. Money Market Fund Reform; Amendments to Form PF, Investment Advisers Act Release No. 3,879, Investment Company Act Release No. 31,166, 79 Fed. Reg. 47,736, 47,920-25 (Aug. 14, 2014) (to be codified at 17 C.F.R pts. 230, 239, 270, 274, 279). In 2023, the SEC finalized another round of reforms on money market funds and once again explicitly discussed the adoption of a capital buffer. Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, Investment Advisers Act Release No. 6344, Investment Company Act Release No. 34959, 88 Fed. Reg. 51,404, 51,501-04 (Aug. 3, 2023) (to be codified at 17 C.F.R pts. 270, 274, 279).

312. *See* Money Market Fund Reform; Amendments to Form PF, 79 Fed. Reg. at 47,922-24; Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, 88 Fed. Reg. at 51,502-03.

313. *See* Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, 88 Fed. Reg. at 51,501-04.

The structural convergence approach also suggests a second reform for money market funds: liquidity requirements. Indeed, the SEC has already accepted this approach. Since the GFC, bank regulators have imposed liquidity requirements on banks to reduce their likelihood of failure during times of stress.[314] The idea is that if a bank holds more liquid assets on its balance sheet, it may be able to withstand greater levels of outflows. That buys the bank extra time to weather the storm or gives the central bank enough time to examine the situation and provide emergency support.

In July 2023, the SEC finalized new rules to increase "minimum liquidity requirements for money market funds to provide a more substantial liquidity buffer in the event of rapid redemptions."[315] Specifically, it raised the minimums from 10% for daily liquid assets to 25% of total assets.[316] Weekly liquid asset minimums increased to 50% of total assets, up from 30%.[317] The SEC also added new redemption fees that "require institutional prime and institutional tax-exempt money market funds to impose liquidity fees when a fund experiences daily net redemptions that exceed 5 percent of net assets, unless the fund's liquidity costs are de minimis."[318] Money market funds may, when the board of directors determines it to be in the fund's "best interests," also "impose a liquidity fee of up to 2%, or temporarily suspend redemptions for up to 10 business days in a 90-day period, if the fund's weekly liquid assets fall below 30% of its total assets."[319] While bank-like capital regulations seem to be an uphill slog for the SEC, bank-like liquidity regulations are not.

The industry is, to be sure, not pleased. Asset managers believe that these higher liquidity levels "may reduce [money market funds'] ability to achieve competitive yields and compete with alternative cash management products."[320] Yet others believe the reforms did not go far enough. Better Markets—an independent, nonpartisan organization interested in financial reform—stated that "[w]ithout a floating NAV and capital buffers, it is almost

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314. Kress & Zhang, *Macroprudential Myth*, *supra* note 64, at 594-95.

315. Press Release, SEC, SEC Adopts Money Market Fund Reforms and Amendments to Form PF Reporting Requirements for Large Liquidity Fund Advisers (July 12, 2023), https://perma.cc/2PJK-SA4H.

316. Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, 88 Fed. Reg. at 51,404, 51,430-31.

317. *Id.*

318. Press Release, *supra* note 315.

319. Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, 88 Fed. Reg. at 51,408-09.

320. Matt Jones, *Changes Arrive for Money Market Funds, Once Again*, W. ASSET MGMT. (July 19, 2023), https://perma.cc/39GC-SN8P.

certain that the adopted rules, although improvements, will be insufficient to avoid yet another [money market fund] bailout during the next period of major market stress."[321]

* * *

In closing out this Part, it is important to appreciate that we have only scratched the tip of the iceberg. The more systematic project for the SEC would be to revisit the key aspects of its regulation—where its jurisdictional reach extends over shadow banking—and ask whether there is room for reform to incorporate financial stability concerns effectively into regulatory design. Where else might a convergence approach work? For the sake of brevity, we gesture at two illustrations.

Consider stablecoins. We argued above that the largest stablecoins may be investment companies.[322] If so, they would either need to qualify as private funds (or fall within another exclusion), which is implausible, or they would be subject to the regulation of registered funds. It is possible that stablecoin issuers would comply with the immense and stringent requirements of the 40 Act.[323] Alternatively, they could seek exemptive relief from the SEC, in exercise of its broad exemptive powers. If issuers sought relief, the SEC would have the ability to design and offer them a stablecoin issuer-specific regulatory regime as the condition for exemptive relief.[324] That regime could build in the collateral requirements, liquidity regulations, capital requirements, and the like, that most commentators believe would promote stablecoin stability.[325]

Or consider broker-dealer regulation. Broker-dealers play a role in financial instability. For example, the collapse or conversion to bank holding companies of broker-dealers like Bear Stearns and Lehman Brothers was a major vector of the GFC.[326] Broker-dealers still play a central role in short-term funding markets, however, and their own instability and rapid

321. Press Release, Better Mkts., The SEC's Money Market Reforms Do Not Go Far Enough (July 12, 2023), https://perma.cc/Y44J-A7CR.

322. *See supra* Part II.C.

323. INV. CO. INST., HOW U.S.-REGISTERED INVESTMENT COMPANIES OPERATE AND THE CORE PRINCIPLES UNDERLYING THEIR REGULATION 15-24 (2022), https://perma.cc/CZ6F-TZDE.

324. *Cf.* ROBERT JACKSON & JOHN MORLEY, SPACS AS INVESTMENT FUNDS 22 (July 14, 2022), https://perma.cc/W8XT-ZWQA (explaining the SEC safe harbor from investment company status that is offered if SPACs comply with specific conditions).

325. *See, e.g.*, PRESIDENT'S WORKING GRP. ON FIN. MKTS., THE FDIC, & THE OFF. OF THE COMPTROLLER OF THE CURRENCY, REPORT ON STABLECOINS 16-17 (2021), https://perma.cc/KY76-AFS7.

326. *E.g.*, *Public Policy Issues Raised by the Report of the Lehman Bankruptcy Examiner: Hearing Before the H. Fin. Servs. Comm.*, 111th Cong. app. at 180-81 (2010) (statement of Mary L. Schapiro, Chairman, SEC).

withdrawal from funding markets can be a precipitant of crisis.[327] Yet the major rules governing the financial stability of broker-dealers—the net capital rule and customer protection rule—are resolutely customer-centric and not focused on the broader market-wide consequence of broker-dealer distress.[328] Revisiting the financial responsibility framework for systemically important broker-dealers would be another item on an SEC agenda oriented around financial stability concerns.

IV. Objections and Qualifications

We now turn to some qualifications and objections to our approach. In terms of qualifications, we make clear the major limits on any plausible SEC role in regulating shadow banking. We then turn to the principal objections to this approach: the SEC's institutional competence, its political will, and judicial constraints. The first objection asks whether we should expect the SEC to regulate effectively, if it did act. The second asks why we should expect the SEC to regulate shadow banking aggressively, when banking regulators have failed to do so for decades. The third asks whether the judiciary would be amenable to such SEC actions in light of recent rulings against the agency.

In brief, our response to the question of institutional competence is that the SEC already regulates many forms of private money and shadow banks. What we are proposing is for the SEC to dial up its regulatory stringency on these particular securities markets. Moreover, our proposals have varying degrees of ambition, which correspond to varying degrees of institutional competence. Our response to the second issue of political will is that the SEC has broader statutory authorities than its banking agency counterparts, so it costs the SEC less political capital to act. Indeed, the SEC has a track record of taking aggressive actions. Finally, we acknowledge that courts—particularly the Fifth Circuit—have not been fans of the SEC. But, as we argue below, the recent rulings against the SEC are distinguishable from our present case.

A. The Limits of the SEC's Role

It is worth being explicit about the limits on any plausible SEC role in regulating shadow banking. For two key reasons, the SEC will never be a fully

327. *See* Claudio Bassi et al., Eur. Cent. Bank, *Financial Stability Risks from Basis Trades in the U.S. Treasury and Euro Area Government Bond Markets*, FIN. STABILITY REV., May 2024, at 45, 46 ("The build-up of hedge funds' leveraged exposures in the US Treasury market has given rise to financial stability concerns.").

328. The "uniform net capital rule and customer protection rule form the foundation of the securities industry's financial responsibility framework." SEC, *supra* note 300, at 130 (citations omitted).

satisfactory substitute when it comes to addressing shadow banking. First, it is not the nation's monetary authority and is not tasked with, or a plausibly appropriate forum for, resolving basic issues of monetary system design.[329] Yet, as Morgan Ricks's work has made vividly clear, shadow banking is, in important part, *an issue of monetary system design*.[330] As a result, certain ultimate issues involving the size and role of shadow banking must either fall to the Federal Reserve or require guidance from it. Second, among the core functions that banking authorities serve in addressing shadow banking, there are some that the SEC cannot plausibly be in a good position to discharge. Regulation of shadow banking can usefully be partitioned into three aspects: (1) ex ante, proactive regulation; (2) interventions during times of crisis; and (3) liquidation of distressed entities. Regulation is most useful in this first area. By contrast, during times of crisis, the balance sheet capacity of the Federal Reserve means it can flood the financial system with liquidity in a way no other part of the governmental apparatus can match.

These are important limits, so it is worth recalling that the SEC *already* plays an important role in designing regulation for much of the shadow banking system; historically, it has just done so with varying degrees of inattention to the systemic financial stability risks posed by shadow banking.

While academic study of shadow banking regulation has largely been partitioned by body of law, regulators have not been so constrained.[331] In recent years, FSOC has identified four key priorities, three of which squarely implicate shadow banking: nonbank financial intermediation, Treasury market resilience, and digital assets (the fourth is climate-related risk).[332] FSOC's focus on nonbank financial intermediation has emphasized three types of financial institutions, all of which are funds (hedge funds, open-end mutual funds, and money market funds).[333]

The last half-decade has seen the SEC propose important reforms to the regulatory architecture or launch major enforcement actions with respect to each of the three priorities. In terms of nonbank financial intermediation, the SEC proposed reforms to money market funds,[334] to the liquidity management

329. *See supra* Part I.B.

330. *See* RICKS, *supra* note 9, at 2 (stating that "financial instability is largely a problem of monetary system design").

331. We are particularly grateful to William Birdthistle for helping us to appreciate this point.

332. *Financial Stability Oversight Council*, U.S. DEP'T OF THE TREASURY, https://perma.cc/UJY4-H77N (archived Dec. 23, 2024).

333. *Id.*

334. Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, Investment

footnote continued on next page

of open-end funds,[335] to private fund advisers,[336] and to the major source of public data on private funds, Form Private Fund.[337] On Treasury market resilience, the SEC adopted a Treasury clearing rule[338] and a rule governing Treasury market dealers.[339] On digital assets, the SEC eventually initiated a wide-ranging enforcement agenda.[340]

Second, as we have argued above, the SEC possesses the clear legal authority to strengthen oversight of shadow banking.[341] The choice, in reality, is not between optimal regulation by traditional banking authorities and second-best regulation by securities regulators. It is a choice between the status quo and securities regulation. Between those two, we think the choice is clear.

B. Institutional Competence

A significant concern is that the SEC cannot adopt effective regulation because the agency lacks institutional competence.[342] This is a fundamental concern, and we think it is worth evaluating with care. While there are genuine limits on the SEC's abilities as a regulator of shadow banking, they are often exaggerated or misunderstood.

Advisers Act Release No. 6,344, Investment Company Act Release No. 34,959, 88 Fed. Reg. 51,404, 51,404 (Aug. 3, 2023) (to be codified at 14 C.F.R. pts. 270, 274, 279).

335. Open-End Fund Liquidity Risk Management Programs and Swing Pricing; Form N-PORT Reporting, Investment Company Act Release No. 34,746, 87 Fed. Reg. 77,172, 77,172 (Dec. 16, 2022) (to be codified at 17 C.F.R pts. 270, 274).

336. Private Fund Advisers; Documentation of Registered Investment Adviser Compliance Reviews, Investment Advisers Act Release No. 6,383, 88 Fed. Reg. 63,206, 63,206 (Sept. 14, 2023) (to be codified at 17 C.F.R. pt. 275).

337. Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A, 88 Fed. Reg. at 51,404.

338. Standards for Covered Clearing Agencies for U.S. Treasury Securities and Application of the Broker-Dealer Customer Protection Rule With Respect to U.S. Treasury Securities, 89 Fed. Reg. 2,714, 2,714 (Jan. 16, 2024) (to be codified at 17 C.F.R. pt. 240).

339. Further Definition of "As a Part of a Regular Business" in the Definition of Dealer and Government Securities Dealer in Connection With Certain Liquidity Providers, 89 Fed. Reg. 14,938, 14,938 (Feb. 29, 2024) (to be codified in 17 C.F.R. pt. 240).

340. *Crypto Assets*, SEC, https://perma.cc/J93V-MQJN (last updated Oct. 18, 2024).

341. *See supra* Part II.

342. *See* Jonathan R. Macey, *Administrative Agency Obsolescence and Interest Group Formation: A Case Study of the SEC at Sixty*, 15 CARDOZO L. REV. 909, 948-49 (1994) (concluding that the SEC is obsolete); A.C. Pritchard, *The SEC at 70: Time for Retirement?*, 80 NOTRE DAME L. REV. 1073, 1076 (2005) (recommending the transfer of the "SEC's regulatory function to the Treasury Department and its enforcement function to the Justice Department"). *But see* Jill E. Fisch, *Top Cop or Regulatory Flop? The SEC at 75*, 95 VA. L. REV. 785, 823 (2009) (concluding that the SEC has been "Wall Street's most effective enforcer").

We developed two important aspects of our response to this concern in Parts II and III. First, we showed that in many instances the SEC already administers regulatory frameworks for shadow banking institutions like repos and money market funds.[343] The agency is familiar with these markets, their day-to-day fluctuations, and their weak points. The SEC is not dealing with unknown legal entities or unknown economic concepts. It is dealing with investment companies, broker-dealers, and the issuance of securities. Second, we suggested two approaches for the SEC to strengthen their regulation of shadow banks: a modest approach and an aggressive approach.[344] While the latter may offer more thoroughgoing reforms, those with profound worries about the SEC's institutional competence should still find the modest approach attractive. Under that complementarity approach, the SEC adopts more limited reforms within the heartland of its institutional competence.[345] Thus, the choice is not between going from 20 miles per hour to 100 miles per hour. There are options in-between.

An important case study to consider is the SEC's Consolidated Supervisory Program (CSE) because critics may point to it as evidence of a lack of institutional competence.[346] What exactly was the CSE and why did it fail? Put plainly, the CSE was created not because the SEC was interested in mitigating systemic risk, but rather because the SEC was reacting to a regulatory regime instituted by the European Union.[347] Indeed, as described in a report by the SEC's Office of Inspector General, "[t]he European Union's . . . Conglomerates Directive required that affiliates of U.S. registered broker-dealers demonstrate that they were subject to *consolidated supervision* by a U.S. regulator *or face significant restrictions on their European operations*."[348] Hence, the SEC was motivated to act in order to prevent U.S. firms from being inadvertently caught up by European regulations.

343. *See supra* Part II.

344. *See supra* Part III.

345. *See supra* Part III.

346. *See* Fisch, *supra* note 342, at 791-93 (summarizing John Coffee and Hillary Sale's criticism).

347. *See Hearing on H.R. 698, the Industrial Bank Holding Company Act of 2007 Before the H. Comm. on Fin. Servs.*, 110th Cong. app. at 75 (2007) (statement of Robert Colby, Deputy Director, Division of Market Regulation, SEC) ("Motivated in part by the need for group-wide risk monitoring, and in part by requirements of the European Union's Financial Conglomerates Directive, which essentially requires non-EU financial institutions doing business in Europe to be supervised on a consolidated basis, the Commission in 2004 crafted a new comprehensive consolidated supervision regime that was intended to protect all regulated entities within a group including broker-dealers.").

348. OFF. OF INSPECTOR GEN., SEC, SEC'S OVERSIGHT OF BEAR STEARNS AND RELATED ENTITIES: THE CONSOLIDATED SUPERVISED ENTITY PROGRAM 4 (2008) (emphasis added), https://perma.cc/S8JD-M79P.

The SEC set up the CSE in 2004 to monitor the financial position and risk management of investment banks.[349] Prior to this program, regulators had simply not supervised the investment holding companies, only their broker-dealer affiliates.[350] To authorize the CSE program, the SEC relied on its authority, under the Exchange Act, to establish net capital requirements for broker-dealer subsidiaries of investment banks.[351] That authority had a condition that the SEC could create an alternative net capital regime for the affiliated holding company if the company consented to group-wide supervision.[352]

The SEC modeled the CSE on standards such as Basel II and the Federal Reserve's own supervision program.[353] When setting up the program, the SEC cooperated with the Federal Reserve to design a comparable program, and even used the same capital ratio applied to bank holding companies by the Federal Reserve.[354] In the end, five investment banks opted into the program.[355]

In retrospect, the CSE is often depicted as a "disastrous attempt" by the SEC to apply prudential regulation to investment banks.[356] After all, three of the five banks that opted into the program collapsed during the GFC, while the other two reorganized into bank holding companies.[357] While we will note the program's failings below, the conventional narrative about the CSE is mostly mistaken. The CSE made little difference, but it was still an improvement over the status quo ante in which there was *no supervision* of these shadow banks. Also, given that the SEC had no self-conscious financial stability goal at the time—and was literally reacting to European regulations—few resources were

349. John C. Coffee, Jr. & Hillary A. Sale, *Redesigning the SEC: Does the Treasury Have a Better Idea?*, 95 VA. L. REV. 707, 737 (2009).

350. Memorandum from the Fin. Crisis Inquiry Comm'n 2 (Apr. 1, 2010), https://perma.cc/S283-V9TX.

351. ERIK R. SIRRI, SEC REGULATION OF INVESTMENT BANKS: TESIMONY BEFORE THE FINANCIAL CRISIS INQUIRY COMMISSION 4-6 (2010), https://perma.cc/Z6G6-WELD.

352. *Id.*

353. Coffee & Sale, *supra* note 349, at 739.

354. *Id.*

355. *Id.* at 735. The five banks were Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley. OFF. OF INSPECTOR GEN., SEC, *supra* note 348, at v.

356. *See* Allen, *supra* note 112, at 727.

357. Bear Stearns, Merrill Lynch, and Lehman Brothers were casualties of the GFC; Goldman Sachs and Morgan Stanley reorganized into bank holding companies. OFF. OF INSPECTOR GEN., SEC, *supra* note 348, at iv.

committed to the program.[358] In essence, the CSE does not provide a reasonable test case of the SEC's ability to regulate shadow banking.

The explanations for the CSE's failure can be grouped into roughly two buckets: process and substance. First, process. When announcing the program's termination, then-SEC Chairman Christopher Cox stressed that the program was "fundamentally flawed from the beginning" due to its voluntary nature.[359] Cox noted that the fact that the regulated entities could withdraw from the program weakened the program's effectiveness.[360] And although Basel II contemplated close monitoring and supervision on top of adherence to certain capital requirements, the CSE employed only thirteen staffers to oversee the five banks.[361] In addition, the Inspector General's report on the failure of Bear Stearns and the CSE characterized the program's administration as extremely lax.[362] The report noted that the supervisors identified but failed to address significant risks at Bear Stearns.[363]

Second, substance. Basel II's capital ratios were set too low and have increased significantly under Basel III.[364] John Coffee and Hillary Sale argue that even if Basel II was sufficient for commercial banks, it may not have been stringent enough for investment banks.[365] Compared to commercial banks, the investment banks had a smaller capital base, lacked access to the Federal Reserve's discount window, and had more volatile earnings.[366] All of these features necessitated higher capital ratios than required by Basel II.[367]

In sum, while it is true that the CSE did little to prevent the financial crisis, it was not a program designed by the SEC with the goal of stabilizing shadow banking. Its limited resources and limited legal authority meant that the program had little prospect of success. If the SEC took run risk seriously and

358. *See id.* at 4 (noting that, because of new EU regulation, "affiliates of U.S. registered broker-dealers [had to] demonstrate that they were subject to consolidated supervision by a U.S. regulator or face significant restrictions on their European operations"); Coffee & Sale, *supra* note 349, at 738 ("Thus, fearful of hostile regulation by some European regulators, U.S. investment banks lobbied the SEC for a system of 'equivalent' regulation that would be sufficient to satisfy the terms of the directive and give them immunity from European oversight.").

359. Press Release, SEC, Chairman Cox Announces End of Consolidated Supervised Entities Program (updated Sept. 26, 2008), https://perma.cc/7PX7-LPW9.

360. *Id.*

361. Coffee & Sale, *supra* note 349, at 741-42.

362. *See* OFF. OF INSPECTOR GEN., SEC, *supra* note 348, at ix-xi.

363. *Id.* at 17-23.

364. *See* Van Der Weide & Zhang, *supra* note 65, at 716-17.

365. Coffee & Sale, *supra* note 349, at 740.

366. *Id.*

367. *Id.*

adhered to our proposal, it would have a blueprint to bring about greater success than is currently offered by the status quo. Of course, doing so might trigger some growing pains in the short run, but it would result in substantial gains to financial stability in the long run.

C. Political Will

Next, we discuss the sensitive issue of political will. For fifteen years now, scholars have advocated major reforms to banking regulation to address the problem of shadow banking.[368] Arguably, there are even existing statutory authorities under which banking regulators could pursue these reforms,[369] yet no major reforms have been adopted. Why then, a reader may ask, should we expect the SEC to act where banking regulators have not? Why would we expect the SEC to bravely step up to the plate and expend hard-to-obtain political capital? There are two components to our response. First, while banking regulators arguably possess statutory authorization for regulation, that authority is vague, untested, and limited, while the SEC possesses clear and extensive statutory authority that it has already used extensively. In other words, it would be less costly for the SEC to act. Second, while neither the SEC nor banking regulators are immune to capture, they are subject to distinct political economies that plausibly make it more likely that the SEC will act.

1. Statutory authorization

The SEC's jurisdictional and regulatory authority is arguably far clearer and broader than that of federal banking regulators, which makes it easier and less costly for the SEC to strengthen its regulation of private money and shadow banks. As we have argued extensively, most private money, if not all of it, falls within the ambit of securities law, not banking law.[370] In other words, the SEC has legal jurisdiction to regulate forms of private money, whereas the banking agencies do not. Indeed, the SEC has already used the Administrative Procedure Act rulemaking process to promulgate regulations over a few forms of private money. For instance, the SEC's Rule 2a-7 governs money market funds,[371] and the SEC's Rule 5b-3 regulates repos.[372]

Now, some may point out that legal authority *does* exist to wrestle forms of private money into the bank regulatory perimeter, namely, section 21(a)(2)

368. *See supra* note 14 and accompanying text.

369. *See infra* Part IV.C.1 (considering the regulatory authority provided by section 21(a)(2) of the Glass-Steagall Act).

370. *See supra* Part II.

371. *See* 17 C.F.R. § 270.2a-7(d) (2024).

372. 17 C.F.R. § 270.5b-3 (2024).

of the Glass-Steagall Act. Section 21(a)(2) states that it is unlawful for an entity "to engage, to any extent whatever . . . , in the business of receiving deposits subject . . . to repayment . . . upon request of the depositor, unless" the entity satisfies one of three conditions, one of which refers to bank regulations.[373] Thus, in theory, section 21(a)(2) could be invoked to bring private money under the jurisdiction of bank regulators. There are, however, a few significant obstacles to successfully invoking this authority. We begin with a legal obstacle and then turn to political ones.

First, the three exemptions in section 21(a)(2) are exceedingly broad and vague, and they plausibly could be interpreted in favor of the actors in the private money business.[374] The legislative history strongly supports the position that Congress intended to vigorously guard the bank regulatory perimeter.[375] However, only the third exemption mentions the word "banking"; the first two hint at banking by referencing "examination and regulation"; and the three conditions are linked by an "or."[376] Thus, from a purely textualist perspective, businesses engaged in private money creation can argue that they satisfy either of the first two conditions. These entities were legally incorporated in the United States and operate subject to either federal law or state law, with examination and regulation from federal or state agencies. From a legal perspective, section 21(a)(2) provides vague, untested, and contestable legal authority, particularly for a wholesale change in banking regulators' claimed authority.

Second, the banking agencies are not the ones who wield the section 21 hammer. As we discussed earlier, the interpretative authority lies with the DOJ. Recall that, in 1979, a letter was sent to the SEC questioning whether money market funds violated section 21.[377] The SEC passed that letter along to

373. 12 U.S.C. § 378(a)(2); *see also* Jackson & Ricks, *supra* note 129.

374. The three exemptions provide that an entity is exempt if it:

> (A) shall be incorporated under, and authorized to engage in such business by, the laws of the United States or of any State, Territory, or District, and subjected . . . to examination and regulation, or
>
> (B) shall be permitted by the United States, any State, territory, or district to engage in such business . . . , and . . . subjected . . . to examination and regulations or,
>
> (C) shall submit to periodic examination by the banking authority of the State, Territory, or District where such business is carried on and shall make and publish periodic reports of its condition, . . . published at the same times and in the same manner and under the same conditions as required . . . in the case of incorporated banking institutions engaged in such business in the same locality.

12 U.S.C. § 378(a)(2).

375. *See* Jackson & Ricks, *supra* note 129 (arguing that "[t]he legislative history of section 21(a)(2) confirms that the provision was intended to 'prohibit[] . . . unregulated private banking so far as practicable'" (quoting S. REP. NO. 74-1007, at 15 (1935))).

376. *Supra* note 374 (listing the three exemptions).

377. *See* Gorton & Zhang, *supra* note 43, at 920.

the DOJ, and the Department's Assistant Attorney General of the Criminal Division issued the now (in)famous interpretive letter asserting that money market funds were not engaged in deposit taking.[378] Even if the banking agencies were to become more aggressive in policing private money creation, they would still have to convince the Attorney General to act aggressively, which would include revoking the DOJ's own 1979 interpretive letter.

Third, section 21 has been on the books for ninety years and it has never been affirmatively utilized to bring private money creation into the bank regulatory perimeter—not once. The DOJ had the chance to apply this law to money market funds but chose not to do so.[379] At that point in time, the money market fund industry was in its infancy.[380] Now, the entire private money complex is worth over $6.8 trillion.[381] The idea that the DOJ would suddenly subject the issuers of all that private money to *criminal liability*[382]—using a law written in the 1930s that has never been tested in court—is, to put it mildly, politically unappealing.

As a result, money market funds now fall squarely under the SEC's legal jurisdiction, and the SEC has promulgated regulations for the industry. Thus, the SEC's regulation of private money not only is plausible but also has the highest likelihood of success going forward given legal and political constraints.

2. Agency capture

In addition to having more expansive statutory authority than banking regulators, the SEC has a robust track record of enforcement. The SEC's actions are especially notable when compared to its counterparts in the bank regulatory world.

One way to see our position is by examining litigation volumes. The SEC has engaged in hundreds of litigation cases in federal court over the past few years alone.[383] The SEC also has been regularly sued by the industry it regulates, leading to well-known cases such as *Business Roundtable v. SEC*,[384] a seminal case adjudicated by the D.C. Circuit in 2011,[385] and *SEC v. Jarkesy*, a case

378. *Id.* at 920-21.

379. *See id.*

380. *See id.* at 935-36.

381. FED. RSRV. BANK OF ST. LOUIS, *supra* note 117.

382. *See* 12 U.S.C. § 378(b).

383. *See Litigation Releases*, SEC, https://perma.cc/9B96-DRJG (archived Dec. 24, 2024) (listing hundreds of cases from the 2020s).

384. 647 F.3d 1144, 1146 (D.C. Cir. 2011).

385. *See, e.g.*, Jill E. Fisch, *The Long Road Back:* Business Roundtable *and the Future of SEC Rulemaking*, 36 SEATTLE U.L. REV. 695, 696 (2013) ("The *Business Roundtable* decision is of

footnote continued on next page

from the Supreme Court's 2023 Term.[386] Whether because of the significant authority the Federal Reserve enjoys, or the incentives of a long-term interaction, banks rarely sue the Federal Reserve.[387] Indeed, the Federal Reserve's litigation docket is sparse compared to other federal agencies.[388]

While the SEC is not perfect by any stretch, the agency has shown that it is willing to enforce securities law. It does not have the same relationship with its regulated industry as the banking agencies do with theirs. Indeed, the SEC's crackdown on cryptocurrency lending platforms provides a powerful illustration of our argument regarding political will. Both banking regulators and the SEC observed that the crypto industry had developed forms of shadow banking. In the end it was the SEC that belatedly but aggressively acted.[389] The SEC is currently in active litigation against numerous crypto firms that operated as shadow banks, strengthening the securities law perimeter created by *Howey* and *Reves*.[390] The SEC not only exercised its regulatory authority over assets that qualify as securities but also deployed its authority over intermediaries operating in the crypto market to indirectly shape the market's structure.

D. Judicial Constraints

Suppose the SEC decides to embark upon the path of enhancing financial stability. Would the courts allow this pivot? Within the past few years, we have seen several decisions handed down by the Fifth Circuit and the Supreme Court against the SEC. In *Chamber of Commerce v. SEC*, the Fifth Circuit found

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particular importance."); Bruce Kraus & Connor Raso, *Rational Boundaries for SEC Cost-Benefit Analysis*, 30 YALE J. ON REGUL. 289, 290 (2013) (calling the *Business Roundtable* decision "devastating").

386. 144 S. Ct. 2117, 2125 (2024).

387. Zaring & Zhang, *supra* note 17, at 343-44; *see also* BD. OF GOVERNORS OF THE FED. RSRV. SYS., 106TH ANNUAL REPORT 349 (2019) ("During 2019, the Board of Governors was a party in 7 lawsuits or appeals filed that year and was a party in 6 other cases pending from previous years, for a total of 13 cases. The Board intervened in or initiated one additional case relating to privileged documents or testimony. In 2018, the Board had been a party in a total of 19 cases. As of December 31, 2019, eight cases were pending.").

388. *See* Zaring & Zhang, *supra* note 17, at 342.

389. *See, e.g.*, Press Release, *supra* note 243.

390. *See Crypto Assets*, *supra* note 340. SEC Chairman Gary Gensler has remarked: "My predecessor Jay Clayton said it, and I will reiterate it: Without prejudging any one token, most crypto tokens are investment contracts under the Howey Test." Gary Gensler, Chairman, SEC, Prepared Remarks on Crypto Markets at the Penn Law Capital Markets Association Annual Conference, Washington, D.C. (Apr. 4, 2022), https://perma.cc/P95K-NMUL; *see also* Christopher Bosch & Elizabette Privat, *SEC Showcases Lesser-Known Legal Theory in Crypto Lending Suit*, SHEPPARD MULLIN (Feb. 2, 2023), https://perma.cc/9BK7-U6NJ.

deficiencies with the agency's rule requiring quarterly disclosures of daily stock repurchase data, including a rationale for why the repurchase occurred.[391] The court stated that the SEC had not adequately shown "that opportunistic or improperly motivated buybacks are a genuine problem."[392] In *National Association of Private Fund Managers v. SEC*, the court vacated the agency's regulation of private fund advisers, partly on the ground that one of the legal provisions on which the SEC relied to promulgate the rule—section 913 of the Dodd-Frank Act—"has nothing to do with private funds."[393] And, garnering the most attention, the Supreme Court ruled against the SEC in *Jarkesy*, holding that the Seventh Amendment entitles a defendant to a jury trial in an Article III court when the agency seeks civil penalties for securities fraud.[394]

While these cases are important, they are distinguishable from our banking/securities interface. Perhaps buybacks are not a genuine problem, but the financial turmoil caused by repeated failures of shadow banks is a proven problem. The GFC demonstrated that clearly.[395] On legal authority, we've shown in this Article that the SEC can regulate much of the shadow banking ecosystem.[396] The agency exercises that legal authority regularly. It's nothing new.[397] Finally, our proposal has nothing to do with the Seventh Amendment.

In addition, magnitude matters. If the SEC adopts the aggressive path of implementing near-bank-like regulations, the Fifth Circuit would likely have something to say about that. But the SEC can pursue a more moderate path. As explained previously, the agency could take an incremental approach that favors reforms within its traditional institutional expertise, which would aim to complement banking regulators' reforms.[398] Practically speaking, trillions of dollars of private money are already regulated by the agency.[399] The SEC could simply turn up the dial by a moderate degree.

Conclusion

Our Article offers a new perspective on what may be the core challenge of financial regulation: shadow banking. The dominant paradigm among

391. 85 F.4th 760, 767, 780 (5th Cir. 2023).
392. *Id.* at 778.
393. 103 F.4th 1097, 1112, 1114 (5th Cir. 2024).
394. SEC v. Jarkesy, 144 S. Ct. 2117, 2124-25, 2139 (2024).
395. *See supra* notes 280-85 and accompanying text.
396. *See supra* Part II.
397. *See supra* Part II.
398. *See supra* Part III.
399. *See infra* Appendix.

regulators and academics is to address shadow banking through the extension of banking regulation. Our fundamental concern is not with the merits of those proposals, but with the likelihood of their adoption. Little progress has been made along that path over the past fifteen years. Yet shadow banking continues to be a source of serious financial stress. We ask whether more can be done by the regulators who already possess extensive legal jurisdiction—namely, securities regulators.

Focusing on securities law to regulate shadow banking may seem counterintuitive, especially to readers accustomed to a debate centered on banking law. But given the reality of the situation, it appears that the SEC is going to remain the regulator of most shadow banks for the near future. Just counting money market funds and repo transactions alone, the SEC has existing jurisdiction over nearly $10 trillion in private money creation.[400] From the perspective of bank regulators, this vast amount of private money was created in the shadows, outside their clear ambit. From the perspective of the SEC, this private money was created in their backyard. The SEC has the legal authority to do something about it, and they should do so, prudently.

400. The total size of the U.S. money market fund sector is approximately $6.8 trillion. *See Release: Money Market Fund Assets*, INV. CO. INST. (Dec. 19, 2024), https://perma.cc/Z6FL-5VU3. The total size of the U.S. repo market is roughly $3.6 trillion. *See U.S. Repo Statistics*, SEC. INDUS. & FIN. MKTS. ASS'N (Dec. 5, 2024), https://perma.cc/9EAL-PJRY.

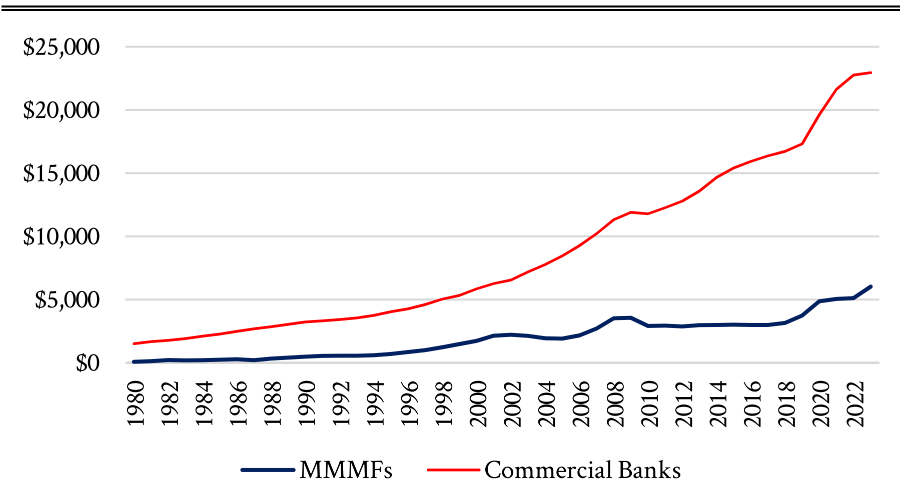
Appendix: The Centrality of Investment Companies

In this Appendix, we show the centrality of investment companies to shadow banking in order to support our claim that securities regulators enjoy broad jurisdiction over shadow banking. We focus on the three largest domestic shadow banking sectors by dollar value: repos, commercial paper, and money market funds.

The largest of the three is money market mutual funds. As Figure 1 shows, since 1980 the growth of the total assets of money market mutual funds relative to the growth of the total assets of the commercial banking sector has been astonishing. While total commercial bank assets ($23.5 trillion) still far exceed total money market fund assets ($6.8 trillion), money market funds have grown from near nonexistence to more than a *quarter* of the assets of the banking system over the past four-plus decades.[401]

Figure 1

Money Market Mutual Funds (MMMF) and Commercial Bank Assets (in billions)

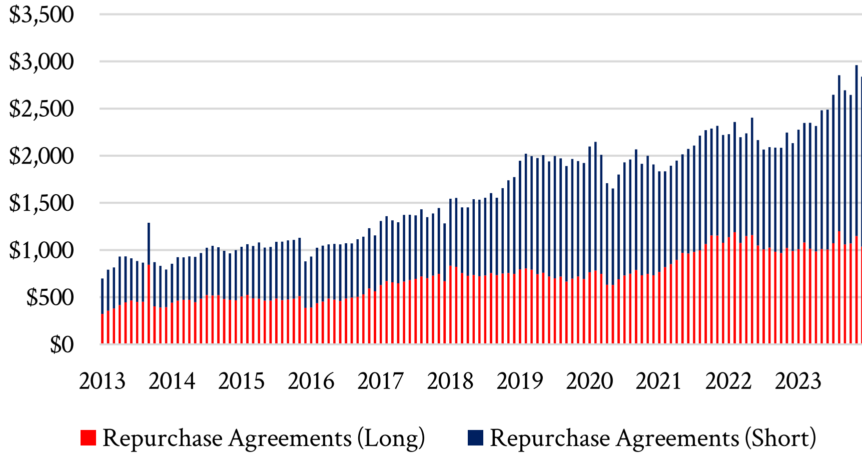


Investment companies play a central role in the other two largest shadow banking markets for repos and commercial paper. Figure 2 presents the growth of hedge fund intermediation in the repo market.[402]

401. Data from FED. RSRV. BANK OF ST. LOUIS, *supra* note 96; FED. RSRV. BANK OF ST. LOUIS, *supra* note 117.

402. Data from *Private Funds—Qualifying Hedge Fund Investment Types*, SEC, https://perma.cc/QA42-7MLE (last updated Sept. 20, 2024) (to locate, click on the bar representing "Repurchase Agreements" in each graph).

Figure 2
Hedge Fund Activity in Repo Markets (in billions)



Lastly, although estimating the precise size of the market is challenging, money market mutual funds remain the single largest type of financial investor in the commercial paper market.[403]

403. *Money Market Funds; Asset-Backed Commercial Paper; Asset; Level*, FED. RSRV. BANK OF ST. LOUIS (updated Dec. 12, 2024), https://perma.cc/L29E-G7WX; BAKLANOVA ET AL., *supra* note 110, at 1-2.