

CONSUMER SHADOW BANKS

Todd Phillips and Matthew Adam Bruckner*

There is no risk-free way to engage in bank-like activities. Entities that take deposits, transmit money, or otherwise provide custody of funds all generally engage in maturity transformation, a process that turns short-term debts into longer-term investments. Maturity transformation is inherently dangerous. Firms that engage in these activities also face moral hazard, whereby they may act contrary to their customers’ interests. Without government intervention and a backstop, institutions that engage in these activities are liable to run, harming their customers. For that reason, the government heavily regulates bank, serves as their lender of last resort, and provides their depositors with insurance. Scholars have long been wary of “shadow banks:” nonbanks that perform bank-like activities without the guardrails that protect bank depositors.

Shadow banks are not just limited to the largest financial institutions, like those that helped exacerbate the great financial crisis. Retail consumers send and receive payments with P2P platforms, purchase and hold stablecoins, and make deposits in crypto and imitation banks—all of which require maturity transformation—without understanding these institutions’ inherent instability and the risks of loss that they pose. Although consumers have seen runs, deposit insurance means they have likely never been harmed by one, and they do not understand the differences between their banks and the “consumer shadow banks” that perform the same or similar functions.

In this paper, we argue that consumer shadow banks can be “abusive” and should be regulated by the Consumer Financial Protection Bureau (CFPB). Accordingly, we urge the CFPB to enact regulations providing minimum standards for their provision, including capital, liquidity, lending limits and limits on extending credit to insiders, safety and soundness standards, and stress testing where appropriate, and subject these firms to supervision.

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* Todd Phillips is an Assistant Professor, Georgia State University. Matthew Adam Bruckner is an Associate Professor at Howard University School of Law. The authors wish to thank Adam Levitin and Lauren Saunders for their ideas, comments, and suggestions. Thanks also to participants at the 2023 AALS Financial Regulation Section mid-year meeting and SEALS Fall conference. We appreciate the excellent research assistance provided by Ria Melhotra (Howard Law '24) & Melody Phillips (Howard Law '24), as well as the editing of Lexi Gael Curnin, Rebecca Zimmerman, and the staff of the *Stanford Law & Policy Review*. Financial support for this paper was provided by Governing for Impact and Howard University School of Law (in the form of a summer research stipend).

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INTRODUCTION

In 2022, crypto markets imploded. More than \$2 trillion in value was wiped away as many popular cryptocurrencies such as Dogecoin, Bitcoin, and Terra lost more than half their value or became completely worthless.¹ Many firms entered bankruptcy, and nearly everyone who had invested in this sector suffered

1. See Cheyenne DeVon, *Bitcoin Lost Over 60% of its Value in 2022—Here's How Much 6 Other Popular Cryptocurrencies Lost*, CNBC (Dec. 23, 2022, 9:30 AM), <https://perma.cc/FY3R-7SCF>.

large losses.²

Like a canary in a coal mine, the crypto banks' failures signal problems that lie ahead in related areas of the consumer financial markets. These institutions, which include Celsius Network, Voyager Digital, BlockFi, and Genesis Global, among others, operated by accepting crypto assets as deposits by their customers (that is, they borrowed tokens from customers), lent those deposited tokens to borrowers, and used those loans' fees to fund their operations and pay interest to depositors. They were engaging in a process called maturity transformation, whereby institutions make longer-term, illiquid loans funded by highly liquid, short-term deposits.³ Maturity transformation creates the condition for a first mover advantage, whereby customers are incentivized to withdraw their funds at the earliest sign that their institution may face losses. Furthermore, these firms faced moral hazard, whereby they made highly risky investments contrary to their customers' long-term interests. Accordingly, after the venture capital firm Three Arrows Capital collapsed, customers of the crypto banks (such as Voyager Digital, BlockFi, and Celsius) started to "run," resulting in the institutions' collapses. For those that were unable to withdraw their funds, they must wait for the bankruptcy process to end before getting anything back.⁴

There is no risk-free way to conduct bank-like activities—whether accepting deposits, providing payment services, or holding customer funds. As a result, consumer funds are at risk when left with any firm that engages in these activities. And unfortunately, crypto banks are not the only lightly regulated consumer financial firms engaged in maturity transformation, nor are they the biggest. Money transmitters like PayPal, Venmo, and Cash App and stablecoin issuers such as Tether, Circle, and Paxos engage in maturity transformation and hold vastly more customer funds on their books than the crypto banks ever did. These firms are all capable of running (or "breaking the buck," in the case of stablecoins), meaning that consumers may not receive the full amount they are owed when they attempt to withdraw or redeem for cash.

Government officials know how to regulate these activities to protect consumers. Regulators subject traditional banks, known as insured depository

2. Even firms that were ostensibly structured to avoid taking directional bets on crypto asset valuations, such as exchanges that served as trading platforms or so-called "crypto banks" that took crypto assets as deposits, entered bankruptcy.

3. See Morgan Ricks, *Regulating Money Creation After the Crisis*, 1 HARV. BUS. L. REV. 75, 81 (2011) (describing maturity transformation as "a fancy term for borrowing very short and investing long"). See also Dan Awrey, *Bad Money*, 106 CORNELL L. REV. 1, 3 (2020) [hereinafter *Bad Money*] (describing how banks' "heavy reliance on short-term debt makes [their] balance sheets extremely fragile and exposes them to destabilizing runs by depositors and other creditors").

4. Customers may be able to sell their bankruptcy claims before the end of the case, but the underlying claims are unlikely to pay anything before the court approves the debtors' plans of reorganization or liquidation.

institutions (IDIs), to capital, liquidity, and other requirements;⁵ examine IDIs to ensure their continued compliance with those rules;⁶ serve as IDIs' lender of last resort;⁷ and provide customers with deposit insurance.⁸ And recognizing the importance of regulating maturity transformation, Congress enacted a law designed to stop unregulated entities from engaging in deposit-taking.⁹

Nevertheless, scholars¹⁰ and regulators¹¹ have long struggled with how to bring unregulated maturity transformation inside the so-called "prudential" regulatory perimeter, calling the institutions that perform these activities "shadow banks."¹² For example, money market mutual funds have conducted maturity transformation under securities law since the late 1970s. Yet legislators have never heeded the call to address these activities' laxer regulatory regime, which has twice precipitated the need for a federal bailout.¹³ In addition, the great

5. See, e.g., 12 C.F.R. § 3.1 *et seq.* (providing capital standards for national banks).

6. See FED. RSRV. BD., *THE FED EXPLAINED: WHAT THE CENTRAL BANK DOES* 10 (2021), <https://perma.cc/FD2K-PRPV> (describing examination as a regulatory responsibility).

7. See *id.* at 38 ("Discount window lending is available as a backup source of liquidity for depository institutions.").

8. See 12 U.S.C. § 1821 (providing up to \$250,000 in deposit insurance per depositor).

9. See *id.* § 378(a)(2) (restricting nonbanks' ability to take deposits).

10. See, e.g., Karen W. Arenson, *Impact of Money Market Funds*, N.Y. TIMES, Mar. 6, 1979, at D1 (describing scholars' concerns regarding money market mutual funds); NICHOLAS K. TABOR ET AL., *A BRIEF HISTORY OF THE U.S. REGULATORY PERIMETER* (2021), <https://perma.cc/DYH6-KM6R>; *Bad Money*, *supra* note 3, at 7 ("The defining feature of this new breed of monetary institutions is that they issue monetary liabilities outside the perimeter of conventional bank and MMF regulation."); MORGAN RICKS, *THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION* 16 (2016) ("A central objective of the reformed monetary system is to *confine* money creation to the member banking system.").

11. See, e.g., FIN. STABILITY OVERSIGHT COUNCIL, *REPORT ON DIGITAL ASSET FINANCIAL STABILITY RISKS AND REGULATION* 5 (2022), <https://perma.cc/N8RJ-S95G> ("[C]rypto-asset businesses do not have a consistent or comprehensive regulatory framework and can engage in regulatory arbitrage."); Letter from Senator Sherrod Brown to Treasury Secretary Janet Yellen (Nov. 30, 2022), <https://perma.cc/U83A-974M> (expressing "concern[] about the risks posed to consumers, investors, and the financial system" by the failure of insufficiently regulated crypto banks); Michael J. Hsu, Acting Comptroller, *Modernizing the Financial Regulatory Perimeter*, Remarks before the Federal Reserve Bank of Philadelphia Fifth Annual Fintech Conference (Nov. 16, 2021) <https://perma.cc/W8YX-U3HQ>; Martin J. Gruenberg, *Financial Stability Risks of Nonbank Financial Institutions*, Remarks Before the Exchequer Club (Sept. 20, 2023) <https://perma.cc/5JAX-N95N> ("Since nonbanks do not have direct access to the public safety net, they are generally not subject to the same degree of regulation and supervision as banking organizations.").

12. Bryan J. Noeth & Rajdeep Sengupta, *Is Shadow Banking Really Banking?*, FED. RSRV. BANK OF ST. LOUIS (Oct. 1, 2011), <https://perma.cc/NH7D-T7NY> ("The term 'shadow banking' has been attributed to 2007 remarks by economist and money manager Paul McCulley to describe a large segment of financial intermediation that is routed outside the balance sheets of regulated commercial banks and other depository institutions.").

13. See Tami Luhby, *Run Ends on Money Market Funds*, CNN MONEY (Sept. 29, 2008, 6:00 PM), <https://perma.cc/F8DB-UL6Z> (describing the Treasury Department bailout); Press Release, Bd. of Governors of the Fed. Rsrv. Sys., *Federal Reserve Board Broadens Program of Support for the Flow of Credit to Households and Businesses by Establishing a Money*

financial crisis was so deep, in part because securities brokers had been funding their long-term operations with short-term repurchase agreements.¹⁴

We propose an alternate route for regulating some of the unregulated maturity transformation in the U.S. economy: have the Consumer Financial Protection Bureau (CFPB) impose capital, liquidity, and other traditional “banking” requirements on consumer financial firms that engage in deposit taking, money transmission, and fund custody—a class we identify as “consumer shadow banks”—on the basis that maturity transformation is abusive to consumers when undertaken in a less-than-well-regulated manner. While not all unregulated shadow banks are captured by our proposal—the CFPB cannot address the maturity transformation in which sophisticated financial market participants knowingly participate—it does cover more than \$100 billion in financial system assets owned by the least sophisticated financial market participants: retail consumers.

Maturity transformation is a consumer financial risk that the CFPB can and should address. Consumers send and receive payments with P2P platforms, purchase and hold stablecoins, and make deposits in crypto and imitation banks and risk loss when these uninsured financial services providers go bankrupt¹⁵ and when the lack of regulation enables these firms to engage in excessive risk-taking¹⁶ or outright fraud.¹⁷ But customers do not understand these risks exist because they do not understand these institutions’ inherent instability or even

Market Mutual Fund Liquidity Facility (MMLF) (Mar. 18, 2020), <https://perma.cc/X6Z7-YRV3> (announcing a Federal Reserve bailout).

14. See Darrell Duffie, *The Failure Mechanics of Dealer Banks*, 24 J. ECON. PERSP. 51, 51 (2010) (describing how, during the crisis, “major dealer banks . . . suffered from new forms of bank runs”).

15. See Declaration of Alex Mashinsky, Chief Executive Officer of Celsius Network, LLC, in Support of Chapter 11 Petitions and First Day Motions at 50, *In re Celsius Network, LLC*, No. 22-10964 (Bankr. S.D.N.Y. July 14, 2022), <https://perma.cc/4KTT-4NPA> (describing roughly \$4.3 billion in assets and \$5.5 billion in liabilities); Nikou Asgari & Joshua Oliver, *Crypto Broker Genesis Owes Winklevoss Exchange’s Customers \$900m*, FINANCIAL TIMES (Dec. 3, 2022), <https://perma.cc/L6B4-WDWX> (describing at least a \$900 million debt owed to Gemini).

16. Will Kenton, *Savings and Loan Crisis (S&L): What Happened and Aftermath*, INVESTOPEdia (July 30, 2021), <https://perma.cc/BN4S-CQ7G> (“The roots of the S&L crisis lay in excessive lending, speculation, and risk-taking driven by the moral hazard created by deregulation and taxpayer bailout guarantees.”).

17. See, e.g., *New York v. Mashinsky*, No. 23 Cr. 347 (S.D.N.Y. filed Jan. 5, 2023) (alleging Celsius’ founder violated state securities law violations and committed fraud); *Tex. Sec. Bd. v. Mashinsky*, SOAH Docket No. 312-22-0160 (filed Sept. 17, 2021) (same); *Mangano v. BlockFi*, No. 22-cv-01112 (D.N.J. filed Mar. 1, 2022) (alleging BlockFi’s investment accounts were unregistered securities); *Garrison v. Bankman-Fried*, No. 22-cv-23753 (S.D. Fla. filed Nov. 15, 2022) (same for FTX’s yield-bearing accounts); *Goines v. Celsius Network*, No. 22-cv-04560 (D.N.J. filed July 13, 2022) (same for Celsius’ Earn Rewards accounts); *Robertson v. Cuban*, No. 22-cv-22538 (S.D. Fla. filed Aug. 10, 2022) (same for Voyager’s Earn accounts); *Picha v. Gemini Trust Co.*, No. 22-cv-10922 (S.D.N.Y. filed Dec. 27, 2022) (same for Gemini’s Earn accounts).

recognize that maturity transformation is occurring.¹⁸ In addition, consumers may be harmed even when they aren't doing business directly with these entities because they can create systemic risk that hurls our economy into recession when these entities fail.¹⁹ In short, when consumer shadow banks fail, consumers face substantial risks that they will lose some or all of their funds.

In this article, we make the case for more robust regulation of consumer shadow banks by the CFPB. The CFPB has more expansive jurisdiction over the regulation of uninsured non-bank financial services providers than many have previously recognized. It is authorized to regulate “any person that engaged in offering or providing a consumer financial product or service,” which includes “engaging in deposit-taking activities, transmitting or exchanging funds, or otherwise acting as a custodian of funds or any financial instrument for use by or on behalf of a consumer.”²⁰ This authority includes money transmitters like PayPal, Cash App, and Venmo; now-failed crypto firms like Voyager Digital, BlockFi, and Celsius; imitation banks like Compound Banc and Tellus; and issuers of stablecoins, such as Tether, Circle, and Paxos. Given the various risks consumers face by these under-regulated, uninsured, non-bank entities—from deceptive claims to run risk—it is imperative that the government find ways to regulate them.

The CFPB is best positioned to regulate these entities using its authority to proscribe abusive acts and practices. We argue that the CFPB should declare the provision of consumer financial services that rely on maturity transformation as abusive unless providers meet certain minimum capital, liquidity, and other metrics designed to ensure firms' continued operation and align customer and corporate interests. This would fulfill two core CFPB mandates: protecting consumers and ensuring well-functioning markets.

Beyond identifying and proposing solutions to address an overlooked

18. See Maggie Davis, *84% of Consumers Have Used Peer-to-Peer Payment Services, and Nearly a Quarter Have Mistakenly Sent Money to Wrong Recipient*, LENDINGTREE (June 27, 2022), <https://perma.cc/Z4KD-D4XH> (finding that, for users of P2P platforms, “62% of consumers knew P2P balances aren't insured by the FDIC,” but that “nearly half (49%) of P2P users who keep a balance in their accounts wrongly believe that their money is protected”). For crypto banks, consumers relied upon these misrepresentations. One Celsius consumer wrote, “I initially signed up with Celsius due to the advertised fact that you could earn interest in crypto with minimal risk through over-collateralized loans . . . The advertising campaigns, weekly AMAs, website, and interviews all are adamant that our funds are used in over-collateralized loans to generate yield for the depositors.” *In re Celsius Network LLC*, Docket No. 90, No. 22-10964 (Bankr. S.D.N.Y. 2022), <https://perma.cc/XT7X-2DYJ?type=image>.

19. See FIN. STABILITY OVERSIGHT COUNCIL, *supra* note 11, at 4 (“Crypto-asset activities could pose risks to the stability of the U.S. financial system if their interconnections with the traditional financial system or their overall scale were to grow without adherence to or being paired with appropriate regulation, including enforcement of the existing regulatory structure.”).

20. 12 U.S.C. §§ 5481(5)-(6), 5481(15)(A)(iv).

consumer financial risk, this article contributes to two contemporary debates in the literature. The first is over-ensuring that institutions that engage in maturity transformation are properly regulated. Scholarship in this area primarily focuses on how such institutions could affect financial stability if they fail, arguing for industry-wide regulation on maturity transformation²¹ or focusing on how to address the financial stability concerns of discrete industries such as open-end mutual funds and money market funds,²² stablecoins,²³ and crypto banks.²⁴ Our article takes a different approach. Rather than focus on financial stability, we identify maturity transformation as a risk to consumers and offer a solution to addressing it in particular nonbank industries under that lens.

The second debate to which we contribute is over whether or how to ensure the federal government maintains appropriate control over private money creation. Some scholars posit that money market funds, P2P payment platforms, and stablecoin issuers have impinged on the rights of the sovereign to control the money supply (which it does through chartering IDIs), negatively affecting the real economy.²⁵ This proposal certainly may affect this debate, by providing an

21. See, e.g., Steven L. Schwarcz, *Systematic Regulation of Systemic Risk*, 2019 WIS. L. REV. 1, 34 (2019) (describing how maturity transformation of a systemically important financial institution “could trigger a systemic shock”); Zachary J. Gubler, *Regulating in the Shadows: Systemic Moral Hazard and the Problem of The Twenty-First Century Bank Run*, 63 ALA. L. REV. 221, 229 (2012) (proposing “three different policy alternatives for managing the twenty-first century bank run, which are aimed at eliminating, limiting, or circumscribing maturity transformation in securitized banking”); John Crawford, *A Better Way to Revive Glass-Steagall*, 70 STAN. L. REV. ONLINE 1, 6–7 (2017) (“History has taught that widespread maturity transformation without deposit insurance or its equivalent tends to end in tears.”); Robert Hockett, *The Macroprudential Turn: From Institutional “Safety and Soundness” to Systematic “Financial Stability” in Financial Supervision*, 9 VA. L. & BUS. REV. 201, 225 (2015) (explaining that “an effective macroprudential regulatory regime that would make use of liquidity minima and maturity mismatch maxima”).

22. See, e.g., Jeffrey N. Gordon & Christopher M. Gandia, *Money Market Funds Run Risk: Will Floating Net Asset Value Fix the Problem?*, 2014 COLUM. BUS. L. REV. 313 (2014) (evaluating whether a proposal to address these funds’ run risks is effective).

23. See, e.g., Arthur E. Wilmarth, *We Must Protect Investors and Our Banking System From the Crypto Industry*, 101 WASH. U. L. REV. 235, 242 (2023) (explaining that the stablecoin USDC “probably would have suffered a devastating run if [Silicon Valley Bank’s] uninsured depositors had not been protected by federal authorities”); Todd Phillips, *Tokenized Deposits: How I Learned to Stop Worrying and Love Stablecoins* (discussing whether deposit insurance can be used to address stablecoin runs); Howell Jackson et al., *How We Can Regulate Stablecoins Now—Without Congressional Action*, BROOKINGS (Aug. 16, 2022), <https://perma.cc/7R78-WWN6> (proposing that stablecoin issuers be subsidiaries of insured banks); Gary B. Gorton & Jeffery Y. Zhang, *Taming Wildcat Stablecoins*, 90 U. CHI. L. REV. 909 (2023) (evaluating stablecoins’ risks).

24. Gary B. Gorton & Jeffery Y. Zhang, *Bank Runs During Crypto Winter*, HARV. BUS. L. REV. (forthcoming) (describing the activities of crypto banks).

25. See, e.g., Robert C. Hockett & Saule T. Omarova, *The Finance Franchise*, 102 CORNELL L. REV. 1143, 1175 (2017) (“[W]e define and analyze shadow banking by reference to specific mechanisms through which capital and money markets *amplify* and functionally *replicate* the role of banking and Treasury securities markets as channels for dispensing the

avenue for the government to regulate certain nonbanks in a manner consistent with the federal banking agencies. However, our motivation is aligned with those scholars who are concerned with how consumers and merchants would be impacted if underregulated money creators fail.²⁶ To that end, our proposal contributes to this debate by providing an avenue for their regulation that does not require new legislation.

The rest of this article proceeds as follows. In Part I, we explain how consumers are harmed by firms that act like banks but are not regulated like banks. There, we explain how maturity transformation creates run risk and unregulated and uninsured nonbanks can harm their customers by mishandling their funds. In Part II, we argue that the CFPB has the authority to regulate deposit-taking and money-transmission but has not exercised its authority sufficiently. There, we demonstrate that CFPB may use supervision, disclosure requirements, and the authority to prohibit abusive acts and practices to regulate these activities. We also discuss how entities that engage in deposit-taking and money-transmission are under-regulated absent CFPB oversight.

In Part III, we make the descriptive and normative cases for expanded CFPB regulation under its abusiveness authority to proscribe maturity transformation in certain instances. Descriptively, we explain why consumers don't understand the material risks outlined in Part I and how consumer shadow banks take unreasonable advantage of consumers' lack of knowledge. We note two analogous instances of CFPB regulation, the Civil Investigative Demand sent to Nexo and when it shut down My Loan Doctor for operating a consumer shadow bank. Normatively, we explain how CFPB action fulfills its core mandates.

Finally, Part IV anticipates and attempts to refute likely counterarguments, including that the CFPB is not the ideal regulator for consumer shadow banks' maturity transformation because it lacks experience. While we acknowledge that the CFPB is not ideally positioned, it is currently the best positioned regulator to do this work. It has both the mandate to act and an untapped ability to do so.

I. BANK-LIKE ACTIVITIES CAN BE RISKY FOR CONSUMERS

A. There is no risk-free way to take deposits, transmit money, or custody

sovereign's full faith and credit."); Lev Menand & Morgan Ricks, *Rebuilding Banking Law: Banks as Public Utilities*, YALE J. ON REG. at 4 (forthcoming) (explaining that banks, in a previous era, "enjoyed an exclusive privilege to augment the money supply but were largely limited to conducting activities consistent with their monetary mission").

26. See generally *Bad Money*, *supra* note 3 (detailing the problems with contemporary regulation of nonbank money providers); Dan Awrey & Kristin van Zwieten, *The Shadow Payment System*, 43 J. CORP. L. 775 (2018) (describing the growth of nonbank payment providers); Nadav Orian Peer, *Money Creation and Bank Clearing*, 28 FORDHAM J. CORP. & FIN. L. 35 (2023) (describing the process by which banks facilitate payments).

client funds without government backstops.

Banking is risky. When a customer deposits their funds, the bank is actually borrowing that money and merely promising to repay the consumer upon request. The institution does not keep that money in the bank vault until the customer returns. Instead, it can lend the funds to a borrower, buy a Treasury Bond, or engage in any number of other activities (subject to government regulations, of course). These activities all come with varying levels of risk. The borrower to which funds were lent can fail to repay the loan. The U.S. government can default and fail to pay its bondholders. Even if the money were placed in the bank's vault, someone might steal it. Any losses not offset by any gains made by the bank's productive investment of that money need to come from somewhere. As Milton Friedman and Anna Schwartz noted over five decades ago, the term deposit is "misleading" because it "connotes the placing of something in safekeeping, as in a 100 per cent reserve banking system."²⁷

But there is no way for a bank to credibly ensure against all losses and promise that consumers will always be made whole if things go wrong.²⁸ Accordingly, who bears the risk of loss is a key question in banking regulation. Banks that are heavily funded through shareholder equity place the risk of loss on their owners. Sometimes, customers bear the risk of loss, as with banks that are highly leveraged. And other times, the banking industry mutualizes the losses with a government backstop, such as with federal deposit insurance. Bank regulation exists to minimize catastrophic losses and ensure that shareholders take losses before their customers.

Accordingly, when nonbanks engage in bank-like activities without bank-like regulation, not only can they not guarantee that their customers will be made whole, but their customers may be more likely to bear losses than their owners.²⁹ These institutions, colloquially known as shadow banks, "are financial intermediaries that conduct maturity, credit, and liquidity transformation without access to central bank liquidity or public sector credit guarantees."³⁰ The largest shadow banks, including money market mutual funds and investment banks that relied on repurchase agreements for funding, helped cause and sustain the great

27. MILTON FRIEDMAN & ANNA J. SCHWARTZ, *MONETARY STATISTICS OF THE UNITED STATES: ESTIMATES, SOURCES, METHODS* 59 n.4 (1970).

28. Government backstops come in three forms: The government holds assets for firms, as the Federal Reserve does when it provides accounts for member banks; commits to repay debts if firms fail, as the FDIC does with deposit insurance; or commits to ensuring the firm is solvent and can repay the debt, as the Fed does with its discount window or liquidity facilities.

29. See *Bad Money*, *supra* note 3, at 7 ("[I]f this new breed of monetary institutions does not enjoy the unique legal privileges of banks and [money market funds], how credible are the promises they make to their customers?").

30. ZOLTAN POZSAR ET AL., *SHADOW BANKING*, FED. RSRV. BANK N.Y. STAFF REPORT NO. 458 (2010), <https://perma.cc/PBV8-FFVJ>.

financial crisis.³¹

Not all shadow banks operate in commercial markets. Consumer shadow banks, a term we coin, interface primarily with retail consumers by taking consumers' deposits, transmitting consumers' money, and acting as custodians for consumers' funds. Such entities include peer-to-peer (P2P) payment platforms like PayPal that engage in some or all these consumer-facing, bank-like activities without the regulation or insurance of IDIs. For example, when a customer uses PayPal to make a payment, the firm is—like with banks—borrowing that cash from the consumer, with the promise that the recipient can seek to transfer that money off of PayPal's platform at their convenience. Until the recipient requests those funds be transferred into their bank account, PayPal is free to use that money as it sees fit. It can engage in any of the activities of the bank described above (e.g., place the funds in its “vault,” lend the funds, buy a bond). Even leaving the funds in PayPal's own account is risky because, if the account provider fails, PayPal will be unable to honor the recipient's redemption request.

Of course, consumers benefit from using these services, much as shadow banks performed beneficial economic functions before the crisis. Consumers can store their cash or other assets relatively safely so they do not have to worry about doing so themselves, can make payments with nothing more than a debit card or their phone, and can transmit money to around the world. Nevertheless, most do not understand the mechanics involved in these activities, nor the inherent risks they pose. As will be described in Part III, consumers do not expect to lose their assets, and do not recognize that they are actually debtors of consumer shadow banks. They expect their cash deposited in banks, left on payment platforms, and held by stablecoin issuers (or even crypto tokens held with crypto banks) to be there when they need them.

1. Maturity transformation

Not only is there no risk-free way to take deposits, transmit money, or custody client funds, these activities are made riskier thanks to the fact that the consumer shadow banks engaging in these activities use maturity transformation and face moral hazard.

Maturity transformation is a process whereby institutions make long-duration loans from shorter-duration debt. Traditional banks and consumer shadow banks permit creditors (i.e., depositors, payment recipients) to withdraw their funds at any time yet are unable to make investments with similar terms. Banks, for example, borrow depositors' cash with the promise that it may be redeemed upon request but lend that money to borrowers with terms spanning

31. See FIN. CRISIS INQUIRY COMM'N, THE FINANCIAL CRISIS INQUIRY REPORT, at xx (2011), <https://perma.cc/FUM4-V8CS> (describing how the shadow banking system helped create the climate that allowed for the great financial crisis).

months or years. For example, banks may make thirty-year, fixed rate mortgage loans using funds obtained from customer demand deposits. Similarly, money transmitters borrow customers' cash with the promise that recipients can withdraw those funds immediately or at any point in the future, but in the interim purchase bonds and other financial instruments with lengthy terms.

Maturity transformation provides significant benefits to society. Rather than sitting in a physical vault waiting for such time as it may be spent, money is lent out to borrowers or debt issuers.³² Bank depositors and money transmitter clients desire liquid and stable assets that can be used for unexpected payments, but requiring those assets to always be available is economically inefficient.³³ Maturity transformation allows households and businesses to maintain liquid savings or send money around the globe while simultaneously permitting those assets to be used productively in the real economy.³⁴ Maturity transformation also permits depositors to earn yield while keeping their savings secure and liquid, or allows money transmitters to retain that yield and provide payments seemingly free of charge.³⁵ When all goes well, maturity transformation contributes to a growing economy.

However, even when institutions act properly, maturity transformation is inherently unstable when unregulated or improperly regulated, thanks to a collective-action problem.³⁶ Maturity transformation makes shadow banking riskier for customers than properly regulated banking. Neither entity type will have sufficient assets on hand to meet all withdrawal requests if a substantial number of depositors try to withdraw their funds at the same time. Thus, the

32. See DOUGLAS J. ELLIOTT, BROOKINGS, *BANK LIQUIDITY REQUIREMENTS: AN INTRODUCTION AND OVERVIEW* 3 (2014), <https://perma.cc/DA6C-XAHA> (“Banks . . . [rely] on the fact that households and firms seldom take advantage of the liquidity they have obtained. . . [B]anks can lend out the funds for longer periods with a fair degree of assurance that the deposits will remain available”).

33. See *id.* (explaining that although “[d]emand deposits can theoretically all be withdrawn in a single day,” in reality, “households and firms seldom take advantage of the liquidity they have obtained”). See also William C. Dudley, *More Lessons from the Crisis*, Remarks at the Center for Economic Policy Studies (CEPS) Symposium in Princeton, New Jersey (Nov. 13, 2009), <https://perma.cc/7LC5-86B3> (“The need for maturity transformation arises from the fact that the preferred habitat of borrowers tends toward longer-term maturities used to finance long-lived assets such as a house or a manufacturing plant, compared with the preferred habitat of investors, who generally have a preference to be able to access their funds quickly.”).

34. See ELLIOTT, *supra* note 32 (“Maturity transformation is useful because households and businesses often have a strong preference for a substantial degree of liquidity, yet much of the useful activity in the economy requires assured funding for multiple years.”).

35. We say “seemingly” because the alternative to free payments could be reverting yield otherwise retained to depositors and charging for payments.

36. See GARY GORTON, *SLAPPED BY THE INVISIBLE HAND: THE PANIC OF 2007* 5 (2009), <https://perma.cc/PS36-HNJ9> (“Uninsured bank debt is vulnerable to panic”); Morgan Ricks, *Shadow Banking and Financial Regulation* 13 (Columbia L. and Econ. Working Paper No. 370, 2010), <https://perma.cc/8TPD-NKBL> (“[M]aturity transformation in the absence of a government safety net is inherently prone to periodic run-behavior”).

maturity transformation process works only when all depositors have confidence in an institution. Bank regulation and deposit insurance seek to create the necessary conditions for depositor confidence, and shadow banks lack both.

Mass redemptions would not be a problem if depositors could be sure that firms were always solvent and liquid; that is, that firms' assets always exceeded liabilities and could be promptly liquidated for their full value. But neither is true. The ways customer funds are invested are opaque to their depositors and liquidating assets prior to maturity to meet redemption requests can result in losses.³⁷ Further, those losses are borne unevenly, with those who are last to withdraw their deposits left with the greatest losses. As such, even those who are not otherwise concerned about the health of their institutions will rush to withdraw out of fear that their requests will not be met if others withdraw first.³⁸ This creates an advantage for the first persons to act (i.e., they get their money back but the last to seek to withdraw does not), and this first mover advantage incentivizes depositors to withdraw their deposits at the earliest sign that their institution may face losses, helping make runs a self-fulfilling prophecy.

This model of run, known as the Diamond-Dybvig model, is applicable to all maturity transformation and has been demonstrated repeatedly. Prior to the modern era of bank regulation, "there were periodic real shocks which caused depositors to be anxious about their banks, . . . in which case they would run to their banks en masse demanding cash," causing banks to fail.³⁹ During the financial crisis, "[asset-backed commercial paper] conduits . . . , dealer repo markets, commercial paper markets, 'liquidity put' bonds, money market mutual funds, repo-financed credit hedge funds, and uninsured bank deposits all experienced modern-day bank runs."⁴⁰ Most recently, Silicon Valley Bank was felled by a run following its sale of various low-interest Treasury and mortgage bonds at a substantial loss; those securities had diminished in value because of "an aggressive series of interest rate hikes at the Federal Reserve,"⁴¹ and the first-mover advantage meant that there was a strong incentive to withdraw first and ask questions later.

37. See George G. Pennacchi, *Deposit Insurance Reform*, in PUBLIC INSURANCE AND PRIVATE MARKETS 20, 22 (Jeffrey R. Brown ed., 2010) ("If a bank needs to sell such loans prior to maturity, value can be lost by liquidating them" because "loan buyers suspect that a bank is selling its worst-quality loans.").

38. See generally Douglas W. Diamond & Philip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. OF POL. ECON. 401 (1983) (describing how runs may occur). See also Ricks, *supra* note 36, at 13 ("run-behavior is a product of a basic collective action problem").

39. GORTON, *supra* note 36, at 5.

40. Morgan Ricks, *Regulating Money Creation After the Crisis*, 1 HARV. BUS. L. REV. 75, 87 (2011). Although the financial crisis was caused by a deterioration in asset quality, it was the fear that others would redeem first that caused the short-term debtholders (and equity-holders, in the case of money market funds) to run.

41. Max Zahn, *A Timeline of the Silicon Valley Bank Collapse*, ABC NEWS (Mar. 14, 2023), <https://perma.cc/T25C-FKQW>.

2. Moral hazard

Moral hazard is a problem in which actors take on risks of which they do not bear the full costs and those who shoulder excess risks cannot fully police them.⁴² Making high-risk-high-reward investments with depositor or transmitter money is more profitable than investing prudently for the safety of their customers or even with their own assets; lenders are incentivized to swing for the fences. Gains revert to lenders whereas any losses are borne by depositors and transmitters, and institutions have a “heads-I-win-tails-you-lose” incentive for extreme risk-taking. Further, neither bank nor nonbank depositors have insight into the loans banks make with their deposits (and most lack the capacity to effectively assess the quality of those loans even if they did), preventing them from acting to address those incentives.

Unfortunately, it is possible that the public disclosure of an entity’s condition—necessary to address moral hazard—can cause a run. Runs occur if public sentiment turns and depositors lose confidence that they will be able to withdraw their deposits on demand. Although a run may be inevitable for insolvent institutions, solvent entities on the cusp of insolvency can still face runs if depositors begin withdrawing funds out of a sense of caution. While release of information regarding a bank’s condition may in many instances help calm depositors’ concerns, in other instances, it could help propagate a run. For example, Silicon Valley Bank’s recent run was spurred on by the disclosure that it was selling some of its assets at a substantial discount.⁴³

Because bankers are incentivized to act imprudently with depositors’ capital and runs can happen even at healthy institutions, the government subjects IDIs to a variety of regulatory requirements. Banks must have sufficient high-quality liquid assets on hand to meet expected redemptions when customers demand return of their deposits.⁴⁴ Risk-based capital requirements ensure bankers fund loans with increasing amounts of their own capital to insure they are in first-loss positions ahead of their depositors, including a total capital ratio of at least 8% and leverage ratio of at least 4%, with heightened requirements for larger and more systemically risky institutions.⁴⁵ Other rules impose limitations on unsafe and unsound banking practices⁴⁶ and extending too much credit to a single borrower, among other requirements.⁴⁷ Premiums for deposit insurance (discussed more below) are levied based on institutions’ riskiness, further

42. N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 472 (3d ed. 2024) (defining moral hazard as a problem in which an “agent may act in a way that serves the agent’s self-interest but is undesirable for the principal”).

43. Polo Rocha, *SVB Shares Fall Sharply After \$1.8B in Surprise Bond Losses*, *AM. BANKER* (Mar. 9, 2023), <https://perma.cc/KJ6Z-6DDQ>.

44. *See, e.g.*, 12 C.F.R. Part 50.

45. *See, e.g., id.* § 3.10.

46. *See, e.g., id.* Part 30.

47. *See, e.g., id.* § 32.3.

incentivizing institutions to take less-risky behaviors.

IDIs are also supervised by bank examiners, which is the process of “monitoring, inspecting, and examining financial institutions” to ensure that they follow the law and operate “in a safe and sound manner.”⁴⁸ Supervision “is an iterative process of comment by the regulators and response by the bank,” wherein “examiners concern themselves with all manner of a bank’s affairs” and encourage adjustment to the bank’s operations.⁴⁹ The supervisory process requires examiners to review banks’ books and records to ensure loans are not overly risky, but it also allows examiners to evaluate the policies and processes of institutions. Although there is an ongoing debate about the precise role of supervision in the bank regulatory process, supervision nevertheless is intended to promote the safety of individual banks and the banking system.⁵⁰

Lastly, IDIs are provided two government backstops to help prevent their failure. First, deposit insurance, which covers depositors up to the statutory insurance ceiling, ensures that depositors are not concerned about their institutions’ health. Because their assets are insured, they lose the first-mover advantage to withdraw their deposits at the first sign of danger.⁵¹ If insured depositors are not prone to withdrawing their funds, otherwise healthy institutions will not run. Second, IDIs are offered access to the Federal Reserve’s Discount Window, allowing them to borrow against good collateral when they run into issues.⁵² The Fed follows Bagehot’s Dictum, which posits that central banks should lend freely and at a penalty rate, ensuring that solvent but illiquid firms can survive to another day without engaging fire-sales that reduce the long-term value of their assets.⁵³

48. BD. OF GOVERNORS OF THE FED. RSRV., SUPERVISING AND REGULATING FINANCIAL INSTITUTIONS AND ACTIVITIES 74, <https://perma.cc/8GDG-V77C>. In order to carry out this mission, examiners from the banking agencies conduct on-site examinations of each bank at least once every 18 months, reviewing its balance sheet, operations, and policies and procedures to ensure that its management is not taking excessive risks with funds that are backed by the FDIC’s deposit insurance fund or, ultimately, taxpayers. See 12 U.S.C. § 1820(d).

49. *In re Subpoena Served Upon the Comptroller of the Currency*, 967 F.2d 630, 633-34 (D.C. Cir. 1992).

50. See generally Peter Conti-Brown & Sean Vanatta, *Risk, Discretion, and Bank Supervision* (2023), <https://perma.cc/FDV9-BBCB> (describing the debate and the role of supervision).

51. See Diamond & Dybvig, *supra* note 38, at 404 (“Deposit insurance is shown to be able to rule out runs without reducing the ability of banks to transform assets.”).

52. See FED. RSRV. BD., THE FED EXPLAINED: WHAT THE CENTRAL BANK DOES 38 (11th ed. 2021), <https://perma.cc/FD2K-PRPV> (“Discount window lending is available as a backup source of liquidity for depository institutions.”).

53. Brian F. Madigan, Director of Division of Monetary Affairs, Federal Rsrv. Bd., Bagehot’s Dictum in Practice: Formulating and Implementing Policies to Combat the Financial Crisis, Speech at the Federal Reserve Bank of Kansas City’s Annual Economic Symposium, Jackson Hole, Wyoming (Aug. 21, 2009), <https://perma.cc/A3A5-X7DU> (describing the Fed’s application of the dictum).

The federal government has also provided several reforms to help depositors if their IDIs fail. Deposit insurance not only helps prevent runs, but ensures that if a bank *does* fail, depositors will be made whole up to some ceiling. Today, the FDIC insures up to \$250,000 per person per institution,⁵⁴ covering the full amount in more than 99% of accounts⁵⁵ and nearly 60% of total bank deposits.⁵⁶ In addition, depositors of IDIs maintain what is known as a “depositor preference,” in which they are given a position second only to the FDIC’s own administrative expenses for paying claims in bankruptcy.⁵⁷ Absent this preference, depositors of non-IDIs and customers of money transmitters are “mere unsecured creditors . . . almost last in line for repayment from the failed [institution’s] limited pool of assets.”⁵⁸

But none of these protections are available to customers of shadow banks. As such, the very same activities taken by banks are riskier when taken by shadow banks. Recognizing the harms that can befall depositors and the wider economy from unregulated bank-like activities, Congress passed a law designed to put a stop to it. In an explicit attempt to rein-in unchartered private banks, section 21(a)(2) of the Banking Act of 1933 makes it a criminal offense for institutions “to engage . . . in the business of receiving deposits subject to check or to repayment upon presentation of a pass book, certificate of deposit, or other evidence of debt, or upon request of the depositor” without being, at minimum, subject to bank-like examination and having that examination report be made public.⁵⁹ Because the only maturity transformation occurring at the time was occurring in banks, Congress would not have seen a need to address non-deposit maturity transformation.⁶⁰

B. Crypto banks: canaries in the consumer coal mine

The utter collapse of crypto banks in 2022 may be the best way to demonstrate the risks posed by the maturity transformation and moral hazard

54. 12 U.S.C. § 1821.

55. Norbert Michel, *Fewer Than One Percent of Accounts Are Above the FDIC Limit*, CATO INST. (Apr. 6, 2023, 3:48 PM), <https://perma.cc/2FDT-H48T>.

56. FDIC, QUARTERLY BANKING PROFILE: FIRST QUARTER 33 (2023), <https://perma.cc/ZQR5-MS87> (estimating that 58.64% of deposits are insured as of Q1 2023).

57. 12 U.S.C. § 1821(d)(11).

58. Adam Levitin, *Not Your Keys, Not Your Coins: Unpriced Credit Risk in Cryptocurrency*, 101 TEX. L. REV. 877, 880-81 (2023) (describing the bankruptcy process for crypto banks). See also Sam Sutton, *Crypto Meltdown Sparks Legal Battle over Assets*, POLITICO (Jan. 31, 2023), <https://perma.cc/L3MX-755S> (noting that depositors of crypto banks “now have to compete in bankruptcy court with major creditors who secured massive loans to those businesses.”).

59. Banking Act of 1933 § 21, Pub. L. No. 73-66, 48 Stat. 162 (codified at 12 U.S.C. § 378).

60. See *Bad Money*, *supra* note 3, at 55 (noting that money transmitters in prior eras would hold cash only for several days).

occurring in consumer financial products offered by consumer shadow banks.

Crypto banks, also described as “crypto lending platforms,” are now-failed institutions that acted as depositories and lenders of crypto assets.⁶¹ Through programs with names such as “Lend,” “Earn,” and “Interest,” Celsius Network, Voyager Digital, BlockFi, and other institutions⁶² accepted crypto assets as deposits by their customers (that is, borrowed tokens from customers), lent those deposited crypto assets to borrowers, and used those loans’ fees to fund their operations and pay interest to depositors. In addition to taking deposits, several crypto banks offered other services like those provided by commercial banks, including programs that allowed customers to borrow funds using their crypto deposits as collateral, allowed crypto to be deposited into accounts that claimed to be akin to a safety deposit box, and allowed customers to use deposited crypto for transactions and payments.⁶³ The crypto banks promised depositors interest rates of upwards of 18% annually,⁶⁴ which attracted customer funds. At their largest, BlockFi held nearly \$15 billion in customer assets,⁶⁵ Celsius held nearly

61. Carol R. Goforth, *Neither a Borrower Nor a Lender Be: Analyzing the SEC’s Reaction to Crypto Lending*, 18 U. MASS. L. REV. 2, 20 (2022) (describing these institutions as “crypto lending platforms”). Crypto assets are assets issued or transferred using decentralized blockchain technology. See Carol Goforth, *The Lawyer’s Cryptionary: A Resource for Talking to Clients About Crypto-Transactions*, 41 CAMPBELL L. REV. 47, 61 (2019) (“Blockchain is a technological and cryptographic process involving a digital decentralized ledger in which transactions are added in chronological order, creating a ‘chain’ of Blocks.”).

62. See generally Complaint for Permanent Injunction, Monetary Relief, and Other Relief, *FTC v. Celsius Network Inc.*, No. 1:23-cv-6009 (S.D.N.Y. 2023) [hereinafter *FTC Celsius Complaint*], <https://perma.cc/64F4-GU9G> (describing Celsius’s accounts); *Customer Agreement*, VOYAGER (updated Jan. 7, 2022) (describing Voyager’s Earn accounts); *In re BlockFi Lending LLC* (2022) [hereinafter *SEC BlockFi Order*] (describing BlockFi’s accounts). See also Nikhilesh De, *Crypto Exchange FTX US Under Investigation by Texas Regulator Over Securities Allegations*, COINDESK (Oct. 17, 2022), <https://perma.cc/T2H2-M8A9> (quoting Prosecution’s claim that FTX offered “yield-bearing accounts”); *Simple Earn*, BINANCE (last accessed July 29, 2023), <https://perma.cc/B4VE-HXLA> (describing Binance’s Simple Earn” accounts); *Gemini Earn Program Terms and Authorization Agreement*, GEMINI (last updated Dec. 14, 2022) [hereinafter *Gemini User Agreement*], <https://perma.cc/EN4E-YWEB> (describing Gemini’s Earn accounts).

63. See, e.g., *FTC Celsius Complaint*, *supra* note 62, at 10 (“Celsius’s services have included . . . a Borrow program that allows customers to take out loans secured by their crypto deposits; a Custody program that allows customers to store their crypto on the Celsius platform without earning yield; and other services that allow customers to exchange (‘swap’) cryptocurrency, buy cryptocurrency, or transfer assets to other Celsius users.”); VOYAGER INVESTOR PRESENTATION, VOYAGER DIGITAL LTD. 22 (June 2022), <https://perma.cc/EEA8-SGWX> (describing Voyager accounts’ use in the “Crypto Payments Ecosystem”).

64. See Zeke Faux & Joe Light, *Celsius’s 18% Yields on Crypto Are Tempting—and Drawing Scrutiny*, BLOOMBERG BUSINESSWEEK (Jan. 27, 2022), <https://perma.cc/SSA8-SSNX>.

65. See *SEC BlockFi Order*, *supra* note 62, at 2 (“As of March 31, 2021, BlockFi and its affiliates held approximately \$14.7 billion in BIA investor assets.”).

\$12 billion,⁶⁶ and Voyager held nearly \$6 billion.⁶⁷

One SEC settlement agreement with BlockFi explained in detail how that firm’s “Interest” accounts operated. First, “an investor could transfer crypto assets to the digital wallet address assigned by BlockFi to the investor, or purchase crypto assets with fiat currency”⁶⁸ Next, BlockFi would send those crypto assets “to BlockFi’s wallet addresses at third-party custodians”—essentially, an omnibus account not segregated in any way.⁶⁹ BlockFi would then “lend[] those crypto assets to institutional borrowers,” who would “pay interest” back to BlockFi.⁷⁰ BlockFi would set its Interest accounts’ “rates based, in part, on the yield that [BlockFi] can generate from lending to institutional borrowers.”⁷¹ Similar accounts at Voyager, Celsius, and the other crypto banks operated in an analogous fashion.

BlockFi’s, Voyager’s, and Celsius’ institutional borrowers largely—if not entirely—used borrowed tokens to speculate.⁷² The largest of such borrowers appears to have been Three Arrows Capital (3AC), a Singapore-based hedge fund that was “meaningfully responsible for the larger crypto crash of 2022.”⁷³ 3AC’s assets reached “some \$10 billion,” of which “much of the sum was likely borrowed,”⁷⁴ and it engaged in activities ranging from arbitraging crypto prices to speculating on new tokens.⁷⁵ To repay its loans, 3AC would have used its profits to repurchase the same types of tokens it had borrowed.

This business model worked well when crypto prices were rising, but not when they started falling. Problems began in May 2022 when the price of the algorithmic stablecoin TerraUSD and its paired token Luna both collapsed; Luna

66. Ryan Browne & Arjun Kharpal, *Crypto Lender Celsius Pauses Withdrawals Due To ‘Extreme Market Conditions’*, CNBC (June 13, 2022, 4:16 PM EDT), <https://perma.cc/F7V4-YP3G>.

67. VOYAGER DIGITAL, *supra* note 63, at 17.

68. SEC BlockFi Order, *supra* note 62, at 4.

69. *Id.*

70. *Id.* at 3–4.

71. *Id.* at 5 (internal quotation marks and punctuation omitted).

72. See Ephrat Livni & Eric Lipton, *Crypto Banking and Decentralized Finance, Explained*, N.Y. TIMES (updated Nov. 1, 2021) (describing how crypto banks “lend[] to hedge funds and other institutional investors who exploit flaws in crypto markets to make fast money without actually holding risky assets, betting on discrepancies between actual crypto values and crypto futures”).

73. Jen Wieczner, *The Crypto Geniuses Who Vaporized a Trillion Dollars*, NEW YORK MAGAZINE (Aug. 15, 2022), <https://perma.cc/RFA7-HTDY> (“Among crypto’s smartest observers, there is a widely held view that Three Arrows is meaningfully responsible for the larger crypto crash of 2022”).

74. *Id.* For example, a “loan to 3AC was one of [Voyager’s] largest outstanding loans.” Declaration of Stephen Ehrlich, Chief Executive Officer of the Debtors, In Support of Chapter 11 Petitions and First Day Motions, *In re: Voyager Digital Holdings, Inc.*, No. 22-10943 (Bankr. S.D.N.Y. 2022), <https://perma.cc/V9NR-X4VE>.

75. Matt Levine, *Crypto Had a Credit Bubble*, BLOOMBERG (Dec. 5, 2022), <https://perma.cc/Z86G-22XJ>.

started the month trading at around \$80 and was worthless two weeks later.⁷⁶ This caused the entire crypto market to pull back and, with token valuations falling, crypto lenders began issuing margin calls and, when those calls were not met, liquidated tokens were held as collateral.⁷⁷ These sales created a downward spiral in the price of crypto assets. For example, it was reported that 3AC held “around \$560 million” worth of the now-valueless token Luna⁷⁸ and failed to satisfy margin calls. Depositors at various crypto banks lacked insight into whether the entities holding their crypto had lent assets to 3AC. And so, contagion spread.

This caused a classic bank run. When crypto prices began dropping precipitously and news reports indicated that loans were not repaid, a wide swath of crypto banks’ depositors began attempting to withdraw their own deposits.⁷⁹ The crypto banks were forced to sell into a death spiral to meet those redemption requests,⁸⁰ but several crypto banks ultimately halted withdrawals in late June or early July.⁸¹ When 3AC filed for bankruptcy in June 2022, the company reportedly owed \$3.5 billion-worth of assets to 27 different lenders, including \$2.3 billion to Genesis,⁸² \$650 million to Voyager,⁸³ and \$75 million to Celsius.⁸⁴ Other crypto banks were able to survive longer, but eventually halted withdrawals and declared bankruptcy after the collapse of the crypto exchange FTX because of that company’s fraud.⁸⁵

76. *Terra Classic*, COINMARKETCAP (accessed July 23, 2023), <https://perma.cc/G3B9-3LKH>. See Phillips, *supra* note 23 (explaining the mechanisms leading Luna to crash).

77. See *In re BlockFi Inc.*, Docket No. 17, 22-19361-MBK, at 14 (Bankr. D. N.J. Nov. 28, 2022), <https://perma.cc/8J67-UEAX> (“BlockFi’s retail loans are subject to margin calls and/or liquidation based on specified loan-to-collateral value ratios.”).

78. Sam Bourgi, *Three Arrows Capital Weighs Bailout as Kyle Davies Breaks Silence: Report*, COINTELEGRAPH (June 17, 2022), <https://perma.cc/9DH4-7VQX>.

79. See generally Matt Levine, *The Crypto Story*, BLOOMBERG BUSINESSWEEK (Oct. 31, 2022), <https://perma.cc/C8RD-7NW2> (describing the contagion following Luna’s collapse).

80. MacKenzie Sigalos, *From \$10 Billion to Zero: How a Crypto Hedge Fund Collapsed and Dragged Many Investors Down With It*, CNBC (July 11, 2022), <https://perma.cc/5Q7K-7AZ2> (“Many of the firm’s counterparties were, in turn, unable to meet demands from their investors, including retail holders who had been promised annual returns of 20%.”).

81. Browne & Kharpal, *supra* note 66; MacKenzie Sigalos, *Major Crypto Suspends All Trading, Deposits and Withdrawals*, CNBC (July 1, 2022), <https://perma.cc/C4BD-G3A4>.

82. Wiczner, *supra* note 73; Kate Irwin, *Bankrupt Three Arrows Capital Owes \$3.5B to Creditors, Including \$2.3B to Genesis*, DECRYPT (July 18, 2022), <https://perma.cc/AFD5-QNGN>.

83. *In re Voyager Digital Holdings, Inc.*, First Day Presentation, No. 22-10943 (S.D.N.Y. Bkr. July 8, 2022), <https://perma.cc/Y8W7-SNDM>.

84. Declaration of Alex Mashinsky at ¶ 112, *In re Celsius Network LLC*, No. 22-10964 (Bankr. S.D.N.Y. 2022) (No. 1:22-bk-10964), Doc. 23.

85. Luke Huigsloot, *BlockFi Limits Platform Activity, Including a Halt on Client Withdrawals*, COINTELEGRAPH (Nov. 11, 2022), <https://perma.cc/8XK8-H82X>. Luc Cohen & Jody Godoy, *Sam Bankman-Fried Convicted of Multi-Billion Dollar FTX Fraud*, REUTERS (Nov. 3, 2023, 4:43 AM ET), <https://perma.cc/SZ8Q-RNQ9>.

The crypto banks were wholly unprepared for the market-wide downturn in crypto prices. In part, we believe this stemmed from their minimal supervision by regulators. Among the many risk-management failures of these institutions⁸⁶ were the enormous amounts of leverage the institutions took on. Voyager Digital was leveraged 23-to-1⁸⁷ and Celsius was leveraged 19-to-1,⁸⁸ meaning that 4.3% and 5.3% decreases, respectively, in asset valuations could bankrupt the institutions.⁸⁹ Although these leverage ratios were within greater than the minimum required for regulated state and federally chartered banks,⁹⁰ chartered banks are subject to a host of additional prudential standards, including limitations on investments in any one asset class.⁹¹ In addition, the crypto banks were invested in one of the most highly volatile assets: crypto tokens.

Although the full scope of the losses is still being determined through the bankruptcy processes, these firms' customers appear to have lost upwards of \$2.5 billion or more.⁹² In letters to the judge overseeing the bankruptcy of Celsius Network, customers wrote about losing the money they were going to use to pay

86. See, e.g., First Interim Report of John J. Ray III to the Independent Directors on Control Failures at the FTX Exchanges at 12–13 (Apr. 9, 2023), <https://perma.cc/8534-2LDL> (“Thirty-five FTX Group entities used QuickBooks as their accounting system and relied on a hodgepodge of Google documents, Slack communications, shared drives, and Excel spreadsheets and other non-enterprise solutions to manage their assets and liabilities.”) FTX CEO is reported as saying he spent less than an hour a day on risk management. See Richard Vanderford, *Sam Bankman-Fried ‘Wasn’t Even Trying’ to Manage Risk at FTX, He Says*, WALL ST. J. (Dec. 1, 2022), <https://perma.cc/4LWH-VGVA> (“What happened, happened—and, if I had been spending an hour a day thinking about risk management on FTX, I don’t think that would have happened.”).

87. Interim Condensed Consolidated Financial Statements (Unaudited) for the quarter ending March 31, 2022, *In re Voyager Digital Holdings, Inc.*, Case No. 22-10943 (noting total equity of \$257,783,000; total assets of \$5,998,884,000; for a 4.3% leverage ratio).

88. Levine, *supra* 79.

89. Leverage is the ratio of borrowed capital to shareholder equity. The percentage decreases describe the losses that would need to occur for firms to be unable to repay their debts.

90. See 12 C.F.R. § 217.10 (limiting federally regulated banks' leverage ratios to no greater than 25-to-1 and capital ratios of 8%).

91. See *id.* Appendix A to Part 30 (requiring national banks to take “adequate account of concentration of credit risk”).

92. See Declaration of Alex Mashinsky, Chief Executive Officer of Celsius Network, LLC, in Support of Chapter 11 Petitions and First Day Motions at 50, *In re Celsius Network, LLC*, Docket No. 23 (July 14, 2022) (describing roughly \$4.3 billion in assets and \$5.5 billion in liabilities); Nikou Asgari & Joshua Oliver, *Crypto Broker Genesis Owes Winklevoss Exchange’s Customers \$900mn*, FINANCIAL TIMES (Dec. 3 2022), <https://perma.cc/HPH8-AVK6> (describing Genesis’s at least \$900 million debt owed to Gemini); Rohan Goswami & MacKenzie Sigalos, *BlockFi Secret Financials Show a \$1.2 Billion Relationship with Sam Bankman-Fried’s Crypto Empire*, CNBC (Jan. 24 2023), <https://perma.cc/KNB7-DCBU> (describing a \$671 million loss).

for the birth of their child;⁹³ use in retirement;⁹⁴ or the purchase of a home;⁹⁵ as well as the stress, shame, disgust, and humiliation that those losses engendered.⁹⁶

What makes the crypto banks concerning (as with other consumer shadow banks) is not that they funded loans with customer assets. After all, using customer funds for investments is the premise of investment companies.⁹⁷ Instead, the concern is that they did so with demand deposits and engaged in maturity transformation. The crypto banks were unable to provide customers with the crypto assets they were obligated to provide, even as prices were falling, because they did not have enough capital on hand to make those purchases. Evidence points to the mass withdrawals from the crypto banks as key to the crypto market's collapse.⁹⁸

Although counterfactuals are impossible to prove, it is worth considering that, had the CFPB enacted regulations addressing maturity transformation and using other peoples' assets—by, for example, requiring crypto banks to hold high levels of high-quality liquid assets or fund their loans with high amounts of shareholder capital—depositors may not have run and would not have faced the losses that they ultimately did.

Any financial firm that makes investments with customer assets, whether depository institutions providing places for customers to store their assets or money transmitters facilitating payments, is prone to run, resulting in losses.

93. See *In re Celsius Network LLC*, Docket No. 104, No. 22-10964, (Bankr. S.D.N.Y. 2022), <https://perma.cc/A45D-TEWD> (“I am expecting my third child in 2.5 months and need the money to pay for the doctor, hospital[,] and expenses. . . . [D]ue to the withdrawal halt, I don’t have access to any funds and my life has become so miserable now. I am worried that my stress due to Celsius’s situation will affect the health of my unborn child.”)

94. See *id.*, Docket No. 68, <https://perma.cc/G9K3-DV4G> (“I can’t tell my wife and kids our retirement and dreams have been stolen from us.”).

95. See *id.*, Docket No. 109, <https://perma.cc/9B6N-JD8W> (“I . . . had deposited \$15,000[:] Everything I had remaining for a purchase of a home for my two children and wife here in Southwest Florida.”).

96. See *id.*, Docket No. 65, <https://perma.cc/DGR5-REWC> (“I am ashamed, humiliated, and quite frankly, disgusted, that I put all my trust into a company that has clearly participated in near fraudulent activity.”).

97. The SEC has alleged that crypto banks are investment companies that must be registered with the agency. See *infra* Part II.C.

98. See MacKenzie Sigalos, *From \$10 Billion to Zero: How a Crypto Hedge Fund Collapsed and Dragged Many Investors Down With It*, CNBC (July 11, 2022) (quoting Nic Carter), <https://perma.cc/5Q7K-7AZ2> (“Credit is being destroyed and withdrawn, underwriting standards are being tightened, solvency is being tested, so everyone is withdrawing liquidity from crypto lenders.”). FTX’s failure was also related to mass withdrawals, but its inability to meet those demands was even more surprising because it wasn’t supposed to be lending those funds out in the first place and certainly not to its affiliated hedge fund, Alameda. See Kalley Huang, *Why Did FTX Collapse? Here’s What to Know.*, N.Y. TIMES (Nov. 10, 2022), <https://perma.cc/8PWM-GR35> (“FTX scrambled to process requests for withdrawals, which amounted to an estimated \$6 billion over three days. It seemed to enter a liquidity crunch, meaning it lacked the money to fulfill requests.”).

When these customers are consumers, the CFPB has a role to play in protecting them.

II. THE CFPB HAS JURISDICTION OVER CONSUMER SHADOW BANKS THAT ENGAGE IN MATURITY TRANSFORMATION

The mission of the CFPB is, in part, to “ensur[e] . . . that markets for consumer financial products and services are fair, transparent, and competitive,” and the agency maintains a variety of authorities to regulate the offer and provision of such products and services.⁹⁹ The CFPB protects consumers by enforcing certain federal consumer financial laws and policing the actions of companies that offer any of ten enumerated consumer “financial products and services.”¹⁰⁰ Included in this list are various activities that consumer shadow banks perform, including “engaging in deposit-taking activities, transmitting or exchanging funds, or otherwise acting as a custodian of funds or any financial instrument for use by or on behalf of a consumer.”¹⁰¹ The first two clauses have discrete meanings under the Consumer Financial Protection Act (CFPA), and the final clause provides that the CFPB has authority over activities that are at all similar in nature to the first two.¹⁰²

This Part examines four types of consumer shadow banks that take deposits, transmit money, or provide services that facilitate money transmission: peer-to-peer (P2P) payment platforms, collateralized stablecoin issuers, imitation banks, and crypto banks. The firms in each category hold customer assets such that, in the event of their insolvency, customers are at substantial risk of losing some or all of their funds and, at a minimum, are certain to suffer substantial delays in accessing those funds. Despite these similarities, we conclude that the case for regulating P2P payment platforms is the strongest and is the weakest for regulating collateralized stablecoin issuers.

A. P2P payment platforms

P2P payment platforms—such as PayPal, Venmo, Cash App, MoneyGram, Wise, and others—are fintech companies that facilitate the transfer of funds between customers (usually) via the internet.¹⁰³ Although the particulars between any two platforms differ, they all are closed-loop systems that “facilitate the

99. 12 U.S.C. § 5511.

100. *Id.* § 5511(b).

101. *Id.* § 5481(15).

102. *See Ejusdem Generis*, BLACK’S LAW DICTIONARY (11th ed. 2019) (“When a general word or phrase follows a list of specifics, the general word or phrase will be interpreted to include only items of the same class as those listed.”).

103. *Bad Money*, *supra* note 3, at 40 (“These platforms utilize the Internet to communicate payment instructions and execute electronic fund transfers.”). Unlike many of the other companies, MoneyGram has physical locations.

transfer of funds via book transfers between customer accounts held and administered by the [platform] itself.”¹⁰⁴ That is, both the sender and the recipient for any given transaction must both have accounts with the platform.¹⁰⁵

Money first enters the closed-loop system when customers fund their accounts through credit cards or ACH transfers; transactions are either pre-funded or funded when a transaction is initiated.¹⁰⁶ Those funds are usually comingled on the platform’s balance sheets, with credits given to the funders’ accounts on the platform. Accounts are also funded through the receipt of funds through platform-based payments. Senders can then transmit money to other accountholders via the platform’s online portal, debiting senders’ accounts and crediting recipients’ accounts.¹⁰⁷ Recipients may either withdraw funds from the platform to their bank accounts or retain funds in their accounts for an indefinite period with which they may make future payments. Withdrawals do not occur unless or until the accountholder “affirmatively requests a transfer of those funds out of this closed loop system and into their bank account or prepaid card.”¹⁰⁸ And, until they do, that money is at risk.¹⁰⁹

P2P payments are “often viewed as offering a relatively fast, easy, secure, and affordable way of making and receiving retail payments.”¹¹⁰ Senders may initiate payments by providing information about recipients that they already have, such as a phone number or an email address, rather than by providing sensitive financial information like bank account numbers.¹¹¹ Furthermore, payments are either made instantaneously (if accounts already have sufficient balances) or appear to senders and recipients as though they are instantaneous (if money has to be transferred from external sources, which may take several days).

104. Dan Awrey & Kristin van Zwielen, *The Shadow Payment System*, 43 J. CORP. L. 775, 800 (2018). See also *Issue Spotlight: Analysis of Deposit Insurance Coverage on Funds Stored Through Payment Apps*, CFPB (June 1, 2023), <https://perma.cc/8U84-G3MS> (describing these platforms as “closed loop systems” whereby “transactions are enabled through a single provider”).

105. Some P2P platforms, such as MoneyGram, allow users to send and receive money without having accounts by visiting physical storefronts, though they also provide account-based services. See *How to Receive Money with MoneyGram*, MONEYGRAM (accessed Apr. 20, 2024), <https://perma.cc/LM68-DW79>.

106. See Ronald J. Mann, *Regulating Internet Payment Intermediaries*, 82 TEX. L. REV. 681, 684–85 (2004) (describing the “two general ways to provide funds for payment”).

107. See *Issue Spotlight: Analysis of Deposit Insurance Coverage on Funds Stored Through Payment Apps*, CFPB (June 1, 2023) <https://perma.cc/V8KA-LVR4> (“In a transaction, the single provider will reduce the funds in the account of the payer and increase the funds in the account of the receiver. Funds do not leave the system in this type of transaction.”).

108. *Id.*

109. See *id.*

110. *Bad Money*, *supra* note 3, at 41.

111. See Mann, *supra* note 106, at 685 (“Normally, the only information that the purchaser needs to make a payment is the amount of money and the email address of the intended recipient.”).

And merchants may find that P2P platforms offer cheaper payments than other vendors.¹¹² According to recent statistics, P2P payment platforms have been used by over three-quarters of U.S. adults,¹¹³ and mobile P2P payments hit nearly \$1.1 trillion in 2022.¹¹⁴

Accountholders tend to be treated as creditors of their platforms,¹¹⁵ and because money transmitters today must store customers' cash somewhere electronically (unlike the money transmitters of old that held physical currency),¹¹⁶ these platforms necessarily engage in maturity transformation and pose the types of risks discussed in Part I. PayPal's user agreement, for example, states that "any balance in your Balance Account . . . represent unsecured claims against PayPal,"¹¹⁷ and Wise's terms of use state that "[v]alue held as a balance in your Borderless Account represents an unsecured claim against Wise."¹¹⁸ And because customer funds are owned by the platforms, platforms decide how they are held, subject to state money transmitter laws. As of December 2022, PayPal owed customer accounts more than \$40 billion (larger than many banks),¹¹⁹ and as of March 2023, Wise owed customer accounts more than £10.5 billion.¹²⁰ Accordingly, these firms must invest or deposit with banks (which re-lend those assets) those sums with the possibility that investments may decrease in value or banks may fail. In these instances, regulations on P2P payment platforms are

112. *Bad Money*, *supra* note 3, at 41 ("[E]specially for small business customers, these platforms are far less costly than more conventional merchant banking services that would enable them to accept debit or credit card payments."). *See also id.* at 43 (noting that cash may be kept on platforms "as a convenient way of pooling money from friends and family for the purpose of, for example, paying the accommodation and travel expenses for a destination wedding," because businesses use P2P platform accounts "as their de facto working capital account," and because users "simply forget to transfer money out of their PayPal accounts.").

113. Monica Anderson, *Payment Apps like Venmo and Cash App Bring Convenience – And Security Concerns – To Some Users*, PEW RESEARCH (Sept. 8, 2022), <https://perma.cc/773Z-XAYJ>.

114. *US Mobile Payment Market (2019–2026)*, OBERLO, <https://perma.cc/QD4V-LD28> (last visited Apr. 20, 2024).

115. However, some P2P payment platforms may serve as customers' agents. Customer funds are deposited in IDIs and receive pass-through deposit insurance. *See, e.g., PayPal Balance Terms and Conditions*, PAYPAL (last updated Jan. 16, 2024), <https://perma.cc/BHN4-Z943> (identifying that in certain instances, "PayPal places the U.S. dollar funds held in your Balance Account in one or more Program Banks" and that "PayPal will hold these funds as your agent and custodian, and you will be the ultimate beneficial owner of the funds").

116. After the creation of the telegraph, "[c]ustomers would deliver money to a branch of Western Union in one location, which would then telegraph a coded message to a branch at another location instructing it to deliver payment to the designated recipient." *Bad Money*, *supra* note 3, at 45–46. Because customer cash could be held physically, maturity transformation need not occur (though it may have).

117. *PayPal User Agreement*, PAYPAL, <https://perma.cc/H397-KFXK>.

118. *Customer Agreement*, WISE, <https://perma.cc/T4MD-BA8Q>.

119. *Form 10-Q*, PayPal Holdings, Inc. (for the quarterly period ended June 30, 2023) at 4, <https://perma.cc/4DKW-H5VU>.

120. *Annual Report and Accounts*, Wise (2023) at 173, <https://perma.cc/6UVX-J6RH>.

wholly insufficient, given lower regulatory standards and the lack of deposit insurance or discount window access.

Because these platforms “engag[e] in . . . transmitting or exchanging funds” on behalf of consumers, it is difficult to argue that they are exempt from CFPB authority.¹²¹ With its regulatory authority, the Bureau has brought enforcement actions for violations of the consumer financial laws¹²² and has proposed a rule to subject larger participants to supervision.¹²³ Recently, the Bureau issued a consumer advisory highlighting the fact that P2P payment platforms “offer . . . the ability for consumers to store funds,” yet those “funds can be at risk of loss in the event of financial distress or failure of the entity” as they are not covered by federal insurance.¹²⁴ This spotlight gives some indication that the CFPB is concerned about the maturity-transformation aspects of modern-day money transmission, noting that these firms are “exposed to risk if customers demand their funds all at once” and advising that users “may choose to transfer their nonbank payment app balances back to their federally insured deposit accounts.”¹²⁵

B. Stablecoin issuers

Stablecoins are money-like crypto assets “designed to maintain a stable value relative to a national currency or other reference assets.”¹²⁶ They are financial instruments sold “for fiat on the explicit promise or implicit understanding that those tokens are redeemable for fiat at par,”¹²⁷ and issued by firms such as Tether (the UST stablecoin) and Circle (the USDC stablecoin) or decentralized autonomous organizations (DAOs) such as Terra (the LUNA stablecoin). Stablecoins come in two shades depending on how they maintain their peg. Collateralized stablecoins are backed by assets held by their issuers on the understanding that the backing assets are worth at least as much as the outstanding supply of stablecoins, whereas issuers of algorithmic stablecoins utilize algorithms to alter their stablecoins’ supply to facilitate arbitrages that result in the par price.¹²⁸ This article is solely concerned with collateralized

121. 12 U.S.C. § 5481.

122. *See, e.g.*, CFPB v. MoneyGram Int’l, Inc., No. 22 CIV. 3256 (KPF), 2022 WL 17547438 (S.D.N.Y. Dec. 9, 2022); In the Matter of Servicio UniTeller, Inc., CFPB No. 2022-CFPB-0012 (Dec. 22, 2022); In the Matter of Choice Money Transfer, Inc., CFPB No. 2022-CFPB-0009 (Oct. 4, 2022).

123. *See* 88 Fed. Reg. 80197 (Nov. 17, 2023).

124. *Analysis of Deposit Insurance Coverage on Funds Stored Through Payment Apps*, CFPB (June 1, 2023), <https://perma.cc/6JM5-VUYF>.

125. *Id.*

126. PRESIDENT’S WORKING GROUP ON FINANCIAL MARKETS ET AL., REPORT ON STABLECOINS 1 (2021), <https://perma.cc/F2DX-MJNU>.

127. Phillips, *supra* note 23, at XX.

128. *See What Are Stablecoins?*, CRYPTOPEDIA, <https://perma.cc/DTR4-R64Y>

stablecoins.

Stablecoins are used as a means of payment.¹²⁹ Broadly speaking, issuers of collateralized stablecoins sell crypto tokens to purchasers in a transaction whereby the tokens are credited to purchasers' crypto wallets and the proceeds are comingled on issuers' balance sheets, just as with P2P payment platforms and banks.¹³⁰ Senders can then transmit stablecoins to recipients, with transactions recorded via blockchains. Recipients may either cash out those tokens by selling them back to the issuer in exchange for payments to their bank accounts or can retain stablecoins in their crypto wallets for future use.

The types of payments for which stablecoins are used vary, and some are currently more experimental than others. Primarily, stablecoins serve as a means of payment or source of liquidity within crypto asset markets.¹³¹ That is, stablecoins are used to buy and sell other crypto assets, and having a common unit of account facilitates trades between asset pairs. Beyond crypto markets, stablecoins may be used for real-economy payments,¹³² settling cross-border financial transactions between financial institutions,¹³³ and individual cross-border remittances.¹³⁴ Stablecoins have also been used for illicit transactions.¹³⁵

Owning stablecoins does not necessarily mean that holders will be able to redeem them from the issuer, as that issue is governed by issuer contracts with individual holders. In all instances, issuers will not redeem stablecoins unless they have contracts with holders, making them in some ways similar to the closed-loop systems of P2P platforms.¹³⁶ Even then, holders may not be able to

(explaining stablecoins' various collateral structures).

129. Even though most stablecoin transactions today are for the purchase of other crypto assets. See Garth Baughman et al., *The Stable in Stablecoins*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (Dec. 16, 2022), <https://perma.cc/98NR-YGY8> ("Stablecoins' primary role is to provide media of exchange – means of payment – within the digital asset ecosystem").

130. There also exists versions of bank deposits that are issued by banks, known as tokenized deposits. See generally Phillips, *supra* note 21. These are stablecoins, but they are not of the type we discuss here because they are subject to bank regulation since they are also bank deposits.

131. See Baughman, *supra* note 129.

132. Aisha Malik, *PayPal Launches PYUSD Stablecoin for Payments and Transfers*, TECH CRUNCH (Aug. 7, 2023), <https://perma.cc/PF5Q-9TGE>.

133. See *Press Release: Visa Expands Stablecoin Settlement Capabilities to Merchant Acquirers* (Sept. 5, 2023), <https://perma.cc/U74K-LNL5>; *Swift Testing Use of Its Infrastructure for Cross-Border Transfers over Blockchains*, PYMNTS (June 6, 2023), <https://perma.cc/XUD9-5UCC>.

134. See *Moneygram to Launch Crypto Wallet Including for Cross Border Payments*, LEDGER INSIGHTS (Sept. 26, 2023), <https://perma.cc/L8SB-A65M>.

135. See Ben Foldy, *From Hamas to North Korean Nukes, Cryptocurrency Tether Keeps Showing Up*, WALL ST. J. (Oct. 27, 2023), <https://perma.cc/W443-8QYS>.

136. See, e.g., *Legal*, Tether (last updated Dec. 7, 2023), <https://perma.cc/7HFJ-TQAE> ("In order to cause Tether Tokens to be issued or redeemed directly by Tether, you must be a verified customer of Tether. . . . The right to have Tether Tokens redeemed or issued is a contractual right personal to you."); *Legal & Privacy*, Circle (last updated Oct. 4, 2023),

redeem unless they have some minimum level of tokens. Tether's minimum to redeem tokens for cash is 100,000 stablecoins, with a fee of the greater of \$1,000 or 0.1%,¹³⁷ and Circle's minimum is \$100 and charges no fees.¹³⁸

As with P2P payment platforms, stablecoin issuers necessarily engage in maturity transformation, yet may be subject to even fewer regulations. Several stablecoin issuers are registered with and regulated by the New York Department of Financial Services as limited purpose trust companies, but the largest stablecoin issuer by issuance, Tether, is not.¹³⁹ Tether and other stablecoin issuers may claim that their tokens are fully backed, but those assets could be invested in low-volatility assets such as cash or bank deposits, stable securities like government debt or repos, or high-volatility assets like other crypto assets.¹⁴⁰

Accordingly, stablecoins can run, and there is no better example of this phenomenon than Circle's USDC stablecoin in March 2023. Previously, Circle had deposited \$3.3 billion of the nearly \$43.8 billion in assets backing its stablecoin with Silicon Valley Bank (SVB), a regional bank known for working with tech firms, making Circle SVB's largest depositor.¹⁴¹ Over March 9th and 10th, SVB's customers ran, requesting withdrawals of \$100 billion before the bank was taken over by its regulator.¹⁴² Understanding that Circle had so much on deposit with SVB, holders of USDC became concerned about the value of the token, which traded for less than \$0.97 on the dollar at one point.¹⁴³ The token price only recovered with the news that the federal government had triggered the "systemic risk exception" to the FDIA, allowing the FDIC to make all depositors

<https://perma.cc/D9YS-NRNU> ("You understand and agree that you may only tokenize USD to USDC and redeem USDC for USD in your Circle Mint account directly with Circle to the extent that you have a Circle Mint account in good standing.").

137. *Fees*, Tether (last accessed Apr. 20, 2024), <https://perma.cc/43F4-CCBF>.

138. *Stablecoin Product Fee Schedule*, Circle Support (last accessed Apr. 20, 2024), <https://perma.cc/9WZT-6VFD>.

139. *See Virtual Currency Businesses: Main Page*, Dep't of Fin. Services (last accessed Dec. 7, 2023), <https://perma.cc/V77N-JRZR> (identifying the stablecoin issuers registered with New York); *see also Consumer Alert: Attorney General James Ends Virtual Currency Trading Platform Bitfinex's Illegal Activities in New York*, (Feb. 23, 2021), <https://perma.cc/7BTN-ZBBE>.

140. *See Jonathan Weil, Tether Is Lending Its Stablecoins Again*, WALL ST. J. (Sept. 21, 2023), <https://perma.cc/Q3DE-T4EU> (explaining how USDT stablecoins are backed by debt against borrowers).

141. *See Matt Egan, FDIC Accidentally Reveals Details About Silicon Valley Bank's Biggest Customers*, CNN (June 23, 2023), <https://perma.cc/EM62-HEMA> (describing that "SVB's biggest depositor was Circle Internet Financial, the stablecoin firm behind USD Coin" and "that Circle held \$3.3 billion at SVB"); *USDC Reserve Report*, Circle Internet Financial (Apr. 28, 2023), <https://perma.cc/BM8M-28C6> (describing the fair value of assets backing USDC stablecoins as \$43.7 billion as of March 6, 2023).

142. *See Office of the Inspector General, Material Loss Review of Silicon Valley Bank, 2023-SR-B-013* (Sept. 25, 2023), <https://perma.cc/BN4Q-WRHQ> at 10.

143. *See USDC*, COINMARKETCAP (last accessed Dec. 7, 2023), <https://perma.cc/5XL7-FT73>.

whole so as to avoid a run on the broader banking system.¹⁴⁴

Whether stablecoins are commodities, securities, payment instruments, or something else is contested.¹⁴⁵ Regardless, the CFPB has jurisdiction over stablecoin issuers because they are subject to the CFPA under at least three different theories. First, stablecoin issuers are “engag[ed] in . . . transmitting or exchanging funds”—defined as “receiving currency, monetary value, or payment instruments from a consumer¹⁴⁶—or are “acting as a custodian of funds or any financial instrument for use by or on behalf of a consumer.”¹⁴⁷ These issuers receive funds from consumers in exchange for stablecoins, which are then used by consumers for payments or money transmission.

Second, stablecoin issuers are providers of “stored value or payment instruments.”¹⁴⁸ The term “stored value” has traditionally referred to the value held on stored value cards or other media that are a subset of payment instruments (though stored value need not be associated with a payment instrument),¹⁴⁹ wherein the value on a stored value card is held by the card issuer, and when a payment is made, value is debited from the issuer and credited to the merchant.¹⁵⁰ A common example are gift cards offered by retailers, such as

144. *Fed Says SVB, Signature Depositors to Get Full Funds. USDC Bounces Back*, LEDGER INSIGHTS (Mar. 13, 2023), <https://perma.cc/8P79-WAEM>.

145. The CFTC alleges Tether’s stablecoins are commodities. *See In the Matter of: Tether Holdings Limited*, CFTC Docket No. 22-04 (Oct. 15, 2021). Paxos claims that its “USD Stablecoin tokens . . . are not monetary instruments,” *US Dollar-Backed Stablecoin Terms and Conditions*, Paxos (last modified Sept. 25, 2023), <https://perma.cc/4GHC-YLQQ>. Whereas Circle notes that “USDC is regulated as a form of stored value or prepaid access.” *Legal & Privacy*, Circle (last updated Oct. 4, 2023), <https://perma.cc/D9YS-NRNU>. The SEC’s chair claimed that stablecoins “may well be securities.” S. Hrg. 117-699 at 9, <https://perma.cc/8AFX-TW94>. Several issuers provide that the assets backing stablecoins are “held . . . on behalf of” stablecoin holders, meaning that stablecoins would be evidence of ownership in a pro rata share of the assets backing the stablecoins, not debt. *See Circle, supra* 145 (providing the assets backing USDC are “held . . . on behalf of, and for the benefit of, Users”); Paxos, *supra* 145 (providing the assets backing its stablecoins are “held . . . on behalf of, and for the benefit of, Member Token Holders and Non-Member Token Holders”). *See also* Kara J. Bruce, Christopher K. Odet & Andrea Tosato, *The Private Law of Stablecoins*, 54 ARIZ. ST. L. J. 1073, 1111 (2023) (concluding that some stablecoin issuers have “no equitable interest in the underlying reserves”). Under certain contracts, stablecoin are claims on bank deposits. *See Paxos, supra* 145 (allowing users “to obtain FDIC ‘pass-through’ deposit insurance for . . . stablecoins represented by fiat cash maintained at insured banks.”).

146. 12 U.S.C. § 5481.

147. *Id.*

148. The CFPA defines “stored value” as “funds or monetary value represented in any electronic format . . . and stored or capable of storage on electronic media in such a way as to be retrievable and transferred electronically,” subject to limitations. *Id.* It defines “a payment instrument” as “a check, draft, warrant, money order, traveler’s check, electronic instrument, or other instrument, payment of funds, or monetary value (other than currency).” *Id.*

149. *See* Uniform Money Services Act at 9 (2004), <https://perma.cc/V6AX-P6HZ> (“issuers need not sell a physical tangible payment instrument in order to issue value to consumer.”).

150. *See* Christopher B. Woods, *Stored Value Cards*, 59 CONSUMER FIN. L.Q. REP. 211,

Target. But stablecoins are similar because they represent electronic claims on funds or other monetary value held by issuers that can be transferred electronically (on blockchains) and may be used to send value from one person to another. Thus, stablecoins are certainly either stored value or payment instruments.¹⁵¹ And stablecoin issuers, therefore, are engaged in “selling, providing, or issuing stored value or payment instruments,” subjecting them to CFPB authority.¹⁵²

Third, stablecoin issuers are “service providers” to other entities that are covered persons. If a firm “provides a material service” to an entity subject to CFPB jurisdiction, then the CFPB has jurisdiction over that firm as well.¹⁵³ In the case of stablecoins, firms that provide payment services using stablecoins may themselves be covered persons because they “transmit[] or exchange[] funds.”¹⁵⁴ For example, Paxos issues the PYUSD stablecoin, which PayPal uses to facilitate payments,¹⁵⁵ and one court even held that Uphold HQ Inc., a crypto asset exchange, “engages in ‘electronic fund transfers’” and that crypto assets are funds under EFTA.¹⁵⁶ Providing the stablecoins and holding the cash that make crypto payments possible would likely be a “material service” under the CFPB.¹⁵⁷

The CFPB’s authority under these three grants depends on these products or services being “offered or provided for use by consumers primarily for personal, family, or household purposes.”¹⁵⁸ Although it is true that many consumers use stablecoins to purchase other crypto assets for speculation or investment purposes,¹⁵⁹ retail consumers are speculating or “investing for personal or family use rather than for business use.”¹⁶⁰ Further, as CFPB Director Chopra has noted,

212–13 (2005) (describing semi-open and open systems of stored value cards).

151. This designation should apply regardless of whether stablecoins are also commodities or debt. See Steven L. Schwarcz, *Regulating Digital Currencies: Towards an Analytical Framework*, 102 B.U. L. REV. 1037, 1060 (2022) (comparing UCC Article 4A with EFTA and determining that, whereas the UCC largely covers bank transactions, “EFTA pays little attention to what digital funds transfers consist of or how they are carried out”).

152. 12 U.S.C. § 5481.

153. *Id.*

154. *Id.* (providing relevant definitions).

155. PayPal, PayPal Cryptocurrency Terms and Conditions (last updated on Oct. 23, 2023), <https://perma.cc/KW2N-9U7P> (“One of the Crypto Assets that PayPal supports is PYUSD, a U.S. dollar denominated stablecoin. PYUSD is issued by Paxos, not PayPal[.]”).

156. *Rider v. Uphold HQ Inc.*, No. 22-cv-1602 (DLC), 2023 WL 2163208, at *3–4 (S.D.N.Y. Feb. 22, 2023).

157. For example, Paxos provides the stablecoins used by PayPal. See PayPal, *Press Release: PayPal Launches U.S. Dollar Stablecoin* (Aug. 7, 2023), <https://perma.cc/4NBD-8WTR> (“PayPal USD is redeemable 1:1 for U.S. dollars and is issued by Paxos Trust Company.”).

158. 12 U.S.C. § 5481.

159. See *supra* note 129.

160. Adam J. Levitin, *Not Your Keys, Not Your Coins: Unpriced Credit Risk in Cryptocurrency*, 101 TEX. L. REV. 877, 950 (2023).

“the CFPB is actively monitoring and preparing for broader consumer adoption of cryptocurrencies,” at which point it may decide that they are no longer primarily used for crypto trading and impose regulations.¹⁶¹

C. Crypto banks and imitation banks

Crypto banks, described in Part I, and imitation banks are retail-facing institutions that take customer deposits while evading the banking and consumer protection laws that protect customers and the financial system. Given these similarities, we combine our analysis of these two types of consumer shadow banks. Like P2P payment platforms, these institutions offer accounts to retail customers, borrow from those customers with the explicit promise that they may be redeemed on demand (or subject to a specific timeframe), and make longer-term loans with those assets. Unlike money transmitters but like IDIs, crypto and imitation banks pay interest to customers, which they obtain from the fees and interest charged to borrowers. Nevertheless, depositors of crypto and imitation banks are not insured, making their offerings more like *investing* than *saving* with the possibility that customers do not understand that an important facet of the product is the risk of loss.

As described in Part I.B., crypto banks are now-failed institutions that acted as depositories and lenders of crypto assets. Imitation banks are a subset of fintechs¹⁶² that “use [or used] online bank-like platforms and language to entice retail investors with yields . . . all while exempt from regulatory oversight” that applies to IDIs.¹⁶³ Although their business models are varied, they all had websites and apps that appear modeled on those of IDIs to deceive consumers, offered accounts that permitted customers to deposit cash with or otherwise lend cash to the institutions that were used for loans in exchange for interest, and used advertising that explicitly compared their offerings to account yields at FDIC-insured institutions.¹⁶⁴ All of these marketing ploys implied that the imitation banks are as safe as IDIs to prospective customers. And whereas the history of the crypto banks has concluded with their failures following the 2022 crypto collapse, many imitation banks are still operating and more could spring into

161. Rohit Chopra, *Statement of CFPB Director Chopra on Stablecoin Report*, CFPB (Nov. 1, 2021), <https://perma.cc/MG6S-YWNW>.

162. See Matthew Adam Bruckner, *The Promise and Perils of Algorithmic Lenders' Use of Big Data*, 93 CHI. KENT L. REV. 3, 12–13 (2018) (describing fintech companies as “usually non-bank financial companies that operate mostly online and use financial technology to market themselves to prospective borrowers, evaluate borrower creditworthiness, and to match prospective borrowers with sources of credit.”).

163. Ebrima Santos Sanneh, *The Rise of 'Imitation Banks' May Lead to Regulatory Scrutiny*, AM. BANKER (Mar. 3, 2023), <https://perma.cc/79Y9-MV7W>.

164. Albeit returns between 17-times and 150-times greater without acknowledging the increased risks of depositing money in uninsured and under-regulated entities. See Todd Phillips, *Imitation Banks: Abusing the Public's Faith in Banks*, ROOSEVELT INST., at 4 (2023).

existence in the future.¹⁶⁵

Some examples of the business models of imitation banks may be useful. First, Compound Real Estate (formerly known as Compound Banc) sells “Compound Bonds” to raise funds it invests “in real estate assets across a diversified portfolio consisting of mortgages, residential, commercial, and industrial assets.”¹⁶⁶ Although Compound sells bonds registered with the SEC, that customers may only purchase them through the firm’s web portal, may only redeem bonds through the web portal, and may not resell bonds to a third party,¹⁶⁷ makes the bonds akin to deposits in all but name.

Similarly, the fintech Tellus offers debt to customers through its website that it uses for “wholesale residential real estate lending.”¹⁶⁸ Unlike Compound, however, Tellus’s offering is not registered as a security, so the securities laws’ strict disclosure requirements do not apply.¹⁶⁹ Tellus is also a tool for property managers. Third, Confetti was an imitation bank that failed, because it lent customer deposits to firms speculating in crypto.¹⁷⁰ Nevertheless, Confetti told customers their deposits were safe, explaining that “borrowers are overcollateralized,” describing three scenarios that could occur, and omitting the fourth scenario that did happen: Borrowers fail to repay their loans, their collateral precipitously drops in value, and depositor accounts lose value.¹⁷¹ Lastly, Zera Financial offered customers “a fixed 3% interest . . . every month,”

165. See Mary Ann Azevedo, *a16z-Backed Tellus Wants to Offer Consumers a Much Better Savings Rate. Here’s How.*, TECHCRUNCH (Nov. 10, 2022), <https://perma.cc/8D5T-BV6K> (noting that Tellus raised \$26 million across multiple financing rounds from venture capital firms).

166. *Frequently Asked Questions*, COMPOUND REAL ESTATE BONDS (accessed Aug. 3, 2023), <https://perma.cc/WK5A-3TQA>.

167. See Compound Real Estate Bonds, Inc., Offering Circular (Sept. 20, 2022), <https://perma.cc/X4QT-TFFA> (“We will offer and sell our Compound Bonds described in this offering circular on a continuous basis directly through the Compound Banc Website accessible at www.compoundbanc.com or through the Compound Banc App”).

168. *Mobile Wallet*, TELLUS (accessed July 30, 2023), <https://perma.cc/PT5F-B9UG>.

169. See *How Does Tellus Transform Your Savings into Passive Income?*, Tellus (accessed Mar. 22, 2023), <https://perma.cc/2Z3G-GE93> (explaining that its “mortgages are always overcollateralized.”); Jacob Adelman, *This Start-Up Promises Rates 13 Times Higher Than a Typical Savings Account. There’s One Problem: It Isn’t a Bank.*, BARRON’S (Apr. 11 2023), <https://perma.cc/DSE4-KH84> (reporting that Tellus was “funding riskier types of borrowers than it advertises,” such as “real estate speculators” and “distressed borrowers.”).

170. See *Here’s How Confetti Works*, CONFETTI (accessed Dec. 24, 2021), <https://perma.cc/HH4Y-2HEQ> (noting that Confetti will “lend some of the funds to borrowers in digital asset markets where demand for digital dollars is high”).

171. *Id.* See also *id.* (providing the following three scenarios: (1) “The borrower pays back the loan plus interest” such that “[c]apital is restored, earned interest is restored, and the borrower receives back all collateral[;]” (2) “The value of the collateral falls to less than 1.5 times the value of the loan,” and so the borrower faces a margin call or the collateral will be liquidated “so that the total value of the collateral remains at least 1.5 times more than the total value[;]” and (3) “The borrower does not repay the loan [and] the collateral provided by the borrower is sold and funds are restored[.]”).

or 42.6% annually, on deposits made through its web portal without explaining how it achieves these astronomical returns.¹⁷²

Because the crypto and imitation banks “engag[ed] in deposit-taking activities” or “act[ed] as a custodian of funds or any financial instrument for use by or on behalf of a consumer,” the CFPB has jurisdiction.¹⁷³ Tellus’s Boost Accounts, for example, are funded through “deposit[s] of funds” that increase account balances¹⁷⁴ and are debts,¹⁷⁵ meeting the definition of deposits in the CFPB.¹⁷⁶ Similarly, the crypto banks’ accounts were funded through transfers of crypto assets¹⁷⁷ that would be owned by the crypto banks with credit given to customer accounts,¹⁷⁸ again meeting the definition of deposits or, at minimum, serving as custodians of clients’ financial instruments. Even Compound¹⁷⁹ can

172. SEC v. Zera Financial, Dkt. No. 1, 8:23-cv-01807-CJC at *3 (C.D. Cal. 2023) <https://perma.cc/U57Y-5ZE2> (quoting zerafinancial.com).

173. 12 U.S.C. § 5481. One could argue that crypto and imitation banks do not engage in “deposit-taking activities” because the definition of “deposit” presupposes that deposits are “received or held by a bank.” *Id.* § 1813 (emphasis added). However, “bank” is defined in part as an institution “engaged in the business of receiving deposits,” *id.* § 1813(a)(1)–(2), making the terms “deposit” and “bank” self-referential and indeterminate. *See* Dan Awrey, *Unbundling Banking, Money, and Payments*, 110 GEO. L.J. 715, 776 (2022) (describing this as “a tautology”). *But see* CFPB v. My Loan Doctor, Docket No. 46, 20-cv-05159, (S.D.N.Y. Dec. 9, 2022) <https://perma.cc/AB3L-DGTR> (providing that a nonbank took deposits under the CFPB).

174. *Boost Account Terms of Service*, TELLUS, <https://perma.cc/HJT3-6Z8N>, (last modified Mar. 30, 2023) (“Each time you initiate and request a deposit of funds to your Account, your account balance will be increased by the deposited amount.”). Tellus also offers a variety of sub-accounts, with “different account deposit and withdrawal rules and restrictions and different Applicable Interest Rates,” including “Reserve Accounts” that offer higher rates on deposits up to \$2,500 and “Vault Accounts” that have a set maturity and act akin to banks’ certificates of deposit. *Id.*

175. *See id.* (“Your account balance represents Tellus’ indebtedness to you.”)

176. *See* 12 U.S.C. § 1813(l) (incorporated by reference into the CFPB by *id.* § 5301(18)(A)) (defining deposits as “the unpaid balance of money or its equivalent received or held by a bank or savings association . . . and for which it has given or is obligated to give credit [to an account].”).

177. *See, e.g., Interest Account Terms*, BLOCKFI, <https://perma.cc/M8Z2-SSG7>, (accessed Feb. 6, 2021) (“You can open your account by transferring eligible cryptocurrency to the wallet address provided in your BlockFi account. Your cryptocurrency will be accepted by BlockFi Trading LLC, and then will be transferred to BlockFi, which will act as holder of your Crypto Interest Account.”).

178. *See id.* (“[Y]ou grant BlockFi the right . . . to hold the cryptocurrency held in your account in BlockFi’s name or in another name, and to [transact with] any amount of such cryptocurrency, separately or together with other property, with all attendant rights of ownership, and for any period of time and without retaining in BlockFi’s possession and/or control a like amount of cryptocurrency”).

179. To purchase Compound Bonds, a depositor must create a “Compound Bonds Account” through which all bond purchases and redemptions are to be made. *See* Compound Real Estate Bonds, Inc., Offering Circular, <https://perma.cc/X4QT-TFFA>, (Sept. 20, 2022). Bondholders cannot sell bonds to third-parties, as records are maintained by Compound and there are no physical bearer bond certificates to sell. *See id.* (“The Company will act as its own

be said to take deposits, as its “Compound Bonds” are debts credited to depositors’ accounts on Compound’s web portal.¹⁸⁰ Indeed, there is evidence that the CFPB and SEC believe there can be overlap between securities and deposits.¹⁸¹

The CFPB has previously used its authority against deposit-taking institutions, albeit on different grounds than we suggest here.¹⁸² In an action against Loan Doctor and its founder, the CFPB alleged the nonbank was “masquerad[ing] as a traditional bank [offering] a high-yield savings product.”¹⁸³ Loan Doctor “offer[ed] consumers what it dubbed a ‘Healthcare Finance (HCF) Savings CD [Certificate of Deposit] Account,’” which were deposit accounts used “to originate loans for healthcare professionals” and that it “always had a buyer lined up for the loans before each loan’s origination.”¹⁸⁴ The firm advertised that deposits received by the firm would be used to purchase “a CD that matured monthly and could be withdrawn, with interest, with one month’s

transfer agent and maintain the Company’s share register”). Interest is credited to bondholders’ accounts. *See id.* (“we will pay interest . . . and credit such interest to bondholders’ Compound Banc accounts”).

180. Although this paper’s concern is related maturity transformation, we note that many crypto and imitation banks likely committed abusive acts and practices, as well as fraud, permitting broader enforcement than the means for which we argue here. Several crypto banks, for example, indicated that they held customer assets as bailments without making it clear that customers’ deposits were indeed loans to the institutions. *See, e.g., Voyager Earn Program*, VOYAGER, <https://perma.cc/7BX4-8FNV> (archived May 25, 2024) (explaining that interest would accrue “based on how much [of a cryptocurrency] you hold,” indicating that depositors owned the tokens and not Voyager’s debt); *SEC Genesis Complaint*, <https://perma.cc/456V-4YQD> at 10 (advertising that depositors could earn “a real return on their crypto holdings”). Others asserted that their firms were as safe as—or even safer than—commercial banks. *See, e.g., FTC Celsius Complaint* at 10–11 (noting that the head of Celsius claimed that “we have less risk, we have much less risk” than banks); Letter from Seth P. Rosebrock, FDIC & Jason A. Gonzalez, Board of Governors of the Federal Reserve System to Stephen Ehrlich & David Brosgol, Voyager Digital, LLC (July 28, 2022), <https://perma.cc/SZ38-8HAC>, (describing misleading statements made by Voyager claiming that depositor assets were insured if Voyager failed); *FTC Celsius Complaint* at 17 (identifying that the CEO tweeted that “[a]ll coins are returned to their owners even in the case of bankruptcy”). Others asserted that their firms were as safe as—or even safer than—commercial banks. Indeed, the FTC has alleged that Celsius’s founder “made a number of misrepresentations about the benefits of using Celsius services and the safety of consumer funds,” *see generally* *FTC Celsius Complaint* at 11.

181. The CFPB sued My Loan Doctor for making deceptive statements about its deposit offerings. *See CFPB v. My Loan Doctor*, 20-cv-05159 (S.D.N.Y. July 6, 2020) <https://perma.cc/VG3S-D5TJ>. The next year, the SEC sued them on the grounds that its deposit offerings were unregistered securities. *See SEC v. Radjabli*, 21-cv-01761-MBS (D.S.C. June 11, 2021).

182. *See infra* Part III.

183. Press Release: *CFPB Takes \$19 Million Action Against Loan Doctor and Edgar Radjabli for Offering Fake High-Yield Bank Accounts*, CFPB (Dec. 1, 2022), <https://perma.cc/75AS-QTYX>.

184. *CFPB v. My Loan Doctor*, <https://perma.cc/VG3S-D5TJ> *supra* note 181 at 3-5.

notice.”¹⁸⁵ Yet depositors’ funds were actually placed in the founder’s hedge fund and then invested “in volatile securities or securities-backed investments.”¹⁸⁶ The CFPB took action on the grounds that Loan Doctor had engaged in deceptive acts and practices in connection with “accept[ing] deposits from consumers” and “[acting] as a custodian of those funds for use by consumers for personal, family, or household purposes.”¹⁸⁷

Similarly, the CFPB enforced a civil investigative demand (CID) against Nexo, a crypto bank that offered deposit accounts called Earn.¹⁸⁸ Earn accounts operated similarly to those offered by BlockFi, Celsius, Voyager, and others; customers deposited crypto assets with Nexo, Nexo made investments with those tokens, and Nexo paid interest to depositors.¹⁸⁹ Unlike other crypto banks, however, Nexo not only lent tokens to borrowers but also engaged in a variety of other activities.¹⁹⁰ Earn was marketed as a way for consumers to earn interest on their crypto assets, and was at various times marketed as an investment product and a savings product.¹⁹¹ The CFPB never brought an action against Nexo, perhaps because the crypto bank settled charges with the SEC and state securities regulators, agreeing to pay a \$45 million penalty on the grounds that Earn accounts were unregistered securities and to cease its offerings to U.S. customers.¹⁹²

Even though these institutions’ deposit accounts may be considered securities, as Nexo’s were, the CFPB still has jurisdiction over the issuing firms. Nexo sought to modify the CFPB’s CID on the grounds that “interest-bearing crypto lending products [like Nexo’s Earn Interest Product] are securities” that fall outside the CFPB’s ambit,¹⁹³ but nothing in statute prohibits the CFPB from

185. *Id.*, at 4.

186. *Id.*, at 8.

187. *Id.*, at 3.

188. See Nexo Financial, LLC, 2022-MISC-Nexo Financial LLC-0001 (Nov. 22, 2022) <https://perma.cc/2HP5-MJNY>.

189. See In the Matter of Nexo Capital Inc., Securities Act Release No. 11149 (Jan. 19, 2023) <https://perma.cc/U5RQ-5KSP> at 2 (“Nexo obtained the crypto assets in exchange for a promise to pay them back, with interest.”).

190. See *id.* (providing that Nexo engaged in “staking, lending, and engaging in arbitrage on purportedly ‘decentralized’ finance platforms; investing in certain crypto assets; loaning funds to retail and institutional borrowers; and entering into options and swap contracts with respect to the crypto assets tendered.”).

191. See *id.* at 4 (providing that “Nexo also promoted the EIP as an investment opportunity on Twitter” and “linked to additional information on its website to ‘Learn how to earn compounding interest on your Crypto and Fiat assets using Nexo’s Savings Account.’”).

192. Press Release, SEC, Nexo Agrees to Pay \$45 Million in Penalties and Cease Unregistered Offering of Crypto Asset Lending Product (Jan. 19, 2023), <https://perma.cc/6EL3-E3Z6>.

193. Nexo Financial, *supra* note 188 at 3 (alteration in original). See 12 U.S.C. § 5517(i)(1) (“Exclusion for persons regulated by the Commission”). The SEC also asserted that BlockFi’s and Celsius’s accounts were securities and that Compound Bonds are securities. See *SEC BlockFi Order*, *supra* note 62, at 2 (“the BIAs were securities”); Complaint at 2,

asserting authority over the provision of consumer financial products that are also securities. At most, the CFPA provides that the CFPB cannot regulate entities that are also regulated by the SEC, such as brokers and investment companies.¹⁹⁴ Also, the securities laws provide that “certificate[s] of deposit” are among the contracts that are securities—Congress has explicitly decided that deposits can be securities.¹⁹⁵ There are several reasons why prohibiting the CFPB from regulating firms that issue securities would be nonsensical. First, many consumer financial firms also issue publicly traded stocks and bonds.¹⁹⁶ Second, overlapping regulatory jurisdiction is common, especially in financial services.¹⁹⁷ Finally, the Supreme Court has only ever provided that financial products should be subject to one regulatory regime and not multiple when the principal regime is so sufficiently protective that the second is unnecessary, which is certainly not the case here.¹⁹⁸

III. THE CFPB CAN REGULATE MATURITY TRANSFORMATION THROUGH ITS ABUSIVENESS AUTHORITY

As described in Part I, the risks associated with maturity transformation are real and unavoidable for consumers. Yet, as described in Part II, several nonbank firms provide consumer financial products and services in ways that require maturity transformation. Although some consumer shadow banks, like crypto and imitation banks, have also acted unfairly or deceptively,¹⁹⁹ others have not, requiring novel uses of the Bureau’s existing regulatory authority to address their activities. We argue that the CFPB should declare the provision of consumer financial services that rely on maturity transformation as abusive unless

SEC v. Celsius Network Ltd., No. 23-cv-06005 (S.D.N.Y. July 13, 2023), <https://perma.cc/BJ7P-GFH4> (“Defendants never filed a registration statement for their offers and sales of the Earn Interest Program,” as is required for securities); Compound Real Estate Bonds, Inc., Offering Circular (Sept. 20, 2022) <https://perma.cc/X4QT-TFFA> (describing the bonds as “securities”).

194. 12 U.S.C. § 5517 (“The Bureau shall have no [authority] to exercise any power to enforce this title with respect to a person regulated by the Commission.”) (footnote omitted).

195. 15 U.S.C. §§ 77b(a), 78c(a)(10). Whereas the Securities Act of 1933 excludes securities issued by banks from being subject to that law and pursuant regulations, *see id.* § 77c(a)(2), the Securities Exchange Act of 1934 does not.

196. *See, e.g., Block (NYSE: SQ)*, MOTLEY FOOL (accessed Apr. 20, 2024), <https://perma.cc/GLR4-U8HL> (identifying Block as a publicly traded company).

197. *See generally* Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A., 511 U.S. 164 (1994) (providing that OCC-chartered banks may be subject to the securities laws); *Caiola v. Citibank, N.A.*, 295 F.3d 312, 325 (2d Cir. 2002) (finding that contracts—in this case options—can be securities, while the OCC still has jurisdiction over the banks).

198. *See, e.g., Marine Bank v. Weaver*, 455 U.S. 551, 559 (1982) (“It is unnecessary to subject issuers of bank certificates of deposit to liability under the antifraud provisions of the federal securities laws since the holders of bank certificates of deposit are abundantly protected under the federal banking laws.”).

199. *See supra* note 180.

providers meet certain minimum capital, liquidity, and other metrics designed to ensure firms' continued operation and align customer and corporate interests.

A. Improperly regulated maturity transformation is abusive

The CFPB's principal authority for addressing the myriad harms associated with consumer financial services is what is colloquially known as UDAAP authority, which allows it to protect consumers from the "unfair, deceptive, or abusive act[s] or practice[s]" perpetrated by covered persons and service providers.²⁰⁰ The CFPB may promulgate regulations declaring certain methods of providing consumer financial services as legal violations, may regulate away their harm or prohibit them entirely, and may bring enforcement actions to obtain injunctions and monetary relief.²⁰¹ Actions that are UDAAP violations can be unfair, deceptive, abusive, or some combination of the three.²⁰²

Congress enacted the abusiveness prohibition following the great financial crisis, which "was precipitated by the proliferation of poorly underwritten mortgages with abusive terms, followed by a broad fall in housing prices as those mortgages went into default and led to increasing foreclosures."²⁰³ Accordingly, it supplemented the existing prohibition against unfair and deceptive practices—which failed to address these harmful mortgages—with the abusiveness standard that applies when, among other things, an act or practice "obscur[es] important features of a product or service," or "leverag[es] certain circumstances to take an unreasonable advantage" of consumers.²⁰⁴ Importantly, the CFPB has taken the

200. 12 U.S.C. § 5531.

201. *See id.* § 5531(b) ("The Bureau may prescribe rules applicable to a covered person or service provider identifying as unlawful unfair, deceptive, or abusive acts or practices"); *id.* § 5531(a) (permitting the CFPB to bring enforcement actions); *id.* § 5565(a)(2) (providing that relief in such actions may include, inter alia, refunds, restitution, disgorgement, and damages).

202. Unfair practices are those in which consumers cannot reasonably avoid the harms and the injuries are not outweighed by the benefits the practice provides, deceptive practices are those in which customers are misled by representations or omissions, and abusive practices are those that take advantage of consumers' "lack of understanding" about how products operate. *See generally* CFPB, *Unfair, Deceptive, or Abusive Acts or Practices*, in CFPB SUPERVISION AND EXAMINATION MANUAL (2012), <https://perma.cc/TT28-LPUH>.

203. S. REP. NO. 111-176, at 11 (2010); *see also* FIN. CRISIS INQUIRY COMM'N, THE FINANCIAL CRISIS INQUIRY REPORT, at xv-xvii (2011), <https://perma.cc/647N-Q5VG> (describing "toxic mortgages" as one cause of the 2007-08 financial crisis and laying much of the blame on "the Federal Reserve's pivotal failure to stem the flow of toxic mortgages, which it could have done by setting prudent mortgage-lending standards.").

204. *Statement of Policy Regarding Prohibition on Abusive Acts or Practices*, 88 Fed. Reg. 21883, 21884 (Apr. 12, 2023) [hereinafter *Abusiveness Policy Statement*]; *see also* 12 U.S.C. § 5531(d) (providing that an act or practice is abusive when it "(1) materially interferes with the ability of a consumer to understand a term or condition of a consumer financial product or service; or (2) takes unreasonable advantage of— (A) a lack of understanding on the part of the consumer of the material risks, costs, or conditions of the product or service; (B) the inability of the consumer to protect the interests of the consumer in selecting or using a consumer financial product or service; or (C) the reasonable reliance by the consumer on a

position that service providers need not act in a harmful manner,²⁰⁵ consumers need not act reasonably,²⁰⁶ and consumers need not be harmed for products or services to be considered abusive.²⁰⁷ That is, some acts or practices may be inherently abusive.²⁰⁸ As pertinent here, an act or practice may be abusive if it “takes unreasonable advantage of . . . a lack of understanding on the part of the consumer of the material risks, costs, or conditions of the product or service.”²⁰⁹

In more recent policy guidance, the CFPB has described its abusiveness standard as applying when “financial products and services [are] ‘set up to fail’” or when providers “benefit from, or [are] indifferent to, negative consumer outcomes.”²¹⁰ Furthermore, the CFPB has taken the contested position that the question “is whether some consumers in question have a lack of understanding, not all consumers or even most consumers.”²¹¹

covered person to act in the interests of the consumer.”).

205. See *Abusiveness Policy Statement*, *supra* note 204, at 21887 (“While acts or omissions by an entity can be relevant in determining whether people lack understanding, the prohibition . . . does not require that the entity caused the person’s lack of understanding through untruthful statements or other actions or omissions.”) (footnote omitted).

206. See *id.* (“The statutory text of the prohibition does not require that the consumer’s lack of understanding was reasonable to demonstrate abusive conduct”) (footnote omitted).

207. *CFPB v. Access Funding, LLC*, 270 F. Supp. 3d 831, 850 (D. Md. 2017) (providing that neither a showing of “how the [allegedly abusive] act causes substantial injury to consumers” nor of “how any purported substantial injury is not outweighed by the benefits to consumers” is required in a “claim for ‘abusive’ acts or practices.”).

208. See *Abusiveness Policy Statement*, *supra* note 204, at 21884 (noting that “abusiveness requires no showing of substantial injury to establish liability, but is rather focused on conduct that Congress presumed to be harmful or distortionary to the proper functioning of the market”).

209. 12 U.S.C. § 5531(d). The other three qualities of an abusive act or practice are “materially interfer[ing] with the ability of a consumer to understand a term or condition of a consumer financial product or service,” “tak[ing] unreasonable advantage of . . . the inability of the consumer to protect the interests of the consumer in selecting or using a consumer financial product or service,” or “tak[ing] unreasonable advantage of . . . the reasonable reliance by the consumer on a covered person to act in the interests of the consumer.” *Id.*

210. *Abusiveness Policy Statement*, *supra* note 204, at 21886. See *id.* at 21884 (noting that the abusiveness standard is “focused on conduct that Congress presumed to be harmful or distortionary to the proper functioning of the market”); Jean Braucher, *Form and Substance in Consumer Financial Protection*, 7 BROOK. J. CORP. FIN & COM. L. 107, 110 (2012) (“The CFPB appears focused on eliminating financial products that are based on tricks and traps, that is, on working to do away with substantively bad, unsafe deals.”).

211. *Abusiveness Policy Statement*, *supra* note 204, at 21888 (“Since there can be differences among consumers in the risks, costs, and conditions they face and in their understanding of them, there may be a violation with respect to some consumers even if other consumers do not lack understanding.”); *But cf.* Eric J. Mogilnicki, *The Consumer Financial Protection Bureau’s Abusive Policy Statement*, 140 BANKING L.J. 377, 386 (2023) (“A case built solely on allegations that some consumers misunderstand a product (even though such misunderstanding was not intended or a natural consequence) would require evidence about particular consumers, rather than a sweeping claim relating to all consumers. However, the Bureau’s practice has been to bring claims of abusive conduct on behalf of all consumers who purchased a particular product or service—not just the fraction who misunderstood it.”).

To determine whether improperly regulated maturity transformation is abusive under the CFPA, three factors must be demonstrated.²¹² First, that maturity transformation's inherent instability and the possibility of runs is a "material risk[], cost[], or condition[]" of deposit taking, money transmission, and the other consumer financial products or services. Second, that consumers do not understand these material risks or conceptions. Finally, that service providers take "unreasonable advantage" of this lack of understanding.²¹³

1. Maturity transformation is an inherent condition of bank-like activities that pose material risks.

Part I discussed how maturity transformation poses material risks and is an inherent condition of various bank-like activities.²¹⁴ This Subpart will focus on the two other factors.

2. Consumers do not understand these material risks.

Sophisticated investors, such as corporate treasurers or investment managers, understand the inherent instability of maturity transformation. Although they frequently invest in assets known as "cash equivalents" (e.g., bank deposits, T-Bills and other short-term government debt, commercial paper, money market fund shares), they do so recognizing that the "decision is a trade-off between a number of different considerations."²¹⁵

Consumers lack this understanding of maturity transformation's inherent condition and material risks, satisfying the second element. Frankly, one of this article's co-authors had not considered how consumer shadow banks' maturity transformation was risky before starting this project. And consumers lack this understanding for good reason. IDIs have been *de facto* safe for many depositors' entire lives. Since the 1930s, most depository institutions have had the option of being regulated and insured by the federal government.²¹⁶ Further, although

212. See 12 U.S.C. § 5531(d)(2)(A).

213. 12 U.S.C. § 5531(d) (providing that an act or practice is abusive when it "(1) materially interferes with the ability of a consumer to understand a term or condition of a consumer financial product or service; or (2) takes unreasonable advantage of— (A) a lack of understanding on the part of the consumer of the material risks, costs, or conditions of the product or service; (B) the inability of the consumer to protect the interests of the consumer in selecting or using a consumer financial product or service; or (C) the reasonable reliance by the consumer on a covered person to act in the interests of the consumer.").

214. See *supra* pp. 9-17.

215. Stephen Fletcher & Gary Purvey, *International Treasury/Cash Management*, in HANDBOOK OF INTERNATIONAL CREDIT MANAGEMENT 323 (Brian W. Clarke ed. 2017).

216. See generally Banking Act of 1933, Pub. L. No. 73-66, 48 Stat. 162 (codified as amended in scattered sections of 12 U.S.C.) (allowing federal insurance and regulation to all banks); National Housing Act of 1934, Pub. L. 73-479, 48 Stat. 1246 (codified as amended at 12 U.S.C. §§ 1701-1749bbb-12) (allowing federal insurance and regulation to all thrifts).

statutes explicitly contemplate the existence of uninsured depository institutions,²¹⁷ federal and state laws have *required* all chartered depository institutions to have federal deposit insurance for decades.²¹⁸ Depositors have not had to think about whether any particular institution is safe because they have all *been* safe. Even when depository institutions have failed, most consumers were not affected because their deposits were insured by the federal government.²¹⁹ Furthermore, bank runs are simply uncommon today, which is a contrast to the generations prior to the Great Depression when they were a common occurrence that affected even the smallest depositors. Back then, fights about whether and how to support the banking system were debated in the national press, but that is no longer the case.²²⁰

For this reason, when imitation and crypto banks (or even traditional banks that are not insured) use the language of banking and the term “deposit” despite their products being more similar to investments than savings, consumers are confused.²²¹ Several consumer shadow banks called their offerings “deposits.”²²² Celsius, for example, claimed that “members will be able to easily earn interest on their crypto assets the same way they earn on the savings in the bank,”²²³ and Gemini’s website claimed that depositors could “receive more than 100x the average national interest rate.”²²⁴ Some consumer shadow banks called their products “savings” or used other banking or bank-like terms.²²⁵ And some

217. See 12 U.S.C. § 1831t (requiring disclosure from depository institutions not federally insured).

218. See MICHAEL S. BARR, HOWELL E. JACKSON & MARGARET E. TAHYAR, *FINANCIAL REGULATION: LAW & POLICY* 173-74 (2d ed. 2018) (“Federal law requires that all national banks be FDIC insured, and all state laws require that a state-chartered commercial bank obtain FDIC insurance.”).

219. Even in the one instance where a federal deposit insurance fund went negative, Congress ensured that the fund met its obligations. See U.S. GEN. ACCNT. OFF., B-262036, *FINANCIAL AUDIT: RESOLUTION TRUST CORPORATION’S 1995 AND 1994 FINANCIAL STATEMENTS* 13 (1996), <https://perma.cc/7Q64-HAUL> (estimating that taxpayers spent \$124.6 billion to resolve the Savings and Loan Crisis, including \$42.7 billion to supplement the Federal Savings and Loan Insurance Fund).

220. See JEANNA SMIALEK, *LIMITLESS* 58 (2023) (describing how the details of the Federal Reserve Act were debated in the press).

221. See Press Release, Nat’l Consumer L. Ctr., *Crypto Companies, Others, Must Stop Misusing FDIC’s Name and Logo* (Apr. 6, 2023), <https://perma.cc/V7JE-926E> (arguing that nonbanks should be prohibited “from using the words ‘banking’ and ‘bank account’ to describe their products or services offered”).

222. See, e.g., *How Do I Confirm That a Deposit or Withdrawal is Complete?*, CELSIUS NETWORK, <https://perma.cc/SJP2-YQ2Y> (archived Apr. 20, 2024); *BlockFi Removes Minimums and Fees for Its Crypto Interest Account*, BLOCKFI (Sept. 13, 2019, 08:00 ET), <https://perma.cc/6E96-AHCB> (“BIA clients will no longer have to meet a minimum deposit amount in their Bitcoin, Ether, or GUSD balances in order to earn interest.”).

223. *Why Trust Celsius*, CELSIUS (archived Apr. 20, 2024), <https://perma.cc/YMK5-MA24>.

224. *SEC Genesis Complaint*, *supra* note 180, at 11.

225. See, e.g., *Home*, COMPOUND BANC (accessed Apr. 20, 2024),

indicated that they held customer assets in trust, rather than as debts.²²⁶ Accordingly, consumers likely will not appreciate the risks they face when an uninsured and unregulated consumer shadow bank collapses. While they may “have an awareness that it is in the realm of possibility that a particular negative consequence [loss of principal] may follow,” they may not understand that “the impact of a particular risk [collapse] would be severe.”²²⁷

When it comes to money transmission, consumers similarly do not expect runs or even consider that money transmitters *can* run—if they even contemplate how money transmitters operate at all. Consumers simply expect that money sent will be received. We speculate that there are two principal reasons for this, both of which come down to the fact that it has worked well for so long that consumers do not recognize there could be a run.

First, many consumers consider sending funds via money transmitters akin to writing checks or swiping credit cards, both of which “just work” because the payments never leave the banking system that has been wholly insured since the 1980s.²²⁸ Although checks may bounce, they do so because of insufficient funds in consumers’ accounts, not because banks transmitting or receiving the funds have collapsed. Indeed, with the creation of Zelle—a P2P payment platform operated by IDIs—the difference between sending payments to a friend by Zelle or PayPal is too nuanced for most consumers to recognize. And according to one survey, whereas 38% of respondents erroneously believed that P2P platform balances are FDIC-insured, nearly half of users who keep account balances believe they are protected from loss.²²⁹

Second, and similar to what has happened with deposit insurance, governments have ensured that money transmission occurs safely for so long that

<https://perma.cc/42NK-93JB> (“Compound your savings”); *Tellus Has Raised its Rates. Enjoy 3.85%-5.12% APY on Your Savings with Tellus*, TELLUS (Nov. 2, 2022), <https://perma.cc/7XQ6-9XG8>.

226. Voyager Earn Program, VOYAGER, <https://perma.cc/7BX4-8FNV> (archived May 25, 2024) (explaining that Voyager customers’ interest would accrue “based on how much [of a cryptocurrency they] hold”). See also *SEC Genesis Complaint*, *supra* note 180, at 10 (indicating Gemini explained customers could earn “a real return on their crypto holdings”); Build Wealth, TELLUS, <https://perma.cc/SU92-MMQY> (archived Apr. 20, 2024) (noting that customers can “withdraw anytime”).

227. *Abusiveness Policy Statement*, *supra* note 204, at 21887-88.

228. See *Bad Money*, *supra* note 33, at 4 (arguing that consumers trust banks thanks to the facts that “the Federal Reserve System . . . is authorized by statute to provide emergency loans and other forms of assistance to banks in financial distress,” “[b]anks . . . benefit from a deposit guarantee scheme,” “a special bankruptcy—or ‘resolution’—regime designed to ensure that banks can continue to honor their promises to depositors even in the event of their failure,” and “comprehensive prudential regulation and supervision designed to minimize both the probability of their failure and its potential impact on creditors, other financial institutions, and the wider financial system.”).

229. See Maggie Davis, 84% of Consumers Have Used Peer-to-Peer Payment Services, and Nearly a Quarter Have Mistakenly Sent Money to Wrong Recipient, LENDING TREE (June 27, 2022), <https://perma.cc/KN2F-V6KU>.

consumers no longer recognize the risks. One Pew survey found that nearly half of P2P platform users say that “a key factor for using these platforms is because it makes sending money to people safer” than traditional payment methods, despite banks being more effectively regulated.²³⁰ For decades, states have regulated money transmitters, requiring that they invest in only in certain assets or meet minimum bonding requirements.²³¹ There have been no recent major failures of money transmitters—though, as Dan Awrey notes, state regulations were designed with the old Western Union model in mind, not the multinational digital payment firms.²³² So long as the likes of PayPal and MoneyGram do not fail, or are provided bailouts in the case of failure,²³³ consumers will not realize that they can run or the harms that would result if runs were to occur.

3. Unreasonable advantage taken.

Furthermore, consumer financial institutions that engage in maturity transformation while providing products and services without sufficient capital, liquidity, and other protections may be taking “unreasonable advantage” of consumers’ lack of understanding of the nature of the risks those consumers are taking.²³⁴ According to *CFPB v. ITT Educ. Servs., Inc.*, the meaning of “unreasonable advantage” is “broad” and is something akin to unfairly profit from or to unfairly make use of another for one’s own benefit.²³⁵

230. Monica Anderson, Payment Apps Like Venmo and Cash App Bring Convenience—and Security Concerns—to Some Users, PEW RSCH. CTR. (Sept. 8, 2022), <https://perma.cc/773Z-XAYJ>.

231. See Andrea Lee Negroni, Risky Business: State Regulation of Money Transmitters, CLEAR NEWS (2003), <https://perma.cc/YKS6-H4HJ> (“California first licensed money transmitters in 1936.”); *Bad Money*, *supra* note 3, at 45-55 (identifying existing state regulations). Awrey notes that these rules “typically contemplate a relatively thin layer of protection in comparison with” those required of banks, such that a multinational firm like PayPal could comply with state net-worth requirements with “an effective minimum capital requirement of just under 0.006%.” *Id.* at 48. Some states have begun implementing the Model Money Transmission Modernization Act, which increases money transmitters’ financial requirements, but not all have. See Conference of State Bank Supervisors, CSBS Model Money Transmission Modernization Act, <https://perma.cc/8552-FMY3> (archived Apr. 20, 2024); Conference of State Bank Supervisors, 2023 Money Transmission Modernization Act Legislation (Aug. 30, 2023), <https://perma.cc/W8TC-EKMM> (identifying the MTMA’s enactment status in every state).

232. See *Bad Money*, *supra* note 3, at 45-46.

233. See *id.* at 53 (“As the market value of these securities plummeted during the financial crisis, MoneyGram experienced a severe liquidity crisis. On the verge of bankruptcy, MoneyGram was eventually bailed out by a consortium, led by Thomas H. Lee Partners and Goldman Sachs, that collectively injected over \$1.5 billion in new equity and debt.”) (footnote omitted).

234. See 12 U.S.C. § 5531(d)(2).

235. 219 F. Supp. 3d 878, 918 (S.D. Ind. 2015) (quoting MERRIAM-WEBSTER, THIRD NEW INTERNATIONAL DICTIONARY 2331 (3d ed.1993)) (“The ordinary meaning of ‘to take advantage of’ is ‘to make use of for one’s own benefit,’ ‘to use to advantage,’ or to ‘profit

According to the Bureau's Statement of Policy, although "[e]valuating unreasonable advantage involves an evaluation of the facts and circumstances," it can be shown through several analytical methods, including where "financial products and services that may be 'set up to fail'" or where providers' mere existence relies on consumer misunderstandings.²³⁶ One commentator has taken issue with the set-up-to-fail characterization, but it seems to us that requiring that a product be "set up to fail" is a fair bit more restrictive than immoderately profiting from someone else's lack of knowledge.²³⁷ Whether we use the ordinary meaning of the statutory language or the seemingly more restrictive definition from the Bureau's policy statement, nonbank money transmission, deposit-taking, and stablecoins' whole existence may well fit the bill.

As an initial matter, unsupervised deposit-taking is already illegal. The Banking Act of 1933 makes it a criminal offense for institutions "to engage . . . in the business of receiving deposits subject to check or to repayment . . . upon request of the depositor" without being subject to the same types of examinations as banks.²³⁸ Congress enacted this statute upon the recognition that unregulated deposit-taking can harm not only institutions' depositors but the larger economy as well.²³⁹ Although this provision is rarely enforced, the fact that Congress has declared this activity harmful means that firms subject to its provisions—the full scope of its coverage is debated, but crypto and imitation banks at minimum—should be considered to be taking unreasonable advantage of their consumers.²⁴⁰

Even without this provision, the crypto banks showed that unregulated deposit-taking with maturity transformation is a consumer financial service that is unlikely to exist today if customers truly understood its risks. Crypto banks' business model appears to have been predicated on the constant and inexorable rise of the crypto assets' prices, and the firms lacked adequate safeguards. When concerns arose about the companies' underlying business, depositors ran and the

by.' . . . Given the Bureau's allegations about the unfair nature of the students' predicament, the Complaint sufficiently pleads that ITT derived 'unreasonable advantage' from its conduct, according to the term's ordinary, broad meaning.")

236. *Abusiveness Policy Statement*, *supra* note 204, at 21886; *see also id.* at 21866 ("One may also assess whether entities are obtaining an unreasonable advantage by considering whether they are reaping more benefits as a consequence of the statutorily identified circumstances, or whether the benefit to the entity would have existed if the circumstance did not exist.").

237. *See* Mogilnicki, *supra* note 211, at 388 ("Despite the asserted centrality of this concern, the Policy Statement cites no legislative history for this point.")

238. 12 U.S.C. § 378.

239. *See* S. REPT. NO. 73-1455, at 225 (lamenting that "[p]rivate bankers were not subject to State or Federal examination or supervision, except to determine whether the banker was within the scope . . . of the New York banking law").

240. Morgan Ricks, *Money as Infrastructure*, 2018 COLUM. BUS. L. REV. 757, 809-10 (2018) ("In current U.S. law, it is axiomatic that only banks (authorized depository institutions) may incur 'deposit' liabilities. But this only restates the question in a different guise: what then is a deposit?").

businesses failed *en masse*. Consumers do not expect “depositing” assets to be a speculative venture, and if letters from harmed crypto-bank depositors to bankruptcy judges are any indication, consumers would not have used these firms if they had understood the true nature of their deposit accounts.²⁴¹

P2P payment platforms may also rely on consumer ignorance or misunderstandings. As discussed previously, existing state regulations on the P2P platforms are insufficient, and only through some combination of individual platforms’ prudence in selecting their investments and users not understanding these platforms’ business models that keeps them from running.²⁴² Existing state regulations of stablecoin issuers are similarly insufficient. The largest issuer, Tether, is wholly unregulated and the next largest are regulated as trusts by New York State, but USDC nearly collapsed in March 2023 and was saved only through a federal government backstop.²⁴³ Although consumers would likely still use these products for transactions if they understood the risks—this article’s authors continue to use PayPal—they would likely not leave cash with the platforms or hold stablecoins after transactions are completed.

It is only because consumers failed to understand crypto banks’ business models and left billions of dollars with P2P platforms and stablecoin issuers that these service providers were able to operate under their preferred business models. Although what happened with the crypto banks and USDC was surprising to depositors, customers, and the public, it was not to scholars and should not have been for the firms themselves. As Part I explained, without appropriate government intervention, maturity transformation is unstable and even institutions that do everything correctly are liable to collapse (and without appropriate regulation, many entities will not do everything correctly), and customers slow to withdraw their funds are certain to be harmed.

Some consumer shadow banks know these risks exist but fail to appropriately mitigate them to profit at the expense of consumers uneducated about the relevant risks. PayPal’s user agreement, for example, states that it “invests [users’] funds in liquid investments,” but also provides that users “do not have any ownership interest (either legal or beneficial) in these investments” and that “PayPal owns the interest or other earnings on these investments.”²⁴⁴ PayPal and other P2P payment platforms could prevent consumers from keeping balances in their accounts by automatically placing received funds into consumers’ bank accounts, but they profit from account balances. Crypto banks and stablecoin issuers could similarly fund their operations with more shareholder equity, but they profit by operating with as much leverage (provided

241. See *supra* notes 92-96 and accompanying text (describing customers’ understanding of Celsius’ operations).

242. See *supra* note 231 and accompanying text.

243. See LEDGER INSIGHTS, *supra* note 144.

244. PayPal User Agreement, PAYPAL, <https://perma.cc/H397-KFXK> (last updated Jan. 16, 2024).

by their customers) as possible.

It is worth noting that the CFPB's policy statement makes clear that the abusiveness prohibition applies even if service providers did not cause consumers' lack of understanding or if their lack of understanding is unreasonable.²⁴⁵ Consumer shadow banks have not taken steps to obfuscate their risks from consumers, but their activities may still be considered abusive. Similarly, the prohibition applies even if service providers themselves are unaware of their material risks or did not intend to cause harm, as may be the case with smaller service providers that lack sophisticated legal counsel.²⁴⁶

B. Regulations and supervision

If the CFPB becomes serious about protecting customers from maturity transformation, the obvious next question is what those protections should look like. Before we begin, we want to make clear that some service providers may already meet whatever requirements the CFPB creates. We are not intent on requiring all service providers to change their operations, but instead aim to ensure that all service providers meet appropriate baselines to protect consumers.

We propose the CFPB enact new regulations to establish minimum standards that must be met for activities that rely on maturity transformation to not be considered performed in an abusive manner, and encourage the CFPB to supervise providers of those services.

1. Regulations

The CFPB “may prescribe rules . . . identifying as unlawful unfair, deceptive, or abusive acts or practices,” including “requirements for the purpose of preventing such acts or practices.”²⁴⁷ Accordingly, the CFPB should enact regulations providing minimum standards for the provision of services that require maturity transformation to prevent abusive practices.

The specific minimum standards should be based on the service being provided; for example, the standards for money transmission or custody activities should be different from the standards for deposit-taking. Dan Awrey argues that one starting point for deciding how to regulate P2P platforms and

245. *Abusiveness Policy Statement*, *supra* note 204, at 21887 (“While acts or omissions by an entity can be relevant in determining whether people lack understanding, the prohibition in section 1031(d)(2)(A) does not require that the entity caused the person’s lack of understanding through untruthful statements or other actions or omissions.”).

246. *See* S. REP. NO. 111-176, at 172 (Apr. 30, 2010) (explaining that prohibiting abusive acts and practices is an “addition” to the preexisting prohibition on “unfair or deceptive acts or practices”); *FTC v. Freecom Commc’ns, Inc.*, 401 F.3d 1192, 1202 (10th Cir. 2005) (noting that “the intent to deceive the consumer is not an element of a [UDAP] violation”).

247. 12 U.S.C. § 5531(b).

stablecoin issuers—firms that provide money transmission services and do not offer consumers yield—might be the regulation of money market mutual funds.²⁴⁸ Rule 2a-7 requires these funds to maintain at least 10% of total assets in “daily liquid assets” (i.e., cash, U.S. Treasury bonds, or overnight repos); at least 30% in “weekly liquid assets” (i.e., cash, Treasury bonds, five-day repos, or GSE mortgage-backed securities); and the rest in “eligible securities” (i.e., bonds with a “maturity of 397 calendar days or less that the fund’s board of directors determines present minimal credit risks”).²⁴⁹ Because money transmitters serve as payment rails and not as investments, similar to money market funds, their investments should be limited to some combination of daily and weekly liquid assets. Awrey argues that money transmitters’ “investment restrictions could then be supplemented by a prohibition against [their] incurring any financial debts other than those stemming from their contractual obligations to customers,” which seems appropriate.²⁵⁰

Additionally, because P2P platforms and stablecoin issuers offer debt and not equity instruments, making them unlike money market funds, some minimum capital requirements should be imposed as well. The Money Transmission Modernization Act, crafted by the Conference of State Bank Supervisors, would provide that money transmitters would be required to have capital “of the greater of \$100,000 or 3 percent of total assets for the first \$100 million, 2 percent of additional assets for \$100 million to \$1 billion, and 0.5 percent of additional assets for over \$1 billion.”²⁵¹ We are not in a position to decide here what the optimal capital structure of these institutions should be, but we note that having only half-a-percent capital for assets above \$1 billion seems low, particularly given the real consequences for consumers and the potential consequences for the financial system of a large money transmitter’s failure.

Finally, the CFPB could require stress testing for firms with more than \$10 billion in assets (as the Dodd-Frank Act required of IDIs) or more than \$250 billion in assets (as statute currently requires).²⁵²

For service providers that take deposits and provide interest, the federal banking agencies’ (FBAs) regulations provide an optimal starting point for determining appropriate CFPB regulations. The FBAs have regulated banks for decades and have sophisticated understandings of what rules are necessary to mitigate the run risks of deposit-taking firms and ensure their consumers are

248. See *Bad Money*, *supra* note 3, at 61 (“the regulatory framework that currently governs MMFs might provide us with some useful insights into how better regulation can transform the monetary liabilities of MSBs into good money.”).

249. 17 C.F.R. § 270.2a-7.

250. *Bad Money*, *supra* note 3, at 61.

251. CSBS Model Money Transmission Modernization Act, *supra* note 231, at 34.

252. See Dodd-Frank Act Wall Street Reform and Consumer Protection Act § 165, Pub. L. No. 111-203, 124 Stat. 1376 (codified at 12 U.S.C. § 5365); 12 U.S.C. § 5365.

protected. Looking at the FBAs' rules and retaining those necessary for simply ensuring institutions' continued survival, areas for the CFPB's consideration include capital, liquidity, lending limits and limits on extending credit to insiders, safety and soundness standards, and stress testing where appropriate.²⁵³

For many of these areas, the CFPB could adopt the FBAs' rules largely as-is. The FBAs' regulations require that loans to insiders are "made on substantially the same terms . . . as, and following credit underwriting procedures that are not less stringent than, those prevailing at the time for comparable transactions" with non-insiders.²⁵⁴ Their safety and soundness standards require institutions to establish policies and procedures related to internal controls and information systems, audit systems, loan documentation and credit underwriting, asset quality, and other areas of risk.²⁵⁵ The FBAs' liquidity and stress-testing rules apply to institutions with more than \$250 billion in consolidated assets, which is larger than any existing nonbank consumer financial service provider that engages in maturity transformation. All of these regulations are appropriate for consumer shadow banks.

Capital is the one area in which the CFPB may have to depart from the FBAs—for nonbanks, at least. The FBAs today impose a total capital ratio of at least 8% and leverage ratio of at least 4% on institutions, with heightened requirements for larger and more systemically risky institutions.²⁵⁶ But research shows that these levels are too low, with economists estimating that optimal levels should be between 10 and 26 percent.²⁵⁷ Importantly, these optimal levels still take into consideration the fact that the institutions to which they would apply are insured by the FDIC, given discount window access by the Fed, and subject to frequent examinations. As Anat Admati and Martin Hellwig note, capital levels "were often 25 percent or higher (even as high as 40 percent or 50 percent in the first half of the nineteenth century)" before "the expansion of the government safety net of banks, with equity levels decreasing as the safety

253. See generally 12 C.F.R. Chapter 1 (listing the categories of OCC rules).

254. *Id.* § 215.4.

255. *Id.* pt. 30 App'x A.

256. See, e.g., *id.* § 3.10.

257. See, e.g., David Miles et al., *Optimal Bank Capital*, 123 *ECON. J.* 1, 30 (2013) ("Our estimate of optimal bank capital is that it should be around 20% of RWAs."); Simon Firestone et al., *An Empirical Economic Assessment of the Costs and Benefits of Bank Capital in the United States*, 101 *FED. RES. BANK ST. LOUIS REV.* 203, 204 (2019) (arguing for "capital between 13 percent and 26 percent"); Henrik Andersen & Ragnar Enger Juelsrud, *Optimal Capital Adequacy Ratios for Banks*, *LATIN AM. J. OF CENT. BANKING* 13 (forthcoming) ("[T]he results indicate that Norwegian banks should have a [Common Equity Tier 1] ratio of between 12 and 19 percent"); Federal Reserve Bank of Minneapolis, *The Minneapolis Plan To End Too Big To Fail* 13 (2017), <https://perma.cc/EU78-XMQU> ("We propose a minimum capital ratio of 23.5 percent of risk-weighted assets for covered banks."); WILLIAM R. CLINE, *THE RIGHT BALANCE FOR BANKS: THEORY AND EVIDENCE ON OPTIMAL CAPITAL REQUIREMENTS* 110 (2017) ("[The] optimal ratio would correspond to a ratio of capital to risk-weighted assets of 11.7 percent").

net expanded.”²⁵⁸ The CFPB should not second-guess the FBAs’ rules for banks under their jurisdiction—that is, firms regulated by the FBAs and in compliance with their rules should be presumed to not be engaging in maturity transformation in an abusive manner—but must impose capital requirements to a level such that they are not abusive despite lacking deposit insurance and discount window access. It may be appropriate for the CFPB to provide that maturity-transformed consumer financial services are abusive unless the institutions are funded by capital levels upward of 30, 40, or 50 percent.

2. Supervision

The CFPB should also supervise at least some of the institutions that engage in maturity transformation in the provision of consumer financial services.

Supervision is the process of “monitoring, inspecting, and examining financial institutions . . . to ensure that an institution complies with those rules and regulations [and] operates in a safe-and-sound manner.”²⁵⁹ Whereas UDAAP regulations are used to prohibit or constrain certain activities, supervision allows the CFPB to review firm-specific practices or obtain information for future enforcement actions.²⁶⁰ The CFPB’s examination manual explains that supervision “focus[es] on risks to consumers” and “on an institution’s ability to detect, prevent, and correct practices that present a significant risk of violating the law and causing consumer harm.”²⁶¹

When it comes to supervising for maturity transformation risks, examiners should focus on three areas. First, they should ensure compliance with the regulations the CFPB enacts governing these activities. For example, examiners should verify that money transmitters and stablecoin issuers are invested only in high-quality liquid assets or that all institutions are funded with sufficient levels of shareholder capital. Second, examiners should evaluate whether firms have risk-management practices appropriate for their activities. Deposit taking, money transmission, and fund custody all pose different types and levels of risk to firms and their consumers, and it would be inappropriate to write rules

258. ANAT ADMAT & MARTIN HELLWIG, *THE BANKERS’ NEW CLOTHES: WHAT’S WRONG WITH BANKING AND WHAT TO DO ABOUT IT* 146-47 (2013).

259. FEDERAL RESERVE BOARD, *COMMERCIAL BANK EXAMINATION MANUAL* at 1; *see also* *In re Subpoena Served Upon Comptroller*, 967 F.2d 630, 633-34 (D.C. Cir. 1992) (describing supervision as “an iterative process of comment by the regulators and response by the [institution]” whereby “the bank may agree to change some aspect of its operation or accounting”).

260. *See* 12 U.S.C. § 5514(b)(1) (allowing the CFPB to supervise for the purposes of “assessing compliance with the requirements of [f]ederal consumer financial law,” “obtaining information about the [firm’s] activities and compliance systems or procedures,” and “detecting and assessing risks to consumers and to markets for consumer financial products and services”).

261. CFPB *Supervision and Examination Process 4* (2023), <https://perma.cc/3C5L-5YXH>.

detailing specific risk-management activities for each activity. Nevertheless, examiners should evaluate firms' policies and practices for whatever risks do affect firms.²⁶² Finally, examiners should ensure that firms conduct appropriate financial audits so that institutions have clear views of their assets and liabilities and short-term inflows and outflows.

One feature of modern supervision is that examiners rate institutions.²⁶³ The CFPB currently rates firms using the Uniform Interagency Consumer Compliance Rating System (CC Rating System), which has three components: Board and Management Oversight, Compliance Program, and Violations of Law and Consumer Harm.²⁶⁴ The first two components "are used to assess a financial institution's [compliance management system]," and the third is used to "evaluate the dimensions of any identified violation or consumer harm."²⁶⁵ Each component has several "assessment factors" that examiners consider when rating institutions.²⁶⁶ Firms receive ratings between 1 and 5 for each component and an overall rating, wherein "1 or 2 represent satisfactory or better performance" and "3, 4, or 5 indicate performance that is less than satisfactory."²⁶⁷

If the CFPB implements rules declaring improperly managed maturity transformation abusive, it should incorporate this risk into its ratings, most likely by incorporating compliance with capital and other rules into the Compliance Program and Board and Management Oversight components, given their assessment factors. One assessment factor in the Compliance Program component is "[w]hether the institution's policies and procedures are appropriate to the risk in the products, services, and activities of the institution," which aligns with ensuring institution capital levels are appropriate.²⁶⁸ A factor in the Board and Management Oversight component is "comprehension, identification, and management of risks arising from the institution's products, services, or activities," which aligns with complying with safety and soundness and other standards.²⁶⁹

262. See Comptroller's Handbook: Bank Supervision Process 26-28 (2019), <https://perma.cc/2FE6-KUDH> (identifying credit, interest rate, liquidity, price, operational, compliance, and strategic risks as among the risks banks face).

263. Daniel K. Tarullo, *Bank Supervision and Administrative Law*, 2022 COLUM. BUS. L. REV. 279, 340 ("[T]he assignment of ratings to banks . . . is central to the supervisory function")

264. Federal Financial Institutions Examination Council, 81 Fed. Reg. 79473, 79478 (Nov. 14, 2016).

265. *Id.* at 79478.

266. *Id.*

267. *Id.* at 79477.

268. *Id.* at 79478.

269. *Id.* Another way the CFPB could provide assessments of firms' compliance with rules around maturity transformation is to adopt the Uniform Financial Institutions Rating System (UFIRS), which is used by the FBAs for prudential supervision. See 61 Fed. Reg. 67021 (Dec. 19, 1996). This rating system has five components—Capital Adequacy, Assets, Management Capability, Earnings, Liquidity, and Sensitivity to Market Risk—and is perhaps

The final question is which firms should be subject to CFPB supervision. By statute, the CFPB supervises IDIs with more than \$10 billion in assets²⁷⁰ and has discretion to supervise other covered persons, including those who are “larger participant[s]” of consumer financial product markets as the CFPB defines by rule and those the CFPB “has reasonable cause to determine . . . [are] engaging, or ha[ve] engaged, in conduct that poses risks to consumers with regard to the offering or provision of consumer financial products or services.”²⁷¹

It is appropriate for the CFPB to supervise *all* consumer financial firms that engage in maturity transformation—including all money transmitters, deposit takers, and stablecoin issuers—and not only those that are larger participants. Federal law requires all IDIs be examined at least every eighteen months to ensure that they are operating safely and soundly, and the same oversight is appropriate for consumer financial firms engaged in similar activities.²⁷² Because maturity transformation is inherently risky, the CFPB should have “reasonable cause” to determine that anyone engaging in maturity transformation “is engaging . . . in conduct that poses risks to consumers.”²⁷³ Nevertheless, if the CFPB decided instead that it only wished to supervise larger participants in the markets for deposit taking, money transmission, and fund custody, it could do so—just as the CFPB has proposed doing for larger P2P payment platforms.²⁷⁴

C. The normative case for expanded CFPB authority

As established in Part II, the CFPB has authority to regulate the maturity transformation engaged in by consumer financial service providers, but it has not done so. Indeed, while it has asserted authority over P2P payment platforms, it has not previously acknowledged jurisdiction over stablecoin issuers, crypto banks, or imitation banks at all.²⁷⁵ Here we explain the normative case for a more muscular and robust CFPB presence over these institutions on the grounds that they are currently underregulated.

The CFPB’s dual mission is to “make consumer financial markets work for consumers, responsible providers, and the economy as a whole” and to “protect consumers from unfair, deceptive, or abusive practices.”²⁷⁶ To that end, having the CFPB assert authority to oversee firms’ maturity transformation practices

more appropriate for ensuring firms have sufficient capital and liquidity. Nevertheless, because the CFPB’s supervision of maturity transformation activities would be conducted with an eye toward protecting consumers, retaining the CC Rating System is preferable.

270. 12 U.S.C. § 5515.

271. *Id.* § 5514.

272. *Id.* § 1820.

273. *Id.* § 5515.

274. 88 Fed. Reg. 80197 (Nov. 17, 2023).

275. *See id.*

276. CFPB, <https://perma.cc/KEB5-Z9A9> (archived Apr. 21, 2024).

would ensure that that financial products and services work better for consumers. Take the P2P platforms and stablecoin issuers. Although their products and services—money transmission and, essentially, money storage—routinely work for consumers, users may one day find themselves with stablecoins that are worth a fraction of their par value and thus useless for payments, or funds trapped on a P2P platform that they cannot use and for which they may not be reimbursed. The CFPB certainly should ensure that consumers can rely on money transmitters and stablecoin issuers to serve as the safe stores of value that they pledge to be.

Similarly, asserting authority over maturity transformation can help the CFPB ensure a level playing field among service providers. P2P payment platforms, stablecoin issuers, and even some crypto banks serve the same function—facilitating payments—yet only P2P platforms are required to adhere to the (still insufficient) capital requirements imposed by the states in which they operate. This makes P2P platforms safer for customers, but also makes it difficult for these platforms to compete with the firms that do not comply with such standards. Similarly, IDIs that are subject to appropriate capital requirements compete with crypto and imitation banks that are not; nevertheless, they both can advertise their offerings as safe, meaning that the safer IDIs must compete against the more harmful alternatives. Through regulation and oversight, a strong CFPB helps businesses that want to play by a set of fair rules do so and ensures that above-board service providers will not lose customers to shady competitors.²⁷⁷

Finally, the CFPB aggressively policing the boundaries of its authority—to address maturity transformation activities or otherwise—would help protect consumers from institutions that ride the line between offering investment or savings products. The CFPB was created to aggregate authority into a single consumer financial protection regulator, authority that previously “tended to ‘fall between the cracks’ [when] no agency had an exclusive role of consumer protection in financial services.”²⁷⁸ Such cracks appear when institutions are ambiguous about whether they offer investment or savings products. One way of viewing the crypto banks’ deposit taking and maturity transformation, for example, is that they helped their customers invest.²⁷⁹ This is the position of the

277. See Creola Johnson, *America’s First Consumer Financial Watchdog Is on a Leash: Can the CFPB Use Its Authority to Declare Payday-Loan Practices Unfair, Abusive, and Deceptive?*, 61 CATH. U. L. REV. 381, 409 (2012) (quoting President Obama as saying that “our financial system only works—our market is only free—when there are clear rules and basic safeguards that prevent abuse, that check excess, that ensure that it is more profitable to play by the rules than to game the system”) (citing William D. Cohan, Op-Ed., *Make Wall Street Risk It All*, N.Y. TIMES, Oct. 8, 2010, at A27).

278. Adam J. Levitin, *The Consumer Financial Protection Bureau: An Introduction*, 32 REV. BANKING & FIN. L. 321, 330 (2013).

279. This is indeed one view of traditional banks: They help depositors invest in the capital markets or the banks’ borrowers. See Nicola Cetorelli et al., *The Evolution of Banks*

SEC. But because they also described themselves as similar to IDIs and made statements using words like “deposits” and “savings” to bring in retail customers, they appeared to customers as providers of consumer financial services. In short, crypto banks’ customers did not expect to lose their principal—much as how one will not with IDIs—and for that reason we think the consumer finance laws would have been more appropriate for these firms than the securities laws.

To that end, it is important that the CFPB enforce the consumer protection laws even when firms may arguably also be regulated elsewhere. For example, although state money transmitter laws exist, the federal consumer financial laws ensure nationwide floor on conduct or minimum standards of behavior apply as it relates to financial firms’ retail customers. States may, of course, impose standards above those required by the CFPB’s UDAAP provisions, as the Act contains no federal preemption clause. Similarly, although the securities laws’ disclosure requirements may be applied to crypto and imitation banks, the CFPB’s UDAAP protections are more appropriate for instances in which consumers believe they are buying a product, not investing—as is the case with those firms.²⁸⁰

Not only that, but it is better to have two regulators policing any given market than one. For example, there are instances in which each regulator can play an important role in regulating the same firm. Compound’s investment offerings are subject to disclosure under the securities laws, but because it engages in deposit taking, its advertisements and other operations may appropriately be regulated by the CFPB. The same can be said for the crypto banks, whose offerings the SEC may consider to be demand notes but who also engaged in deposit-taking.²⁸¹

Additionally, because SEC-regulated firms are exempt from CFPB jurisdiction,²⁸² an entity that refuses to abide by either regime can be forced to choose one if the CFPB asserts its authority. For example, when the CFPB tried to enforce a civil investigative demand on Nexo, the firm sought to modify the CID on the grounds that “interest-bearing crypto lending products [like Nexo’s Earn Interest Product] are securities” that therefore fall outside the CFPB’s ambit.²⁸³ It is not public whether Nexo ultimately decided to call itself an SEC-

and Financial Intermediation: Framing the Analysis, 18 FED. RES. BANK N.Y. ECON. POL’Y REV. 2 (2012).

280. See *supra* notes 92-96 and accompanying text (describing consumers’ uses of these products); see also *supra* notes 180, 222-226 and accompanying text (providing firms’ descriptions of their products); Complaint, *People v. Mashinsky*, No. 450040/2023, 2023 WL 5025252 (N.Y. Sup. Ct. Jan. 5, 2023) (describing Celsius’s claim that customers would earning yield “without taking any risk . . . or taking minimal risk”).

281. See *In re Nexo Cap. Inc.*, Exchange Act Release No. 11149 (Jan. 19, 2023), <https://perma.cc/U5RQ-5KSP> (describing Nexo’s accounts as securities).

282. See 12 U.S.C. § 5517(i)(1) (“The Bureau shall have no authority to exercise any power to enforce this title with respect to a person regulated by the [SEC].”).

283. Nexo Financial, *supra* note 188, at 3 (alterations in original). The CFPB ultimately

regulated entity to escape CFPB jurisdiction—no complaint was ever brought—but the firm soon settled with the SEC for selling unregistered securities.²⁸⁴ The CFPB should similarly assert jurisdiction over other crypto firms that argue they are not securities brokers or exchanges and force them to comply with one regulatory regime or the other. We agree with the views of folks like Creola Johnson, who has argued (in the context of payday loan regulation) that the CFPB should take an expansive view of its authority to cover “companies pretending to be some other type of entity.”²⁸⁵

Of course, some view the CFPB with skepticism. Criticisms have been levied against the agency since before its creation²⁸⁶ and allegations abound that the CFPB is an all-powerful bureaucracy that “stifle[s] innovation and flexibility in consumer financial services.”²⁸⁷ We disagree. It is appropriate that the CFPB protect consumers to the greatest extent its legal authority permits. Congress created the agency in response to regulatory failures that “led to what has become known as the Great Recession in which millions of Americans have lost jobs; millions of American families have lost trillions of dollars in net worth; millions of Americans have lost their homes; and millions of Americans have lost their retirement, college, and other savings.”²⁸⁸ Congress intentionally gave the Bureau broad authority to protect the American public and assigned it a role in preventing another financial crisis and subsequent harms. And if there is a chance that consumer financial firms may harm their customers, we want the CFPB to act as mightily as it can to protect them.

IV. THE CFPB IS NOT THE IDEAL REGULATOR, BUT IS BEST POSITIONED UNDER CURRENT LAW

In the prior Part, we argued that the CFPB should act to prohibit consumer shadow banks from engaging in maturity transformation. This does not mean, however, that we think the CFPB is ideally positioned for this task; the Bureau lacks experience in this area, as regulating maturity transformation is a role more commonly undertaken by traditional banking regulators. Rather, it is the only federal regulator with the authority and (we hope) the disposition to act quickly

denied Nexo’s motion on the grounds that it “does not contend that the SEC has determined that the Earn Interest Product is a security.” *Id.*

284. See *In re Nexo Cap. Inc.*, *supra* note 281.

285. Johnson, *supra* note 277, at 414.

286. See Patricia A. McCoy, *Inside Job: The Assault on the Structure of the Consumer Financial Protection Bureau*, 103 MINN. L. REV. 2543, 2567-79 (2019) (describing efforts to undermine the CFPB).

287. Arthur E. Wilmarth Jr., *The Financial Services Industry’s Misguided Quest To Undermine the Consumer Financial Protection Bureau*, 31 REV. BANKING & FIN. L. 881, 883 (2012).

288. S. REP. NO. 111-176, at 9 (2010), <https://perma.cc/36FS-QX93>.

on these important consumer financial protection issues.²⁸⁹

In this Part, we discuss these factors, recognizing that they serve to push the CFPB away from and pull it toward acting on maturity transformation in consumer finance. We discuss both the Bureau's lack of experience, as well as the inability for other regulators to act.

A. The CFPB lacks experience regulating maturity transformation.

Although the CFPB already regulates some institutions that engage in maturity transformation, it does not regulate that aspect of their businesses. With IDIs, for example, the FBAs and NCUA regulate institutions' maturity transformation activities—what is traditionally known as “safety and soundness” or “prudential” regulation—whereas the CFPB regulates these firms' consumer-facing activities, such as their deposit accounts' terms and conditions and various loan offerings. The CFPB also oversees imitation banks' deposit-taking activities to the extent they are unfair or deceptive, money transmitters' payments and cross-border activities, and may soon begin regulating stablecoin issuers' and other crypto firms' compliance with the Electronic Funds Transfer Act.²⁹⁰

Today, the CFPB does not address maturity transformation. Its examination manual, which describes the policies and procedures by which its examiners supervise firms, does not mention capital, liquidity, or stress tests. So far, the Bureau's focus has been on protecting consumers from unfair terms of service,²⁹¹ deceptive claims and advertising, such as TD Bank claiming that an overdraft-protection service was free when it was not;²⁹² and abusive acts, such as Wells Fargo “opening unauthorized deposit accounts” without account-holders' knowledge or consent, in the provision of consumer financial services.²⁹³

Indeed, there are three options that are preferable to the CFPB regulating maturity transformation. It would be preferable for state regulators to require money transmitters to have consistently sufficient levels of capital and high-quality liquid assets. Or to have the Department of Justice (DOJ) and state agencies enforce statutory provisions that prohibit nonbanks from taking

289. Although the FTC could act under its UDAP authority, only the CFPB may prosecute abusive acts and practices.

290. Rohit Chopra, Director, CFPB, Prepared Remarks at the Brookings Institution Event on Payments in a Digital Century (Oct. 6, 2023), <https://perma.cc/66LB-LGXC> (“[T]he CFPB is exploring providing additional guidance to market participants to answer questions regarding the applicability of the Electronic Fund Transfer Act with respect to private digital dollars and other virtual currencies for consumer and retail use.”).

291. *See, e.g.*, Amendments to Federal Mortgage Disclosure Requirements under the Truth in Lending Act (Regulation Z), 82 Fed. Reg. 37, 656 (Aug. 11, 2017).

292. *See, e.g.*, TD Bank, N.A., CFPB No. 2020-BCFP-0007, at ¶ 69 (Aug. 20, 2020), <https://perma.cc/28UG-5FWT>.

293. *See, e.g.*, Wells Fargo Bank, N.A., CFPB No. 2016-CFPB-0015 (Sept. 8, 2016), <https://perma.cc/2XBS-5HDU>.

deposits.²⁹⁴ Or for Congress to give the FBAs regulatory authority over institutions that engage in maturity transformation activities. But if these options are not available, the CFPB is the best fallback regulator.

B. But it is better positioned than other regulators.

Although these alternatives would be preferable, they all seem unlikely. All states impose rules on money transmitters to ensure that they are in safe and sound conditions, including “minimum net worth requirements, surety bond and other security requirements, and restrictions on permissible investments,” but these rules “typically contemplate a relatively thin layer of protection in comparison with” those required of banks, such that a multinational firm like PayPal could comply with state net-worth requirements with “an effective minimum capital requirement of just under 0.006%.”²⁹⁵ The DOJ is unlikely to bring criminal charges against longstanding firms that are otherwise in compliance with the law, particularly given the perceived ambiguity around the term “deposit.” Congress has considered but has been unwilling to pass legislation allowing the Fed to regulate stablecoins, and the political capital necessary to give bank regulators authority over other money transmitters is even greater.²⁹⁶

Compared to these options, that the CFPB need only enact a new regulation under its existing statutory authority to regulate these activities seems downright easy. In addition, there is no nationwide regulator that has the authority to regulate consumer shadow banks in a way that addresses their maturity transformation other than the CFPB.

294. See 12 U.S.C. § 378(a)(2). To use digital wallet providers like PayPal and Cash App to transmit funds, users enter into a debtor-creditor relationship with the providers, wherein providers owe debts to payment recipients that are redeemed when funds are moved into recipients’ bank accounts. Because customers may leave received funds in their digital wallets for months or years—perhaps even using them as alternatives to bank accounts—these assets are very similar to deposits. And because money transmitters today must store customers’ cash somewhere electronically (unlike the money transmitters of old that held physical currency), they end up lending it out, resulting in the same kinds of maturity transformation as do banks.

295. Awrey, *supra* note 3, at 47-48. Some, but not all, states have begun implementing the Model Money Transmission Modernization Act, which increases money transmitters’ financial requirements. See *CSBS Model Money Transmission Modernization Act*, CONFERENCE OF STATE BANK SUPERVISORS (Sep. 9, 2021), <https://perma.cc/C8P7-WFZW>; *2023 Money Transmission Modernization Act Legislation*, CONFERENCE OF STATE BANK SUPERVISORS (Aug. 30, 2023), <https://perma.cc/W8TC-EKMM> (identifying the MTMA’s enactment status in every state).

296. See, e.g., H.R. 4766, 118th Cong. (2023).

1. The Federal Banking Agencies

The FBAs cannot regulate consumer shadow banks for the same reasons that they cannot regulate traditional shadow banks—they, with limited exception, are limited to regulating institutions that opt into their jurisdictions. The OCC may only regulate and supervise banks that apply for and receive federal charters, the Fed may only regulate state banks that apply for and receive membership in the Federal Reserve System and bank holding companies, and the FDIC may only regulate state nonmember banks that apply for and receive deposit insurance.²⁹⁷ Because no consumer shadow banks have applied for OCC charters, Fed membership, or FDIC insurance, the FBAs lack authority.

The exception to the limitation that the FBAs regulate institutions that voluntarily acquiesce to their oversight is for nonbank financial institutions that are designated as systemically important by the Financial Stability Oversight Council (FSOC). FSOC designation results in regulation and supervision by the Fed, including capital and other rules.²⁹⁸ FSOC may designate nonbank financial companies if they either “could pose a threat to the financial stability of the United States,”²⁹⁹ or are “financial market utilities or payment, clearing, or settlement activities that . . . are, or are likely to become, systemically important.”³⁰⁰ FSOC could designate one or more consumer shadow banks as systemically important or posing a risk to financial stability—commentators have identified stablecoin issuers as possible candidates³⁰¹—but that would do nothing to address the consumer protection issues of consumer shadow banks lacking such designation. Smaller consumer shadow banks may not pose financial stability risks, but they can still harm consumers.

2. The Treasury Department

The Bank Secrecy Act requires nonbanks that engage in money transmission to register with the Treasury Department as money services businesses (MSBs)

297. See generally JAY B. SYKES, CONG. RSCH. SERV., R45081, *BANKING LAW: AN OVERVIEW OF FEDERAL PREEMPTION IN THE DUAL BANKING SYSTEM* (2018) (describing the laws governing state and national banks).

298. See 12 U.S.C. § 5323.

299. *Id.*

300. *Id.* § 5463.

301. *Hearing on “Stablecoins: How Do They Work, How Are They Used, and What Are Their Risks?” Before the S. Comm. on Banking, Hous., & Urb. Affs.*, 117th Cong. 17 (Dec. 14, 2021) (statement of Hilary J. Allen, Professor, American University Washington College of Law), <https://perma.cc/PGL3-TMGL> (“If a stablecoin becomes a widely-used and accepted payment service, the FSOC should consider: designating the stablecoin issuer as a systemically important financial institution, utilizing the designation power bestowed by Section 113 of Dodd-Frank. This would subject the issuer to supervision by the Federal Reserve.”).

and comply with the Department's regulations.³⁰² Treasury's rules are largely limited to requiring MSBs to create customer identification programs, report suspicious activity to the government, and retain information for future investigations.³⁰³ The Treasury Department cannot not impose any rules that ensure MSBs' stability.

3. The Commodity Futures Trading Commission

The CFTC regulates derivatives and, because the integrity of derivatives markets relies on the integrity of the markets for the underlying assets, has authority to address fraud and manipulation in the markets for commodities.³⁰⁴ It cannot regulate the producers of commodities, which are usually agricultural farmers, cattle ranchers, oil producers, and precious metals miners.

The CFTC considers some crypto assets, including Bitcoin, Ether, and a variety of stablecoins, to be commodities, and considers crypto banks to be commodity pools—essentially investment companies for investing in commodities.³⁰⁵ After Voyager's collapse, for example, the CFTC sued Voyager's former chief executive officer for operating an unregistered commodity pool in violation of the Commodity Exchange Act (CEA).³⁰⁶ Although regulating the capital framework of commodity pools is not contemplated by the CEA, the CFTC has broad authority "to make and promulgate such rules and regulations as [in its judgment] are reasonably necessary to effectuate any of the provisions or to accomplish any of the purposes of" the CEA.³⁰⁷ It is possible that the CFTC could impose capital, liquidity, and other requirements on commodity pools in a way similar to how the SEC has regulated money market funds.

Of the consumer shadow banks, the CFTC may only regulate crypto banks. The agency considers stablecoins to be commodities, giving it limited authority to ensure that stablecoin issuers are not defrauding customers in token sales.³⁰⁸ But because it cannot regulate the production of commodities, it lacks jurisdiction to regulate the maturity transformation necessary to create stablecoins. It cannot regulate money transmitters or imitation banks that do not trade in commodities.

302. See 18 U.S.C. § 1960; 31 U.S.C. § 5330.

303. See, e.g., 31 C.F.R. § 1010 (2010) (articulating requirements as to reports, recordkeeping, and standards of diligence); *id.* § 1022 (articulating rules for money services businesses).

304. 7 U.S.C. § 6b.

305. *Id.* § 1a(10) (defining commodity pools as "enterprise[s] operated for the purpose of trading in commodity interests").

306. See Complaint, CFTC v. Ehrlich, No. 23-cv-8962 (S.D.N.Y. Oct. 12, 2023).

307. 7 U.S.C. § 12a(5).

308. See *In re Tether Holdings Ltd.*, CFTC No. 22-04, (Oct. 15, 2021) (finding that Tether intentionally or recklessly made untrue or misleading statements about its stablecoins).

4. The Securities and Exchange Commission

Although the SEC may be the only regulator besides the CFPB that is most able to regulate consumer shadow banks, it cannot act as forcefully as the CFPB may,—it may largely only require disclosure of risks, rather than require particular capital structures—and it may have even less of a claim to authority than the CFPB.

The SEC may wish to regulate some consumer shadow banks by designating them as investment companies, which are “any issuer which . . . is or holds itself out as being engaged primarily . . . in the business of investing, reinvesting, or trading in securities,” subject to limitation.³⁰⁹ The maturity transformation process necessarily requires consumer shadow banks to invest in securities, and the SEC views at least some as being investment companies.³¹⁰ The SEC could, theoretically, impose capital requirements on these entities through the use of its exemptive authority,³¹¹ much as it has imposed liquidity requirements on money market mutual funds.³¹² Some consumer shadow banks, like stablecoin issuers, could also become money market funds, though offering equity instruments is different from their current business models.

Despite this jurisdictional hook, some consumer shadow banks could qualify for exemptions, meaning the SEC would still lack authority. P2P payment platforms and stablecoin issuers can claim to exist to facilitate payments, not to be “engaged primarily . . . in the business of investing.” Crypto and imitation banks may claim to primarily take deposits, whereas some—like Tellus—may claim that investing deposits is only a small part of their larger operations. In these instances, the SEC could attempt to obtain jurisdiction by arguing that stablecoins and account balances at other consumer shadow banks are notes that require disclosure under the securities laws.³¹³ Not only would the SEC not be able to regulate the maturity transformation aspects of the consumer shadow banks’ businesses—disclosure cannot prevent runs—but it may not even be

309. 15 U.S.C. § 80a-3.

310. *See* BlockFi Lending LLC, Exchange Act Release No. 11,029, Investment Company Act Release No. 34,503 (alleging that BlockFi is an investment company). *But see* Nexo Cap. Inc., Exchange Act Release No. 11,149 (Jan. 19, 2023), <https://perma.cc/U5RQ-5KSP> (alleging that Nexo violated the Securities Act but not that it was an investment company).

311. The Investment Company Act prohibits investment companies from generally issuing non-equity securities, *see* 15 U.S.C. § 80a-18(f)(1), but also allows the SEC to exempt firms “from any provision or provisions of this [Act] or of any rule or regulation thereunder.” *Id.* § 80a-6(c). The SEC could exempt consumer shadow banks from the prohibition on issuing debt on the condition that it maintains certain levels of high-quality liquid assets and shareholder capital.

312. *See* 15 U.S.C. § 270.2a-7.

313. *See* *Reves v. Ernst & Young*, 494 U.S. 56, 67 (1990) (explaining that demand notes may be securities subject to the securities laws). *See also* Nexo Cap. Inc., *supra* note 310, at 2 (identifying Nexo’s Earn accounts as notes).

successful.³¹⁴ What is more, notes are debt instruments, and some stablecoins may not be debt, meaning they escape SEC jurisdiction entirely.³¹⁵

C. Bureau authority bolsters the SEC’s and CFTC’s authorities

One argument we heard when presenting early versions of this article is that crypto and imitation banks are used for investment, which makes the SEC and CFTC (“the markets regulators”) the preferred regulators for these firms. Congress prohibited the CFPB from enforcing the CFPB against entities, like investment companies and commodity pools, that are regulated by the markets regulators.³¹⁶

We have two responses. First, deposits are frequently used as investment vehicles. FDIC-insured banks are permitted to pay interest on deposits credited to bank accounts, and as of February 2024, could pay up to 7.39 percent.³¹⁷ By using the term “deposit” to describe activities that are consumer financial products or services, it seems Congress intended to include accounts that offer yield to depositors.³¹⁸

Second, for those consumer shadow banks that are more appropriately regulated by the SEC and CFTC, having the CFPB assert authority can help force them into compliance with those regulatory regimes. For some time, crypto banks refused to comply with the securities laws despite the SEC’s allegations that they are brokers, investment companies, or other SEC-registered institutions.³¹⁹ Imitation banks are still operating and are unregistered. If the

314. The Supreme Court has held that notes are presumed to be securities, but that presumption may be rebutted if “the note in question ‘bear[s] a strong family resemblance’ to an item on the judicially crafted list of exceptions or convinces the court to add a new instrument to the list.” *Reves*, 494 U.S. at 64 (quoting *Exch. Nat. Bank of Chicago v. Touche Ross & Co.*, 544 F.2d 1126, 1137-38 (2d. Cir. 1976) (internal citations omitted)). For that evaluation, courts are to examine “the motivations [of] a reasonable seller and buyer”; “the ‘plan of distribution’ of the instrument to determine whether it is an instrument in which there is ‘common trading for speculation or investment’”; “the reasonable expectations of the investing public” as to whether the assets are likely to be securities; and “whether some factor such as the existence of another regulatory scheme significantly reduces the risk of the instrument.” *Id.* at 66-67. Given that P2P payment platforms and stablecoin issuers do not provide yield, their offerings likely would not be considered securities. Crypto and imitation banks’ accounts are more likely to be considered securities, but the test is still not clear.

315. *See supra* note 145.

316. *See* 12 U.S.C. § 5517(i)-(j) (excluding from the CFPB’s jurisdiction persons regulated by the SEC and CFTC).

317. *See* National Rates and Rate Caps, FDIC, <https://perma.cc/J3RQ-XL3Q> (last updated Apr. 15, 2024).

318. 12 U.S.C. § 5481.

319. The SEC settled with BlockFi for being an unregistered investment company, *see* BlockFi Lending LLC, Exchange Act Release No. 11,029 (Feb. 14, 2022), <https://perma.cc/GUJ5-A6QE>; Investment Company Act Release No. 34,503, but that did not incentivize Celsius, Voyager, FTX, and others to register—the SEC sued them after their

CFPB sues these institutions for violating the CFPA, they could use the affirmative defense that they are subject to the markets regulators' oversight. This pincer movement would either compel these firms to register with the SEC or CFTC or make it easier for the markets regulators to sue these firms for failing to register. If consumer shadow banks want to be considered investment firms, CFPB action makes it easier for the markets regulators to ensure compliance. If they want to be considered consumer finance firms, the CFPB should be bringing suit anyway to compel them to comply with those laws.³²⁰

CONCLUSION

In this article, we have argued that consumer shadow banks pose significant risks to consumers because of their maturity transformation activities and moral hazard and have provided a means by which the CFPB can help mitigate those risks. Noting that the CFPB has regulatory jurisdiction over P2P payment platforms, stablecoin issuers, and crypto and imitation banks, we argue the Bureau can make use of its authority to regulate abusive conduct to address these risks. Specifically, we encourage the CFPB to enact regulations to establish minimum standards that must be met for activities that rely on maturity transformation to not be considered performed in an abusive manner. Although different business models will necessitate different standards, we believe minimum capital and liquidity requirements are necessary, possibly along with lending limits, limits on extending credit to insiders, safety and soundness standards, and stress testing where appropriate. We also encourage the CFPB to supervise providers of those services to ensure that they are complying with all applicable regulations.

collapse.

320. As an example of this in action is the case of Nexo. In a CFPB action, Nexo alleged that its Earn product was a security as an affirmative defense, though the CFPB ignored this claim. *See* Nexo Fin. LLC, CFPB No. 2022-MISC-Nexo Financial LLC-0001 (Nov. 22, 2022), <https://perma.cc/2HP5-MJNY>.