THE BANKRUPTCY COURT AS CRYPTO MARKET REGULATOR

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ABSTRACT

In the second half of 2022, several large and systemically important cryptocurrency firms, such as BlockFi, Celsius, FTX, and Voyager, collapsed into bankruptcy. Their sudden implosion can be attributed, at least in part, to a scant pre-existing framework for oversight, allowing firms to engage in runaway risk-taking, exuberant opportunism, and, in some cases, outright fraud. Bankruptcy courts adjudicating these cases found themselves in a strange role: serving as a sort of proxy overseer for a maturing cryptocurrency industry, and forced into doing some of the work historically entrusted to regulatory agencies like the SEC, CFTC, and Fed. This Article explores the implications of bankruptcy courts being drafted into this kind of quasi-regulatory service. We observe that bankruptcy's intervention comes with numerous payoffs, given that Chapter 11's end-goals often align with traditional regulatory objectives. Indeed, by case necessity, bankruptcy courts have overseen broad and detailed reporting from some of the industry's darkest corners, rendered decisions that likely will have lasting

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impact on customer protection, directed regulatory attention to particular points of public vulnerability, and afforded opportunity for regulatory agencies to advance their policy initiatives. Nevertheless, we also observe that bankruptcy courts are inadequate proxies for administrative, technocratic oversight. Focused mainly on the debtor's fate, the Bankruptcy Code is ill-equipped to address, in a prophylactic way, system-wide risks in crypto markets. Even disclosure—a foundational regulatory tool—works idiosyncratically when delivered in the bankruptcy context, intended to inform the debtor's stakeholders in furtherance of bankruptcy-specific imperatives, rather than to facilitate knowledgeable investing by the general public. Bankruptcy courts are, moreover, statutorily constrained in ways that lack the mission, modalities, and mechanisms to protect an industry and its participants. As we show here, even as bankruptcy courts have stepped up to do their work, their role in overseeing crypto bankruptcies firmly establishes a paramount need for comprehensive regulation tailored for the digital asset space.

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INTRODUCTION

The collapse of the FTX cryptocurrency exchange in November 2022 was a pivotal moment for the digital asset industry. The company's sudden implosion triggered billions in economic damage across the sector, as well as immeasurable personal pain for millions of everyday customers.¹

Prior to its failure, FTX had been one of crypto's brightest stars, serving as a leading trading hub for digital assets, offering a panoply of sophisticated financial products, and boasting a (supposedly) enviable balance sheet.² Just one year after its founding in 2019, the company was hosting \$385 billion in annual trading volume.³ The following year, it reported five million customers worldwide, more than \$1 billion in revenue, and almost \$275 million in earnings.⁴ By January 2022, FTX was valued at \$32 billion.⁵ The company had also been absorbed into popular culture, helping to demystify digital assets for everyday Americans: the FTX brand was emblazoned across the Miami Heat's basketball stadium; it was endorsed by celebrities like Tom Brady and Larry David, including a memorable advertisement aired during the 2022 Superbowl; and, Sam Bankman-Fried, FTX's oncewunderkind CEO, became known for contributing lavishly to political campaigns and marketing himself as the legitimizing, ethical face of crypto.⁶ In fewer than four years, FTX had become big, powerful, and ubiquitous bridging Wall Street, Main Street, and the nation's capital to a brand new crypto marketplace-which too had become far too big, powerful, and

^{1.} Eric Wallerstein, *FTX and Sam Bankman-Fried: Your Guide to the Crypto Crash*, WALL ST. J. (Jan. 19, 2023, 11:57 AM), https://www.wsj.com/articles/ftx-and-sam-bankman-fried-your-guide-to-the-crypto-crash-11669375609 [https://perma.cc/NR6Q-CWU3].

^{2.} Id.

^{3.} Darreonna Davis, *What Happened to FTX? The Crypto Exchange Fund's Collapse Explained*, FORBES (June 2, 2023, 10:35 AM), https://www.forbes.com/sites/darreonnadavis/2023/06/02/what-happened-to-ftx-the-crypto-exchange-funds-collapse-explained/?sh=7312804b3cb7 [https://perma.cc/A2AG-QVNY].

^{4.} *Id*.

^{5.} Ryan Browne, *Cryptocurrency Exchange FTX Hits \$32 Billion Valuation Despite Bear Market Fears*, CNBC (Jan. 31, 2022, 7:44 PM), https://www.cnbc.com/2022/01/31/crypto-exchange-ftx-valued-at-32-billion-amid-bitcoin-price-plunge.html [https://perma.cc/FE78-SMTH].

^{6.} Alyssa Lukpat, *Tom Brady. Stephen Curry. Shaq. See the Celebrities with Ties to FTX*, WALL ST. J. (Nov. 10, 2022, 4:19 PM), https://www.wsj.com/articles/the-celebrities-including-tom-brady-tied-to-ftx-see-the-list-11668109684 [https://perma.cc/8M6A-CJTZ]; Will Gottsegan, *Sam Bankman-Fried Got What He Wanted*, THE ATLANTIC (Dec. 14, 2022), https://www.theatlantic.com/technology/archive/2022/12/sbf-ftx-downfall-cryptocurrency-regulation-future/672461/.

ubiquitous to ignore.⁷

But, in November 2022, FTX was outed as a possible fraud, suspected of grossly misrepresenting its enterprise value and misusing customer deposits.⁸ Within weeks, Bankman-Fried was in handcuffs,⁹ other FTX executives were cutting plea deals,¹⁰ and the company was in bankruptcy.¹¹ The resulting Chapter 11 case is sweeping, both in scale and complexity, spanning over 130 entities worldwide, with total value estimates ranging anywhere from \$10 to \$50 billion.¹² The administrative fee burn has been commensurately immense, with the debtor's bankruptcy professionals seeking over \$200 million in fees for the initial six months of work.¹³

11. David Yaffe-Bellany, *Embattled Crypto Exchange FTX Files for Bankruptcy*, N.Y. TIMES (Nov. 11, 2022, 1:06 PM), https://www.nytimes.com/2022/11/11/business/ftx-bankruptcy.html [https://perma.cc/27HV-YD6Z].

12. Wallerstein, *supra* note 1.

^{7.} For example, at its peak (in November 2021), crypto's global market capitalization stood at approximately \$3 trillion. See, e.g., Ari Levy & MacKenzie Sigalos, Crypto Peaked a Year Ago—Investors Have Lost More Than \$2 Trillion Since, CNBC (Nov. 14, 2022, 3:07 AM), https://www.cnbc.com/2022/11/11/crypto-peaked-in-nov-2021-investors-lost-more-than-2-trillion-since.html [https://perma.cc/A7M8-AYBQ].

^{8.} Ian Allison, Divisions in Sam Bankman-Fried's Crypto Empire Blur on His Trading Titan Alameda's Balance Sheet, COINDESK (Aug. 16, 2023, 5:56 PM), https://www.coindesk.com/business/2022/11/02/divisions-in-sam-bankman-frieds-crypto-empire-bluron-his-trading-titan-alamedas-balance-sheet [https://perma.cc/PJK5-MQAX].

^{9.} In November 2023, Sam Bankman-Fried was convicted on multiple counts of federal criminal wrongdoing, including fraud against FTX's customers. For discussion see for example, David Yaffe-Bellany, Matthew Goldstein and J. Edward Moreno, Sam Bankman-Fried Is Found Guilty of 7 Counts of Fraud and Conspiracy, N.Y. TIMES (Nov. 2, 2023), https://www.nytimes.com/ 2023/11/02/technology/sam-bankman-fried-fraud-trial-ftx; On Bankman-Fried's charging following FTX's collapse see for example, Siladitya Ray, DOJ Agrees to Try Sam Bankman-Fried on Original Eight Charges—For Now. FORBES (June 15, 2023, 5:07AM), https://www. forbes.com/sites/siladityaray/2023/06/15/doj-tells-court-it-is-ready-to-try-sam-bankman-fried-only-oneight-original-charges-for-now/?sh=7ced50ae32d9 [https://perma.cc/K9R6-ETZ2].

^{10.} Alex Hern, Associates of Sam Bankman-Fried Plead Guilty to Fraud Charges After FTX Collapse, THE GUARDIAN (Dec. 22, 2022, 5:25 AM), https://www.theguardian.com/business/2022/dec/21/sam-bankman-fried-ftx-associates-plead-guilty-fraud [https://perma.cc/M4LR-S8PT].

^{13.} Joe Miller, *FTX Bankruptcy 'on Track to be Very Expensive' as Fees Top \$200mn*, FIN. TIMES (June 20, 2023), https://www.ft.com/content/b5adbcdd-304a-4147-8a4a-c81296ac7d2b [https:// perma.cc/7C9Q-U8NK]. The costly professional effort did not, however, result in a business turnaround or M&A solution. At the end of January 2023, the FTX bankruptcy transitioned away from finding going concern value and toward liquidation, with the FTX estate abandoning plans to revive the exchange as an "FTX 2.0." In submissions to the bankruptcy court, lawyers for the FTX estate noted that customers would be able to receive their payments in full. For discussion see for example, Steven Church & Jonathan Randles, *FTX Plans to Repay Customers in Full, Drop Exchange Relaunch*, BLOOMBERG (Jan. 31, 2024, 10:18 AM), https://www.bloomberg.com/news/articles/2024-01-31/ftx-expects-to-repay-customers-in-full-bankruptcy-lawyer-says?sref=2qugYeNO [https://perma.cc/4WWV-EQHE].

Intriguingly, the FTX story is not unique.¹⁴ The company's meteoric rise and sudden descent tracks that of other crypto behemoths. Firms like BlockFi, Celsius Network, Core Scientific, Genesis Global, Three Arrows Capital, and Voyager Digital each found themselves intermediating billions in crypto assets only a few years after launch and, like FTX, imploding in the wake of a sharp market downturn. Several major crypto bankruptcies have also generated substantial allegations of executive wrongdoing, and those allegations overlap, reflecting somewhat repeating patterns of alleged customer deception and sloppy safeguarding of customer assets.¹⁵

None of this should be terribly surprising. The crypto market has, through its evolution, lacked a systematic regulatory framework to constrain excessive risk-taking, interconnection, and propensities for predation against customers.¹⁶ This has meant, for example, a lack of vetted, mandatory public disclosure about the business dealings of some of its most significant enterprises, as well as their corporate governance and risk management practices.¹⁷ Nor has regulation imposed comprehensive standards for protecting customer assets.¹⁸ It has thus failed to speak on how the market should ensure the overall safety and soundness of crypto firms-and, importantly, what procedures crypto businesses need to follow in order to legally insulate the value of customer assets against instances of theft, hacks, and firm bankruptcy.¹⁹ This relatively threadbare regulatory environment has afforded considerable space for firms to take excessive financial risks or institutionalize problematic practices (e.g., opaque governance), with predictably costly consequences. This has left bankruptcy courts to become, oddly, the frontline responders— tasked with cleaning up the fallout by imposing their jurisprudence onto an otherwise lightly governed crypto marketplace.

This Article shows that, by dint of historical happenstance, bankruptcy law has been required to partially fill an administrative void and to function in an almost quasi-regulatory capacity. Several bankruptcy courts in New York, Delaware, and New Jersey have come to simultaneously oversee what is, collectively, a sort of grand public inquest into crypto market infrastructure and operations, surveying a wide spectrum of industry-specific

^{14.} FTX's financial demise is not, in other words, akin to historically significant, but individualistic, corporate frauds like Adelphia Communications, Bernard L. Madoff Investment Securities, Enron Corporation, HealthSouth, Petters Group Worldwide, Stanford Financial Group, or WorldCom.

^{15.} See infra note 26

^{16.} See infra Part II.

^{17.} See id.

^{18.} See id.

^{19.} See id.

transactions, practices, and methods of corporate decision-making. These courts have also decided issues of first impression that will likely leave a lasting impact on the maturing crypto industry (e.g., modified terms of service).²⁰ The courts have been doing their work in advance of a mainstay framework for regulating cryptocurrency markets, driven by case imperatives to perform certain functions commonly entrusted to financial supervisors like the Securities and Exchange Commission, the Commodity Futures Trading Commission, and the Federal Reserve.²¹

In forwarding this argument, this Article moves to examine the implications of bankruptcy law and its courts being drafted into quasiregulatory service. It makes three points. First, we observe that bankruptcy has stepped into an arena where financial regulators have struggled to craft a system of rules and standards, applying its own principles and processes to the messy task of preserving and allocating economic value. In many respects, crypto represents an inherently complicated challenge for U.S. financial regulation, given the industry's extraterritorial nature, fast-moving technology, and originating anti-government spirit.²² But, even as the likes of FTX are far from the first crypto players to fail,²³ the scale of alleged wrongdoing and magnitude of damage caused by 2022's "crypto winter"²⁴ have laid bare the significance of sparse regulation and deepened the strains experienced by the New Deal administrative apparatus in policing the digital asset space.²⁵ This has left the bankruptcy system charged with, among other

25. It is true, of course, that bankruptcy courts have long overseen failures in heavily regulated industries, such as financial services (e.g., Lehman Brothers), banking (e.g., Washington Mutual), public utilities (e.g., Pacific Gas & Electric), satellite communications (e.g., Intelsat), and nuclear power production (e.g., Energy Future Holdings Corporation). Traditionally, in cases such as these, the applicable regulatory regime is well situated and functioning prior to the bankruptcy filing, and the debtor's financial collapse is generally attributable to business, not regulatory, failure (e.g., a pre-petition transaction that overextended the debtor's balance-sheet, shifts in customer preferences or macroeconomics, unachievable capital expenditure requirements to refresh and remain competitive, or merely a succession of poor business decisions with lasting financial consequences). For these businesses, Chapter 11 does not need to blaze new trails: typical exit strategies (reorganization, M&A transacting, liquidation) work just as well as they do in less-regulated industries. Crypto Chapter 11 cases are different, however. Almost invariably, each debtor's fortunes rose and fell extremely fast; it participated in an industry that remains relatively nascent and intends to achieve (but has not yet achieved) market reliability and efficiency; the regulatory landscape remains relatively sparse; and, as a result, crypto debtors have

^{20.} See infra Part III.

^{21.} Hereinafter, these agencies are referred to, respectively, as the "SEC," the "CFTC," and the "Fed."

^{22.} See, e.g., Nakamoto, infra note 54.

^{23.} MtGox, for example, a Tokyo-based cryptocurrency exchange, filed for bankruptcy protection in 2014. *In re* MtGox Co., Ltd., Case No. 14-31229-sgj15 (Bankr. N.D. Tex. 2014).

^{24.} See Joanna England, What Is a Crypto Winter and Are We Still Experiencing One? FINTECH (Jan. 20, 2023), https://fintechmagazine.com/crypto/what-is-a-crypto-winter-and-are-we-in-one [https://perma.cc/AC4R-NUL8] (" 'Crypto winter' refers to a prolonged bear market in the cryptocurrency industry, characterized by a significant decrease in the prices of cryptocurrencies and a reduction in market capitalization.").

things, calculating the economic costs of regulatory failure and, where possible, developing mechanisms to safeguard and redistribute enterprise value within otherwise under-protected crypto markets.

Second, we show that bankruptcy law offers a number of advantages when its courts are, by default, performing traditional regulatory functions. By its very design, bankruptcy involves a system of rules that advance certain core regulatory objectives. For example, Chapter 11 is demanding when it comes to disclosure, a phenomenon highlighted by the production of startling revelations across various crypto Chapter 11 proceedings (e.g., FTX, Celsius, Voyager, and BlockFi).²⁶ Chapter 11's adversary process typically divulges more as the case unfolds. And, in bankruptcies involving particularly troubling facts, the court may compel the appointment of an examiner to deliver a "tell-all" report, as it did in two crypto cases (Cred and Celsius)²⁷ and is poised to do in FTX.²⁸ This emphasis on disclosure can meaningfully promote management accountability and, in turn, help ward away bad C-Suite behavior. In the Celsius case, for instance, the 689-page examiner's report presented a damning account of the company's historical business practices.²⁹ The report presaged, and likely contributed to, the

found it extremely challenging to access financing for their bankruptcy strategy. As we argue, in this particular industry segment, bankruptcy needs to do more and work differently to help stakeholders achieve a principled and value-accretive exit. *See, e.g., In re* Voyager Digital Holdings, Inc., 649 B.R. 111, 119–20 (Bankr. S.D.N.Y. 2023) ("Let me say at the outset, and as background to my rulings, that I cannot think of another case I have had that comes before me in a setting quite like this one does . . . I am in the unenviable position of having to make a ruling about the proposed transaction in the face of hearsay accusations of potential wrongdoing, in an industry where other firms have apparently engaged in real wrongdoing, while having absolutely no evidence indicating that there is any good basis for the questions about Binance.US that have been raised.").

^{26.} See Declaration of John J. Ray III in Support of Chapter 11 Petitions and First Day Pleadings, *In re* FTX Trading LTD, Case No. 22-11068 (JTD) (Bankr. D. Del. Nov. 17, 2022) (No. 24) [hereinafter John Ray Dec.]; Final Report of Shoba Pillay, Examiner, In re Celsius Network LLC, Case No. 22-10964 (MG) (Bankr. S.D.N.Y. Jan. 31, 2023) (No. 1956) [hereinafter Celsius Examiner's Report]; Investigation Report of the Special Committee of the Board of Directors of Voyager Digital, LLC, *In re* Voyager Digital Holdings, Inc., Case No. 10943 (MEW) (Bankr. S.D.N.Y. Oct. 7, 2022) (No. 1000-1) [hereinafter Voyager Special Committee Report]; Preliminary Report Addressing Question Posed by the Official Committee of Unsecured Creditors: Why Did BlockFi Fail?, *In re* BlockFi Inc., Case No. 22-19361 (MBK) (Bankr. D. N.J. May 17, 2023) (No. 1202) [hereinafter BlockFi Committee Report].

^{27.} See Report of Robert J. Stark, Examiner, In re Cred Inc., Case No. 20-12836 (JTD) (Bankr. D. Del. Mar. 8, 2021) (No. 605); Celsius Examiner's Report, supra note 26.

^{28.} Early in the case, the United States Trustee moved for the appointment of an examiner, but the bankruptcy court denied the motion. The Third Circuit Court of Appeals reversed, finding the appointment mandatory upon request. *See In re* FTX Trading Ltd., 2024 U.S. App. LEXIS 1279 (3d Cir. Jan. 19, 2024). For discussion see, Justin Wise, *Third Circuit Orders Independent Examiner in FTX Bankruptcy*, BLOOMBERG LAW (Jan. 19, 2024, 1:34 PM), https://news.bloomberglaw.com/business-and-practice/third-circuit-orders-independent-examiner-in-ftx-bankruptcy [https://perma.cc/9MT7-NBYU].

^{29.} See Celsius Examiner's Report, supra note 26; see also Olga Kharif & Joanna Ossinger, Celsius Examiner Rips Into Crypto Lender in Final Report, BLOOMBERG LAW (Jan. 31, 2023, 6:07 AM), https://news.bloomberglaw.com/crypto/celsius-examiner-rips-into-crypto-lender-in-her-final-report [https://perma.cc/35KD-BP43].

Celsius CEO's eventual indictment and arrest, which occurred only a few months after the report's publication.³⁰

Bankruptcy disputes also deliver poignant teaching moments for government overseers and the wider public. For instance, a value allocation contest in the Celsius bankruptcy-pitting depositors in interest-bearing accounts against depositors in "wallet" accounts-revealed just how fragile customer ownership rights can be when deposited crypto-value exists in digital and legally ambiguous form.³¹ Customers came to learn that, contrary to marketing promises,³² the cryptocurrency ceased being legally "theirs" upon deposit in interest-bearing accounts. That is, customers were deemed to be merely unsecured creditors in the bankruptcy case, left to fight for scraps near the bottom of the priority ladder.³³ The bankruptcy court, in so ruling, not only resolved a critical case issue, it also delivered a hard truth to crypto customers: entrusting savings to an unregulated crypto exchange or "bank" comes with serious risks, given that these companies are not well policed for fraud and that customer savings lack conventional protective mechanisms, like federal deposit insurance.³⁴ Such lessons can be unsparing, yet also clarifying about the economic and legal vulnerabilities faced by crypto customers-who, en masse, were tempted by tantalizing marketing promises but ultimately found themselves exposed to inherently complex, opaque legal and economic risks.³⁵ By highlighting the traps, bankruptcy courts direct agency attention to acute public vulnerabilities, hopefully motivating regulators to develop the kind of customer protections that have long existed in more traditional marketplaces (e.g., securities or commodities markets).³⁶

^{30.} Sandali Handagama, *Celisus Network's Alex Mashinsky Is Arrested as SEC, CFTC, FTC Sue Bankrupt Crypto Lender*, COINDESK (July 14, 2023, 10:50 AM), https://www.coindesk.com/policy/2023/07/13/sec-sues-bankrupt-celsius-network-alex-mashinsky-over-securities-fraud [https://perma.cc/2R38-WL9F].

^{31.} See In re Celsius Network LLC, 647 B.R. 631 (Bankr. S.D.N.Y. 2023), appeal denied, 2023 WL 2648169 (S.D.N.Y. Mar. 27, 2023).

^{32.} See Celsius Examiner's Report, supra note 26, at 20 ("In its marketing materials and AMAs, Celsius and its managers told customers that the crypto assets they deposited with Celsius were 'your assets' and that the coins belonged to the customers \ldots Similarly, Mr. Mashinsky told customers that in the event of a bankruptcy they would get their coins back \ldots ").

^{33.} Celsius, 647 B.R. 631; see also Paul Kiernan, Coinbase Says Users' Crypto Assets Lack Bankruptcy Protections, WALL ST. J. (May 12, 2022, 10:46 AM), https://www.wsj.com/articles/coinbase-says-users-crypto-assets-lack-bankruptcy-protections-11652294103 [https://perma.cc/3RNS-T7DB].

^{34.} See Steven Church & Amelia Pollard, Angry Crypto Investors Are Brawling in Court After Voyager and Celsius Collapsed, BLOOMBERG (Apr. 25, 2023, 7:00 AM), https://www.bloomberg.com/ news/articles/2023-04-25/celsius-voyager-creditors-battle-bankruptcy-bureaucracy#xj4y7vzkg [https:// perma.cc/5QWT-6GNS].

^{35.} Id.

^{36.} See SEA Rule 15c3-3 and Related Interpretations, FINRA (Feb. 23, 2023), https://www.finra.org/rules-guidance/guidance/interpretations-financial-operational-rules/sea-rule-15c3 -3-and-related-interpretations [https://perma.cc/78RG-MEHH].

As a concluding observation on this point, we show how bankruptcy represents a forum where regulatory agencies can press specific policy objectives in advance of a new statutory framework and without facing the usual set of political/rulemaking constraints and ramifications. Regulators have some leeway to inject themselves into bankruptcy proceedings, promoting an agency's policy priorities.³⁷ The SEC and the federal government, for example, intervened in Voyager's Chapter 11 case to object to its proposed sale to Binance.US, the American affiliate of Binance-the world's largest crypto exchange, by volume.³⁸ The government contended that the proposed Chapter 11 sale came with serious regulatory problems. suggesting that Binance.US may not be a fully law abiding corporate citizen and that distributions to Voyager creditors (via Binance.US) might violate securities laws.³⁹ The government's arguments floundered in court,⁴⁰ but its highly public attack effectively terminated the transaction.⁴¹ This case study illustrates how agencies can, with efficiency, produce regulatory impact when the target of their action falls under the bankruptcy court's stewardship.

Nevertheless, in our third contribution, we observe that reliance on bankruptcy courts to perform regulatory functions comes with serious shortcomings. Bankruptcy courts are tribunals of limited jurisdiction, and their powers are localized to the specific debtor and its stakeholders, not the

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^{37.} See 11 U.S.C. § 1109(a) ("The Securities and Exchange Commission may raise and may appear and be heard on any issue in a case under this chapter"); Fed. R. Bankr. P. 2018 (enabling permissive case intervention as the court deems appropriate, as well as intervention as of right for states attorneys general on behalf of consumer creditors).

See Objection of the United States of America to Confirmation of Debtors' Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 6, 2023) (No. 1144); Supplemental Objection of the U.S. Securities and Exchange Commission to Final Approval of the Adequacy of the Debtors' Disclosure Statement and Confirmation of the Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 6, 2023) (No. 1141). 39. See id.

^{40.} See In re Voyager Digital Holdings, Inc., 649 B.R. 111, 1123 (Bankr. S.D.N.Y. 2023) ("This is a Court. In the end I have to make decisions based on actual, admissible evidence and, where legal issues are involved, based on cogent legal arguments. I have no actual evidence or cogent legal argument, from the SEC or from any other regulator or party, that could support a contention that the plan would require Voyager to purchase or sell any token that should be considered to be a security, or that Binance.US is engaged in any activity for which it is required to register as a broker or dealer. I therefore am compelled by the evidence and arguments before me to reject and overrule any contention that the transactions contemplated by the Plan would be illegal, and any suggestion that for regulatory reasons the Debtors would be unable to complete their proposed liquidation.").

^{41.} See Notice of Receipt of Termination Notice from BAM Trading Services Inc. D/B/A Binance.US, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Apr, 25, 2023) (No. 1345). In November 2023, the Department of Justice announced a \$4.3 billion criminal settlement with Binance. The settlement resolved potential criminal sanctions against the exchange and its former CEO, Changpeng Zhao, for various kinds of alleged wrongdoing sounding in money laundering and sanctions avoidance. The settlement also included an agreement between Binance and the CFTC, resolving civil complaints in relation to Binance and Binace.US's trading conduct. See U.S. Dep't of Justice, Binance and CEO Plead Guilty to Federal Charges in \$4B Resolution, Press Release, Nov. 21, 2023.

public welfare more generally.⁴² They are, in turn, intended to work in tandem with functioning regulatory arms of government; they are not supposed to assume their oversight responsibilities.⁴³ These courts are particularly ill-equipped to address risks arising from an interconnected and multifaceted financial market, especially in a prophylactic way.⁴⁴ Stated differently, corporate bankruptcy is not structured to expressly entertain regulatory imperatives, like stopping financial calamity before it happens or ensuring that a firm's distress does not trigger systemic contagion within the wider market.⁴⁵

Further, Chapter 11's legal and normative rules-focused on maximizing each debtor's distributable value, allocating that value among stakeholders, and where possible rehabilitating the broken business-are not friendly to outsiders, even government outsiders seeking to advance public policy aims.⁴⁶ Competition between economic and regulatory agendas can, in fact, lead to value-deteriorating outcomes, such as dooming Voyager's sale to Binance.US, contrary to bankruptcy's primary mission. Even concerning matters of disclosure, the objective is case-specific (e.g., maximizing and allocating estate value) and often strategic in nature (e.g., the debtor's desire to remain in possession of estate assets), not to obviate risk in the industry generally.⁴⁷ In some cases, the court may not favor augmented public disclosure if doing so may be prohibitively costly or where greater public disclosure threatens an orderly Chapter 11 process.⁴⁸ This may explain why examiner reports were commissioned in the Cred and Celsius cases, but not in the FTX case (that is, until compelled by the Third Circuit Court of Appeals).⁴⁹ Stated simply, even as bankruptcy is (by case necessity) doing important regulatory work, it is far from its natural functionality and is an inherently inadequate substitute for administrative agencies whose

^{42.} Rafael Ignacio Pardo, Comment, Bankruptcy Court Jurisdiction and Agency Action: Resolving the NextWave of Conflict, 76 N.Y.U. L. REV. 945 (2001).

^{43.} See, e.g., Board of Governors, FRS v. MCorp Fin., Inc., 502 U.S. 32, 40 (1991) ("MCorp's broad reading of the [Bankruptcy Code's automatic] stay provisions would require bankruptcy courts to scrutinize the validity of every administrative or enforcement action brought against a bankrupt entity. Such a reading is problematic, both because it conflicts with the broad discretion Congress has expressly granted many administrative entities and because it is inconsistent with the limited authority Congress has vested in bankruptcy courts.").

^{44.} See infra Section II.B & Part III.

^{45.} See id.

^{46.} See infra Section II.B.

^{47.} See 7 COLLIER ON BANKRUPTCY ¶ 1125.02[1] (16th ed. rev. 2023) ("Precisely what constitutes adequate information in any particular instance will develop on a case-by-case basis. Courts will take a practical approach as to what is necessary under the circumstances of each case.").

^{48.} See id. at \P 1104.03[2] ("Notwithstanding the mandatory language of section 1104(c), some courts have denied the appointment of an examiner... These courts typically find that such an appointment would constitute an unnecessary expense.").

^{49.} See supra note 28.

mandates include establishing a set of robust, lasting, and standardized rules that protect marketplaces both in peacetime and in crisis.

This Article proceeds as follows. Part I describes the cryptocurrency ecosystem and the challenges of establishing regulatory perimeters for this emerging asset class. Even though regulators have struggled to develop rules-of-the-road for the digital asset industry, this Part highlights some key risks (e.g., systemic risk, information deficits, and user vulnerability) that are commonly cited to justify the application of traditional financial regulation. Part II explains how Chapter 11 has been drafted into quasi-regulatory service to help clean up the mess enabled by crypto's sparse regulatory environment. This Part illustrates how bankruptcy court oversight has generated a slew of benefits, with the potential to promote insight, expertise, clarity, and good governance. Part III explores the fuller implications of bankruptcy serving quasi-regulatory functions. It shows that, despite all their good and hard work, bankruptcy judges are imperfect overseers for the crypto marketplace. Not only do they lack the statutory directive and powers to address market risks, their decision-making is further limited by the estatespecific focus of bankruptcy's adversary process, the case-specific nature of bankruptcy disclosures, as well as general inexperience in addressing complex, esoteric, and systemic financial risks-especially risks arising outside prevailing regulatory frameworks. Relying on bankruptcy courts for quasi-regulatory assistance, instead of technocratic rulemaking, is thus profoundly problematic, as Part IV concludes.

I. CRYPTO'S MISSING REGULATORS

Despite acquiring popular appeal and developing a sophisticated array of financial services and products, the market for cryptocurrencies has come of age largely outside of a comprehensive system of regulation.⁵⁰ There are many reasons to explain this historical gap in oversight. For one, the asset class is legally complex, with agencies, most notably the SEC and CFTC, publicly at odds over which of them has authority.⁵¹ In other words,

^{50.} Agency action has, in a number of contexts, manifested an emphasis on enforcement rather than rulemaking, seeking to apply existing regulatory paradigms to emerging trends in digital asset regulation via litigation rather than rulemaking (e.g., contending that certain digital assets are securities). For a discussion of this approach, *see* Chris Brummer, Yesha Yadav & David Zaring, *Regulation by Enforcement*, 96 S. CAL. L. REV. (forthcoming 2024) https://papers.srn.com/sol3/papers.cfm?abstract_id=4405036 [https://perma.cc/S8C4-TN4B] (discussing the legality of "regulation by enforcement" and exploring why agencies rely on this approach, alongside the trade-offs of doing so, especially in the context of using litigation to test novel/ambitious applications of law to innovation).

^{51.} For a discussion of the impasse between the CFTC and the SEC over the definition of crypto assets as securities or commodities, see Taylor Anne Moffett, *CFTC & SEC: The Wild West of Cryptocurrency Regulation*, 57 U. RICH. L. REV. 713 (2023). See also Michael Selig, *What if Regulators Wrote Rules for Crypto?*, COINDESK (Jan. 24, 2023, 12:32 PM), https://www.coindesk.com/consensus-

jurisdictional wrangling is underway over whether some or all crypto-assets ought to be legally defined as securities (the purview of the SEC) or commodities (the purview of the CFTC)—this determination being critical to situating crypto within existing bodies of securities and commodities regulation. Additionally, digital assets are far from monolithic in their design, with different types of tokens implicating different kinds of risks and entitlements: more decentralized and volatile cryptocurrencies like Bitcoin, for example, operate distinctively from so-called stablecoins, digital assets typically attached to an identifiable issuer and designed to maintain a steady one-token-to-one-dollar correspondence.⁵² Even while navigating such definitional challenges, digital assets raise intriguing considerations for policymakers looking to calibrate their supervisory toolkit, such as: how should domestic national authorities oversee risks arising across decentralized, globally dispersed blockchains; and, do existing administrative processes suffice, or might regulators benefit from crafting tailored solutions to match novel attributes of the asset class (e.g., decentralization)?⁵³

magazine/2023/01/23/sec-cftc-crypto-markets [https://perma.cc/PA78-MSJC]; Sheila Warren, U.S. SEC and CFTC Are in a Turf War over Who Gets to Regulate Crypto: Crypto Council for Innovation, CNBC (Mar. 28, 2023, 2:22 am EDT), https://www.enbc.com/video/2023/03/28/sec-cftc-in-turf-war-overregulation-crypto-council-for-innovation.html [https://perma.cc/3VCK-8T4Q]; Lydia Beyoud & Allyson Versprille, FTX's Rapid Demise Stokes US Fight over Who Will Regulate Crypto Exchanges, BLOOMBERG (Dec. 1, 2022, 11:29 AM), https://www.bloomberg.com/news/articles/2022-12-01/ftxdemise-stokes-fight-over-who-will-regulate-crypto-exchanges?sref=2qugYeNO [https://perma.cc/ W2NX-OKSR]. In addition to the SEC and the CFTC, other regulators, like the Fed, may exert authority over the crypto market where they, for example, implicate financial stability. See, e.g., Katanga Johnson, Fed's Barr Flags Concerns About Stablecoins Without US Oversight, BLOOMBERG (Sept. 8, 2023, 08:10 https://www.bloomberg.com/news/articles/2023-09-08/fed-s-barr-flags-concerns-about-stable AM), coins-without-us-oversight?sref=2qugYeNO; Kyle Campbell, The Fed Says It Can Regulate Stablecoins. So Why Doesn't It? AMER. BANKER (Sept. 21, 2023, 9:30PM), https://www.americanbanker. com/news/the-fed-says-it-can-regulate-stablecoins-so-why-doesnt-it. Congressional efforts have sought to try and create a framework for clarity in determining oversight, for example, establishing some form of joint oversight. However, as at the time of writing, these efforts remain works-in-progress. For example, see Senators Lummis' and Gillibrand's Responsible Financial Innovation Act, Lummis, Gillibrand Reintroduce Comprehensive Legislation To Create Regulatory Framework For Crypto Assets, Press Release, Jul. 12, 2023, https://www.gillibrand.senate.gov/news/press/release/lummis-gillibrandreintroduce-comprehensive-legislation-to-create-regulatory-framework-for-crypto-assets/ [https:// perma.cc/CB8F-KZXA].

^{52.} See Garth Baughman, Francesca Carapella, Jacob Gerstzen & David Mills, *The Stable in Stablecoins*, FED. RESERVE (Dec. 16, 2022), https://www.federalreserve.gov/econres/notes/feds-notes/the-stable-in-stablecoins-20221216.html [https://perma.cc/PHS2-Q6VP] (highlighting key attributes of stablecoins, notably the 1:1 token to USD correspondence). For discussion of possible use cases of stablecoins in payments, see Yesha Yadav, Jose Fernandez da Ponte & Amy Davine Kim, *Payments and the Evolution of Stablecoins and CBDCs in the Global Economy*, VAND. L. SCH. 53–64 (Apr. 21, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4425922 [https://perma.cc/BDTX-7392].

^{53.} See, e.g., Rohan Goswami & MacKenzie Sigalos, SEC Proposes Rules that Would Change Which Crypto Firms Can Custody Customer Assets, CNBC (Feb. 15, 2023, 4:16 PM), https://www.cnbc.com/2023/02/15/sec-chair-gensler-crypto-firms-need-to-register-to-custody-assets.html [https:// perma.cc/R7YR-GKZV]; Martin Young, SEC's 'Brute Force' Crypto Regulation Attempt Is 'Bad

This Part has two objectives. First, it summarizes key features of crypto markets to highlight some of its distinguishing features and risks. Second, it describes fundamental theories of financial regulation that generally explain and justify its application (e.g., to protect financial stability and enhance consumer welfare). This Part shows that crypto markets exhibit the kinds of risks that fall under usual rationales justifying the application of financial regulation. We observe, however, that the crypto market has evolved largely outside of a dedicated system of financial regulation, leaving it intrinsically vulnerable to costly externalities and failure.

A. SOME KEY FEATURES OF CRYPTO MARKET STRUCTURE

Broadly, the cryptocurrency market is made up of three major parts: (1) at its most fundamental, it originates within globally dispersed computer networks that work to produce a "distributed ledger" (or blockchain) recording the transactions submitted to and verified by each network; these automated networks often mint digital tokens/coins as a means of rewarding users that work to maintain the system's integrity;⁵⁴ (2) various types of more centralized firms like cryptocurrency exchanges and quasi-banks that intermediate access to cryptocurrency assets (e.g., coins) and offer related financial services and products;⁵⁵ and (3) a slate of digital applications aiming to offer financial products in a more decentralized manner, harnessing the verification capacity of blockchain networks. These applications derive their utility by running automated programs (colloquially, "smart" contracts), rather than relying on centralized firms like

54. See Kevin Roose, The Latecomer's Guide to Crypto, N.Y. TIMES (Mar. 18, 2022), https://www.nytimes.com/interactive/2022/03/18/technology/cryptocurrency-crypto-guide.html?action= click&module=RelatedLinks&pgtype=Article [https://perma.cc/P7DL-YD3C]; Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System, BITCOIN.ORG 2–4, https://bitcoin.org/bitcoin.pdf [https://perma.cc/HFX5-DAWH].

55. See Kristin N. Johnson, Decentralized Finance: Regulating Cryptocurrency Exchanges, 62 WM. & MARY L. REV. 1911, 1953–56 (2021); Yesha Yadav, Toward Public-Private Oversight Model for Cryptocurrency Markets, 30–35 (Vand. L. Rsch., Rsch. Paper No. 22-66, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4241062 [https://perma.cc/WRC7-RK4H].

Policy'—Paradigm, COINTELEGRAPH (Apr. 21, 2023), https://cointelegraph.com/news/sec-s-bruteforce-crypto-regulation-attempt-is-bad-policy-paradigm [https://perma.cc/L8UB-PNB8]; Reena Jashnani-Slusarz & Justin Slaughter, Paradigm Files Comment Letter in Response to Proposed Amendments to the Custody Rule, PARADIGM (May 8, 2023), https://policy.paradigm. xyz/writing/Custody-Comment-Letter [https://perma.cc/H2FN-3SUA]. On the SEC's proposal to oversee decentralized exchanges, see Jesse Hamilton, SEC Lays Its Cards on the Table with Assertion That DeFi Falls Under Securities Rules, COINDESK (Apr. 17, 2023, 4:06 PM), https://www.coindesk. com/policy/2023/04/17/sec-lays-its-cards-on-the-table-with-assertion-that-defi-falls-under-securities rules [https://perma.cc/GH3A-GZLZ]; Paul Kiernan, Old-School Rules Apply to New-School DeFi Exchanges, WALL ST. J. (Apr. 22, 2023, 10:00 AM), https://www.sij.com/articles/old-school-rulesapply-to-new-school-defi-exchanges-lec14258 [https://perma.cc/UF9A-8NYL]; Mat Di Salvo, SEC's Hester Peirce Says Gensler's Plan to Target DeFi Undermines First Amendment, DECRYPT (Apr. 14, 2023), https://decrypt.co/136812/sec-hester-peirce-gary-genser-defi [https://perma.cc/VQP3-HUYX].

exchanges or banks to provide an intermediary service.⁵⁶ A detailed discussion of each of these component parts is outside the scope of this Article. However, the summary below outlines some of their defining characteristics (and risks).

1. The Building Blocks: Chains, Coins, and Ledgers

The origin story of modern-day cryptocurrencies emerges from the Bitcoin white paper, written by Satoshi Nakamoto, that sets out a vision for an entirely digital payments network capable of operating globally on a person-to-person basis.⁵⁷ Its radicalism lies in envisioning the creation of a payments system that does not look to centralized intermediaries like banks to validate flows of money, nor does it presuppose the power of the state to enforce bargains or maintain the integrity of the system. Instead, it conceptualizes an infrastructure for making payments that depends on a network of computers, running a common protocol, to verify and record transactions. In place of a bank checking key details (e.g., whether the sender has enough money in his account) or regulators monitoring transactions, these tasks are approximated by the application of computerized code. By running the Bitcoin protocol, participating networks of computers ("nodes") apply verification rules that examine incoming transactions to check whether they conform to the protocol's standards of accuracy and integrity. Once nodes agree, by consensus, that a transaction is valid, it can be accepted, processed, and written into the protocol's "ledger." Transactions are batched into blocks and presented for validation, a practice that has given rise to the nomenclature of the "blockchain." Unlike a bank payment, which remains confidential between the parties and the bank, the ledger is public and verifiable. This transparency is supposed to provide a mechanism whereby external scrutiny constitutes a means of interrogating whether the system is running in a safe and trusted way (e.g., that the same coins are not being sent twice or double spent).⁵⁸ Once accepted and validated, transactions are generally irreversible. This aspiration for immutability provides a proxy for certainty and reliability within the system, where it is not subject to idiosyncratic changes by one or another player.59

^{56.} Kevin Roose, *What is DeFi?*, N.Y. TIMES (Mar. 18, 2022), https://www.nytimes.com/interactive/2022/03/18/technology/what-is-defi-cryptocurrency.html [https:// perma.cc/2W5B-M78K]; E. Napoletano, *What is DeFi? Understanding Decentralized Finance*, FORBES (Apr. 28, 2023, 2:14 PM), https://www.forbes.com/advisor/investing/cryptocurrency/defi-decentralized-finance [https://perma.cc/46T8-PGYB].

^{57.} See Roose, supra note 54; see also Nakamoto, supra note 54, at 1.

^{58.} Nakamoto, *supra* note 54, at 2–3.

^{59.} There is a risk that a disruptive actor might try to usurp majority network power to take control of which transactions are validated, to cause potential double-spending, or to roll back otherwise approved transactions. The more transactions are approved by the ledger, the harder it becomes to unwind earlier

The "coins" underlying the Bitcoin blockchain speak to digital rewards given to those that work to safeguard the network. Within Bitcoin, the dispersed network of nodes is vulnerable to the risk that a node (or a group) turns malicious—seeking to disrupt its function or to use it for its own benefit (e.g., by only proposing transactions that are sent to accounts connected to operators of a malicious node).⁶⁰ To secure the network's integrity, the blockchain looks to a system of "protectors" tasked with looking into the pool of transactions entering the system and picking those for approval that should meet the protocol's standards.⁶¹

The network creates incentives for participants to become "protectors" by awarding "coins" to those that succeed.⁶² In the Bitcoin network, "protectors" can also collect any discretionary fees that users might attach to a transaction.⁶³ Bitcoin looks to a "proof of work" validation mechanism, where network protectors—or "miners"— competitively deploy extensive computing power to solve a mathematical challenge. A winning miner then builds a block of transactions for the network to approve and receives new Bitcoin (and fees) for their effort.⁶⁴ The "proof of stake" validation mechanism is also common across major blockchains (e.g., Ethereum). Broadly, in a proof-of-stake blockchain, those that already have a number of coins in the system can win the chance to build the block and collect more coins (and fees) as rewards.⁶⁵

While this description is highly simplified, it serves to highlight some legal puzzles confronting regulators. Major blockchain networks, like Bitcoin or Ethereum, are global and open to anyone, anywhere, willing to download and run the relevant protocol on their computer.⁶⁶ Additionally, users do not give their real-world names in order to join, as they would when using a bank. Instead, users are known and accounted for on a blockchain by their "public keys," a form of pseudonymous public handle, that links to a private password known to the user.⁶⁷ If a user loses her password, she

trades because it takes high-capacity computing to unwind deeply entrenched trades. *See* Andrey Didovskiy, *Finality in Bitcoin: Always Almost but Never Just Quite*, MEDIUM (Feb. 13, 2021), https://medium.com/coinmonks/finality-in-bitcoin-f82890bf39b7 [https://perma.cc/ZHD7-NJLB] (noting that finality on the Bitcoin blockchain is probabilistic).

^{60.} Nakamoto, supra note 54, at 4.

^{61.} Id.

^{62.} *Id.*

^{63.} *Id*.

^{64.} What Is "Proof of Work" or "Proof of Stake"?, COINBASE, https://www.coinbase. com/learn/crypto-basics/what-is-proof-of-work-or-proof-of-stake [https://perma.cc/Y3QP-YYCZ].

^{65.} *Id.*; *What Is Proof of Stake?*, MCKINSEY & CO. (Jan. 3, 2023), https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-proof-of-stake [https://perma.cc/RS2F-3S5Z].

^{66.} Nakamoto, *supra* note 54, at 1–2.

^{67.} Id.

cannot access her account or make and receive payments, meaning that value on the network is lost.

This globally distributed system, designed to operate outside of traditional private and public intermediation, presents unusual regulatory conundrums. How should U.S. regulators construct a system of rules capable of applying to an automated cross-border network that aims to avoid centralized governance and control altogether? What tools can regulation deploy to overcome information gaps, address potential misconduct, or costly fragilities existing within a blockchain's operation?⁶⁸ And, what legal classification ought to apply to coins minted on blockchains: do they constitute securities or commodities under conventional stipulations of federal law, extending existing regimes to crypto assets; or, do they fall under an entirely different, more tailored legal category?

As such, while market regulation is usually equipped to accommodate innovation, crypto assets have come to pose a significant challenge.⁶⁹ For example, the definition of innovative kinds of security-as covered by the concept of an "investment contract" in the Securities Act of 1933-was elaborated by the 1946 case of SEC vs. Howey. Per Howey, a security is a claim that represents: (1) an investment of money; (2) in a common enterprise; (3) for profit; and (4) through the effort of others, where those that promote an investment exercise managerial control over any scheme.⁷⁰ A discussion of the jurisprudence born out of *Howey* is outside the scope of this Article. But concepts like "common enterprise" or "through the efforts of others" signal the difficulties confronting policymakers when seeking to apply conventional precepts to cryptocurrencies and their blockchains. Emphasis on miners/stakers extracting higher returns relative to other network participants, for example, sits uneasily with long-rooted notions of a horizontal common enterprise. The task of identifying promoters with managerial powers strains in the context of public blockchains that seek to

^{68.} For a discussion of potential concerns regarding block-builders on Ethereum extracting private gains in the form of maximum extractable value ("MEV") to prioritize payments promising higher fees or their own payments, see Mikolaj Barczentewicz, Alex Sarch & Natasha Vasan, *Blockchain Transaction Ordering as Market Manipulation*, 20 OHIO ST. TECH. L.J. 1 (2023). On vulnerabilities attaching to the operational workings of blockchains, see Nic Carter & Linda Jeng, *DeFi Protocol Risks: The Paradox of DeFi*, at 13–17 (June 14, 2021) (unpublished manuscript), https://papers.csm.com/sol3/papers.cfm?abstract_id=3866699 [https://perma.cc/LK5S-FXJB]; Jamie Redman, *Privacy Coin Verge Suffers Third 51% Attack, Analysis Shows 200 Days of XVG Transactions Erased*, BITCOIN.COM (Feb. 17, 2021), https://news.bitcoin.com/privacy-coin-verge-third-51-attack-200-days-xvg-transactions-erased [https://perma.cc/XU6V-YHUN].

^{69.} See, e.g., Yuliya Guseva, When the Means Undermine the End: the Leviathan of Securities Law and Enforcement in Digital-Asset Markets, 5 STAN. J. BLOCKCHAIN L. & POL'Y L., 46–57 (2022) (highlighting the challenges facing the SEC in developing a regulatory approach to digital assets and the distortions arising out of stretching traditional approaches to crypto).

^{70.} See SEC v. W.J. Howey Co., 328 U.S. 293 (1946).

structure themselves in ways that look to be deliberately diffuse from a governance standpoint and where self-help constitutes a basic rule-of-thumb.⁷¹ With these thorny definitional questions key to establishing how regulators legally assert authority in the first place, it is not surprising that debates on the issue have become contentious as between regulators themselves, each seeking to jostle for their agency to have primary jurisdiction.⁷² This administrative squabbling has arguably played an important part in delaying the production of a comprehensive system of rulemaking for digital asset markets, leaving them to evolve largely outside of everyday administrative oversight.

2. Centralized Finance in Crypto Markets

As much as decentralization is popularly perceived as the distinguishing feature of cryptocurrencies, the everyday experience of digital asset markets for many is often intermediated through "centralized finance." Engaging with sophisticated blockchains, setting up public keys, protecting their private passwords, or learning technical specifics of the computing involved can act as a barrier to entry for the average person looking to enter the crypto market. Finding a party through which to buy and sell crypto on a blockchain might similarly be impractical for those unfamiliar or uncomfortable with searching online for brokers.

So-called "centralized finance" firms have emerged as essential conduits for mitigating these difficulties and increasing crypto's appeal for the mainstream. Exchanges, in particular, have established themselves as organizing architecture for the crypto markets, bringing together volumes of

^{71.} See, e.g., Brummer, Yadav & Zaring, supra note 50; see also Matthew G. Lindenbaum, Robert L. Lindholm, Richard B. Levin & Daniel Curran, When James Met Gary, Howey, and Hinman, NELSON MULLINS (Apr. 4, 2023), https://www.nelsonmullins.com/idea_exchange/blogs/fintech-nostradamus/fnin-the-news/when-james-met-gary-howey-and-hinman [https://perma.cc/R7S2-U7VR]; William Hinman, Digital Asset Transactions: When Howey Met Gary (Plastic), U.S. SEC. & EXCH. COMM'N (June 14, 2018), https://www.sec.gov/news/speech/speech-hinman-061418 [https://perma.cc/67XD-XAHN].

^{72.} For example, in separate statements and actions, both the SEC and the CFTC have asserted that the same asset might be a security and the commodity at the same time. See Press Release, CFTC, CFTC Charges Binance and Its Founder, Changpeng Zhao, with Willful Evasion of Federal Law and Operating an Illegal Digital Asset Derivatives Exchange (Mar. 27. 2023), https://www.cftc.gov/PressRoom/PressReleases/8680-23 [https://perma.cc/UV9M-UX7T] (suggesting BUSD as a commodity); Vicky Ge Huang, Patricia Kowsmann & Dave Michaels, Crypto Firm Paxos Faces SEC Lawsuit over Binance USD Token, WALL ST. J. (Feb. 12, 2023, 6:26 PM), https://www.wsj.com/articles/crypto-firm-paxos-faces-sec-lawsuit-over-binance-usd-token-8031e7a7 [https://perma.cc/PGE3-CZ46] (noting the SEC asserting that Paxos's BUSD might be a security); Angela Walch, Deconstructing "Decentralization": Exploring the Core Claim of Crypto Systems, in CRYPTOASSETS: LEGAL, REGULATORY, AND MONETARY PERSPECTIVES 39, 47-51 (Chris Brummer ed.) (2019) (critiquing the notion of decentralization in cryptocurrency markets). For discussions in divergences of approach between the SEC and the CFTC in the context of crypto regulation, see generally Yuliya Guseva & Irena Hutton, Regulatory Fragmentation: Investor Reaction to SEC and CFTC Enforcement in Crypto Markets, 64 B.C. L. REV. 1 (2023).

institutional and retail users, developing a variety of financial products, and helping to popularize the asset class for everyday people.⁷³ By connecting to users through smartphone apps, advertising on prime time television slots (e.g., the Superbowl), and using top-flight celebrity endorsements, crypto exchanges like Coinbase, Binance, Kraken, and infamously, FTX have established a prominent position both within crypto as well as financial markets more broadly.⁷⁴

Exchanges deploy established market structure tools to connect cryptocurrency buyers and sellers. By creating an organized marketplace, users no longer have to worry about seeking out a counterparty privately within an ecosystem of pseudonymous users who could be located anywhere in the world. The need for self-help is also reduced. Centralized firms provide a known point of contact, capable of correcting problems (e.g., hacked accounts), as well as offering users compensation and recourse if they suffer damage.⁷⁵ Unlike public blockchains that demand that their users be capable of looking after their own interests or dealing with the consequences (e.g., irreversible transactions), exchanges offer services to facilitate uptake of cryptocurrency trading (e.g., by offering loans for trading, custody services, or educational resources). By reducing the transaction costs and building avenues for accessible participation, exchanges have introduced everyday users to cryptocurrency markets. Tellingly, leading exchanges were drawing in eye-catching trading volumes during most of 2021-the cryptocurrency market's boom year. Binance, for example, intermediated around \$7.7 trillion in trading over 2021, reportedly generating \$20 billion in revenue.⁷⁶ FTX, founded in 2019, saw its valuation grow over 1000% in the course of 2021 to around \$1.1 billion, soaring to \$32 billion by 2022before collapsing into insolvency in November 2022 and liqudidation in January 2024.77 Even as trading volumes fell sharply with the onset of

^{73.} Yadav, *supra* note 55, at 30–40.

^{74.} Coinbase, for example, is a publicly traded company in the United States. *See* Coinbase Global, Inc., Registration Statement (Form S-1) (Feb. 25, 2021), https://d18rn0p25nwr6d.cloudfront. net/CIK-0001679788/699359de-d974-4ad9-b7f6-5031f2f432d3.pdf [https://perma.cc/H4GS-WZD3]. Cryptocurrency exchanges have also partnered with traditional financial institutions. Before its collapse, for example, FTX sought an equity stake in a national securities exchange, IEX. *See* Michael Bellusci, *FTX Takes Stake in Stock Exchange IEX To Strengthen Crypto Markets*, COINDESK (May 11, 2023, 3:11 PM), https://www.coindesk.com/business/2022/04/05/ftx-takes-stake-in-stock-exchange-iex-to-strengthen-crypto-markets [https://perma.cc/CR25-5V3R].

^{75.} See Ben Bartenstein, Binance Builds Up \$1 Billion Insurance Fund Amid Crypto Hacks, BLOOMBERG (Jan. 31, 2022, 5:58 AM), https://www.bloomberg.com/news/articles/2022-01-31/binance-builds-up-1-billion-insurance-fund-amid-crypto-hacks#xj4y7vzkg [https://perma.cc/FHP7-5B6G].

^{76.} David Curry, *Binance Revenue and Usage Statistics (2023)*, BUS. OF APPS (Jan. 9, 2023), https://www.businessofapps.com/data/binance-statistics [https://perma.cc/8SMS-5PRT].

^{77.} Emily Flitter & David Yaffe-Bellany, *FTX Founder Gamed Markets, Crypto Rivals Say*, N.Y. TIMES (Jan. 18, 2023), https://www.nytimes.com/2023/01/18/business/ftx-sbf-crypto-markets.html [https://perma.cc/VHE4-FW3F]; Ryan Browne, *Cryptocurrency Exchange FTX Hits \$32 Billion*

"crypto winter" and FTX's failure, crypto exchanges remained financially significant for the digital asset ecosystem. In its first quarter earnings report for 2023, Coinbase reported revenues of \$773 million, up 23% from the final quarter of the previous year.⁷⁸ In April 2023, Binance saw sharply reduced activity, losing almost 50% in trading volume, while still recording approximately \$287 billion in trading activity for the month.⁷⁹

In addition to exchanges, centralized finance includes firms performing a variety of financial services (e.g., lenders, hedge funds, broker-dealers, and specialist traders). Cryptocurrency deposit/lending and investment firms, in particular, have assumed considerable importance. Crypto quasi-banks, for instance, took in vast sums of customer capital/crypto—offering lucrative interest rates on these deposits—and for a shot time profited handsomely by relending those deposits. Predictably, as the crypto markets suffered a sharp downturn in 2022, these entities were hit especially hard with loan defaults and collapsing collateral prices, pushing several of the more prominent quasi-banks into bankruptcy.⁸⁰

Take Celsius. Founded in 2017, Celsius billed itself as a way for everyday people to "unbank" themselves—meaning, exiting the traditional banking system and putting money into a vehicle that promised depositors tantalizing returns. At its height, Celsius marketed investments that would pay as much as 18% interest on customers' crypto deposits. Given such dazzling promises, the firm ended up controlling assets of around \$20 billion, reaching 1 million or so customers.⁸¹ Its business model relied on putting

Valuation Despite Bear Market Fears, CNBC (Jan. 31, 2022, 7:44 PM), https:// www.cnbc.com/2022/01/31/crypto-exchange-ftx-valued-at-32-billion-amid-bitcoin-price-plunge.html [https://perma.cc/FE78-SMTH]; Kate Rooney, FTX in Talks to Raise Up to \$1 Billion at Valuation of About \$32 Billion, In-Line with Prior Round, CNBC (Sept. 21, 2022, 7:09 PM), https://www.cnbc.com/2022/09/21/ftx-in-talks-to-raise-1-billion-at-valuation-of-about-32-billion.html [https://perma.cc/8V8Z-EEKN]. On FTX's liquidation, see Church & Randles, supra note 13.

^{78.} Helene Braun, Coinbase Jumps 17% Post-Earnings; Analysts Praise Results But Worry About Regulatory Uncertainty, COINDESK (May 9, 2023, 12:13 AM), https://www.coindesk. com/business/2023/05/05/coinbase-jumps-16-post-earnings-analysts-praise-results-but-worry-aboutregulatory-uncertainty [https://perma.cc/P4MH-ZT6L]. But see Lyllah Ledesma, Crypto Exchange Binance Trading Volume Fell Almost 50% in April, COINDESK (May 10, 2023, 11:18 AM), https://www.coindesk.com/markets/2023/05/10/crypto-exchange-binance-trading-volume-fell-almost-50-in-april [https://perma.cc/89PH-D825] (reporting that Binance trading volumes collapsed on account of distressed crypto markets as well as regulatory uncertainty).

^{79.} Id.

^{80.} Dan Milmo, *Crypto Lender Genesis Files for Chapter 11 Bankruptcy in US*, GUARDIAN (Jan. 20, 2023, 7:24 AM), https://www.theguardian.com/business/2023/jan/20/crypto-lender-genesis-files-chapter-11-bankruptcy [https://perma.cc/2H28-VJFR].

^{81.} David Yaffe-Bellany, Celsius Network Plots a Comeback After a Crypto Crash, N.Y. TIMES (Sept. 13, 2022), https://www.nytimes.com/2022/09/13/technology/celsius-network-crypto.html [https://perma.cc/5JVF-DPTA]; see also Elizabeth Napolitano, The Fall of Celsius Network: A Timeline of the Crypto Lender's Descent into Insolvency, COINDESK (May 11, 2023, 1:22 PM), https://www.coindesk.com/markets/2022/07/15/the-fall-of-celsius-network-a-timeline-of-the-crypto-lenders-

customer assets into high-yield, high-risk investments. The value of these investments eventually plummeted_with the onset of "crypto winter" in May 2022. Owing approximately \$4.7 billion to its customers and unable to make good, Celsius filed for Chapter 11 protection.⁸²

Genesis Global, alongside two of its lending subsidiaries, also found itself in Chapter 11 in January 2023. Genesis, too, functioned like a quasibank; it took in customer deposits, offering high interest rates, and redeployed those deposits as loans extended to other industry players, like hedge funds.⁸³ With a loan book totaling around \$12 billion in 2021, Genesis found itself in a vulnerable position with the onset of "crypto winter": first, it lent \$2.4 billion (partially collateralized) to the defunct crypto hedge fund, Three Arrows Capital, that collapsed in Spring 2022; and, second, it lent hundreds of millions of dollars to FTX's affiliated hedge fund, Alameda Research, which imploded a few months later.⁸⁴ The mounting losses, alongside larger struggles in the crypto market, contributed to Genesis entering into Chapter 11.⁸⁵

Centralized firms have come to exercise enormous economic influence within the cryptocurrency marketplace.⁸⁶ As exemplified by the likes of FTX, Celsius, and Genesis, centralized firms routinely hold deep pools of crypto capital and convene a crowded and diverse range of stakeholders within their institution.⁸⁷ This capacity to build scale and complexity within

84. *Id.*; Caitlin Ostroff, Alexander Saeedy & Vicky Ge Huang, *Crypto Lender Genesis Considers Bankruptcy, Lays Off 30% of Staff*, WALL ST. J. (Jan. 5, 2023, 3:55 PM), https://www.wsj.com/articles/crypto-lender-genesis-lays-off-30-of-staff-11672939434?mod=article_inline [https:// perma.cc/4GJD-FK5E]; Serena Ng, Caitlin Ostroff & Vicky Ge Huang, *Crypto Hedge Fund Three Arrows Ordered by Court to Liquidate*, WALL ST. J. (June 29, 2022, 9:14 PM), https://www.wsj.com/articles/crypto-fund-three-arrows-ordered-to-liquidate-by-court-11656506404?mod=article_inline [https://perma.cc/FZ3L-N3UA].

85. As discussed *infra* Sections II.A and II.C.2, another major crypto lender and broker, Voyager Digital, ended up in Chapter 11 bankruptcy, triggered by an unpaid loan to Three Arrows Capital. See also Danny Nelson & David Z. Morris, Behind Voyager's Fall: Crypto Broker Acted Like a Bank, Went Bankrupt, COINDESK (May 11, 2023, 1:22 PM), https://www.coindesk.com/layer2/2022/07/12/behind-voyagers-fall-crypto-broker-acted-like-a-bank-went-bankrupt [https://perma.cc/ZKB3-8CP2].

86. Johnson, supra note 55, at 1953 (detailing the stature and power of crypto exchanges).

87. Yadav, supra note 55, at 3–6; Andjela Radmilac, Celsius Bankruptcy Filing Shows Its Biggest Creditor Has Ties to Alameda Research, CRYPTOSLATE (July 15, 2022, 2:57 PM), https:// cryptoslate.com/celsius-bankruptcy-filing-shows-its-biggest-creditor-has-ties-to-alameda-research [https://perma.cc/CA6F-SKLE]; Joshua Oliver & Sujeet Indap, FTX Businesses Owe More than \$3bn to Largest Creditors, FIN. TIMES (Nov. 20, 2022), https://www.ft.com/content/5d826ca9-389e-41ec-a38bda43211da974 [https://perma.cc/D3JT-234W].

descent-into-insolvency [https://perma.cc/BT3R-5LEE] (detailing a chronology of Celsius's collapse and various attempts to avoid bankruptcy).

^{82.} Yaffe-Bellany, supra note 81.

^{83.} Vicky Ge Huang, Caitlin Ostroff & Akiko Matsuda, *Crypto Lender Genesis Files for Bankruptcy, Ensnared by FTX Collapse*, WALL ST. J. (Jan. 20, 2023, 4:45 PM), https://www.wsj.com/articles/crypto-lender-genesis-files-for-bankruptcy-ensnared-by-ftx-collapse-11674191903 [https://perma.cc/43R5-7LGS].

lace is hardly accidental A

a purportedly decentralized marketplace is hardly accidental. As noted above, centralized firms often offer a range of services and conveniences that bypass many of the novel and technically quirky facets of crypto market structure.⁸⁸

The far-reaching pull of centralized platforms within crypto has given rise to sources of vulnerability, creating risk for everyday users and market integrity. For example, platforms routinely require customers to transmit the password to their crypto "wallets" to the venue.⁸⁹ Practically speaking, by taking custody of user passwords (or "keys"), the venue is able to move the user's crypto into accounts (i.e., the "wallets") that it (the platform) controls, meaning that assets can be pooled and placed by the venue into various onward investments. With the platform holding the customer's passwords, users confront the risk that they lose control of—and, indeed, potentially even legal title to—their own assets.⁹⁰ Because crypto's foundational design assumes that those that hold the password to an account constitute its owners, a platform's custodianship can leave customers suddenly bereft should the platform fail or end up losing the passwords for whatever reason (e.g., a theft or fraud).⁹¹

From a broader structural standpoint, the ability of centralized firms to pool and deploy capital has resulted in the creation of fragile interconnections between various types of market participants. Described above, exchanges and firms like Celsius and Genesis have emerged as prolific investors, putting customer capital into various crypto ventures. Such investments have taken the form of loans—where funds have made their way into crypto-lending arrangements promising (sometimes) double-digit interest rates (e.g., Celsius). BlockFi, for example, found itself in Chapter 11 after making bad loans to failed hedge funds, Three Arrows and Alameda.⁹²

^{88.} Yadav, supra note 55, at 30-40; Yesha Yadav, Professor, Vand. L. Sch., Crypto Crash: Why Financial System Safeguards are Needed for Digital Assets (Feb. 14, 2023), https://www.banking.senate.gov/download/yadav-testimony-2-14-23 [https://perma.cc/MUY3-NQJ6].

^{89.} Adam Levitin, *What Happens if a Cryptocurrency Exchange Files for Bankruptcy*?, CREDIT SLIPS (Feb. 2, 2022, 11:06 PM), https://www.creditslips.org/creditslips/2022/02/what-happens-if-a-cryptocurrency-exchange-files-for-bankruptcy.html [https://perma.cc/Y6GY-ML54].

^{90.} See, e.g., Dietrich Knauth, U.S. Judge Says Celsius Network Owns Most Customer Crypto Deposits, REUTERS (Jan. 5, 2023, 12:50 PM), https://www.reuters.com/business/finance/us-judge-says-celsius-network-owns-most-customer-crypto-deposits-2023-01-05 [https://perma.cc/QDM3-D6M4].

^{91.} See, e.g., Doug Alexander, Quadriga Downfall Stemmed from Founder's Fraud, Regulators Find, BLOOMBERG (June 11, 2020, 1:58 PM), https://www.bloomberg.com/news/articles/2020-06-11/quadriga-downfall-stemmed-from-founder-s-fraud-regulators-find#xj4y7vzkg [https://perma.cc/ 6BBE-UFFL]; Adam J. Levitin, Not Your Keys, Not Your Coins: Unpriced Credit Risk in Cryptocurrency, 101 TEX. L. REV. 877, 882–83, 887–88 (2023) [hereinafter Not Your Keys].

^{92.} See, e.g., Turner Wright, BlockFi CEO Ignored Risks from FTX and Alameda Exposure, Contributing to Collapse: Court Filing; COINTELEGRAPH, (Jul. 14, 2023), https://cointelegraph. com/news/blockfi-ceo-ignored-risks-ftx-alameda-exposure-contributing-collapse [https://perma.cc/ D7B3-6FRB]; Jonathan Randles, BlockFi Fights FTX, Three Arrows Over Potential Repayments,

But, they can also comprise equity investments. That is, platforms put capital into the riskiest slice of the corporate balance sheet in a bid to secure potentially unlimited upside should the venture succeed. Exchanges, for example, have emerged as active investors in start-ups. FTX, notably, collapsed holding an eclectic balance sheet comprising crypto as well as more mainstream equity investments, reportedly worth around five billion dollars at the time of its failure.⁹³ Seen as a whole, centralized finance firms have shown themselves to be economic lynchpins of the crypto ecosystem, creating close financial linkages between themselves, their customers, as well as any number of stakeholders through often opaque, complex investments. Such relationships have resulted in regulators confronting a broad tangle of interconnected exposures, where risks from one entity can be transmitted to other firms, and ultimately to everyday customers, resulting in potentially heavy economic fallout whose permutations are not understood *ex ante* and cannot be easily remedied *ex post*.

B. RATIONALES FOR REGULATION IN CRYPTO AND FINANCE

Though crypto markets have evolved mostly outside of the regulatory perimeter, they showcase a number of features that have traditionally proven persuasive in anchoring oversight for financial markets: (1) vulnerability to systemic risks; (2) information asymmetries; and (3) customer and investor protection. While a full discussion examining theoretical grounds justifying financial regulation is outside the scope of this Article, the observations below demonstrate that the relative absence of oversight in crypto markets represents a costly gap out-of-step with established paradigms in financial market design.

1. Mitigating Systemic Risks

Traditional financial regulation is often justified by reference to the importance of reducing "systemic" risk.⁹⁴ The task of defining systemic risk, in practice, has proven to be notoriously slippery.⁹⁵ Particularly in the

BLOOMBERG (Aug. 22, 2023, 4:15 CDT), https://www.bloomberg.com/news/articles/2023-08-22/blockfi-fights-ftx-three-arrows-over-potential-repayments [https://perma.cc/7ZP7-C9TY].

^{93.} Kadhim Shubber & Bryce Elder, *Revealed: The Alameda Venture Capital Portfolio*, FIN. TIMES (Dec. 6, 2022), https://www.ft.com/content/aaa4a42c-efcc-4c60-9dc6-ba6cccb599e6 [https://perma.cc/2CF7-UB2G].

^{94.} MARKUS BRUNNERMEIER, ANDREW CROCKET, CHARLES GOODHART, AVINASH D. PERSAUD & HYUN SHIN, THE FUNDAMENTAL PRINCIPLES OF FINANCIAL REGULATION, 1–11 (2009).

^{95.} See, e.g., Steven L. Schwarcz, Systemic Risk, 97 GEO. L.J. 193, 196–98 (2008) (noting the confusion and divergences in views surrounding the meaning of systemic risk); Hal S. Scott, Interconnectedness and Contagion, Comm. on Cap. Mkts. Regul. 2–5, (Nov. 20, 2012), https://www.aei.org/wp-content/uploads/2013/01/-interconnectedness-and-contagion-by-hal-scott_153927406281.pdf [https://perma.cc/MH65-GS8B] (noting the role of interconnectedness in the definition of systemic risks); MORGAN RICKS, THE MONEY PROBLEM: RETHINKING FINANCIAL

shadow of the 2008 financial crisis, the capacious intervention of the federal government to backstop the safety of financial markets pointed to a concept whose parameters might only become clear *ex post*, when failure illuminates sources of previously unknown but intolerably high risks within the marketplace. Even as banking regulators invoked an emergency "systemic risk" exception to fully protect deposits at two fairly large but relatively niche banks in March 2023 (Silicon Valley Bank and Signature Bank), the ensuing debate surrounding the need and propriety of such interventions has only served to underscore the tricky boundaries of conceptualizing systemic risk and what regulators ought to do about controlling it.⁹⁶

Notwithstanding these definitional difficulties, containing systemic fallout has long been a critical objective of financial regulation. Broadly seen, it references two core scenarios. The first scenario is one in which a firm's behavior leads it to take risks that result in it creating dangers that can spread far beyond its own four walls. In other words, a risky, failing firm lacks the resources to pay for its own behavior, forcing others to bear the losses, risking collapse themselves. The second scenario is where a shock to the market (e.g., a pandemic) causes similarly situated firms to face potential distress, resulting in crisis impacting multiple firms simultaneously.⁹⁷ Simplifying things, certain kinds of firms have traditionally been viewed as being especially susceptible to failure, with the potential to trigger a larger crisis. Specifically, firms vulnerable to sudden runs-for example, they owe money short-term and may have invested it in longer-term ventures-can face catastrophe if creditors seek to take out their money all at once. This can force a firm to sell its longer-term investments at distressed prices, plunging its balance sheet into the red, as assets end up fetching less than the money it owes. Conventionally, banks represent the quintessential purveyors of such run-risk. Their depositors constitute short-term (on-demand) creditors, while their assets typically take the form of longer-term loans. But, exemplified by

REGULATION, 52-77 (2016) (highlighting short-term run-risks within the unregulated money market sector as a key indicator of systemic risks, justifying financial regulation).

^{96.} See, e.g., Lev Menand & Morgan Ricks, Scrap the Bank Deposit Insurance Limit, WASH. POST (Mar. 15, 2023, 7:15 AM), https://www.washingtonpost.com/opinions/2023/03/15/silicon-valley-bankdeposit-bailout/ [https://perma.cc/UN6B-E3DP]; Peter Conti-Brown, This Bank Proposal Will Damage Our Economy and Make Voters Even More Resentful, N.Y. TIMES (Apr. 5, 2023), https:// www.nytimes.com/2023/04/05/opinion/banking-reforms-deposit-insurance-guarantee.html [https:// perma.cc/8DH8-SCS5]; Roger Lowenstein, The Silicon Valley Bank Rescue Just Changed Capitalism, N.Y. TIMES (Mar. 15, 2023), https://www.nytimes.com/2023/03/15/opinion/silicon-valley-bank-rescueglass-steagall-act.html [https://perma.cc/S8RC-WEXM]. On the scope of the rescue, see Press Release, Janet L. Yellen, Jerome H. Powell & Martin J. Gruenberg, Joint Statement by Treasury, Federal Reserve, and FDIC (Mar. 12, 2023), https://www.federalreserve.gov/newsevents/pressreleases/ monetary20230312b.htm [https://perma.cc/X3ZS-QHHQ].

^{97.} See e.g., European Central Bank, *The Concept of Systemic Risk*, Financial Stability Review (Dec. 2009), 134–35, https://www.ecb.europa.eu/pub/pdf/fsr/art/ecb.fsrart200912_02.en.pdf [https://perma.cc/P8XC-FKV9].

the wide-ranging rescue of institutions like money market mutual funds in 2008, other types of firms and markets can become vulnerable to sudden crises, setting-off the possible specter of systemic collapse.⁹⁸

Regulation normally wields a range of tools to prevent such crises from occurring, as well as to respond to them when they do. Ex ante levers can include, for example, mandatory requirements on vulnerable firms to maintain buffers of high-quality assets that make a firm safer and less likely to end up without money.⁹⁹ Firms might be subject to regular "stress tests," designed to interrogate how well they might withstand a sudden shock.¹⁰⁰ Federal insurance might prevent customers from panicking and rushing for the exits, where the state stands behind the promises made by a financial firm. U.S. bank accounts, notably, are protected by insurance that promises to cover up to \$250,000 worth of deposits.¹⁰¹ Expert monitoring by regulators can help spot and punish the kinds of risky behaviors that might lead to a crisis and loss of customer confidence.¹⁰² In turn, ex post tools can also mitigate harm as and when they arise. Regulators might step in with emergency loans. The Federal Reserve, for instance, offers banks a "lender of last resort" facility, providing bridge lending during difficult times.¹⁰³ In extreme cases, liquidity support can take the form of federal facilities set up with the specific purpose of prioritizing systemic stability, even if such rescues protect firms that otherwise deserve to fail.¹⁰⁴ Or, if there is no prospect of a rescue, a specialist insolvency regime can step in to wind down a failing institution before its collapse can contaminate the rest of the market.

^{98.} See e.g., Schwarcz, supra note 95; RICKS, supra note 95.

^{99.} See, e.g., The Capital Buffers in Basel III – Executive Summary, BANK FOR INT'L SETTLEMENTS (Nov. 28, 2019), https://www.bis.org/fsi/fsisummaries/b3_capital.htm [https://perma.cc/X3ZS-QHHQ]; José Abad & Antonio García Pascual, Usability of Bank Capital Buffers: The Role of Market Expectations (Int'l Monetary Fund Working Paper No. 2022/021, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4065443 [https://perma.cc/3AGZ-M88Y].

^{100.} For discussion see, *Dodd-Frank Act Stress Test Publications*, FED. RSRV. (Feb. 22, 2023), https://www.federalreserve.gov/publications/2023-Stress-Test-Scenarios.htm [https://perma.cc/4FTA-XSZD]; JILL CETINA, BERT LOUDIS & CHARLES TAYLOR, CAPITAL BUFFERS AND THE FUTURE OF BANK STRESS TESTS, OFF. FIN. RSCH. (2017), https://www.financialresearch.gov/briefs/files/OFRbr_2017_02_Capital-Buffers.pdf [https://perma.cc/K64V-QMDZ].

^{101.} Deposit Insurance FAQs, FED. DEPOSIT INS. CORP. (Mar. 20, 2023), https://www.fdic.gov/resources/deposit-insurance/faq [https://perma.cc/HL9R-TPNH].

^{102.} See, e.g., Peter Conti-Brown & Sean Vanatta, Risk, Discretion, and Bank Supervision (Mar. 30, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4405074 [https://perma.cc/3AGZ-M88Y]; Peter Conti-Brown & Sean Vanatta, Focus on Bank Supervision, Not Just Bank Regulation, BROOKINGS (Nov. 2, 2021), https://www.brookings.edu/research/we-must-focus-on-bank-supervision [https://perma.cc/8V36-SBBH].

^{103.} The Lender of Last Resort, FRED BLOG, (Apr. 20, 2023), https://fredblog.stlouisfed.org/2023/04/the-lender-of-last-resort [https://perma.cc/A7P3-E75Q].

^{104.} BANK FOR INT'L SETTLEMENTS, RE-THINKING THE LENDER OF LAST RESORT (2014), https://www.bis.org/publ/bppdf/bispap79.pdf [https://perma.cc/V8PJ-4CD7].

In the context of banking, the Federal Deposit Insurance Corporation¹⁰⁵ operates a resolution regime for failed banks, designed to ensure that their loans and deposits can be transferred to viable firms without lengthy bankruptcy regimes that might leave depositors in limbo.¹⁰⁶

Crypto markets have shown themselves capable of inhabiting an ecosystem where systemic risks can manifest in a number of ways. First, as highlighted above, it is home to a number of centralized firms that constitute singularly important points of failure. Crucially, these firms have tended to become interconnected to a web of stakeholders, creating transmission pathways for losses to flow from one institution to another. FTX offers perhaps the most compelling example of such entanglement, where its sudden failure caused firms like BlockFi and Genesis also to seek bankruptcy protection.¹⁰⁷ Several traders failed too, as they were unable to retrieve their deposits from the FTX the platform.¹⁰⁸

Second, major centralized firms have shown themselves exposed to the costs of sudden runs, where customers seek to retrieve their funds *en masse* resulting in the platform suffering a cash crunch. FTX is again case in point, experiencing a wave of redemption requests from fleeing customers, eventually causing the firm to pause withdrawals.¹⁰⁹ Celsius, too, is instructive. According to a study by the Federal Reserve Bank of Chicago, 35% of all withdrawals in June 2022 (just before Celsius filed for bankruptcy protection) came from relatively wealthier depositors— customers each with crypto worth more than \$1 million in their accounts.¹¹⁰ Those holding \$500,000 ended up being the fastest to retrieve their money. Put differently, larger institutional customers, likely possessing financial sophistication and reasonably roomy balance sheets, were among the most liable to trigger a panic. And, by dint of their size and resources, their private instincts to run resulted in a cost on those that could not adjust their behavior as quickly (i.e.,

^{105.} Hereinafter, the "FDIC."

^{106.} FED. DEPOSIT INSUR. CORP., *Failing Bank Resolutions*, https://www.fdic.gov/resources/resolutions [https://perma.cc/FUB9-KT7J].

^{107.} MacKenzie Sigalos & Ashely Capoot, *Gemini, BockFi, Genesis Annoucning New Restrictions as FTX Contagion Spreads*, CNBC (Nov. 16, 2022, 8:02 PM), https://www.cnbc.com/2022/11/16/genesis-lending-unit-halts-withdrawals-in-aftermath-of-ftx-collapse.html [https://perma.cc/5RER-N3AD].

^{108.} See, e.g., Sam Reynolds, Crypto Hedge Fund Galois Capital Shuts Down After Losing \$40M to FTX, COINDESK (May 9, 2023, 12:08 AM), https://www.coindesk.com/business/2023/02/20/crypto-hedge-fund-galois-shuts-down-after-losing-40-million-to-ftx-ft [https://perma.cc/92BP-Q2FY].

^{109.} *Id.*

^{110.} Olga Kharif, *Large Investors Led 2022 Runs on Crypto Platforms, Study Finds*, BLOOMBERG (May 15, 2023, 4:41 PM), https://www.bloomberg.com/news/articles/2023-05-15/large-investors-led-2022-crypto-withdrawal-crisis-on-celsius-ftx-chicago-fed?utm_medium=social&utm_source=twitter &utm_campaign=socialflow-organic&utm_content=crypto&sref=2qugYeNO [https://perma.cc/6QC3-28XN].

less wealthy customers).¹¹¹

Unlike traditional markets, however, exposure to run-risk has come without the usual *ex ante* and *ex post* levers that might mitigate panic and control the costs of fallout. Even as a swath of crypto market participants—retail as well as institutional actors—faced the prospect of devastating losses, they lacked recourse to protections taken for granted in traditional financial markets (e.g., federal deposit insurance).

2. Addressing Information Gaps

A second key objective of financial regulation lies in addressing information gaps and the costs that they pose.¹¹² This involves ensuring that regulatory supervisors as well as market participants can acquire insight about the riskiness of claims and assets alongside an understanding of the institutions that operate within the perimeters of financial and capital markets. In seeking to intermediate the informational environment, policy can also seek to create ways in which thorough due diligence becomes less important, for example, where the claims being issued are presumed to be so safe that detailed investigation would be a waste of time and money.¹¹³ Broadly seen, regulation can work to provide tools and create incentives for reducing information costs, improving the accuracy by which risk is priced. It can help firms and investors protect themselves by equipping them with insight as well as offer spaces for creating informationally-insensitive claims, contracts that do not need a great deal of due diligence owing to their perceived safety, connecting parties in situations that might otherwise showcase complexity, and unknowable risks.¹¹⁴ A full discussion of this interplay between information deficits in markets and regulation is outside the scope of this Article. A few examples, however, serve to underscore how foundational this relationship is for shaping key aspects of market design.

First, regulation can help ensure that the marketplace enjoys a baseline level of insight about key claims and assets. When a company issues equity or debt in public markets, the worth of the promised cash flows emerges through an understanding of the capacity of the firm to deliver on its promises. At a very general level, whether and how it can do so constitutes a function of many aspects of its enterprise, such as its organization,

^{111.} *Id*.

^{112.} For discussion on information gaps, see Kathryn Judge, Information Gaps and Shadow Banking, 103 VA. L. REV. 411, 416–17 (2017).

^{113.} Tri Vi Dang, Gary Gorton & Bengt Holmström, *The Information View of Financial Crises*, 12 ANN. REV. FIN. ECON. 39, 40–41 (2020).

^{114.} *Id.* at 40–41; Tri Vi Dang, Gary Gorton & Bengt Holmström., *The Information Sensitivity of a Security* 4–5 (Mar. 2015), http://www.columbia.edu/~td2332/Paper_Sensitivity.pdf [https://perma.cc/2ZHA-GLDT] (highlighting varying interpretations of the notion of information insensitivity).

governance, business model, and industry. This multiplicity of factors helps shape the kinds of results that a firm can achieve and, ultimately, what kinds of future cash flows investors and other stakeholders might expect to receive.¹¹⁵

Regulation has stepped in to overcome some of the frictions that might cause actors to withhold information about their firm. As modeled by Sanford Grossman and Oliver Hart, disclosure can be excessively costly for a firm, creating a disincentive for revelation. It also might expose a firm to outside scrutiny, give away competitive secrets, or highlight managerial failures.¹¹⁶ At the same time, where the firm constitutes the most knowledgeable repository of its own activities, the chances that single investors (or even regulators) might be able to obtain information efficiently about and from it are slim, if not outright impossible. Everyday investors will not be able to muster the resources, or obtain the access needed, to acquire key details of the risks governing their claim. Even deep-pocketed institutional investors may be loath to share the fruits of their labor, forcing others to replicate the same research and analysis that might still be incomplete.¹¹⁷

Where firms have few incentives to distribute information freely, regulation can mandate full and honest disclosure. In seeking to punish those that fail to disclose or lie, regulation modifies the incentives against putting information into the marketplace. Such broad and freely available distribution of prized information affords all investors access to this knowledge, reducing the pressure on their own pocketbooks and minimizing the risks of duplicative investigation. Rather, investors might focus on honing the quality of their analysis, making money, or deriving some other gain by bringing new interpretations of the disclosures to the fore.¹¹⁸ In this

^{115.} See, e.g., Fernando Duarte & Carlo Rosa, The Equity Risk Premium: A Review of Models, 2015 FED. RSRV. BANK N.Y. ECON. POL'Y REV, 39–40.

^{116.} See, e.g., S.J. Grossman & O.D. Hart, *Disclosure Laws and Take-Over Bids*, 35 J. FIN. 323, 323–334 (1980); see generally Robert E. Verrecchia, *Discretionary Disclosure*, 5 J. ACCT. & ECON. 179 (1983) (analyzing the impact of disclosure related costs on how managers decide to disclose information even in the shadow of market expectations).

^{117.} John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 720–33 (1984); Merritt B. Fox, Randall Morck, Bernard Yeung & Artyom Durnev, *Law, Share Price Accuracy, and Economic Performance: The New Evidence*, 102 MICH. L. REV. 331, 339–41 (2003). For a more circumspect view on mandatory disclosure, see HOMER KRIPKE, THE SEC AND CORPORATE DISCLOSURE: REGULATION IN SEARCH OF A PURPOSE (1979).

^{118.} Coffee, *supra* note 117; Fox et al., *supra* note 117; Chris Brummer, *Disclosure, Dapps and DeFi*, STAN. J. BLOCKCHAIN L. & POL'Y (forthcoming) , https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4065143 [https://perma.cc/YXV9-MR95] (noting the incentives of firms to disclose in alignment with regulatory objectives); Paul G. Mahoney, *The Economics of Securities Regulation: A Survey* (Univ. of Va. Sch. of L., Rsch. Paper No. 2021-14, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3910557 [https://perma.cc/DC4H-2EVX].

way, investors can learn about the kinds of risks that they are carrying in a relatively systematic and thorough manner. They can protect themselves by charging more for their capital, taking other precautions (e.g., putting only so much at risk as they are willing to lose), and ensuring that their prior biases and expectations are better kept in check.¹¹⁹

In addition to ensuring information about claims, regulation provides ways to increase understanding about entities within the marketplace. Regulators benefit from knowing whether entities that are active within financial markets can do so safely and have the resources to fulfill their obligations to stakeholders (including customers). This also entails supervisors knowing that firms can look after themselves, with sufficient and accessible resources to pay creditors and to reduce the systemic risks they create for others.¹²⁰ In place of enabling a free-for-all, allowing anyone to set-up shop, regulation imposes stipulations designed to procure detailed information from a firm. For example, eligibility criteria demand that those seeking to do business satisfy entry conditions concerning internal corporate governance, balance sheet capacity, and customer protection.¹²¹ Supervisors can conduct examinations on a regular basis to assure themselves that the firm conforms to expected rules and standards. Enforcement actions offer regulators and others a mechanism to learn more about an entity generating suspicion (e.g., via discovery).

Finally, regulation can control information gathering and dissemination to account for some of the costs and effects of disclosure. In particular, regulation can determine who gets data, how fully, at what speeds, and at what time intervals. Even where transparency constitutes a valuable policy goal, full openness to the inner workings of complex institutions can, in some situations, constitute a risk in itself. For example, regulators are typically careful about how much information is publicly disclosed about banks (e.g.,

^{119.} Aswath Damodaran, Equity Risk Premiums (ERP): Determinants, Estimation and Implications—The 2015 Edition, (Mar. 14, 2015) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2581517 [https://perma.cc/SHE8-G4XB]; Bradford Cornell & Aswath Damodaran, Tesla: Anatomy of a Run-Up Value Creation or Investor Sentiment? (Apr. 28, 2014) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2429778 [https://perma.cc/4348-4HF9] (highlighting the role of investor sentiment and biases in shaping valuation).

^{120.} See, e.g., Why Do We Regulate Banks?, BANK OF ENG. (June 17, 2019), https://www.bankofengland.co.uk/explainers/why-do-we-regulate-banks [https://perma.cc/QLR4-5M2G]; Julie L. Stackhouse, Why Are Banks Regulated?, FED. RSRV. BANK OF ST. LOUIS (Jan. 30, 2017), https://www.stlouisfed.org/en/on-the-economy/2017/january/why-federal-reserve-regulate-banks [https://perma.cc/9A3M-98DY]; Speech, Ben S. Bernanke, Chairman, Fed. Rsrv., Bank Regulation and Supervision: Balancing Benefits and Costs (Oct. 16, 2006), https://www.federalreserve.gov/newsevents/speech/bernanke20061016a.htm [https://perma.cc/KE6D-PXPG].

^{121.} See, e.g., Bernanke, *supra* note 120; *Examinations Overview*, OFF. OF THE COMPTROLLER OF THE CURRENCY, https://www.occ.treas.gov/topics/supervision-and-examination/examinations/examinations-overview.html [https://perma.cc/4GBL-3TMU].

through stress tests or supervisions).¹²² Revelations about a bank's balance sheet might foster panic where information ends up interpreted by the public as presaging a collapse, triggering a needless run on the firm.¹²³ Relatedly, developing disclosure regimes can also look to policies in which the goal lies in ensuring that relationships do not have to require detailed disclosure between parties. For example, where money is lent on a very short-term basis and fully collateralized, lenders have less need to invest in uncovering information on a borrower. Instead, this debt becomes more informationallyinsensitive, allowing for credit to flow more quickly, with fewer formalities, and still providing for risk mitigation by the terms of the debt agreement.¹²⁴

Limited comprehensive regulation for cryptocurrency markets has thus resulted in a relative paucity of tools for addressing the need to create information about the quality of claims being traded and market participants.¹²⁵ Interestingly, crypto represents a unique mix between the transparent and opaque. On the one hand, it is defined by its reliance on blockchains, which intend to provide the ultimate in transparency—by ensuring that each transaction is readily inspectable¹²⁶—as described above.

On the other hand, crypto's larger ecosystem is opaque, with critical aspects of its workings taking place without adequate standardization and verifiability. For a start, digital assets themselves can exhibit unknown risks for which even the traditional regulatory system can be a poor match. Crypto inhabits an informationally complex environment from the point of view of its technology. As Chris Brummer, Trevor Kiviat, and Jai Massari observe, crypto combines legacy informational deficits (e.g., about a token issuer's internal governance) with novel considerations about technological riskiness that conventional regulatory paradigms are ill-suited to match.¹²⁷ Without an

^{122.} See, e.g., Tuomas Takalo & Diego Moreno, Bank Transparency Regulation and Stress Tests: What Works and What Does Not, CTR. FOR ECON. POL'Y RSCH (Apr. 17, 2023), https://cepr.org/voxeu/columns/bank-transparency-regulation-and-stress-tests-what-works-and-what-does-not [https://perma.cc/Z8D7-TETM].

^{123.} Ben Foldy, Rachel Louise Ensign & Justin Baer, *How Silicon Valley Turned on Silicon Valley Bank*, WALL ST. J. (Mar. 12, 2023, 12:11 PM), https://www.wsj.com/articles/how-silicon-valley-turnedon-silicon-valley-bank-ee293ac9 [https://perma.cc/7V4W-CSX2]; J. Anthony Cookson, Corbin Fox, Javier Gil-Bazo, Juan F. Imbet & Christoph Schiller, *Social Media as a Bank Run Catalyst*, 1 (Apr. 18, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4422754 [https://perma.cc/3HLE-CJFL].

^{124.} Pradcep K. Yadav & Yesha Yadav, *The Failed Promise of Treasuries in Financial Regulation*, 26 (Sept. 2, 2020) (unpublished manuscript), https://papers.ssrn.com/sol3/papers. cfm?abstract_id=3685404 [https://perma.cc/55PS-S7VX] (noting the role of US Treasuries in supporting the market for repurchase contracts, or very short-term lending agreements between large financial firms). 125. Brummer, *supra* note 118, at 2–4 (highlighting a lack of systematic fit between traditional

regulatory disclosure paradigms and decentralized finance).

^{126.} See *id.* at 4 (noting that blockchains bring some transparency to crypto markets as a starting point).

^{127.} Chris Brummer, Trevor I. Kiviat & Jai Massari, What Should Be Disclosed in an Initial Coin

applicable and properly tailored regulatory framework, token holders must take on the costs of diligence privately. Even where they can get some help (e.g., through "white papers" that typically launch new crypto ventures), a lack of regulatory vetting for these disclosures can result in limited accountability for those producing them.¹²⁸ Exchanges too might demand information from token issuers seeking to list the asset on their exchange. But, even here, the approach is *ad hoc* and varies by venue, creating a hodge-podge of regimes for customers to try to follow.¹²⁹

Crypto market regulation also lacks tools to acquire information about key market participants. As noted earlier, exchanges are key pillars within the crypto ecosystem. Notwithstanding this significance, considerable uncertainty exists about their inner governance, the quality of their balance sheets, or their readiness to respond in a crisis. According to a May 2023 Financial Times survey of 21 of the most prominent crypto firms, many refused to supply critical information about their governance, measures for customer protection, and balance sheets—underscoring concerns raised in the wake of "crypto winter" failures about opaque and complex governance structures that pose a risk for stakeholders.¹³⁰ In the absence of express disclosure regimes to stipulate eligibility criteria or supervisory regimes to ensuyre compliance, certain crypto firms appear to lean heavily on opacity as a part of their business model.¹³¹

3. Protecting Customers and Stakeholders

Perhaps the most straightforward rationale for financial regulation lies in protecting customers and stakeholders.¹³² Investors and financial consumers routinely fall prey to scams, display biases and impulsivity, and open themselves up to losses that can result in enormous personal suffering.¹³³ Beyond safeguarding customers against predation, regulation

Offering?, at 3–5 (Nov. 29, 2018) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3293311 [https://perma.cc/BJ6E-5YE4].

^{128.} Id. at 12–13.

^{129.} See generally William Anderson, Flying Blind—What Does It Mean To Be Listed on a Crypto Exchange? (May 27, 2023) (unpublished manuscript) (on file with author).

^{130.} Martha Muir, *Cryptocurrency Market Struggles with Transparency*, FIN. TIMES (May 30, 2023), https://www.ft.com/content/85184cf9-79d2-4080-b817-4ea6f0cc9846 [https://perma.cc/C6MG-Y5WC]; Yadav, *supra* note 55, at 46–58 (noting the central importance of crypto exchanges and the risks that they pose, alongside a proposal to create a self-regulatory organization ("SRO") registration regime for exchanges).

^{131.} Muir, supra note 130.

^{132.} Phillip R. Lane, *The Role of Financial Regulation in Protecting Consumers*, BANK FOR INT'L SETTLEMENTS (Mar. 10, 2017), https://www.bis.org/review/r170310b.htm [https://perma.cc/PVY5-EJJX].

^{133.} See, e.g., Federal Trading Commission, New FTC Data Show Consumers Reported Losing Nearly \$8.8 Billion to Scams in 2022 (Feb. 23, 2023), https://www.ftc.gov/news-events/news/press-

can also step in to secure financial assets and their integrity. Predictably, where vast pools of customer money are entrusted to an agent (e.g., a fund or bank), there is the risk of misuse, misappropriation, and mismanagement. To counter such "agency costs," regulation provides a slew of measures to safeguard customer interests and counter the negative incentives of those holding money for others.¹³⁴

Arguably the most consequential for a customer's everyday peace-ofmind are rules designed to ensure that their assets are safely custodied and accounted for, and, where custody arrangements work, to prevent such assets from being mingled with those of the agent (e.g., a broker) in the event of an agent's insolvency. Customer protection rules in securities and commodities regulation, for example, set out detailed procedures for ensuring that customer assets are diligently protected.¹³⁵ A variety of measures enable such assurance to be offered through regulation. For example, rules governing brokers of traditional securities and commodities provide that customer assets must be fully segregated, so that there can be no mixing between a broker's funds and those of the customer.¹³⁶ Additionally, the broker must rigorously track how customer assets are being handled and can only entrust them to reputable custodians. To ensure compliance, firms face examination by regulators and must maintain an appropriate paper-trail.¹³⁷ Firms that fall short risk economic penalties and may suffer reputational damage.¹³⁸ Those risks can extend to supervisors, incentivizing more rigorous policing. When the failed brokerage firm, MF Global, was found to have breached applicable rules for protecting and safekeeping customer assets, its frontline regulator (the Chicago Mercantile Exchange) came under heavy scrutiny¹³⁹ and ultimately paid \$130 million to the broker's

releases/2023/02/new-ftc-data-show-consumers-reported-losing-nearly-88-billion-scams-2022 [https:// perma.cc/A9GZ-CNJV] (noting the especial prevalence of investment fraud); SEC. & EXCH. COMM'N, Social Media and Investment Fraud—Investor Alert (Aug. 29, 2022), https://www.sec.gov/oiea/investoralerts-and-bulletins/social-media-and-investment-fraud-investor-alert [https://perma.cc/PK5W-ZKDG] (noting the ways in which social media might lure investors in scams).

^{134.} See, e.g., Mahoney, supra note 118, at 60.

^{135.} See Customer Protection Rule, 17 C.F.R. § 240.15c3-3 (2019).

^{136.} See Segregation of Assets and Customer Protection, FIN. INDUS. REGUL. AUTH., https://www.finra.org/rules-guidance/guidance/reports/2021-finras-examination-and-risk-monitoring-program/segregation [https://perma.cc/4KME-XVY5].

^{137.} Id.

^{138.} Michelle Ong, *FINRA Fines Credit Suisse Securities \$9 Million for Multiple Operational Failures*, FIN. INDUS. REGUL. AUTH. (Jan. 20, 2022), https://www.finra.org/media-center/newsreleases/2022/finra-fines-credit-suisse-securities-9-million-multiple-operational [https:// perma.cc/38N4-UFVY]; CME Group, *CME Group Statement on MF Global Segregation Violation*, (Nov. 17, 2011), https://www.cmegroup.com/media-room/press-releases/2011/11/17/cme_group_statementonmfglobalsegregationviolation.html [https://perma.cc/48NS-TSEZ].

^{139.} Avery Goodman, *CME Is Legally Liable for MF Global Customer Losses*, SEEKING ALPHA (Nov. 8, 2011, 3:52 AM), https://seekingalpha.com/article/306068-cme-is-legally-liable-for-mf-global-customer-losses [https://perma.cc/K5MT-28GP].

customers.140

Crypto customers are subject to similar risks (e.g., being scammed and seeing their funds-stolen or misappropriated) but they do not today enjoy specific protections as part of a regulatory scheme. This leaves crypto customers exposed to a slew of dangers that they have little power to mitigate, while being afforded few practical levers under law to safeguard their interests privately. The costs of this regulatory gap have come into sharp focus, as millions of everyday crypto customers fell victim to a series of high-profile firm failures during 2022's "crypto winter," leaving them caught in uncertain and costly bankruptcy proceedings, rather than protecting them from these processes in the first place.

II. BANKRUPTCY IN CRYPTO WINTER

Part I charted the limited federal regulatory landscape for the cryptocurrency industry. Post-pandemic, the crypto-market experienced sharp growth and, as a result, there was a period of time during which the digital asset marketplace was flush with customer money and able to operate freely in the relative shadows outside of a dedicated system of oversight. This created, predictably, room for mischievous C-Suite behavior, where billions in customer deposits could be lured with promises of outsized returns (typically adorned with marketing puffery about corporate integrity, transparency, and investment safety) but without providing customers any real capacity (e.g., through mandated disclosures) to know what was truly happening. A series of catalytic events would bring down large segments of the industry in mid-2022, starting the so-called "crypto winter." Major Chapter 11 filings followed. But, while bankruptcy is used to cleaning up individual corporate messes, it is not the arm of government usually charged with taming unruly facets of a financial system. But, by necessity, that has become an inadvertent aspect of the work performed by bankruptcy courts in seminal crypto cases, as described in this Part below.

A. A BRIEF HISTORY OF CRYPTO WINTER

In May 2022, the Terra/Luna stablecoin ecosystem suffered a surprise crash, wiping out approximately \$60 billion in value from digital asset markets.¹⁴¹ The hedge fund Three Arrows Capital held significant

^{140.} Halah Touryalai, *MF Global Clients Get \$130M from CME but \$1.6B Is Still Missing*, FORBES (June 14, 2012, 12:25 PM), https://www.forbes.com/sites/halahtouryalai/2012/06/14/mf-global-clients-get-130m-from-cme-but-1-6b-is-still-missing/?sh=3570ca362653 [https://perma.cc/AMD4-KBEN].

^{141.} Q.ai, What Really Happened to LUNA Crypto?, FORBES (Sept. 20, 2022, 11:57 AM), https://www.forbes.com/sites/qai/2022/09/20/what-really-happened-to-luna-crypto/?sh=1bb293ad4ff1 [https://perma.cc/MD9G-HLXH]. The company that created the Terra/Luna ecosystem was eventually

investments in Luna and, consequently, was immediately forced into liquidation in the British Virgin Islands.¹⁴² This resulted in the default of around \$657 million in unsecured debt Three Arrows owed to Voyager, the crypto quasi-bank and brokerage firm.¹⁴³ As word spread, Voyager became inundated with customer withdrawal requests, prompting it to suspend trading and redemptions¹⁴⁴ A week later, Voyager filed for Chapter 11 protection.¹⁴⁵ Contagion also hit Celsius, another crypto quasi-bank. Celsius too was required to pause customer redemptions and withdrawals, ending up in bankruptcy come mid-July.¹⁴⁶ BlockFi, yet a third large quasi-bank, avoided bankruptcy by tethering itself to FTX, securing emergency financing from the then-powerful exchange.¹⁴⁷

On November 2, 2022, a leading news service dedicated to cryptocurrency, CoinDesk, reported (based on a leaked internal document) that the wealth of FTX's hedge fund affiliate, Alameda Research, was largely comprised of FTX's native token, called FTT.¹⁴⁸ This crypto asset was issued by the exchange itself and offered to customers, promising holders a variety of rewards like reduced trading fees, loyalty benefits, and miscellaneous customer services.¹⁴⁹ As the exchange's popularity had grown, so too had the market value of FTT, even though the token's intrinsic worth was controlled in key ways by FTX management (e.g., by calibrating the available float).¹⁵⁰ Thus, for purposes of determining FTX's enterprise value, FTT may be better likened to FTX treasury stock than value independent of the corporate entity itself.¹⁵¹

sued by the SEC for alleged violations of securities laws. *See* SEC v. Terraform Labs Pte. Ltd, Case No. 1:23-cv-013460-JSR (S.D.N.Y. Feb. 16. 2023). This prompted the company's bankruptcy filing about a year later. *See In re* Terraform Labs Pte. Ltd., Case No. 24-10070 (BLS) (Bankr. D. Del. Jan. 30, 2024).

^{142.} In re Three Arrows Capital Limited, 5 Case No. BVIHCOM2022/0119 (June 27, 2022).

^{143.} See Second Amended Disclosure Statement Related to the Third Amended Joint Plan of Voyager Digital Holdings, Inc. and its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code, at 49–52, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Jan. 13, 2023) (No. 863).

^{144.} See id. at 57.

^{145.} See *id*.

^{146.} See In re Celsius Network LLC, 647 B.R. 631, 637 (Bankr. S.D.N.Y. 2023).

^{147.} See Declaration of Mark A. Renzi in Support of Debtors' Chapter 11 Petitions and First-Day Motions, at ¶¶ 3–5, In re BlockFi Inc., Case No. 22-19361 (Bankr. D. N.J. Nov. 11, 2022) (No. 17) [hereinafter Renzi Dec.].

^{148.} Allison, supra note 8.

^{149.} *Id*.

^{150.} Id.

^{151.} See J.C. Ray, Accounting for Treasury Stock, 37 ACCT. REV. 753, 753 (1962) ("[T]reasury stock is not an asset, [and, so,] no gain or loss is recorded on transactions involving such shares. Thus, the problem of accounting recognition focuses solely on the stockholders' equity section of the balance sheet.").

Prior to this publication, the public did not know the skewed composition of Alameda's balance sheet. Once disclosed, the market reacted with fury. Binance, for example, promptly announced it would sell all of its FTT holdings.¹⁵² Watching its enterprise value plummet, FTX immediately offered to sell itself to Binance—which alone seemed financially positioned to catch the company in free-fall.¹⁵³ After some cursory due diligence, Binance passed on the offer,¹⁵⁴ thickening the cloud of suspicion hovering over FTX. Nine days after CoinDesk's publication, FTX collapsed into bankruptcy.¹⁵⁵ Restructuring specialist John J. Ray III was appointed to succeed Bankman-Fried as CEO, and Ray promptly declared that, in his "40 years of legal and restructuring experience," he had never seen "such a complete failure of corporate controls and such a complete absence of trustworthy financial information as occurred here."¹⁵⁶ Bankman-Fried was soon arrested.¹⁵⁷

FTX's sensational collapse deepened 2022's "crypto winter." The token native to Crypto.com, another large exchange, lost \$1 billion in market value virtually overnight.¹⁵⁸ BlockFi, facing another round of withdrawal demands, liquidated all of its domestic crypto portfolio and filed for Chapter 11 protection.¹⁵⁹ Core Scientific, one the largest crypto mining firms, also filed for bankruptcy.¹⁶⁰ Genesis, the brokerage firm, lasted outside of bankruptcy only until mid-January 2023,¹⁶¹ as discussed above. Smaller and ancillary crypto companies succumbed as well.¹⁶²

154. MacKenzie Sigalos & Kate Rooney, *Binance Backs Out of FTX Rescue, Leaving The Crypto Exchange on the Brink of Collapse*, CNBC Nov. 10, 2022, 7:58 AM), https://www.cnbc.com/2022/11/09/binance-backs-out-of-ftx-rescue-leaving-the-crypto-exchange-on-the-brink-of-collapse.html [https://perma.cc/6F9M-S7NS].

157. See Ray, supra note 9.

158. Ambar Warrick, *Crypto.com Native Token Plummets as FTX Collapse Fuels Contagion Fears*, INVESTING.COM (Nov. 13, 2022https://www.yahoo.com/video/crypto-com-native-token-plummets-223429988.html [https://perma.cc/K9VD-6F8N].

^{152.} Olga Kharif, *Binance to Sell \$529 Million of Bankman-Fried's FTT Token*, BLOOMBERG (Nov. 6, 2022, 2:12 PM), https://www.bloomberg.com/news/articles/2022-11-06/binance-to-sell-529-million-of-ftt-token-amids-revelations#xj4y7vzkg [https://perma.cc/3HGF-RAXD].

^{153.} Tracey Wang & Nick Baker, *FTX Agrees to Sell Itself to Rival Binance Amid Liquidity Scare at Crypto Exchange*, COINDESK (May 9, 2023, 12:01 AM), https://www.coindesk.com/business/2022/11/08/ftx-reaches-deal-with-binance-amid-liquidity-scare-sam-bankman-fried-says [https://perma.cc/QA6K-PVUP].

^{155.} John Ray Dec., supra note 26.

^{156.} Id. at ¶¶ 4–5.

^{159.} Renzi Dec., *supra* note 147, at ¶¶ 97–99.

^{160.} In re Core Scientific, Case No. 22-90341 (DRJ) (Bankr. S.D. Tex.2022).

^{161.} In re Genesis Global Holdco, LLC, Case No. 23-10063 (SHL) (Bankr. S.D.N.Y. 2023).

^{162.} See, e.g., In re Compute North Holdings, Inc., Case No. 22-90273 (MI) (Bankr. S.D. Tex.); In

re Desolation Holdings LLC, Case No. 23-10597 (BLS) (Bankr. D. Del. 2023); In re Prime Core Techs. Inc., Case No. 23-11161 (JKS) (Bankr. D. Del. 2023).

On January 31, 2023, the court-appointed examiner in the Celsius Chapter 11 case filed her final report.¹⁶³ Purportedly, Celsius too operated in a deceitful manner: "In every key respect—from how Celsius described its contract with its customers to the risks it took with their crypto assets—how Celsius ran it [sic] business differed significantly from what Celsius told its customers."¹⁶⁴ On July 13, 2023, the company's founder and CEO, Alex Mashinsky, was arrested and charged with seven criminal counts, including securities and wire fraud.¹⁶⁵

The rash of bankruptcies and revelations of customer deception following patterns that overlap across companies—began infusing popular culture. Late night television hosts turned crypto headlines into crypto punchlines.¹⁶⁶ The FTX logo was removed from the Miami Heat's stadium.¹⁶⁷ Consumer fraud claims were filed against not only crypto executives but also celebrities that had provided paid endorsements.¹⁶⁸ Charlie Munger, Berkshire Hathaway's venerable chairman, declared the cryptocurrency market to be "stupid and evil" and that digital assets are only useful to "kidnappers."¹⁶⁹ Both chambers of Congress began a series of hearings focused on, among other things, what the government should do to rein in the perceived lawlessness.¹⁷⁰ But, neither Congress nor traditional regulatory arms of government (e.g., SEC and CFTC) seized the moment, essentially deferring to bankruptcy courts to assume immediate responsibility.

Chapter 11 thus became the default legal framework, overseeing not only the affairs of each individual debtor but also, seemingly, the trajectory

^{163.} See Celsius Examiner's Report, supra note 26, at 22.

^{164.} Id. at 15.

^{165.} See Handagama, supra note 30.

^{166.} See, e.g., Turner Wright, Comedian Stephen Colbert Spoofs 'Colbert Coin' in Response to Rise in Crypto Scams, COINTELEGRAPH (Jan. 6, 2022), https://cointelegraph.com/news/comedian-stephencolbert-spoofs-colbert-coin-in-response-to-rise-in-crypto-scams [https://perma.cc/2N8S-9SEM].

^{167.} See Hern, supra note 10.

^{168.} See Jennifer Korn, Why Tom Brady, David Ortiz, Jimmy Fallon and Other Celebrities are Getting Sued over Crypto, CNN BUSINESS (Dec. 14, 2022, 1:46 PM), https://www.cnn.com/2022/12/14/tech/celebrity-crypto-lawsuits/index.html [https://perma.cc/M5MM-XSA4].

^{169.} Chris Morris, Charlie Munger, Warren Buffet's Right-Hand Man, Rips into Cryptocurrency After FTX Collapse, Saying It's Good for 'Kidnappers', FORTUNE (Nov. 15, 2022, 10:35 AM), https://fortune.com/2022/11/15/charlie-munger-cryptocurrency-criticism-ftx [https://perma.cc/B3VH-EAUP].

^{170.} See Crypto Crash: Why Financial System Safeguards are Needed for Digital Assets Before the S. Banking Committee, 117th Cong. (Feb. 14, 2023), https://www.banking.senate.gov/hearings/cryptocrash-why-financial-system-safeguards-are-needed-for-digital-assets; Crypto Crash: Why the FTX Bubble Burst and the Harm to Consumers: Before S. Banking Committee, 117th Cong. (Dec. 14, 2023), https://www.youtube.com/watch?v=w1JlnjY4d4c. [https://perma.cc/V9XU-BX4X]; Investigating the Collapse of FTX, Part I: Hearing Before the H. Committee on Financial Services, 117th Cong. (Dec. 13, 2022), https://www.youtube.com/watch?v=zqIa6ccn3Bw [https://perma.cc/7MK7-WN33].

of the industry more generally. Millions of individual customers had entrusted tens of billions to debtors that, collectively, controlled a substantial share of the ecosystem. How could all of this have happened? What kinds of value-maximizing strategies would be available to resolve these cases and deliver real value to customers as quickly and efficiently as possible? And how could bankruptcy's recuperative powers help an industry in tumult, with government agencies still competing for jurisdiction, and a regulatory void still in existence? This simultaneously became the charge of several bankruptcy courts, primarily in New York, Delaware, and New Jersey. But, to better understand their particular case work, it first must be contextualized through the lens of Chapter 11's general missions and mechanisms.

B. A PRIMER ON CHAPTER 11'S MISSIONS AND MECHANISMS

Chapter 11's baseline theory is that business reorganization is preferable to liquidation.¹⁷¹ Rehabilitating productive, albeit insolvent, firms can generate more distributable value.¹⁷² It insulates contagion by preserving and continuing customer/vendor relations, jobs, retiree benefits, and future tax payments.¹⁷³ Reorganization also helps solve the so-called "common pool" problem—that is, the tendency of competing creditors to destroy value by racing to take before all others—by channeling stakeholders toward a durable system that prioritizes distributable value (e.g., equity in a reorganized entity) over distributable cash.¹⁷⁴ And, it provides legal rules that are not only flexible but also sophisticated about emerging economic and market theories,¹⁷⁵ as exemplified by developments in distressed debt financing and investment techniques.¹⁷⁶

176. See generally Paul M. Goldschmid, Note, More Phoenix Than Vulture: The Case for Distressed Investor Presence in the Bankruptcy Reorganization Process, 2005 COLUM. BUS. L. REV. 191

^{171.} See COLLIER, supra note 47, at ¶ 1100.01 ("Chapter 11 embodies a policy that it is generally preferable to enable a debtor to continue to operate and to reorganize or sell its business as a going concern rather than simply to liquidate a troubled business.").

^{172.} See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 403 (4th ed. 1992) ("A firm can be at once insolvent and economically viable. If the demand for the firm's product (or products) has declined unexpectedly, the firm may find that its revenues do not cover its total costs, including fixed costs of debt. But they may exceed it variable costs, in which event it ought not be liquidated yet.").

^{173.} See, e.g., Charles J. Tabb, *The Future of Chapter 11*, 44 S.C. L. Rev. 791, 803 (1993) ("This idea that the preservation of a business as a going concern is better for everyone—creditors, stockholders, bondholders, employees, and the public generally—is not a new one. It has been around for at least a century, really ever since the Industrial Revolution reached full flower.").

^{174.} *See generally* Susan Block-Lieb, Fishing in Muddy Waters: Clarifying the Common Pool Analogy as Applied to the Standard for Commencement of a Bankruptcy Case, 42 AM. U. L. REV. 337 (1993).

^{175.} See, e.g., In re Exide Techs, 303 B.R. 48, 65–66 (Bankr. D. Del. 2003) ("Modern finance has caught up . . . by providing courts with valuation methodologies that focus on earning capacity"); see also Robert J. Stark, Jack F. Williams & Anders J. Maxwell, *Market Evidence, Expert Opinion, and the Adjudicated Value of Distressed Businesses*, 68 Bus. Law. 1039 (2013) (explaining modern techniques courts use to value insolvent businesses).

The Bankruptcy Code, for all its size and complexity, boils down to five essentials: (1) the creation of the bankruptcy estate;¹⁷⁷ (2) the statutory pause and protective blanket of the automatic stay;¹⁷⁸ (3) interim steps a debtor may take to maintain and hopefully augment enterprise value, such as entering into a new financing arrangement ("debtor-in-possession" or "DIP" financing)¹⁷⁹ and the rejection of burdensome contracts and leases;¹⁸⁰ (4) rules governing value distribution to stakeholders, typically via a confirmed plan of reorganization;¹⁸¹ and (5) the debtor's entitlement to lead the bankruptcy,¹⁸² subject to an effective adversary process.¹⁸³ The outcome is, in theory, supposed to distribute reorganization value largely consistent with stakeholder expectations established pre-petition under contract and other non-bankruptcy law.¹⁸⁴

The Bankruptcy Code does not look much further than the interests of the debtor and its stakeholders.¹⁸⁵ It provides a list of options available for the debtor to try to solve its financial woes; and, it offers rights and empowerments enabling stakeholders to counter or even undermine the debtor's intended reorganization strategy.¹⁸⁶ The debtor is required to continue post-petition as a law-abiding corporate citizen¹⁸⁷ and the government's police powers are excepted from the automatic stay.¹⁸⁸ But, the "general public interest" finds little quarter in the statutory regime.¹⁸⁹ The adversary process, rather, pits the debtor on one side of the bargaining table (and courtroom) against its stakeholders—typically, bank lenders and

184. See, e.g., Thomas Jackson, *The Logic and Limits of Bankruptcy Law*, 10–17 (Harvard, Discussion Paper No. 16, 1986); Thomas H. Jackson, *Bankruptcy, Non-Bankruptcy Entitlements, and the Creditors' Bargain*, 91 YALE L. J. 857, 861–68 (1982).

185. See generally 11 U.S.C. §§ 101 et seq.

186. Such as, for example, voting to reject the debtor's plan, see 11 U.S.C. § 1125, objecting to any motion or plan filed by the debtor, see *Fed. R. Bankr. Proc.* 9014, moving for the appointment of a trustee or examiner, see 11 U.S.C. § 1104, and objecting to claims asserted by competing stakeholders, see *Fed. R. Bankr. Proc.* 3007.

187. See 28 U.S.C. § 959(b).

188. See 11 U.S.C. § 362(b)(1).

189. The SEC is the only governmental interest expressly afforded statutory standing to appear and be heard on any issue arising in the bankruptcy. *See* 11 U.S.C. § 1109(a). The right to appear and be heard is otherwise conferred only on "parties in interest," see 11 U.S.C. § 1109(b), meaning stakeholders with economic entitlements in the case outcome, see COLLIER, *supra* note 47, at ¶ 1109.02 (1) ("In general, a "party in interest" under section 1109(b) is any person with a direct financial stake in the outcome of the case, including the debtor, any creditor and any equity participant."). The bankruptcy court may also grant government entities permissive standing to appear and be heard, see Fed. R. Bankr. P. 2018.

^{(2005).}

^{177.} See 11 U.S.C. § 541.

^{178.} See 11 U.S.C. § 362.

^{179.} See 11 U.S.C. §§ 361, 363, 364.

^{180.} See 11 U.S.C. § 365.

^{181.} See 11 U.S.C. §§ 1122–29.

^{182.} See 11 U.S.C. §§ 1107, 1108, 1121.

^{183.} See 11 U.S.C. §§ 1102, 1103, 1109.

the official committee of unsecured creditors—on the other side.

Bankruptcy court jurisdiction hews close to this scheme. Bankruptcy courts are not Article III tribunals with full judicial power over life, liberty, and property; bankruptcy courts are, rather, Article I tribunals of limited authority.¹⁹⁰ Bankruptcy judges may only decide issues that are "core" to the bankruptcy, meaning those "arising in" or "arising under" the Bankruptcy Code.¹⁹¹ That includes matters such as DIP financing, asset sales, contract assumption or rejection, and plan confirmation¹⁹² Bankruptcy courts also may adjudicate matters "related to" the bankruptcy, but only if the litigants consent;¹⁹³ otherwise, the court may only issue proposed findings of fact and conclusions of law for the overseeing district court to consider.¹⁹⁴ Bankruptcy courts cannot conduct jury trials without litigant consent;¹⁹⁵ they cannot send anyone to prison for criminal contempt;¹⁹⁶ and, they cannot render judgments on personal injury claims.¹⁹⁷ Matters beyond what directly concerns the debtor and its stakeholders are for other courts to decide.¹⁹⁸

Separately, bankruptcy's adjudicatory process is peculiar. In most commercial litigation, the plaintiff seeks redress for a past event. An alleged wrong happens, and the trial can be scheduled any time after the complaint is filed and pre-trial procedure has run its course. Chapter 11, by contrast, litigates to a future event, again most often confirmation of a plan of reorganization. The debtor's business rehabilitation is, in other words, a sort of "becoming" in which much of the nucleus of operative fact develops postpetition, as the reorganization takes shape.¹⁹⁹ The process is, nevertheless, often pressured and time constrained. The debtor's exclusivity periods to file and then solicit acceptances for a plan are not limitless.²⁰⁰ And, in cases

See, e.g., In re Terrebonne Fuel and Lube, Inc., 108 F.3d at 613, n.3 ("Although we find that 196 bankruptcy judge's [sic] can find a party in civil contempt, we must point out that bankruptcy courts lack the power to hold persons in criminal contempt.").

28 U.S.C. § 157(b)(5). 197.

See Stern v. Marshall, 564 U.S. 462, 487 (2011) ("It is clear that the Bankruptcy Court in this 198 case exercised the 'judicial Power of the United States' in purporting to resolve and enter final judgment on a state common law claim, just as the court did in Northern Pipeline. No 'public right' exception excuses the failure to comply with Article III in doing so, any more than in Northern Pipeline.").

199. See 11 U.S.C. § 1129(b)(2)(B) (a plan may be confirmed over the dissenting vote of unsecured creditors, if the class receives value equal to the allowed amount of their claims, determined "as of the effective date of the plan"); see also In re Mirant Corp., 334 B.R. 800, 829 (Bankr. N.D. Tex. 2005) ("It is incumbent upon this court in valuing Mirant Group to determine whether or not its value extends to equity to reach its decision using the best, most current information available.").

200. See 11 U.S.C. § 1121 (only the debtor may file a plan during the first 120 days of the case and

^{190.} Northern Pipeline Constr. Co. v. Marathon Pipeline Co., 458 U.S. 50 (1982).

^{191.} 28 U.S.C. § 1334(b).

^{192.} 28 U.S.C. § 157(b).

²⁸ U.S.C. § 157(c)(2). 193.

^{194.} 28 U.S.C. § 157(c)(1).

^{195.} 28 U.S.C. § 157(e).

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where DIP financing is required (that is, most business cases), it is customary for such loans to include "milestone" covenants or a near-term maturity essentially a ticking timebomb for the case.²⁰¹ The debtor must move the case along quickly, all the while meeting performance and other covenants, or the DIP lender may cut off liquidity.²⁰² The adjudicatory process thus invariably melds legal principle with pragmatism and business necessity.²⁰³ The Bankruptcy Code allows for this by establishing rules that, among other things, lean heavily on judicial discretion.²⁰⁴ But, in practice, that means bankruptcy courts are often required to make interim case decisions on relatively thin evidentiary records, always trying to preserve and advance the process to some form of successful outcome.²⁰⁵

Further, getting to a confirmable plan can be brutal work.²⁰⁶ Section 1129 of the Bankruptcy Code imposes extensive structural, voting, and evidentiary requirements for plan confirmation, especially for so-called "cram down" on non-consenting classes.²⁰⁷ Stakeholders use those rules for their benefit, threatening and jockeying for larger helpings.²⁰⁸ They may accumulate "blocking" positions in critical debt classes.²⁰⁹ They may contest

204. See generally George G. Triantis, A Theory of the Regulation of Debtor-in-Possession Financing, 46 VAND. L. REV. 901 (1993).

205. See Tung, supra note 201, at 659 ("[A] rushed approval process at the outset of the case makes it difficult for the bankruptcy court or junior claimants to challenge the debtor's generosity in its offering of lending inducement."). Long aware of this phenomenon, appellate jurisprudence admonishes bankruptcy courts to be ever mindful that the ends do not always justify the means. See, e.g., In re Ira Haupt & Co., 361 F.2d 164, 168 (2d Cir. 1966) (Friendly, Cir. J.) ("The conduct of bankruptcy proceedings not only should be right but must seem right.").

206. RadLAX Gateway Hotel v. Amalgamated Bank, 566 U.S. 639, 649 (2012) (Scalia, J.) (characterizing bankruptcy as, "sometimes [an] unruly . . . area of law").

209. See DISH Network Corp. v. DBSD N. Am., Inc. (In re DBSD N. Am., Inc.), 634 F.3d 79, 104

may solicit acceptances of that plan during the first 180 days of the case; the bankruptcy court may extend or reduce these two "exclusivity" periods "for cause," but not beyond 18 months (plan filing exclusivity) or 20 months (solicitation exclusivity) past the bankruptcy filing).

^{201.} See Frederick Tung, Financing Failure: Bankruptcy Lending, Credit Market Conditions, and the Financial Crisis, 37 YALE J. REG. 651, 654 (2020) ("Case milestones are covenants that set specific deadlines for important events in the case, giving lenders critical control over the reorganization process and curbing the discretion of the debtor's management and the bankruptcy court.").

^{202.} *Id.* at 672.

^{203.} See Jonathan M. Seymour, Against Bankruptcy Exceptionalism, 89 U. CHI. L. REV. 1925, 1926–28 (2022).

^{207.} See 11 U.S.C. § 1129(b). For analysis of the cramdown process and the balance struck by the Bankruptcy Code between imposing mandatory constraints on creditors and protections for dissenting creditors, see David A. Skeel Jr. & George Triantis, *Bankruptcy's Uneasy Shift to a Contract Paradigm*, 166 U. PENN. L. REV. 1777, 1796–805 (2018) and Kenneth N. Klee, *Cram Down II*, 64 AM. BANKR. L. J. 229, 231–32 (1990).

^{208.} Harvey R. Miller & Shai Y. Waisman, *Is Chapter 11 Bankrupt*? 47 B.C. L. Rev.129, 153 (2005) ("Distressed-debt traders, primarily hedge funds, constitute a sophisticated set of players in the Chapter 11 arena who continue to grow increasingly familiar with Chapter 11 and who are unwilling to sacrifice recovery for the sake of the debtor's rehabilitation. Distressed-debt traders' entry into the reorganization process has transformed Chapter 11 reorganizations from primarily rehabilitation to the fulfillment of laissez-faire capitalism focused on the realization of substantial profit-taking.").

ambiguities and assumptions undergirding the debtor's business plan and proposed reorganization value.²¹⁰ They may strategize to exclude others from plan treatments²¹¹ or exploit the debtor's desperation for DIP or exit financing.²¹² Stakeholders exploit ingenious structures to fleece others in the capital structure, sometimes even above or within the same class.²¹³

These cases can, in sum, burn hot in their own self-contained crucible until extinguished by winnowing fuel or other paramount need for resolution. The announcement of a plan, any plan, can bring about hope and a sense of relief. The costs can be astounding, both in terms of administrative expense and consumption of judicial resources.²¹⁴ This is especially true in complex, multilayered cases.

To avoid this, bankruptcy tends to nudge stakeholders toward settlement. It does this in two primary ways. First, the Bankruptcy Code compels disclosure of substantial private information. Mandatory public disclosures include the debtor's schedules of assets and liabilities,²¹⁵ statement of financial affairs,²¹⁶ monthly operating reports,²¹⁷ and a disclosure statement to inform voting on any plan of reorganization.²¹⁸ A debtor will invariably supplement the record with additional disclosures as it seeks interim relief from the bankruptcy court over the course of its

212. See, e.g., In re LATAM Airlines Grp., 620 B.R. 722 (Bankr. S.D.N.Y. 2020) (denying approval of DIP loan offered by certain creditors, which promised exceptional value to be provided to the lenders under a future plan of reorganization).

213. See, e.g., Robert Miller, Loan-to-Own 2.0 (July 10, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4506061 [https://perma.cc/5KVD-U3KV]; Vincent S.J. Buccola, Sponsor Control: A New Paradigm for Corporate Reorganization, 90 U. CHI. L. REV. 1 (2023); Diane Lourdes Dick, Hostile Restructurings, 96 WASH. L. REV. 1333 (2021).

214. See, e.g., In re Voyager Digital Holdings, Inc., 649 B.R. 111, 121 (Bankr. S.D.N.Y. 2023) ("Bankruptcy cases are very expensive, and each and every delay means that administrative expenses eat away at the recoveries that creditors may receive. I have a proposed plan of reorganization before me, and I have an obligation to make a ruling – now – as to whether it can be confirmed. I cannot simply put the entire case into an indeterminate and expensive deep freeze while regulators figure out whether they do or do not think there is any problem with the transactions that are being proposed.").

⁽²d Cir. 2011) (disregarding plan vote of creditor that bought a blocking position in a class of claims "to use status as a creditor to provide advantages over proposing a plan as an outsider, or making a traditional bid for the company or its assets"); Skeel & Triantis, *supra* note 207, at 1800; Klee, *supra* note 207, at 232.

^{210.} See, e.g., In re Nellson Nutraceutical, Inc., 200 Bankr. LEXIS 99, at 3 (Bankr. D. Del. Jan. 18, 2007) (bankruptcy court conducted a 23-day valuation trial in connection with contested plan confirmation); In re Mirant Corp., 334 B.R. 800, 809 (Bankr. N.D. Tex. 2005) (bankruptcy court conducted 27-day valuation trial over 11 weeks in connection with contested plan confirmation).

^{211.} See In re Quigley Co., 437 B.R. 102 (Bankr. S.D.N.Y. 2010) (plan confirmation denied on "good faith" grounds, where debtor's parent company "bought enough votes" within a creditor class, leaving similarly situated creditors without comparable benefits).

^{215.} See Fed. R. Bankr. Proc. 1007(b)(A)-(C).

^{216.} See Fed. R. Bankr. Proc. 1007(b)(D).

^{217.} See Fed. R. Bankr. Proc. 2015.

^{218.} See 11 U.S.C. § 1125.

Chapter 11 case.²¹⁹ Stakeholders may demand discovery in connection with any case dispute.²²⁰ They also may seek extraordinary discovery from the debtor and third-parties under Bankruptcy Rule 2004, so long as such discovery may serve a useful bankruptcy purpose.²²¹ In cases involving disconcerting facts, the bankruptcy court may order the appointment of an examiner to conduct an investigation and publish a "tell-all" report of their findings.²²² In these ways, bankruptcy embraces the unremarkable proposition that knowledgeable negotiations are ultimately more efficient and efficacious. Bankruptcy courts enforce this expectation.

Second, bankruptcy courts render decisions over the course of the Chapter 11 process that narrow points of disagreement. "Contested matters," i.e., general bankruptcy motion practice, are resolved with procedural expediency;²²³ "adversary proceedings," i.e., mini-lawsuits within the bankruptcy, follow more traditional federal civil procedure.²²⁴ But, either way, the bankruptcy court will often bring the matter to a quick evidentiary presentation, followed by a clear ruling that guides the case towards larger resolution. A bankruptcy court might, for example, determine, well in advance of a plan, whether a creditor does or does not have a perceived value entitlement; by resolving the dispute (one way or the other), the court clears a path to more effective plan negotiations.²²⁵ Same is true for corporate decision-making: if the case generates substantial allegations of corporate wrongdoing and such allegations start to inhibit negotiations, the court may prompt management changes.²²⁶

226. See 11 U.S.C. 1104(a)(1) (the debtor in possession can be replaced by a Chapter 11 trustee for cause, "including fraud, dishonesty, incompetence, or gross mismanagement of the affairs of the

^{219.} The typical debtor will, among other things, file with the Chapter 11 petition a so-called "first day" declaration that delivers background business data and the debtor's explanation for the bankruptcy filing. *See, e.g.*, John Ray Dec., *supra* note 26; Renzi Dec., *supra* note 147. Such evidence is not necessarily reliable, however. *Compare* Renzi Dec., *supra* note 147, at \P 2 ("Although the Debtors' exposure to FTX is a major cause of this bankruptcy filing, the Debtors do not face the myriad issues apparently facing FTX. Quite the opposite."), *with* BlockFi Committee Report, *supra* note 26, at 1 ("While the [official creditors' committee's] Investigation remains on-going, sufficient evidence has been produced to confidently draw certain factual conclusions. Those conclusions do not square with BlockFi's contentions [contained in the Renzi Dec.].").

^{220.} See Fed. R. Bankr. Proc. 9014(c), 7026.

^{221.} See Fed. R. Bankr. Proc. 2004. Examinations conducted pursuant to Rule 2004 have often been characterized as "fishing expeditions" because the scope is far-ranging with limited protection for defending parties. *In re* Bennett Funding Group, Inc., 203 B.R. 24, 28 (Bankr. N.D.N.Y. 1996). The Rule is intended to, among other things, reveal the nature and extent of the bankruptcy estate. *In re Wash. Mut., Inc.*, 408 B.R. 45 (Bankr. D. DE. 2009). This is another way a case counter-narrative is developed.

^{222.} See 11 U.S.C. § 1104(c).

^{223.} See Fed. R. Bankr. Proc. 9014(c).

^{224.} See Fed. R. Bankr. Proc. 7001-87.

^{225.} See, e.g., In re Celsius Network LLC, 647 B.R. 631, 636–37 (Bankr. S.D.N.Y. 2023) ("Who owns the cryptocurrency assets deposited in Earn Accounts . . . by Celsius's account holders before the July 15, 2022 petition date . . . ? This is a gating issue at the center of many disputes in this case.").

Respecting financial firms (e.g., a bank holding company or brokerage firm), bankruptcy relies on and works in tandem with regulatory authorities.²²⁷ By the time of filing, a financial debtor typically has been policed by government regulators (e.g., the SEC, CFTC, or the Fed) for quite some time. The company's books, records, public disclosures, and manner of business have long been based on rules and expectations established by those administrative supervisors.²²⁸ The regulatory interplay is supposed to continue post-petition, with bankruptcy focusing primarily on a reworked balance sheet and regulatory authorities keeping an eye on operational developments.²²⁹ This affords regulatory agencies some leeway to intervene in the bankruptcy, asserting non-economic imperatives. As Jared Ellias, George Triantis, and Robert Rasmussen have observed, the interplay between bankruptcy and regulatory regimes can generate considerable case frictions.²³⁰ But, if all goes well, the company leaves bankruptcy in a stronger financial position, without objections voiced by regulatory supervisors.²³¹

228. See generally Marc Labonte, Who Regulates Whom? An Overview of the U.S. Financial Regulatory Framework, CONGRESSIONAL RESEARCH SERVICE (updated Oct. 13, 2023) (explaining the history and roles of the "overlapping" regulators in the financial industry).

debtor"); see also In re Marvel Ent. Grp., 140 F.3d 463 (3d Cir. 1998) (extreme acrimony between debtor and stakeholders is also sufficient justification for appointment of a Chapter 11 trustee).

^{227.} See U.S. DEP'T OF JUST., Just. Manual, 54. Bankruptcy and the Government as Regulator – Part I(I)(A) (explaining the paradox of interests because bankruptcy interests are "enhancing rehabilitation; maximizing recovery by and equitable distribution to creditors and stockholders; saving jobs; maintaining tax base; [and] giving [a] 'fresh start[,]' " whereas, governmental interests are "protecting/promoting health, safety and morals of all citizens"); see also 11 U.S.C.§ 1125(d) (asserting that the sufficiency of information in a disclosure statement is "not governed by any otherwise applicable nonbankruptcy law, rule, or regulation, but an [appropriate] agency... may be heard on the issue") (emphasis added).

^{229.} See, e.g., MCorp Fin., 502 U.S. at 40 (1991) (the Bankruptcy Code should not be interpreted to denigrate "the broad discretion Congress has expressly granted many administrative entities"); Midlantic Nat'l Bank v. NJ Dept. Environ. Prot., 474 U.S. 494, 502 (1986) ("Congress has repeatedly expressed its legislative determination that the trustee is not to have *carte blanche* to ignore nonbankruptcy law. Where the Bankruptcy Code has conferred special powers upon the trustee and where there was no common law limitation on that power, Congress has expressly provided that the efforts of the trustee to marshal and distribute the assets of the estate must yield to governmental interest in public health and safety."); *NLRB v. Bildisco & Bildisco*, 465 U.S. 513, 534 (1984) ("[T]he debtor-in-possession is not relieved of all obligations under the [National Labor Relations Act] simply by filing a petition for bankruptcy."); *see also* H.R. REP. No. 595, 95th Cong., 1st Sess., at 343 (1977) ("[W]here a governmental unit is suing a debtor to prevent or stop violation of fraud, *environmental protection*, consumer protection, *safety, or similar police or regulatory laws*, or attempting to fix damages for violation of such a law, the action or proceeding is not stayed under the automatic stay.") (emphasis added).

^{230.} See Jared A. Ellias & George Triantis, Government Activism in Bankruptcy, 37 EMORY BANKR. DEV. J. 509 (2021); Jared A. Ellias & George Triantis, The Administrative State in Bankruptcy, 72 DEPAUL L. REV. 323 (2021); Robert Kenneth Rasmussen, Bankruptcy and the Administrative State, 42 HASTINGS L.J. 1567 (1991).

^{231.} But, if such overseers have historically fallen short of their mission, it is not terribly easy for bankruptcy to pick up the slack. Bankruptcy courts are not vested with the kind of tools necessary to effectively remediate past regulatory oversight.

This is the context in which bankruptcy courts have been engaged to oversee the factual development and consider the legal implications of 2022's "crypto winter." The crypto bankruptcies have, to date, shed disinfecting light on some of the industry's darkest corners, revealing what may have occurred there and who may bear responsibility for the staggering losses. Bankruptcy courts have also rendered rulings that not only propel their cases forward, but also instruct the crypto community—and market regulators—more generally. Bankruptcy has, furthermore, provided a unique forum for regulatory involvement and, it seems, an occasional clash of economic and agency agendas. Below, we set out two case studies that exemplify the ways in which the bankruptcy court has emerged as a sort of default regulatory forum for crypto markets.

C. CRYPTO IN CHAPTER 11: THE CELSIUS AND VOYAGER CASES

1. Celsius

Celsius, founded in 2017 and led by Alex Mashinsky, grew over a few years to be one the largest crypto finance platforms in the world. It presented itself as a sort of virtual bank. Individual customers could electronically, via computer or cellphone, deposit their crypto assets in a Celsius "Earn" account (akin to a traditional savings account) and accrue a relatively high rate of interest, payable in kind or in the Celsius native token, called the "CEL."²³² Customers could borrow fiat money from Celsius (e.g., to pay household expenses with fewer tax consequences)²³³ collateralized by their deposited crypto in the Earn account.²³⁴ Celsius would, in turn, lend deposited crypto to third-parties, pocketing what it made in interest/fee income over what it owed to the account holders.²³⁵

Earn accounts, though functioning economically like general savings accounts, were not insured by the FDIC.²³⁶ Not to worry, said Celsius. The company's management emphasized "safety," touting that "our top priority

^{232.} See Declaration of Alex Mashinsky, Chief Executive Officer of Celsius Network LLC, In Support of Chapter 11 Petitions and First Day Motions, *In re* Celsius Networks, Case No. 22-10964 (MG) (Bankr. S.D.N.Y. July 14, 2022) (No. 23) at ¶ 47 [hereinafter Mashinsky Dec.].

^{233.} *Id.* at ¶ 2.

^{234.} *Id.* at ¶¶ 53–57.

^{235.} Id. at ¶ 13.

^{236.} See Summary Cease and Desist Order, In the Matter of Celsius Network, LLC, 3, https://www.nj.gov/oag/newsreleases21/Celsius-Order-9.17.21.pdf [https://perma.cc/YS42-8RL6]; see also FDIC Cracks Down on Crypto News Sites over Spreading Misleading Statements on FDIC Deposit Insurance, SWFI (Aug. 19, 2022), https://www.swfinstitute.org/news/93793/fdic-cracks-down-on-crypto-news-sites-over-spreading-misleading-statements-on-fdic-deposit-insurance [https://perma.cc/ EWL6-ZE8E].

is keeping your assets secure."²³⁷ Celsius would not lend capital to thirdparties without first conducting extensive diligence, and would use deposited capital only in "a very conservative" way, "such as only allowing very small or overcollateralized positions."²³⁸ Even though Celsius was not a public reporting company, customers were promised even better disclosure: Celsius committed to "publish to a blockchain all our transactions which will provide users transparency as to how many coins we have and what they are used for."²³⁹ Any Earn account holder that did not like how the business was operating had the ability to pull his money out at a moment's notice.²⁴⁰

The company's marketing strategy also sought to play into crypto's anti-establishment ethos. As discussed above, Celsius was a home for those wanting to "unbank" themselves and thereby enjoy a newfound "financial freedom."²⁴¹ Here, an everyday customer could "dream big" and help pursue "economic opportunity and income equality to everyone in the world,"²⁴² just as the people were freed from quarantine and the so-called "Great Resignation" became a mass phenomenon.²⁴³ Mashinsky presented himself as the leader of this "financial freedom" movement.²⁴⁴

The marketing strategy worked. By December 2020, Celsius had more than \$3.3 billion under management²⁴⁵ and, by January 2021, that figure had grown to \$4.5 billion.²⁴⁶ In October 2021, the business was valued at \$3 billion.²⁴⁷ Management expedited plans to grow internationally, including the acquisition of an Israeli cybersecurity firm in October 2021.²⁴⁸ Come May 2022, Celsius had almost \$12 billion under management and more than

244. Id. at 3–4, 229, 238–40.

245. There Are Many 'On-Ramps' Now for Bitcoin: Celsius Network Founder, BLOOMBERG TV (DEC. 8, 2020, 6:56 PM), https://www.bloomberg.com/news/videos/2020-12-08/there-are-many-on-ramps-now-for-bitcoin-celsius-network-founder-video [https://perma.cc/2WJL-XNJ6].

246. Paul Vigna, *Bitcoin's Hot 2021 Continues With Move Above \$40,000*, WALL ST. J. (Jan. 7, 2021, 6:00 PM), https://www.wsj.com/articles/bitcoins-hot-2021-continues-with-move-above-40-000-11610052727 [https://perma.cc/7MW5-6KL4].

247. Isabelle Lee, Crypto Lender Celsius Network's Valuation Soars 2,400% in Latest Fundraising Round, BUS. INSIDER INDIA (Oct. 12, 2021, 8:19 PM), https://www.businessinsider.in/ cryptocurrency/news/crypto-lender-celsius-networks-valuation-soars-2400-in-latest-fundraising-round/ articleshow/86968841.cms [https://perma.cc/55GF-FZK8].

248. Mashinsky Dec, *supra* note 232, at ¶ 8.

^{237.} Celsius Examiner Report, supra note 26, at 240.

^{238.} *Id.* at 243.

^{239.} *Id.* at 255.

^{240.} Id. at 336.

^{241.} Id. at 3.

^{242.} *Id.* at 4.

^{243.} See Maury Gittleman, The "Great Resignation" In Perspective, Monthly Labor Review (July 2022), https://www.bls.gov/opub/mlr/2022/article/the-great-resignation-in-perspective.htm [https:// perma.cc/EP4N-8RPM].

\$8 billion in loans outstanding to third- parties.²⁴⁹ It boasted 1.7 million registered users by July 2022.²⁵⁰ Then it all came to an abrupt end: Luna's collapse segued into a run-on-the-bank scenario for Celsius, leading to a brief suspension of withdrawals, and the company's emergency Chapter 11 filing on July 13, 2022.²⁵¹

The bankruptcy was, from its inception, surrounded by controversy. In his "first day" declaration, Mashinsky asserted that Celsius was a sound, well-run company victimized by extraneous forces and rumor mongering.²⁵² He attributed the company's financial troubles to the "macroeconomic" crypto environment and world economy, with only passing reference to certain "poor asset deployment decisions."²⁵³ Purportedly, the bank-run was due to "unsupported and misleading" news reports.²⁵⁴

For many, the narrative did not add up. How could Celsius find itself in this position if it deployed capital in only "very conservative" ways? Indeed, Mashinsky's own declaration admitted a "shortfall" in its balance sheet of at least \$1.2 billion and about one-third of its loan book was comprised of "bad" debt.²⁵⁵ Moreover, news outlets started reporting that, while Celsius was touting CEL, Mashinsky was liquidating tens of millions of the native token from his personal account.²⁵⁶ Former employees began leaking stories of excessive risk-taking, disorganization, and perhaps even market manipulation.²⁵⁷

On September 14, 2022, the bankruptcy court entered an order directing the appointment of an examiner to conduct a broad-ranging investigation into the facts undergirding the case.²⁵⁸ Two weeks later, Mashinsky resigned

^{249.} Kate Rooney & Paige Tortorelli, *Embattled Crypto Lender Celsius Files for Bankruptcy Protecton*, CNBC (July 14, 2022 9:10 AM), https://www.cnbc.com/2022/07/13/embattled-crypto-lender-celsius-informs-state-regulators-that-its-filing-for-bankruptcy-imminently-source-says-.html [https://perma.cc/4TGR-E73F].

^{250.} Mashinsky Dec., supra note 232, at ¶ 9.

^{251.} Id. at ¶¶ 9, 14–15.

^{252.} Id. at ¶¶ 12, 91–130.

^{253.} Id. at ¶ 10.

^{254.} Id. at ¶ 12.

^{255.} Id. at ¶ 16.

^{256.} Krisztian Sandor, *Celsius CEO Cashed in After Bankrupt Crypto Lender's Token Surged*, COINDESK (Aug. 9, 2022, 3:33 PM EDT, updated May 11, 2023 at 11:57 AM EDT), https://www.coindesk.com/markets/2022/08/09/dormant-wallet-linked-to-alex-mashinsky-used-to-cash-in-on-cel-token-surge [https://perma.cc/2AAN-JF4U].

^{257.} Kate Rooney, Paige Tortorelli & Scott Zamost, Former Employees Say Issues Plagued the Crypto Company Celsius Years Ahead of Bankruptcy, CNBC (July 19, 2022, 8:00 AM), https://www.cnbc.com/2022/07/19/former-employees-say-issues-plagued-crypto-company-celsius-years-before-bankruptcy.html [https://perma.cc/5UPB-V5WX].

^{258.} Order Directing the Appointment of an Examiner Pursuant to Section 1104(c) of the Bankruptcy Code, *In re* Celsius Network LLC, Case No. 22-10964 (MG) (Bankr. S.D.N.Y. Sept. 14, 2022) (No. 820).

as CEO.²⁵⁹ On September 29, 2022, the bankruptcy court approved the appointment of former federal prosecutor, Shoba Pillay, as examiner.²⁶⁰

On January 30, 2023, Pillay published her "tell-all" final report, a scathing 689-page description of the company and its historical practices. The report explained: (1) how the cryptocurrency ecosystem operates;²⁶¹ (2) Celsius' important role in that ecosystem as a sort of virtual thrift bank for millions of individual customers;²⁶² (3) how the business operated dayto-day, including granular investment choices;²⁶³ and (4) how those operations and business decisions differed materially from what was represented to customers.²⁶⁴ Despite customer promises of disclosure and transparency, Celsius "frequently" made statements "that were inaccurate and misleading."265 According to the report, Celsius ultimately could not generate earnings over what it owed customers, driving it into ever riskier investments that ultimately caused its undoing.²⁶⁶ The report includes an internal email describing certain corporate strategies as "very ponzi like."²⁶⁷ It also revealed that, despite mounting corporate losses, Mashinsky pocketed nearly \$70 million by selling his personal holdings in CEL, while the company was hawking CEL's (supposed) intrinsic value to the market.²⁶⁸ The final report is a detailed account that, again, likely contributed to Mashinsky's indictment and arrest seven months later.

Disclosure aside, Celsius came to bankruptcy with billions in assets, including fiat cash, crypto assets, a loan book, mining interests, and other hard and inchoate assets,²⁶⁹ which needed allocation among and distribution to the company's creditors (predominantly customers). Prior to bankruptcy, management repeatedly communicated to the customer-base that crypto deposits remain "your" crypto,²⁷⁰ giving the customers the clear impression that Earn accounts liken better to safe deposit boxes than traditional savings accounts. With Celsius in bankruptcy, 600,000 Earn account holders, who

^{259.} Nina Bambysheva, Celsius CEO Alex Mashinsky Resigns, FORBES(Sept. 27, 2022, 11:05 AM), https://www.forbes.com/sites/ninabambysheva/2022/09/27/celsius-ceo-alex-mashinsky-resigns/?sh= 45d5f4f65d5e [https://perma.cc/2EKD-LNAE].

^{260.} Order Approving the Appointment of Chapter 11 Examiner, In re Celsius Network LLC, Case No. 22-10964 (MG) (Bankr. S.D.N.Y. Sept. 29, 2022) (No. 923).

^{261.} Celsius Examiner Report, supra note 26, at 48-63.

^{262.} See id. at 64-76.

^{263.} See id. at 124-223.

^{264.} See id. at 229-67.

^{265.} See id. at 256.

^{266.} See id. at 15.

^{267.} Id. at 12.

^{268.} See id. at 9.

^{269.}

Mashinsky Dec., supra note 232, at ¶ 16.

Celsius Examiner Report, supra note 26, at 20. 270.

had collectively deposited \$4.2 billion, wanted "their" crypto traced, excepted from the automatic stay, and immediately released to their rightful owners.²⁷¹ This was, after all, what Mashinsky had promised all along.²⁷²

Celsius' advertising puffery did not, however, match up with what was written in the customer agreements. Earn customers may not have realized, when they signed their Celsius contracts, that deep within the legalese was a transfer of ownership of all digital assets deposited into an Earn account.²⁷³ Earn depositors could redeem such assets at will, requiring Celsius to go into the market to cover any demanded crypto it did not then have in treasury. But, after deposit and prior to redemption, the crypto belonged to Celsius and could be exploited as management saw fit for the company's own profitmaking purposes.²⁷⁴ The contract relationship was, contrary to Mashinsky's "unbank" representations, very much like that of traditional depository institutions.²⁷⁵

This entitlement issue was, as described by the bankruptcy court, "a gating issue at the center of many disputes in this case."²⁷⁶ On January 4, 2023, following an evidentiary hearing, the bankruptcy court issued its opinion resolving the matter. The court concluded that, despite the marketing representations and client expectations, the language of the customer agreements control.²⁷⁷ Earn customers were merely unsecured creditors in the Celsius Chapter 11 cases, entitled to recover the remainderman's interest after payment of ever-ballooning administrative expenses.²⁷⁸ Deposits were not, in sum, "your" crypto after all²⁷⁹ and, making matters worse, the deposits were not FDIC insured. The ruling delivered a painful lesson not only to the 600,000 Celsius Earn customers, but also hundreds of thousands of BlockFi customers who deposited their crypto in comparable accounts and came to learn that the Celsius ruling would be followed in BlockFi's

^{271.} See See In re Celsius Network LLC, 647 B.R. 631, 637 (Bankr. S.D.N.Y. 2023).

^{272.} Celsius Examiner Report, supra note 26, at 4.

^{273.} Id. at 10–11.

^{274.} Id. at 20-21.

^{275.} See, e.g., Citizens Bank v. Strumpf, 516 U.S. 16, 21 (1995) ("That view of things might be arguable if a bank account consisted of money belonging to the depositor and held by the bank. In fact, however, it consists of nothing more or less than a promise to pay, from the bank to the depositor."); *In re* Masterwear Corp., 229 B.R. 301, 310 (Bankr. S.D.N.Y. 1999) ("Under New York law, a bank and its depositor stand in a debtor-creditor relationship that is contractual in nature. The bank owns the deposit, the depositor has a claim to payment against the bank, and the bank has a corresponding obligation to pay its depositor. Accordingly, a bank's temporary freeze of an account, without more, is 'neither a taking of possession of [the depositor's] property nor an exercising of control over it, but merely a refusal to perform its promise.' ").

^{276.} Celsius, 647 B.R. at 637.

^{277.} Id. at 5.

^{278.} Id. at 30.

^{279.} Unlike "wallet" customers, who were authorized to reclaim their crypto.

bankruptcy as well.²⁸⁰

2. Voyager

Voyager was founded a year after Celsius (in 2018) and, like Celsius, also focused its marketing strategy on individual crypto enthusiasts. But, Voyager was a hybrid brokerage and quasi-banking firm. Customers could trade, after depositing digital assets, using an interface accessible via the Voyager app.²⁸¹ They just needed to sign a customer agreement, download the app, and then select which of over one hundred asset types they wanted to buy or sell.²⁸² Voyager made money by pocketing the spread between the buy and sell prices of traded crypto assets and by relending customer deposits, akin to Celsius and BlockFi.²⁸³

Like Celsius, Voyager too experienced explosive growth.²⁸⁴ In 2020, Voyager counted only 120,000 users on its platform.²⁸⁵ A year later, Voyager's app was among the top 10 in the world.²⁸⁶ At year-end 2021, Voyager had nearly \$5.9 billion in assets under management.²⁸⁷ By springtime 2022, it counted over 3.5 million users.²⁸⁸ Then came the Luna collapse and Three Arrows defaulting on its \$657 million Voyager loan. Mass customer redemptions followed.²⁸⁹ Voyager filed for bankruptcy protection on July 5, 2022.²⁹⁰

284. Danny Nelson & David Z. Morris, *Behind Voyager's Fall: Crypto Broker Acted Like a Bank, Went Bankrupt*, COINDESK (May 11, 2023, 1:22PM), https://www.coindesk.com/layer2/2022/07/12/ behind-voyagers-fall-crypto-broker-acted-like-a-bank-went-bankrupt [https://perma.cc/N356-XQW5].

^{280.} For discussion of how these issues were presented and resolved in Celsius and BlockFi, see Stephanie Murray, *BlockFi Embroiled in Bankruptcy Drama over Customer Wallets*, THE BLOCK (Feb. 23, 2023, 8:53 AM), https://www.theblock.co/post/214165/blockfi-bankruptcy-drama-customer-wallets [https://perma.cc/9D8K-AT3A]; *The Plan FAQ*, BLOCKFI UNSECURED CREDITORS COMMITTEE, https://blockfiofficialcommittee.com/faq/plan/#faq2 [https://perma.cc/J8B9-KXCW].

^{281.} *Trade. Earn. Grow.*, VOYAGER, https://www.investvoyager.com/app [https://perma.cc/E2UU-QYYY] (detailing the ease of using the app to transact in multiple crypto assets and vehicles).

^{282.} See id. (noting over one hundred "top" digital assets that could be traded through Voyager); see also Customer Agreement, VOYAGER (Jan. 7, 2022), https://www.investvoyager.com/useragreement [https://perma.cc/G82T-WA98].

^{283.} See generally 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., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Jul. 6, 2022) (No. 15) [hereinafter Ehrlich Dec.].

^{285.} Id.

^{286.} Ehlich Dec., *supra* note 283, at \P 2.

^{287.} See Second Amended Disclosure Statement Relating to the Third Amended Joint Plan of Voyager Digital Holdings, Inc. and Its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943, at 42 (MEW) (Bankr. S.D.N.Y. Jan. 13, 2023) (No. 863) [hereinafter Voyager Disclosure Statement].

^{288.} Ehlich Dec., *supra* note 283, at ¶ 2.

^{289.} Id. at ¶¶ 1, 45–56.

^{290.} Id.

Given Voyager's abrupt failure, the board of directors created a special committee to investigate underlying facts.²⁹¹ The special committee retained independent counsel to conduct this investigation.²⁹² The investigative report was made public (in redacted form) on February 14, 2023.²⁹³ The report focused on the decision-making process driving the Three Arrows loan, which was put in place only a few months before Luna's collapse.²⁹⁴ As detailed, management conducted negligible diligence before agreeing to lend Three Arrows up to \$1 billion. Prior to committing capital, Voyager: (i) received merely a single-line statement in lieu of detailed financials, to wit, "We confirm the following for Three Arrows Capital Ltd as at 1-January-2022 in millions of USD. NAV 3,729";²⁹⁵ and (ii) conducted a single due diligence call with two executives from Three Arrows, where no mention was made of the fund's Luna exposure.²⁹⁶ None of the loans were collateralized.²⁹⁷ At the time of Voyager's bankruptcy filing, the Three Arrows debt represented nearly 58% of its loan book.²⁹⁸

Blame aside, Voyager's bankruptcy—like all bankruptcies— required an exit strategy. At case inception, Voyager proposed a plan of reorganization.²⁹⁹ This was, however, merely an aspirational statement, given the tumultuous state of the industry in July 2022.³⁰⁰ The plan, nevertheless, functioned as a kind of "stalking-horse" for alternative exit strategies, particularly a sale transaction.³⁰¹ On August 5, 2022, the bankruptcy court approved bid procedures, initiating an M&A process designed to find a buyer for Voyager.³⁰² That process concluded in September, with FTX advancing a \$1.422 billion offer to buy the

300. See Ryan Browe, Crypto Brokerage Voyager Digital Files for Chapter 11 Bankruptcy Protection, CNBC (July 6, 2022, 10:13 AM), https://www.cnbc.com/2022/07/06/crypto-firm-voyager-digital-files-for-chapter-11-bankruptcy-protection.html [https://perma.cc/PB5Z-NFVG].

301. Ehlich Dec, *supra* note 283, at \P 69 ("The Plan effectively functions as a 'stalking horse' proposal.").

302. See Order (I) Approving the Bidding Procedures, (II) Scheduling the Bid Deadlines and the Auction, (III) Approving the Form and Manner of Notice Thereof, (IV) Scheduling Hearings and Objection Deadlines with Respect to the Debtors' Sale, Disclosure Statement, and Plan Confirmation and (V) Granting Related Relief, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Aug. 5, 2022) (No. 248).

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^{291.} See Voyager Special Committee Report, supra note 26, at 4-5.

^{292.} Id. at 5.

^{293.} Id.

^{294.} See id. at 24–41.

^{295.} *Id.* at 32.296. *Id.* at 32–33.

^{297.} *Id.* at 35.

^{298.} *Id* at 29.

^{299.} See Joint Plan of Reorganization of Voyager Digital Holdings, Inc. and Its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. July 6. 2022) (No. 17) [hereinafter Voyager Plan].

company.³⁰³ That transaction had not yet closed when, in November, CoinDesk published its article outing FTX as a possible fraud, and the company imploded.³⁰⁴

This was devastating news for Voyager and its stakeholders.³⁰⁵ By then, Voyager had incurred millions in professional fees chasing the FTX deal.³⁰⁶ Fortunately, Voyager found another potential suiter: Binance.US,³⁰⁷ the American affiliate of Binance, the behemoth cryptocurrency exchange.³⁰⁸ In December, Binance.US agreed to acquire Voyager for approximately \$1.022 billion, and the transaction would be consummated as part of Voyager's preexisting plan of reorganization.³⁰⁹ Under the plan, Voyager customers would transition to the Binance.US platform, subject to various vetting procedures.³¹⁰ Ineligible customers would have their crypto liquidated and receive the cash proceeds.³¹¹ Same for customers located in jurisdictions where Binance.US was not licensed to provide digital currency services.³¹²

But, there was a problem. The federal government, as well as the SEC, United States Trustee, and several state regulatory agencies expressed concerns over Binance.US as purchaser.³¹³ Binance.US, it seems, was an

^{303.} See Notice of Hearing on Debtors' Motion for Entry of an Order (I) Authorizing Entry into the Asset Purchase Agreement & (II) Granting Related Relief, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Sept 28, 2023) (No. 472).

^{304.} See Mensholong Lepcha, Voyager Crypto Bankruptcy: How Many VGX Tokens Will Locked Account Holders Get?, CAPITAL.COM (Dec. 5, 2022, 2:22 PM), https://capital.com/voyager-vgx-crypto-tokens-bankruptcy-compensation [https://perma.cc/AZ8P-NDHX].

^{305.} See Stacy Elliot, Voyager "Shocked, Disgruntled, Dismayed" by FTX Bankruptcy as Crypto Lender Searches for Another Buyer, DECRYPT (Nov. 16, 2022), https://decrypt.co/114886/voyager-shocked-disgruntled-dismayed-ftx-bankruptcy [https://perma.cc/6RPK-5CJQ].

^{306.} See Order Granting First Interim Applications for Allowance of Compensation for Professional Services Rendered and Reimbursement of Expenses Incurred, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Feb. 17, 2023) (No. 1013).

^{307.} See Elliot, supra note 305.

^{308.} See Tom Wilson & Hannah Lang, Factbox: Binance, World's Top Crypto Exchange, at Center of US Investigations, REUTERS (June 5, 2023, 8:09 PM), https://www.reuters.com/technology/binance-worlds-top-crypto-exchange-center-us-investigations-2023-03-27/ [https://perma.cc/4GTQ-M732].

^{309.} Press Release, Voyager Announces Agreement for Binance.US to Acquire Its Assets (Dec. 19, 2022, 5:00 AM), https://www.investvoyager.com/pressreleases/voyager-announces-agreement-for-binance-us-to-acquire-its-assets [https://perma.cc/E3UF-8RCW].

^{310.} *Id.*

^{311.} See Voyager Plan, supra note 299, at Article 6.10.

^{312.} See id. at Article 6.12.

^{313.} See Objection of the United States of American to Confirmation of Debtors' Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 6, 2023) (No. 1144 [hereinafter USA Objection]; Supplemental Objection of the U.S. Securities and Exchange Commission to Final Approval of the Adequacy of the Debtors' Disclosure Statement and Confirmation of the Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 6, 2023) (No. 1141); Objection of the U.S. Securities and Exchange Commission to Final Approval of the Adequacy of the Debtors' Disclosure Statement and Confirmation of the Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Feb. 22, 2023) (No. 1047) [hereinafter SEC Objection]; Objection of the United States Trustee to Final Approval of Second

entity of concern for federal and state regulators, evoking government suspicion that it was not a suitable buyer for Voyager's expansive role in the U.S. market.³¹⁴ The SEC, in particular, contended that the Binance.US transaction and its distribution of digital assets to creditors *might* end up violating federal securities law,³¹⁵ with the federal government furthering that, as a matter of principle, the plan should not have any preclusive effect on regulatory authorities (federal or state) if the transaction or such distributions are subsequently found to be wrongful.³¹⁶ That meant, among other things, that Voyager and Binance.US executives, as well as bankruptcy professionals advising the debtors and the official committee of unsecured creditors, could face post-consummation regulatory scrutiny—perhaps even liability—for supporting and helping consummate the plan.³¹⁷

315. See *id.* at \P 4 ("Here, the transactions in crypto assets necessary to effectuate the rebalancing, the re-distribution of such assets to Account Holders, may violate the prohibition in Section 5 of the Securities Act of 1933 against the unregistered offer, sale, or delivery after sale of securities.").

316. See USA Objection, supra note 313, at \P 8 ("[T]he provisions purported to bar Governmental Units from 'alleg[ing]' that the Restructuring Transactions violate any federal or state law, or from bringing claims against any Person based on these transactions were entirely improper, as they would bar the Government and other governmental authorities from exercising their police and regulatory powers in the ordinary course.").

Amended Disclosure Statement and to Confirmation of the Third Amended Joint Plan of Reorganization of Voyager Digital Holdings, Inc. and its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Feb. 24, 2023) (No. 1085); Objection of the Texas State Securities Board and the Texas Department of Banking to Final Approval of the Adequacy of the Debtors' Disclosure Statement and Confirmation of the Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Feb. 24, 2023) (No. 1086); The New Jersey Bureau of Securities' Limited Objection to Final Approval of the Adequacy of Disclosures in the Debtors' Second Amended Disclosure Statement and Confirmation of the Third Amended Joint Plan and Joinder to: 1) Objection of the U.S. Securities and Exchange Commission to Final Approval of the Adequacy of the Debtors' Disclosure Statement and Confirmation of the Chapter 11 Plan; and 2) Objection of the Texas State Securities Board and the Texas Department of Banking to Final Approval of the Adequacy of the Debtors' Disclosure Statement and Confirmation of the Chapter 11 Plan, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Feb. 24, 2023) (No. 1087). These pleadings did not disclose that Binance was under investigation for money laundering and sanctions violaitons; the settlement of those charges was not announced until several months later. See supra note 41.

^{314.} See, e.g., SEC Objection, supra note 313, at \P 6 ("The Plan, Disclosure Statement, and APA also do not adequately describe the impact of potential regulatory actions on the purchaser, Binance.US, on account holders and their ability to trade crypto assets. There are numerous public reports and press accounts concerning investigations into the purchaser and its affiliates. Regulatory actions, whether involving Voyager, Binance.US or both, could render the transactions in the Plan impossible to consummate, thus making the Plan unfeasible.").

^{317.} In re Voyager Digital Holdings, Inc., 649 B.R. 111, 135 (Bankr. S.D.N.Y. 2023) ("In short, what the Government is requesting is that I enter a confirmation order that will have the effect, under section 1142 of the Code, of compelling employees, officers, professionals and entities to do the rebalancing transactions that the Plan contemplates and to make the distributions of cryptocurrencies that the Plan requires, while in the view of the Government those same people and entities might then be liable for fines, sanctions, damages or other liabilities just for doing what my confirmation order affirmatively obligates them to do.").

The bankruptcy court was unmoved by these arguments. The court accepted Voyager's contention that the proposed transaction was the most value-maximizing path forward, with approximately \$100 million in value over liquidation.³¹⁸ The court disagreed, as a matter of fundamental bankruptcy principle, that parties should remain liable under securities laws for helping the plan close and, in turn, fulfilling their statutory mandates under the Bankruptcy Code, especially as the government equivocated on whether the Binance.US transaction would or would not actually violate securities laws.³¹⁹ The court further chastised the government objectors for interposing objections rooted in speculation, not evidence.³²⁰ The court ultimately overruled the objections, and the plan was confirmed.³²¹ Voyager was thus authorized to move forward with the sale to Binance.US.³²²

The government appealed, focusing its argument on the plan's exculpation provision, contending that it infringed on its regulatory authority to prosecute enforcement actions against, among others, those working to close the deal.³²³ A motion for stay pending appeal followed shortly thereafter.³²⁴ The appeal did not go far, however. In the face of these developments, Binance.US exercised its right to terminate the transaction, decrying the "hostile and uncertain regulatory climate in the United States."³²⁵ On April 25, 2023, Voyager announced that it had pivoted to

321. See Amended Order (I) Approving the Second Amended Disclosure Statement and (II) Confirming the Third Amended Joint Plan of Voyager Digital Holdings, Inc. and Its Debtor Affiliates Pursuant to Chapter 11 of the Bankruptcy Code, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 8, 2023) (No. 1159).

322. See id.

325. @BinanceUS, TWITTER (Apr. 25, 2023, 2:37 PM), https://twitter.com/BinanceUS/ status/1650932061866172435 [https://perma.cc/A2PJ-SF6S].

^{318.} *Id* at 128–29.

^{319.} *Id* at 133–34 ("Frankly, I think this position by the Government is unreasonable and wrong. It is based on a serious misunderstanding of just what it means when a court confirms a plan of reorganization.").

^{320.} Id. at 120, 121 ("Despite the questions that have been raised, however, I must note that I have been offered absolutely no actual, admissible evidence —I mean literally zero admissible evidence—that would support an accusation that Binance.US is misusing customer assets or is engaged in misbehavior of any kind at all . . . As I said at the outset of the hearing, if a regulator believes there is a legal issue with respect to something that is proposed before me, I am more than anxious to hear an explanation and to consider the issue. But if there is a problem, I expect a regulator to tell me that it has an actual objection (as opposed to saying that there "might" be an issue), and also to tell me what the issue is and *why* it is an issue, so that other parties may address it and so that I may make a proper and well-considered ruling.").

^{323.} See Notice of Appeal, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 9, 2023) (No. 1165); Statement of the Issues and Designation of Items for Record on Appeal of Confirmation Order, In re Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 23, 2023) (No. 1222).

^{324.} See Motion for Stay Pending Appeal, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 23, 2023) (No. 1181); Memorandum in Support of the United States of America and United States Trustee's Expedited Motion for Stay of Confirmation Order Pending Appeal Pursuant to Federal Rule of Bankruptcy Procedure 8007, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943 (MEW) (Bankr. S.D.N.Y. Mar. 14, 2023) (No. 1182).

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The Voyager case story is, from the perspective of bankruptcy law, rather strange: the most value-accretive case solution was scuttled based on unproven contentions. But, considering the government's larger regulatory ambitions, it is instructive. Management remained in possession throughout the case. The case background factswere not buried. The public ultimately received exacting, candid, and stark disclosures of how the C-Suite took excessive risks with customer deposits (i.e., the Three Arrows loan). These disclosures, when married with comparable revelations from the BlockFi, Celsius, Cred, and FTX cases, reflect patterns of governance failures that can be targeted by administrative agencies as well as the consuming public. Moreover, with respect to the failed Binance.US transaction, the case illustrates-in about as clear and impactful way as possible-how bankruptcy can provide an oddly effective forum for public regulators to advance their administrative agendas, prior to comprehensive regulatory reform, with relative ease and crisp effectiveness. That is so, even if the bankruptcy court is left almost entirely in the dark about what is motivating aggressive agency response.

These observations point to a number of gains for overseers arising out of the bankruptcy court's role as accidental quasi-regulator. Just as traditional financial regulation seeks out ways to protect the marketplace, produce information on its risks, and safeguard user interests, the court's unique legal toolkit can achieve outcomes aligned with these regulatory objectives. Indeed, there is an argument that the court's intervention comes with specific advantages. The capacity of bankruptcy judges to exercise wide discretion in applying statutory measures, combined with powers to compel delivery of detailed disclosures, can allow for a flexible, solutions-orientated approach that may be especially well-suited to address the novel, evolving nature of the crypto industry. An objective examiner's report (e.g., Cred and Celsius),³²⁷ for example, can reveal insights about a firm and its industry that may not be easily discernible through regular, standardized disclosures, where a company might present its affairs in an overly curated, sanitized light. Approaches to address thorny problems like valuation of crypto assets (e.g., Voyager) can reflect efforts on the part of any number of experts enlisted by the court, including regulatory agencies. This can better equip judges to develop resolution strategies that stand the best chance of success in addressing risks and distress within a novel, understudied asset class like crypto. Further, the public nature of the bankruptcy process means that the

^{326. @}investorvoyager, TWITTER (Apr. 25, 2023, 1:57 PM), https://twitter.com/investvoyager/status/1650921887512272917 [https://perma.cc/5GHF-HSBK].

^{327.} See supra note 27.

court's efforts are afforded general scrutiny (including on social media). There is signaling of regulatory priorities (e.g., customer protection). And, the court's judgments and analysis create opportunities for wider learning about the legal complexities (e.g., custody) and industry characteristics of crypto markets.

Yet, even as bankruptcy courts have risen to meet the legal and economic challenges posed by "crypto winter," the consequences of their engagement reveal the high costs of relying on these courts to function as proxy financial regulators. As we discuss in Part III, bankruptcy courts are highly specialized actors that are poorly suited to act as general overseers and rule-makers for any financial industry.

III. THE BANKRUPTCY COURT AS (IMPERFECT) CRYPTO MARKET REGULATOR

Part II showed how bankruptcy is, functionally, administering the clean-up of large segments of the crypto ecosystem. It observes that some of bankruptcy's work is serving non-bankruptcy regulatory objectives, including broad and exacting public disclosures, management accountability, loss allocation in ways that are instructive to regulators and crypto investors, even opportunity for traditional government supervisors to advance policy objectives before enactment of corrective regulation. This contention might, however, be troubling, perhaps even to the bankruptcy judges overseeing the crypto cases. As explained in Section II.B, bankruptcy's purpose and intentions look no further than the estate and its stakeholders. Any larger-scale administrative objectives served by bankruptcy are, therefore, more or less incidental to—rather than and by virtue of—the Bankruptcy Code's underlying design.

There lies the trouble with relying on bankruptcy courts to serve as default quasi-regulators. This Part surveys the implications. We observe that there are difficult tensions between core bankruptcy policies and those of more traditional financial regulation. Particularly on matters of systemic risk or customer protection, bankruptcy's usual focus—looking to safeguard, augment, and ultimately distribute estate value—can result in destabilizing and costly externalities for actors like customers or creditors. Though knock-on hardships are commonplace and expected in insolvencies, bankruptcy courts cannot deploy the kind of tools available to financial regulators (e.g., to backstop customer money claims or provide emergency bridge financing for struggling counterparties) to shore up a hurting market or ensure its go-forward integrity.

Even disclosure, a foundational regulatory device, furthers a different imperative in bankruptcy. The timing, extent, and even reliability of bankruptcy disclosure encapsulates the point-counterpoint nature of bankruptcy's adversary process. It is sharply focused on its intended audience—Chapter 11 stakeholders—not the markets more generally. Such disclosures can only instruct and, hopefully, positively affect crypto market development by presenting cautionary tales. Bankruptcy courts can do little more for the wider audience.

Finally, the frictions exemplified by BlockFi, Celsius, FTX, Genesis, Three Arrows, and Voyager illustrate the costs to financial market design where policy looks to the bankruptcy court as a frontline regulator—rather than as but one critical part of an otherwise larger, dedicated architecture for oversight and resolution. Requiring bankruptcy courts to step into a leadership role, rather than to adjudicate within an existing framework for oversight (where oversight is largely entrusted to other facets of government), imposes on these courts a responsibility far outside of their usual functions and capabilities, creating enormous inefficiency and, in the end, grave concerns over effectiveness.

A. SYSTEMIC RISK AND THE BANKRUPTCY CODE

The interventions of bankruptcy courts in the context of crypto have exemplified the tensions between the Bankruptcy Code and financial regulatory approaches designed to address systemic risks. As noted in Part I, crypto markets showcase the potential for externalities—where institutions like exchanges (e.g., FTX, Genesis, and Voyager), quasi-banks (e.g., BlockFi and Celsius), and hedge funds (Alameda and Three Arrows) pose dangers to others, resulting in the creation of pathways for risk to move from one firm to others rapidly and unpredictably.

But, despite these risks, fundamental aspects of the Bankruptcy Code stand in tension with regulation's emphasis on preserving market stability and assuring the safety and soundness of large, deeply networked financial firms. For one, the typical mission of bankruptcy courts looks to address the debtor's insolvency, protecting and enhancing the value of the estate, and overseeing the development of a plan to distribute value to creditors. How bankruptcy courts achieve this has long elicited debate and prompted recourse to competing judicial philosophies to guide how the pie is best divided among stakeholders. Scholars have tussled, for example, over the workability of divergent economic approaches when deciding how much leeway to afford managers struggling to return a distressed business to profitability: whether only creditors' rights ought to be recognized; or, if community interests should also be afforded some voice in a bankruptcy

process; or even whether certain creditors (e.g., DIP lenders) ought to be permitted especially close control over the firm's workings and managerial discretion.³²⁸ While not underplaying their importance, nor diminishing the attention bankruptcy courts often pay to non-economic stakeholders (like local communities and public policy imperatives), these variations generally operate with an overarching focus on the debtor and the financial distress that it is experiencing.³²⁹ Indeed, bankruptcy law expects third-parties to absorb loss, uncertainty, and distress of their own in order to afford the debtor an opportunity to reorganize.³³⁰ In other words, the focus of the Bankruptcy Code is almost exclusively on the debtor—rather than preventing the spread of distress to third-parties and the industry sector more generally.

Perhaps the most visible tension between the Bankruptcy Code and its effect on systemic risks can be seen in the broad application of the automatic stay. Designed to freeze attempts to collect debts against the debtor's estate, it precludes any number of creditors from accessing and retrieving their funds.³³¹ In the context of crypto insolvencies, such as Celsius and BlockFi, this has meant precluding the firms' customers from accessing assets and withdrawing them from the debtor platform, leaving billions of dollars trapped without clarity as to when they might be returned—if they might be returned at all.³³² Importantly, limited financial regulation has meant that the automatic stay is applied bluntly to crypto assets, without any calibration to reflect the common sense (but not, in the end, legal) notion that these assets constitute customer property.³³³ By contrast, in regulated securities and commodities markets, rulemaking mandates that assets be protected to

^{328.} For approaches, see generally Elizabeth Warren, *Bankruptcy Policymaking in an Imperfect World*, 92 MICH. L. REV. 336 (1993); Barry E. Adler, *The Creditors' Bargain Revisited*, 166 U. PA. L. REV. 1853 (2018); Kenneth Ayotte & Jared A. Ellias, *Bankruptcy Process for Sale*, 39 YALE J. ON REG. 1 (2022).

^{329.} Scholars have long criticized bankruptcy's occasional foray into wider systemic and socioeconomic issues. Chrysler's bankruptcy was a case in point, often critiqued for the court's emergency approval of an exit strategy sponsored by the federal government (with a larger macro-economic agenda in mind) that seemingly overturned established payment priorities. *See, e.g.*, Mark J. Roe & David Skeel, *Assessing the Chrysler Bankruptcy*, 108 MICH. L. REV. 727, 733–34 (2010) (contrasting loss-absorbing classes between "normal" processes and the Chrysler bankruptcy).

^{330.} See generally Anne Hardiman, Toxic Torts and Chapter 11 Reorganization: The Problem of Future Claims, 38 VAND. L. REV. 1369 (1985); Vincent S.J. Buccola & Joshua C. Macey, Claim Durability and Bankruptcy's Tort Problem, 38 YALE J. REG. 766 (2021).

^{331. 11} U.S.C. § 362; Citizens Bank of Maryland v. Strumpf, 516 U.S. 16, 21 (1995).

^{332.} See generally Anthony Casey, Brook Gotberg & Joshua Macey, Crypto Volatility and the Pine Gate Problem, 1–2 HARVARD L. SCH. BANKR. PANEL (2023), https://hlsbankruptcyr.wpengine.com/wp-content/uploads/2023/03/Casey-Gottberg-Macey-Harv-Bankr-RT-1.1939.docx.pdf. [https://perma.cc/T8LK-TNXB].

^{333.} Adam Levitin, *What Happens if a Crypto Exchange Files for Bankruptcy*?, CREDIT SLIPS (Feb. 2, 2022, 11:06 PM), https://www.creditslips.org/creditslips/2022/02/what-happens-if-a-cryptocurrency-exchange-files-for-bankruptcy.html [https://perma.cc/Y6GY-ML54].

clearly recognize investor ownership rights, with custody arrangements eliminating the risk of these assets becoming scooped up in a custodian's bankruptcy.³³⁴

This tension has played out repeatedly across the major crypto insolvencies. Bankruptcy courts do not have discretion and must strictly enforce the automatic stay, without regard for potentially systemic consequences within the crypto-ecosystem and the economic damage inflicted on otherwise blameless retail creditors. For one, platform clients not been able to withdraw their assets, causing damaging knock-on effects, if they lack the cash to pay out on their own obligations.³³⁵ In the case of FTX, for instance, this included institutional creditors, such as BlockFi, that ended up pushed into their own insolvency.336 It also compromised millions of vulnerable retail interests, everyday savers with limited or negligible economic slack to absorb the shock.³³⁷ Indeed, in seeking to navigate the damage, retail creditors have been forced to reckon with sophisticated parties in crowded and confusing legal proceedings. This has required administrative investment in filing claims as well as in carefully following the trajectory of their legal entitlements.³³⁸ With these cases (and the automatic stay) stretching on for many months, the complex nature of crypto bankruptcies invariably threaten all customers, retail and institutional, with lengthy and legally burdensome separation from whatever value is ultimately left for them – no matter the resulting knock-on shocks.³³⁹

As an added source of risk, crypto holders confront reckoning with the shifting valuation of a highly volatile asset. As Anthony Casey, Brook Gotberg, and Joshua Macey write, the changing valuation of crypto assets can create incentives for a debtor to use these assets to fund itself at low

^{334.} Ong, *supra* note 138; Customer Protection Rule, 17 C.F.R. § 240.15c3-3 (2019); *Segregation of Assets and Customer Protection*, FIN. INDUS. REGUL. AUTH., https://www.finra.org/rules-guidance/guidance/reports/2021-finras-examination-and-risk-monitoring-program/segregation [https:// perma.cc/43RC-55TM].

^{335.} See, e.g., Casey et al., supra note 332, at 1.

^{336.} Laurence Fletcher & Joshua Oliver, *Hedge Funds Left with Billions Stranded on FTX*, FIN. TIMES (Nov. 21, 2022), https://www.ft.com/content/125630d9-a967-439f-bc23-efec0b4cdeca [https://perma.cc/7P7C-LVZW].

^{337.} Chris Arnold, *FTX Investors Fear They Lost Everything, and Wonder if There's Anything They Can Do*, NPR (Nov. 18, 2022, 2:13 PM), https://www.npr.org/2022/11/18/1137492483/ftx-investors-worry-they-lost-everything-and-wonder-if-theres-anything-they-can- [https://perma.cc/T5PA-QYUE].

^{338.} See e.g., Cheyenne Ligon, Celsius Bankruptcy Filings Hint Retail Customers Will Bear Brunt of Its Failure, COINDESK (Jul. 18, 2022, 1:28 PM), https://www.coindesk.com/business/ 2022/07/18/celsius-bankruptcy-filings-hint-retail-customers-will-bear-brunt-of-its-failure/ [https:// perma.cc/J2FL-EJ5Z] (noting the vulnerability faced by retail customers versus institutional clients for the Celsius bankruptcy).

^{339.} Casey et al., *supra* note 332, at 1–2; Fletcher & Oliver, *supra* note 336.

cost.³⁴⁰ With crypto assets likely to have a depressed valuation on the filing date of a large bankruptcy, an exchange can gain by holding onto a base of assets with appreciating price, and to eventually reap winnings from the difference between a low-dollar customer claim and a higher valuation further into the insolvency process.³⁴¹

These risks are not new for insolvencies where the debtor's failure might result in costly externalities for financial markets. Crucially, however, regulated markets have developed sophisticated conventions to recognize and privilege systemic risk considerations over the interests of the debtor. As noted above, custody arrangements in securities and commodities markets look to keep customer assets outside of the bankruptcy.³⁴² But, other provisions, too, are worth highlighting. For example, under the Bankruptcy Code, certain kinds of risky and short-term financial contracts are expressly exempted from the stay.³⁴³ For certain kinds of derivatives and short-term credit arrangements, a debtor's counterparty is permitted to close-out the contract and set-off liabilities to secure what is owed to them.³⁴⁴ This process is designed to happen automatically, preventing these specific financial creditors from becoming locked in lengthy proceedings and facing the prospect of cash-shortages themselves.³⁴⁵ Of further note is the fact that certain kinds of financially systemic firms are saved from becoming subject to long and uncertain corporate bankruptcies. This is most clearly exemplified by the regime for addressing bank failures, where the process is managed by a particular government agency-the FDIC-rather than the courts. This design is supposed to offer a highly technocratic, fast, and minimally disruptive process, where customer deposits and outstanding bank

^{340.} Casey et al., *supra* note 322, at 2–3.

^{341.} See id. This issue emerged very visibly in the FTX bankruptcy proceedings, where an improving crypto market resulted in prices of major coins increasing during 2023. For example, Bitcoin's price had surged from around \$17,000 at the time of FTX's bankruptcy filing to over \$45k by January 2024. Dietrich Knauth, *FTX Customers Feel Short Changed by Company's Crypto Valuations*, REUTERS (Jan. 11, 2024), https://www.reuters.com/legal/transactional/ftx-customers-feel-short-changed-by-companys-crypto-valuations-2024-01-11/.

^{342.} See Customer Protection Rule, 17 C.F.R. § 240.15c3-3 (2019); Segregation of Assets and Customer Protection, FIN. INDUS. REGUL. AUTH., https://www.finra.org/rules-guidance/guidance/reports/2021-finras-examination-and-risk-monitoring-program/segregation [https:// perma.cc/4KME-XVY5].

^{343.} For discussion, see, Barbra Parlin, *Derivatives and Bankruptcy Safe Harbors*, Holland & Knight Newsletter (Feb. 2009), https://www.hklaw.com/en/insights/publications/2009/02/derivativesand-bankruptcy-safe-harbors [https://perma.cc/WJ4A-3QFL]. It is worth noting that scholars have disputed the logic of using of these safe harbors for mitigating systemic risk. *See, e.g.*, Franklin R. Edwards & Edward R. Morrison, *Derivatives and the Bankruptcy Code: Why the Special Treatment*?, 22 YALE J. ON REGUL. 91, 103-104 (2005) (but positing other efficiency-based rationales for preserving the special treatment of derivative contracts in bankruptcy).

^{344.} See, e.g., Parlin, supra note 343.

^{345.} See, e.g., id.

loans are transferred (ideally) seamlessly to another bank, preventing worries about the larger solvency of the banking system and helping to prevent a run by frightened depositors.³⁴⁶

In other words, regulatory policy recognizes the tension between the Bankruptcy Code and the costs of system-wide fragility. Whereas rulemaking in securities markets, commodities, and banking regulation has looked to navigate this tension through well-established, Congressionallyapproved, crafted tools, crypto markets have been left exposed to the vulnerability of systemic risks but with only the discretion and generalized case oversight of bankruptcy court for recourse. With courts equipped only with traditional tools (e.g., the automatic stay), bankruptcy law is illequipped to protect short-term creditors and vulnerable customers in crypto markets.

B. BANKRUPTCY DISCLOSURE VS. MARKET DISCLOSURE

The close nexus between financial regulation and disclosure finds its originating, and perhaps best, articulation in Justice Brandeis' famous statement: "Sunshine is said to be the best of disinfectants; electric light the most efficient policeman."³⁴⁷ And, so, while scholars have long debated the efficacy of disclosure as a regulatory tool, and contested even further how best it should be implemented to achieve its intended purpose, compelling businesses to periodically divulge core performance and governance data remains a vital component in the administration of financial systems.³⁴⁸ The general idea is that, if the law mandates regular and sufficient disclosure, the consuming public and markets more generally will do much of the policing on their own.³⁴⁹ The SEC and other regulatory agencies have, in turn, issued

^{346.} *Transparency & Accountability – Resolutions & Failed Banks*, FED. DEPOSIT INS. CORP. (May 16, 2023), https://www.fdic.gov/transparency/resolutions.html [https://perma.cc/DM9L-L93N].

^{347.} Louis Brandeis, *What Publicity Can Do* in *Other People's Money—and How the Bankers Use It*, Chapter V (1914). For discussion on information asymmetry within financial markets regulation, see for example, Judge, *supra* note 112.

^{348.} On a critical view of mandatory disclosure systems, see generally HOMER KRIPKE, THE SEC AND CORPORATE DISCLOSURE: REGULATION IN SEARCH OF A PURPOSE (1979). On the importance of mandatory disclosure for enhancing market integrity and efficiency, see for example, John Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 720–28 (1984); Merritt B. Fox, Randall Morck, Bernard Yeung & Artyom Durnev, *Law, Share Price Accuracy and Economic Performance: The New Evidence*, 102 MICH. L. REV. 331, 339–42 (2003); Zohar Goshe & Gideon Parchmovsky, *The Essential Role of Securities Regulation*, 55 DUKE. L.J. 711, 755–65 (2006) (highlighting the essential role of information traders within securities markets and the essential role of mandatory disclosure). This literature is extensive, and a full discussion is outside the scope of this Article.

^{349.} See, e.g., Merritt Fox, Required Disclosure and Corporate Governance, 62 62 L. & CONTEMP. PROBLEMS 113, 116–18 (1999) (noting the importance of disclosure for investors to police corporate governance). The literature is extensive and covers a broad range of policing levers that may be enabled by disclosure.

extensive guidelines and disclosure standards have evolved to aspire for clarity, consistency, and comparability in public communications.³⁵⁰ Broadly viewed, capital markets, as well as the general consuming public, have come to expect high-quality, reliable disclosures (as compelled by law and enforced by federal and state administrative agencies), assuring greater confidence in the efficient and safe workings of regulated markets.³⁵¹

That is not the nature of bankruptcy disclosure, however. Debtors do not have to broadly divulge information in their bankruptcy cases to accommodate a regulatory scheme intended to properly inform a market.³⁵² Come Chapter 11, the typical debtor's securities are already delisted, ³⁵³ and disclosure imperatives arising under non-bankruptcy law shift to what is expected in bankruptcy. Thereafter, and as a normative attribute of Chapter 11, debtors tend to publicly disclose only what is necessary and only when they desire particular relief from the bankruptcy court.³⁵⁴ As explained in Section II.B, a debtor's reorganization is a sort of "becoming" that often takes shape after the bankruptcy has started.³⁵⁵ Bankruptcy law does not compel the debtor to issue much in the nature of progress reports along the way. And, at least during the formative stages of the bankruptcy, a shroud of secrecy is generally acceptable, allowing key constituents, such as the official creditors committee, to do their work.³⁵⁶ Unlike the public more

^{350.} Fox, *supra* note 349, at 113. It is important to note that, in certain contexts implicating systemic banking risks, disclosure can be curtailed by regulators in a bid to prevent panics. On the trade-offs of greater transparency in banking regulation, see Tuomas Takalo & Diego Moreno, *Bank Transparency Regulation and Stress Tests: What Works and What Does Not*, CEPR (Apr. 17, 2023), https://cepr.org/voxeu/columns/bank-transparency-regulation-and-stress-tests-what-works-and-what-does-not [https:// perma.cc/54KC-NXH8].

^{351.} Fox, supra note 349; see generally Coffee, supra note 348.

^{352.} Rather, it is quite the opposite. Section 1125 of the Bankruptcy Code provides that the standard for whether a disclosure statement "contains adequate information is not governed by any otherwise applicable nonbankruptcy law, rule, or regulation". 11 U.S.C. § 1125(d). The House Report accompanying this section stated that creditors "should be able to make an informed judgment on their own, rather having the court or the Securities and Exchange Commission inform them in advance of whether proposed plan is good." H.R. REP. NO. 595, 95th Cong., 1st Sess. 226 (1977).

^{353.} See, e.g., Edward S. Adams, Governance in Chapter 11 Reorganizations: Reducing Costs, Improving Results, 73 B.U. L. REV. 581, 606 (1993) (noting the frequency by which companies facing Chapter 11 delist securities).

^{354.} See id. ("[T]he Bankruptcy Code permits the debtor in possession to formulate and implement an initial reorganization plan without interference from the residual claimants and without having to provide any information to such claimants."); Nicholas S. Gato, *Disclosure in Chapter 11 Reorganizations: The Pursuit of Consistency and Clarity*, 70 CORNELL L. REV. 733, 736 (discussing Congress's intent to create a "vague" disclosure standard in Chapter 11 cases "to allow flexibility").

^{355.} See supra note 199 and accompanying text.

^{356.} See Alexander Wu, Motivating Disclosure by a Debtor in Bankruptcy: The Bankruptcy Code, Intellectual Property and Fiduciary Duties, 26 YALE J. ON REG. 481, 484 (2009) (asserting that, in comparison to corporate law, the bankruptcy law disclosure requirements "are actually less than those of a corporation's management when the corporation is solvent," and that there are situations where the debtor is "not required to disclose materially relevant information even though disclosure of that information would be required by corporate law in a non-bankruptcy setting") (emphasis added).

generally, key constituents receive sensitive information early on because they are the counter-balance in bankruptcy's adversary process and they are the ones the debtor needs to eventually negotiate a plan.³⁵⁷ It is true, as mentioned above, that the Bankruptcy Code and Bankruptcy Rules compel granular public disclosures about the assets comprising and the debts burdening the estate, as well as public release of monthly operating reports.³⁵⁸ But, these disclosures are far from fulsome, they are not completely standardized, and they are neither designed nor intended to offer everyday market participants confidence, clarity, and comparability about firms and their workings.³⁵⁹ For example, monthly operating reports, untethered to a disclosed bankruptcy strategy or turnaround business plan, do little to elucidate where the case is going at any particular moment.³⁶⁰ It is not until the publication of a detailed disclosure statement that the "case story" comes together for the public more generally. But, by then, the story may be almost over.

Debtors do make interim disclosures in the bankruptcy—including, especially, the debtor's so-called "first day" declaration (an explanatory, often lengthy, statement filed with the Chapter 11 petition)—and those disclosures often present a detailed case narrative: why and how the debtor finds itself in need in bankruptcy relief; what it hopes to achieve while in bankruptcy; how and when it expects to exit bankruptcy.³⁶¹ But, unlike disclosure requirements under non-bankruptcy law,³⁶² there are few repercussions for a debtor whose interim disclosures are ultimately found to be insufficient, incomplete, or even inaccurate.³⁶³ Bankruptcy anticipates that the debtor's case narrative, including the "first day" declaration, may be inculcated with advocacy; it relies on the debtor's case adversaries (e.g., the official creditors committee) to exploit discovery and other tools of

^{357.} See id.at 482.

^{358.} Fed. R. Bankr. P. 1007, 2015(a); 11 U.S.C. § 1125.

^{359.} See generally Diane Lourdes Dick, Valuation in Chapter 11 Bankruptcy: The Dangers of an Implicit Market Test, 2017 U. Ill. L. Rev. 1478 (2017) (describing the functional limits on modern debtors' bankruptcy disclosures).

^{360.} Monthly operating reports merely show periodic cash inflows and outflows of the business. Fed. R. Bankr. P. 2015(a)(3).

^{361.} See 11 U.S.C.§ 1125(a)(1) (defining "adequate information" as information that is "reasonably practicable in light of the nature and history of the debtor... but adequate information need not such information about any other possible or proposed plan... in determining whether a disclosure statement provides adequate information, the court shall consider" complexity, benefit of information to creditors, and cost).

^{362.} Cf. Press Release, SEC. & EXCH. COMM'N, Goldman to Pay SEC \$6 Million in Penalties for Providing Deficient Blue Sheet Data (Sept. 22, 2023) (requiring that "[f]irms must provide complete and accurate blue sheet data in response to our requests").

^{363.} See generally supra notes 203 and 204; see also William H. Burgess, Dismissing Bankruptcy-Debtor Plaintiffs' Cases on Judicial Estoppel Grounds, THE FEDERAL LAWYER (May 2015) (explaining the lack of consensus amongst courts in how to rectify nondisclosures in the bankruptcy context).

bankruptcy to ferret out and eventually present the counter-narrative.³⁶⁴ Celsius, for example, initially presented its case narrative in the "first day" declaration of its CEO, Alex Mashinsky. This narrative was largely debunked in the examiner's final report,³⁶⁵ and Mashinsky was arrested a short time later. But, tellingly, that did not lead to the appointment of a Chapter 11 trustee, conversion to a Chapter 7 liquidation, dismissal of the case, or even curtailment of the debtor's exclusivity to file its own bankruptcy plan.³⁶⁶ Bankruptcy wants the parties to negotiate and, so, bankruptcy courts are loath to impose interim process changes over factual disputes, even where the debtor's factual narrative is so blatantly wrong.³⁶⁷ Stated differently, bankruptcy rarely prioritizes factual accuracy in interim (prior to dissemination of a disclosure statement) public disclosure over an orderly Chapter 11 process.³⁶⁸

It is perhaps for this reason that examiner appointments have been rare occurrences in Chapter 11, historically reserved for only the most extreme cases.³⁶⁹ Examiners seize part of the adversary role occupied by creditor representatives, who are otherwise entrusted not only to learn the case facts but also to exploit them at bargaining table.³⁷⁰ Examiner appointments can, in other words, enervate the official creditors committee (among others) and that may not help the parties reach consensus on a plan.³⁷¹ Examiner reports also can be costly, eating into eventual recoveries, and they take time to

368. See In re Voyager Digital Holdings, Inc., 649 B.R. 111 (Bankr. S.D.N.Y. 2023); see generally 11 U.S.C. F§ 1125.

370. See generally 11 U.S.C. § 1106.

371. See *supra* notes 47–48.

^{364.} See Fox, supra note 349 (discussing how the debtor's "first day" declarations and disclosures are not always reliable).

^{365.} See generally Celsius Examiner's Report, *supra* note 26, 37–38 (explaining how, throughout the investigation, the Examiner "observed inconsistencies and inaccuracies in the financial data that Celsius was unable to explain" and continuing that, Celsius' "lack of institutional knowledge [by personnel within the company] led to confusion, delays, inconsistencies, and mistakes"); Kharif & Ossinger, *supra* note 29.

^{366.} See Press Release, U.S. Att'y Off. S.D.N.Y., Celsius Founder And Former Chief Revenue Officer Charged In Connection With Multibillion-Dollar Fraud and Market Manipulation Schemes (July 13, 2023) (explaining that both the former CEO and former CRO were arrested and charged with several counts relating to fraud and misrepresentations, and asserting that the United States entered into a non-prosecution agreement with Celsius.); Handagama, *supra* note 30.

^{367.} See Diane Lourdes Dick, Valuation in Chapter 11 Bankruptcy: The Dangers of an Implicit Market Test, 2017 U. ILL. L. REV. 1487,1491 (2017) (noting that "bankruptcy courts that regularly hear large Chapter 11 cases increasingly allow commercial debtors to submit financial disclosures that are riddled with disclaimers, and they almost always discourage parties from pursuing expensive valuation battles in court").

^{369.} See generally supra note 47; see also Jonathan C. Lipson, Understanding Failure: Examiners and the Bankruptcy Reorganization of Large Public Companies, 84 AM. BANKR. L.J. 1, 3 (2010) (asserting that "[J]udges are often reluctant to appoint an examiner if there is no apparent benefit to the estate or if a party requests one for transparently strategic reasons").

prepare, resulting in case delay.³⁷² Moreover, examiners are required to make their investigative findings public—even the findings that may be best reserved for quiet negotiation—and this can further chill dealmaking.³⁷³ These dynamics may help explain why even in a case as extreme as FTX the bankruptcy the bankruptcy court was reluctant to order the appointment.³⁷⁴

Finally, and most specific to crypto, bankruptcy disclosure does not have permanence. Data delivered in cases such as BlockFi, FTX, and Voyager explain the root causes of failure, and thus can offer cautionary tales for regulatory authorities and the industry more generally to observe and consider.³⁷⁵ But, it can do little more. A "bad" Chapter 11 debtor will change its ways through the reorganization process; a liquidating debtor has no future; and, other industry participants have no obligation to study or heed any cautionary tale. Bankruptcy disclosure, therefore, offers little protection unless the lessons learned are formalized into some kind of mandatory rulemaking.³⁷⁶

C. AN IMPERFECT POLICYMAKER

Facing information deficits and without a mandate to address systemic risks and market stability, bankruptcy courts are a sort of "make-do" but ultimately highly imperfect proxy-regulator for the crypto-market. Yet, their decision-making is likely to have lasting effects that shape future rulemaking and constrain the room to maneuver available to policymakers looking to craft a framework for crypto oversight.

Perhaps the clearest illustration of the courts' impact as imperfect policymaker is reflected in the ownership determinations respecting customer crypto assets deposited with bankrupt custodians. As detailed in Part I, cryptocurrencies reflect a relatively novel kind of asset class, where ownership rests with those holding the private keys (the passwords) to a crypto accounts. This design speaks to the fundamental self-help orientation of underlying blockchains that have emerged from a philosophical rejection of third parties like banks, brokers, or state regulators.³⁷⁷ However, as centralized actors have come to assume a critical role, attracting waves of customers, they have also become vast repositories of user assets, holding

^{372.} Id.; Lispon, supra note 369.

^{373.} See 11 U.S.C. § 1106(b).

^{374.} See supra note 28 and accompanying text.

^{375.} See John Ray Dec., supra note 26; BlockFi Committee Report, supra note 26; Voyager Special Committee Report, supra note 26.

^{376.} See KRIPKE supra note 348 and accompanying text.

^{377.} Nakamoto, *supra* note 54, at 1–2.

onto passwords and able to access accounts, the value of which they carry.³⁷⁸ As Adam Levitin notes, this leaves customer assets vulnerable, caught up in a legal gray zone where the fact of a custodian having *de facto* control and the capacity to access assets at will can leave customers holding a simple contractual-rather than a property-based-claim.³⁷⁹ It has also left the courts facing a complex policy conundrum, whether to (1) recognize customer property rights in crypto assets and, in turn, to permit those assets to remain outside of the custodian's estate or (2) deem the assets property of the estate, repositioning customers as general unsecured creditors.³⁸⁰ Arguably, financial regulatory policy would favor recognizing and protecting customer's property rights-and by extension their savings. As evidenced by the safeguards afforded to customer assets in securities and commodities markets, the emphasis placed by traditional financial regulation on investor protection is well-established and uncontroversial. Even where comingling of assets or failure to secure them has meant that customers have not been able to fully enforce their property rights, regulation has stepped in (e.g., MF Global) to ensure compensation and redress for those whose entitlements were abridged.381

By contrast, the absence of a focused regulatory policy and a relative lack of prior rulemaking in crypto markets, has led the bankruptcy courts the Celsius court in particular—to assert bankruptcy norms, thus reducing customer claims to a contractual (rather than proprietary) nature. As such, around \$4.2 billion in customer assets deposited with Celsius were found to belong to the bankruptcy estate, and a broad swath of depositors entitled only to the remainderman's interest after a long and torturous bankruptcy case.³⁸²

As detailed above, while this ruling might reflect bankruptcy's interpretative norms, it nevertheless raises broader policy concerns surrounding fairness and market integrity. For one, the impact of this ruling can result in some customers faring better than others during a crisis. Specifically, the effect of the ruling means that those that leave assets with an intermediary face the risk that these assets can end up subsumed within a custodian's estate. It follows that those able to hold their assets off-platform, hosted on their own private wallets face far better odds in maintaining their property rights. While straightforward, this scenario creates the risk of a two-tier market, where those possessing the technical savvy to protect themselves

^{378.} Levitin, *supra* note 333.

^{379.} Id.; Not Your Keys, supra note 91.

^{380.} Levitin, supra note 33.

^{381.} See sources cited supra notes 135–140.

^{382.} Soma Biswas, *Celsius Network Wins Ownership Rights to Customer Crypto Deposits*, WALL ST. J. (Jan. 4, 2023, 5:39 PM), https://www.wsj.com/articles/celsius-network-wins-ownership-rights-to-customer-crypto-deposits-11672865422 [https://perma.cc/RF2C-U7ZR].

out-maneuver the risk, but those that are perhaps less knowledgeable or otherwise unable to take such steps lose their entitlements. Such a state of affairs appears especially problematic given that those most likely to see their assets tapped on a platform are likely to include the most vulnerable, with less knowledge and sophistication about using crypto technologies. In other words, rather than protect all customers equally, the decision leaves crypto investors to fend for themselves. Those that cannot—in other words, customers that are in the most precarious situation—end up unprotected and liable to be harmed.

The Celsius court's ruling ended up being especially powerful in the absence of wider regulatory action to protect customers and support market integrity. This has meant that decisions of the bankruptcy court – formed within a particular system of constraints - have given rise to structural effects on the marketplace (e.g., interpretations of terms of service, review of custodianship norms). Unlike administrative rulemaking, however, this impact has taken effect without the benefit of precision market understanding, cost-benefit analysis, stakeholder consultation, or deliberation. While bankruptcy courts have done what they can within their mandate, bringing some order to the prevailing chaos, their intervention can hardly be considered as optimally engineered to provide a lasting and reliable set of guardrails for the crypto-marketplace, designed to operate both in peacetime and in crisis.

CONCLUSION

This Article has sought to offer a new account of cryptocurrency regulation to highlight bankruptcy's role, by default, as a force in financial markets oversight. With the industry lacking a real framework to govern its integrity, customer protection, and relationship with regulators, bankruptcy courts have been required to step in, addressing gray areas and thorny problems surrounding cryptocurrency's legal and economic underpinnings. In applying its expertise and authority, these courts have shown themselves to be deft and creative, bringing clarity to important questions impacting customer entitlements and the risk management practices adopted by crypto firms (e.g., in relation to crypto custody). But the courts' role remains an imperfect and incomplete one. The focus of bankruptcy remains on the debtor. Bankruptcy courts cannot perform policy to address larger concerns--such as the immediate welfare of customers or the overall health of the market. Even as bankruptcy's influence in this space has grown, its deficits have also become apparent, underscoring the larger costs of regulatory inertia and inaction for establishing standards of governance and safety within innovating industries. Ultimately, the bankruptcy court's emergence

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as an accidental financial regulator raises deeper questions about how best to push administrative mobilization to rise to the challenge of complex innovation. As financial regulators endeavor to create new standards for crypto oversight, they face an even more complex task ahead, forced to maneuver in the shadow of the bankruptcy's authority as a first mover in this arena.