Contagion. FTX, A Sector's Crisis & Crypto's Silent Victims

by

Lev E. Breydo*

Abstract

Late 2022 was crypto's Minsky moment, characterized by wholesale sector collapse and over a dozen major bankruptcies, including FTX's implosion. For millions of investors, it was the worst of all worlds, combining the frenetic contagion of 2008 with consumer protections most reminiscent of the Panic of 1907.

While the industry's challenges are often attributed to the nature of crypto itself, the true root cause reflects a fundamental category error. This Article's comprehensive market taxonomy identifies as the sector's nexus of risk entities it terms "Crypto Platforms," like FTX. Crypto Platforms are essentially financial institutions – a cauldron of externalities subject to comprehensive oversight and tailored insolvency frameworks. Yet, despite presenting similar risk profiles, Crypto Platforms have not been treated as such, evolving in an unsupervised parallel universe-turned systemic risk tinderbox. Compounding the challenges, Crypto Platforms appear generally ill-suited for the Chapter 11 reorganization processes to which they have inaptly defaulted.

Crypto's 2022 crisis and exceptionally problematic bankruptcies underscore the need for a paradigm shift with respect to sector oversight and insolvency resolution. First, to prevent future crises, regulation must emphasize substance irrespective of form – uniform treatment for uniform risks – while evolving beyond an instrument-level approach toward broader sector oversight including Crypto Platforms as well as emerging risks. Second, distressed Crypto Platforms should follow the financial institution bankruptcy template: orderly liquidation to facilitate prompt return of customer assets. Both recommendations are actionable using existing legal tools, without the need for bespoke crypto-specific legislation or regulatory action.

^{*} Visiting Assistant Professor, Villanova University Charles Widger School of Law. J.D., cum laude, University of Pennsylvania Law School, 2015; M.B.A. (Finance), The Wharton School, 2015. The author would like to thank the staff and peer reviewers of the American Journal of Bankruptcy Law, and particularly Judge Terrence Michael, Judge Elizabeth Gunn and Tabitha Bauguess for their invaluable insights, edits and feedback. I would also like to thank Professor Jonathan Lipson and the team from Temple Law for their exceptional efforts in preparing the article for publication. All errors are my own.

TABLE OF CONTENTS

Int	rod	uctic	on	100
I.	Bl	locka	chain, Crypto Assets & Platform	104
	A.	Ba	ckground	
		1.	Technology & Terminology	105
		2.	Socio-Cultural Context	108
	B.	Ma	arket Evolution	110
		1.	Growth Phases	110
		2.	Industry Structure & Crypto Platforms	112
	C.	Оv	versight Challenges	115
		1.	Fragmented Supervision	116
		2.	Regulatory Arbitrage	119
		3.	Misplaced Focus	120
II.			022 Crypto Crisis	
	A.	FΤ	X Overview	124
		1.	Background	
		2.	Unsustainable Growth	126
	B.	Se	ctor Contagion	130
		1.	Falling Dominos	
		2.	Rescue Transactions	132
		3.	FTX Collapse	
	C.		ypto's 'Crime Scene'	
III		•	Are Platform Bankruptcies So Problematic?	
	A.	Fir	nancial Regulation Context	
		1.	Ongoing Supervision	141
		2.	Tailored Insolvency Regimes	
	B.	Cr	ypto Platform Contrast	147
		1.	Estate & Asset Composition	
			a. Accountholder Treatment & Priority	148
			i. Are Customer Accounts Property of the Estate?	149
			ii. Legal Entity-Specific Distinctions	150
			b. Asset Recovery & Avoidance Actions	151
			i. Preferences: Exchange Withdrawals	
			ii. Fraudulent Conveyances: Pre-Petition Transactions.	
		2.	Governance & Case Strategy	
			a. Case Control: Who is in Charge of FTX?	
			b. Who Represents Accountholders?	156

98

 IV. Improving Crypto Platform Oversight & Insolvency
 Focus on Platforms
 a. Unbundle Operations
 b. Improve Governance & Controls
 Address Multi-Level Risks
a. Protect Consumers
h Beview Transactions 166
D. ICevicw Transactions
c. Maintain Crypto Ringfence
B. Leverage Existing Resolution Templates
1. Platform Orderly Liquidation
2. Advantages: Clarity & Simplicity
Conclusion

TABLE OF FIGURES

Figure 1. Crypto Sector Growth Phase Summary: 2016 to 2023	
(with BTC Prices)	110
Figure 2. Crypto Ecosystem Taxonomy: Core Entities	
Figure 3. Federal Financial Regulation: Overview of Crypto-Specific	
Roles	117
Figure 4. Crypto Ecosystem: Risk & Regulation Strategic Map	122
Figure 5. Summary of Mid-2022 to Early 2023 Sector Distress	132
Figure 6. FTX Collapse Timeline	136
Figure 7. FTX Group Company-Reported Balance Sheet Summary	
(11/10/2022)	139
Figure 8. Financial Institution Types & Crypto Analogues (Stylized	
Overview)	142
Figure 9. Financial Institution Insolvency Regimes Overview	144
Figure 10. Crypto Ecosystem Strategic Map: Current vs. Stylized	
Suggested Approach	162

INTRODUCTION

"[[C]]ryptocurrencies and blockchain technology have already prompted real change and can continue to do so." – Gary Gensler (2019)

"[[T]] his is a field rife with fraud, rife with hucksters. There are good-faith actors as well, but there are far too many that aren't."² – Gary Gensler (2023)

Crypto is controversial. For some, it represents the future of both finance and technology. Others see little more than a game with dangerous real-world consequences. Following its breathtaking 2022 collapse, the sector is also at something of a crossroads.

The real story, however, is not about FTX, bankruptcy – or even crypto itself – but, fundamentally, the failure of regulation to adapt to a new technology. It is also a familiar fact pattern. While seemingly novel, crypto's conflagration broadly resembles past crises – from 19th century railroad development, to the Great Depression, to dotcoms in 2000 and derivatives in 2008. Accordingly, the Article frames crypto through that historical lens and broader financial regulation context.³

Like past boom-bust mania, crypto's collapse proved most damaging for Main Street, with millions of believers conned by glitzy celebrity-studded ads now experiencing misfortunes eerily similar to savers during the Great Depression. Though often lost in the broader debates, the plight of these individuals – crypto's silent victims – represents the underlying motivation for this Article and its policy recommendations.

At the same time, while crypto may evolve, it is unlikely to disappear: Analysts expect \$5 trillion of "tokenized" assets by 2030.⁴ Thus, contemporary post-crisis policy determinations may influence the future of

¹ Gary Gensler, *Even if a Thousand Projects Don't Make it, Blockchain is Still a Change Catalyst*, COINDESK (Dec. 15, 2019), https://www.coindesk.com/tech/2019/12/15/even-if-a-thousand-projects-dont-make-it-blockchain-is-still-a-change-catalyst/.

² Bloomberg Markets, *Interview with Gary Gensler*, BLOOMBERG (July 27, 2023), https://www.bloomberg.com/news/videos/2023-07-27/sec-chair-says-crypto-rife-with-fraud-hucksters-video?sref=OOpRUZ8l (emphasis added).

³ Rana Foroohar, *Crypto: New Asset, Old Problem*, FIN. TIMES (Nov. 20, 2022), https://www.ft.com/content/a9661f21.dbeb-44c2.9796.2b31f5825645.

⁴ Money, Tokens, and Games: Blockchain's Next Billion Users and Trillions in Value, CITI GPS (Mar. 2023).

global markets for decades to come. Yet, despite the stakes, flurry of legislative proposals and "carpet bombing" of enforcement actions,⁵ there is precious little clarity regarding the specific problems to be solved, let alone their root causes. This Article begins to fill that void through the first comprehensive, multi-disciplinary analysis of the crypto sector's crisis and subsequent bankruptcies. Due to its unique significance, FTX is main illustrative case study, however the Article also discusses other cases and broader themes.

Crypto can be confusing, and that is often by design. Much of the muddle begins with the sector's distinctive terminology, technology and structure. In simplest terms, "crypto assets" are digital representations of value, cryptographically secured using distributed ledger technology.⁶ In less than 15 years, crypto evolved into a trillion-dollar asset class – as well as a socio-cultural phenomenon rooted in scar tissue from the 2008 financial crisis,⁷ and disproportionately embraced by groups historically excluded from financial services.⁸

While often discussed homogenously, the crypto sector encompasses a variety of entities performing different activities with distinct risk profiles.⁹ Over its evolution, crypto grew increasingly "financialized," reflected and amplified by the proliferation of Crypto Platforms, like FTX and Celsius, which provide a range of retail and institutional offerings and represent crypto's natural nexus of risk.¹⁰ Despite this, due to a combination of fragmented supervision, regulatory arbitrage and agency missteps, Crypto

⁶ See infra Part I.A.1.

⁵ David Yaffe-Bellany, Government Cracks Down on Crypto Industry with Flurry of Actions. N.Y. TIMES (Feb. 18. 2023). https://www.nytimes.com/2023/02/18/business/crypto-crackdown-regulation.html; See also, Elizabeth Warren, Opinion, Regulate Crypto or It'll Take Down the Economy, WALL ST. J. (Nov. 22, 2022); But see, Michael J. Casey, Thanks Sam! How FTX Led to COINDESK World's Worst Crypto Policy, (April 10. 2023). https://www.coindesk.com/consensus-magazine/2023/04/07/thanks-sam-how-ftx-ledto-worlds-worst-crypto-policy/ (deriding SEC regulatory actions as "regulation-byretribution.").

⁷ Andrew Ross Sorkin, From Trump to Trade, The Financial Crisis Still Resonates 10 Years Later, N.Y. TIMES (Sept. 10, 2018), https://www.nytimes.com/2018/09/10/business/dealbook/financial-crisis-trump.html.

⁸ See infra Part I.A.2.

⁹ See infra Part I.B.2.

¹⁰ See infra Part I.B.2.

Platforms were largely ignored by regulators, even as they rapidly amassed billions in assets.¹¹

Crypto experienced unprecedented growth during the COVID-19 pandemic. However, sector financialization, leverage and interconnection sans oversight quickly turned into a systemic risk tinderbox.¹² By mid-2022, a drop in crypto prices set off a chain reaction with dozens of cascading bankruptcies across the ecosystem.¹³ For accountholders, it was the worst of all worlds, combining the speed and complexity of 2008 with a Depression-era lack of basic consumer protections.

FTX epitomized crypto's excesses and played a leading role in the sector's collapse.¹⁴ As it rapidly amassed millions of users and a \$40 billion valuation, wunderkind founder Sam Bankman-Fried was lionized as a modern-day J.P. Morgan.¹⁵ Unfortunately, FTX unraveled even faster than it grew, revealing a crude Ponzi scheme¹⁶ facilitated by glaring weakness in governance and oversight.¹⁷ Though perhaps the worst offender, ongoing bankruptcy cases have shown that crypto sector misconduct was fairly widespread.

While often reflexively attributed to the nature of crypto itself, in reality, Crypto Platform bankruptcy challenges reflect a first-order category error: rather than typical tech start-ups, they are complex financial institutions, expressly ill-suited for Chapter 11 reorganization.¹⁸ Unlike other types of companies, financial institutions' business model necessitates comprehensive supervision with an unusually tight interplay between preand-post bankruptcy oversight, both to prevent distress and to mitigate negative impacts on third parties.¹⁹

Failing to treat Crypto Platforms like financial institutions set the stage for crypto's crisis – and the errors are now being compounded through illfitted bankruptcies. Indeed, despite similar operations and risk profiles,

¹¹ See infra Part I.C.

¹² See infra Part I.B.1.

¹³ See infra Part II.B.1

¹⁴ See infra Part II.A.1.

¹⁵ See infra Part II.A.2.

¹⁶ See infra Part II.A; Benjamin Weise, Prosecutor in Bankman-Fried Case Made a Career of White-Collar Cases, N.Y. TIMES (Dec. 13, 2022), https://www.nytimes.com/2022/12/13/business/damian-williams-ftx.html.

¹⁷ See infra Part II.C.

¹⁸ See infra Part III.A.1.

¹⁹ See infra Part III.A.2.

Crypto Platforms existed in a parallel universe of unsupervised locallysystemic entities. The associated bankruptcy proceedings illustrate precisely the hodgepodge of confusion one would expect under the circumstances – contested asset priority, murky governance and unclear exit strategy – but few truly crypto-specific issues, suggesting the deficiencies may ultimately be curable.²⁰

Crypto's 2022 crisis and exceptionally problematic bankruptcies illustrate the need for a paradigm shift regarding both sector oversight and insolvency resolution.²¹ The critical failing has been focusing on form over substance, manifesting most acutely in the mismatched treatment of Crypto Platforms, the sector's central financial institutions.²² This disconnect can be addressed using legal tools and first-principles logic from financial regulation. First, to prevent crises ex ante, crypto oversight must evolve from an instrument-specific approach toward broader oversight focusing on protecting consumers, the sector and broader economy.²³ Second, ex post, in the event of distress, Crypto Platform bankruptcies should be streamlined by incorporating financial institution resolution principles, which can be effectuated under the bankruptcy code without legislative or regulatory action.²⁴

This Article proceeds in four parts. Part I offers background regarding the crypto sector and ecosystem, focusing on Crypto Platforms, as well as associated discussion of industry oversight challenges. Parts II, III, and IV are organized around three core research questions and the Article's associated contributions to the literature:

• *Part II* analyzes the causes of the 2022 crypto crisis. Rather than the nature of crypto itself, the Article posits the root cause to be a disconnect between regulatory strategy and

103

²⁰ See infra Part III.B.

²¹ See infra Part IV.

²² Investigating the Collapse of FTX: Hearing Before the House Fin. Serv. Comm., 117th Cong. (Dec. 13, 2022) (Remarks of Senator Elizabeth Warren, calling for uniform treatment of similar transactions with the "same kind of risks"); Tobias Adrian, et al., *Crypto Needs Comprehensive Policies to Protect Economies and Investors*, IMF BLOG (July 18, 2023), https://www.imf.org/en/Blogs/Articles/2023/07/18/crypto-needscomprehensive-policies-to-protect-economies-and-investors.

²³ See infra Part IV.A.

²⁴ See infra Part IV.B.

104 AMERICAN BANKRUPTCY LAW JOURNAL (Vol. 98:1 2024)

crypto market reality. The Article's novel analysis identifies crypto's nexus of risk entities it terms "Crypto Platforms," like FTX. Crypto Platforms are essentially financial institutions, but were not treated as such from a regulatory or bankruptcy perspective, evolving in a supervisory void that culminated in the sector's collapse.

- Part III assesses why Crypto Platform bankruptcies have been exceptionally problematic. Based on the economics, finance and legal literature, the Article details financial institutions' unique regulatory and bankruptcy treatment in respect of potential distress. Because they were not viewed as financial institutions, however, Crypto Platforms did not follow the associated insolvency template, instead turning to traditional Chapter 11 reorganizations, compounding the initial category error with ill-fitted processes that have forced courts into an uneasy quasi-regulatory role.
- *Part IV* focuses on strategies to improve Crypto Platform insolvency and oversight. To harmonize the disconnect between regulation and market dynamics, the Article recommends a paradigm shift including: (i) transitioning supervisory focus from crypto instruments toward Crypto Platforms and (ii) applying liquidation-focused templates for Crypto Platforms in bankruptcy through a two-phase approach.
- I. Blockchain, Crypto Assets & Platform

Understanding the 2022 crypto crisis requires a brief background regarding the sector, including its distinctive terminology, technology, and maturation cycle. Perhaps most critically, and somewhat counterintuitively given its original ethos, over its rapid evolution the space became increasingly dominated by Crypto Platforms: interconnected financial institutions representing the natural nexus of risk. Unlike "traditional" financial firms subject to intricate regulation, however, Crypto Platforms remain largely unsupervised. This regulatory deficit underlies many of the issues surrounding the crypto crisis – and represents a critical area for regulatory action.

Part I sets the stage for the Article's broader discussion. First, it briefly introduces core technological concepts and historical context. Second, it analyzes the crypto sector's evolution and industry structure, with a focus on Crypto Platforms. Finally, it discusses the regulatory environment, including reasons for limited Crypto Platform oversight.

A. Background

1. Technology & Terminology

Crypto and modern blockchain technology trace their start to a seminal 2008 paper, which presented a system where "online payments [could]] be sent from one party to another without going through a financial institution."²⁵ Bitcoin,²⁶ a cryptocurrency²⁷ launched in 2009, represented the associated unit of account, with blockchain the underlying technology allowing these transactions to occur.²⁸ While Bitcoin remains crypto's bellwether asset, as of 2023, the sector encompasses 10,000 instruments valued in excess of \$1 trillion, down from a late-2021 peak of \$3 trillion.²⁹

105

²⁵ Satoshi Nakamoto, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM (2008). Satoshi Nakamoto is understood to be pseudonym for a developer or group of developers, the identity of which remains unknown.

²⁶ "Bitcoin" is capitalized in reference to the system as a whole, and lowercase when referencing a unit of currency.

²⁷ "Cryptocurrency," refers to "a form of digital money secured not through the backing of a state or financial institution, but through cryptography." Kevin Werbach, *Trust, But Verify: Why the Blockchain Needs the Law*, 33 BERK. TECH. L.J. 489, 493 (2018) [henceforth, 'TRUST BUT VERIFY']].

Rather than "cryptocurrency," the Article generally uses the term "crypto asset" (or simply "crypto"). This is because per a framework presented in a related Article, only a limited sub-set of crypto represents "currency" as the term is properly understood. The article also broadly frames "digital assets" as encompassing both "crypto assets" as well as "tokenized" non-crypto-native assets. *See* Lev E. Breydo, *Stocks, Memes or Miles? A New Crypto Taxonomy and Regulatory Framework* [[henceforth, "Memes or Miles"]].

²⁸ As Professor Werbach observes, "many of the concepts in Nakamoto's paper were familiar to cryptographers,

but the system was implemented in a novel and elegant way to create a private, decentralized form of digital cash, called bitcoin." Werbach, TRUST BUT VERIFY, *supra* note 27, at 500.

²⁹ See Part I.C.

Blockchain is a sub-set of distributed ledger technology ("DLT"),³⁰ which represents the "foundational innovation underlying the crypto-asset ecosystem"³¹ allowing "nearly immutable" transactions between parties who do not trust each other, without an intermediary.³² Blockchain uses "complex technology" to achieve a conceptually straightforward utility: "providing a distributed yet provably accurate record."³³

The structural relationship between crypto and blockchain is that permissionless ledgers – open systems available to anyone – use "their currencies []] to incentivize activity."³⁴ One way of looking at this is that while blockchain can reduce the need for intermediaries, it cannot create altruists; market participants still need incentives to make the systems operable.³⁵ In contrast, permissioned ledgers (closed systems) do not require such incentives, and thus do not use cryptocurrency.³⁶

³⁰ Blockchain and crypto are sometimes erroneously presumed analogous but reflect distinct concepts. *What's The Difference Between Blockchain and Bitcoin?* EUROMONEY (July 27, 2023), https://www.euromoney.com/learning/blockchain-explained/the-difference-between-blockchain-and-bitcoin ("many people wrongly conflate" bitcoin and blockchain).

³¹ FSOC, REPORT ON DIGITAL ASSET FINANCIAL STABILITY RISKS AND REGULATION (2022) at 7.

³² Id.

³³ Werbach, TRUST BUT VERIFY, *supra* note 27, at 493 (describing that the technology is understood to offer two benefits. First, it allows one to have confidence in transactions without trusting any of the individual counterparties involved. Second, "the single distributed ledger replaces many private ledgers that must be reconciled for consistency, thus reducing transaction costs.").

In other words, and in simplest terms, for purposes of this Article blockchain can be conceptualized as an advanced database technology. That observation is intended to contextualize, rather than trivialize – after all, "[m] odern life consists in large part of entries in databases." Matt Levine, *The Crypto Story*, BLOOMBERG (October 25, 2022), https://www.bloomberg.com/features/2022-the-crypto-story/ ("Saying that modern life is lived in databases means... modern life involves a lot of trust.").

³⁴ Werbach, TRUST BUT VERIFY *supra* note 27, at 500.

³⁵ Blockchain does not necessarily require use of crypto, indeed some have posited that "[[t]]he worst use that ever came out for blockchain was currency. . . its halted a lot of innovation." *See* Casper Labs, *Blockchain Hub Davos / Day 0 (Bonus Day!)*, YOUTUBE (Jan. 16, 2023), https://www.youtube.com/watch?v=zyTeQKnu1tA (Panel Interview with David Branch, Consensus Capital).

³⁶ Because, largely by design, financial services are especially dependent on layered intermediation, the sector has appeared most susceptible to prospective blockchain disruption. *See* Merritt B. Fox, et al., *Distributed Ledger Technology and the Securities Markets of the Future: A Stakeholder Survey*, 2021 COLUM. BUS. L. REV. 651, 651 (2021)

Terminologically, a "crypto asset" can be defined as to a "cryptographically secured digital representation of value or contractual rights" using "a form" of DLT.³⁷ This broad framing contextualizes crypto's heterogeneity with a vast universe of instruments encompassing distinct economic features that map imperfectly onto traditional asset classes and existing regulatory frameworks.³⁸ These incongruencies are a threshold hurdle to understanding and overseeing the fast-evolving ecosystem. As a result, nearly 15 years after crypto's advent, the sector lacks not only guiding principles, but clear answers to seemingly threshold questions – including whether crypto assets are securities.³⁹

107

⁽finding, based on 100-plus stakeholder survey, that "[[t]]he potential of DLT, if it can be realized, could improve the functioning of our securities markets while at the same time sharply reducing costs."). Yet, given the broad-based benefits, blockchain use-cases extend far beyond both financial services and cryptocurrency, encompassing a wide range of transactions – as well as unique new business models. See also Don Tapscott & Alex Tapscott, The Impact of The Blockchain Goes Beyond Financial Services, HARV. BUS. REV. (May 10, 2016), https://hbr.org/2016/05/the-impact-of-the-blockchain-goesbeyond-financial-services:_Christopher Mims, Jack Dorsey And The Unlikely Revolutionaries Who Want To Reboot The Internet, WALL ST. J. (Dec. 18, 2021), https://www.wsj.com/articles/jack-dorsey-and-the-unlikely-revolutionaries-who-wantto-reboot-the-internet-11639803654 ("New technologies like blockchain present the opportunity to loosen the centralized stranglehold [[of]] companies and governments."); see also, Onyx, Opportunities in the Metaverse, JPMORGAN, at 3-4 (2022) (describing Metaverse project governance through native token issuance).

³⁷ FSB GLOBAL REGULATORY FRAMEWORK FOR CRYPTO-ASSET ACTIVITIES, FINANCIAL STABILITY BOARD (July 17, 2023) https://www.fsb.org/2023/07/fsb-globalregulatory-framework-for-crypto-asset-activities/; *see also* FACTSHEET: CRYPTOASSETS – KEY TERMS AND DEFINITIONS, UK ECONOMIC CRIME AND CORPORATE TRANSPARENCY BILL 2022, https://www.gov.uk/government/publications/economiccrime-and-corporate-transparency-bill-2022-factsheets/factsheet-cryptoassets-key-termsand-definitions.

³⁸ Value is highly concentrated with the top 10 assets accounting for about 85%, while the bottom 9,000 collectively represent less than 1% – a "long tail" where the most legallyproblematic crypto assets congregate. A taxonomy presented in a related Article divides crypto assets into three primary groupings and over a dozen distinct asset types, few of which are clear from a regulatory perspective. *See* Breydo, *Stocks, Memes, or Miles, supra* note 27.

³⁹ This drives regulatory and jurisdictional challenges, *See infra*, Part I.C.

2. Socio-Cultural Context

It is difficult to appreciate the socio-cultural phenomenon around crypto without the 2008 financial crisis – "a moment that cleaved our country. It broke a social contract ... a sense of trust [including]] in financial institutions and []] government."⁴⁰ Perhaps the deepest fissure concerned government support for financial institutions, which many Americans saw as "bailouts" at the expense of society, sparking movements like Occupy Wall Street.⁴¹ More than a decade later, polls show a lasting negative shift in attitudes toward government and financial institutions.⁴² The game felt rigged, leaving people open to an alternative.⁴³

Crypto encapsulated this zeitgeist, tapping into powerful themes of the inter-crisis decade –inequality, racial injustice, and distrust of legacy institutions, including government and the financial system.⁴⁴ Crypto culture became as much about equity and inclusion as technology and finance⁴⁵ with adoption strongest among groups historically excluded from

⁴⁰ See supra note 30.

⁴¹ Though hardly a universal position, many scholars and policymakers view much of the government's crisis response – including interventions to stabilize markets – as ultimately necessary, albeit unfortunate.

⁴² Philip A. Wallach, Why America's Responses to the Financial Crisis Brought us to BROOKINGS Edge of Political Crisis, (Apr. 21, 2015), the https://www.brookings.edu/blog/fixgov/2015/04/21/why-americas-responses-to-thefinancial-crisis-brought-us-to-the-edge-of-political-crisis; Michael Erman, Five years after Lehman, Americans still angry at Wall Street: Reuters/Ipsos poll, REUTERS (Sept. 15, 2013, 7:03 AM), https://www.reuters.com/article/us-wallstreet-crisis/five-years-afterlehman-americans-still-angry-at-wall-street-reuters-ipsos-poll-idUSBRE98E06Q20130915 (finding 44% against "bail-outs" and 53% of view that not enough was done to prosecute bankers." Former Treasury Secretary Paulson stated "I never was able to convince the average American that what we did with these rescues wasn't for Wall Street but []] for them."").

⁴³ Crypto adoption was also helped by a uniquely-supportive macroeconomic environment and broad-based technology and digitization boom.

⁴⁴ CHARLES CALOMIRIS & STEPHEN HABER, FRAGILE BY DESIGN: THE POLITICAL ORIGINS OF BANKING CRISES & SCARCE CREDIT, 153–202 (2014) (discussing historical concerns about concentrations of power as a reason for relative industry and regulatory fragmentation in the U.S. banking sector).

⁴⁵Cleve Mesidor, *Crypto Can Be a Driver for Racial Equity*, BOSTON GLOBE (May 12, 2022), https://www.bostonglobe.com/2022/05/10/opinion/crypto-can-be-driver-racial-equity.

the financial system, including communities of color in the US.⁴⁶

Because the "traditional financial system has . . . frankly exploited Black people,"⁴⁷ it is not surprising that 38 percent of Black Americans under 40 own crypto (and 25 percent overall),⁴⁸ relative to 29 percent and 15 percent, respectively, for white Americans.⁴⁹ Arguably, the need for crypto as a financial inclusion vehicle reflected a failure of legacy financial institutions;⁵⁰ "When you have been locked out of the system . . .you see [[crypto]] as an opportunity."⁵¹ As a result, Black Americans became disproportionately exposed to crypto assets,⁵² including the "widespread losses" from crypto's crash and sector bankruptcies.⁵³ As discussed in Part IV, this uneven impact

⁵¹ See Foster-Frau, supra note 47.

109

⁴⁶ Paulina Cachero, Crypto Collapse Threatens to Leave Black, Hispanic Investors Further Behind, BLOOMBERG (July 2022), 7. https://www.bloomberg.com/news/articles/2022-07-07/crypto-collapse-threatens-toleave-black-hispanic-investors-further-behind?sref=OOpRUZ81 ("Black consumers in particular see crypto as an opportunity to build wealth outside of a traditional system that has not served them well historically."); NORC, More Than One in Ten Americans Cryptocurrencies, U. CHICAGO Surveyed Invest in (July 22, 2021), https://www.norc.org/NewsEventsPublications/PressReleases/Pages/more-than-onein-ten-americans-surveyed-invest-in-cryptocurrencies.aspx (research shows that 44% of crypto investors are non-white).

⁴⁷ Silvia Foster-Frau, Locked Out of Traditional Financial Industry, More People of Color are Turning to Cryptocurrency, WASH. POST (Dec. 1, 2021), https://www.washingtonpost.com/national/locked-out-of-traditional-financial-industrymore-people-of-color-are-turning-to-cryptocurrency/2021/12/01/a21df3fa-37fe-11ec-9bc4-86107e7b0ab1 story.html.

⁴⁸ Ariel-Schwab Black Investor Survey, SCHWAB MONEYWISE (last visited July 27, 2023), https://www.schwabmoneywise.com/tools-resources/ariel-schwab-survey-2022.

⁴⁹ A 2022 survey revealed that 46% of Black people and 44% of Latinx people believe that "crypto is more accessible than traditional finance." Inbar Preiss, *Survey Finds Race Gap in Attitudes Toward Crypto*, THE BLOCK (Oct. 18, 2022), https://www.theblock.co/post/177859/survey-finds-race-gap-in-attitudes-toward-crypto.

⁵⁰ Annie Lowrey, *The Black Investors Who Were Burned by Bitcoin*, ATLANTIC (Nov. 29, 2022), https://www.theatlantic.com/ideas/archive/2022/11/black-investors-bitcoin-cryptocurrency-crash/671750 ("Crypto also appealed to many Black investors who distrusted traditional finance.").

⁵² Taylor Nicole Rogers, *Crypto Collapse Reverberates Widely Among Black American Investors*, FIN. TIMES (July 5, 2022), https://www.ft.com/content/47d338e2-3d3c-40ce-8a09-abfa25c16a7f.

⁵³ Why The Crypto Crash Hit Black Americans Hard, ECONOMIST (May 20, 2022), https://www.economist.com/graphic-detail/2022/05/20/why-the-crypto-crash-hit-

reinforces the need for consumer protection and accountability.

B. Market Evolution

Between 2009 and 2023, crypto experienced rapid growth, high volatility and fairly regular crashes. As it matured, the sector increasingly incorporated aspects of traditional finance, with entities providing familiar services such as brokerage, custody, lending and clearing. However, crypto endeavored to avoid oversight, leveraging regulatory arbitrage and extensive lobbying to carve out something of a grey area, which fueled growth but now significantly complicates industry challenges.

1. Growth Phases

Broadly, the sector's development can be described through five distinct phases, shown in Figure 1 below, which charts the price of Bitcoin, crypto's bellwether asset, between 2016 and 2023.⁵⁴

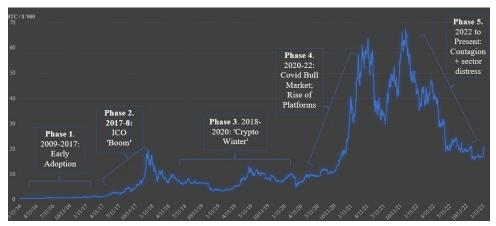


Figure 1. Crypto Sector Growth Phase Summary: 2016 to 2023

Phase 1 reflected a period of early adoption, including the launches of Bitcoin and Ethereum in 2009 and 2014, respectively. Even in these early

black-americans-hard_("The turmoil may have a particularly big impact on black Americans. They tend to earn less and have less savings than their white counterparts.").

⁵⁴ The chart begins in 2016 (rather than 2009) for illustrative purposes, and to visually highlight more recent periods, particularly given the relatively limited activity and price levels between 2009 and 2016. BTC prices are based CoinMarketCap data.

days, volatile episodes, including exchange failures in Japan, already foreshadowed future challenges.⁵⁵

Phase 2, the wave of so-called initial coin offerings ("ICOs"), was characterized by a Bitcoin bull market and the proliferation of new crypto assets, largely developed on Ethereum's infrastructure.⁵⁶ Indeed, 2017 saw over 200 ICOs⁵⁷ – essentially an unregulated cross between crowdfunding and an initial public offering – followed by thousands more in subsequent years.⁵⁸ Phase 2 also marked a shift in industry structure, with many key Crypto Platforms founded in 2017, including exchange leader Binance, BlockFi, Celsius Networks and FTX's sibling hedge fund, Alameda.⁵⁹

Unfortunately, ICOs became subject to widespread abuses, resulting in growing crypto skepticism amongst regulators⁶⁰ and an SEC-led crackdown, ushering in Phase 3: so-called crypto winter, from December 2017 until about March 2020.⁶¹ Bitcoin prices dropped 73 percent, but nonetheless

⁵⁵ The 2014 release of Ethereum significantly expanded crypto use cases. *See* Breydo, *Memes or Miles, supra* note 27; *see* also *infra* notes 149-151 and accompanying text.

⁵⁶ Nathaniel Popper, *Bitcoin's Price Has Soared. What Comes Next?*, N.Y. TIMES (Dec 7, 2017), https://www.nytimes.com/2017/12/07/technology/bitcoin-price-rise.html.

⁵⁷ Holden Page, 2017's ICO Market Grew Nearly 100X From Q1 To Q4, CRUNCHBASE (Jan. 11, 2018), https://news.crunchbase.com/fintech-ecommerce/2017sico-market-grew-nearly-100x-q1-q4/ ("Essentially, an ICO is kind of like crowdfunding, except backers receive newly-created tokens"); Steven Russolillo, *Initial Coin Offerings* Surge Past \$4 Billion-And Regulators Are Worried, WALL ST. J. (Dec. 14, 2017), https://www.wsj.com/articles/initial-coin-offerings-surge-past-4-billionand-regulatorsare-worried-1513235196.

⁵⁸ See Shaanan Cohney, et al., *Coin-Operated Capitalism*, 119 COLUM. L. REV. 591, 661-676 (2019) (detailing 50 largest ICOs of relevant period). Paul Vigna, *What's an Initial Coin Offering? ICOs Explained In 11 Questions*, WALL ST. J. (Oct. 2, 2017, 5:30 AM), https://www.wsj.com/articles/whats-an-initial-coin-offering-icos-explained-in-11-

questions-1506936601?mod=article_inline (describing "a process where tech startups, mainly from inside the digital-currency sector, create a new virtual coin or token and offer it for public sale.").

⁵⁹ See Ryan Vlastelica, Why Bitcoin Is Now The Biggest Bubble In History, MARKETWATCH (Dec. 14, 2017, 8:00 AM), https://www.marketwatch.com/story/whybitcoin-is-now-the-biggest-bubble-in-history-in-one-chart-2017-12-13; John M. Griffin & Amin Shams, Is Bitcoin Really Un-Tethered?, 75 J. FIN. 1913 (June 15, 2019), https://doi.org/10.1111/jofi.12903 (finding "patterns []] most consistent with the supplybased hypothesis of unbacked digital money inflating cryptocurrency prices").

⁶⁰ See infra Part I.C.3.

⁶¹ Russolillo, *supra* note 57 ("some regulators believe ICOs should be regulated like

remained far above early-2017 levels, illustrating staying power.

Phase 4, crypto's Covid boom, began in March 2020, driven by a favorable macroeconomic environment of low rates and global stimulus as well as brisk digital adoption during pandemic lock-downs.⁶² By late-2021, Bitcoin peaked near \$70,000 a unit and crypto became top-of-mind like never before. The sector also rapidly adopted financial tools including leverage and derivatives, which further expanded Crypto Platform opportunities – along with sector interconnection and associated risks.

By mid-2022, the boom turned to bust, with Phase 5 characterized by a \$2 trillion crypto asset price collapse and cascading failures of leading players, including FTX, Celsius and Voyager, as detailed in Part II.⁶³ Yet, retail investors' crypto fervor remains unabated, with 39 percent of existing investors keen to buy more because many consider it "their best chance at building significant wealth,"⁶⁴ underscoring the need for consumer protection and sector oversight.⁶⁵ Unfortunately, without understanding the root causes of crypto's crisis, the recent flurry of regulatory action risks only compounding prior missteps.⁶⁶

2. Industry Structure & Crypto Platforms

As crypto matured, an associated ecosystem developed alongside it, encompassing both familiar activities as well as more novel functions,⁶⁷ with

⁶⁶ See infra Part I.C.

securities. Some ICOs back companies that don't have active products or services.").

⁶² Hadar Y. Jabotinsky & Roee Sarel, *How Crisis Affects Crypto: Coronavirus as a Test Case*, 74 HASTINGS L.J. 433 (2023) (finding significant price increase in crypto assets early into Covid-19).

⁶³ See infra Part II.A.

⁶⁴ Joe Pinsker, *The Investors Who Still Think Crypto Can Make Them Rich*, WALL ST. J. (Feb. 21, 2023), https://www.wsj.com/articles/some-everyday-investors-still-bet-crypto-can-make-them-rich-7107d63e.

⁶⁵ Charlie Munger, Opinion, *Why America Should Ban Crypto*, WALL ST. J. (Feb 1, 2023, 6:16 PM), https://www.wsj.com/articles/why-america-should-ban-crypto-regulation-economy-finance-china-england-trading-currency-securities-commodity-gamble-11675287477; Stephen Cecchetti & Kim Schoenholtz, Opinion, *Let Crypto Burn*, FIN. TIMES (Nov. 17, 2022), https://www.ft.com/content/ac058ede-80cb-4aa6-8394-941443eec7e3.

⁶⁷ For instance, though unique, crypto miners and stablecoin issuers have substantive economic (if not functional) analogs, including, respectively, E&P companies and money market funds.

crypto's distinctive market structure complicating entity classifications, particularly for Crypto Platforms. Broadly speaking, the crypto industry can be grouped into six core types of market participants: (i) Crypto Projects; (ii) Infrastructure Providers; (iii) Support Services; (iv) Investment Vehicles; (v) Stablecoin Issuers; and (vi) Crypto Platforms, as detailed in Figure 2 below:

Figure 2. Crypto Ecosystem Taxonomy: Core	Entities
---	----------

	Entity Type	Description	Examples
٢	1. Crypto Projects	Multi-industry entities applying blockchain and related technologies. Common token / coin issuers.	Wireless (Helium); Electricity (Exergy)
Medium_ Risk	2. Infrastructure Providers	Developers of shared resources for cross-project tools and applications.	Ethereum; Polygon; Algorand
	3. Support Services 4. Investment	Encompasses miners (which validate blockchain transactions) and specialized providers incl. data centers and banking services	Compute North; Core Scientific; Silvergate Three Arrows Capital
Mid/ High – Risk	Vehicles 5. Stablecoin	Largely akin to hedge funds. Frequently employ significant leverage.	Alameda Research
	Issuers	Responsible for reserve maintenance and stablecoin stability	Circle, Tether
		s. Two primary sub-sectors, with third emerging (DEX):	
	Crypto Lenders	Lend digital assets to crypto market participants. Often offer brokerage and trading.	Celsius, Voyager, BlockFi
Highest_ Risk	Crypto Exchanges	Widest range of activities including intermediary (brokerage), market infrastructure (exchange, clearing) and principal investment functions.	FTX, Binance, Coinbase, Genesis
	Decentralized Exchanges (DEX)	Peer-to-peer crypto marketplace with automated market makers (AMM). Typically do not custody assets. Growing market trend.	Uniswap; PancakeSwap; Curve

Crypto Ecosystem: Taxonomy of Core Entities

A somewhat underappreciated takeaway reflected in Figure 2 is simple heterogeneity: the crypto sector encompasses distinct entities, activities and risk profiles.⁶⁸ Indeed, the fast-evolving structure has arguably resulted in misplaced regulatory focus on Crypto Projects rather than Crypto Platforms, the real center of risk.⁶⁹

Crypto Projects represent operating companies and asset issuers spanning a wide range of industries with a common denominator around blockchain and DLT. Perhaps most uniquely, Crypto Projects often combine financial activities with operating businesses, exacerbating already uncertain regulatory treatment.⁷⁰ Infrastructure providers, such as

⁶⁸ This is notwithstanding crypto's arguably supra-normal levels of financialization relative to underlying activity.

⁶⁹ See infra Part I.C.1., discussing the third and fourth evolutive phases.

⁷⁰ "A basic premise of Web3 is that every product is simultaneously an investment

Ethereum, also have operating businesses, but focus on developing shared resources to support Crypto Projects and the broader ecosystem. Stablecoins offer a common entry point into crypto through instruments typically pegged to a non-crypto asset, such as USD, marketed and maintained by their respective issuers.⁷¹ Crypto investment vehicles serve a role most analogous to hedge funds and other alternative investors in traditional markets.

Crypto Platforms, the focus of this Article, are fundamentally financial institutions, providing a range of retail and institutional services. Due to significant business model overlap, the term encompasses both lenders (like Celsius and BlockFi) and Crypto Exchanges (like FTX and Binance).⁷² In a similar vein, "financial institution" as used in this Article reflects a conceptually simplified and intentionally broad construct intended to parallel crypto sector dynamics.⁷³

In contrast to traditional finance, where substantive functions are carefully compartmentalized, Crypto Platform activity spans: (i) intermediary roles (brokerage, lending and market-making); (ii) market infrastructure (clearing, custody and exchange operation); and (iii) principal investment, including proprietary trading and venture capital activity.⁷⁴ This agglomeration makes Crypto Platforms "prone to the risks that regulation in the conventional financial sector is designed to avoid" while increasing

opportunity." Matt Levine, *There's Inside Information in SEC Filings*, BLOOMBERG (Dec. 21, 2021), https://www.bloomberg.com/opinion/articles/2021-12-21/there-s-inside-information-in-sec-filings?sref=OOpRUZ8l.

 ⁷¹ Stablecoin Issuer economics are in many respects most akin to money market funds.
 See Dan Awrey, Bad Money, Cornell L. Rev, at 40-45. See also Matt Levine, *Tether Keeps Lending Tethers*, BLOOMBERG (Sept. 21, 2023), https://www.bloomberg.com/opinion/articles/2023-09-21/tether-keeps-lending-

tethers?sref=OOpRUZ81 (noting "what a good business Tether, the big stablecoin issuer, is. It is an unregulated bank that does not pay interest, rates are going up, and its depositor base is quite stable"). *See also infra* Part IV.A.2.

⁷² Decentralized exchanges represent a third Platform type largely beyond the scope of this analysis.

⁷³ As discussed infra, certain considerations may differ for certain crypto entity types. *See* Part III.A., Figure 8 and Figure 9 (mapping crypto entities to traditional finance analogues).

⁷⁴ See infra note 113 (discussing SEC actions against Binance and Coinbase). See also infra Part IV, discussing the need for further formalization and separation between business activities and legal entities for regulatory purposes.

conflicts of interest.⁷⁵

Crypto Platforms are the nexus of activity in crypto's oftentimesspeculative ecosystem, serving two key roles as: (i) retail investors' crypto on-ramp; and (ii) institutional intermediaries. For retail investors, Crypto Platforms offer a one-stop crypto shop, with a user-friendly interface eliminating the need for technical expertise. Platform economics reflect a largely volume-based business, incentivizing asset accumulation and maximization of transaction volume, reflected in aggressive marketing and gamification.⁷⁶ At the same time, Platforms' fast embrace of leverage and higher-risk instruments significantly accelerated sector interconnection, magnifying contagion risks – a dynamic with eerie parallels to the 2008 financial crisis.

C. Oversight Challenges

The hodgepodge of confusion around crypto has interplayed poorly with America's notoriously balkanized regulatory system. The 2022 crypto crisis and subsequent bankruptcy challenges exposed a unique confluence of oversight failures – driven by supervisory fragmentation, regulatory

115

⁷⁵ See Adam J. Levitin, Not Your Keys, Not Your Coins, 101 TEX. L. REV. 877, 890 ("some of the functions performed by a cryptocurrency exchange are more akin to those of a broker in securities or commodities markets"); Stephen J. Lubben, We Got the Kingdom, We Got the Key: Corporate Bankruptcy and Cryptocurrency, 6 STANFORD J. OF BLOCKCHAIN LAW AND POLICY 219, 236 (2023) ("crypto exchanges . . . are more like brokers than exchanges in many cases"); see also, Akila Quinio & Joshua Oliver, Crypto Exchanges' Bundling of Services Threatens Stability, Says Bank of England Official, FIN. TIMES (Nov. 21, 2022), https://www.ft.com/content/5c12eb2b-390e-473f-a8ce-0a7f9dfc3a33 ("digital asset exchanges created risks to their market by operating businesses that encompassed trading, lending, clearing and custody of client assets. Traditional markets maintain careful separation between these different roles to guard against risks.").

⁷⁶ The economics are distinct for other facets of Crypto Platforms' businesses and operations, including for instance proprietary trading. "Gamification" refers to financial application engagement practices to make the user experience "more fun for the average consumer, like playing a video game" through a more intuitive, exciting and visually appealing user interface. https://finmasters.com/gamification-of-investing/#gref. The strategy is perhaps most associated with the Robinhood trading application, but is utilized by other industry players. See Caitlin McCabe, Massachusetts Regulators File Complaint Against Robinhood, WALL St. J. (Dec. 16, 2020), https://www.wsj.com/articles/massachusetts-regulators-to-file-complaint-againstrobinhood-11608120003.

arbitrage, and agency missteps. ⁷⁷ The resulting disconnect left Crypto Platforms almost entirely unsupervised.

1. Fragmented Supervision

The challenges of crypto oversight begin with America's financial regulatory system, which "evolved piecemeal" after crises to encompass hundreds of limited-scope agencies.⁷⁸ The Dodd-Frank Act, its latest evolution,⁷⁹ in many respects focused on taming the externalities of modern financial systems,⁸⁰ emphasizing: (i) preventing distress through risk mitigation including increased capital requirements, and heightened oversight while(ii) "limit[[ing]] the damage caused by the failure of a large" systemically significant financial institution, or "SIFI."⁸¹ Ironically, these hard-won insights were wholly lost with respect to crypto.

Three primary groupings of federal regulators are *most* applicable to Crypto Platforms: (i) prudential regulators, composed of the Federal Deposit

⁷⁷ Kevin Werbach, *Demystifying Crypto: Digital Assets and the Role of Government*, JOINT ECONOMIC COMMITTEE, WRITTEN STATEMENT, (Nov. 17, 2021) [[henceforth, "WERBACH DIGITAL ASSET TESTIMONY"]] (noting "Federal digital asset regulation in the U.S. to date has involved a number of agencies and offices: the Financial Crimes Enforcement Network (FinCEN), Office of the Comptroller of the Currency (OCC), and Internal Revenue Service (IRS) in the Treasury Department," the SEC, CFTC and FDIC the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC), and the Federal Deposit Insurance Corporation (FDIC).").

⁷⁸ U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-09-1049T, FINANCIAL REGULATION: RECENT CRISIS REAFFIRMS THE NEED TO OVERHAUL THE U.S. REGULATORY SYSTEM 4 (2009) ("almost a dozen federal regulatory agencies, numerous self-regulatory organizations, and hundreds of state financial regulatory agencies share responsibility for overseeing the financial services industry.").

⁷⁹ Who Regulates Whom? An Overview of the U.S. Financial Regulatory Framework, at 1 Cong. Rsch. Serv. (2023).

⁸⁰ GIANNI DE NICOLO, ET AL., EXTERNALITIES AND MACROPRUDENTIAL POLICY, INT'L MON. FUND (June 7, 2012) (taxonomizing financial externalities and detailing how "externalities associated with . . . financial intermediaries can lead to systemic risk").

⁸¹ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) (codified at various sections of the U.S. Code) [[hereinafter, Dodd-Frank]]. Dodd-Frank "has two very clear objectives. [[first]] to limit the risk of contemporary finance. . . and the second is to limit the damage caused by the failure of a large financial institution." DAVID A. SKEEL, THE NEW FINANCIAL DEAL: UNDERSTANDING THE DODD-FRANK ACT AND ITS (UNINTENDED) CONSEQUENCES 4 (2011).

Insurance Corporation (FDIC) and the Federal Reserve;⁸² (ii) market regulators, i.e., the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC);⁸³ and (iii) the Consumer Financial Protection Bureau ("CFPB").

Figure 3 below details the regulators' primary roles and their respective relationship to crypto.⁸⁴

Figure 3. Federal Financial Regulation: Overview of Crypto-Specific Roles

Regulator Type	Primary Role	Federal Agencies	Crypto Role / Focus
Market Regulators	Oversight of securities and derivatives markets, including issuers, intermediaries and infrastructure.	SEC (securities) and CFTC (derivatives)	Instrument-Specific Oversight
Depository Regulators ("Prudential")	Oversight of banks and bank holding companies. Emphasis on safety and soundness regulation.	FDIC (deposit insurance) and Federal Reserve (banks / BHC) ²	'Ring-Fence' crypto from regulated banks
Consumer Protection	Consumer protection in financial products	CFPB (consolidated post-DF)	Limited

Federal Financial Regu	lation: Crypto-Focused	Overview & Roles ¹

¹ Excludes insurance and government sponsored enterprises.

² Office of the Comptroller of the Currency (OCC) provides additional bank oversight; National Credit Union Administration (NCUA) for credit unions.

In practice, the market regulators have been most involved in crypto oversight. The agencies oversee financial products and associated entities – including issuers, intermediaries and infrastructure – with emphasis on disclosure and market conduct.⁸⁵ However, the divided purview between the SEC and CFTC has caused frictions, including perennial instrument classification questions as to whether crypto assets constitute securities.⁸⁶

The prudential regulators' now seemingly prescient focus was to "ringfence" crypto away from regulated entities by closely monitoring and

⁸² With respect to Crypto Platforms, the Federal Reserve Board specifically.

⁸³ Jill E. Fisch, *Top Cop or Regulatory Flop? The SEC* at 75, 95 VA. L. REV. 785, 790-96, (2009) (discussing the CSEP program and other aspects of SEC structure and tenure as a regulator).

⁸⁴ WHO REGULATES WHOM? AN OVERVIEW OF THE U.S. FINANCIAL REGULATORY FRAMEWORK AT 9-11, CONG. RSCH. SERV. (2023).

⁸⁵ Id.

⁸⁶ The SEC has jurisdiction over "securities" while industry preference has been CFTC oversight. See Yuliya Guseva & Irena Hutton, Digital Assets and Regulatory Fragmentation: The SEC versus the CFTC, 64 B.C. L. REV. 1555, 1572 (2023).

disincentivizing crypto exposure.⁸⁷ Notwithstanding some challenges,⁸⁸ the structure has largely kept crypto's contagion away from the broader financial system.⁸⁹ The CFPB, a consolidated consumer protection regulator created by Dodd-Frank, has "not exercised jurisdiction" over crypto thus far, arguably compounding the sector's consumer protection deficits.⁹⁰

Reflecting less than crystalline divisions of labor, the regulatory system emphasizes constituent-driven registration.⁹¹ Financial groups generally selforganize legal entities circumscribed by activity and oversight agency.⁹² Similarly, financial products – and particularly securities – default to registration, barring no action relief or an applicable exemption, typically articulated in a legal opinion from reputable counsel.

Crypto short-circuited this fragile construct. The 2017 ICO wave brought a flood of legally problematic activity, based on largely industrycreated exemptions unrecognized by the Commission.⁹³ Crypto Platforms' bundling of functions also exacerbated jurisdictional frictions by cutting across domains, leaving multiple agencies with oversight but none unambiguously in charge.

⁸⁷ BOARD OF GOVERNORS OF THE FEDERAL RESERVE, FDIC, OCC, JOINT STATEMENT ON CRYPTO-ASSET RISKS TO BANKING ORGANIZATIONS (Jan. 3, 2023), https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20230103a1.pdf; *Can Crypto Contagion Infect Mainstream Finance?* FIN. TIMES (June 30, 2022), https://www.ft.com/content/03bb9296.b645.4311.abb2.14bc3ab66443.

⁸⁸ See infra notes 148, and accompanying text (discussing FTX purchase of regulated exchange LedgerX and Alameda stake in regulated bank).

⁸⁹ *FTX's Collapse Underscores the Need for Regulating Crypto*, FIN. TIMES (Nov. 23, 2022), https://www.ft.com/content/c3e58d27-0a77-479f-bf52-b492efebc72f. ("Arguably, the current approach has helped ringfence crypto's crisis from the rest of the financial system.").

⁹⁰ Levitin, *supra* note 75, at 951. CONSUMER FINANCIAL PROTECTION BUREAU, COMPLAINT BULLETIN: AN ANALYSIS OF CONSUMER COMPLAINTS RELATED TO CRYPTO ASSETS (NOV. 2022).

⁹¹ Lev E. Breydo, *Structural Foundations of Financial Stability*, 17 U. PA. J. BUS. LAW 973, 1004 (2015).

⁹² For instance, a banking group might have dozens of regulators, with the Fed responsible for the top-level holding company, FDIC overseeing a depository bank, the SEC its broker-dealer and the CFTC a sibling swap dealer.

⁹³ See Part I.C.1. For further context, see also Breydo, Memes or Miles, supra note 27.

2. Regulatory Arbitrage

The crypto sector maintained its supervisory void through regulatory and jurisdictional arbitrage,⁹⁴ dusting off and adopting the derivatives industry's pre-2008 crisis playbook.⁹⁵ First, the crypto industry argued that it simply did not need regulation,⁹⁶ then it leveraged jurisdictional frictions to "effectively []] pick" the CFTC as its preferred regulator.⁹⁷ Finally, following the sector crisis, akin to financial services post-2009, crypto has conceded the need for some regulation, but only on industry terms.⁹⁸

Crypto's borderless nature has further complicated oversight, as the technology can bypass traditional payment systems, allowing high-risk activity to migrate beyond U.S. jurisdiction while still targeting U.S.-based customers.⁹⁹

Reflecting this, Crypto Platforms' jurisdictional strategies represent something of a continuum. On one side, the U.S. based Coinbase exchange branded around embracing regulation, including the disclosure, governance

⁹⁴ See Victor Fleischer, Regulatory Arbitrage, 89 TEX. L. REV. 227, 244-72 (2010) (outlining opportunities, requirements, and constraints for regulatory arbitrage). See generally Richard A. Posner, Theories of Economic Regulation, 5 BELL J. ECON. & MGMT. 335 (1974) (describing regulatory and arbitrage dynamics in American financial regulation).

⁹⁵ See, e.g., Jonathan R. Macey, *The Political Science of Regulating Bank Risk*, 49 OHIO ST. L.J. 1277, 1285 (1989) (noting that "each constituency ha [ving]] its own regulatory agency... increases the likelihood that bank regulators will succumb to regulatory capture, because... [their interests]] are not divided among a large number of constituents").

⁹⁶ At a Congressional hearing on FTX, Senator Warren observed initial arguments that crypto was "special" and should not be regulated like other industries, but reiterated a "basic rule" of our system as applying the "same rules" when transactions are of the "same kind" with the "same kind of risks." https://www.warren.senate.gov/newsroom/press-releases/icymi-at-hearing-warren-warns-about-cryptos-use-for-money-laundering-by-rogue-states-terrorists-and-criminals.

⁹⁷ See Ankush Khardori, Can Gary Gensler Survive Crypto Winter?, N.Y. MAGAZINE, (Feb 23, 2023), https://nymag.com/intelligencer/2023/02/gary-gensler-on-meeting-with-sbf-and-his-crypto-crackdown.html (describing FTX lobbying as a "straightforward strategy of domestic regulatory arbitrage.").

⁹⁸ See Gretchen Morgenson & Don Van Natta, In Crisis, Banks Dig in For Fight Against Rules, N.Y. TIMES, (May 31, 2009), https://www.nytimes.com/2009/06/01/business/01lobby.html ("Arguing that regulation would hamper financial innovation and send American jobs overseas, Congress passed legislation in December 2000 exempting derivatives from most oversight.").

⁹⁹ See infra note 103.

and asset listing limitations inherent to being a public company.¹⁰⁰ Some entities trended toward the middle. Crypto Lender Celsius, for instance, maintained U.S. domicile but also worked around regulatory requirements.¹⁰¹ Most large Crypto Platforms, however, sought to minimize oversight. Binance, the largest exchange, has maintained that it does not have a legal domicile, while FTX was Bahamas-based.¹⁰² Both Binance and FTX also established regulated U.S. subsidiaries to cater to American investors, who are technically barred from using foreign crypto exchanges (though many allegedly do).¹⁰³

3. Misplaced Focus

The 2017 ICO wave in Phase 2 marked a shift in regulatory posture as the SEC took a broad view of its jurisdiction, declaring most ICOs to be unregistered securities and aggressively pursued enforcement actions.¹⁰⁴ In retrospect, the SEC may have over-anchored to ICO-specific issues for too

¹⁰⁰ Coinbase's relationship with regulars has nonetheless been fraught, including litigation with the SEC regarding registration and asset listing matters. Matthew Goldstein, Ephrat Livni, and Emily Flitter, Coinbase, *Accused of Breaking Market Rules as Crypto Crackdown Widens*, N.Y. TIMES (June 6, 2023), https://www.nytimes.com/2023/06/06/business/sec-coinbase-lawsuit-cryptocurrency.html. *See also infra* notes 112-113.

¹⁰¹ See infra Part II.B.

¹⁰² See infra Part II.A.

¹⁰³ The CFTC has accused Binance of establishing procedures to deliberately circumvent these safeguards for U.S.-based investors. Complaint, CFTC v. Changpeng Zhao, Binance Holdings Limited, et al., No. 23-cv-01887 (N.D. Ill. Mar. 27,2023), ECF No. 1 (arguing that "[m]]uch of Binance's reported trading volume, and its profitability, has come from its extensive solicitation of and access to customers located in the United States.").

¹⁰⁴ Corinne Ramey, Celebrities Who Endorsed Crypto, NFTs Land in Legal Crosshairs After Investor Losses, WALL ST. J., (Jan. 30, 2023), https://www.wsj.com/articles/celebrities-who-endorsed-crypto-nfts-land-in-legal-

crosshairs-after-investor-losses-11675097150?mod=hp_lead_pos11; SEC Charges Kim Kardashian for Unlawfully Touting Crypto Security, SEC. & EXCH. COMM'N (Oct. 3, 2022), https://www.sec.gov/news/press-release/2022-183.

long¹⁰⁵ – a strategic error that took the spotlight off Crypto Platforms.¹⁰⁶

In particular, the SEC arguably failed to appreciate the pace of sector evolution toward a financialized and intermediated model¹⁰⁷ centered around Crypto Platforms.¹⁰⁸ The resulting mismatch can be visualized as a two-dimensional conceptual framework in Figure 4, which builds on the sector taxonomy in Figure 2 to map relative risk (y-axis) against level of regulatory focus (x-axis). Though presenting the highest levels of risk, Platforms inaptly mapped to the lower regulation quadrant, while relatively lower-risk Crypto Projects, mapped to the high-regulation quadrant (bottom right).¹⁰⁹

¹⁰⁵ Since 2017, 70 SEC enforcement matters (55% of total) have been related to ICOs, including nearly half of 2022 actions, typically alleging unregistered securities offerings, with a majority also making fraud allegations. In 2022, the SEC launched just 4 actions concerning broker or exchange registration, compared to 43 unregistered securities offerings actions (Securities Act Sections 5(a),5(c)) or fraud in the sale of securities, under Section 17(a) of the Securities Act and/or Section 10(b) and Rule 10b-5 of the Exchange Act. *See* CORNERSTONE RESEARCH, SEC CRYPTOCURRENCY ENFORCEMENT (2022 UPDATE) (Cornerstone report says "since 2013" for ICO enforcement, the underlying data is as of 2017 which is also consistent with the context).

¹⁰⁶ Though impossible to precisely attribute, a potential rationale may be due to crypto's distinctive technological features. Unlike prior vintages of heavily-intermediated, dubious offerings, ICOs were often sold directly by issuers to investors using blockchain and marketed via social media 'influencers.' Perhaps because of this, the SEC saw the issuer, rather than an intermediary, as the transferor of ICO risk, and focused enforcement resources accordingly towards Crypto Projects, assets and marketing. *See* Cohney, *supra* note 58; Ramey, *supra* note 104.

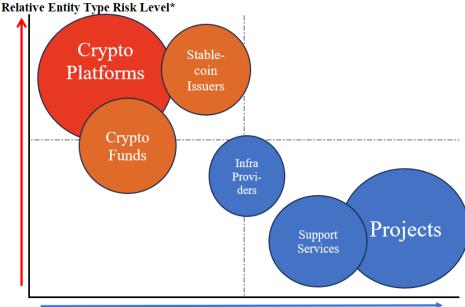
¹⁰⁷ Arner, Douglas W. and Zetzsche, Dirk Andreas and Buckley, Ross P. and Kirkwood, Jamieson, *The Financialization of Crypto*, UNSW Law Research Paper No. 23-32, Available at SSRN: https://ssrn.com/abstract=4436852 (May 17, 2023) (2023) (discussing irony of crypto crisis in light of sector development to address historical financial instabilities).

¹⁰⁸ An additional irony is that Crypto Platforms' business model reflected precisely the type of entity that post-Dodd-Frank financial regulation emphasizes.

¹⁰⁹ See infra Part IV, discussing associated policy recommendations.

Figure 4. Crypto Ecosystem: Risk & Regulation Strategic Map





Regulatory Emphasis & Focus

*Refers to broader sector risk, particularly financial spill-overs (not institution-specific risk). Bubble size corresponds to qualitative and relative sector prominence.

A practical implication of this mismatch was that the SEC's instrumentspecific focus, combined with limited prudential engagement, meant that no agency focused on Crypto Platforms even as they rapidly amassed billions in assets.¹¹⁰ This void allowed problems to compound, culminating in the 2022 crypto sector crisis.¹¹¹

After the FTX bankruptcy, regulators pursued aggressive enforcement actions¹¹² that increasingly threaten Crypto Platforms' business model

```
<sup>112</sup> David Yaffe-Bellany, Government Cracks Down on Crypto Industry with Flurry
of
           Actions,
                            N.Y.
                                           TIMES
                                                          (Feb.
                                                                         18,
                                                                                     2023),
```

¹¹⁰ See Legislative Update: Academics Lay Out Proposals for Digital Asset Safeguards at Senate Hearing, 42 AM. BANKR. INST. J. 8, at 77 (April 2023) (Noting Platforms "mostly lack a comprehensive federal system of oversight that can offer a reliable set of guardrails, regulatory clarity and assurance.").

¹¹¹ The SEC's approach has also, paradoxically, hindered asset-level oversight which is often operationalized through market infrastructure and intermediaries with respect to securities and derivatives markets.

viability, including alleging Binance and Coinbase to be operating unregistered broker-dealers and exchanges.¹¹³ However, the crackdown appears unmoored from guiding principles, exacerbating industry uncertainties without clear consumer benefit. Indeed, aspects of the belated regulatory response now arguably hinders resolution of the issues through bankruptcy proceedings increasingly forced into an uneasy quasi-regulatory role.¹¹⁴

II. The 2022 Crypto Crisis

In retrospect, given the backdrop of rapid growth, underappreciated risk and minimal regulation, the 2022 crypto collapse should have seemed inevitable.¹¹⁵ The fallout has been most brutal for millions of crypto's silent victims as the digital bank runs and "old-fashioned embezzlement" of crypto's contagion combined the ferocity of 2008 with pre-Depression consumer protections.¹¹⁶ FTX epitomized crypto's excesses and hypocrisies, leveraging effective altruism to build "one of the biggest financial frauds in American history"¹¹⁷ and played a starring role in the sector's collapse.¹¹⁸

https://www.nytimes.com/2023/02/18/business/crypto-crackdown-regulation.html.

¹¹³ Complaint at ¶ 3, SEC v. Binance Holdings Ltd., et al. No. 23-cv-01599 (D.D.C. June 5, 2023), ECF No. 1, ("Binance . . . unlawfully offered three essential securities market functions—exchange, broker-dealer, and clearing agency . . . without registering with the SEC."); Complaint at ¶ 1, SEC v. Coinbase Inc., No. 23-cv-4738 (S.D.N.Y. June 6, 2023), ECF No. 1 ("The Coinbase Platform merges three functions that are typically separated in traditional securities markets—those of brokers, exchanges, and clearing agencies. Yet, Coinbase has never registered with the SEC.").

¹¹⁴ See infra Part III.B. See also Yesha Yadav & Robert Stark, *The Bankruptcy Court* as Crypto Market Regulator, S. CAL L. REV. (forthcoming).

¹¹⁵ Andrew Grant, et al., *Black Swans, Gray Rhinos and Silver Linings*, MCKINSEY GLOBAL INST. (Feb. 24, 2023), https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/black-swans-gray-rhinos-and-silver-linings-anticipating-geopolitical-risks-and-openings (describing so-termed "grey rhino" events in respect of seemingly inevitable but ignored circumstances).

¹¹⁶ John J. Ray III, *Testimony*, HOUSE FIN. SERV. COMM. (Dec. 13, 2022, Hearing) https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=408483.

¹¹⁷ Benjamin Weise, Prosecutor in Bankman-Fried Case Made a Career of White-Collar Cases, N.Y. TIMES (Dec. 13, 2022),

https://www.nytimes.com/2022/12/13/business/damian-williams-ftx.html.

¹¹⁸ Complaint, S.E.C. v. Samuel Bankman-Fried, Case No. 22-cv-10501 (S.D.N.Y. Dec. 13, 2022), ¶¶ 24-29 [[henceforth, "*SEC v. SBF*"]].

Part II is divided in three sub-parts: (i) FTX's background, growth and sector role; (ii) crypto's 2022 collapse and sector contagion, with emphasis on parallels to the 2008 financial crisis; and (iii) FTX's collapse as well as its financial position at bankruptcy to help contextualize issues discussed in Part III.

A. FTX Overview

In just a few years, the combination of aggressive marketing, rapacious dealmaking and sophisticated branding propelled FTX to a \$40 billion group valuation with millions of users around the world.¹¹⁹ While the reality proved far less impressive, the trajectory helps show how FTX was able to wield such influence within and beyond the crypto sector.¹²⁰

1. Background

FTX Group traces its origin to October 2017, when Sam Bankman-Fried ("SBF") founded Alameda Research ("Alameda"), a Berkley-based crypto quantitative hedge fund.¹²¹ Alameda initially focused on arbitrage, minting a quick fortune by exploiting Bitcoin price differences between Asian markets and the rest of the world.¹²² Finding execution to be the hardest part of crypto investing, around May 2019 SBF founded FTX Trading, Ltd ("FTX"),¹²³ an international crypto exchange, followed by FTX.US, a

¹¹⁹ Joinder of Official Committee of Unsecured Creditors to Motion of Debtors for Entry of Interim and Final Orders (i) Authorizing Debtors to Maintain a Consolidated List of Creditors in Lieu of Submitting a Separate Matrix for Each Debtor, (ii) Authorizing Debtors to Redact or Withhold Certain Confidential Information of Customers and Personal Information of Individuals and (iii) Granting Certain Related Relief at 4, *In re* FTX Trading Ltd. et al., No. 22-11068 (JTD) (Bankr. D. Del. Jan. 8, 2023), ECF No. 408 (describing "advertising blitz" with 9-million-member customer list).

¹²⁰ John J. Ray III, *Testimony*, HOUSE FIN. SERV. COMM., *supra* note 116.

 $^{^{121}}$ Zixiao "Gary" Wang was formally a co-founder but owned a small portion of the fund. Id, \parallel 15.

¹²² Adam Fisher, Sam Bankman-Fried Has a Savior Complex—And Maybe You Should Too, SEQUOIA CAP. (Sept. 22, 2022), https://web.archive.org/web/20221027181005/https://www.sequoiacap.com/article/s am-bankman-fried-spotlight ("SBF collapsed the so-called kimchi premium . . . It was a daring feat of arbitrage. . . which quickly made him a billionaire and . . . legend.").

¹²³ The Article applies the following definitions for FTX-related entities: (i) FTX Trading, Ltd. ("FTX"), the international exchange, largest group entity and center of events;

domestically-focused and regulated sibling exchange in January 2020.¹²⁴ Though SBF claimed to relinquish control of Alameda so it could operate at arms-length from FTX, in reality he "remained the ultimate decision-maker" at both entities.¹²⁵

In July 2019, FTX raised capital by selling its FTT "exchange token" – essentially a utility token "associated with a crypto trading platform."¹²⁶ Despite representing a *liability*, FTT ultimately became both FTX and Alameda's primary *asset*.¹²⁷

SBF proved to be a prolific fundraiser, amassing \$1.8 billion from preeminent investors¹²⁸ – including Binance, the world's largest crypto exchange, which backed FTX's late-2019 series A, buying both equity and FTT tokens.¹²⁹ However, shortly before FTX's \$1 billion July 2021 series B financing, Binance divested its equity stake,¹³⁰ while retaining its FTT

⁽ii) "FTX.US" references the regulated U.S-based exchange; (iii) "Alameda" corresponds to Alameda Research, the hedge fund; and (iv) "FTX Group" refers to the consolidated corporate group.

¹²⁴ U.S. investors are not permitted to invest in crypto through offshore exchanges, though it is commonly understood that many do. See SEC v. SBF, supra note 118, at $\|\|$ 18-22.

¹²⁵ Id.

¹²⁶ 350 million FTT minted with 175 million allocated to FTX as "company tokens." See Complaint at ¶¶75-77, SEC v. Caroline Ellison and Zixiao "Gary" Wang, No. 22-cv-10794 (S.D.N.Y. Dec. 21, 2022), ECF No. 1.

¹²⁷ In a related Article, I argue that utility tokens are most akin to rewards programs (such as airline miles and credit card points), and should be accounted for similarly: as liabilities against (rather than assets of) the issuer. *See* Breydo, *Memes or Miles, supra* note 27.

¹²⁸ Investors included Sequoia, Paradigm and Thoma Bravo. FTX Group's peak valuation was \$40 billion, \$32 billion for FTX and \$8 billion for FTX.US. Erin Griffith and David Yaffe-Bellany, *Investors Who Put \$2 Billion Into FTX Face Scrutiny, Too*, N.Y. TIMES (Nov. 11, 2022), https://www.nytimes.com/2022/11/11/technology/ftx-investors-venture-capital.html.

¹²⁹ William Foxley, *Binance Invests Undisclosed Sum in Crypto Derivatives Platform FTX*, COINDESK (last updated Sept. 13, 2021, 7:51 AM), https://www.coindesk.com/markets/2019/12/20/binance-invests-undisclosed-sum-incrypto-derivatives-platform-ftx.

¹³⁰ See Notice of Filing First Day Hearing Presentation at 8, *In re* FTX Trading Ltd. et al., No. 22-11068 (JTD) (Bankr. D. Del. Nov. 22, 2022), ECF No. 115-1. [henceforth, "FTX First Day Presentation"].

tokens – a decision that later featured prominently in FTX's collapse.¹³¹ Notwithstanding the amounts raised, no single outside investor owned more than 2 percent of FTX's main business units and thus exercised minimal oversight.¹³² FTX also did not have a functional board of directors, a CFO or accounting department.¹³³

2. Unsustainable Growth

FTX's frenetic growth kept investors happy as it amassed millions of users and \$15 billion of customer assets by the end of 2021.¹³⁴ Branding itself as the "cryptocurrency exchange for the masses,"¹³⁵ FTX lavished millions on marketing campaigns with an A-list celebrity roster¹³⁶ that included Tom Brady and Larry David, who starred in a prime-time Super Bowl ad in retrospect most notable for lacking any disclosures or disclaimers, in contrast to mainstream financial products¹³⁷ or even sports betting.¹³⁸

¹³³ The board (which no investors joined) was composed of Bankman-Fried, an FTX employee and a lawyer. Eric Griffith & David Yaffe-Bellany, *Investors Who Put \$2 Billion Into FTX Face Scrutiny, Too*, N.Y. TIMES (Nov. 11, 2022), https://www.nytimes.com/2022/11/11/technology/ftx-investors-venture-capital.html.

¹³¹ @CZ_Binance, TWITTER (Nov. 6, 2022, 10:47 AM), https://twitter.com/cz_binance/status/1589283421704290306 ("As part of Binance's exit from FTX equity last year, Binance received roughly \$2.1 billion USD equivalent in cash (BUSD and FTT).").

¹³² Declaration of John J. Ray III in Support of Chapter 11 Petitions and First Day Pleadings at 4, *In re* FTX Trading Ltd. et al., No. 22-11068 (JTD) (Bankr. D. Del. Nov. 17, 2022), ECF No. 24 [[henceforth, "Ray First Day Decl."]].

 $^{^{134}}$ Ray First Day Decl., supra note 132 at 12, $\P\P$ 35-6.

¹³⁵ Research indicates that the flow of new investors is critical to maintaining the crypto ecosystem, including asset prices. Raphael Auer, et al., *Crypto Trading and Bitcoin prices: Evidence from a New Database of Retail Adoption*, (Bank for Int'l Settlements, Working Paper No. 1049, 2022 (revised 2023)), https://www.bis.org/publ/work1049.pdf.

¹³⁶ The endorsers included Tom Brady, Shaquille O'Neal, Stephen Curry, and Naomi Osaka. Ken Sweet, *Tom Brady, Larry David, Other Celebrities Named in FTX Suit,* APNEWS (Nov. 16, 2022, 4:25 PM), https://apnews.com/article/entertainment-technology-sports-celebrity-business-24690dec0c1541a911f4d201e568ebee_

¹³⁷ iShares, *Future Baller*, BLACKROCK (2022), https://www.youtube.com/watch?v=Z65gyBWSY80.

¹³⁸ Miguel Sanchez Extra, *FanDuel Commercial (October 2022)*, YOUTUBE (Oct. 17, 2022), https://www.youtube.com/watch?v=bR7oZ2sW-B8.

FTX and other Crypto Platforms thoroughly exploited crypto's nebulous parallel existence to traditional finance, "[[u]]sing the familiar to ... establish false expectations." ¹³⁹ For instance, FTX.US¹⁴⁰ and Voyager¹⁴¹ falsely claimed that customer accounts were FDIC-insured.¹⁴² There was little subtlety: "direct deposits . . . to FTX.US are stored in individually FDIC-insured bank accounts," tweeted FTX.US's president.¹⁴³ While the FDIC sent cease-and-desist letters, there was almost no meaningful attempt to correct customer misperceptions.¹⁴⁴

FTX was also a voracious acquirer, pursuing strategic transactions and spending \$4.6 billion on 300-plus minimally-documented venture capital

127

¹³⁹ Peter Whoriskey and Dalton Bennett, *Crypto's free-wheeling firms lured millions. FTX revealed the dangers.* WASH. POST (Nov. 16, 2022), https://www.washingtonpost.com/business/2022/11/16/ftx-collapse-crypto-exchanges-regulation/.

¹⁴⁰ Nikhilesh De, *FDIC Orders Crypto Exchange FTX US, 4 Others to Cease 'Misleading' Claims*, COINDESK (last updated May 11, 2023, 1:09 PM), https://www.coindesk.com/policy/2022/08/19/fdic-orders-ftx-us-4-other-companies-to-cease-and-desist-misleading-consumers.

¹⁴¹ Allyson Versprille, US Demands Voyager Clarify Client Funds Are Not FDIC Insured, BLOOMBERG (July 28, 2022, 7:25 PM), https://www.bloomberg.com/news/articles/2022-07-28/fed-fdic-demand-voyagerclarify-client-crypto-funds-not-insured?sref=OOpRUZ81.

¹⁴² Allyson Versprille, *FDIC Probing How Bankrupt Crypto Broker Voyager Marketed Itself*, BLOOMBERG (July 7, 2022, 2:39 PM), https://www.bloomberg.com/news/articles/2022-07-07/fdic-probing-how-bankruptcrypto-broker-voyager-marketed-itself?sref=OOpRUZ81.

¹⁴³ The tweet also stated that "stocks are held in FDIC-insured and SIPC-insured brokerage accounts." The FDIC mandated deleting the tweet but did not appear to pursue punitive measures. *See* Letter from FDIC to Brett Harrison, President of FTX US, and Dan Friedberg, Chief Regulatory Officer of FTX US (Aug. 18, 2022), https://www.fdic.gov/news/press-releases/2022/pr22060.html.

¹⁴⁴ The FDIC sent five cease-and-desist letters in August 2022. FDIC Issues Cease and Desist Letters to Five Companies For Making Crypto-Related False or Misleading Representations about Deposit Insurance, FDIC (Aug. 19, 2022, 2:01 PM) https://content.govdelivery.com/accounts/USFDIC/bulletins/328cfe1. Other examples included Celsius promising risk-free 17% returns, while misleading customers regarding their accounts' legal status. See infra Part III.B.1.; James Ledbetter, Was Celsius a Massive Scam from the Start?, OBSERVER (Jan. 10, 2023), https://observer.com/2023/01/was-celsius-a-massive-scam-from-the-start.

investments¹⁴⁵ – ranging from \$500 million in AI company Anthropic¹⁴⁶ to \$1 billion for a Kazakhstan-based bitcoin miner.¹⁴⁷ Despite organizing its affairs to minimize direct oversight, Bahamas-headquartered FTX pushed into regulated parts of the crypto sector through M&A. In 2021, it grew its U.S. footprint by acquiring LedgerX, the first crypto derivatives exchange and clearinghouse to receive regulatory approval.¹⁴⁸ In early 2022, FTX purchased Liquid, a regulated Japanese crypto exchange.¹⁴⁹ Notably, following early crypto insolvencies, including Mt. Gox and Coincheck, Japan implemented stringent sector oversight with "proper" account segregation,¹⁵⁰ leaving those customers best positioned to recover their funds.¹⁵¹

FTX spent lavishly on pet causes and political contributions to establish itself as the presentable face of crypto. Reinforcing branding around

¹⁴⁸ Vildana Hajric, *FTX Acquires the First U.S.-Approved Crypto Derivatives Platform*, BLOOMBERG (Aug. 31, 2021), https://www.bloomberg.com/news/articles/2021.08-31/ftx-acquires-the-first-u-s-approved-crypto-derivatives-platform?sref=OOpRUZ8l.

¹⁴⁹ Eliza Gkritsi, *FTX Buys Crypto Exchange Liquid Group for Expansion in Japan*, COINDESK (last updated May 11, 2023, 1:55 PM), https://www.coindesk.com/business/2022/02/02/ftx-buys-crypto-exchange-liquidgroup-for-expansion-in-japan.

¹⁵⁰ JP Koning, Japan Was The Safest Place To Be An FTX Customer, COINDESK (Dec. 13, 2022, 4:51 PM), https://www.coindesk.com/consensus-magazine/2022/12/13/japan-was-the-safest-place-to-be-an-ftx-customer ("Spurred by the failure of Mt. Gox in 2014 and the 2017 hacking of Coincheck . . . Japan's Financial Services Agency (FSA) established a broad set of standards for crypto exchanges.").

¹⁵¹ Takashi Nakamichi & Nao Sano, *Japan Expects Local FTX Clients To Get Funds Back From February*, BLOOMBERG (Jan. 12, 2023, 10:33 PM), https://www.bloomberg.com/news/articles/2023-01-13/japan-expects-local-ftx-clients-to-get-funds-back-from-february?sref=OOpRUZ8l (noting that at FTX Japan "clients assets have been property segregated").

¹⁴⁵ David Yaffe-Bellany, *The Unknown Hedge Fund That Got \$400 Million From Sam Bankman-Fried*, N.Y. TIMES (Jan. 24, 2023), https://www.nytimes.com/2023/01/24/business/ftx-sbf-modulo-capital.html.

¹⁴⁶ Cade Metz, *How the Collapse of Sam Bankman-Fried's Crypto Empire Has Disrupted A.I.*, N.Y. TIMES (Dec. 1, 2022), https://www.nytimes.com/2022/12/01/technology/sam-bankman-fried-crypto-artificial-intelligence.html.

¹⁴⁷ Eliot Brown & Yuliya Chernova, Sam Bankman-Fried's Supersized Bet: \$1 Billion for a Bitcoin Miner on the Kazakh Steppe, WALL ST. J. (Jan. 11, 2023), https://www.wsj.com/articles/inside-sam-bankman-frieds-1-billion-bet-on-a-bitcoinminer-on-the-kazakh-steppe-11673453716.

"effective altruism," SBF and FTX's Future Fund charitable arm donated heavily to non-profits, with \$160 million of pledges at the time of bankruptcy,¹⁵² which the estate is attempting to claw back.¹⁵³ FTX executives further contributed to at least 196 members of Congress – more than one in three¹⁵⁴ – with SBF personally ranking as the 2022 midterms' second largest Democratic donor¹⁵⁵ and third-largest supporter of Republicans, with as much as \$150 million in contributions.¹⁵⁶ These donations provided significant access to policymakers,¹⁵⁷ positioning SBF to

¹⁵² SBF subsequently admitted that this was part of a "dumb game we woke westerners play where say all the right shiboleths [[sic]] and so everyone likes us." Kelsey Piper, *Sam Bankman-Fried Tries to Explain Himself*, VOX (Nov. 16, 2022), https://www.vox.com/future-perfect/23462333/sam-bankman-fried-ftx-cryptocurrencyeffective-altruism-crypto-bahamas-philanthropy.

¹⁵³ Eric Wallerstein, *FTX Seeks to Recoup Sam Bankman-Fried's Charitable Donations*, WALL ST. J. [Jan. 7, 2023), https://www.wsj.com/articles/ftx-seeks-to-recoup-sam-bankman-frieds-charitable-donations-11673049354; Kenneth P. Vogel, et al., *Inside Sam Bankman-Fried's Quest to Win Friends and Influence People*, N.Y. TIMES (Nov. 22, 2022), https://www.nytimes.com/2022/11/22/business/ftx-sam-bankman-fried-influence.html.

¹⁵⁴ According to Coindesk even more elected officials "indirectly" benefitted from FTX's largesse. Jesse Hamilton, et al., *Congress' FTX Problem: 1 in 3 Members Got Cash From Crypto Exchange's Bosses*, COINDESK (Jan. 17, 2023), https://www.coindesk.com/policy/2023/01/17/congress-ftx-problem-1-in-3-members-got-cash-from-crypto-exchanges-bosses.

¹⁵⁵ Nik Popli, *Here's What We Know About Sam Bankman-Fried's Political Donations*, TIME (Dec. 14, 2022, 6:01 PM), https://time.com/6241262/sam-bankman-fried-political-donations.

¹⁵⁶ Bankman-Fried claimed to have given "about the same amount" to Republicans, but through "dark" channels. Dominic Rushe, *FTX billionaire Sam Bankman-Fried funneled dark money to Republicans*, GUARDIAN (Nov. 30, 2022), https://www.theguardian.com/technology/2022/nov/30/ftx-billionaire-sam-bankmanfried-dark-money-republicans.

¹⁵⁷ For instance, FTX pushed proposals to allow individual investors direct exchange access to use derivatives for levered crypto bets. Alexander Osipovich, *FTX Presses for Crypto Derivatives Approval, Agitating Legacy Exchanges*, WALL ST. J. (July 6, 2022, 5:30 AM), https://www.wsj.com/articles/ftx-presses-for-crypto-derivatives-approval-agitating-legacy-exchanges-11657084236; Alexander Osipovich, *Futures Giant CME Considers Brokerage, Taking Cue From Crypto Rival FTX*, WALL ST. J. (Sept. 30, 2022), https://www.wsj.com/articles/futures-giant-cme-considers-brokerage-taking-cue-from-crypto-rival-ftx-11664592510.

directly influence regulation.¹⁵⁸

B. Sector Contagion

After the Phase 4 Covid boom¹⁵⁹ characterized by rapid financialization, growing leverage and sector interconnection in a regulatory void, by mid-2022 crypto was a systemic risk tinderbox.¹⁶⁰ A drop in prices set off cascading financial distress culminating in dozens of bankruptcies and vast losses for millions of customers.¹⁶¹

In about six months, the crypto sector was decimated, with the bankruptcies of six US-focused Platforms – Voyager, Celsius, FTX/FTX.US, BlockFi and Genesis – and numerous other key players. Compounding the pressure, many Asia-focused Crypto Platforms collapsed under similar circumstances, including Babel Finance, Hodlnaut, Vauld and Zipmex.¹⁶²

1. Falling Dominos

The table below details the sequence of distress and insolvency events. The first domino was stablecoin issuer Terraform Labs;¹⁶³ the collapse of its

¹⁵⁸ See Piper, supra note 152 (quoting SBF describing regulatory focus as "just PR . . .fuck regulators . . . they make everything worse.").

¹⁵⁹ Phase 4 and associated events are further detailed *supra* Part I.B.1.

¹⁶⁰ Filippo Ferroni, *How Interconnected Are Cryptocurrencies and What Does This Mean for Risk Measurement?*, CHICAGO FED. LETTER NO. 466. (March 2022) https://www.chicagofed.org/publications/chicago-fed-letter/2022/466 (finding crypto to be "extremely interconnected").

¹⁶¹ Dave Michaels & Andrew Ackerman, *Crypto Tumult Highlights Lack of Investor Protections*, WALL ST. J. (July 7, 2022), https://www.wsj.com/articles/crypto-tumult-highlights-lack-of-investor-protections-11657195212 ("Cryptocurrency investors are learning that there is no government safety net to protect them when their funds seemingly disappear with a trading and lending platform that has failed.").

¹⁶² Arner, Douglas W. and Zetzsche, Dirk Andreas and Buckley, Ross P. and Kirkwood, Jamieson, *The Financialization of Crypto*, UNSW Law Research Paper No. 23-32, Available at SSRN: https://ssrn.com/abstract=4436852 or http://dx.doi.org/10.2139/ssrn.4436852 (May 17, 2023).

¹⁶³ Though the causal link is difficult to definitively trace, some have attributed the collapse to the federal reserve tightening cycle, and 50 basis point rate increase on May 4, 2022. Candice Choi, *Crypto Crisis: A Timeline of Key Events*, WALL ST. J. (June 6, 2023), https://www.wsj.com/articles/crypto-crisis-a-timeline-of-key-events-11675519887

⁽marking Fed rate increase as starting point for chain of events culminating in the crypto

Terra algorithmic stable coin and associated Luna token wiped out an estimated \$50 billion of value.¹⁶⁴ Reflecting classic sector contagion, the Terra-Luna failure led to heavy losses at crypto hedge funds, including Alameda¹⁶⁵ and Three Arrows Capital (3AC), both of which funded their Terra-Luna positions by borrowing from Crypto Lenders.¹⁶⁶ 3AC's failure to meet margin calls and subsequent insolvency¹⁶⁷ pushed the already-tottering Voyager¹⁶⁸ and Celsius toward bankruptcy.¹⁶⁹ Far worse, to avoid default, Alameda used FTX customer funds to plug its losses and repay lenders.¹⁷⁰

¹⁶⁶ Eliot Brown & Caitlin Ostroff, *Behind the Celsius Sales Pitch Was a Crypto Firm Built on Risk*, WALL ST. J. (June 30, 2022), https://www.wsj.com/articles/behind-the-celsius-sales-pitch-was-a-crypto-firm-built-on-risk-11656498142.

¹⁶⁸ 3AC and Alameda represented about 90% of Voyager's loan portfolio.

¹⁶⁹ Kadhim Shubber & Joshua Oliver, *Crypto hedge fund Three Arrows fails to meet lender margin calls*, FIN. TIMES (June 16, 2022), https://www.ft.com/content/126d8b02-f06a-4fd9-a57b-9f4ceab3de71.

¹⁷⁰ See supra Part II.A.3.

sector crisis).

¹⁶⁴ Liu, Jiageng and Makarov, Igor and Schoar, Antoinette, Anatomy of a Run: The Terra Luna Crash (April 11, 2023). MIT Sloan Research Paper No. 6847-23, Available at SSRN: https://ssrn.com/abstract=4416677 (2023); David Yaffe-Bellany & Erin Griffith, *How a Trash-Talking Crypto Founder Caused a \$40 Billion Crash*, N.Y. TIMES (June 22, 2023), https://www.nytimes.com/2022/05/18/technology/terra-luna-cryptocurrencydo-kwon.html.

¹⁶⁵ A blockchain-based analysis traces the Alameda-FTX issues to the Terra Luna collapse. Yong Li Khoo, et al., BLOCKCHAIN ANALYSIS: THE COLLAPSE OF ALAMEDA AND FTX, NANSEN (Nov. 17, 2022), https://www.nansen.ai/research/blockchain-analysis-the-collapse-of-alameda-and-ftx. *But see* Emily Nicolle, *Mystery of Terra Collapse Deepens with Possible FTX Role Raised*, BLOOMBERG (Dec. 8, 2022), https://www.bloomberg.com/news/articles/2022-12-08/mystery-of-terra-ust-collapse-deepens-with-possible-ftx-role-raised (describing investigation of potential FTX role in causing Terra-Luna collapse).

¹⁶⁷ 3AC filed for insolvency in the Cayman Islands and Chapter 15 in New York. Serena Ng, et al., *Crypto Hedge Fund Three Arrows Ordered By Court To Liquidate*, WALL ST. J. (last updated June 29, 2022, 9:14 PM), https://www.wsj.com/articles/cryptofund-three-arrows-ordered-to-liquidate-by-court-11656506404; Shaurya Malwa, *Three Arrows Capital Confirms Heavy Losses From LUNA's Collapse, Exploring Potential Options: Report*, COINDESK (last updated May 8, 2023, 11:48 PM), https://www.coindesk.com/business/2022/06/17/three-arrows-capital-confirms-heavylosses-from-lunas-collapse-exploring-potential-options-report.

Entity	Description	Date	
Terraform Labs*	Stablecoin Issuer	May-22	
Three Arrows Capital ("3AC")	Investment Fund	Jun-22	
Voyager	Crypto Platform (Lender / Broker)	Jul-22	
Celsius	Crypto Platform (Mainly Lender)	Jul-22	
Compute North	Support Services (Data Center Operator)	Sep-22	
FTX Group:	Crypto Platform (Diversified)		
FTX.US	Exchange (Domestic)	Nov-22	
FTX Trading "FTX"	Exchange (International)	Nov-22	
_ Alameda	Investment Fund	Nov-22	
BlockFi	Crypto Platform (Lender / Broker)	Nov-22	
Core Scientific	Support Services (Miner)	Dec-22	
Genesis Global	Crypto Platform (Exchange, Institutional)	Jan-23	
Silvergate Bank	Support Services (Crypto-Focused Bank)	Mar-23	

Crypto Contagion: Summary of Mid-2022 to Early 2023 Sector Distress

. ..

*Terra did not file for bankruptcy, but halted operations after severe financial distress. Blue border reflects FTX Voyager / Celsius 'rescue' transactions. Red corresponds to FTX entities.

This period also illustrated both the conceptual wisdom and potential permeability of the prudential regulators' crypto "ringfence."¹⁷¹ Shortly after the FTX collapse, for instance, Signature Bank and Silvergate Capital, two regulated crypto-friendly lenders,¹⁷² stemmed "a flood of customer withdrawals" by borrowing billions from the Federal Home Loan Banks ("FHLB"),¹⁷³ a "lender of next-to-last resort" for regulated banks during downturns.¹⁷⁴ Both Signature and Silvergate ultimately failed, suggesting some innate spill-over risk for the regulated system, notwithstanding the overall limited economic fallout.

2. Rescue Transactions

As "fears of a 2008-style financial contagion spread" in mid-2022,

.....

¹⁷¹ See supra notes 87-91.

¹⁷² See supra Part III.A.2.

¹⁷³ Eric Wallerstein, *Crypto Banks Borrow Billions from Home-Loan Banks to Plug Shortfalls*, WALL ST. J. (Jan. 21, 2023), https://www.wsj.com/articles/crypto-banks-borrow-billions-from-home-loan-banks-to-plug-shortfalls-11674263424.

¹⁷⁴ Max Reyes, et al., *Crypto Chaos Snags Wall Street Lender of Next-to-Last Resort*, BLOOMBERG (Jan. 24, 2023) https://www.bloomberg.com/news/articles/2023-01-24/crypto-chaos-snags-wall-street-s-lender-of-next-to-last-resort?sref=OOpRUZ8I.

lacking government support, the crypto sector turned to industry solutions with FTX playing 'white knight.' ¹⁷⁵ Analogized to a modern-day J.P. Morgan,¹⁷⁶ SBF espoused sacrifice for the greater goal, claiming: "The explicit . . . working principle we had . . . was its ok to do a deal that is moderately bad . . . [[where]] we are incinerating a relatively small-ish [[*sic*]] amount of money."¹⁷⁷ In reality, such actions sought to prop up Bankman-Fried's own empire, including Alameda, which was heavily exposed to the industry's weakest players and instruments.

FTX sought to acquire the Voyager¹⁷⁸ and BlockFi¹⁷⁹ Crypto Platforms through a combination of rescue financing and complex bankruptcy deals, which further increased sector interconnection as well as risk to customers.¹⁸⁰

¹⁷⁷ "We need to be a good constructive actor in this space." *Bankman-Fried on Crypto Downturn & Acquisition Landscape*, BLOOMBERG at minute 9 (July 19, 2022), https://www.bloomberg.com/news/videos/2022-07-19/bankman-fried-on-crypto-downturn-acquisition-landscape?sref=OOpRUZ8l.

¹⁷⁵ Alexander Osipovich, *The 30-Year-Old Spending \$1 Billion to Save Crypto*, WALL ST. J. (Aug. 23, 2022, 10:35 AM), https://www.wsj.com/articles/crypto-bitcoin-ftx-bankman-fried-11661206532; *See generally*, GARY B. GORTON, SLAPPED BY THE INVISIBLE HAND: THE PANIC OF 2007 (2010) for a discussion analyzing the financial crisis through the framework of a banking panic and considering its effects and causes.

¹⁷⁶ Crypto's last man standing, **ECONOMIST** (July 5, 2022), https://www.economist.com/finance-and-economics/2022/07/05/cryptos-last-manstanding; Roger Lowenstein, FTX's founder was called a modern-day J.P. Morgan. The analogy still works., N.Y. TIMES (Nov. 12, 2022), https://www.nytimes.com/2022/11/12/business/dealbook/ftx-bankman-fried-centralbanks.html.

¹⁷⁸ Eliot Brown & Yifan Wang, *Crypto Broker Voyager Digital Files for Bankruptcy Protection*, WALL ST. J. (July 6, 2022), https://www.wsj.com/articles/crypto-brokervoyager-digital-files-for-bankruptcy-protection-11657098630 ("Voyager . . . ran a business similar to a bank mixed with a brokerage, in which customers deposited crypto assets . . .Voyager in turn sought to profit by lending to others in the crypto sector at even higher rates.").

¹⁷⁹ Alexander Osipovich, *The 30-Year-Old Spending \$1 Billion To Save Crypto*, WALL ST. J._(Aug. 23, 2022, 10:35 AM), https://www.wsj.com/articles/crypto-bitcoin-ftx-bankman-fried-11661206532 (describing BlockFi as "essentially a crypto bank.").

¹⁸⁰ FTX publicly declined to support Celsius, suggesting potential wrongdoing at the platform. *Bankman-Fried on Crypto Downturn & Acquisition Landscape*, BLOOMBERG (July 19, 2022), https://www.bloomberg.com/news/videos/2022-07-19/bankman-fried-on-crypto-downturn-acquisition-landscape?sref=OOpRUZ81 (Sam Bankman-Fried, Interview with Matt Levine).

FTX's "rescue" of BlockFi illustrated the issues. First, the transaction worsened crypto's circuitousness: FTX provided BlockFi a \$400 million credit facility, but BlockFi also lent Alameda \$831.3 million while depositing \$355 million on the FTX platform.¹⁸¹ This doom loop tied the entities' fates. FTX's bankruptcy caused BlockFi to file, unable to draw the rescue line, unlikely to be repaid by Alameda or access its funds through FTX.¹⁸² Second, FTX's actions put BlockFi's nearly 700,000 largely retail customers at further risk, including exposure to lengthy bankruptcy proceedings.

FTX's Voyager transactions proved even more problematic. Underscoring the sector's propensity for recycling capital, Alameda wore "every possible hat" in Voyager's July 2022 bankruptcy, including borrower, creditor and shareholder,¹⁸³ and was Voyager's second largest loan exposure.¹⁸⁴ The Bankruptcy Court approved relatively standard asset sale bidding procedures,¹⁸⁵ screening buyers based on ability to consummate the transaction, without further regulatory oversight.¹⁸⁶ FTX.US initially

¹⁸³ Vicky Ge Huang & Alexander Osipovich, *In Voyager Bankruptcy, Crypto Trading Firm Alameda Is Creditor, Shareholder and Borrower*, WALL ST. J. (July 7, 2022), https://www.wsj.com/articles/in-voyager-bankruptcy-crypto-trading-firm-alameda-iscreditor-shareholder-and-borrower-11657186200 (quoting Professor Levitin regarding the "general phenomenon of a lot of recycled capital within crypto.").

¹⁸¹ Alexander Osipovich, *The 30-Year-Old Spending \$1 Billion to Save Crypto*, WALL ST. J. (Aug. 23, 2022), https://www.wsj.com/articles/crypto-bitcoin-ftx-bankman-fried-11661206532?mod=article_inline (SBF stated: "We want to do what we can to stem contagion, and sometimes that's going to mean that we try to help out in cases where it's not enough.").

¹⁸² Rohan Goswami & MacKenzie Sigalos, *BlockFi secret financials show a \$1.2 billion relationship with Sam Bankman-Fried's crypto empire*, CNBC (Jan. 24, 2023), https://www.cnbc.com/2023/01/24/blockfi-secret-financials-show-1point2-billion-tie-to-ftx-and-alameda.html?__source=twitter%7Cmain.

¹⁸⁴ Declaration of Stephen Ehrlich, Chief Executive Officer of the Debtors, in Support of Chapter 11 Petitions and Frist Day Motions at 12-13, *In re* Voyager Digital Holdings, Inc., Case No. 22-10943-(MEW) (Bankr. S.D.N.Y. July 6, 2022), ECF No. 15..

¹⁸⁵ Declaration of Jared Dermont in Support of Debtors' Motion Seeking Entry of an Order Approving Bidding Procedures at 6-8, *In re* Voyager Digital Holdings, Inc., No. 22-10943-(MEW) (Bankr. S.D.N.Y. July 26, 2022), ECF No. 151.

¹⁸⁶ 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., No. 22-10493-(MEW) (Bankr. S.D.N.Y. July 26, 2022), ECF No. 248 (providing definition of Acceptable Bidder and requirements including

prevailed at the auction, but filed for Chapter 11 shortly after.¹⁸⁷ Binance.US subsequently re-bid for Voyager's assets – allowing hundreds of thousands of customers to recover funds.¹⁸⁸ However, the SEC moved to block the sale, insinuating, but never expressly alleging, securities law violations -- ultimately scuttling the process and leaving the court understandably exasperated.¹⁸⁹

3. FTX Collapse

Though the misconduct appears to have begun far earlier,¹⁹⁰ the immediate precipitating cause of FTX's implosion was its overly-intertwined relationship with Alameda.¹⁹¹ According to the SEC's complaint against

¹⁸⁸ Jack Schickler, *FTX Opposition to \$1B Binance Deal is 'Hypocrisy and Chutzpah*,', COINDESK (Jan 9, 2023), https://www.coindesk.com/policy/2023/01/09/ftx-opposition-to-1b-binance-deal-is-hypocrisy-and-chutzpah-voyager-says/.

¹⁸⁹ In re Voyager Digital Holdings, Inc., 649 B.R. 111, 120 (Bankr. S.D.N.Y. 2023) ("[T] he SEC contended that the Debtors somehow had to prove a negative – *i.e.*, that the Debtors were not violating securities laws and that Binance.US is not violating registration requirements for brokers."). Judge Wiles also observed that "[t] he CFTC seems to have taken some positions [] at odds with the SEC's views." *Id.* at 119.

¹⁹⁰ The allegations against Bankman-Fried – levied by the SEC, CFTC, New York Attorney General and others – include (amongst others) that he directed FTX to misappropriate customer funds to 'bail out' Alameda, purchase assets and channel millions to favored causes as well as a "dark money" political network. Additional charges beyond the scope of this analysis include (but are not limited to) misleading investors, securities fraud, and various related causes of action. Eli Tan & Tory Newmyer, *Bankman-Fried convicted on all charges after weeks-long criminal trial*, WASHINGTON POST (Nov. 2, 2023), https://www.washingtonpost.com/business/2023/11/02/sbf-bankman-fried-trial-ftx/ (detailing charges against Sam Bankman-Fried).

¹⁹¹ Matthew Goldstein, et al., *FTX's Sister Firm, Alameda Research, Was Central to Collaps*e, N.Y. TIMES (Nov. 30, 2022), https://www.nytimes.com/2022/11/30/business/dealbook/ftx-almeda-research-sambankman-fried.html.

good faith \$5M deposit).

¹⁸⁷ Dave Sebastian & Vicky Ge Huang, *FTX Wins Auction for Bankrupt Crypto Broker Voyager Digital's Assets*, WALL ST. J. (last updated Sept. 27, 2022, 1:16 PM), https://www.wsj.com/articles/ftx-wins-auction-for-bankrupt-crypto-broker-voyager-digitals-assets-11664263726; Soma Biswas, *Bankrupt Voyager Digital Looks for New*

Buyer After FTX Goes Under, WALL ST. J. (last updated Nov. 11, 2022, 7:35 PM), https://www.wsj.com/articles/bankrupt-voyager-digital-looks-for-new-buyer-after-ftxgoes-under-11668213301.

Bankman-Fried, around May 2022, as crypto prices "were dropping precipitously," lenders demanded Alameda repay loans, taken out at Bankman-Fried's direction the prior year. Alameda lacked the capital to meet obligations, so SBF directed it to draw on its line of credit from FTX, diverting "billions of dollars of FTX customer assets . . . to repay [Alameda's]] third-party obligations."¹⁹² That \$65 billion line of credit¹⁹³ was collateralized by Alameda's holdings of FTT, FTX's native token.¹⁹⁴ Following industry reporting on the FTX-Alameda relationship, FTX unraveled in less than 10 days, detailed below in Figure 6.

Figure 6. FTX Collapse Timeline

DRV Amjj_nqc Rgk cjgl c
• L nt ck ` cp 0*0. 00, The initial match was a report highlighting
"unusually close" ties between FTX and Alameda, whose
"balance sheet [was] full of FTX – specifically, the FTT token
a coin that [FTX] invented, not an independent asset like a fiat
currency or another crypto." ¹⁹⁵
• Lnt ck ` cp 4, Binance's CEO tweeted that "due to recent
revelations," it would liquidate its FTT positions (purchased
through its 2019 FTX investment), putting further pressure on
the token's price. ¹⁹⁶
• L nt ck ` cp 5, SBF tweeted: <i>"FTX has enough to cover all client</i> "
holdings. We don't invest client assets" ¹⁹⁷

¹⁹² *SEC v. SBF, supra* note 118, at ¶ 43-46.

¹⁹³ See Maximizing FTX Recoveries Presentation at 19, *In re* FTX Trading Ltd., et al., No. 22-11068-JTD (Bankr. D. Del. Nov. 17, 2022), ECF No. 507-1 [[henceforth "Debtor Jan 17 Presentation"]] (detailing Alameda 'back door' lending facility).

¹⁹⁴ Ian Allison, *Divisions in Sam Bankman-Fried's Crypto Empire Blur on His Trading Titan Alameda's Balance Sheet*, COINDESK, (Nov. 2, 2022), https://www.coindesk.com/business/2022/11/02/divisions-in-sam-bankman-frieds-crypto-empire-blur-on-his-trading-titan-alamedas-balance-sheet ("But even though they are two separate businesses, the division breaks down in a key place: on Alameda's balance sheet.").

¹⁹⁵ Id.

¹⁹⁶ @CZ_Binance, TWITTER (Nov. 6, 2022, 10:47 AM), https://twitter.com/cz_binance/status/1589283421704290306.

¹⁹⁷ The tweet was subsequently deleted. Vicky Ge Huang, et al., *FTX Tapped into Customer Accounts to Fund Risky Bets, Setting Up Its Downfall*, WALL ST. J. (Nov. 11, 2022), https://www.wsj.com/articles/ftx-tapped-into-customer-accounts-to-fund-risky-

- L mt ck ` cp 6, FTX paused customer withdrawals. Binance pounced with a non-binding letter of intent to explore a rescue deal for FTX.
- L nt ck ` cp 7, Binance called off the transaction based on "news reports regarding mishandled customer funds,"¹⁹⁸ requiring FTX to scramble for rescue financing against an \$8 billion shortfall.¹⁹⁹
- L nt ck ` cp//, In the early morning, FTX Group filed a "free-fall" Chapter 11 in Delaware. SBF was replaced as CEO by bankruptcy veteran John J. Ray III ("Ray").²⁰⁰

C. Crypto's 'Crime Scene'

As John Ray, who oversaw Enron's liquidation, testified during a congressional hearing regarding FTX: "Never in my career have I seen such an utter failure of corporate controls at every level of an organization . . . a complete failure of governance."²⁰¹

FTX's management was characterized by an "absolute concentration of control" with "grossly inexperienced and unsophisticated individuals."²⁰² Governance proved no better. FTX's 3-member board was composed of SBF, an FTX employee and an outside attorney,.²⁰³ Many key operating units within the 134-entity global web did not hold board meetings.²⁰⁴ Investors exercised minimal oversight.²⁰⁵

Furthermore, FTX deliberately²⁰⁶ failed to implement controls and

 202 Ray First Day Decl., supra note 132, at \P 5.

²⁰⁴ Id.

²⁰⁵ See supra Part II.A.1.

bets-setting-up-its-downfall-11668093732.

¹⁹⁸ FTX First Day Presentation, *supra* note 130, at 13-14.

¹⁹⁹ Antoine Gara, et al., *FTX Held Less Than \$1Bn In Liquid Assets Against \$9Bn In Liabilities*, FIN. TIMES (Nov. 12, 2022), https://www.ft.com/content/f05fe9f8-ca0a-48d5-8ef2-7a4d813af558.

²⁰⁰ Ray First Day Decl., *supra* note 132, at ¶ 1.

²⁰¹ John J. Ray III, *Testimony*, HOUSE FIN. SERV. COMM., *supra* note 116.

²⁰³ According to Ray, some of the FTX entities never held board meetings. Erin Griffith & David Yaffe-Bellany, *Investors Who Put \$2 Billion Into FTX Face Scrutiny, Too*, N.Y. TIMES (Nov. 11, 2022), https://www.nytimes.com/2022/11/11/technology/ftx-investors-venture-capital.html.

²⁰⁶ See Second Interim Report of John J. Ray III to the Independent Directors: The Commingling and Misuse of Customer Deposits at FTX.com at 6, *In re* FTX Trading Ltd.,

systems "necessary for a company that is entrusted with other people's money," relying on small business software QuickBooks instead of retaining a CFO or establishing an accounting department.²⁰⁷ While repeatedly representing that it followed industry best practices for custody of customer funds,²⁰⁸ FTX treated customer and company assets without "meaningful distinction."²⁰⁹

The issues quickly materialized on both sides of the balance sheet. FTX did not keep track of customer funds and assets (its liabilities)²¹⁰ and failed to document "transactions involving nearly 500 investments" (its assets).²¹¹ Simply put, FTX did not know how much money it owed to which customers – or what it did with the funds.

The haphazard nature of FTX's accounting is illustrated by its last-ditch investor materials, which showed \$900 million of liquid assets against \$9 billion of liabilities.²¹² In contrast to the company's reasoned post-filing approach, SBF readily consolidated legal entities, while – critically – failing to even consider segregating customer funds.²¹³ Figure 7 below summarizes FTX's balance sheet shortly before its bankruptcy filing.²¹⁴

et al., No. 22-11068 (JTD) (Bankr. D.Del. June 26, 2023), ECF No. 1704-1 [[henceforth, "FTX Second Interim Report"]].

²⁰⁷ John J. Ray III, *Testimony*, HOUSE FIN. SERV. COMM., *supra* note 116.

 $^{^{208}}$ The standard industry practice is termed "account segregation," which is meant to safeguard assets and facilitate their return. Brokerage and FCM regulations prohibit rehypothecation (i.e., reuse) of customer assets – a violation potentially subject to criminal penalties. *See* Part III.A.2.

²⁰⁹ "This separation mitigates the risk that the company might misuse customer funds for its own purposes, and facilitates the return of customer funds if the company holding them experiences financial distress." FTX Second Interim Report, *supra* note 206, at 6.

²¹⁰ This is an oversimplification of a complex issue; in reality, the funds should have been segregated per brokerage and FCM regulations against rehypothecation. *See infra* Part III.

²¹¹ Id.

²¹² Alphaville, *FTX Balance Sheet, Revealed*, FIN. TIMES (Nov. 12, 2022), https://www.ft.com/content/0c2a55b6-d34c-4685-8a8d-3c9628f1f185.

²¹³ See infra Part III.B.

²¹⁴ See infra Appendix I.

Figure 7. FTX Group Company-Reported Balance Sheet Summary (11/10/2022)

Assets		Liabilities	
Liquid Assets	899.86	Fiat-Denominated (98% USD)	5,249.82
Less Liquid Assets	5,448.06	Crypto-Denominated*	2,880.76
FTX-Sponsored Crypto	3,749.60	Crypto Entity Loans	460.00
Other	1,698.46	Other	268.46
Illiquid Assets	3,239.45	Total Liabilities	8,859.04
Total Assets	9,587.37		
FTX Crypto (% Total)	39.1%	Fiat-Denominated (% Total)	59.3%

FTX Group: Company-Reported Balance Sheet Composition (11/10/22)

*USDT stable coin, BTC and ETH.

Along with underscoring the gross insufficiency of FTX's operations and controls,²¹⁵ the materials illustrate a critical financial mismatch. While most of FTX's liabilities – about \$5.25 billion (59 percent of the total) – were fiat-currency denominated, likely reflecting customer assets (and thus company liabilities), nearly 40 percent of company assets (about \$3.75 billion) were FTX-sponsored crypto, which it received for free.²¹⁶ To put that differently, FTX took in dollars and was left with magic beans.

This raises an obvious follow-up question: where did the money go?

III. Why Are Platform Bankruptcies So Problematic?

Crypto Platform bankruptcies have been financially devastating for millions of accountholders and uniquely problematic from a host of legal dimensions. While the challenges are often reflexively attributed to the nature of crypto itself, the salient issues actually have little to do with the asset.²¹⁷ The true root cause reflects the fundamental category error of

²¹⁵ Highlights included a "hidden, poorly internally labled [[sic]]" negative \$8 billion "fiat@' account," cautionary notes regarding "rough values" and potential "typos" and (likely intentional) exclusion of FTX's loans to Alameda. *See* Antoine Gara, et al., *FTX Held Less Than \$1Bn In Liquid Assets Against \$9Bn In Liabilities*, FIN. TIMES (Nov. 12, 2022), https://www.ft.com/content/f05fe9f8-ca0a-48d5-8ef2-7a4d813af558.

²¹⁶ SBF has argued that FTX's issues reflected crypto illiquidity, rather than insolvency. *See infra* Part III.A.

²¹⁷ Notably, relatively few of the issues identified in the literature regarding potential

treating Crypto Platforms – complex, unregulated financial institutions²¹⁸ – akin to typical start-ups. Failing to appropriately monitor Crypto Platforms set the stage for the crypto sector's 2022 crisis – and the errors risk being compounded through ill-suited Chapter 11 reorganization processes.²¹⁹

Financial institutions²²⁰ are subject to comprehensive regulation through a prevention-first system with a fallback toward pre-arranged entity resolution. The paradigm reflects an unusually close interplay between preand-post bankruptcy oversight with post-2008 crisis regulatory focus on large institutions with the most acute spill-over risks.²²¹ Among various competing objectives, ex ante financial regulation and ex post entity insolvency resolution emphasize mitigating negative impacts to third parties, including immediate stakeholders, the sector, and the broader economy.²²²

All of this is required because financial institutions represent a cauldron of externalities with unique significance, risk profiles and industry interlinkages that inevitably impact the broader economy.²²³ Crypto

crypto-specific insolvency issues few have materialized, with the challenges generally reflecting financial institution regulation and contract interpretation issues – not crypto.

²¹⁸ Stefania Palma, et al., *US watchdogs play blame game over FTX demise*, FIN. TIMES (Nov. 18, 2022), https://www.ft.com/content/b1d7ee93-8f4d-4050-98f3-84958267864a (quoting U.S. senator who inquired: "[[W]]ho in our federal financial services regulatory administrative state was watching FTX to make sure no one there stole people's money . . . Was anyone watching this?").

²¹⁹ Diane Lourdes Dick & Christopher K. Odinet, *The Questionable Virtues of Chapter 11 in the FTX Bankruptcy*, CLS BLUE SKY BLOG (Dec. 7, 2022), https://clsbluesky.law.columbia.edu/2022/12/07/the-questionable-virtues-of-chapter-11-in-the-ftx-bankruptcy/ (suggesting "important conversations" as to "whether chapter 11 bankruptcy is the appropriate place to deal with crypto failures like those of FTX.").

²²⁰ As discussed, this Article references "financial institutions" in the broadest sense to reflect and parallel certain incongruencies in respect of the crypto sector. *See supra* note 73 and associated text.

²²¹ As used here, "spill-overs," especially at the first level are somewhat conceptually distinct from externalities as the term is used in the economics literature.

²²² Such impacts can also be positive including through credit extension and capital formation. Potential externalities include (but are not limited to): (i) informational contagion; (ii) loss of access to funding for bank customers; (iii) sector interconnection; (iv) fire sales; and (v) credit contraction.

²²³ E. Gerald Corrigan, Are Banks Special?, MINN. FED. RES. (Jan. 1, 1983), https://www.minneapolisfed.org/article/1983/are-banks-special; E. Gerald Corrigan, Are Banks Special? A Revisitation, MINN. FED. RES., (Mar. 1, 2000), https://www.minneapolisfed.org/article/2000/are-banks-special; Thomas Huertas, Are Banks Still Special? 5 J. FIN. PERSP. 1 (Feb. 7, 2018), https://ssrn.com/abstract=3154345.

Platforms present significant structural similarities to financials, as well as certain distinctions tied to asset-specific uncertainties.

Part III is organized in two sections. First, it contextualizes the regulation and insolvency resolution of financial institutions, highlighting the focus on accountholders, as well as measures to mitigate sector and systemic risks. Second, it discusses how Crypto Platforms' unregulated operations created a host of bankruptcy issues that, while seemingly unique, in reality reflect long-standing financial sector challenges best addressed through existing sector-specific templates.

A. Financial Regulation Context

Appreciating the significance of the crypto crisis and Crypto Platform bankruptcies requires some context regarding the regulatory and insolvency treatment for financial institutions. That treatment emphasizes: (i) first and foremost, preventing distress; and (ii) if that fails, minimizing the damage through specialized bankruptcy regimes, predicated on subtly distinct considerations and priorities from Chapter 11 – including a focus on accountholders, rather than creditors.²²⁴

1. Ongoing Supervision

A starting financial supervisory principle is the compartmentalization of substantive functions through legal formalities²²⁵ to facilitate risk management as well as account monitoring to ensure proper treatment of customer funds. Crypto Platforms, in contrast, haphazardly bundle activities²²⁶ specifically segmented within different entity types and

²²⁴ The underlying policy rationale is that the impact of bank failures extends beyond the institution's direct stakeholders, imposing negative externalities on the economy. *See generally*, Jonathan R. Macey, *supra* note 100; *See also* Stephen Lubben, *Financial Institutions in Bankruptcy*, 34 SEATTLE U. L. REV. 1259, 1259 (2011) (noting, generally critically in SIFI context, that "banking and financial institutions have been increasingly held to different standards than other types of corporations in the bankruptcy setting").

²²⁵ This compartmentalization occurs at multiple levels, including (i) segmentation of certain activities to different organization types and (ii) circumscribing certain activity within financial groups.

²²⁶ Akila Quinio & Joshua Oliver, *Crypto exchanges' bundling of services threatens stability, says Bank of England official*, FIN. TIMES (Nov. 21, 2022), https://www.ft.com/content/5c12eb2b-390e-473f-a8ce-0a7f9dfc3a33.

regulatory paradigms. The contrast is illustrated in Figure 8 below.²²⁷

Figure 8. Financial Institution Types & Crypto Analogues

(Stylized Overview)

Activity	'TradFi' Entity*	Description	Crypto Analogues
Lending	"Banks" ¹	Depository and lending institutions (FDIC-insured, FDIC/ Fed-Regulated).	Celsius, Voyager, BlockFi and Gemini
Securities	Broker-Dealers (or security-brokers) ²	Facilitate customer stock trading on exchanges. Securities Investor Protection Company (SIPC) account insurance. ³	Voyager, Genesis, FTX, Binance, Coinbase and Kraken
Futures	Futures Commission Merchants ("FCM")	Facilitate customer futures contract trading. No federal account insurance; customer protection through account segregation and margin management. ⁴	FTX and Binance

Financial Institution Types & Crypto Analogues: Stylized Overview

¹ See generally, Lev Breydo, Bank Recapitalization through Chapter 11, ABI J (2015).

² Formally, this term refers to "stockbroker," per 101(53A) of the Bankruptcy Code.

³ Exchange / clearinghouse access limited to institutions, which facilitate client trading and are responsible for associated risks.

⁴ Paul Peterson, Behind the Collapse of MF Global, U.IL Dept of Econ. (Aug. 2, 2013).

*Definitions and descriptions simplified for illustrative purposes

Financial institution distress broadly falls into two core categories: (i) solvency (i.e., balance sheet liabilities exceed assets) and (ii) liquidity, which reflects a mismatch between the structure of liabilities (on-demand deposits) and assets (illiquid loans and securities).²²⁸ That mismatch can create the risk of a bank run²²⁹ – a negative feedback loop where depositors' concerns lead to preemptive capital withdrawals,²³⁰ leaving otherwise healthy institutions in crisis.²³¹ One institution's failure can, in turn, put pressure on others due

²²⁷ These categories are non-exhaustive (excluding, for instance, clearing organizations, exchanges and SIFIs), and intentionally simplified to highlight the most pertinent analogues.

²²⁸ Though most commonly associated with banking distress, the framework is more broadly applicable for illustrative purposes.

²²⁹ Indeed, 'runs on the bank' is how FTX and other Platforms described their predicaments. Grant Easterbrook, *How The History Of Bank Runs Helps Us Understand The FTX Fiasco And Other 2022 Crypto Exchange Failures*, FORBES (Jan. 5, 2023), https://www.forbes.com/sites/granteasterbrook/2023/01/05/how-the-history-of-bank-runs-helps-us-understand-the-ftx-fiasco-and-other-2022-crypto-exchange-failures/?sh=13713ff37428.

²³⁰ The commercial logic underlying parties' incentives is that no one wants to keep their money in a bankrupt bank.

²³¹ In other words, "pure panic can cause a run." Anil K. Kashyap, *Bank Runs Aren't Madness: This Model Explained Why*, CHI. BOOTH (June 15, 2015), https://www.chicagobooth.edu/review/bank-runs-arent-madness-this-model-explained-

to real or perceived financial linkages – precisely as occurred with crypto's 2022 contagion.²³²

The financial regulatory architecture safeguards against solvency risks through both rulemaking and ongoing prudential review, including regular assessment of capital quality, operations, records, legal supervision, technology infrastructure, and cybersecurity.²³³ Liquidity risks are addressed ex ante in large part through deposit insurance.²³⁴

2. Tailored Insolvency Regimes

In the event of distress, financial institutions are subject to specialized liquidation-focused insolvency regimes,²³⁵ with broad-based policy goals including: (i) protecting and returning customer property; (ii) preventing systemic risk; and (iii) safeguarding the broader economy.²³⁶ While perfectly logical for the context, these objectives are also notably distinct from, and broader than, the largely endogenous Chapter 11 process.²³⁷ Indeed, conflict

why ("If enough depositors become concerned that a bank may experience more withdrawals than it's prepared for, it becomes rational for depositors to try to get their money back rather than wait and risk getting nothing after the bank's other depositors have withdrawn their money.").

²³² That, in turn, can result in broader financial contagion, which "describes the cascading effects that an initially idiosyncratic shock to a small part of a financial system can have on the entire system." R. Kollmann & F. Malherbe, *Chapter 14: Financial Contagion, in* HANDBOOK OF SAFEGUARDING GLOBAL FINANCIAL STABILITY: POLITICAL, SOCIAL, CULTURAL, AND ECONOMIC THEORIES AND MODELS 139 (Gerard Caprio, Jr. et al. eds., 2013).

²³³ Andrew Crockett, Gen. Manager of the Bank for Int'l Settlements and Chairman of the Fin. Stability Forum, Remarks at the Eleventh International Conference of Banking: Marrying the Micro-and Macro-prudential Dimensions of Financial Stability (Sept. 20-21, 2000), https://www.bis.org/speeches/sp000921.htm.

²³⁴ Depression-era experience and Nobel Prize-winning work have illustrated that deposit insurance can mitigate "bank runs." *See* Douglas Diamond and Philip Dybvig, *Bank Runs, Deposit Insurance, and Liquidity,* 91 J. POL. ECON. 401, 417 (1983) ("[D]]eposit insurance is a binding commitment which can be structured to retain punishment of the bank's owners, board of directors, and officers in the case of a failure.").

²³⁵ Notably, financials, including broker-dealers, are not allowed to file under Chapter 11 and must use Chapter 7. *See* 11 U.S.C. § 109(d).

²³⁶ See supra note 224.

²³⁷ In contrast, with respect to FCMs: "Customer funds are not subject to creditor claims against an FCM should it become financially unstable or insolvent. Customer funds

between creditors and depositors is a defining feature of financial institution insolvency – as is increasingly the case with Crypto Platforms.²³⁸

Figure 9 below summarizes the insolvency regimes applicable to banks, broker-dealers and futures commission merchants ("FCM").²³⁹

Figure 9. Financial Institution Insolvency Regimes Overview Financial Institution Insolvency Resolution: Stylized Overview

		Kesolution:			
Entity Type	Insurance	Fed Regime / BK	Mechanics	Primary Goals	
Bank ¹	FDIC (\$250K)	FDIA / HoldCo Ch. 11 ¹	FDIC receivership; auctions operating bank	(i) Least Cost Resolution; (ii) depositor preference	
Broker- Dealer ²	SIPC (\$500K)	SIPA / Ch. 7 (subchapter III) ³	SIPC files SIPA liquidation; Trustee appointed; case proceeds through Ch. 7. ⁴	(i) liquidate B-D; (ii) return customer property	
FCM ⁵	N/A (account segregation regime)	None / Ch. 7 (subchapter IV)	Ch. 7 liquidation overseen by trustee	(i) liquidate FCM; (ii) return customer property ⁶	

¹ Operating banks, the FDIC-insured unit, are ineligible for Ch. 11. The bank holding company typically files Ch. 11 (parallel to FDIA)

 $^2\,$ Formally, this term refers to "stockbroker," per 101(53A) of the Bankruptcy Code.

³ 15 USC 78eee(b)(4). Process is governed by SIPA, but Ch. 7 sub-chapter 3 is applicable to the extent it doesn't conflict with SIPA

⁴ Mariel Mok, Who Determines Customer Property? Colum Bus. L.Rev

⁵ Formally, this term refers to "commondity broker," per 101(6) of the Code.

⁶ Peter Malyshev, Account Transfer in the Event of an FCM Liquidation , Mondaq (2011).

Banks and broker-dealers benefit from insurance through the FDIC and Securities Investor Protection Corporation, respectively, and are subject to stand-alone federal liquidation regimes operated by the insurer entities acting as receivers.²⁴⁰ Because there is no comparable FCM insurance

can be transferred to another FCM if necessary." *See How is my Futures Account Protected*, NAT'L FUTURES ASS'N (July 29, 2023), https://www.nfa.futures.org/faqs/investors.html.

²³⁸ See Lev E. Breydo, Bank Recapitalization through Chapter 11, 36 AM. BANK. INST. J. 44 (July 2015). See also Gibson Dunn, Overview of the FDIC as Conservator or Receiver, 3-5 (2008) (on file with the author).

²³⁹ Under Title II of Dodd-Frank certain SIFIs are subject to the Orderly Liquidation Authority for which the FDIC serves as receiver to liquidate the failed firm. DEP'T. OF TREAS., ORDERLY LIQUIDATION AUTHORITY AND BANKRUPTCY REFORM (2018), https://home.treasury.gov/sites/default/files/2018-02/OLA_REPORT.pdf.

²⁴⁰ For broker-dealers this process operates alongside the code *see* Camille C. Bent et al., *Broker-Dealer Insolvencies under the Bankruptcy Code and SIPA*, Practical Law Practice Note w-030-8341 (Nov. 2023).

scheme,²⁴¹ the entities file under Chapter 7 (sub-chapter IV),²⁴² with a trustee appointed to handle the liquidation.²⁴³ FCM customers are "protected by strict segregation rules"²⁴⁴ with customer property²⁴⁵ kept in accounts the FCM cannot utilize.²⁴⁶ This account segregation regime is a cornerstone of derivative market stability with violations subject to both civil and criminal penalties.²⁴⁷

A related dimension is the use of customer assets and, correspondingly, the legal status of that property.²⁴⁸ While banks generally use customers' dollar-denominated deposits to make loans, Broker-Dealers and FCMs typically do not rehypothecate (re-use) customer assets without owner

²⁴¹ The business is relatively low-margin, with the broker's financial position protected by customer margin. Paul Peterson, *Behind the Collapse of MF Global*, DEP'T AGRIC. CONSUMER ECON. U. ILL. URBANA-CHAMPAIGN (Aug. 12, 2013), https://farmdocdaily.illinois.edu/2013/08/behind-collapse-mf-global.html (FCMs have "no insurance scheme comparable to SIPC.").

²⁴² Vincent E. Lazar & Kathryn Trkla, *CFTC Overhauls Its Commodity Broker Bankruptcy Rules*, ABA BUS. LAW TODAY (Jan. 22, 2021), https://businesslawtoday.org/2021/01/cftc-overhauls-commodity-broker-bankruptcy-rules/.

²⁴³ Chapter 7 "dictates important customer protections through provisions protecting the transfer of customers' commodity contracts and related customer property from the failed commodity broker." Kathryn M. Trkla & Geoffrey S. Goodman, *Finally 190! Years in the Making: CFTC Proposes New Bankruptcy Rules for FCMs and DCOs*, FOLEY (May 2020), https://www.foley.com/en/insights/publications/2020/06/finally-190years-in-the-making.

²⁴⁴ See RENA S. MILLER, THE MF GLOBAL BANKRUPTCY, MISSING CUSTOMER FUNDS, AND PROPOSALS FOR REFORM, CONGRESSIONAL RESEARCH SERVICE 2 (Aug. 1, 2013) [[henceforth, "CSR MF GLOBAL"]]. See also Lazar & Trkla, supra note 242, noting "segregation of customer property is the hallmark protection for commodity broker customers. The CFTC's Part 190 regulations . . . are of paramount importance both for protecting customer property and reducing . . . systemic impact."

 $^{^{245}}$ "Customer property" is defined in part as "cash, a security, or other property, or proceeds of such cash, security, or property, received, acquired, or held by or for the account of the debtor, from or for the account of a customer ..." 11 U.S.C. § 761(10).

 $^{^{246}}$ 17 CFR § 1.20 establishes that "A futures commission merchant must separately account for all futures customer funds and segregate such funds as belonging to its futures customers."

²⁴⁷ See CSR MF GLOBAL, supra note 244, at 2-3.

²⁴⁸ This has become a particularly hot button issue for Crypto Platforms. *See infra* Part III.B, discussing status of customer assets.

permission.²⁴⁹ This distinction is critical in the insolvency context. U.S. currency is fungible, while stocks and futures are not; a dollar equals a dollar, but a share of Apple is not a share of Microsoft.

Illustrating application of this regime, in 2011, MF Global, a large SECregistered broker-dealer and CFTC-registered FCM, filed for bankruptcy following wrong-way European distressed debt bets.²⁵⁰ Subsequently, MF Global was found to have mis-used \$1.6 billion of customer funds²⁵¹ in attempting to cover up the losses.²⁵² Separate trustees²⁵³ were appointed to wind down each of the securities broker-dealer²⁵⁴ and FCM.²⁵⁵ Both conducted in-depth investigations and publicly released reports detailing events around the misuse of customer funds²⁵⁶ along with specific recommendations, which helped restore market confidence and ultimately provided the basis for amendments to FCM insolvency.²⁵⁷

More recently, during a mid-2023 wave of regional bank collapses,²⁵⁸

²⁴⁹ Margin trades and associated position liquidation represent something of a caveat beyond the scope of this discussion, but outlined *infra* with respect to FTX.

²⁵⁰*Rating Action: Moody's downgrades MF Global to Baa3*, MOODY'S INVESTORS SERVICE (October 24, 2011) (noting Moody's growing "increasingly concerned" regarding MF Global health).

²⁵¹ Peterson, *Behind the Collapse of MF Global, supra* note 241.

²⁵² Prior to its bankruptcy, MF Global was one of the world's largest brokers in markets for commodifies and listed derivatives, providing clients access to over 70 exchanges. CSR MF GLOBAL, *supra* note 244, at 2.

²⁵³ At the time of MF Global's insolvency, FCMs were Chapter 11 eligible (which is why a Chapter 11 trustee was appointed). Changes following MF Global made FCMs eligible for Ch. 7 subchapter IV.

²⁵⁴ Report of the Trustee's Investigation and Recommendation, Attorneys for James W. Giddens, Trustee for the SIPA Liquidation of MF Global Inc., *In re* MF Global Inc., No. 11-2790 (MG) SIPA, (Bankr. S.D.N.Y. June 2012), http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/mfglobaliinvestr eport060412.pdf.

²⁵⁵ Miller, *supra* note 244 at Figure A-2 (detailing appointment of trustees for each of the broker-dealer and FCM as well as their respective responsibilities).

²⁵⁶ The CFTC and other regulators brought charges against MF Global executives, with CEO Jon Corzine paying a \$5 million fine. Ben Protess, *Corzine Reaches \$5 Million Settlement with Regulators in MF Global Case*, N.Y. TIMES (Jan. 5, 2017), https://www.nytimes.com/2017/01/05/business/dealbook/mf-global-jon-corzine-penalty-settlement.html.

²⁵⁷ See Lazar & Trkla, *supra* note 242.

²⁵⁸ Failed lenders included Silicon Valley Bank, Signature Bank and First Republic Bank. Karl Russell & Christine Zhang, *3 Failed Banks This Year Were Bigger Than 25*

the FDIC, as receiver, took control of each lender (typically over a weekend to ensure depositor account access) and orchestrated asset sales or assumed certain positions for subsequent wind-down.²⁵⁹

At a high level, three core financial institution insolvency principles are most pertinent for Crypto Platforms. First, governance and control are unambiguous: each process is shepherded by a trustee or receiver, with functionally analogous objectives.²⁶⁰ Second, the mechanics are predicated on orderly liquidation. While certain operating units can be sold to more stable entities,²⁶¹ there is no emphasis on the insolvent financial institution reorganizing as a going concern. Finally, the overarching goal for each financial institution insolvency regime is the protection and expedient return of *customer* property.²⁶²

These features are supported by pre-petition oversight that, along with measures to prevent distress, facilitates insolvency through account segregation and record keeping that ensures clarity regarding customer funds and the legal structure of relationships.

B. Crypto Platform Contrast

While exhibiting similar risk profiles as traditional financial institutions,

²⁵⁹ Failed Bank List, FDIC (last updated July 28, 2023), https://www.fdic.gov/resources/resolutions/bank-failures/failed-bank-list (Gov't Accountability Office, Bank Regulation: Preliminary Review of Agency Actions Related to March 2023 Bank Failures (GAO-23-106736)).

In addition, Silvergate, a smaller crypto-focused regulated lender, initiated a voluntary liquidation in early 2023. *Silvergate Capital Corporation Announces Intent to Wind Down Operations and Voluntarily Liquidate Silvergate Bank*, BUSINESSWIRE (Mar. 8, 2023, 4:30 PM), https://www.businesswire.com/news/home/20230308005795/en/

²⁶⁰ This is also conceptually akin to a chapter 11 trustee, in that an independent fiduciary (rather than the debtor's management) becomes responsible for the process.

²⁶¹ On occasion such sale processes may require a Chapter 11 trustee or CRO. Lehman Brothers, for example, had multiple parallel proceedings, and reflected a rare instance of parallel Trustee and CRO appointments for portions of the processes.

²⁶² Peter Y. Malyshev, *United States: Account Transfer in The Event of an FCM Liquidation*, MONDAQ (Nov. 11, 2011), https://www.mondaq.com/unitedstates/insolvencybankruptcy/152642/account-transfer-in-the-event-of-an-fcm-liquidation.

That Crumbled in 2008, N.Y. TIMES (May 1, 2023), https://www.nytimes.com/interactive/2023/business/bank-failures-svb-first-republic-signature.html.

Crypto Platforms were not subject to the associated regulatory safeguards. Their failures rippled out to accountholders and through the sector, though harm to the broader economy was largely ringfenced.²⁶³

That regulatory ringfence also reflects crypto's central dissonance. Many doubt its substantive utility with some scholars arguing that crypto is "a game emulating finance" without "productive purposes," and others warning against "legitimacy-inferring" regulation. ²⁶⁴ Yet, irrespective of crypto's prospective benefits, the risks are real and hard to argue with – perhaps not unlike earlier generations of financial products, including many mid-2000s vintage derivatives.²⁶⁵ Further, as the bankruptcy proceedings illustrate, the issues are not a function of crypto itself, but rather unsupervised financial institutions sometimes operated by less-than-scrupulous individuals. The distinction is particularly critical at this juncture, as oversight should not paint a whole sector with the same brush as FTX.

This section outlines two sets of issues implicated across Crypto Platform bankruptcies: (i) estate and asset composition, including avoidance actions; and (ii) case governance and strategy.²⁶⁶

1. Estate & Asset Composition

A preliminary step in the utilitarian, value-maximizing Chapter 11 process requires determining basic debtor accounting, including: (i) existing assets, encompassing the bankruptcy estate and recoverable assets through avoidance actions; as well as (ii) claims against the debtor.²⁶⁷ Unlike regulated financial institutions – with regulatory frameworks that ensure proper account treatment – Crypto Platform bankruptcies have been anything but straightforward.

a. Accountholder Treatment & Priority

²⁶³ See supra Part II.B.

²⁶⁴ Todd H. Baker, *Let's Stop Treating Crypto Trading as If It Were Finance* (November 27, 2022). Available at SSRN: https://ssrn.com/abstract=4287185 or http://dx.doi.org/10.2139/ssrn.4287185.

²⁶⁵ *Id.* at 3.

²⁶⁶ Certain specific bankruptcy issues and process mechanics are beyond the scope of this Article, but present an area for potential future research.

 $^{^{267}}$ Commencement of bankruptcy creates the "estate," which is defined broadly to encompass assets in the debtors' possession at filing. *See* 11 U.S.C. § 541.

Accountholders are typically *the* priority for financial institution insolvency resolution: the process operates to promptly return their money. No such safeguards exist for Crypto Platforms. Yet, in cases like FTX, accountholders are *victims* who simply wanted to access Platforms' services with zero ex ante intention of becoming investors or creditors. FTX's fraud should not dimmish this reality, but rather provides an additional reason to safeguard these parties' interests; yet, precisely the opposite is occurring.

The legal classification of claims determines their bankruptcy priority, which in turn influences case incentives and ultimately dollar recoveries. For Crypto Platforms there are two layers of legal issues: (i) whether customer accounts are property of the bankruptcy estate; and (ii) whether account holders at different legal entities should be treated distinctly.²⁶⁸

i. Are Customer Accounts Property of the Estate?

While unambiguous for financial institutions, the status of Crypto Platforms' customer funds presents a gating issue with something of a binary outcome.²⁶⁹ If the assets are property of the estate, account holders "are unsecured creditors and their recovery depends on" bankruptcy distributions.²⁷⁰ If not, customers continue to own the assets and are entitled to structural priority and expedited return, circumstances permitting.²⁷¹

An early-2023 decision in the Celsius case held that the status of customer funds was essentially a "contract law issue" governed by the respective terms of use.²⁷² In that case, the majority of customers had so-called 'Earn' accounts that advertised 17 percent "risk-free" returns and effectively provided unsecured digital asset loans to Celsius, which retained "all right and title to such Eligible Digital Assets, including ownership rights"

²⁶⁸ The debtors' preliminary chapter 11 term sheet contemplates extinguishing the FTT token, which raises distinct legal considerations beyond the scope of this Article.

²⁶⁹ There is a significant range of potential characterizations of custodial holdings, including "express trust, constructive trust, financial assets governed by Article 8 of the Uniform Commercial Code, bailment, and property sold to the exchange." Levitin, *supra* note 75, at 905.

²⁷⁰ In re Celsius Network LLC, 647 B.R. 631, 637-651 (Bankr. S.D.N.Y. 2023).

²⁷¹ A practical issue is likely to be the treatment of accounts in the event of a shortfall, for which an effective bifurcation of the claim may be possible – in effect, treating the party as closer to a secured creditor.

²⁷² In re Celsius Network LLC, 647 B.R. at 637.

in the respective crypto assets.²⁷³ Notwithstanding alleged company misrepresentations,²⁷⁴ based on the contractual language, the court held that about 600,000 Earn Accounts with nearly \$4.2 billion constituted property of the estate.²⁷⁵

FTX's terms of use were markedly distinct, expressly providing that "[[t]]itle to your Digital Assets shall at all times remain with you and shall not transfer to FTX,"²⁷⁶ suggesting at least a portion of FTX customers²⁷⁷ have grounds to assert a property interest in their accounts.²⁷⁸ However, even if the terms were uniform and unambiguous for all customers, reconciling contractual provisions with the reality of FTX operations and accounting will be an acute challenge – though it need not mean entirely negating customers' ex ante substantive rights.²⁷⁹

ii. Legal Entity-Specific Distinctions

A second layer of consideration is the treatment of obligations as between different legal entities – in other words, how are customers of different Platform units treated relative to one another? Broadly speaking,

²⁷³ Id. at 637-38.

 $^{^{274}}$ Celsius customers argued that the terms of use were "ambiguous within the four corners," company statements – "particularly" by its former CEO – "constituted an oral modification" such that the contract "did not transfer title and ownership" to the crypto assets, and that Celsius marketing misrepresented the complex legal agreements to consumers. *Id.* at 644-45.

²⁷⁵ The court did not decide ownership of assets in Celsius' Custody Program (intended to not transfer ownership) to which the business largely transitioned. *Id. See also* Examiner's Report/Interim Report of Shoba Pillay at 3-4, *In re* Celsius Network, LLC, et al., Debtors, No. 22-10964(MG) (Bankr. S.D.N.Y. Jan. 31, 2023), ECF No. 1411 (describing transition away from Earn Accounts).

 $^{^{276}}$ SEC v. SBF, supra note 118, at ¶ 48 ("none of the digital assets in your account are the property of, or shall or may be loaned to, FTX Trading.").

 $^{^{277}}$ It is unclear if this applies to all or only a portion of FTX customers, as it is unknown whether the FTX terms of service were the same for all FTX entities – or whether they had changed over time. Further, the FTX court has declined to follow certain Celsius precedents.

²⁷⁸ Prior to the Celsius decision, the Ad Hoc Group of Non-US Customers indeed argued that based on the terms of service, they were entitled to the assets in their accounts as property. However, that adversary proceeding was indefinitely stayed as of August 2, 2023. *See* Order Approving Stipulation Staying the Adversary, *In re* FTX Trading Ltd., et al., No 22-50514 (Bankr. D. Del. Aug. 2, 2023), ECF No. 23.

²⁷⁹ FTX Second Interim Report, supra note 206, at 6.

the two ends of this continuum are: (i) treating each silo on a stand-alone basis or (ii) substantive consolidation across all entities.²⁸⁰ For a case like FTX, a plausible outcome may be somewhere in between, with customers of at least some jurisdictionally-circumscribed entities, such as FTX Japan, being treated on a stand-alone basis, and others experiencing some consolidation.²⁸¹

In contrast to SBF's haphazard approach, the post-petition estate divided company operations into four 'silos,' each housing certain legal entities and operations.²⁸² These demarcations are particularly pertinent because some of the regulated entities, including FTX.US, may be solvent on a stand-alone basis – but FTX Group on the whole is likely not.²⁸³ If that is the case, customers of solvent entities would much prefer to be treated separately (to recover in full), while customers of insolvent entities, such as FTX international, would prefer a common pot of assets. Here, prior commingling of funds and operating separation between entities is likely to be important,²⁸⁴ because if appropriate allocation of assets becomes impossible, the court may be inclined toward a form of substantive consolidation.²⁸⁵

b. Asset Recovery & Avoidance Actions

²⁸⁰ Substantive consolidation is an equitable doctrine allowing bankruptcy courts to disregard formal legal separation between debtor entities and treat corporate groups, or parts thereof, on a consolidated basis. While courts may dissolve entities to combine assets and liabilities, a more common approach is so-called 'deemed consolidation,' which has a similar effect without the formal dissolutions.

²⁸¹ FTX first previewed this approach in the debtors' January 17 presentation and FTX Second Interim Report, but presented it more directly in the July 31, 2023, plan term sheet, which contemplates substantive consolidation with certain specified entities carved out.

²⁸² The "DotCom Silo" corresponds to FTX and "WRS Silo" to FTX.US. *See* FTX First Day Presentation, *supra* note 130, at 10-21. Each correctly excludes customer cash, which should be kept legally separate from company assets, as detailed above.

²⁸³ See Ray First Day Decl., supra note 132, seriatim (containing various charts showing the solvency of four separate "silos" comprising the FTX business operations); see also FTX Pre-Mortem Overview, SBF'S SUBSTACK (Jan. 12, 2023), https://sambf.substack.com/p/ftx-pre-mortem-overview (arguing that "FTX US is fully solvent and always has been").

²⁸⁴ These issues are relatively common in Ponzi scheme cases – which may reasonably describe the FTX operation, potentially making certain Ponzi-specific frameworks operable.

²⁸⁵ See supra note 281.

A significant component of account holder compensation for FTX and other Crypto Platform cases is likely to come from legal claims to recover misappropriated assets through so-called avoidance actions, which include preferences and fraudulent conveyances.²⁸⁶

i. Preferences: Exchange Withdrawals

In FTX's final days, customers rapidly withdrew funds – \$5 billion on November 6, 2022, alone²⁸⁷ – in a classic bank run that hastened the exchange's demise. The critical bankruptcy issue is whether such withdrawals can be recovered by the estate as "preferential transfers,"²⁸⁸ or pre-petition transactions that leave a party better off than they would be in bankruptcy.²⁸⁹ In context of smaller retail customer transactions, preference claims may prove difficult to fully prosecute –– as well as for individuals to address, notwithstanding potentially viable defenses. Additional transfers of uncertain provenance around the time of bankruptcy may also implicate preference claims.²⁹⁰

²⁸⁶ Certain avoidance action safe harbors exist for financial transactions and institutions; however, it is unclear if those provisions are applicable to customer transactions with and withdrawals from FTX. See 11 U.S.C. 546(e). The safe harbors, designed to account for the unique interconnectedness between financial institutions and the capital markets, are generally applicable to "securities" and "commodities" as defined under the Bankruptcy Code. The treatment of crypto in this context is uncertain. See H.R. REP. 97-420, at 1 (1982) (reprinted in1982 U.S.C.C.A.N. 583, 583) ("Certain protections are necessary to prevent the insolvency of one commodity or security firm from spreading to other firms and possibl [[y]] threatening the collapse of the affected market."); Edward E. Neiger et. al., Navigating Crypto Issues Within Preference Litigation, 42 AM. BANKR. INST. J. 14, 14 (June 2023) ("There is likely to be significant litigation over whether the § 546(e) safe harbor applies in crypto cases.").

²⁸⁷ @SBF_FTX, TWITTER (Nov. 10, 2022, 9:13 AM) https://twitter.com/SBF_FTX/status/1590709174572572675?s=20&t=wsISU2QHH1 yfjw2MHFf7vg.

²⁸⁸ Fraudulent conveyance causes of action may also be possible; those legal standards are analyzed below. *See infra* Part III.A.2.b.

²⁸⁹ Preferential transfers allow the debtor/trustee to correct the potential issue; the cause of action has five components, detailed under 547(b), with defenses provided under 547(c). 11 U.S.C. § 547(b), (c). There is a 90-day clawback period (extended to 1-year for "insiders"). *Id.*, § 547(b)(4).

²⁹⁰ FTX has alleged that the Bahamian government directed \$374 million of postpetition "unauthorized" withdrawals. James Nani & Daniel Gill, *FTX Looks at Years of Lawsuits to Recover Billions from Customers*, BLOOMBERG (Nov. 18, 2022),

ii. Fraudulent Conveyances: Pre-Petition Transactions

FTX's pre-bankruptcy operations were characterized by billions of questionable transactions using customer assets, which can now potentially be recoverable by the estate as "actual" or "constructive" fraudulent conveyances ("FraudCo"). In simplest terms, "Actual FraudCo" refers to "fraud" as the term is commonly understood, requiring an intent element.²⁹¹ Constructive FraudCo, in contrast, does not require intent, but concerns sufficiently unfavorable transactions that have a similar practical impact on creditors.²⁹²

For Actual FraudCo claims, intent is assessed through so-called 'badges of fraud,' many of which appear to be met based on findings that asset misappropriation was not "by accident" but rather "occurred at [[FTX senior executives']] direction, and by their design."²⁹³ FTX treated customer and company assets without "meaningful distinction," including over \$2 billion of insider loans, \$253 million of luxury property purchases²⁹⁴ and "hundreds" of transactions with close SBF associates²⁹⁵ now being reviewed by the bankruptcy estate.²⁹⁶

https://news.bloomberglaw.com/bankruptcy-law/ftx-looks-at-years-of-litigation-to-recover-billions-in-assets.

 $^{^{291}}$ "Actual FraudCo" reflects the debtor making a "transfer or incur[[ing]] [[an]] obligation" with "*actual intent*" to "hinder, delay or defraud" creditors. 11 U.S.C. § 548(a)(1)(A).

 $^{^{292}}$ Constructive FraudCo requires the Debtor "(i) Received less than a reasonably equivalent value in exchange for such transfer or obligation; and (ii) was insolvent on the date that such transfer was made . . . or became insolvent as a result of such transfer or obligation." 11 U.S.C. § 548(a)(1)(B). The bankruptcy code look-back period is 2 years, but the debtor can use state law to extend it under the trustee's 'strong arm' powers. State law typically provides a 4- or 6-year period. UNIF. VOIDABLE TRANSFER ACT § 9 (UNIF. L. COMM'N 2014).

²⁹³ FTX Second Interim Report, *supra* note 214, at 2.

²⁹⁴ See Debtor Jan 17 Presentation, supra note 193.

²⁹⁵ David Yaffe-Bellany, et al., *The Unknown Hedge Fund That Got \$400 Million From Sam Bankman-Fried*, N.Y. TIMES (Jan. 24, 2023), https://www.nytimes.com/2023/01/24/business/ftx-sbf-modulo-capital.html (describing SBF investment in ex-girlfriend's "unknown" start-up hedge fund operating out of the Bahamas compound where he resided, shortly before bankruptcy and over internal objections).

²⁹⁶ See Debtor Jan 17 Presentation, *supra* note 193, at 17 (detailing questionable transactions).

The FTX estate may also have constructive FraudCo claims in connection with (but not limited to) political contributions and charitable donations – for which FTX presumably did not receive "reasonably equivalent value" ²⁹⁷ during a time when it was likely insolvent or near insolvency. ²⁹⁸

2. Governance & Case Strategy

Crypto Platform proceedings fit uneasily into the Chapter 11 framework. In typical bankruptcies, "interests of shareholders [become]] subordinated to the interests of creditors,"²⁹⁹ whereas financial institution insolvency puts accountholders ahead of creditors.

Some distinctive features of the U.S. bankruptcy regime help contextualize Chapter 11 governance challenges for Crypto Platforms. First, Chapter 11 is a multi-stakeholder, adversarial process where each class of interests ensures their own fair treatment, resulting in frequent litigation. Second, company management typically remains in place after filing as a so-termed debtor-in-possession ("DIP"). Finally, in contrast to many other jurisdictions,³⁰⁰ Chapter 11 allows reorganization,³⁰¹ rather than default liquidation of the debtor business.³⁰² Together these features create

²⁹⁷ The first prong is likely met with respect to political contributions, though charitable organizations may have potential defenses, depending on the nature of the arrangement.

²⁹⁸ The second prong may be more complex due to FTX's murky finances – though the expansive timeline suggests some of the \$150 million-plus of questionable political donations overlapped with insolvency. Prior decisions have also found a general Ponzi insolvency presumption, likely satisfying that prong if applicable here. *See, e.g.,* Klein v. Cornelius, 786 F.3d 1310, 1320 (10th Cir. 2015) (holding that "Ponzi schemes are insolvent by definition[.]") *In re* Ramirez Rodriguez, 209 B.R. 424, 432 (Bankr. S.D. Tex. 1997) (and cases cited therein); *In re Lake States Commodities, Inc.,* 272 B.R. 233, 242 (Bankr. N.D. Ill, 2002).

²⁹⁹ Commodity Futures Trading Comm'n v. Weintraub, 471 U.S. 343, 355 (1985) ("bankruptcy causes fundamental changes in the nature of corporate relationships.").

³⁰⁰ Globally, this dynamic continues to shift with more jurisdictions adopting aspects of chapter 11 reorganization. See Lev E. Breydo, Piecemeal: An Empirical Analysis of Global Restructuring Regimes (unpublished manuscript) (on file with author).

³⁰¹ Reorganization is an option and not a mandate. A business may enter bankruptcy to liquidate or shift to liquidation if reorganization proves unfeasible.

³⁰² "By permitting reorganization . . . Congress presumed that the assets of the debtor would be more valuable if used in a rehabilitated business than if 'sold for scrap." United States v. Whiting Pools, Inc., 462 U.S. 198, 203 (1983) (citing H.R.REP. NO. 95-595, at 220 (1977)).

significant and often valuable optionality, but also increase potential process complexity.

In contrast, financial institution insolvency is intended to be highly predictable, with a liquidation default, straightforward governance and the clear objective of returning customer property.³⁰³ The root of the challenge comes back to the first order category error of failing to characterize Crypto Platforms as financial institutions. As a result, their attempts to use the innately more complex Chapter 11 process creates uncertainties and incongruencies in governance, accountholder representation and exit strategy.

a. Case Control: Who is in Charge of FTX?

Notwithstanding the "strong presumption" of continued debtor management post-petition,³⁰⁴ for cases involving misconduct, the court can replace the DIP. Alternatives include the appointment of: (i) a Chapter 11 trustee, for cases of gross mismanagement;³⁰⁵ (ii) an Examiner to investigate wrongdoing; (iii) chief restructuring officer ("CRO");³⁰⁶ or (iv) far less commonly, a "responsible person" appointment.³⁰⁷ Broadly speaking, the framework balances case control against levels of potential wrongdoing, with less trustworthy debtors generally entitled to less deference and control over company affairs.

³⁰³ See Part III.A.2.

³⁰⁴ In re Marvel Ent. Grp., 140 F.3d 463, 471 (3d Cir. 1998); In re Costa Bonita Beach Resort Inc., 479 B.R. 14, 44 (Bankr. D. P.R. 2012) (discussing rationale for DIP default presumption).

³⁰⁵ See 11 USC § 1104; In re 1031 Tax Grp., LLC, 374 B.R. 78, 90-91 (Bankr. S.D.N.Y. 2007).

³⁰⁶ Special conflict provisions apply to CRO retention under the 'J. Alix Protocol.' *See* Clifford White et al. *Future of the USTP's CRO "Protocol,* "37 AM. BKR. INST. J. 24 (Sept. 2018).

³⁰⁷ In re Gaslight Club, Inc., 782 F.2d 767, 772 (7th Cir. 1986) (finding that the "peculiar circumstances of the case" justify the 'responsible person' appointment). But see In re Adelphia Commc'ns Corp., 336 B.R. 610, 668 (Bankr. S.D.N.Y.), aff'd, 342 B.R. 122 (S.D.N.Y. 2006) (declining to follow Gaslight due to "lacking" constituency consent and case circumstances that are "not extraordinary or peculiar."). See also Walter W. Theus, Who is Responsible Here? "Responsible Persons" in Chapter 11 Cases, 27 AM. BKR. INST. J. 12 (May 2008) (criticizing 'responsible person' appointments, and arguing that appointment of a Chapter 11 trustee is the only appropriate remedy).

156 AMERICAN BANKRUPTCY LAW JOURNAL (Vol. 98:1 2024)

The extremely unusual circumstances of the FTX bankruptcy created a divergence from this model. Operationally, John Ray's role appears most akin to a CRO. Procedurally, however, his appointment was even more problematic than the broadly-disfavored "responsible person" construct, as it occurred *pre-filing* (instead of post). The substantive ex ante governance issue is that because FTX lacked a functional board, Ray took over at the behest of FTX legal counsel – without court approval or oversight.³⁰⁸ Even under the circumstances, getting court approval for Ray's appointment, perhaps as a traditional CRO or even Chapter 11 trustee, could have been preferable from a governance perspective.³⁰⁹

b. Who Represents Accountholders?

In contrast to accountholder-focused financial institution insolvencies,³¹⁰ Crypto Platform reorganizations' application of the adversarial, multi-party Chapter 11 template, begs the question: *if not accountholders, then for whose benefit are Platform proceedings being run?*

Unlike most large cases where debtors have funded obligations, FTX's main claimants are 1.9 million customers collectively owed about \$10 billion.³¹¹ Yet, despite the circumstances, this most critical constituency lacks dedicated representation.

The FTX Official Committee of Unsecured Creditors ("UCC"),³¹² composed of mostly institutions rather than retail investors, has incorrectly claimed³¹³ to represent all accountholders. This implicates two critical

³⁰⁸ See infra Part IV, discussing suggested governance reforms for Crypto Platforms.

³⁰⁹ Because of these governance challenges, one could argue that the FTX court erred in denying the U.S. Trustee motion for an independent examiner, which are often beneficial in complex and contentious Chapter 11 cases. The Celsius examiner, for instance, found evidence of fraudulent marketing, coin price manipulation and "very ponzi like" practices described in internal emails. Examiner's Report/Final Report of Shoba Pillay at 9, *In re* Celsius Network, LLC, et al., Debtors, No. 22-10964(MG) (Bankr. S.D.N.Y. Jan. 31, 2023), ECF No. 1956 (finding the business Celsius "sold to its customers was not the business that Celsius actually operated").

³¹⁰ See infra Part III.A.2.

³¹¹ Funded obligations generally refer to debt and other instruments involving the provision of capital to the debtor.

³¹² The UCC is a UST-appointed group to represent lowest ranking creditors. The nine-member FTX UCC skews highly institutional, with a unit of Crypto Platform Genesis, crypto market maker Wintermute, four investment funds and three individuals.

³¹³ Debtors' Response to the Statement of the Official of Unsecured Creditors at 4-5,

issues: (i) accountholder status and priority; and (ii) incentives around case strategy.³¹⁴

The UCC position reflects a basic conflict: unsecured creditors (who are last in priority) have adverse interests to accountholders.³¹⁵ Reflecting this disconnect, at least two accountholder Ad Hoc Groups ("AHG") have formed: one with about \$200 million of claims³¹⁶ and a non-U.S. customer group, with about \$856.9 million,³¹⁷ which early in the case asserted property rights in their accounts.³¹⁸ AHGs, however, only speak for their members, which also skew institutional, rather than the retail investors representing the bulk of accounts.³¹⁹

The institutional-retail claimant divide implicates case strategy and incentives – specifically whether the institutional investor-controlled UCC and AHGs' goals align with retail accountholders.³²⁰ As discussed below,

³¹⁵ Under the Celsius precedent, accounts with terms like FTX's have clear structural priority. *See supra* Part III.B.1.a.

³¹⁶ See Verified Statement Pursuant to Bankruptcy Rule 2019, In re FTX Trading Ltd. Et al., No. 22-11068 (JTD) (Bankr. D. Del. Aug. 9, 2023), ECF No. 1084.

³¹⁷ The group earlier held over \$2 billion of claims, but according to counsel members left after the court declined to grant confidentiality. *See* Exhibit A to Verified Second Supplemental Statement of Eversheds Sutherlan (US) LLP and Morris, Nichols, Arsht & Tunnell LLP Prsuant to Bankruptcy Rule 2019, *In re* FTX Trading Ltd. et al., No. 22-11068 (JTD) (Bankr. D. Del. Aug. 9, 2023), ECF No. 2144-1.

³¹⁸ See AHG Adversary Proceeding, supra note 278 (discussing AHG litigation).

³²⁰ This has already caused some tension with the debtor, which fired back to a UCC objection it described as "heavy with the weight of an unstated agenda specific to the individual [[UCC]] members." Response (Debtors' Response to the Statement of the Official Unsecured Creditors) Filed by FTX Trading, *In re* FTX Trading Ltd. Et al., No. 22-11068

In re FTX Trading Ltd. et al., No. 22-11068 (JTD) (Bankr. D. Del. Aug. 9, 2023), ECF No. 2143 (The debtor has concurred that the UCC does not represent "all of the various classifications of creditors," or "reflect the views of all of the 1.9 million customers of the FTX.com exchange," and does not include any FTX.US account holders (with potentially different recovery priority)).

³¹⁴ Objection of the Official Committee of Unsecured Creditors to Motion of the United States Trustee for Entry of an Order Directing the Appointment of an Examiner at 4, 9-10, *In re* FTX Trading Ltd. et al., No. 22-11068 (JTD) (Bankr. D. Del. Jan. 25, 2023), ECF No. 571 (UCC position is that "the vast majority (if not all) of the claims against the Debtors' estates are those of unsecured creditors" putting the UCC in the "best position . . to represent the *entire* body of" creditors, also arguing that UCC represents the "vast majority of the Debtors' stakeholders").

 $^{^{319}}$ One reasonable option would have been to appoint an official committee of accountholders.

this arguably manifested most acutely in the UCC's push for restarting the FTX exchange, notwithstanding significant legal hurdles. While logically appealing to UCC members,³²¹ including market makers and other Platforms, there is little to suggest this high-risk proposition reflects accountholder interests or the aggregate welfare.

c. What is the Exit Strategy?

While a bankruptcy reorganization option if often conducive toward Chapter 11's value maximization objectives, Crypto Platform insolvency governance and incentive incongruencies may create an unusual scenario where the *possibility* of reorganization actually proves value destructive. Crypto Platforms present a confluence of circumstances each of which reduces the probability of productive reorganization, including: (i) financial institution business models; (ii) frequent allegations of wrongdoing; and (iii) regulatory uncertainty.³²²

Reflecting this complex backdrop, Crypto Platform reorganization attempts have generally struggled, ultimately transitioning toward de facto or de jure liquidations.³²³ Celsius provides an informative case study. After its mid-2022 filing, it was initially adamant about "a return to normal operations"³²⁴ through a stand-alone restructuring, using bankruptcy and accountholder money to develop a new crypto mining business.³²⁵ The company explored a range of business models, rebranding and recovery instruments including token-based debt "IOUs"³²⁶ and accountholder equitization "to reorganize and exit bankruptcy as a regulated crypto

⁽JTD) (Bankr. D. Del. Aug. 9, 2023), ECF No. 2143.

³²¹ One party even resigned the UCC to invest in the exchange. *Id.* at 3.

³²² This is particularly due to the SEC crypto crackdown creating fundamental business viability questions, applicable beyond just U.S.-based units. *See supra* Part I.C.3.

³²³ Cheyenne Ligon, Voyager Digital Plans to Liquidate Assets, Wind Down After Sale Dreams Crushed, COINDESK (May 6, 2023), https://www.coindesk.com/policy/2023/05/05/voyager-digital-plans-to-liquidate-assetswind-down-after-sale-dreams-crushed.

³²⁴ See Declaration of Alex Mashinsky, Chief Executive Officer of Celsuis Network LLC, in Support of Chapter 11 Petitions and First Day Motions at 41, *In re* Celsius Network LLC, et al., No. 22-10964(MG) (Bankr. S.D.N.Y. July 14, 2022), ECF No. 23.

³²⁵ Id.

³²⁶ 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.

platform,"³²⁷ before spinning off the mining business and otherwise liquidating.³²⁸

Voyager also unsuccessfully attempted a number of transaction structures before moving to liquidate.³²⁹ Similarly, BlockFi initially sought a stand-alone turnaround, but quickly moved to liquidation and return of customer assets.³³⁰ Genesis, the last Platform to file in January 2023, appears to have defaulted to a liquidation sale from the get-go.³³¹

Platforms' prospective interest in "turnarounds," like restarting the FTX exchange, reflects complex governance issues arguably driven by institutions with disproportionate influence spending accountholder money on a speculative strategy. On the one hand, the estate has a fiduciary duty to explore potentially value-generative strategies supported by some case constituencies. However, the regulatory environment and other Platforms' experiences suggest reorganization is unlikely to be viable: the best possible version of a reorganized FTX closely resembles Coinbase, which the SEC alleges to be unregistered exchange and broker-dealer.³³²

Pursuing out-of-the-money options most valuable to a limited institutional constituency is particularly problematic because reorganization

³²⁷ Steven Church, *Celsius May Issue a Bankruptcy Crypto Token to Pay Creditors*, BLOOMBERG (Jan. 23, 2023).

³²⁸ Celsius' June 2023 plan contemplates: (i) liquidating much of the business and assets and (ii) repositioning certain mining and staking assets into a new publicly-traded entity owned largely by account holders (through equitization) and managed by an outside investor consortium. *See* Notice of Successful Bidder and Backup Bidder, *In re* Celsius Network LLC, et al., No. 22-10964(MG) (Bankr. S.D.N.Y. July 14, 2022), ECF No. 2713.

³²⁹ Alexander Saeedy & Alexander Osipovich, New FTX Chief Says Crypto Exchange Could Restart, WALL ST. J. (Jan. 19, 2023, 10:46 AM), https://www.wsj.com/articles/new-ftx-chief-says-crypto-exchange-could-restart-11674143168; Cheyenne Ligon, Celsius Proposes Restructuring to Offer One-Time 'Meaningful Recovery' Payout for Most Creditors, COINDESK (Jan. 24, 2023, 3:50 PM), https://www.coindesk.com/policy/2023/01/24/celsius-proposes-restructuring-to-offerone-time-meaningful-recovery-payout-for-most-creditors.

³³⁰ Akiko Matsuda, *BlockFi Moves to Liquidate Its Crypto Lending Platform*, WALL ST. J. (May 15, 2023), https://www.wsj.com/articles/blockfi-moves-to-liquidate-its-crypto-lending-platform-ccd50083?mod=article_inline.

³³¹ See Transcript of First Day Presentation, *In re* Genesis Global Holdco, LLC, et al., No. 23-10063 (Jan. 23, 2023), ECF No. 35.

³³² See supra Part I.C.

is not cheap.³³³ The FTX process has cost about \$1.5-million daily, exceeding \$320 million seven months into the case.³³⁴ These expenses represent a big slice of the overall pie and thus reduce accountholder recoveries, potentially leaving them worse off relative to liquidation.

IV. Improving Crypto Platform Oversight & Insolvency

Crypto's 2022 crisis and exceptionally problematic Crypto Platform bankruptcies underscore the need for a paradigm shift with respect to both sector oversight as well as insolvency resolution. Thus far, the critical deficit has been a failure to look at substance over form – the "same activity, same risk, same regulations" principle – manifesting most acutely³³⁵ in the mismatched treatment of Crypto Platforms, the sector's central financial institutions.

Part IV seeks to address this disconnect using legal tools and firstprinciples logic from financial regulation with two sets of recommendations. First, to prevent crises ex ante, crypto oversight must evolve from an instrument-specific approach toward broader oversight guided by a focus on protecting consumers, the sector and broader economy. Ex post, in the event of distress, unwieldy Crypto Platform bankruptcies should be streamlined by incorporating financial institution resolution principles, which can be effectuated under the bankruptcy code without legislative or regulatory

³³³ At an August 2023 hearing, UCC counsel expressed limited concern regarding delay, stating "we are where we are" in respect of the process. *See FTX Group Files Case Update Presentation Summarizing Asset Recovery Status, Target Plan Timeline*, REORG RESEARCH (Aug. 24, 2023), https://reorg.com/ftx-chapter-11-case-presentation/.

³³⁴ Jennifer Sor, *FTX's Lawyers are Reportedly Making \$2,000 an hour*, MARKETS INSIDER (Jan. 27, 2023), https://markets.businessinsider.com/news/currencies/ftx-bankruptcy-lawyers-crypto-collapse-sam-bankman-fried-john-ray-2023-1. See also Emergency Motion of the Official Committee of Unsecured Creditors for Entry of an Order Compelling Mediation of Chapter 11 and Other Case Issues at ¶ 1, *In re* FTX Trading Ltd., et al., No. 22-11068 (JTD) (Bankr. D.Del. Aug. 18, 2023), ECF No. 2212.

³³⁵ Investigating the Collapse of FTX: Hearing Before the House Fin. Serv. Comm., 117th Cong. (2022) (remarks of Senator Elizabeth Warren) (calling for uniform treatment of similar transactions with the "same kind of risks"); Tobias Adrian, et al., Crypto Needs Comprehensive Policies to Protect Economies and Investors, IMF BLOG (July 18, 2023), https://www.imf.org/en/Blogs/Articles/2023/07/18/crypto-needs-comprehensivepolicies-to-protect-economies-and-investors (providing principle of "same activity, same risk, same regulations").

action.336

A. Crypto Needs Oversight

History shows that unsupervised financial institutions are inherently dangerous; the nature of the business necessitates proactive oversight and tailored resolution frameworks. To address the first-order category error with respect to crypto, regulation must shift from an instrument-specific approach toward institutional oversight, focusing on risk nexuses, and particularly Crypto Platforms.³³⁷ At the same time, sector supervision guiding principles should emphasize impact to third parties, including: (i) immediate stakeholders through consumer protection; (ii) the sector, through review of transactions; and (iii) the broader economy by maintaining the crypto regulatory "ringfence."³³⁸ These changes do not require new crypto-specific legal tools³³⁹ and can be accomplished by holding crypto accountable to existing standards.³⁴⁰

1. Focus on Platforms

The critical misstep of focusing on Crypto Projects instead of Crypto

³³⁶ See infra note 387.

³³⁷ Jurisdictional allocation among regulators presents considerations and challenges beyond the current scope as well as an area for potential future research. Some scholarly suggestions include Professor Reiners' proposal to exclude crypto from the commodity definition and recognizing "cryptocurrencies as securities under a special definition to the securities laws." *See supra* note 110, at 8.

³³⁸ Certain new measures, such as the EU's recently-passed MICA represent valuable steps, though, long-term, global harmonization may be needed. Council of the European Union Press Release, *Digital Finance: Agreement Reached on European Crypto-Assets Regulation (MiCA)* (June 30, 2022), https://www.consilium.europa.eu/en/press/pressreleases/2022/06/30/digital-finance-agreement-reached-on-european-crypto-assetsregulation-mica/.

Establishment of a self-regulatory organization, like ISDA or NFA, may be beneficial as a starting point, though it is unlikely to be sufficient as a long-term solution.

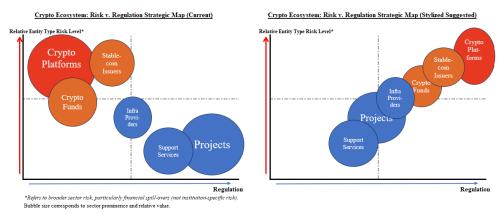
³³⁹ Though a discussion beyond present scope, this proposition is largely for the financial regulation context; certain digital asset governance and market infrastructure matters may warrant distinctive treatment.

³⁴⁰ Hillary Allen, *Beware the Proposed US Crypto Regulation*, FIN. TIMES (Nov. 17, 2022), https://www.ft.com/content/3ae0bf36-24f5-44ff-8301-c90193ee3e2d (noting that "there's nothing particularly special about crypto assets").

162 AMERICAN BANKRUPTCY LAW JOURNAL (Vol. 98:1 2024)

Platforms is aptly illustrated by the strange reality of regulatory agencies monitoring celebrity social media but missing FTX's fraud. Correspondingly, the regulatory paradigm needs to shift by applying first-principles aspects of financial regulation to Crypto Platform operations and governance, illustrated by the stylized schematic in Figure 10 below. Building on the taxonomies from Part I, the lefthand model shows the current approach (Figure 4) while the righthand model reflects the contemplated continuum, matching oversight to relative risk profiles. Specifically, Platforms' riskprofile suggests they should be at the *top right* quadrant (high risk, high oversight), rather than *top left* (high risk, low oversight). Crypto Projects, in contrast, should be toward the middle, maintaining robust consumer and market protections while reducing unnecessary burdens for honest entrepreneurs.

Figure 10. Crypto Ecosystem Strategic Map: Current vs. Stylized Suggested Approach



a. Unbundle Operations

To facilitate entity oversight and mitigate against future crises, Crypto Platform operations must be unbundled to parallel the demarcations in traditional finance. This should occur at two levels.³⁴¹

First, Crypto Platform business models should be compartmentalized to

³⁴¹ See supra Part I.C, III.A. Such unbundling may require true divestitures because as FTX illustrated, it is simply not enough to draw separate boxes when one individual remains the beneficial owner. See supra Part II.A.1.

include only one of: (i) intermediary functions (brokerage and lending); (ii) market infrastructure (clearing, custody and exchange) or (iii) proprietary trading.³⁴² Combining intermediation with market infrastructure unambiguously invites conflicts of interest and increases sector risks, while neither intermediary nor infrastructure roles have productive synergies with proprietary trading. The FTX-Alameda asset misappropriation - hardly a wholly unique occurrence, given similar allegations against Celsius and Asia-focused Babel Finance³⁴³ - represents the worst possible outcome from keeping a high-risk hedge fund and customer assets under one roof. Even barring fraud, however, the underlying logic of Dodd-Frank reforms, including the Volcker Rule prohibiting investment banks from proprietary trading, is broadly transferable. While valuable for markets as a whole, trading activity appears best suited for stand-alone investment vehicles, rather than businesses responsible for customer assets, particularly in a highrisk industry with a history of weak controls.

The second level of separation should be amongst market infrastructure functions. Separating custody from other functions appears most critical to safeguarding customer assets,³⁴⁴ while also facilitating choice and reducing conflicts.³⁴⁵ Additionally, akin to traditional market practice, exchange and clearing functions should be segmented into formally separate entities.

b. Improve Governance & Controls

FTX's rapid collapse illustrated Crypto Platforms' inadequate oversight, governance and controls.³⁴⁶ While none of these measures alone provide a silver bullet, a qualified and independent board coupled with other changes

³⁴² See supra Part I.B.2.

³⁴³ Oliver Knight, Lender Babel Finance Lost \$280M Trading Customer Funds, COINDESK (July 29 2022), https://www.coindesk.com/business/2022/07/29/babelfinance-lost-280m-trading-customer-funds-report/.

³⁴⁴ Custody refers to the storage and holding of assets, which is particularly relevant in the event of counterparty insolvency. In addition, akin to EU approaches, regulators should enforce safekeeping of customer wallets – including holding providers liable for negligent losses of assets.

³⁴⁵ Mike Belshe, A 5-Pronged Approach to Sensible Crypto Regulation After FTX, COINDESK (Jan. 25, 2023), https://www.coindesk.com/consensusmagazine/2023/01/24/us-crypto-regulation-approach.

³⁴⁶ See supra Part III.B.1.

would have significantly reduced the probability of the multitude of multibillion-dollar issues that occurred at FTX and Celsius.³⁴⁷ Crypto Platforms could benefit from incorporating aspects of the model for financial institutions, which are required to have boards of directors, subject to statutorily-determined duties and eligibility requirements. Along with safety and soundness analyses, financial institution supervision includes operational reviews to ensure safekeeping of customer funds through account segregation and proper recordkeeping.³⁴⁸ While hardly fool-proof, these layers of protection work alongside others to significantly reduce the chance of misconduct.³⁴⁹

FTX's accounting deficiencies and associated bankruptcy challenges illustrate that Crypto Platform controls should match industry standards, including maintaining proper account and asset segregation³⁵⁰ as well as maintaining sufficient books and records, consistent with existing broker-dealer and custodial standards.³⁵¹ Crypto Platforms should also provide regulators risk exposure data and audited proofs of reserves – an area where industry self-action has been wholly insufficient, with many publishing reserves excluding liabilities, making it impossible to assess shortfalls.³⁵²

³⁴⁷ Investors should also subject Crypto Platforms to higher scrutiny, though it remains to be seen whether regulatory inquiries to FTX investors change primary behavior. Chris Prentice, *U.S. securities regulator probes FTX investors' due diligence-sources*, REUTERS (Jan. 6, 2023), https://www.reuters.com/technology/us-securities-regulator-probes-ftxinvestors-due-diligence-sources-2023-01-05.

³⁴⁸ Books and Records Requirements for Brokers and Dealers, Exchange Act Release No. 34-44992, 66 Fed. Reg. 55, 817 (proposed Oct. 26, 2001), https://www.sec.gov/rules/final/34-44992.htm.

³⁴⁹ Reuters Staff, UPDATE 1-U.S. SEC tightens client rules for broker-dealers, REUTERS (July 31, 2013, 4:45 PM) https://www.reuters.com/article/securitiesregulation/update-1-u-s-sec-tightens-client-rules-for-broker-dealersidINL1N0G11TA20130731.

³⁵⁰ Japan's experience shows this can readily be done by Crypto Platforms and that the practice remains critical for protecting accountholder assets. *See supra* notes 149-151. FCM account treatment standards offer a logical template. *See* Part III.A. Other scholars have identified account segregation as critical. *See supra* note 110, at 8.

³⁵¹ This may require a CFO or accounting function and can be enforced through periodic reporting and independent audits.

³⁵² Mark Maurer, *More Crypto Exchanges Verify Reserves, But Questions About Assets Remain*, WALL ST. J. (Dec. 5, 2022, 7:30 AM), https://www.wsj.com/articles/more-crypto-exchanges-verify-reserves-but-questions-about-assets-remain-11670153687.

2. Address Multi-Level Risks

The haphazard approach to crypto regulation has created uncertainty harmful to consumers and the industry itself. Moving forward, crypto regulation should adopt a multi-level conceptual framework organized around protecting: (i) immediate stakeholders; (ii) the sector; and (iii) broader economy.

a. Protect Consumers

Crypto's collapse exposed millions to the misfortunes that financial regulation exists to prevent.³⁵³ While an inherently imperfect system, financial institutions are subject to oversight regarding, amongst other things, customer-facing marketing, disclosures, sales practices and product suitability determinations. None of these safeguards exist with Crypto Platforms, representing a critical public policy issue that must be addressed in the aftermath of the sector crisis.³⁵⁴

As it stands, the prevailing regulatory void rewards exploitative business models, which often leverage crypto's murky parallel existence with traditional finance to confuse customers skeptical of legacy institutions.³⁵⁵ This in effect also subsidizes bad actors by exempting them from compliance expenses.

Research shows that 73-81 percent of individuals lose money on crypto investments with "many retail investors not fully informed of the risk or volatility of the crypto sector," ³⁵⁶ and the harms falling disproportionately on individuals of color.³⁵⁷ Yet, investors' crypto fervor remains unabated,

³⁵³ Sirin Kale, *They Couldn't Even Scream Any More*, GUARDIAN (July 12, 2022), https://www.theguardian.com/technology/2022/jul/12/they-couldnt-even-scream-any-more-they-were-just-sobbing-the-amateur-investors-ruined-by-the-crypto-crash (quoting investor who "had invested everything in crypto... when it came crashing down, my whole life came crashing down").

³⁵⁴ See supra Part I.B.1.

³⁵⁵ See supra Part II.A.

³⁵⁶ Raphael Auer, et al., *Crypto Trading and Bitcoin prices: Evidence From a New Database of Retail Adoption*, 1049 BANK FOR INT'L SETTLEMENTS 1, 4 (2022) (revised 2023), https://www.bis.org/publ/work1049.pdf (The BIS report also found that individual investors were typically buying as large holders were selling and also found that men under 35 were the primary entrants to the market).

³⁵⁷ See supra Part I.B.

underscoring the need for appropriate oversight³⁵⁸ rather than "just say[ing] no to legitimacy-inferring regulation" as some have proposed.³⁵⁹ Here, the CFPB may be a logical candidate agency, given its unique mandate, financial sophistication and broad purview.³⁶⁰

b. Review Transactions

While thoughtful transactions can stabilize shaky markets, without oversight such dealmaking can also create larger unstable entities that ultimately worsen sector conditions. This dynamic was well illustrated by FTX's "rescues" of Voyager and BlockFi,³⁶¹ where even cursory regulatory diligence could have protected over a million customers – and likely exposed FTX's fraud far sooner. Correspondingly, along with institution-level oversight, the sector would benefit from review of significant transactions³⁶² including: (i) distressed (out-of-court) transactions, such as BlockFi³⁶³ and (ii) bankruptcy sales.³⁶⁴

Bankruptcy transactions, such as the sale of Voyager's assets, highlight the normative tension between bankruptcy's value-maximizing ethos and securities enforcement objectives. While reasonable for a typical Chapter

³⁵⁸ Press Release, Int'l Monetary Fund, IMF Executive Board Discusses Elements of Effective Policies for Crypto Assets (Feb. 23, 2023) ("crypto assets may continue to evolve despite the current downturn.").

³⁵⁹ Cecchetti & Schoenholtz, *Let Crypto Burn, supra* note 65; Charlie Munger, Opinion, *Why America Should Ban Crypto*, WALL ST. J. (Feb 1, 2023, 6:16 PM), https://www.wsj.com/articles/why-america-should-ban-crypto-regulation-economyfinance-china-england-trading-currency-securities-commodity-gamble-11675287477.

³⁶⁰ See Levitin, supra note 75, at 951 (noting crypto "would be squarely with the CFPB's regulatory ambit"). See also Oren Bar-Gill & Elizabeth Warren, Making Credit Safer, 157 U. PA. L. REV. 1 (2008) (discussing the normative foundations underlying the creation of the CFPB). Particular areas for regulatory attention include: ensuring Crypto Platforms do not engage in discrimination, as well as compliance with existing regulations such as fair lending and the Equal Credit Opportunity Act. See also Breydo, Memes or Miles, supra note 27.

³⁶¹ See supra Part II.B.3.

 $^{^{362}}$ This approach would be much akin to the existing approach for regulated entities in the post-Dodd-Frank paradigm. See Bank Merger Act, 12 U.S.C. § 1828(c)(5) ; Bank Holding Company Act, 12 U.S.C. § 1842(c)(7) .

³⁶³ As discussed *supra*, during the crypto sector downturn in 2022, FTX pursued a series of transactions to provide BlockFi with rescue financing and received an option to also purchase the company. *See* Part II.B.2.

³⁶⁴ See supra Part II.B.

11, given the broader backdrop, allowing FTX to bid on Voyager's assets likely worsened crypto's crisis. A sensible standard could incorporate aspects of bank regulators' transaction oversight.³⁶⁵ Instead, Crypto Platform transactions have not been subject to review until SEC plan confirmation objections, which have been largely based on instrument-compliance issues. This has injected significant uncertainty without clear consumer benefit, chilling such transactions and potentially reducing accountholder recoveries.³⁶⁶

Until there is greater clarity regarding instrument and entity oversight classification, the Voyager case illustrates the need for a middle-ground. One approach may be incorporating prudential review and regulatory input earlier in the process, including the bidding procedures and sale process – but prior to confirmation hearings.

c. Maintain Crypto Ringfence

Prudential regulators' policy of "ring-fencing" crypto from the regulated financial sector undoubtedly benefitted the broader economy by keeping crypto's turbulence largely self-contained.³⁶⁷ Correspondingly, in contrast to other scholars, this Article posits that the crypto ringfence should not only be maintained but enhanced³⁶⁸ to protect against emerging risks.³⁶⁹

"Without oversight, our licensed markets are for sale," explained CFTC Commissioner Kristin Johnson in requesting additional authority to review acquisitions of CFTC-registered entities following FTX's insufficiently

 $^{^{365}}$ For instance, under the Bank Merger Act (Section 18(c) of the FDIA), along with competitive impacts, federal bank regulators take into account financial and managerial resources of the existing and proposed institution, as well as its ability to meet additional requirements including the Community Reinvestment Act. See 12 U.S.C. §§ 1828(c)(5), 1842(c)(2)).

³⁶⁶ See supra Part II.B.2.

³⁶⁷ "It would be a grave mistake to . . . deepen []] the ties between cryptocurrencies and the broader financial system," according to the National Economic Council. Brian Deese, et al., *The Administration's Roadmap to Mitigate Cryptocurrencies' Risks*, WHITE HOUSE (Jan. 27, 2023), https://www.whitehouse.gov/nec/briefing-room/2023/01/27/the-administrations-roadmap-to-mitigate-cryptocurrencies-risks.

³⁶⁸ See supra note 110, at 76 (finding "segregating the crypto sector" presents "oversight risks").

³⁶⁹ See supra Part I.C.

scrutinized LedgerX acquisition.³⁷⁰ The underlying logic extends beyond CFTC-regulated institutions to broader concerns regarding the potential permeability of the aforementioned crypto ringfence.³⁷¹ For instance, in the aftermath of the FTX collapse, crypto-focused banks turned to the FHLB for emergency funding, which appears far removed from the FHLB's purpose, and risked spreading crypto's contagion to the banking system."³⁷² Similarly, crypto sector attempts to enter the regulated banking system via M&A should also be closely scrutinized.³⁷³

Regulators must remain vigilant regarding potentially larger risks on the horizon, including stablecoins³⁷⁴ and decentralized exchanges.³⁷⁵ For instance, currency-pegged stablecoins are often backed by reserve assets,³⁷⁶ creating a clear financial system linkage with potential contagion effects³⁷⁷

³⁷⁵ See supra Part I.B.2.

³⁷⁰ Chris Prentice & Michelle Price, *With Eyes on FTX bankruptcy, U.S. Regulator seeks more due diligence authority*, REUTERS (Jan. 26, 2023), https://www.reuters.com/business/finance/with-eyes-ftx-bankruptcy-us-regulator-seeks-more-due-diligence-authority-2023-01-26.

³⁷¹ POLICY STATEMENT ON SECTION 9(13) OF THE FEDERAL RESERVE ACT, BD. GOV. FED. RES. (Jan. 27, 2023), https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20230127a1.pdf ("both insured and uninsured banks will be subjected to limits on certain activities including those that are associated with crypto assets").

³⁷² Per Senator Warren: "Under no circumstance should taxpayers be left holding the bag for collapses in the crypto industry," which risked "allowing crypto to become intertwined with the banking system." Eric Wallerstein, *Crypto Banks Borrow Billions* from Home-Loan Banks to Plug Shortfalls, WALL ST. J. (Jan. 21, 2023), https://www.wsj.com/articles/crypto-banks-borrow-billions-from-home-loan-banks-toplug-shortfalls-11674263424.

³⁷³ For instance, Alameda quietly acquired an interest in a small regulated bank. Stephen Gandel, *Crypto Firm FTX's Ownership of a U.S. Bank Raises Questions*, N.Y. TIMES (Nov. 23, 2022).

³⁷⁴ Stablecoins are digital assets "designed to maintain a stable value relative to a national currency or other reference assets." PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, THE FEDERAL DEPOSIT INSURANCE CORPORATION, AND THE OFFICE OF THE COMPTROLLER OF THE CURRENCY, REPORT ON STABLECOINS 1 (Nov. 2021), https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf.

³⁷⁶ This is distinct from the Terra algorithmic stablecoin which helped trigger the crypto crisis.

³⁷⁷ "The composition of reserves can generate not only risks to consumers and investors but also financial contagion and instability." PARMA BAINS, ET AL., REGULATING THE CRYPTO ECOSYSTEM: THE CASE OF STABLECOINS AND ARRANGEMENTS, INT'L MON. FUND 20 (2022); see also PRESIDENT'S WORKING GROUP

amplified by stablecoins' murky governance.³⁷⁸ Decentralized exchanges, which have grown rapidly following the collapse of leading Crypto Platforms, represent an emerging risk nexus with eerie parallels to the dangers posed by the likes of FTX.

B. Leverage Existing Resolution Templates

Unfortunately, Crypto Platform bankruptcy proceedings have at times exacerbated ex ante oversight deficits through processes ill-suited to sector-specific business models and legal uncertainties.³⁷⁹ This can be remedied by applying tailored financial institution insolvency principles to crypto market dynamics – an approach operable through existing procedural paths without legislative action and ultimately most consistent with broader bankruptcy objectives. At the same time, if the alternative were true, and Crypto Platform reorganization were viable, the policy rationale for affording greater flexibility to what some regulatory agencies allege to be unregistered financial institutions appears dubious, reinforcing the disconnect inherent to the current approach.³⁸⁰

1. Platform Orderly Liquidation

Rather than working from a blank page, the contemplated conceptual

ON FINANCIAL MARKETS, *supra* note 374, at 14 ("a stablecoin issuer . . . could pose systemic risk.")

³⁷⁸ Tether, one of the largest stablecoin issuers, is controlled by a small group of individuals. Ben Foldy, et al., The Unusual Crew Behind Tether, Crypto's Pre-Eminent Stablecoin, WALL ST. J. (Feb. 2, 2023), https://www.wsj.com/articles/tether-ownershipand-company-weaknesses-revealed-in-documents-11675363340. Stablecoin oversight could present a productive initial step, including requiring issuers to provide audited reserves, while also potentially incorporating prudential supervision commensurate with entity size and risk profiles. See Stablecoin Risks Extend Beyond Reserving Practices, FITCHRATINGS (Jan. 12, 2023), https://www.fitchratings.com/research/banks/stablecoin-risks-extend-beyond-reservingpractices-12-01-2023 ("pressure from regulators [has] driven a trend towards more conservative reserving and some improvement in transparency"). See also Abdelaziz Fathi, Circle Publishes a Breakdown of USDC Reserves for December, FINANCE FEEDS (Jan. 30, https://financefeeds.com/circle-publishes-a-breakdown-of-usdc-reserves-for-2023), december.

³⁷⁹ See supra III.B.2.

³⁸⁰ See notes 103, 113.

framework incorporates aspects of financial institution insolvency and, where applicable, financial fraud cases. The financial institution resolution template offers clear objectives and straightforward governance, while fraud cases provide tools for addressing complex, long-lived estate assets, including legal claims. Taken together, these two frameworks address Platforms' distinct challenges through what can be described as a two-phase strategy:

- First, Crypto Platform insolvency should start with a rebuttable default toward an orderly liquidation, with the overarching goal of expediently returning accountholder assets. The process can be effectuated by a court-appointed trustee, or potentially a DIP, but generally should be operationally distinct from a stand-alone reorganization attempt.³⁸¹
- Second, if needed to address sector-specific complexity or alleged wrongdoing, the liquidation can incorporate a postconfirmation entity³⁸² – a flexible vehicle to administer complex, longer-lived and illiquid estate asset, including timeintensive legal claims, such as avoidance actions.³⁸³ Such structures are increasingly common in financial fraud cases and litigation-heavy bankruptcies, expediting resolution of the primary case without abandoning estate assets.

The bankruptcy code offers numerous distinct paths to effectuate this strategy. All things being equal, Chapter 7 liquidation³⁸⁴ may be best suited

³⁸⁴ A viable conceptual template may be FCM liquidation, as it does not involve a federal insurer-receiver and implicates similar business models. While some Crypto Platforms may quality as FCMs, the premise is more conceptual than prescriptive. Chapter 7 can be either under broker-dealer liquidation provisions or for "cause." The SEC position

³⁸¹ Id.

³⁸² Id.

³⁸³ See supra Part III.B.1 (detailing avoidance actions). See also Richard G. Mason & Benjamin S. Arfa, Post-Confirmation Entities Created Under Restructuring Plans, The "In Pari Delicto" Doctrine & The American Bankruptcy Institute's Commission to Study the Reform of Chapter 11, in 41st Annual Lawrence P. King and Charles Seligson Workshop on Bankruptcy & Business Reorganization (Am. Bank. Inst. Sept. 2015), available at https://www.wlrk.com/webdocs/wlrknew/AttorneyPubs/WLRK.24860.15.pdf.

for cases that do not need a post-confirmation entity. Chapter 11, meanwhile, is likely most applicable for more complex cases, including those with alleged wrongdoing, and can be effectuated with a trustee,³⁸⁵ termination of debtor "exclusivity"³⁸⁶ (potentially followed by a liquidating plan)³⁸⁷ or possibly another procedural avenue.

2. Advantages: Clarity & Simplicity

Crypto Platform reorganizations have experienced a range of strategy and governance issues resulting in high costs but relatively limited benefits.³⁸⁸ Planning for liquidation as the default outcome would facilitate a more orderly process, while preserving value through a post-confirmation trust.³⁸⁹

From a governance perspective, Platform reorganizations' critical

that nearly all crypto assets are securities implies that Crypto Platforms engaging in brokerage activity (which most do) are unregistered broker-dealers, which must utilize Chapter 7 liquidation (rather than Chapter 11). 11 U.S.C. § 109(d). Professor Lubben has pointed out that this argument has not been made in Crypto Platform bankruptcy cases and has also suggested, in light of Crypto Platform operating complexity, a modification to the bankruptcy-code definition of "stockbroker" to clearly encompass crypto group affiliates. *See* Lubben, *We Got the Key, supra* note. 75, at 29-31. Chapter 7 conversion requires a showing of "cause," with 16 factors enumerated in Section 1112(b)(4). The analysis is casespecific and factually-intensive. *See United Sav. Ass'n of Tex. v. Timbers of Inwood Forest Assocs., Ltd. (In re Timbers of Inwood Forest Assocs., Ltd.)*, 808 F.2d 363, 371-72 (5th Cir. 1987).

³⁸⁵ Chapter 11 trustee appointment under section 1104(a) is an "extraordinary remedy" used is instances of "fraud, dishonesty, incompetence, or gross mismanagement" of debtor affairs. In Chapter 7, trustee appointment is the default. Some Crypto Platform cases may need to start in Chapter 11 before transitioning to Chapter 7 or otherwise to liquidate through Chapter 11.

³⁸⁶ Under 11 U.S.C § 1121(d)(1) a party in interest may request termination of the debtor's bankruptcy exclusivity period for "cause." Once the debtor loses exclusivity: "Any party in interest . . . may file a plan," per 11 U.S.C. § 1121(c). *See, e.g., In re* Adelphia Commc'ns Corp., 352 B.R. 578, 587-90 (Bankr. S.D.N.Y. 2006) (reviewing the nine "for cause" factors); *In re Dow Corning Corp.*, 208 B.R. 661, 664-65, 670 (Bankr. E.D. Mich. 1997).

 $^{^{387}}$ Application could also involve the Court's equitable powers under 11 U.S.C. § 105(a).

³⁸⁸ See Part III.B.2. See also Breydo, Bank Recapitalization Through Chapter 11, supra note 238.

³⁸⁹ See supra Part III.A.

disconnect is the relative underrepresentation of accountholders. With FTX, for instance, none of the debtor, UCC or AHC credibly speak for all 1.9-million accountholders,³⁹⁰ leaving about \$9 billion of claims without a real seat at the table. This incongruence invites constituency conflicts, including regarding the FTX debtor's legally-fraught plan to "restart" the exchange.³⁹¹

Particularly when coupled with a trustee appointment, an orderly liquidation could serve the substantial public interest through an independent fact-finding and formal report, which has proven invaluable following precedentially-significant cases like MF Global. In that vein, if the appointment of a trustee is not possible, Crypto Platform bankruptcies should, in the very least, utilize a broad-scope examiner,³⁹² with Professor Klee's approach in the *Tribune* case a viable template.³⁹³

Barring changes to the bankruptcy code or other legislative action, effectuating Crypto Platform liquidation is largely a matter of judicial determination. Because financial institutions – including unregulated ones, like Crypto Platforms – have limited reorganization prospects, liquidation is the least-problematic, particularly in respect of aggregate welfare considerations, accountholder treatment, and advisor incentives. Indeed, subject to appropriate safeguards and circumstances, courts should have little reason to fear – and may even welcome – orderly liquidations of Crypto Platforms.

CONCLUSION

Though distinctive, the 2022 crypto sector collapse is fundamentally a

³⁹⁰ See supra III.B.2., discussing governance challenges, conflicts and adversarial mechanics.

³⁹¹ Though not necessarily always the case, in this context I would hypothesize lower cost for financial institution liquidation. *But see* Arturo Bris, et al., *Costs of Bankruptcy*, 61 J. FIN. 1253 (June 2006) (finding Chapter 7 liquidations appear to be no faster or cheaper than Chapter 11).

³⁹² See Objection to Motion of the United States Trustee for Entry of an Order Directing the Appointment of an Examiner Filed by Official Committee of Unsecured Creditors at 12, *In re* FTX Trading Ltd. Et al., No. 22-11068 (JTD) (Bankr. D. Del. Nov. 22, 2022), ECF No. 571 (UCC arguing that "an examiner does not adjudicate, but merely reports").

³⁹³ Daniel Bussel, *A Third Way: Examiners as Inquisitors*, 90 AM. BANKR. L.J. 59, 67 (2016).

familiar tale as old as finance itself. While post-crisis regulatory attention is certainly welcome, far too little energy has been invested in identifying root causes and developing guiding principles to prevent the next calamity.

This Article begins to fill that critical void by deconstructing the crypto sector crisis and subsequent bankruptcies to identify the key culprit not as crypto itself, but as a category error inherent to not treating mislabeled financial institutions as such. With these insights, the Article recommends a paradigm shift for crypto oversight as well Crypto Platform bankruptcy proceedings.

The historical parallels between crypto's conflagration and past boombust cycles also strongly suggest that this most recent vintage of crisis is unlikely to be the last. Thus, along with immediately actionable findings, the Article's analysis and frameworks provide insights for mitigating future emerging risks.

FTX Group: Balance Sheet Assets Composition			
	Market Value		
	Late Oct.	November	
	2022	10, 2022	Change
<u>Liquid</u>			
Robinhood Shares	579.18	472.29	(106.89)
Fiat-Denominated	230.69	230.81	0.12
Crypto / Stablecoin	101.11	101.11	0.01
Other	101.29	95.65	(5.64)
Liquid Assets Total:	1,012.26	899.86	(112.40)
<u>Less Liquid</u>			
FTX-Sponsored Crypto	13,635.90	3,749.60	(9,886.30)
Other	1,774.24	1,698.46	(75.78)
'Less Liquid' Assets Total:	15,410.14	5,448.06	(9,962.08)
<u>Illiquid</u>			
Venture Investments	1,475.00	1,475.00	0.00
Other	1,756.15	1,764.45	8.31
Illiquid Assets Total:	3,231.15	3,239.45	8.31
Total FTX Assets	19,653.55	9,587.37	(10,066.17)

Appendix. FTX Group Balance Sheet Composition (Nov. 2022)