

This brief is part of a series produced by the Digital Finance Project Team (DFPT) of the Bretton Woods Committee's Future of Finance Working Group (FFWG)

# Addressing Governance Issues in the Crypto Ecosystem

By Richard Berner, William Coen, and Carolyn Wilkins

*“Never in my career have I seen such a complete failure of corporate controls and such a complete absence of trustworthy financial information as occurred here.”*

—John Ray

newly appointed CEO for FTX in bankruptcy

## INTRODUCTION

Governance failures have been at the core of more than one business breakdown, and the collapse of the cryptocurrency exchange FTX last November is a spectacular case in point.<sup>1</sup> According to authorities, FTX lost more than \$8 billion of its customers' money, leaving a range of corporate and individual investors holding the bag and eroding trust in the crypto ecosystem more generally.<sup>2</sup> Untangling precisely what happened and how will take time, but governance questions are likely to extend beyond FTX to institutional investors, such

as the Ontario Teachers' Pension Plan and Sequoia Capital, that appear to have failed to perform sufficient due diligence.<sup>3</sup>

Many of the governance failures at FTX (see Box 1)—such as the apparent comingling of client funds, inaccurate bookkeeping, and misuse of corporate funds—had little to do with crypto; they are similar to the flagrantly illegal activities at firms such as Enron and Madoff. But unlike the traditional finance (TradFi) system, much of the crypto ecosystem lacks adequate rules of engagement and appropriate controls. Indeed, many of its developers sought to create a financial system that relied upon computer code for such rules, intentionally eschewing centralized control and regulation.

Consequently, crypto is peppered with issues in governance that, if left unresolved, risk more business failures and customer and investor losses. This will inevitably erode trust. And if crypto becomes materially more consequential and interconnected over time, such failures

- 1 In addition to FTX, there have recently been several other crypto fallen angels: Terra USD, Celsius, Three Arrows Capital, and Genesis, to name a few. And the collateral damage from spillovers into banking is growing, with crypto-bankers Signature Bank and Silvergate Bank now added to the list. Silicon Valley Bank's failure primarily was about risk management and supervision, but its concentrated exposure to crypto was also a weakness.
- 2 See Andrew R. Chow, "Where Did FTX's Missing \$8 Billion Go? Crypto Investigators Offer New Clues," *Time*, December 21, 2022, <https://time.com/6243086/ftx-where-did-money-go/>.
- 3 For more on due diligence, see Brooke Masters, "Doesn't Anyone Do Due Diligence Anymore?," *Financial Times*, November 29, 2022, <https://on.ft.com/3XUWGZe>.

could lead to generalized financial stress. As discussed in earlier Bretton Woods Committee Digital Finance Project Team (DFPT) briefs,<sup>4</sup> this could jeopardize the realization of what could be important benefits from responsible innovation in financial services.

This policy brief outlines how the crypto ecosystem presents opportunities to reimagine and then implement better governance. We propose four ways to strengthen governance and the underpinnings of trust in the crypto ecosystem, each of which has a global dimension given crypto's global reach:

1. Identification of, and agreement on, shared codes of conduct and best practices in governance among crypto industry participants
2. Implementing high standards for transparency
3. Constructive industry–regulatory engagement
4. Global coordination among standard setters

We will illustrate how these approaches have been used in TradFi and how they can be adapted to centralized finance (CeFi) and decentralized finance (DeFi). The principle “same issue, same governance outcome” will guide

### Box 1. Governance flaws contributing to the FTX collapse

It will take time to fully understand the circumstances surrounding the failure of FTX. What we will assert now, however, is that the FTX collapse underscores the need for fundamental requirements that financial intermediaries must satisfy regardless of the technology or protocols that are in place.

These are typically primarily related to

- transparency in the corporate structure;
- constraints on the connections between the firm and its affiliates, as well as between activities carried out within a firm to avoid conflicts of interest;
- custodial arrangements to ensure safety of client funds; and
- governance, including audits and controls.

Of course, the issues with FTX extend well beyond governance, as the criminal and civil charges against its founder and CEO Sam Bankman-Fried (SBF) and other related executives attest to. That said, there appear to have been numerous deficiencies in governance that serve as hard lessons for authorities, investors, and customers. In particular, FTX operated as a conglomerate and combined many products and activities within the firm. Moreover, some of those products and activities were inherently fragile. For instance, FTX accepted its own unbacked crypto asset

(called “FTT”) as collateral in loans on its platform, creating exposure through leverage, concentration, collateral valuation, and wrong-way risk.\*

Not only that, but executives at Alameda Research (a private equity fund also founded by SBF) have been charged by the SEC of having “schemed to manipulate the price of FTT.” Alameda is alleged to have received concealed loans from FTX using customer funds that were supposed to be held in custody. SBF and other FTX executives purportedly received loans from Alameda. That this could happen undetected raises serious questions about audits and controls. Armanino, the accounting firm that gave FTX's financial statements the green light in 2020 and 2021, is facing a lawsuit by FTX customers. This is reminiscent of the Arthur Andersen failure in the case of Enron in conducting due diligence about how earnings and value were being created.

FTX is not the only entity in the crypto space with a complex corporate structure and opaque dependencies across affiliated entities. Digital Currency Group (DCG), for instance, owns a number of crypto entities with opaque financial connections. One entity, Genesis Global Capital, has filed for bankruptcy, in part due to the fallout from FTX as well as unpaid loans from its parent, DCG. Similarly, Three Arrows Capital, a crypto hedge fund, failed in 2022.

\* See, for example, Gary Gorton and Guillermo Ordoñez, “Collateral Crises,” *American Economic Review* 104, no. 2 (2014): 343–78, <https://doi.org/10.1257/aer.104.2.343>.

4 See other DFPT briefs at [www.brettonwoods.org/view/other-publications](http://www.brettonwoods.org/view/other-publications).

our recommendations. We also conclude that it is even more important to establish good governance in crypto and DeFi activities because—as recent events throw into sharp relief—their opacity and newness can beget abuse.

Equally, we argue that although the crypto industry’s adoption of good governance is critically important, it is not sufficient for success. It is also necessary to solve the collective action and coordination problems that permeate financial services in both TradFi and crypto (including CeFi and DeFi), such as insufficient protections for consumers and investors. Such crypto activities require government establishment of standards and enforcement regimes to identify and sanction those who violate them.

## GOVERNANCE ISSUES IN CRYPTO

Many factors underpin business success, including the strength of the business plan and its execution, and how well it adapts and responds to bumps along the road. Good governance underpins all of these factors because it establishes sound rules of engagement and principles by which any organization or community operates in both bad times and good (see Box 2).

Distributed ledger technologies, such as blockchain, and smart contracts create the potential for decision making—a core part of governance—to be significantly more decentralized in DeFi than it is in TradFi. They also create the opportunity for governance itself to spur innovation by making decision making an activity in which participants have something at (or to) stake.<sup>5</sup>

Notwithstanding this potential, there are currently important flaws in governance in the crypto ecosystem that must be addressed.

A common myth about the crypto ecosystem is that it is well governed in a decentralized manner—what advocates call “trustless”—thanks to new technology and smart contracts. Advocates also frequently refer to this vision as “on-chain” governance—that is, governance of the protocols for decision making. In theory, decisions needed to provide trusted crypto-based financial services *could* be made in a completely decentralized manner. In practice, however, governance is not completely decentralized even in a permission-less blockchain such as Bitcoin—far from it. Fewer than 50 miners control half of the mining capacity for Bitcoin, given the incentives to pool computing power in order to achieve efficiencies in validating transactions.<sup>6</sup> And

### Box 2. What is governance?

Governance establishes the rules of engagement, controls, and incentives that produce organizational effectiveness, efficiency, and risk management.

It establishes *decision rights*—that is, what decisions need to be made, who is responsible for making them, and how they are communicated. It defines *processes* that balance accountability, transparency, and compliance with empowerment and entrepreneurship to meet organizational goals.

These elements are designed to

- clarify goals, roles, and responsibilities;
- establish accountability for decisions and performance; and
- ensure transparency and accuracy of information.

Technology itself, blockchain or otherwise, cannot obviate the advantages of good governance for sustained business success.

5 See Sinclair Davidson, Primavera De Filippi, and Jason Potts, “Disrupting Governance: The New Institutional Economics of Distributed Ledger Technology,” July 19, 2016, available at SSRN, <http://dx.doi.org/10.2139/ssrn.2811995>.

6 Lin William Cong, Zhiguo He, and Jiasun Li, “Decentralized Mining in Centralized Pools,” *Review of Financial Studies* 34, no. 3 (2021): 1191–1235; Igor Makarov and Antoinette Schoar, “Cryptocurrencies and Decentralized Finance (DeFi)” (Working Paper 30006, National Bureau of Economic Research, April 2022).



it is precisely those incentives that create the potential for abuse that undermines trust. In other words, getting governance right at the protocol level is far from sufficient to create trust.

Proof-of-stake (PoS) tokens, such as Cardano and Solana, also have concentration issues because voting rights are not widely held. One study showed that, among the top 10 PoS platforms by market capitalization, the top 10 validators held between 23 and 88 percent of the stakes, while the top 50 held between 47 and 100 percent of the stakes.<sup>7</sup> Moreover, voting rights can be obtained “on chain” through *governance attacks*. This can enable the attacker to obtain decision rights that can be used for the sole benefit of the attacker. For example, an attacker used a flash loan to

obtain a majority of governance tokens in Beanstalk, a decentralized, credit-based stablecoin protocol, and, by enacting a new set of rules, used this control to steal.<sup>8</sup>

Concentration of power in proof-of-work (PoW) and PoS systems is also problematic because it can facilitate front-running and other forms of market manipulation. Clearly, when tokens are transferable, mechanisms are needed so that the supply, distribution, and price are aligned with the interests of those who are invested in the project. Some protocols have fail-safe rules to guard against this kind of governance attack, such as Compound’s mandatory waiting period before a vote result is enacted. Using nontransferable tokens (“soul-bound”) that are linked to an individual’s identity or quadratic voting is another method that can be used to



Photo by Kanchanara on Unsplash

7 Makarov and Schoar, “Cryptocurrencies and Decentralized Finance (DeFi).”

8 “Beanstalk Governance Exploit,” Beanstalk Blog, April 19, 2022, <https://bean.money/blog/beanstalk-governance-exploit>.

reduce the ability to manipulate outcomes that conflict with the broader interest.<sup>9</sup>

Properly designed, decentralization can be consistent with sound governance to a degree. But it is also important to recognize the practical limits to decentralization when transformational changes are being implemented. For example, take Ethereum’s project to move from PoW to PoS validation—called “the Merge.” It was successful in large part because it had a sound governance structure. Rather than being completely “distributed,” the governance structure had considerable centralization. For instance, given the project’s complexity, it was coordinated by the Ethereum Foundation that oversaw a core development team.<sup>10</sup> There was extensive testing and trial runs over a multi-year period, and the schedule was delayed on a number of occasions given outstanding issues that needed to be addressed.

There are two other factors that limit the degree of decentralization. First, crypto systems typically rely on knowledgeable coders; these “insiders” have the expertise to propose and engage with protocol updates on off-chain governance forums. Fixes like quadratic voting will not change the fact that most people have little idea how a particular protocol works or what impact proposed updates might have. Arguably, nor should they care, as long as the outcomes are consistent with their interests. Moreover, only a small number of core developers are entrusted with “commit keys” that allow them to implement changes to the code that has been agreed upon.

Second, the risk of unanticipated outcomes places limits on the degree to which one can rely upon governance embedded in code and the rigid protocols needed to achieve it; there can never be a set of smart contracts that work well in any possible situation. That’s why many DeFi protocol teams retain emergency—*centralized*—powers to unilaterally step in when they deem

intervention is necessary and appropriate. For example, Polkadot, an open-source blockchain platform and cryptocurrency, allows for emergency referenda to be initiated by an assigned technical committee.

Robust fail-safes are not always in place, however, because some of the crypto community does not support the necessary centralized decision making needed to intervene even in emergencies. Solend, a platform that supports tokens such as Solana and USDC, made plans in June 2022 to use emergency powers to gain control of the platform’s largest account to avoid a crisis that would have made the protocol unviable. It gave its governance token holders only one day to vote. The community reacted negatively, and the use of emergency powers was overturned. This should not be surprising; such ad hoc centralization in what is supposed to be a decentralized world likely undermines trust when there is no prior agreement on how to govern in emergencies. It is in the crypto industry’s interest to address these issues proactively to avoid further loss of trust in this new ecosystem.

## PRINCIPLES FOR GOVERNANCE

The failure of FTX and the large number of outright frauds, scams, and thefts in the crypto ecosystem that have occurred in recent years demonstrate that the principles for good governance that exist in finance need to apply to crypto and DeFi.

### I. IDENTIFICATION OF AND AGREEMENT ON SHARED CODES OF CONDUCT AND BEST PRACTICES IN GOVERNANCE

The place to start for crypto and DeFi is with industry-led mechanisms that develop shared codes of conduct and best practices for coders, money service

9 Compound is an Ethereum-based token that allows the community to govern the Compound protocol. Soulbound tokens, or SBTs, are non-transferable digital identity tokens representing a person or entity’s characteristics, features, traits, and achievements. Quadratic voting allows voters to express the degree of their preferences by allowing them to “pay” for additional votes.

10 For more information, see “Introduction to Ethereum Governance,” <https://ethereum.org/en/governance/#:~:text=Ethereum%20governance%20is%20the%20process,participate%20in%20on%2Dchain%20activities>.

businesses, and exchanges. Good examples of these exist in TradFi—often, initiatives that were launched in response to bad conduct and/or illicit activity. For example, the Treasury Market Practices Group (TMPG) was launched in 2007 to address what Treasury officials described as “questionable trading practices” in the cash, financing, and futures markets for U.S. Treasury securities. This concern reflected the “increasing incidence of ill-conceived and borderline-manipulative trading activities and the prospective undermining of public confidence in the markets.”<sup>11</sup> These questionable trading practices were not new, having featured in the Salomon Brothers bond scandal in 1991. To foster market integrity, the TMPG recommended “general guidelines for promoting market liquidity, maintaining a robust control environment, managing positions responsibly, and promoting efficient market clearing. The best practices standard is a ‘living document’ that will be updated as needed over time.”<sup>12</sup>

Likewise, manipulation in the foreign exchange market<sup>13</sup> triggered the creation of the FX Global Code<sup>14</sup> (Global Code), a set of global principles of good practice in the foreign exchange market. According to Bloomberg News, “Currency dealers said they had been front-running client orders and rigging the foreign exchange benchmark WM/Reuters rates by colluding with counterparts and pushing through trades before and during the 60-second windows when the benchmark rates were set. The behavior occurred daily in the spot foreign-exchange market and went on for at least a decade according to currency traders.”<sup>15</sup>

The Global Code provides a common set of guidelines to promote the integrity and effective functioning of the wholesale foreign exchange market. It was developed by a partnership between central banks and market participants from 20 jurisdictions around the globe.

Notwithstanding the differences between these activities and those in crypto, these two examples show how it is possible to formulate and implement sound best practices in order to help improve governance. The crypto industry and its institutional investors should seek to establish high standards with regard to disclosures in financial statements, sources and uses of funds, conflicts of interest, and related parties regardless of whether the activity is subject to regulatory requirements. These expectations should include regular audits of code and disclosure of how rights to change code are determined and who holds the “commit keys.” Embracing a collective goal of responsible innovation and self-governing mechanisms to achieve that goal could start to reverse crypto’s loss of trust.

## II. GREATER TRANSPARENCY

Transparency in business and finance builds trust in firms, markets, and financial instruments and so is a critical ingredient in governance. For example, a key reason that financial laws and regulators require disclosure of information to all parties is to help ensure fair and effective markets. Yet disclosure is necessary but not sufficient; consumers and investors trust firms and markets in which honesty and fair dealing are behavioral norms, required and enforced by those same laws and regulators and evidenced by transparent reporting and disclosure.

One of the ironies of the crypto industry is that its promoters claim that transactions are completely transparent, which they say builds trust in the ecosystem. Indeed, according to the European Parliament, “enabling transparency of information is one of the biggest promises of blockchain technology, which provides a fully auditable and valid ledger of transactions. Blockchain is supposed to be a transparency machine

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11 Kenneth D. Garbade and Frank M. Keane, “The Treasury Market Practices Group: Creation and Early Initiatives” (Federal Reserve Bank of New York Staff Report 822, August 2017), [https://www.newyorkfed.org/medialibrary/media/research/staff\\_reports/sr822.pdf](https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr822.pdf).

12 “Best Practices,” (web page), Federal Reserve Bank of New York, Treasury Market Practices Group, [https://www.newyorkfed.org/TMPG/best\\_practices.html](https://www.newyorkfed.org/TMPG/best_practices.html).

13 Katie Martin and David Enrich, “Forex Probe Uncovers Collusion Attempts,” *Wall Street Journal*, December 19, 2013, <https://www.wsj.com/articles/SB10001424052702304866904579267901064067572>.

14 “FX Global Code” (Global Foreign Exchange Committee, July 2021), [https://www.globalfxc.org/fx\\_global\\_code.htm](https://www.globalfxc.org/fx_global_code.htm)

15 Bloomberg, “Traders Said to Rig Currency Rates to Profit Off Clients,” By Liam Vaughan, Gavin Finch and Ambreen Choudhury June 11, 2013 at 7:00 PM EDT Updated on June 12, 2013 at 2:06 PM EDT



in which anyone can join the network and, as a result, view all information on that network.”<sup>16</sup>

As mentioned earlier, the so-called transparency norms in crypto have limited value to most investors because they require detailed technical knowledge that is possessed mainly by crypto insiders. That *information asymmetry*—differences in knowledge about a project or transaction—creates differences in incentives, which in turn can foster abuse and undermine trust in markets. Unlike in TradFi, where intermediaries shield client identities in transactions, crypto transactions with pseudonyms are made public on blockchains or other platforms. Consequently, transactions and flows of activity are visible mainly to insiders who, by matching a crypto address to an entity, can exercise

first-mover advantage to run from that entity if they fear trouble.<sup>17</sup> Such asymmetries can undermine trust.

Moreover, transparent behavior, honesty, and fair dealing are frequently lacking. In practice, the way blockchain is being applied is less and less transparent. From non-fungible token (NFT) “rug pulls” to meme coins that deliberately hide backdoors, many projects are intentionally obscuring their operations in order to scam buyers.

Problems of honesty and fair dealing are obviously not limited to crypto. Following the Global Financial Crisis, banks and banking fell into disrepute: “poor cultural foundations and significant cultural failures were major drivers of the ... crisis, and continue to be factors in the

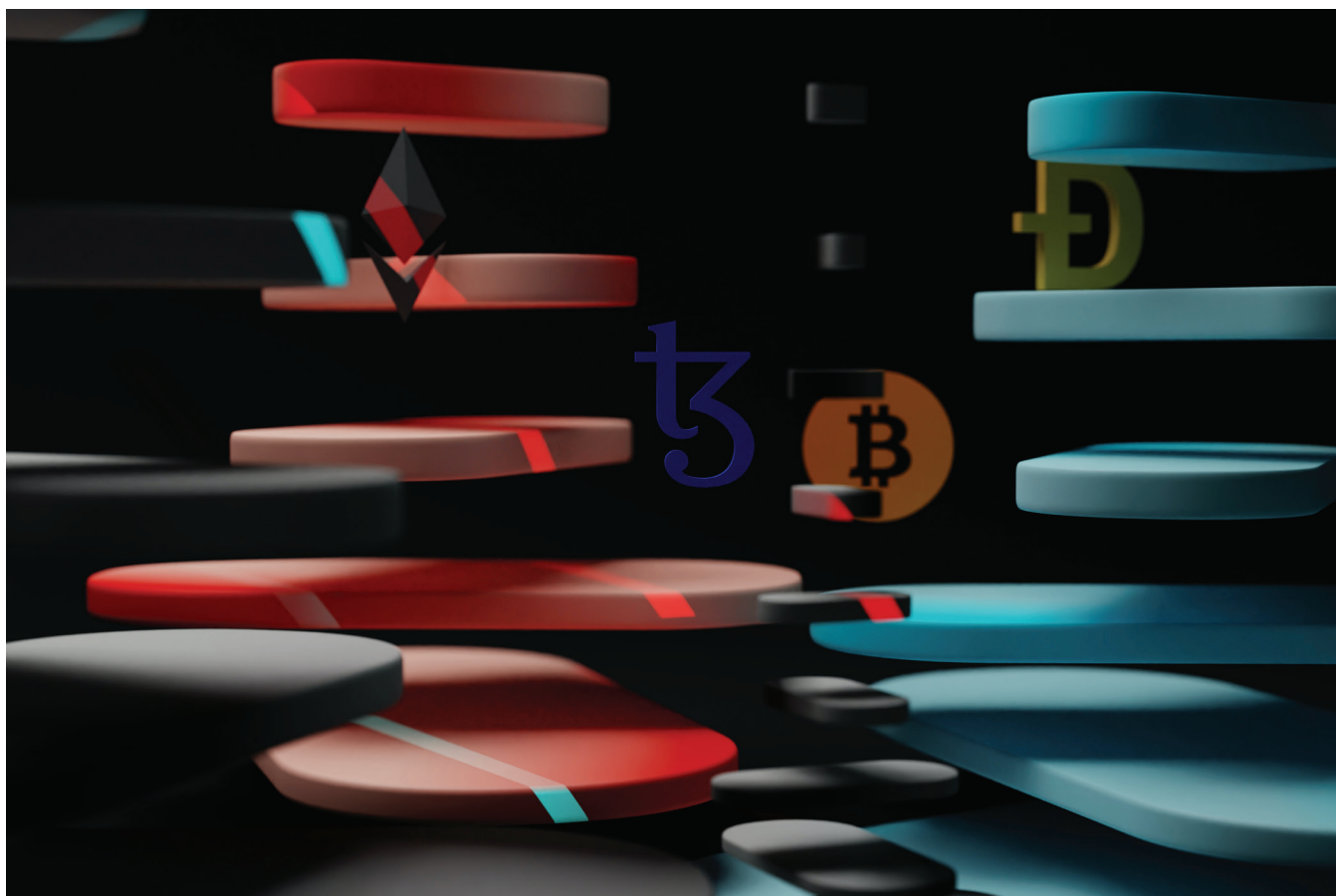


Photo by Shubham Dhage on Unsplash

16 See Mihalis Kritikos, “What If Blockchain Offered a Way to Reconcile Privacy with Transparency?” (European Parliamentary Research Service, September 2018), [https://www.europarl.europa.eu/RegData/etudes/ATAG/2018/624254/EPRS\\_ATA\(2018\)624254\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2018/624254/EPRS_ATA(2018)624254_EN.pdf).

17 Telis Demos, “Crypto’s Transparency May Be Part of the Problem Right Now,” *Wall Street Journal*, November 17, 2022, <https://www.wsj.com/articles/cryptos-transparency-may-be-part-of-the-problem-right-now-11668692632>.

scandals since then, exacerbated by staff with questionable conduct and values who move from bank to bank with impunity.<sup>18</sup> Likewise, such issues of conduct and culture in crypto and DeFi have caused reputational damage and loss of public trust.

The solution likely lies in the same governance and incentive structures underpinning TradFi transparency, including fair dealing, supported by standardized reporting and appropriate protocols for sharing information.

### III. INDUSTRY–REGULATORY ENGAGEMENT

Financial regulation and policies, including those aimed at financial stability and resilience, and the authorities charged with achieving their goals, often lag behind innovation in finance. Crypto is no different and is particularly challenging because understanding its technology and protocols requires expertise and knowledge that TradFi authorities—not to mention the public—typically lack. Clever, nimble coders can therefore outrun the authorities. Consequently, assessing—in real time—whether market participants are actually implementing innovations responsibly seems nigh impossible.

What to do? One might reimagine the relationship between fintech/crypto participants and authorities in mutually beneficial ways that are already being employed in TradFi.

Many central banks, financial regulators, and financial stability authorities have successfully established advisory committees involving practitioners and market participants to inform their judgment on market and industry developments and risks, as well as to advise about appropriate responses. Such groups can do the same for the DeFi industry and can help improve understanding about the similarities and differences between the TradFi and the DeFi ecosystems.

Many authorities are using two other mechanisms to engage with fintech innovators and technologists: innovation hubs and sandboxes. Innovation hubs “provide a dedicated point of contact for firms to raise enquiries with competent authorities on FinTech-related issues and to seek non-binding guidance on regulatory and supervisory expectations, including licensing requirements.” Sandboxes “are schemes to enable firms to test, pursuant to a specific testing plan agreed and monitored by a dedicated function of the competent authority, innovative financial products, financial services or business models.”<sup>19</sup> These two venues not only provide opportunities for engagement but also enable the authorities sponsoring them to go one step further in supporting “techsprints,” which are events in which such tests can be implemented and in which their benefits, costs, and risks can be evaluated.

Carrying out such activities in broad daylight and publicizing them can also provide value by informing the public and official-sector representatives about the opportunities and vulnerabilities in crypto.

### IV. GLOBAL COORDINATION

Finance, to paraphrase Mervyn King and others, is global in life but national in death; resolving a troubled institution, even a global one, has typically been the responsibility of national authorities. Interconnectedness and spillovers across national borders, however, have required global coordination in TradFi, as exemplified in the Global Financial Crisis and the “dash for cash” in the wake of the pandemic shock.<sup>20</sup> Given their footloose nature, international coordination in crypto and DeFi should be an even more compelling proposition for the authorities. Global coordination is challenging in any case, but the fact that regulation in TradFi typically is entity-based complicates the task further in the case of crypto. That is

18 See Group of Thirty, “Banking Conduct and Culture: A Call for Sustained and Comprehensive Reform,” July 2015, p. 11, [https://group30.org/images/uploads/publications/G30\\_BankingConductandCulture.pdf](https://group30.org/images/uploads/publications/G30_BankingConductandCulture.pdf).

19 ESMA, EBA and EIOPA, “FinTech: Regulatory Sandboxes and Innovation Hubs,” 2018, [https://www.esma.europa.eu/sites/default/files/library/jc\\_2018\\_74\\_joint\\_report\\_on\\_regulatory\\_sandboxes\\_and\\_innovation\\_hubs.pdf](https://www.esma.europa.eu/sites/default/files/library/jc_2018_74_joint_report_on_regulatory_sandboxes_and_innovation_hubs.pdf). The US Securities and Exchange Commission directly solicits engagement from practitioners through its Strategic Hub for Innovation and Technology.

20 A good example of such post-Global Financial Crisis cooperation is Federal Deposit Insurance Corporation and Bank of England, “Resolving Globally Active, Systemically Important, Financial Institutions,” December 10, 2012, <https://www.fdic.gov/about/srac/2012/gsifi.pdf>.



because the crypto ecosystem is made up of a wide range of business models and services that do not fit neatly into the “boxes” of the TradFi regime.

Progress on global coordination has been made in some areas, especially in the work of the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO).<sup>21</sup> These groups have set out principles for payments, clearing, and settlements arrangements in the *Principles for Financial Market Infrastructures* (PFMI)<sup>22</sup>. In the case of crypto, they provide guidance clarifying that a systemically important stablecoin arrangement (SA) would be expected to observe those principles. Stablecoin’s usability as a means of payment relies on the core functions performed by SAs. As a result, an SA “that performs [these] functions is considered an FMI for the purpose of applying the PFMI and, if determined by relevant authorities to be systemically important, the SA as a whole would be expected to observe all relevant principles in the PFMI.”<sup>23</sup> One clear expectation of systemic SAs related to governance is that governance should allow for “timely human intervention as and when needed.” Another is that systemic SAs will be owned and operated by identifiable legal entities that are “ultimately controlled by natural persons.”

These expectations do not have the force of law, and should not, given the disparate legal structures in different jurisdictions. They do, nonetheless, provide the basis for national authorities to promulgate standards for such activities and the entities that engage in them consistent both with local laws and equivalent laws abroad.

Global cooperation is also essential to establish digital IDs to enable the private identification of parties to financial transactions. This is needed to preserve privacy and the pseudonymous nature of crypto, but, at

the same time, to permit the appropriate identification of legal entities that are “ultimately controlled by natural persons.” Analogous to the digital IDs that several states are now creating, the Global Legal Entity Foundation is promulgating a vLEI (verifiable legal entity identifier) that would accomplish both sets of goals.<sup>24</sup>

Clearly more must be accomplished on both domestic and international fronts in order to clarify what needs to be regulated, how and by whom, whether legislation is needed, who has authority to make rules and enforce them, and, for those who have been harmed, who they can go to for recourse. Analytical work is needed to distinguish between systemic and nonsystematic activities, recognizing that today’s nonsystematic activity may be tomorrow’s financial stability threat. Authorities must also agree on whether liquidity backstops are needed to reduce the chance of runs and fire sales. We cannot emphasize enough that this will require people with the right skills, productive engagement with the crypto industry, and an ambitious enhancement in supervisory and enforcement expertise and the oversight capabilities of the official sector.

## CONCLUSIONS

The serious governance flaws in the crypto ecosystem present risks to the industry, its customers and creditors, and, if sustained, the ability of the nascent industry to achieve its potential. The crypto industry needs to develop and implement shared codes of conduct and best practices in governance and to achieve much higher standards of transparency, cultural and conduct norms, honest and fair dealing, and global coordination to ensure a level playing field for consumers, investors, and other market participants. If crypto activities and actors are to interconnect with the traditional financial system, they must be trusted and their commitments

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21 The CPMI is an international standard setter that promotes, monitors, and makes recommendations about the safety and efficiency of payment, clearing, settlement, and related arrangements, thereby supporting financial stability and the wider economy. The CPMI also serves as a forum for central bank cooperation in related oversight, policy, and operational matters, including the provision of central bank services. IOSCO is the international body that brings together the world’s securities regulators and is recognized as the global standard setter for the securities sector. IOSCO develops, implements, and promotes adherence to internationally recognized standards for securities regulation.

22 “Principles for Financial Market Infrastructures.” The Bank for International Settlements, April 16, 2012. <https://www.bis.org/cpmi/publ/d101.htm>.

23 Committee on Payments and Market Infrastructures and Board of the International Organization of Securities Commissions, “Application of the Principles for Financial Market Infrastructures to Stablecoin Arrangements,” October 2021, <https://www.bis.org/cpmi/publ/d198.pdf>.

24 Global LEI Systems, “GLEIF’s Digital Strategy for the LEI,” <https://www.gleif.org/en/lei-solutions/gleifs-digital-strategy-for-the-lei/>.



Photo by Dylan Calluy on Unsplash

verifiable. None of that can happen in a crypto bubble; the industry must proactively engage and work with financial regulators to achieve those goals.

While these extensive steps are necessary, they are unlikely to be sufficient for success. Major investors and funders, too, have a responsibility to conduct proper due diligence, particularly if others depend on their advice and sponsorship. After all, their losses could spill over to others (e.g., future pensioners) and to the financial system more generally. The history of finance is rife with examples of failure when there is inadequate due diligence by stakeholders, insufficient coordination, and failure to address collective action problems.

Those are reasons why governments must establish standards for investor and consumer protection, implement measures to ensure fair and effective markets, and implement enforcement mechanisms to identify and punish bad actors.

Global coordination among standard setters is also essential. The work of the CPMI and IOSCO on stablecoin is a great example of what success can look like—specifically to establish principles on which authorities in each jurisdiction can base laws and regulations that follow “same risk, same outcome.” But much more needs to be done to identify and close gaps to create a regime that supports responsible innovation.

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