mirolab

To:
Financial Stability Board
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Date:
22 June 2024

Re: Proposed recommendations for the international regulation of cryptoasset activities

Mirolab Global, Inc. (together with its subsidiaries) welcomes the opportunity to comment on the recommendations proposed by the Financial Stability Board (**FSB**) for the regulation and supervision of cryptoasset activities.

Our submission addresses three FSB publications: "International Regulation of Crypto-asset Activities," a consultative document, and the two reports issued concurrently, "Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets" and "Review of the FSB High-level Recommendations of the Regulation, Supervision and Oversight of 'Global Stablecoin' Arrangements" (together, the **Reports**).

We appreciate the FSB's leadership in the development of global standards for our emerging industry, and we look forward to continuing to share our expertise in this area.

Mirolab's response to the FSB's proposed recommendations for the international regulation of cryptoasset activities and markets

1.   Introduction

Blockchain technology is the backbone of a new financial architecture. While nascent, it is already bringing more efficiency, transparency, and resiliency to financial systems. It is empowering market participants with greater control over their financial activities. These developments are made possible by Satoshi Nakamoto's original innovation: an electronic payment system based on cryptographic proof. But cryptographic proof, on its own, cannot fully unlock the benefits of blockchain technology for the general public. In practice, many people will interact with this new technology through centralized platforms, and they will only use platforms that inspire trust.

Developing that trust is not a new problem, and neither are the solutions. Financial markets throughout the world have long promoted trust through disclosure and accountability. Public companies are required to disclose material information about their businesses and are liable for material misstatements or omissions. Over time, these rules have fostered the development of a healthy marketplace. Today, Mirolab is the cryptoasset platform that can provide the high levels of transparency and assurance demanded of public companies all over the wotld. We hope that more cryptoasset companies will follow the same path over time.

Trust in a financial system built on blockchain technology also requires having rules in place that govern the interactions between market participants. Who is required to register, and what are they required to do? On what terms can people trade? What rights do customers have when things go wrong? Answering questions like these requires regulators to build a regulatory framework that works for cryptoasset markets. And because blockchains are borderless, that framework should also operate across jurisdictions in a way that is clear, consistent, and comprehensive. Regulatory authorities must have the powers and resources they need to make that framework a reality. This is not an easy task, and we commend the FSB for taking on this hard work. We at Mirolab are ready to help.

2.   Important considerations for cryptoasset regul ation

The Reports raise a number of important and overarching issues, which we explore in this Section. We then respond to each of the specific questions asked by the FSB in Section 3.

2.1. Focusing on regulatory outcomes

The overarching objective of the FSB and its members is a good starting point. The Reports assert that effective regulatory and supervisory frameworks should be based on the principle of "same activity, same risk, same regulation." We believe this principle is being misapplied to cryptoasset activities and could lead to regulation that is not fit-for-purpose.

The technologies underlying cryptoasset activities differ in meaningful ways from those that power traditional financial activities. This means that the risks and benefits

can also differ. For example, blockchain technology enables near real-time (also known as T+0) settlement, enabling market participants to transact with less exposure to credit risk than what is currently possible in traditional financial markets.[1] On the other hand, self-executing, immutable smart contracts are novel, and their implementation may present risks that differ from traditional financial transactions.

As a primary regulatory objective, we suggest that the FSB adopt an approach advocated by IOSCO Secretary General Martin Moloney, who has rationally argued for a regulatory framework focused on desired outcomes.[2] This approach requires regulation that is tailored and responsive to the specific features of cryptoasset activities and their corollary risks and benefits.

Outcomes sought by a regulatory regime for cryptoasset activities should include:

- Fair, efficient, and orderly markets, centered on transparency and free of manipulation
- Clear, workable rules that foster compliance, incentivize good behavior and root out bad actors
- Consumer protection from fraud and improper conduct
- Disclosure and reporting frameworks that provide regulators and market participants with accurate, verifiable, and decision-useful information
- Prevention of financial crimes, with appropriate protections for innovation and privacy

A fit-for-purpose regime that meets these objectives needs to accommodate unique features of blockchain technology. Shoehorning cryptoassets into existing regulations will not work.

2.2. Benefiting from combining multiple functions

Blockchain technology enables the creation of open, immutable systems for recording ownership and transferring value. It greatly reduces the need for intermediaries, enables real-time settlement, reduces credit risk, and lowers costs for consumers. This technological leap provides participants in this system the opportunity to reassess market structure from first principles.

Notably, the adoption of blockchain technology has led to the combination of market functions that had previously been confined within separate institutions or intermediaries.[3] For example, Mirolab provides both exchange and custodial services. Blockchain-based recordkeeping has both enabled this combination and made it more efficient than in the traditional financial system by removing the need for centralized settlement and clearance of market trading activity.

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[1] The precise settlement period for cryptoasset transactions depends on the particular blockchain. While settlement is not technically instantaneous, it occurs over a significantly shorter period (typically minutes) as compared to traditional financial transactions (which can take days). We accordingly use the term "real-time settlement" in this letter for simplicity.
[2] Regulatory Insights Session - Interview with Martin Moloney, IOSCO Secretary General (13 June 2022).
[3] We use the term "intermediary" in this letter for simplicity to refer to various types of cryptoasset service providers, including brokers, custodians, exchanges, and others.

Combining multiple functions within the same entity marks a departure from regulatory frameworks that grew out of a paper-based financial system where "the lack of an automatic, efficient, and trusted infrastructure that verified and transferred assets led to the need of separate intermediaries, such as brokers, custodians, exchanges, market makers, and settlement and clearing agencies, often with conflicting interests and incentives."[4] In the era before computers, trust was created by requiring these intermediaries and then regulating them.

Cryptoasset markets should not be bound by historical path dependence. It would be a mistake to call for the separation of activities merely because that is how it is done today for trading activities that use inferior technology. We should instead reevaluate traditional market structures in light of the particular benefits and risk-mitigants of blockchain technology to determine the best path forward for consumers and the market.

Blockchain innovations can promote safer and more efficient markets. For example, blockchain recordkeeping enables real-time settlement because it eliminates the need for a centralized counterparty to clear transactions or determine net exposures. A market that operates on real-time settlement effectively eliminates counterparty credit exposure that would otherwise exist because of the delay between the moment when a trade is confirmed and the moment when ownership of the asset is transferred.[5] Removing this credit risk makes markets safer and more capital efficient, because market participants no longer need to pledge collateral during the settlement period to protect their counterparty against settlement failure.

These practices offer an improvement over securities trading that relies on a centralized custodian to be the record holder for all assets, as is currently the case in the United States with the Depository Trust Clearing Corporation (**DTCC**), which also necessitates end-of-day netting of trades across market participants by the National Securities Clearing Corporation (**NSCC**). Because final settlement with the DTCC takes up to two days, the NSCC requires dealers to pledge capital to manage the resulting settlement risk, based on models that are often imprecise, particularly during times of high volatility. These capital costs are ultimately borne by retail participants in traditional securities markets, who must rely on intermediaries to facilitate their trading activity.

The GameStop episode in January 2021 highlighted the inefficiencies and potential harm to consumers within the current regulatory system. A sharp spike in retail trading caused a dramatic increase in the volatility and trading volume of GameStop shares. As a result, some brokers needed to suspend trading because NSCC models required capital in excess of what was being held. Such an episode could have been averted with real-time settlement as currently practiced in cryptoasset markets.

Potential benefits extend beyond just real-time settlement. Combining functions into a single technology stack offers economies of scope, reducing the number of intermediaries that can charge a fee for a transaction. Combination can also improve

the overall user experience, enabling users to access a wide range of services from a single platform with one overarching set of rights and risks to understand. Finally, and critically, combining functions makes it easier for regulators to obtain a holistic view of the market by reducing the need to piece together activity from a large number of layered intermediaries.

Combining functions within a single technology stack may also give rise to certain risks, including potential conflicts of interest, that require internal controls and supervisory oversight to protect customers. These controls and oversight are absent in many jurisdictions, as illustrated by the recent failure of FTX, which custodied customer funds without the most basic level of governance, controls, and procedures that market participants customarily rely upon.

A regulatory framework tailored to permitting combined activity can mitigate these risks. In tailoring rules, regulators should focus on *outcomes*, and recognize that not all combinations should be regulated in the same way. For example, consider the following three types of combinations:

- **Exchange services and custody of trading assets**. As noted above, combining exchange services with custody of trading assets allows for real-time settlement. This benefit comes with no meaningful risk of misalignment between the incentives of the custodian and the exchange. The custodian holds the assets, and the exchange matches orders to buy and sell those assets. Moreover, the sum total of cryptoassets custodied by an exchange can be made publicly visible and cryptographically verified on the blockchain.[6]

- **Exchange and broker services**. Combining exchange and broker services allows for economies of scope and reduces operational complexity by permitting straight-through processing of customer orders within the same technology stack. This type of combination can present a conflict of interest because a broker may be incentivized to route customer orders through its affiliated exchange even if a third-party exchange would provide better execution. But participants in traditional financial markets have long been aware of these conflicts and developed effective mitigants to manage the corresponding risks while retaining the benefits. These mitigants include the separation of management and focus on duties to customers, as described below.[7]

- **Exchange and market making**. Exchanges that operate order matching engines depend on the participation of market makers, which provide liquidity to customers through a willingness to take either side of a transaction and earn a spread. But affiliation between an exchange and a market maker – like FTX and Alameda – can create an acute conflict of interest, particularly if the market maker has unfair advantages when transacting on the trading platform, such as

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[6] Mirolab is also continuing to explore various new crypto native methods to prove our assets and liabilities.

[7] Other combinations might also fall into this category of risk. For example, an exchange affiliated with a venture capital firm may face pressure to list cryptoassets that are tied to the venture capital firm's investments. This type of conflict can also be addressed by the measures noted in the text.

privileged access, lower latency, or other preferred terms. This conflict is exacerbated if the market maker has access to confidential information, such as counterparty positions and orders, which may inappropriately inform trading and lead to the front running of exchange customers. The risks of combining these activities are high and any market making arrangement tied to exchange order matching should be clearly disclosed and subject to a commensurate level of controls and oversight. In addition to implementing information barriers and independent governance, as noted below, exchanges should be required to treat all market makers on the same terms irrespective of affiliation.

Mitigating potential conflicts of interest from combined functions begins with separate governance and management to help ensure that decisions are made independently. Well-constructed and understood information barriers can minimize opportunities for improper use of information. Clear articulation of the duties that employees have to customers can clarify whose interests need to be considered. Disclosure and the transparency of the blockchain can keep the market and regulators apprised of inter-company relationships. Simple to understand, written disclosures should help customers understand any potential conflicts of interest.

The FSB has also noted that combining functions may raise concerns about contagion, concentration, and systemic risks. As with conflicts of interest, we believe that the majority of these risks can be effectively mitigated with proper regulation and do not require functions to be separated.

Measures to address systemic risk start with making sure that key institutions are financially and operationally resilient. To that end, well-established regulatory principles based on lessons learned in the traditional financial system can be adapted and applied to cryptoasset activities. Entities should be appropriately capitalized based on the activities they conduct. Risk management programs should be calibrated to ensure that firms do not take on too much risk. Supervision should act as a check to ensure that firms meet these and other regulatory obligations. In each case, applying these obligations to particular legal entities helps to ensure that affiliates' operations remain appropriately independent, including in times of stress.

Finally, we believe that concerns about the systemic risk of combining functions in cryptoasset markets are not yet ripe given the size of the market and its limited connections to the traditional financial system. Regulatory authorities should consider whether preemptive regulation to address these concerns would stifle innovation without commensurate benefits, if implemented at such an early stage of the market's development that its systemic risks are not yet fully understood or able to be addressed.

2.3. Protecting customer assets in insolvency

Regulatory frameworks should provide assurance to cryptoasset market participants that their assets are protected in the event of an intermediary's insolvency. Clear, unambiguous rules are necessary to provide confidence to customers and creditors that their claims will be resolved in a predictable and timely manner. Customers of a cryptoasset intermediary should benefit from legal protections, either by contract or under the insolvency law of the relevant jurisdiction, which provide that cryptoassets held on the customer's behalf by the intermediary are not available to satisfy the

claims of other creditors in the event of the intermediary's insolvency.

As evidenced by recent events, cryptoasset market insolvencies pose complex questions that will have to be worked out by courts and legislatures over time. There are, however, certain steps that regulators and market participants can take to maximize the likelihood of fair outcomes in an insolvency without amending insolvency law.

While specific commercial arrangements may vary by jurisdiction and activity, customer assets should generally be held for the benefit of customers, on a fully reserved, 1:1 basis. Such assets should not be staked, pledged, rehypothecated, or otherwise used except with the customer's express, informed consent. Intermediaries should be required to disclose how assets are held and used, and regulators should have sufficient oversight powers to ensure intermediaries follow through with these disclosures. Assets should be tracked through robust recordkeeping so that they can be returned to their rightful owners in the case of an insolvency.

An intermediary's own assets should be segregated from the assets of customers, and the type of segregation required or offered may likewise vary by activity and/ or jurisdiction. In general, the ultimate outcome should be the same: customers should have priority over all other creditors in the insolvency of the relevant intermediary.[8]

Regulatory authorities should also consider whether existing insolvency regimes provide adequate legal clarity and assurance that creditors' claims will be resolved in a timely manner. If not, administrative proceedings under a special regime created specifically for cryptoasset intermediaries may be more appropriate. Taking cues from post-crisis reforms in the traditional financial system, regulators may also want certain market participants to pre-plan for an orderly distribution of assets to customers and creditors under the relevant insolvency regime.[9]

2.4. Effectively regulating stablecoin arrangements

Stablecoins are the foundation for a new era of innovation in financial services. By making money digitally native and programmable, stablecoins are an integral building block of an improved financial architecture, and should be subject to rigorous standards of financial and operational resilience, so that anyone who holds a fiat-backed stablecoin can be confident in its soundness.[10]

We are concerned, however, about the breadth of the FSB's use of the term "stablecoin arrangement."[11] As used in the Reports, this term captures a wide range of

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[8] A good example of this is the "legal segregation with operational commingling" regime for cleared swaps adopted by the U.S. Commodity Futures Trading Commission.
[9] This is not to say that the same resolution planning requirements imposed upon global systemically important banks should be applied to cryptoasset intermediaries. Some aspects of those requirements, such as measures to ensure operational continuity and to maintain a rational legal entity structure, may be instructive.

activities, many of which are well outside the typical purview of financial market infrastructures, such as validating transactions on a blockchain network. We recommend that the FSB should clearly exclude from the scope of a "stablecoin arrangement" any validators, block builders, relays, pool operators, and other blockchain technology infrastructure providers who have no involvement of any kind in a stablecoin arrangement other than to support the blockchain network on which a stablecoin may operate.

The application of stablecoin-specific regulatory requirements to the operational components of a blockchain network is, at best, impractical and unnecessary to the regulatory objective of maintaining the soundness of fiat-backed stablecoins. At worst, it would hinder the adoption of novel, evolving and promising technology.

2.5. Encouraging responsible innovation in DeFi

Decentralized finance, or "DeFi," is a transformational development made possible by blockchain technology. DeFi removes financial intermediaries from financial transactions, replacing banks, brokers, and other traditional financial institutions with open-source code operating on public, permissionless blockchain networks. It has the potential to create financial markets that are open, free, fair and accessible to anyone with an internet connection. While the technology is still nascent, DeFi protocols have already proven their resiliency through periods of market stress, and regulators around the world are beginning to recognize the benefits.[12]

Regulation of DeFi is not straightforward. Historically, regulators have overseen financial markets by imposing and enforcing rules on market intermediaries. But no such intermediaries exist in the DeFi ecosystem. Regulation of this new ecosystem thus needs to be done thoughtfully, guided by the desired outcomes described earlier in this letter. DeFi cannot merely be shoehorned into existing regulations that are not fit-for-purpose.

Governments and regulators encouraged the internet's early development, and they should likewise encourage DeFi innovation at the base layer to flourish.[13] DeFi developers only develop and publish code; they do not directly facilitate financial transactions for customers or hold their assets, and we believe it would be inappropriate to regulate developers as if they were cryptoasset market intermediaries

or participants. Indiscriminately forcing liability and regulatory standards from the traditional financial system on DeFi developers and users could stunt innovation, growth, and broad involvement in this sector.

2.6. Encouraging cross-border cooperation

Cryptoassets exist in code—they do not stop at a country's borders. Cooperation and information sharing among domestic authorities are therefore crucial to the development of international regulatory standards for cryptoasset activities.

Responsible innovation across borders would benefit from consistent, globally coordinated regulatory requirements. This requires a common framework for the regulation of cryptoassets like the one the FSB is creating. It also requires regulators to show respect and deference to one another by incorporating concepts of reciprocity and substituted compliance in their cryptoasset regulatory frameworks, to avoid imposing conflicting requirements. Such cross-border cooperation is in the best interest both of the domestic regulators, who save on their own investigation and monitoring costs, and cryptoasset market participants, who face less regulatory uncertainty and save on compliance costs by not being required to comply with multiple sets of duplicative rules.

3.   Responses to the consultation questions

General Questions

1. Are the FSB's proposals sufficiently comprehensive and do they cover all cryptoasset activities that pose or potentially pose risks to financial stability?

Yes, the FSB's proposals are sufficiently comprehensive, and they cover the cryptoasset activities that could potentially pose risks to financial stability. The FSB's recommendations are also sufficiently principles-based and flexible to allow regulatory standards to continue to adapt as blockchain technology continues to evolve.

2. Do you agree that the requirements set out in the CA Recommendations should apply to any type of cryptoasset activities, including stablecoins, whereas certain activities, in particular those undertaken by GSC, need to be subject to additional requirements?

We do not agree that the recommendations should apply to "any type of cryptoasset activities." DeFi innovation should be free to flourish at the base layer. In other words, pure development of blockchain code should be free from regulatory interference.

The regulatory requirements for a particular cryptoasset activity should otherwise be fit-for-purpose and focused on outcomes, as described in the "Focusing on regulatory outcomes" section.

Additional regulation may be appropriate for certain market segments requiring different oversight, such as for global stablecoin issuers or cryptoasset intermediaries that have risen to the level of systemic importance. But, as described above in the "Effectively regulating stablecoin arrangements" section, the scope of the term "stablecoin arrangement" is too broad. The FSB should clarify that the regulatory perimeter associated with a "stablecoin arrangement" does not include any validators, block builders, relays, pool operators, or other blockchain technology infrastructure providers who may have no involvement in a stablecoin arrangement other than to support the blockchain network on which a stablecoin may operate.

3. Is the distinction between GSC and other types of cryptoassets sufficiently clear or should the FSB adopt a more granular categorisation of cryptoassets (if so, please explain)?

Yes, at least as the cryptoasset ecosystem exists at this time. The FSB and its constituent regulators will need to coordinate on these principles, criteria, and thresholds as the stablecoin market develops.

4. Do the CA Recommendations and the GSC Recommendations each address the relevant regulatory gaps and challenges that warrant multinational responses?

Regulatory gaps and challenges can make it difficult for market participants acting in good faith to know what regulatory regime applies to them. Additional clarity would bring enhanced compliance. For example, it is important for authorities to provide clear and workable definitions for the classification of cryptoassets (e.g., as a payment instrument vs. financial instrument, or as a security vs. a commodity).

5. Are there any financial stability issues that remain unaddressed that should be covered in the recommendations?

No. As noted above in the "Benefiting from combining multiple functions" section, concerns about the systemic risk of combining functions in cryptoasset markets are still premature, given the size of the market and its limited connections to the traditional financial system. Such risks can be addressed more thoughtfully at a later stage in the development of cryptoasset markets, when any prospective financial stability concerns would be less conjectural and more clearly understood.

Regulatory authorities should also recognize the potential of blockchain technology to reduce systemic risks, for example through real-time settlement processes that eliminate the counterparty credit risks associated with extended settlement periods in the traditional financial system.

Cryptoassets and markets (CA Recommendations)

6. Does the report accurately characterize the functions and activities within the crypto-ecosystem that pose or may pose financial stability risk? What, if any, functions, or activities are missing or should be assessed differently?

The Report's characterizations of functions and activities within the cryptoasset ecosystem are generally accurate.

7. Do you agree with the analysis of activity patterns and the associated potential risks?

Yes, the Report accurately analyzes the activities undertaken by cryptoasset market participants and the risks associated with those activities, with two exceptions:

- The Report does not sufficiently focus on the benefits of cryptoassets and blockchain technology, which include the abilities to transact without intermediaries, support real-time settlement, and conduct market analyses using public on-chain data.

- The Report does not sufficiently address how the risks pertaining to combining functions can be managed, as described in the "Benefiting from combining multiple functions" section above.

8. Have the regulatory, supervisory and oversight issues and challenges as relate to financial stability been identified accurately? Are there other issues that warrant consideration at the international level?

Yes, though in certain cases the Report undervalues the ability for those risks to be mitigated, as described in Question 7 above.

9. Do you agree with the differentiated requirements on cryptoasset issuers and service providers in the proposed recommendations on risk management, data management and disclosure?

No, the requirements for cryptoasset issuers and service providers have not been adequately differentiated. The regulatory and risk considerations for service providers

are very different from those relevant to cryptoasset issuers.

10. Should there be a more granular differentiation within the recommendations between different types of intermediaries or service providers in light of the risks they pose? If so, please explain.

Yes, we would support more granular differentiation between different types of intermediaries or service providers in light of the risks they pose. For instance, in the "Benefiting from combining multiple functions" section above, we detail how the risks vary across different types of combinations and should be mitigated accordingly.

Global stablecoins (GSC Recommendations)

11. Does the report provide an accurate analysis of recent market developments and existing stablecoins? What, if anything, is missing in the analysis or should be assessed differently?

Yes, the Report generally provides an accurate analysis of recent market developments and existing stablecoins. It does not, however, appropriately distinguish between stablecoins backed by cryptoassets affiliated with the promoter of the stablecoin, like Terra, and those backed by cryptoassets unaffiliated with the promoter of the stablecoin, like DAI. The Report appears to regard these two distinct types of stablecoins as being the same and having the same risk, which is incorrect. While we agree that uncollateralized stablecoins like Terra are prone to death spirals, DAI and other crypto-backed stablecoins have established strong track records of resilience through periods of market stress. The FSB should recognize the difference between crypto-backed stablecoins and other types of cryptoassets that should not rightly be called stablecoins at all.

12. Are there other changes or additions to the recommendations that should be considered?

The recommendations focus primarily on the risks of cryptoassets; they should reflect greater recognition and understanding of the benefits of blockchain technology. These benefits include the abilities to transact without intermediaries, support real-time settlement, and conduct market analyses using public on-chain data.

13. Do you have comments on the key design considerations for cross-border cooperation and information sharing arrangements presented in Annex 2? Should Annex 2 be specific to GSCs, or could it be also applicable to cryptoasset activities other than GSCs?

No. We believe the Report does a commendable job of outlining the key design considerations for cross-border cooperation and information sharing. We have noted our views on the importance of promoting greater cross-border cooperation above in the "Encouraging cross-border cooperation" section.

14. Does the proposed template for common disclosure of reserve assets in Annex 3 identify the relevant information that needs to be disclosed to users and stakeholders?

Yes, we believe the proposed template for common disclosure of reserve assets generally identifies the relevant information that needs to be disclosed.

15. Do you have comments on the elements that could be used to determine whether a stablecoin qualifies as a GSC presented in Annex 4?

Regulatory authorities in various jurisdictions should agree on the principles, criteria and thresholds at which a stablecoin is deemed to be a global stablecoin. Otherwise, a stablecoin may be considered a global stablecoin in one jurisdiction but not in another, leading to fragmented and inconsistent regulation.