

Response to the FSB questions raised in their consultation of Oct- Dec 2022 on proposals for the international regulation of crypto-assets and of stable coins, from Professor Alistair Milne, School of Business and Economics, Loughborough University, UK; a.k.i.milne@lboro.ac.uk

I respond as a university researcher, known for my work on financial risk and regulation and financial transactions infrastructure. These responses draw on a number of my research papers, both published and unpublished.

A theme in my responses is the “permissionless” nature of crypto-assets and stable coins, the essential feature which distinguishes crypto from other intangible financial assets which are “permissioned” i.e. there is an institutional framework for transfer of assets working within a legal framework for resolution of disputes about ownership and transfer. This distinction is central to any coherent framework of crypto regulation because permissionless transactions are by their nature unregulatable – there is no entity to be regulated, supervised or overseen. Regulation can be applied only to intermediaries that emerge to provide crypto-asset services.

A related perspective is the need to distinguish between direct permissionless access to crypto assets, including global stable coins, when the holder also holds the corresponding private keys without divulging them to anyone else; and indirect usually permissioned access to crypto assets, when the holder uses an intermediary to provide custodial services for holding and trading crypto assets, the custodian either holding the private keys on their behalf or sharing access to the private keys.

Some general comments on the consultation paper follow. A variety of entities provide services in crypto-assets, including custodial services, venues for exchange of crypto-assets and maintaining the fiat pegs of global stable coins. The FSB consultation, Table 1, provides a useful classification of these services. There are though some fundamental lacunae in this classification. It (a) it fails to distinguish the maintenance of fixed pegs that support of global stable coins, which should also be considered an essential function; and (b) fails to analyse the role of both permissionless and permissioned provision in the support of these functions, whether these are provided through (i) permissionless code; (ii) through institutional and hence in principle permissioned and regulatable provision, or (iii) some combination or mixture of the two.

Some functions and activities, such as “underwriting”, placement, marketing and sales, cannot be provided by permissionless code, and can be regulated primarily through existing regulation. Basic operating infrastructure and validating of instructions are permissionless (with some exceptions e.g. where a subset of an crypto asset is held and transferred on a permissioned basis, such as Ripple’s XRP or USDC in real world application) and hence outside of the reach of regulation.

Finally, a comment on the statement ‘... the focus of this report is on regulatory, supervisory and oversight issues relating to crypto-assets to help ensure safe innovation.’ This appears a little naïve, assuming without question that crypto-asset innovation i.e. transactions in permissionless financial assets is of economic and financial value. It will be more prudent to focus solely on financial stability and customer protection, with the assumption that permissionless trading should be treated like any other high-risk activity, out of bounds for retail investors.

Turning next to the consultation questions.

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

There is a critical ambiguity in the FSB's proposals that needs to be addressed. The second of the proposed recommendations is as follows '*2. Authorities should apply effective regulation, supervision, and oversight to crypto-asset activities and markets – including crypto-asset issuers and service providers – proportionate to the financial stability risk they pose, or potentially pose, in line with the principle "same activity, same risk, same regulation."*'

The ambiguity in this proposal arises because it does not distinguish as it should between the two cases: (i) direct permissionless access to crypto assets – as exemplified by 'decentralised finance' DeFi where there are no entities to regulate, supervise and oversee; and (ii) indirect access using an intermediary that can be regulated supervised and overseen. The same risk can arise in these two cases but is simply not possible to apply the principle "same activity , same risk, same regulation" because only in the second case is regulation, supervision and oversight possible.

There is further ambiguity in this now popular regulatory phrase "same activity, same risk, same regulation" because of the inherent challenge of comparing risks, either quantitatively or qualitatively. Are the risks of trading sub-prime mortgage-backed securities and high quality corporate bonds the same or different? Before 2007-2008 they appeared the same, after 2007-2008 they were clearly different. "same activity, same risk, same regulation" is, regrettably, not a sufficiently clear principle for determining the allocation of regulatory resources.

The FSBs proposals are also insufficient in a further respect (but one that is understandable because the remit of the FSB is financial stability but not conduct and customer protection). From a practical enforcement perspective, it is really not helpful to distinguish prudential and conduct regulation of crypto-asset activities and markets, the key issue "who to regulate" and this question needs to be addressed simultaneously and consistently across prudential and conduct regulation.

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

I agree that the CA recommendations, or something similar should apply to any type of crypto-asset activities (where these are conducted by a legal entity or natural person). I (mostly) disagree that activities "undertaken by global stable coins" need to be subject to any additional requirements.

The FSB high level recommendations on global stable coins are driven (as is much regulation) by fear of the unknown, "something may go wrong and we must be able to show we were doing all we could to deal with the potential problem". They are not though based on an adequate intellectual understanding of stable coins, driven by an inflated and unjustified fear that these might someone evolve into being widely used

unregulated substitutes for regulated bank, central bank or e-money. This is a misdiagnosis of the regulatory concern of global stable coins. As a result the FSB high level recommendations are at best unnecessary and at worst counterproductive.

Why is this fear unjustified? This is because of the distinction between permissionless i.e. crypto and permissioned financial assets. The distinguishing feature of global stable coins such as Tether – what makes them ‘global’ – is that their ownership and transfer is permissionless. A permissioned stable coin, operating under a legal framework, is definitionally limited to a single legal jurisdiction (and can as such be regulated as an e-money or possibly as a money market mutual, no additional regulation is required).

There are as yet almost no examples of ‘global’ ie. permissionless, stable coins being used as means of payment (expect, as with cryptocurrencies, where the parties to the transaction seek to escape oversight from regulators and law enforcement. This is hardly surprising, payment in the context of commercial or public services, whether C2B or B2B, requires the support of a legal framework with arrangements where necessary for identifying transaction participants, reversing payments, linking payments to transactions and ensuring they are not used to avoid appropriate oversight.

This misperception that permissionless (“global”) stable coins are someone likely to displace conventional regulated forms of money and are hence a threat to monetary and financial stability, has been, in part, driven by the writings of some prominent scholars who have espoused the (to me incoherent) notion of a “digital currency area” operating outside of any legal and monetary jurisdiction. This is an attractive fantasy: that the ease of transfer of permissionless digital money will lead to its replacing the relatively costly transfer of permissioned – and hence regulated – bank, e-money and money market mutual forms of money. But the practical reality is that in almost all contexts regulation *reduces* the transaction costs associated with using money (establishing the identity of the counterparty, providing the legal framework for dealing with disputed or unintended transfers of value). There really is no meaningful threat of permissionless “global” stable coins replacing conventional regulated money any anything more than a miniscule scale. The FSB has been wasting time and effort coming up with an unnecessary set of high-level recommendations in response to what is really a phantom concern about GSCs.

Where, as very occasionally, GSCs have been used on an experimental basis for application in conventional payments contexts, e.g. Circle’s USDC coin in international remittances, this has always been done by establishing parallel *permissioned* arrangements for holding and transfer, which can then support direct exchange into and out of fiat currency, without giving the holders direct access to the private keys which support permissionless exchange of global stable coins. This is effectively creating a new permissioned coin. The association with the original is simply a marketing exercise of no financial or economic substance.

The stable coins used in a conventional context are thus conventional forms of money that can be regulated as e-monies or possibly as money market mutual funds with a guaranteed minimum transfer value (the regulatory issue being whether the issuer guarantees a fiat value supported on its own balance sheet or only offers a

claim on a mutual fund of stable value fiat assets). They can then be subject to existing regulation as e-money or money market mutual funds with the legal requirement that their value in their regulated payment context is not referenced to the market value of the permissionless “global” stable coin from which they are derived. If the associated “global stable coin” collapses in value the permissionless variant will be separated and trade at full fiat value.

It is true that much buying and selling of global stable coins is done through crypto-intermediaries, the major exchanges such as Binance and Coinbase, with permissioned (not permissionless) holding and transfer. In this respect they are different from e-mones. But here the situation is precisely the same as for any other permissionless digital asset , such a cryptocurrency, traded using a custodial arrangement for which standard regulatory arrangements can apply.

There is one reason for additional regulation in relation to GSC, discussed in relation to the following question 3.

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

No, if anything a less granular distinction is to be preferred. The FSB is wasting time and resource trying to pursue this further. The appropriate distinction is as follows.

Stable coins are, like cryptocurrencies, held and exchanged on permissionless distributed ledgers. The supporting software, while it may have a known creator, is not itself sold or provided under the jurisdiction of any legal regime. Direct permissionless transfers and exchanges cannot be regulated, supervised or overseen (this is true of stable coins, cryptocurrencies and code based contracts based on these assets traded in decentralised DeFi markets). What distinguishes stable coins from cryptocurrencies is the additional presence of an arrangement to maintain a peg against a fiat currency value.

It may be possible to regulate this supporting peg. Permissionless (“global”) stable coins fall into two categories, depending on what distinguishes them from cryptocurrencies with a floating market value: (i) those whose stable value against a fiat reference is algorithmically enforced without any entity involved in maintaining the peg; and (ii) those where an entity, e.g. Tether Ltd. , is commits to acting as a market maker that intervenes, buying (extinguishing) and selling (creating) the stable coin to maintain a stable value against fiat currencies.

In the first category there is no effective means of regulation. In the second category regulation can be applied to the entity that supports the fiat peg. In this second case the approach to regulation along the lines considered by the FSB may be appropriate. The following considerations are relevant.

- The entities supporting the pegs of global stable coins have no legal commitment to maintaining the fiat peg of the stable coin, they can if they chose step back and allow the stable coin to freely float (effectively turning it into an unpegged cryptocurrency).

- These entities supporting GSCs could be offered the opportunity for regulation as an e-money or mutual fund, with all permissionless “free float” exchanged on crypto-exchanges treated as a permissionless share of total issuance.
 - If there is global co-ordination then regulation could go further, requiring such entities to be regulated as either e-money providers or money market mutual funds.
 - The necessary global co-ordination to enforce such regulation is likely to be elusive, (there may always be a jurisdiction willing to allow operations on a looser basis; or the “entity” may not have a clear legal existence to be subject to such regulation).
 - The extent to which it is necessary for the global regulatory community to go along this path remains unclear, because as yet (as the FSB report notes) to date the interconnections and systemic risks of global stable coins remain almost entirely within the crypto-asset ‘eco-system’. The key to effective regulation of this ‘eco-system’ is regulation of the entry and exit points that link it to the conventional financial system. If these ‘borders’ are properly policed then the stability of global stable coins likely matters little for wider financial stability.
4. Do the CA Recommendations and the GSC Recommendations each address the relevant regulatory gaps and challenges that warrant multinational responses?

The multilateral response is essential, but the recommendations are on the whole too complex for dealing with what is a relatively easily delineated (although difficult to implement) challenge: that of policing the border between crypto (permissionless) and conventional (permissioned) financial assets.

The basic approach should be the same as dealing with the border between non-financial real assets (commodities, real estate) and conventional (permissioned) financial assets. The existing panoply of regulations that protect investors and ensure financial stability in relation to these assets can be carried over pretty much without change to cover also permissionless financial assets. Substantial risk weights must be applied whenever banks or other institutions of prudential concern hold these assets. Customer protection rules should also be applied consistently, with strict limits on retail investment.

The principal challenge is ensuring a globally consistent approach. There are siren calls that lead away from this, for example the goal of the UK government to make London the “leading global hub for crypto trading” which if it means anything at all means providing a lighter regulatory regime that will attract crypto intermediaries to London. There needs to be firm international understanding that any such effort will not be at the expense of maintaining global standards over the boundary with either prudential risk or customer protection.

The only element that is new is the emergence of new intermediaries such as crypto exchanges, which combine custodial and trading venue functions. They

should though (as the FSB recommendations indicate) be subject to essentially the same expectations as established conventional intermediaries.

Indeed this could be taken – for both customer protection and financial stability reasons – as step further, requiring all intermediaries offering services to clients and customers in crypto-assets to do so on a “brokerage only” basis without taking any customer deposits on their balance sheets. This is easily achieved by requiring them to share the private keys to crypto-assets with their ultimate owners so they can transfer them out – to self-custody or to another service provider – whenever they wish. This would fundamentally change the business models for these intermediaries, they would no longer have any access to leverage from holding customer funds and would have to charge fees instead. This would in turn align prices much more accurately with the underlying risks.

Permissionless transactions, e.g. of cryptocurrencies or global stable coins or within DeFi, are unregulatable because there are no entities to regulate; so it is only intermediary access to these forms of permissionless exposure that can and should be regulated i.e. to restate the regulation can only be at the border between mainstream finance and crypto-assets.

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

No.

Crypto-assets and markets (CA Recommendations)

6. Does the [report](#) accurately characterise 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?

See discussion above. I think the FSB overcomplicate. The key issue is policing the border, effective regulation of intermediaries that offer services in CA,

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

The analysis is an accurate characterisation, but risks within the CA system, e.g. in DeFi, ,. are of little or no financial stability concern provided the border to mainstream finance is adequately policed.

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, issues and challenges identified, if proposed solutions over complex.

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

I am not quite sure what you mean by differentiated. The obligations should be identical to any mainstream financial intermediaries dealing with a non-financial asset (with the possible stronger requirements on custodial services in crypto assets being done on a “shared key” basis to remove any possibility of leverage; ensuring these are thus from a stability perspective treated pari-passu with custodian banks in the mainstream financial system..

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.

No. a simple approach based on existing regulation of mainstream financial intermediaries is largely adequate. Some additional measures, as discussed above, may be appropriate for custodians of crypto assets and for the institutions supporting global stable coin pegs, but the proposed approach is already granular enough.

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?

As discussed above, the FS high level recommendations substantially overstate the risks of potential use of global stable coins as means of payment or store of value for retail unsophisticated customers.

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

The response will be better re-orientated along the lines outline above, regulating GSCs whenever they are adapted in a permissioned form for use as means of payment by applying existing e-money and mutual fund regulation (priority); and further encouraging self regulation of providers of permissionless GSCs to adopt similar established regulation, with an eventual move to requiring such adoption (lesser priority).

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 crypto-asset activities other than GSCs?

I have no strong views on this, expect to say that evolving technology is making transparency of this kind now feasible for all regulated intermediaries and should be developed for all those firms offering services in crypto assets, not just to GSCs. It is no longer expensive.

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?

The template should mirror that already applied to e-money and money market mutual funds.

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?

This misses the key issue, emphasised in this response to the consultation, of whether the stable coin can be traded on a permissionless basis. If it can it is a GSC. If it cannot then it is (or should be) an e-money or money market mutual fund.