Dear Sir or Madam,

This letter is submitted by Marco Dell’Erba and Rolf H. Weber in connection with the request for comments by the Financial Stability Board (FSB) on its “Addressing the regulatory, supervisory and oversight challenges raised by “global stablecoin” arrangements”. Marco Dell’Erba is an Assistant Professor of Corporate and Financial Law at the University of Zurich, where he is also a member of the UZH Blockchain Center, and Academic Fellow at the Institute for Corporate Governance & Finance at New York University School of Law. Rolf H. Weber is Professor of Law at the University of Zurich, a member of the Steering Committee of the UZH Blockchain Center, a member of the board of the Swiss Blockchain Federation and a practicing attorney-at-law, having contributed to key legal developments in Switzerland in the field of technology. Neither of us represents clients and or has done consulting that would be affected by the outcome of the FSB’s consultation.

The Blockchain Center at the University of Zurich is an academic center conducting multidisciplinary research on the area. It benefits from the engagement of Faculty members from diverse areas such as Informatics, Law, Business, Economics and Finance, and develops a broad range of activities, that make it the largest academic initiative in the field in Switzerland, a renowned world-wide blockchain hub. The core missions of the BCC are: to foster and coordinate research activities, to create and nurture a complete education at all levels, and to act as the single point of contact of the University with industry, peer institutions and governments in the area of blockchain.

Prof. Marco Dell’Erba / Prof. Rolf H. Weber
1. Do you agree with the analysis of the characteristics of stablecoins that distinguish them from other crypto-assets?

The core difference between stablecoins and other cryptoassets is the existence of a stabilization mechanism. Different categories of stablecoins (on-chain, off-chain and algorithmic) have emerged in cryptoeconomy, in relation to the type of collateral (fiat currency, cryptocurrency, and smart contracts in charge of managing a variable supply of coins).

The document also refers to a combination of multiple functions and activities as a key characteristic of stablecoins. In our view, the economic function of a specific entity cannot characterize as a key difference, but it is rather an application, depending on the possibility to recur to an instrument inherently stable. At time of writing, stablecoin arrangements promise to be stable, although this is not fully proven yet. However, if other crypto-assets achieved the same degree of stability, they would also serve the same purposes. Rather than a definitive distinctive characteristic, it would be worth to refer to this second element as the economic function of stablecoins at this precise (current) stage of cryptoeconomy. Furthermore, stablecoins will likely (and exclusively) take over specific functions in cryptoeconomy, such as serving as money market funds in cryptoeconomy, and in another context as a payment system, or at least certain functions generally associate with money (in particular medium of exchange), although not on an exclusive basis.

Finally, the characteristic of being a global instrument is not necessarily a distinctive characteristic of stablecoins, as clearly opposed to other crypto-assets. Bitcoin, Ethereum as well as other crypto-assets have shown the intrinsic potential for a massive adoption on a global scale.

2. Are there stabilisation mechanisms other than the ones described, including emerging ones, that may have implications on the analysis of risks and vulnerabilities? Please describe and provide further information about such mechanisms.

We agree with the categorization of stabilization mechanism as they were identified. However, with regard to the first category of asset-linked stablecoins, we recommend to clearly distinguish on-chain versus off-chain stablecoin arrangements because of the different risks related to the two arrangements. Off-chain stablecoin arrangements pose threats to the economy that are very similar to what traditional finance has experienced, in particular when referring to money market funds and their traditional problem of “breaking the buck”, i.e. exchanging them at a stable value of 1 dollar.
Off-chain stablecoin arrangements are highly centralized. An interesting example is Tether, which is still the most capitalized stablecoins. The problems experienced by Tether exemplify such criticalities, such as lack of transparency, conflicts of interest, etc. It is also interesting to note that gold-backed stablecoins experienced a high-degree of wind-up. On-chain stablecoin arrangements are in principle more transparent, while being exposed to more relevant problems of cybersecurity, as well as to different sources of problems affecting their stability.

3. **Does the FSB properly identify the functions and activities of a stablecoin arrangement?**

   Does the approach taken appropriately deal with the various degrees of decentralisation of stablecoin arrangements?

Stablecoin arrangements characterize for their versatility. They may serve different functions. A precedent is represented by private funds, that in the past eroded the activities of many different regulated entities, shifting from banks to infrastructural funds operating in emerging economies. In that context it was extremely important to look at the activity, rather than any formal categorization, to properly assess and protect both the system and investors from the risks posed by such market actors. A similar trend characterizes cryptoeconomy, where one entity would be capable to exploit different functions within the system. Stablecoins arrangement are an example of such ability. Beyond the identification of multiple activities, we consider extremely important the adoption of an approach which would adequately emphasize the ability of a stablecoin arrangement to disrupt both the banking (and shadow banking) and the central banking layers. We encourage regulators to identify specific thresholds that could be helpful to identify how and when a stablecoin arrangement should characterize as a banking (or shadow banking) or rather as a central banking activity. This would certainly help to identify the scope of the activities, the actors and the risks involved.

4. **What criteria or characteristics differentiate GSC arrangements from other stablecoin arrangements?**

A GSC is a stablecoin that is capable to penetrate multiple economic environments belonging to different jurisdictions, and to disrupt specific established (global) institutions, including (but not limited to):

- Central banks
- Commercial regulated credit institutions and shadow banks
- Market infrastructures.

Irrespective of any structural characteristic, the potential for disrupting these categories of market institutions should lead to the possibility to categorize such GSC arrangements as “global”. Even a GSC arrangement capable of permeating only one key established function from especially relevant economies should lead to consider such stablecoin arrangement as a “GSC”.

Furthermore, we tend to agree with previous recent publications highlighting the potential of certain stablecoin arrangement to become in the very short term global money market funds.

5. Do you agree with the analysis of potential risks to financial stability arising from GSC arrangements? What other relevant risks should regulators consider?

In principle, the analysis is correct, however, consistent with our answer to question 3, we highly recommend to develop a taxonomy where the different functions and activities related to banking (shadow banking) and central banking are clearly distinguished, and evaluate how the same entity may affect both spheres.

6. Do you agree with the analysis of the vulnerabilities arising from various stablecoin functions and activities (see Annex 2)? What, if any, amendments or alterations would you propose?

We generally agree with the view emerging from such taxonomy. However, the problem of a sound corporate governance and conflicts of interest tends to generally affect many activities that are part of a stablecoin arrangement, and it is certainly not confined exclusively to the activity of “Establishing rules governing the stablecoin arrangement”. A clear example is the one of “Managing the reserves”: even in this context, corporate governance and conflicts of interest may be an issue. Furthermore, similar vulnerabilities may emerge in the case of a total failure of the ledger. In that case, the lack of substitutive forms of sound governance might expose to additional significant risks.

7. Do you have comments on the potential regulatory authorities and tools and international standards applicable to GSC activities presented in Annex 2?

With regard to “Managing reserve assets”, consistent with our previous answers, as well as to the identification of corporate governance issues and conflicts of interests, a tool at corporate governance level mitigating excessive-risk takings could the provision of appropriate remuneration policies for
asset managers in charge of managing the reserves within the GSC arrangements, aimed at discouraging excessive risks and moral hazard.

8. Do you agree with the characterisation of cross-border issues arising from GSC arrangements?
Consistent with our answers to questions 3 and 5, we recommend to characterize such risks by identifying the two main dimensions of banking and central banking.

9. Are the proposed recommendations appropriate and proportionate with the risks? Do they promote financial stability, market integrity, and consumer protection without overly constraining beneficial financial and technological innovation?
We generally agree with the proposed recommendations. Although monetary policy issues are beyond the scope, we would expect the formalization of recommendations addressing the “central banking” dimension of GSC arrangements, which directly affects both macro- and micro-prudential concerns. Therefore, we would expect an explicit reference to this issue, and its direct impact on the different economic and legal dimensions. In addition, we would like to stress that the freedom of innovation is an essential key driver for building a prosperous financial system. Consequently, governments should avoid the implementation of a zero-risk-framework that would compromise such innovative private initiatives. On the contrary, they should be engaged in adopting reasonable measures, pursuing investor protection and financial stability, while stimulating continuous technological developments.

a. Are domestic regulatory, supervisory and oversight issues appropriately identified?
b. Are cross-border regulatory, supervisory and oversight issues appropriately identified?
c. Do the recommendations adequately anticipate and address potential developments and future innovation in this sector?

One of the key characteristics of cryptoeconomy is the hybridization of market actors. This is a trend that exists at different levels, including (but not limited to) market infrastructures, where the key market actors are in charge of multiple tasks at the same time. Similar trends may be observed in the future even with respect to stablecoins, eroding established institutions in different contexts. We expect that regulators, policy-makers and central bankers both at domestic and international level act in concert in order to consider the multidimensionality (finance, banking, and central banking) of
GSC arrangements. As a direct consequence we would also expect that the recommendations appropriately take into account such phenomenon of hybridization and multidimensionality in cryptoeconomy, in particular when referring to GSC arrangements, reflecting this approach also at the level of recommendations.

10. **Do you think that the recommendations would be appropriate for stablecoins predominately used for wholesale purposes and other types of crypto-assets?**

In principle yes, but our comments to the other questions equally apply.

11. **Are there additional recommendations that should be included or recommendations that should be removed?**

Authorities should evaluate whether GSC arrangements disrupt banking or central banking entities, and adopt appropriate tools to take into account the risks for each individual layer (finance, banking, central banking) as well the interconnections between heterogeneous layers, highlighting the multidimensionality of the disruptions characterizing GSC arrangements and cryptoeconomy. In addition, legislators should strive at finding an adequate balance between a too liberal regime allowing a misuse of the technological possibilities and a too strict regime eliminating private initiatives.

12. **Are there cost-benefit considerations that can and should be addressed at this stage?**

We are aware of the importance of an appropriate cost-benefit analysis as a complimentary tool to adequately regulate financial markets, and we would encourage to recur to this tool when regulating cryptoeconomy. This would definitely contribute to implement a “do-no harm” approach coupled with a technology neutrality. In the area of stablecoin arrangements, appropriate cost-benefit analysis should be drawn with respect to two activities, belonging to two different contexts, the shadow banking one, where GSC arrangements may be capable to revolutionize the money market industry, and the central banking one, where GSC arrangements may erode the activity of other established payment systems and payment infrastructures.

We recommend a sound cost-benefit analysis for these two core areas. In the context of shadow banking, we highlight the importance of liquidity. From this perspective, any regulation aimed at strengthening the shadow banking system via new regulations of GSC arrangement should question
whether specific regulatory tools contribute to building a resilient shadow banking system, especially in comparison to the old paradigm observable in traditional finance.

With regard to the second point, central banking, we are aware that the scope of this document does not include any central banking issues, but we want to stress that central banking is the area which is more exposed to cost-benefit considerations. We believe that a major issue at the level of cost-benefit analysis refers to the scenario of managing a public versus a private payment infrastructure. The way new regulations contribute to the efficiency of building an integrated and resilient payment system should be the key objective of an appropriate cost-benefit analysis in this field.

The implementation of a cost-benefit analysis also means the costs involved for entering a market should not be excessive. Startups cannot afford high regulatory or similar costs. If small businesses are disproportionately suffering from such costs the financial system will become less adaptive and innovative in the medium run.