Report and recommendations on regulatory, supervisory and oversight challenges raised by “global stablecoin” arrangements

Overview of responses to the public consultation

On 14 April 2020, the FSB published a consultative document on 10 high-level recommendations to address the regulatory, supervisory and oversight challenges raised by “global stablecoin” (GSC) arrangements. The FSB received 53 responses to the consultation which ended on 15 July 2020 (with 2 respondents asking for their answers not to be published). Respondents included: regulated financial institutions (12), trade associations representing financial technology firms (11), financial technology firms (7), trade associations representing regulated financial institutions (6), authorities (5), consulting firms (5), non-governmental organisations (2), others (5).

Overall, respondents welcomed the document and found the high-level recommendations generally appropriate to address the identified issues. Respondents in particular endorsed the “same business, same risk, same rules” approach and stressed that regulatory, supervisory and oversight approaches should be agnostic of underlying technology, reflecting the fact that the market is continually evolving, and to promote financial innovation. Respondents also acknowledged that GSCs that might have systemic importance would likely require novel institutional arrangements to supervise/oversee them, and that it was important to clarify the respective roles of the various regulators involved in GSC oversight. Respondents also stressed that GSC activities demand appropriate transparency to the market. Feedback was also received on matters outside the scope of the report, including the assessment of competition, consumer protection and data privacy issues. They also noted micro-economic effects (such as consumer behaviour with the use of stablecoins) that may have global financial stability implications (such as currency substitution potentially) and affect the intended end users of stablecoins. While in favour of ecosystems that support innovation and inclusion, several respondents stressed that the possibility of GSC arrangements creating systems that could mandate openness and accessibility may fall outside of regulation and might hinder innovation and competition and give rise to financial stability risks. Several respondents noted that the definition of “stablecoins”, or “global stablecoins”, could be more precise. Similarly,

1 FSB (2020), Addressing the regulatory, supervisory and oversight challenges raised by “global stablecoin” arrangements: Consultative document, April
comments were made on the definition of the stabilisation mechanisms, which some perceived to be too narrow. Other respondents suggested a few additional risks to be considered in the analysis, e.g. operational and cyber risks. Finally, a few respondents noted that regulatory sandboxes have allowed innovative projects to develop under the supervision of authorities, and thus expressed some concern that Recommendation 10, which asks for stablecoin project developers to meet all applicable regulatory, supervisory and oversight requirements of a particular jurisdiction before commencing any operations, did not take explicit account of sandboxes and therefore could hinder innovation.

Having considered the feedback and suggestions received, some amendments and clarifications were made to the final report and high-level recommendations, including the following:

■ Given the common use of the term “stablecoin”, the report does not propose to adopt a specific categorisation of stablecoins, but references several documents that propose such categorisation or taxonomy. The report also makes it clearer that Annex 5 sets out elements that could be used by authorities to determine whether a stablecoin qualifies as a global stablecoin.

■ With regard to the important issues of anti-money laundering and countering the financing of terrorism (AML/CFT), data privacy, cybersecurity, consumer and investor protection and competition, while these issues are outside its scope, the report clearly acknowledges that there could be consequences for financial stability if these are not properly addressed. The report further stresses the need for a holistic approach to the regulation of global stablecoins, and that a comprehensive regulatory, supervisory and oversight framework is needed to effectively address those issues in addition to financial stability risks.

■ The report also places more emphasis on the need to address risks of an operational or cybersecurity nature arising from the use of emerging technologies supporting GSC arrangements. It also notes conflicts of interest as potential risks that governance arrangements for global stablecoins need to address.

■ The report also clarifies that Recommendation 10 does not prevent the establishment of proof-of-concepts or experiments under the adequate supervision of relevant authorities in jurisdictions concerned.

■ Finally, to keep pace with the evolution of GSC arrangements and market developments, the FSB will, in close cooperation with relevant SSBs, review its recommendations on a regular basis in order to identify any potential gaps, and update them if needed to ensure that they remain relevant and continue to promote effective regulation, supervision and oversight of GSC arrangements across jurisdictions.

Set out below is a summary of the responses received to the 12 questions asked in the consultation.
Summary of responses to consultation questions

**Question 1: Do you agree with the analysis of the characteristics of stablecoins that distinguish them from other crypto-assets?**

There was broad support for the definition and characteristics of stablecoins presented in the consultative document, noting that the most critical differentiators are the existence of stabilisation mechanisms, which for example may include the rights to fully reserved assets. The functions of issuance, redemption and stabilisation of value, including how the reserve is managed were also stressed as key differentiators.

Respondents however had diverging views on the precision of the definition. While some respondents confirmed it is aligned with similar ones they developed and use, others noted that the definition could be more precise and identify the features that would make a stablecoin fall within a particular regulatory category. However, the respondents also acknowledged that there is currently no common and consistent definition in use. Some suggested possible approaches for further classification, with various degrees of detail, notably with regards to the stabilisation mechanism. Finally, a couple of respondents supported the idea of further work on a common taxonomy at international level that would facilitate a consistent classification of crypto-assets, including stablecoins.

**Question 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.**

Most respondents supported the two stabilisation mechanisms described (asset-linked and algorithm-based), noting the existence of some hybrid mechanisms, and their implications on risks and vulnerabilities. Some respondents suggested further clarification of the differences between those two broad categories, especially for the asset-link mechanism, which could benefit from additional details.

**Question 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?**

Respondents broadly supported the description of the functions and activities of a GSC arrangement as presented in the consultative report and found the level of detail and granularity appropriate. Several noted the need for further clarification on the application of existing international frameworks (issued by standard-setting bodies such as BCBS, FATF, CPMI and IOSCO^3) to these functions, and the service providers of the functions.

Many respondents underlined the challenges raised by GSC arrangements incorporating decentralised and permissionless technology, especially to evidencing accountability and

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^3 The Basel Committee on Banking Supervision, the Financial Action Task Force, the Committee on Payments and Markets Infrastructures, the International Organization of Securities Commissions.
government, while also noting that adequate risk management measures could be deployed, and compliance with regulatory frameworks ensured.

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

A majority of respondents agreed that global stablecoins are stablecoins with a potential reach and adoption across multiple jurisdictions and the potential to achieve substantial volume. They also agreed that characteristics noted in Annex 5 of the consultative report could help in determining their global nature. Many respondents underlined the potential systemic importance of such arrangements achieving wider usage and global reach. Several respondents shared the view that some of the criteria in Annex 5, e.g. size and composition of reserve assets, customer base, general market share data and links to the financial systems, were particularly helpful in determining if and when a stablecoin becomes global. Finally, respondents suggested that interconnectedness as a potential criterion should also take into account digital platforms and services, and not limited to the traditional financial systems.

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

Most respondents supported the analysis of potential risks to financial stability laid out in the consultative report, adhering to the “same business, same risks, same rules” principle. Many also noted that regulatory frameworks for stablecoins should not be considered separate and apart from existing regulatory frameworks for other financial assets. In particular, they stressed the need to conduct a risk assessment and apply frameworks in a manner that is proportionate to the size, risk, and complexity of the asset and arrangement under review. Several respondents shared the view that risks associated with the management of the reserve within a GSC arrangement would be the most important ones to take into account.

Some respondents, however, considered that the key transmission channels for risks identified in the report, i.e. if a GSC were used as a common store of value or means of payments, would potentially carry lesser effects on users’ wealth and confidence, if there are adequate designs and controls for stabilisation mechanisms and reserve management. Such measures would effectively reduce risks for a given GSC arrangement. A few respondents also shared the view that the decentralisation of functions within a GSC arrangement could contribute to decreasing the transmission of risks.

Many respondents underlined the importance of other risks outside the scope of the report, notably money-laundering/terrorism financing (ML/TF), competition, consumer and investor protection and data privacy risks. A few further noted risks to monetary policy and currency substitution in emerging market and developing economies (EMDEs), and links with central bank digital currencies (CBDCs). A couple of respondents set out the need for clarity regarding redemption rights with fiat currencies.

Respondents found that cross-border risks were adequately described. However, a few felt that the operational and infrastructure risks, including cybersecurity and resilience, could be
emphasised more. One respondent noted that human risk factors also needed to be taken into account as part of the overall governance of GSC arrangements.

Question 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?

A majority of respondents supported the analysis of vulnerabilities presented in the report, especially in Annex 2. Many noted ML/TF vulnerabilities associated with typical functions of a GSC arrangement, and stressed the importance of FATF work and of the forthcoming EU legislation for jurisdictions in Europe. Others stressed vulnerabilities stemming from managing and providing custody for reserve assets, potentially as being the principal vulnerability according to some respondents. A few respondents highlighted competition implications and also observed that a number of the vulnerabilities described relate to all crypto-assets more broadly, or also to other financial assets, and are therefore not unique to stablecoins.

There were some diverging views on vulnerabilities arising from the technology used (e.g. distributed ledger technology (DLT), permissionless systems), and the level of security achieved for some functions (e.g. for wallet services, smart contracts), with some respondents stressing recent advances in the field which have contributed to improving the security of the technologies used. Respondents broadly supported a technology-agnostic approach, in order to foster innovation, and acknowledged the need to make progress e.g. with respect to protocol robustness, operational resilience, and the scalability of the systems.

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

Respondents broadly supported the analysis presented in Annex 2, with some noting that coordination and cooperation among competent authorities on a continuous basis could help ensure a level playing field in the market and avoid regulatory arbitrage. A couple of respondents observed that there is a residual risk of regulatory gaps despite the existence of overarching international frameworks as some jurisdictions may still need to adapt their domestic frameworks.

Most respondents also supported the application of existing international standards, to the extent they are adapted to cover all or a subset of the functions and activities of a GSC arrangement. Several respondents referred to the standards issued by CPMI-IOSCO (Principles for Financial Market Infrastructures - PFMIs), FATF and BCBS.

A few respondents called for a flexible and proportionate use of standards and tools by authorities, notably for governance, internal control and risk management, depending on the design of the GSC arrangement considered. Some underlined the need to consider bespoke regimes to support the emergence of stablecoins and other crypto-assets. Others emphasised the importance of addressing operational risks and more precisely, cybersecurity and the ability to assess issues of risks, vulnerabilities and threats with IT systems used, citing e.g. applicable international standards for information security management (such as ISO/IEC 27001), to safeguard the confidentiality, integrity and availability of data used in GSC arrangements.
Some respondents noted the absence of data privacy standards in Annex 2, and raised the issue of digital identifiers, which could be considered in the context of GSC arrangements.

**Question 8: Do you agree with the characterisation of cross-border issues arising from GSC arrangements?**

Respondents supported the cross-border issues arising from GSC arrangements presented in the report. Many of them noted that interconnected financial markets have increased financial institutions’ exposures to cross-border issues in the past few decades. New entrants and innovations in financial services have accelerated this global trend. They called for increased international cooperation and coordination of authorities, in particular to avoid regulatory arbitrage. The concepts of “home/host supervisor” and “lead overseer” were to that extent well received by the respondents, who further noted some possible challenges for more decentralised GSC arrangements.

A few respondents also emphasised issues arising from capital and foreign exchange controls, AML/CFT obligations, cross-border disputes, which, according to the respondents, calls for more harmonised frameworks and coordinated supervision and oversight. Many respondents also mentioned risks linked to currency substitution and to more overarching monetary policy and sovereignty matters, especially in EMDEs.

**Question 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?**

(i) Are domestic regulatory, supervisory and oversight issues appropriately identified?

(ii) Are cross-border regulatory, supervisory and oversight issues appropriately identified?

(iii) Do the recommendations adequately anticipate and address potential developments and future innovation in this sector?

A majority of respondents agreed with the guiding principle of “same business, same risk, same rules”. Generally, respondents were of the view that the proposed recommendations were appropriate and proportionate, given the significant risks to financial stability and consumer protection associated with the potential emergence of inadequately regulated GSC arrangements. Some noted that the recommendations are function-based and do not distinguish between different actors, which, according to the respondents, means that not all of the recommendations are appropriate for all the different actors offering a subset of the functions of a GSC arrangement. Depending on market developments and domestic implementation of regulatory frameworks, a few respondents called for future review and adjustments of the recommendations, including potentially greater specificity if and when deemed necessary.

Respondents generally supported the recommendations, in particular those intended to address cross-border challenges. However, there were diverging views on some issues. For example, with respect to permissionless ledgers and decentralised systems, a few
respondents suggested more flexibility, while others supported a more cautious approach by authorities, as suggested in the recommendations and in Annex 2. For Recommendation 10, on GSC arrangements meeting all applicable regulatory, supervisory and oversight requirements before commencing operations, respondents generally recognised the need to conform to existing regulations before a GSC could be offered, however some indicated that such a measure could hamper innovation and prevent new projects from developing. Some respondents called for regulatory sandbox regimes or something similar, with the ability for market stakeholders to test and advance their GSC related projects in a controlled environment.

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

Respondents broadly agreed that the recommendations would be appropriate for wholesale-type stablecoins, and that a subset of them would be generally applicable to crypto-assets, depending on their designs. In particular, some respondents noted that Recommendations 1, on authorities’ powers and tools, 2, on comprehensive regulatory, supervision and oversight frameworks, 4, on governance, 6, on safeguarding data and 10, on meeting applicable requirements before commencing operations, seem to be applicable to a majority of crypto-assets. Recommendations 5, on risk management frameworks (including requirements on the reserve), 7, on recovery and resolution plans, 8, on information to users (including on the stabilisation mechanism) and 9, on legal clarity of redemption rights, were more specific to stablecoins.

Many respondents provided comments on the differences between retail and wholesale stablecoins. Some indicated that although the risks posed by wholesale stablecoins are different from those posed by retail stablecoins, notably in terms of consumer protection (e.g., wholesale stablecoins users having a more professional background), wholesale stablecoins could also be a source of risk to financial stability. According to respondents, the recommendations would therefore be appropriate for both, so long as they are implemented to take into account the differences in vulnerabilities, functions and entities performing those functions in retail and wholesale stablecoins arrangements (e.g. generally financial institutions who are regulated in the case of wholesale stablecoins). A couple of respondents noted that the FATF recommendations, as well as existing regional frameworks for AML/CFT (e.g. the EU 5th AML Directive), would be applicable as they follow a risk based approach.

Finally, one respondent noted the possible connections between wholesale and retail payment systems and the use of stablecoins in those environments, and a couple of others called for more detailed regulation adapted to use cases developed by stakeholders (e.g. wholesale stablecoins on a private ledger).

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

A majority of respondents agreed with the recommendations put forward in the report, and emphasised that no recommendations should be removed. They also found useful Annex 2, i.e., the overview of international standards applicable to GSC activities, as a complement to the recommendations. Respondents generally shared the view that the recommendations
identify the key functions and activities of GSC arrangements and address vulnerabilities and risks that may arise from these. Many insisted on the “same business, same risks, same rules” principle as a guide to authorities’ policy development, while still noting that this principle cannot be applied mechanically (e.g. due to different technology choices), and on the need to pursue cross-border regulatory harmonisation, in order to ensure a level playing field among market stakeholders. In addition, several respondents called for an adequate balance between fostering innovation and establishing comprehensive and effective regulatory frameworks.

Some respondents suggested additional precision on certain recommendations. For example, some respondents suggested that adequate qualifications for issuers and custodians could be considered as part of the proper governance rules of a GSC arrangement. To encourage innovation but also competition, the use of international industry standards, trials and proof-of-concepts, interoperability initiatives, could be further facilitated.

Finally, many respondents emphasised the need to address in a more detailed manner important issues such as AML/CFT, consumer and investor protection, data privacy, competition and market integrity.

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

Most respondents agreed with the current approach set forth by authorities, i.e., regulating stablecoins in a manner proportionate to the risks they raise while fostering innovation and market competition. They stressed the importance for authorities to be agile and diligent in embracing those nascent technologies, notably because conducting a cost-benefit analysis at this stage without widely deployed real-life examples remains challenging. Many considered that the main cost-benefit consideration is the trade-off between financial innovation on the one hand, and consumer protection and financial stability on the other hand. Several respondents however shared the view that the ability to provide access to a wider population, foster innovation and competition, and ensure access to innovative products, while limiting the risks to the financial system and to consumers, are not at odds with regulatory compliance (while also noting the costs associated).

Some respondents noted that the emergence of global stablecoins could mean greater benefits for financial inclusion in EMDEs and for cross-border payments in advanced economies. Several respondents factored in the development of CBDC, which could reduce the effects that privately-issued stablecoins could bring. Others perceive stablecoins as substantial innovations that could benefit current financial services and processes, through e.g. advanced features such as smart contracts (i.e. “programmable money”).

A few respondents expressed their views on how global stablecoins could have an impact on payments infrastructures, and suggested for example to consider a cost-benefit analysis of resilient payment systems provided either by the public or by the private sector. Others proposed to further analyse cross-border payment flows in light of GSCs and how to maximise the use of existing cross-border infrastructures, e.g. by leveraging current processes (e.g. in know-your-customer (KYC) and AML controls, security, resilience), integrating with domestic payment systems (e.g. with existing national or regional instant payment services), solving scalability, interoperability and data exchange issues.