FSB FINANCIAL STABILITY BOARD

Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements

Progress Report on the implementation of the FSB High-Level Recommendations

7 October 2021

The Financial Stability Board (FSB) coordinates at the international level the work of national financial authorities and international standard-setting bodies to develop and promote the implementation of effective regulatory, supervisory, and other financial sector policies. Its mandate is set out in the FSB Charter, which governs the policymaking and related activities of the FSB. These activities, including any decisions reached in their context, shall not be binding or give rise to any legal rights or obligations.

Contact the Financial Stability Board

Sign up for e-mail alerts: www.fsb.org/emailalert
Follow the FSB on Twitter: @FinStbBoard
E-mail the FSB at: fsb@fsb.org

Copyright © 2021 Financial Stability Board. Please refer to the terms and conditions

Table of Contents

Executive summary 1

Introduction 4

1. Key market and regulatory developments since the publication of the FSB High-Level Recommendations 5

    1.1. Market developments 5

    1.2. Major regulatory initiatives in individual jurisdictions 6

2. Progress in implementation at jurisdictional level 12

3. Progress in reviewing international standards 14

    3.1. BCBS 14

    3.2. CPMI-IOSCO 16

    3.3. IOSCO 17

    3.4. FATF 19

4. Specific implementation issues 20

    4.1. FSB High-Level Recommendation 1 21

    4.2. FSB High-Level Recommendation 2 21

    4.3. FSB High-Level Recommendation 3 22

    4.4. FSB High-Level Recommendation 4 23

    4.5. FSB High-Level Recommendation 5 23

    4.6. FSB High-Level Recommendation 6 23

    4.7. FSB High-Level Recommendation 7 24

    4.8. FSB High-Level Recommendation 8 24

    4.9. FSB High-Level Recommendation 9 24

    4.10. FSB High-Level Recommendation 10 25

5. Areas to consider for further international work 25

Executive summary

This report provides a status update on progress made on the implementation of the FSB high-level recommendations for Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements. It discusses key market and regulatory developments since the publication of the FSB high-level recommendations in October 2020; takes stock of the implementation of the FSB high-level recommendations across jurisdictions; describes the status of the review of the existing standard-setting body (SSB) frameworks, standards, guidelines and principles in light of the FSB high-level recommendations; and identifies areas for consideration of potential further international work.

While the current generation so-called stablecoins are not being used for mainstream payments on a significant scale, vulnerabilities in this space have continued to grow over the course of 2020-21. At present, stablecoins are being used primarily as bridge between traditional fiat currencies and other crypto-assets, which in turn are primarily held and traded for speculative purposes. Increased participation by retail investors could give rise to broader financial stability issues through an erosion of trust in the financial system. In the event that a stablecoin does enter the mainstream of the financial system as a means of payment and/or a store of value in multiple jurisdictions, with the potential to achieve substantial volume, it could become a global stablecoin (GSC). The emergence of GSCs would pose greater risks to financial stability than existing stablecoins and may challenge the comprehensiveness and effectiveness of existing regulatory, supervisory and oversight approaches. Ensuring appropriate regulation, supervision and oversight across sectors and jurisdictions will therefore be necessary to prevent any potential gaps and avoid regulatory arbitrage.

Overall, the implementation of the FSB high-level recommendations across jurisdictions is still at an early stage. In the first half of 2021, the FSB conducted a comprehensive stock-take of the implementation of the FSB high-level recommendations on the regulation, supervision, and oversight of so-called "global stablecoin" arrangements of October 2020. 48 jurisdictions in the FSB and its Regional Consultative Groups (RCGs) participated in the stock-take covering 21 advanced economies and 27 emerging markets and developing economies. Several jurisdictions have been reviewing and updating their legal and regulatory regimes to address specific risks arising from the emergence of stablecoins.

Jurisdictions have taken or are considering different approaches towards implementing the high-level recommendations. As the stablecoin landscape is evolving rapidly and as regulatory and supervisory policies are being developed, the differences among regulatory approaches and classifications could be increasing. For example, certain jurisdictions are seeking to implement the recommendations through the adoption of new rules and regulations, while others have amended or plan to amend existing rules and regulations in such a way that these are applicable to stablecoins. Other jurisdictions have relied largely on existing regulatory, supervisory and oversight regimes to address the risks associated with stablecoins or with entities that are part of the stablecoin arrangement. Differing regulatory classifications and approaches to stablecoins at jurisdictional level could give rise to the risk of regulatory arbitrage and harmful market fragmentation.

Standard-setting bodies are continuing to assess whether and how existing international standards may apply to stablecoin arrangements and, where appropriate, adjust their standards in light of the FSB high-level recommendations. However, a number of issues may not be fully covered by ongoing work. Authorities should rely on existing standards and principles relevant to the supervision and oversight of GSC arrangements, where they perform the same economic function as existing regulated activities covered by these standards. Any gaps in existing standards and principles should be addressed holistically and in a manner that is coordinated across sectors. The FSB high-level recommendations complement the international standards and principles and should inform any potential updates to international sectoral standards and principles.

As jurisdictions are using the FSB high-level recommendations in developing their own domestic regulatory approaches, authorities have identified several issues relating to the implementation of the recommendations that may warrant further consideration and where further work at international level could be useful. Areas for further consideration that respondents to the stock-take identified as most useful include conditions for qualifying a stablecoin as a GSC; prudential, investor protection, and other requirements for issuers, custodians, and providers of other GSC functions (e.g., wallet providers); redemption rights; cross-border and cross-sectoral cooperation and coordination; and mutual recognition and deference. Further work on these issues at international level may help to support the effective implementation of the FSB high-level recommendations at the jurisdictional level, to mitigate the risk of regulatory fragmentation and arbitrage, and to address risks to financial stability arising from GSCs. Efforts by standard-setting bodies to review, and where appropriate adjust their standards can further promote international consistency and reduce the risk of arbitrage or regulatory underlaps.

The work on fostering the soundness of GSCs is an integral part of the Roadmap for enhancing cross-border payments endorsed by the G20 in October 2020. The Roadmap, which the FSB has developed in coordination with relevant international organisations and SSBs,[1] calls for a review by the FSB, to be undertaken in consultation with other relevant SSBs and international organisations, of the FSB high-level recommendations. This progress report and the underlying stock-takes, as well as ongoing and planned work from SSBs, will inform that review.

The FSB will continue to support the effective implementation of the FSB high-level recommendations and facilitate coordination among SSBs. Starting in January 2022, with an expected completion date of July 2023, the FSB will review, in consultation with other relevant SSBs and international organisations, the recommendations in the FSB report and how any gaps identified could be addressed by existing frameworks. The FSB will update its recommendations, if needed.

---

[1] FSB (2020), *Enhancing Cross-border Payments: Stage 3 roadmap, October.* Fostering the soundness of global stablecoin arrangements is Building Block 18.

FSB High-Level recommendations to address the regulatory, supervisory and oversight challenges raised by GSCs arrangements[2]

1. Authorities should have and utilise the necessary powers and tools, and adequate resources, to comprehensively regulate, supervise and oversee a GSC arrangement and its associated functions and activities, and enforce relevant laws and regulations effectively.
2. Authorities should apply comprehensive regulatory, supervisory and oversight requirements and relevant international standards to GSC arrangements on a functional basis and proportionately to their risks.
3. Authorities should cooperate and coordinate with each other, both domestically and internationally, to foster efficient and effective communication and consultation to support each other in fulfilling their respective mandates and to ensure comprehensive regulation, supervision, and oversight of a GSC arrangement across borders and sectors.
4. Authorities should ensure that GSC arrangements have in place a comprehensive governance framework with a clear allocation of accountability for the functions and activities within the GSC arrangement.
5. Authorities should ensure that GSC arrangements have effective risk management frameworks in place especially with regard to reserve management, operational resilience, cyber security safeguards and AML/CFT measures, as well as 'fit and proper' requirements.
6. Authorities should ensure that GSC arrangements have in place robust systems for collecting, storing and safeguarding data.
7. Authorities should ensure that GSC arrangements have appropriate recovery and resolution plans.
8. Authorities should ensure that GSC arrangements provide users and relevant stakeholders with comprehensive and transparent information necessary to understand the functioning of the GSC arrangement, including with respect to its stabilisation mechanism.
9. Authorities should ensure that GSC arrangements provide legal clarity to users on the nature and enforceability of any redemption rights and the process for redemption, where applicable.
10. Authorities should ensure that GSC arrangements meet all applicable regulatory, supervisory and oversight requirements of a particular jurisdiction before commencing any operations in that jurisdiction, and adapt to new regulatory requirements as necessary.

[2] FSB (2020), *Regulation, supervision and oversight of "global stablecoin" arrangements: Final Report and High-Level Recommendations*, October. The 2020 report states that it recognises that establishing powers and tools for authorities is the province of individual jurisdictions' governing legislatures and any change would require legislative support.

Introduction

In October 2020, the FSB issued a report with a set of 10 high-level recommendations on the regulation, supervision, and oversight of so-called "global stablecoin" arrangements or GSCs.[3]

The G20 endorsed the recommendations and asked the FSB to assess, in collaboration with other standard-setting bodies (SSBs), any remaining challenges to the implementation of the recommendations and financial stability concerns, including possible effects specific to EMDEs, and to deliver a progress report to the October 2021 G20 Finance Ministers and Central Bank Governors (FMCBG).

The FSB undertook a comprehensive stock-take of recent regulatory developments in FSB member jurisdictions as well as non-FSB jurisdictions represented on FSB Regional Consultative Groups (RCGs)[4] to identify (i) any adjustments that jurisdictions have made or are planning to make to their jurisdictions' frameworks relevant to the regulation, supervision, and oversight of GSCs; and (ii) any challenges to the implementation of the recommendations and remaining financial stability concerns.

The FSB also took stock among SSBs of their progress in reviewing and revising or supplementing their existing frameworks, standards, guidelines, and principles, as appropriate and relevant to the regulation, supervision, and oversight of GSCs, considering the FSB 2020 report and its high-level recommendations.

Based on these stocktakes and members' sharing of recent developments in their jurisdictions this report provides a status update on:

1. key market and regulatory developments since the publication of the FSB high-level recommendations (Section 1);

2. the implementation of the FSB high-level recommendations across jurisdictions (Section 2); and

3. the review of the existing SSB frameworks, standards, guidelines, principles, as appropriate and relevant to the regulation, supervision and oversight of GSCs, in light of the FSB high-level recommendations (Section 3).

Section 4 identifies specific issues that authorities identified as relevant to address when implementing the recommendations at jurisdictional level. Section 5 identifies areas for further international work. It also sets out how this work will support the implementation of

---

3 FSB (2020), *Regulation, supervision and oversight of "global stablecoin" arrangements: Final Report and High-Level Recommendations*, October. The report was prepared in carrying out a G20 mandate to the FSB to examine regulatory, supervisory and oversight issues raised by "global stablecoin" arrangements and to advise on multilateral responses as appropriate, considering the perspective of emerging markets and developing economies (EMDEs).

4 The stock-take was completed in June 2021 and 48 responses were received in total, 21 from advanced economies (including one from the EU Commission responding for EU Member States) and 27 from emerging markets and developing economies. All questions have not necessarily been answered by all responding jurisdictions, i.e., the sum of responses in tables and graphs throughout this report may be fluctuant and less than the total number of responses received. The following jurisdictions/institutions responded: AE, AR, AU, BCEAO, BS, CA, CH, CL, CO, CZ, DE, DK, ES, EU Commission, FI, GT, HU, HK, ID, IN, IS, IT, JP, JO, KE, KG, KR, KY, KZ, LU, LB, MU, MX, NZ, PT, PL, RU, SAMA, SE, SG, TH, TR, UA, UK, US, UY, VN, ZA.

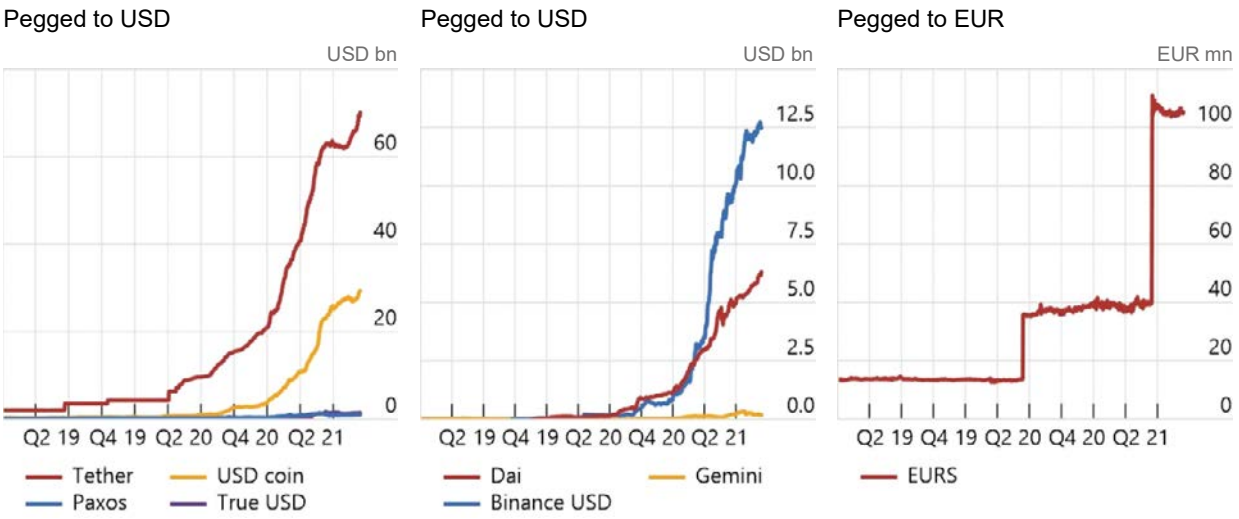
the G20 cross-border payments roadmap[5], of which the regulation and supervision of stablecoins is a key building block.[6]

1. Key market and regulatory developments since the publication of the FSB High-Level Recommendations

1.1. Market developments

The market capitalisation of existing so-called stablecoins has grown over the course of 2020/21 along with wider crypto asset markets (see Graph 1). Total market capitalisation of such stablecoins reportedly stood at around $123 billion in September 2021.[7] The largest existing stablecoin is Tether, with a reported market capitalisation of approximately $68bn (Graph 1). In the past year, other stablecoins, such as USD Coin and Binance USD, have also reached considerable market capitalisations (Graph 1).

Market capitalisation of selected stablecoins **Graph 1**



Key design features, including the terms of service and conditions for exercise of redemption rights, appear to vary across different types of stablecoins. For example, the terms of service of some stablecoins, such as Tether, among other conditions, reserve the right to delay the redemption or withdrawal of coins if such delay is necessitated by the illiquidity or unavailability or loss of any reserves held by the issuer to back the coin, whereas others, such as USDC, promise to always redeem the coin at a rate of one unit of fiat currency (USD).[8]

Some major stablecoin initiatives have announced significant design changes. For example, Diem announced in May of this year that it had withdrawn its application to the Swiss Financial

5 Enhancing Cross-border Payments: Stage 3 roadmap - Financial Stability Board (fsb.org).

6 See Building Block 18 – "Fostering the soundness of global stablecoin arrangements for cross-border payments".

7 Source Coin Market Cap. This data is unverified data from an industry source.

8 See Legal | Tether, Legal – USDC (circle.com).

Market Supervisory Authority and planned instead to launch in the United States[9], initially with only limited international availability; it would partner with a U.S. state-chartered commercial bank as the issuer of the stablecoin and would seek U.S. Treasury approval to register as a money services business.

Despite an increase in the use of existing stablecoins arrangements in the past year, the functions these arrangements perform remain limited. They are typically a by-product of demand for, and investments in, speculative crypto assets. For example, they act as a bridge between traditional fiat currencies and non-stablecoin crypto assets, are used in decentralized finance ("DeFi") structures, and may serve as collateral in crypto asset derivative transactions. Nevertheless, this dynamic, where stablecoins can help to facilitate speculation in crypto assets and DeFi structures, with increased participation by retail investors, could raise broader issues of trust in the financial system as a whole.

The current generation of stablecoins are not yet being used for mainstream payments on a significant scale.[10] It is possible, however, that one or more of them may evolve over time and could have the potential to expand reach and adoption across multiple jurisdictions. Factors contributing to the potential for expansion could include the ability to maintain a stable value over time and under varying market conditions, the ease of use and of transfer across borders, and perhaps sponsorship by large technology firms seeking to integrate it into their mass telecommunication platforms. If a stablecoin entered the mainstream of the financial system as a means of payment and/or a store of value in multiple jurisdictions, with the potential to achieve substantial volume, it could become a GSC, posing greater risks to financial stability than existing stablecoins. Continuous and vigilant monitoring by authorities is therefore important, both of potential risk transmission channels and of vulnerabilities arising from evolving use cases for stablecoins, especially when use is on a large scale and across multiple jurisdictions where laws and regulatory oversight may differ.

1.2. Major regulatory initiatives in individual jurisdictions

Several jurisdictions have been reviewing and updating their legal and regulatory regimes to address specific risks arising from the emergence of stablecoins. They are pursuing paths that are determined by their respective regulatory structures and existing taxonomies. In some jurisdictions, existing regulatory and supervisory regimes (e.g., for securities, derivatives, and commodities) enable authorities to cover stablecoins, whereas in other jurisdictions the existing regulatory perimeter may be too narrow to capture stablecoins and policymakers see a need to establish a bespoke regime for the classification and regulatory treatment of stablecoins. Such regulatory approaches, however, generally emulate the rules and regulatory objectives of existing regimes and adapt them to stablecoins and crypto assets more generally.

9 Diem Announces Partnership with Silvergate and Strategic Shift to the United States | Diem Association

10 As an alternative means of payment in certain jurisdictions (e.g., Venezuela).

1.2.1. European Union

The European Commission (EC) issued a proposal for a regulation on markets in crypto-assets (MiCA). The legislative process on MiCA is ongoing and still subject to discussion in EU legislative bodies. The subsequent overview is therefore not final.

MiCA sets out a comprehensive regulatory framework for all crypto-assets not already covered under other European financial services legislation, including stablecoins. Its objective is to ensure legal certainty, allow innovation to take place, and to provide for appropriate levels of consumer protection and market integrity, while mitigating financial stability, monetary policy transmission and monetary sovereignty risks.

MiCA sets out two different sets of obligations for issuers, of stablecoins depending whether they issue stablecoins referencing to a basket of assets (asset-referenced tokens, or 'ARTs') or a single official currency (e-money tokens). Issuers of both stablecoins are subject to authorisation requirement in the EU and must prepare a crypto-asset white paper. For ARTs, MiCA sets out obligations concerning, governance, information to users (including on the management of the reserve), handling of complaints, prevention of conflicts of interest, and orderly wind-down. It also includes obligations regarding the investment of reserve assets, the custody of reserve assets and rights of holders. As for e-money tokens MiCA clarifies that e-money tokens are e-money so the requirements of the existing legal framework on e-money and payment services apply, unless otherwise specified in MiCA, that holders have a direct claim on the issuer at par value and that they need to be fully backed by the reserve of assets.

MiCA also includes criteria for defining "significant" stablecoins[11] which trigger additional requirements for issuers such as on remuneration and liquidity management policy, interoperability and higher own funds requirements. These criteria include the size of the customer base; the value of tokens issued; transactions value and volume; the size of the issuer's reserve assets; the significance of cross-border activities; and interconnectedness with the financial system.

The European Banking Authority (EBA) decides on the classification of stablecoins as significant on its own initiative or on a request by the issuer based on the above criteria and supervises together with the college of supervisors such significant stablecoins (in case of e-money tokens supervision is shared with national competent authorities).

Finally, MiCA regulates crypto-asset service providers, including wallet providers and operators of trading platforms and exchanges. They are also subject to an authorisation requirement and organisational, prudential and other rules as well as requirements specific for each service, modelled on existing rules on investment services relating to financial instruments.

MiCA provides for a phasing-in period of one and half years after the date of entry into force. However, provisions on e-money tokens and asset-referenced tokens may apply immediately upon its enactment. The legislative process is ongoing, so the date for entry into force is yet to be determined.

---

[11] See the MiCA proposal here.

1.2.2. Singapore

The Monetary Authority of Singapore ("MAS") issued a public consultation in December 2019, seeking views on the interactions between money, e-money, and cryptocurrencies, including stablecoins, and the appropriate regulatory treatment for cryptocurrencies, particularly stablecoins. The Payment Services Act 2019 ("PS Act") was introduced to regulate the range of payment services, including e-money issuance, fund transfer services, as well as the exchange and conversion of cryptocurrencies. While the PS Act established the definitions of e-money and cryptocurrencies, these definitions were being challenged by the emergence of stablecoins, which potentially exhibit a variety of characteristics across the generally understood categories of money, e-money, and cryptocurrency.

The consultation sought views on the defining characteristics of e-money and cryptocurrency, considered the potential ability of stablecoins to function as money, and discussed its relevance in the regulatory class of e-money or cryptocurrency. The differing regulatory priorities for e-money and cryptocurrency services have different implications for how stablecoins would be regulated if placed in either of these categories: e-money services are regulated for the safeguarding of customers' money; whereas cryptocurrency services are regulated for money laundering and terrorism financing risk, with a disclosure requirement to warn customers of the risk of loss. Other issues were also touched on, such as whether a global stablecoin should be regulated differently from other stablecoins and how the stabilization mechanism should be regulated.

Mixed feedback was received from the consultation, with different views hinging on whether a stablecoin was a single-currency or multi-currency stablecoin, whether there was a claim on the issuer of the stablecoin, etc. There were also varying views regarding whether stablecoins should be treated as a payment instrument or an investment product, depending on the assets backing the stablecoins.

MAS is continuing work on reviewing the appropriate regulatory treatment for stablecoins, such as the treatment under different legislation, taking into consideration its practical use and risks, and informed by ongoing work of the international SSBs.

1.2.3. United States

The US President's Working Group on Financial Markets (PWG) is working on the preparation of a report on stablecoins, which will discuss their potential benefits and risks, the current U.S. regulatory framework, and recommendations for addressing any regulatory gaps.

On July 16, 2021, the US Secretary of the Treasury Janet L. Yellen announced plans to reconvene the PWG, joined by the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation, to continue discussion of interagency work on stablecoins. The group will prepare a report on stablecoins, which will discuss their potential benefits and risks, the current U.S. regulatory framework, and recommendations for addressing any regulatory gaps. The work is motivated by the rapid growth of stablecoins, potential uses of stablecoins as a means of payment, and potential risks to end-users, the financial system, and national security. The PWG expects to issue the report in the coming months.

The current work by the PWG builds on a statement issued on 23 December 2020 on key regulatory and supervisory considerations for participants in stablecoin arrangements. The regulatory and supervisory considerations outlined in the December 2020 statement were for participants in significant so-called stablecoin arrangements that have a US nexus and are intended primarily for retail payments use.

In July 2020, the Office of the Comptroller of the Currency (OCC) issued an interpretive letter that stated that it is legally permissible for national banks to provide cryptocurrency custodianship services to its customers.[12] The OCC determined that providing such custody services, including holding and safekeeping the unique cryptographic keys associated with cryptocurrency, fell within the business of banking and could also be conducted in a fiduciary capacity.

In September 2020, the OCC issued an interpretive letter that stated that national banks may accept and hold as deposits cash reserves for issuers of stablecoins in reliance on banks' general authority to accept deposits.[13] The OCC specifically addressed stablecoins that are backed by a single fiat currency and fully redeemable on a one-to-one basis, and reiterated that any national bank accepting such deposits should understand all the applicable laws and regulations, especially with respect to AML/CFT and deposit insurance coverage. Additionally, the OCC recommended that national banks reach agreements with stablecoin issuers to be able to verify regularly that reserves are sufficient to satisfy redemption requests.

In January 2021, the OCC issued an interpretive letter addressing whether national banks may use "independent node verification networks" (INVNs) and stablecoins to engage in and facilitate bank permissible payment activities.[14] The OCC's letter recognizes the authority of banks to conduct permissible payment activities with new and evolving technologies. Any national bank that plans to use stablecoins and INVNs should understand and monitor the operational risks while ensuring compliance with existing federal regulation. The OCC is currently undergoing a review of these interpretive letters and may issue additional guidance.

1.2.4. United Kingdom

HM Treasury issued a public consultation[15] on crypto-assets and stablecoins on 7 January 2021.[16] The consultation document seeks views, in particular, on the classification of crypto-assets, including for stablecoins (identified as "stable tokens"); the objectives of prospective regulation (protecting financial stability and market integrity; delivering robust consumer protections; promoting competition, innovation and supporting UK competitiveness) and underlying regulatory principles (applying the principle of "same risk, same regulatory outcome" and the roles and responsibilities of the UK regulators; ensuring a proportionate approach focussed on the most urgent or acute risks and opportunities; ensuring that the approach is agile,

[12] "Authority of a National Bank to Provide Cryptocurrency Custody Services for Customers", Interpretive Letter, no 1170, July 2020.

[13] "OCC Chief Counsel's Interpretation on National Bank and Federal Savings Association Authority to Hold Stablecoin Reserves", Interpretive Letter, no 1172, September 2020.

[14] "Federally Chartered Banks and Thrifts May Participate in Independent Node Verification Networks and Use Stablecoins for Payment Activities ", Interpretive Letter, no 1174, January.

[15] Which ended on 21 March 2021.

[16] The consultation document was developed through the UK's Cryptoasset Taskforce and reflects advice from the Bank of England and the Financial Conduct Authority. It also includes input from the UK Payments Systems Regulator.

able to reflect international discussions and aligned to the future UK government approach to financial services and payments regulation).

The consultation represents the first phase of HM Treasury's consultative process on the UK legislative approach to crypto-assets and stablecoins. It proposes that stablecoins which could be reliably used for retail or wholesale payment transactions be subject to minimum requirements and protections as part of a UK authorisation regime under the responsibility of the Financial Conduct Authority. Algorithmic stablecoins would be excluded from this regime because they more closely resemble unbacked exchange tokens and may pose similar risks in relation to their ability to maintain stability of value, so may not be suitable for retail or wholesale payment transactions. Enhanced requirements and regulation by the Bank of England would be applied if systemic thresholds are met. To manage the risks where stablecoins are used as a means of payment, additional requirements would apply for issuers and service providers. These would include authorisation requirements; prudential requirements, including capital and liquidity requirements, accounting and audit requirements; requirements for the maintenance and management of a reserve of assets; orderly failure and insolvency requirements; safeguarding the token; systems, controls, risk management and governance; notification and reporting; record keeping requirements; conduct requirements; financial crime requirements; outsourcing requirements; operational resilience, service reliability and continuity requirements; and security requirements.

The consultation document notes that stablecoin arrangements that play a similar function to existing payments systems may be regulated by the UK Payment Systems Regulator, which regulates payment systems designated by HM Treasury. Where stablecoin arrangements reach systemic scale, they should be subject to existing systemic payments regulation. Stablecoin system operators, issuers and service providers that reach systemic scale would be subject to regulation by the Bank of England and enhanced requirements grounded in the Principles for Financial Market Infrastructures (PFMI). Existing criteria for systemic payment systems should be extended to stablecoin arrangements performing a retail or wholesale payment system function. Furthermore, a stablecoin arrangement with significant potential to become systemic would need to be covered by regulation as soon as it is launched. The Bank of England's approach to systemic stablecoin arrangements incorporates the expectation that systemic stablecoin arrangements will need to provide holders with a robust legal claim, ensure stability of value and enable users to redeem tokens at par into fiat. The document also acknowledges that other service providers in a stablecoin arrangement outside of the payment system, for example wallets, have the potential to pose systemic risks and consults on whether to extend the Bank of England's systemic regulatory perimeter to such entities. The consultation proposes an overall framework through legislation, with detailed requirements on firms to be set by the independent regulators.

Given the decentralised and cross-border nature of stablecoins, the UK government and authorities are also considering whether firms actively marketing to UK consumers should be required to have a UK establishment and be authorised in the UK.

In June 2021, the Bank of England issued a Discussion Paper on new forms of digital money[17], including systemic stablecoins. The paper elaborates on the proposal set out in HMT's consultation to bring systemic stablecoins within the Bank of England's regulatory remit. The paper states that stablecoins have the potential to offer both a new means of payment and a new way of storing wealth and that the regulatory framework needs to support both functions.

The Bank's Financial Policy Committee previously set out two expectations to inform the design of regulation for systemic stablecoins[18]. The first expectation addressed the financial stability risks associated with the payment functionality of stablecoins and stated that stablecoins should be regulated to standards equivalent to those applied to traditional payment chains. The second expectation relates to the use of stablecoins as money and stated that systemic stablecoins should meet standards equivalent to those provided by commercial bank money in relation to stability of value, robustness of legal claim and the ability to redeem at par in fiat. To meet these expectations, a regulatory framework would need to be clearly established before a stablecoin could safely operate in the UK.

The paper highlights four key features of the current banking regime that would need to be incorporated in the regulation of any stablecoin that is to be used as money: (i) a robust legal claim that allows for prompt redemption of the original amount deposited for fiat currency in normal times and in a stress; (ii) capital requirements to lower the risk of insolvency; (iii) liquidity requirements and support to ensure redemptions can be met and liquidity problems do not result in failure; (iv) a backstop to ensure depositors can access their funds and vital payment services are maintained (this could involve a combination of resolution arrangements and a guarantee scheme). The regulatory model for stablecoins could include different applications of these features – as long as it offers equivalent protections as those for commercial bank money. As part of this, the paper stresses that, unless a stablecoin is operating as a bank, the backing assets for stablecoins will need to cover the outstanding coin issuance at all times and robust reserve management will be a key requirement.

These features could be provided through a variety of regulatory models. For example, stablecoin issuers could be regulated like banks that back their liabilities with non-liquid assets like loans; liquid assets such as government bonds and certain corporate securities; and/or central bank reserves. Alternatively, they could be required to back their tokens with high-quality liquid assets (HQLA); with central bank liabilities equivalent to reserves; or with deposits placed at commercial banks acting as custodians. The Bank of England is also considering the need for the use of transitional arrangements in managing the uncertainty around the impact of new digital forms of money on monetary and financial stability risks.

The Bank will consult on any specific regulatory framework that would apply to stablecoins, informed by responses to the Discussion Paper, and pending the outcome of HMT's consultation on stablecoins.

---

17 *New forms of digital money*, June 2021, Bank of England

18 *Financial Stability Report, Financial Policy Committee Record and stress testing results*, December 2019, Bank of England

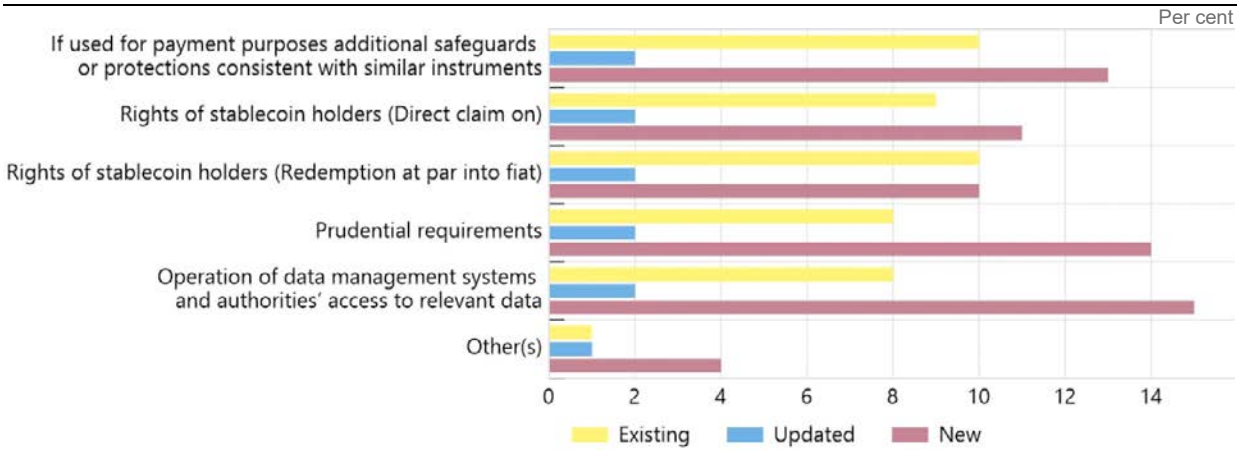
2. Progress in implementation at jurisdictional level

The results of the stock-take suggest that, overall, the implementation of the FSB high-level recommendations across jurisdictions is still at an early stage. As the stablecoin landscape is evolving rapidly and as regulatory and supervisory policies are being developed, differences in regulatory approaches and classifications could be increasing and give rise to a risk of regulatory arbitrage and harmful market fragmentation. Many authorities responding to the FSB stock-take noted that they see definitions of stablecoins as still evolving and that new terminology is emerging.

The stock-take shows that jurisdictions have taken or are considering different approaches towards implementing the high-level recommendations. Broadly speaking, certain jurisdictions are seeking to implement the recommendations through the adoption of new rules and regulations. For example, the EU is developing a comprehensive new regulatory framework for stablecoins and other crypto assets. Other jurisdictions, e.g., Canada and the Cayman Islands, continue to consider a regulatory response or are at the early stages of establishing a new regulatory regime. Other jurisdictions amended or plan to amend existing rules and regulations in such a way that these are applicable to stablecoins. And other jurisdictions have relied largely on existing regulatory, supervisory and oversight regimes to address the risks associated with stablecoins or with entities that are part of the stablecoin arrangement, including Switzerland, Thailand, Turkey, and the US.

Most jurisdictions reported that they are considering new rules addressing the use of stablecoins for payment purposes, the redemption rights of stablecoin holders, prudential requirements for the issuer and reserve, and data management (Graph 2). In Canada, a new retail payments oversight framework is being established to provide federal oversight of payment service providers; as this framework is developed, regulatory requirements, including standardized disclosure requirements, limits on asset concentration and liquidity requirements, will be established.

Implementation through existing, new or updated legal frameworks, standards, guidance and other regulatory, supervisory and oversight tools **Graph 2**



Source: FSB

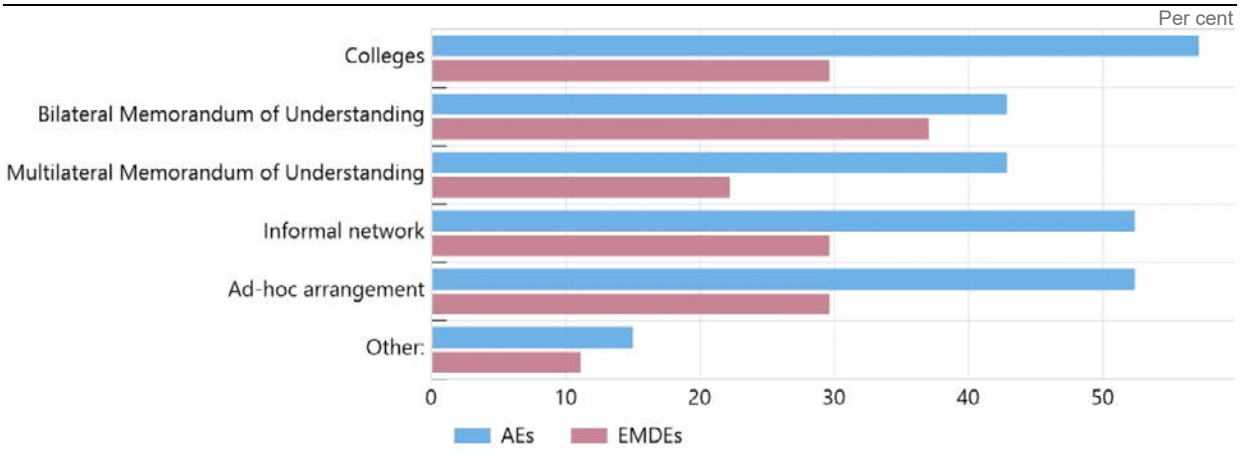
If a GSC is actively marketed to users in a jurisdiction (e.g., wallet, exchange/trading services accessible to consumers/investors/purchasers), all authorities responding to the FSB stock-take noted that the existing frameworks at jurisdictional level are generally applicable and actioned

based on the regulatory classification of the stablecoin (e.g., falling under securities laws, regulation for e-money, payment services, banking/deposit taking, insurance). This often means that jurisdictions' laws and regulations require entities performing those activities to register with national authorities and comply with applicable laws, notably related to AML/CFT, consumer/investor protection, market conduct, and data privacy. Some jurisdictions also impose incorporation or registration requirements as conditions for conducting stablecoin activities in their jurisdictions.

Most authorities indicated that they seek to enforce their domestic regulation and would not defer to any foreign regulatory, supervisory or enforcement regimes. A few authorities also noted that they are reviewing the possibility of adopting a deference regime, which could be based on an assessment of equivalence or similarity of the rules applicable in a foreign jurisdiction and the effectiveness of cross-border supervisory and oversight cooperation with that jurisdiction. A few authorities also stressed that capital and taxation controls in connection with activities carried out abroad would be applicable to activities involving GSCs.

The risk of regulatory arbitrage is seen as being important by a majority of jurisdictions across GSC activities, highlighting the importance of ensuring appropriate regulation, supervision and oversight, supported by appropriate international standards. To overcome challenges posed by cross-border operations of GSCs, all authorities responding to the FSB stock-take highlighted the importance of cross-border cooperation and coordination between authorities. Existing cooperation mechanisms can help support cooperation, possibly with some adaptations, if appropriate or needed, e.g., through Memoranda of Understanding (MoU). They already cover a minimum of data and information sharing for specific regulatory purposes (e.g., AML/CFT) or more generally regulatory, supervisory and oversight matters pertinent to functions and activities of a GSC. Most authorities stated that they can share relevant supervisory information and non-public data on GSC arrangements with other authorities, on a need-to-know basis and subject to the condition that adequate cross-border and cross-sectoral cooperation arrangements are established between the authorities. The supervisory colleges, informal networks or other ad hoc arrangements have been identified as among the possible mechanisms to support the timely exchange of sensitive information between authorities and support coordinated action (see Graph 3) and already may exist and apply, consistent with jurisdictions' laws and regulations.

Cooperation and coordination mechanisms with foreign regulatory, supervisory and oversight authorities, which exist or are being established **Graph 3**



Source: FSB

3. Progress in reviewing international standards

The FSB high-level recommendations are intended to complement and inform any potential updates to international sectoral standards and principles. Authorities should take into account such standards and principles relevant to the supervision and oversight of GSC arrangements, where they perform the same economic function as existing regulated activities covered by these standards. Standard-setting bodies – BCBS, FATF, CPMI, and IOSCO – are continuing to assess whether and how existing international standards may apply to stablecoin arrangements and, where appropriate, adjusting their standards in light of the FSB high-level recommendations. In addition to the overarching international standards that could apply to GSC arrangements, existing international standards and principles that focus on cross-border cooperation, coordination and information sharing may also be adapted to apply to GSC arrangements. These include, for example, the IOSCO Principles regarding Cross Border Supervisory Cooperation, the CPMI-IOSCO Principles for Financial Market Infrastructures, including the Responsibilities of Authorities and particularly Responsibility E, the FATF standards, in particular Recommendation 15, and the relevant principles applicable to cross-border banking supervision and crisis management of the BCBS and the FSB.

This section reports on ongoing reviews and progress achieved so far.

3.1. BCBS

BCBS work on crypto-assets comprises three broad elements:

1. monitoring of market and regulatory developments related to crypto-assets, and an assessment of the impact of such developments on the banking system;

2. the quantification of banks' exposures to crypto-assets through periodic data-collection exercises; and

3. the development of an internationally consistent prudential treatment for banks' exposures to crypto-assets.

In June 2021, the BCBS published a consultative document that sets out its proposed prudential treatment of banks' exposures to crypto-assets.[19] Under the proposal, in order to determine minimum risk-based capital requirements for credit and market risk, cryptoassets are screened on an ongoing basis and classified into two groups:

- **Group 1 cryptoassets** are those cryptoassets that meet a set of classification conditions. Group 1 cryptoassets will be subject to at least equivalent risk-based capital requirements based on the risk weights of underlying exposures as set out in the existing Basel capital framework.

- **Group 2 cryptoassets** are those cryptoassets that fail to meet any of the classification conditions. As a result, they pose additional and higher risks compared with Group 1 cryptoassets and consequently will be subject to a newly prescribed conservative capital treatment based on a 1250% risk weight.

The classification conditions relate to the nature of the cryptoasset, issue of legal certainty, the reliability of the design of the cryptoasset arrangement and the regulation and supervision of entities performing significant functions. Group 1 cryptoassets include tokenised traditional assets (Group 1a), and cryptoassets with effective stabilisation mechanisms (Group 1b). Stablecoins can only been included in Group 1b if they are redeemable for underlying traditional asset(s) (e.g., cash, bonds, commodities, equities) and the stabilisation mechanism is assessed to be effective.

Stablecoin arrangements may be designed in various ways. As such, the consultation document considers two stylised structures as illustrative examples and examines how capital rules would be applied in these cases. As the issues raised in the generic examples are likely to be relevant for many cryptoasset structures, the examples aim to serve as an indication of the Committee's current thinking for stablecoin arrangements.

In addition to the capital requirements for credit and market risk, the consultation provides additional guidance on the application of other aspects of the Basel Framework to cryptoassets, such as liquidity requirements, operational risk, the leverage ratio and large exposures. It also sets out various issues that should be considered by banks and supervisors as part of the supervisory review process and proposes new requirements for banks to disclose information regarding their cryptoasset exposures on a regular basis. The consultation and the current BCBS work do not address specific questions arising in cases where banks act as issuers of stablecoins.

Given the rapidly evolving nature of cryptoassets, the BCBS has noted that policy development for banks' exposures is likely to be an iterative process, involving more than one consultation. The BCBS has decided to proceed with the public consultation to enable further work to continue with the additional benefit of incorporating feedback from external stakeholders. The BCBS will continue to investigate the need for adjustments in order to adequately capture the cash flow risks arising from exposures to cryptoassets or any assets and liabilities payable in, denominated

[19] BCBS (2021), Consultative Document: Prudential treatment of cryptoasset exposures

in or linked to cryptoassets. The BCBS will also continue to coordinate with other international organisations that are developing their approaches to cryptoassets.

3.2. CPMI-IOSCO

Following the publication of the FSB high-level recommendations in October 2020, the CPMI and IOSCO embarked on further analysis on the application of PFMI to stablecoins with a view to making any revisions or providing further guidance to the PFMI, as needed, in light of the recommendations and following their review of their existing frameworks, including on cooperation, coordination and information sharing amongst authorities. The CPMI-IOSCO consultative report which has been published in October 2021[20] reflects the CPMI-IOSCO's continued analysis on the applicability of the PFMI to stablecoins. This includes specifically analysis of the transfer function. The transfer function of a stablecoin is comparable to the transfer function performed by other types of FMI. As a result, a stablecoin that performs this transfer function is considered an FMI for the purpose of applying the PFMI and, if determined by relevant authorities to be systemically important, it would be expected to observe all relevant principles in the PFMI.

The CPMI-IOSCO consultative report also provides considerations to assist relevant authorities in determining whether a stablecoin is systemically important, which include: (i) the size of the stablecoin; (ii) the nature and risk profile of the stablecoin's activity; (iii) interconnectedness and interdependencies of the stablecoin; and (iv) the substitutability of the stablecoin. Authorities may consider the potential growth and future state of a stablecoin in determining the systemic importance of a stablecoin that is under development.

Notwithstanding the fact that the transfer function of stablecoins is considered an FMI function for the purpose of applying the PFMI, the CPMI-IOSCO consultative report identifies certain novel features as compared with existing FMIs:

- **Settlement of transactions occurs in stablecoins rather than central bank money or commercial bank money,** which creates a possibility of introducing credit and/or liquidity risk. This arises as the safety of a stablecoin's money settlements will depend on the credit and liquidity risk stemming from the entity performing the issuance, stabilisation and redemption of the stablecoin, on the nature and sufficiency of the reserve assets used to support and stabilise the value of the outstanding stock of issued stablecoin and the relevant custody and investment arrangements. It also depends on the ability of the users to have access to these assets. Money settlements play a crucial role in an FMI's operation. The novelty and uniqueness of a stablecoin's approach to money settlements call for the more granular guidance.

- **Stablecoins typically perform multiple, interdependent functions** – notably issuance, redemption and stabilisation; transfer; and interaction with users). These interdependencies may complicate comprehensive risk management. This applies both where the stablecoin functions are conducted and/or governed by a single entity, as well as where each stablecoin function is performed by separate entities (possibly including

[20] https://www.bis.org/cpmi/publ/d198.pdf

non-FMI and/or unregulated entities). The PFMI provide standards for FMIs to comprehensively manage risks that arise in or are borne by the FMI, including risks resulting from interdependencies. The CPMI-IOSCO consultative report builds on these standards by providing guidance in the context of stablecoins' multiple interdependent functions. In particular, it clarifies that a systemically important stablecoin should regularly review the material risks that the FMI function bears from and poses to other stablecoin functions and associated entities which perform other stablecoin functions or on which the stablecoin relies for its transfer function.

- **Stablecoins may use distributed and/or automated technology protocols as well as decentralisation of operations and/or governance.** This consideration is not unique to stablecoins but stablecoins may be the first among FMIs to deploy these new technologies and models at scale. While the PFMI do not prescribe the use of a certain technology, new and innovative technologies may have an impact on how an FMI observes certain principles. For example, the use of distributed ledger technology (DLT) in the stablecoin's transfer function may create a misalignment between legal (settlement) finality and technical settlement. It may also facilitate different degrees of decentralisation, of both FMI operations and organisational structure, in contrast to the typically centralised nature of FMI functions in existing FMIs. The CPMI-IOSCO consultative report provides guidance on these features in order for stablecoins to observe all relevant principles in the PFMI. In light of these features, the CPMI-IOSCO consultative report provides clarity on how certain aspects of the PFMI could be observed by stablecoins. Specifically, the report proposes guidance on aspects related to governance (Principle 2), framework for the comprehensive management of risks (Principle 3), settlement finality (Principle 8) and money settlements (Principle 9).

The CPMI and IOSCO are considering further work on issues related to the PFMI application and implementation, regarding, e.g.: (i) the definition of stablecoins; (ii) systematically important payment systems (see above); (iii) specific features of stablecoins denominated in or pegged to a basket of fiat currencies (multicurrency stablecoins); (iv) interactions with non-FMI functions (e.g. those regarding issuance, redemption and stabilisation or user-interfaces) and non-FMI nonbank entities; (v) asset-backed stablecoins; (vi) the classification of an stablecoin as a payment system or securities settlement system; (vii) further clarifications regarding the PFMI "Responsibilities" of central banks, market regulators and other relevant authorities (including authorities not covered by the scope of the Responsibilities) and (viii) definitions (other than the definition of a stablecoin). Further, the CPMI and IOSCO will, as needed and appropriate, coordinate with other standard-setting bodies to address outstanding standards gaps. Apart from the work on the application of the PFMI to stablecoins, and as part of the broader work on enhancing cross-border payments, the CPMI has been analysing how well-designed and risk-managed global stablecoins could address existing frictions associated with cross-border payments.

3.3. IOSCO

In 2020, IOSCO reviewed the applicability of its Principles, Standards, Recommendations and Guidance (IOSCO Standards) to GSC initiatives and issued a public report on 23 March 2020

(the "IOSCO GSC Report").[21] The IOSCO GSC Report discusses the implications that GSC proposals could have for securities market regulators. It concludes that GSCs may – depending on their structure – present features that are typical of regulated securities or other regulated financial instruments or services.

To focus its analysis, the IOSCO GSC Report examines a hypothetical case study of the lifecycle a proposed stablecoin that could act as a global currency and potential financial infrastructure used for domestic and cross-border payments. In this example, a multi-currency, multi-asset reserve fund and intermediaries is used to seek a stable price vis-a-vis a basket of low volatility currencies. The report explores how existing IOSCO Principles and Standards could apply to global stablecoin proposals like the hypothetical case.

The IOSCO GSC Report finds that several IOSCO Standards could apply to the hypothetical stablecoin offering. These include (i) IOSCO's *Policy Recommendations for Money Market Funds* (2012); (ii) *Issues, Risks and Regulatory Considerations for Crypto-Asset Trading Platforms* (2020); (iii) the *Principles for the Regulation of Exchange Traded Funds* (2013); and (iv) the IOSCO work on market fragmentation including the *Cross Border Regulation Task Force Report* (2015) and the work of the Follow-Up Group on Cross-Border Regulation to address potential regulatory arbitrage as well as IOSCO work on cyber resilience and client assets.

The IOSCO GSC Report further concludes that its findings may equally apply to a wider set of stablecoin arrangements beyond the hypothetical example analysed in the report – although that determination would have to be made subject to a facts and circumstances assessment of the individual proposal at hand.

Since publication, IOSCO's Fintech Network has continued to monitor stablecoin market developments, applying its functional analysis to other possible GSC structures entering the market. From a securities markets regulatory perspective, compared to the multi-currency, multi-asset reserve-backed hypothetical stablecoin arrangement analysed in the IOSCO GSC Report, more recent stablecoin proposals appear less complex and more streamlined in their structure.

IOSCO has been conducting a 'lessons-learned' exercise on the use of supervisory colleges, to develop – where appropriate – a set of good practices on the use of these colleges as far as securities markets are concerned. As part of this exercise, IOSCO is considering what parts of financial markets could benefit from the use of supervisory colleges.

IOSCO and its Fintech Network have also established a "Decentralised Finance" (DeFi)[22] Working Group focused on understanding the current activity and structure of the global so-called DeFi market, its typologies, and existing and potential regulatory approaches and implications. As part of this initiative, IOSCO will be evaluating the role that stablecoins play in fuelling activity in the DeFi market, including speculative crypto-asset trading.

---

21 IOSCO (2020), *Global Stablecoin Initiatives*, March.

22 DeFi commonly refers to the provision of financial products, services, activities, and arrangements that use distributed ledger technology ("DLT") to digitalize and decentralize legacy ecosystems by eliminating the need for traditional financial intermediaries and centralized institutions. Currently, there is no generally accepted definition of "DeFi," or what makes a product, service, activity or organization "decentralized."

3.4. FATF

Since the release of its report to G20, the FATF has continued work on so-called stablecoins as part of its broader focus on virtual assets and VASPs. In July 2021, the FATF released its second 12-month review of its revised Standards on virtual assets and Virtual Asset Service Providers (VASPs).[23] This review looks at how jurisdictions and the private sector have implemented the revised Standards since the FATF's first 12-month review. It also looks at changes in the typologies, risks, and the market structure of the virtual assets sector.

The report finds that 58 out of 128 (45%) reporting jurisdictions advised that they have now implemented the revised FATF Standards. While this represents progress, these gaps in implementation mean that there is not yet a global regime to prevent the misuse of virtual assets and VASPs for money laundering and terrorist financing, including so-called stablecoins. The lack of regulation or the lack of enforcement of regulation in jurisdictions is allowing for jurisdictional arbitrage and the raising of ML/TF risks.

The report also includes market metrics on peer-to-peer transactions (i.e., virtual asset transfers that occur without a VASP), based on input from seven blockchain analytic companies. This work included one so-called stablecoin (Tether). The report finds that the market metrics work indicates that a potentially significant amount of virtual assets is transferred on a peer-to-peer basis. The share of illicit transactions also appears potentially higher for peer-to-peer transactions, in number and USD volume compared with transactions with VASPs, at least in terms of direct transactions. However, there were substantial differences in the data provided by the blockchain analytic companies. As a result, the size of the peer-to-peer sector and its associated ML/TF risk remains unclear. The report therefore does not find clear evidence of a shift towards peer-to-peer transactions at this time.

The FATF found there is not currently a need to amend the revised FATF Standards, except for technical amendments to apply the FATF's recent changes on proliferation financing to virtual assets and VASPs. In the future, if the market structure were to change in a way that significantly altered the ML/TF risk profile of virtual assets and VASPs, the FATF would consider whether amendments to the revised Standards would be warranted.

The second 12-month review also committed the FATF to revised Guidance on virtual assets and VASPs and the private sector in implementing the revised FATF Standards by November 2021. The FATF committed to provide updated Guidance in July 2020, as set out in its report to G20 and its first 12-month review report.[24] This project will provide updated Guidance to countries, VASPs and the broader private sector on the FATF Standards on virtual assets and VASPs in six main areas. The Guidance will (1) provide guidance on how the FATF Standards apply to so-called stablecoins (2) further clarify the definitions of virtual asset and VASP to make clear that these definitions are expansive (3) provide additional guidance on the risks and potential risk mitigants for peer-to-peer transactions, (4) provide updated guidance on the licensing and registration of VASPs, (5) provide additional guidance for the public and private

---

23 FATF (2021), *Second 12-Month Review of Revised FATF Standards - Virtual Assets and VASPs*, July.

24 FATF (2020), *12-Month Review of Revised FATF Standards - Virtual Assets and VASPs*, July.

sectors on the implementation of the 'travel rule' and (6) include Principles of Information-Sharing and Co-operation Amongst VASP Supervisors.

In terms of so-called stablecoins, the Guidance builds on the analysis included in the FATF's report to G20, where the FATF clarified that so-called stablecoins are subject to the FATF Standards either as virtual assets and traditional financial assets, key players such as central governance bodies of so-called stablecoins will, in general, be subject to the FATF Standards either as VASPs or financial institutions, and the ML/TF risks of so-called stablecoins should be analysed in an ongoing and forward-looking manner and be mitigated before launch. It provides specific guidance on the ML/TF risks relating to so-called stablecoins, how the FATF definitions of virtual assets and VASPs can apply to so-called stablecoins and entities involved in stablecoin arrangements, such as central governance bodies, the licensing and registration of VASPs relating to so-called stablecoins and the supervision of such VASPs. The Guidance also provides broader guidance on virtual assets in the five areas outlined above. While this guidance is not necessarily specific to so-called stablecoins, it will assist countries and VASPs in mitigating the ML/TF risks posed by so-called stablecoins.

After publication of this revised Guidance, the FATF will continue to focus on the effective implementation of its Standards on virtual assets and VASPs by its membership and its broader Global Network. The FATF's Virtual Assets Contact Group will report back to FATF on implementation by June 2022. The FATF will also continue to monitor the virtual asset and VASP sector for any material changes or developments that necessitate further revision or clarification of the FATF Standards considering the business and technological environment of virtual assets and so-called stablecoins.

4. Specific implementation issues

As jurisdictions are developing their policy frameworks and regulatory approaches to implement the FSB high-level recommendations, they identified several issues that may warrant further consideration. Addressing these issues could help jurisdictions as they are using the FSB high-level recommendations in developing their own domestic regulatory approaches. Consistent application of these recommendations by all relevant authorities in jurisdictions in which GSC arrangements are active may help to ensure comprehensive regulatory coverage and reduce the scope for regulatory arbitrage. Efforts by standard-setting bodies to review and, where appropriate, adjust their standards can further promote international consistency and reduce the risk of arbitrage or regulatory underlaps.

The emphasis is on addressing financial stability risks that GSC may give rise to, which is the focus of the FSB high-level recommendations. Comprehensive and effective supervisory, regulatory and oversight frameworks will also need to cover important issues such as anti-money laundering (AML), counter financing of terrorism (CFT), data privacy, cyber security consumer and investor protection and competition. These are covered by other international standards.

This section sets out some specific issues that authorities responding to the FSB stocktake find important as they consider the FSB high-level recommendations within their jurisdictions

4.1. FSB High-Level Recommendation 1

FSB high-level recommendation 1 provides that authorities should have and utilise the necessary powers and tools, and adequate resources, to comprehensively regulate, supervise and oversee a GSC arrangement and its associated functions and activities, and enforce relevant laws and regulations effectively.

Issues identified as important to consider when implementing this recommendation include the following:

- Which are the appropriate regulatory authority or authorities to regulate and supervise stablecoin arrangements?
- Do the existing regulatory perimeters of authorities need to be revised due to the involvement of multiple functions and multiple participants in governance, issuance, redemption, reserve management, stabilisation, transfer of coins and interaction with users?

4.2. FSB High-Level Recommendation 2

FSB high-level recommendation 2 provides that authorities should apply comprehensive regulatory, supervisory and oversight requirements and relevant international standards to GSC arrangements on a functional basis and proportionately to their risks.

Issues identified as important to consider when implementing this recommendation include the following:

- What entities (e.g., banks, other non-bank institutions) should be allowed to issue stablecoins and, if so, subject to what requirements?
- How should entities that may be involved in the transfer, exchange, or distribution of stablecoins be regulated?
- What prudential regime should the issuance of a stablecoin as means of payment and/or store of value that promises redemption at par into fiat at all times be subject to? For instance, a regime that is equivalent to that for banks, or an alternative regime that, for example, disallows any maturity transformation?
- Should any exceptions to redemption at par value permissible? If so under what circumstances and how should it be regulated? For instance, could a stablecoin arrangement appropriately be regulated in a manner that emulates the regulation of collective investment schemes, so as to adequately address the specific ‘run risks’ that may arise in case of market stress and any doubt that holders may no longer be able to redeem their stablecoins for their full value?
- Should stablecoin arrangements be regulated and supervised as systemic payment systems?

- How should any regulatory approach based on existing standards or principles, such as the CPMI-IOSCO Principles for Financial Market Infrastructures, be applied or adapted to address the specific payments-related risks of stablecoins?

4.3. FSB High-Level Recommendation 3

FSB high-level recommendation 3 provides that authorities should cooperate and coordinate with each other, both domestically and internationally, to foster efficient and effective communication and consultation in order to support each other in fulfilling their respective mandates and to ensure comprehensive regulation, supervision, and oversight of a GSC arrangement across borders and sectors.

Issues identified as important to consider when implementing this recommendation include the following:

- How should cooperation and coordination among the relevant sectoral regulatory authorities be established, including in evaluating the different functions and parties in stablecoin arrangements?

- What are ways authorities can identify entities that potentially constitute critical links in a payment chain? How can authorities ensure that they have access to relevant information to identify any emerging risks arising from the component activities of a stablecoin arrangement that are unbundled across multiple jurisdictions, with certain activities, including issuance/redemption/ stabilization, transfer, and the user-facing activities being undertaken by separate entities subject to different regulatory regimes and/or operating across different jurisdictions? For example, how can they have access to relevant information?

- How can authorities ensure that they have the ability to enforce regulatory requirements where component activities of a stablecoin arrangement are unbundled across multiple jurisdictions?

- Should authorities consider imposing local incorporation and data access requirements? What are possible alternatives to such requirements?

- How can regulatory approaches and responsibilities across different authorities be aligned so that to the extent that activities entail similar risks these are assessed in a comparable way and different regulators have similar powers to obtain information and to enforce regulatory requirements? How should they avoid the risk of harmful fragmentation arising from differing regulatory classifications and approaches to regulation?

- Should regulators identify a “lead supervisor” who has primary responsibility for coordinating supervisory and regulatory cooperation for a global stablecoin arrangement—and if so, how? What is an appropriate composition of a supervisor college or similar cooperation arrangement? How can they achieve the right balance of a trade-off between “inclusiveness and coordination cost”, and “agility and consensus”?

4.4. FSB High-Level Recommendation 4

FSB high-level recommendation 4 provides that authorities should ensure that GSC arrangements have in place a comprehensive governance framework with a clear allocation of accountability for the functions and activities within the GSC arrangement.

Issues identified as important to consider when implementing this recommendation include the following:

- What are ways to address potential conflicts of interest among different entities in different jurisdictions, including through GSC governance arrangements?
- What governance features should be required of GSC arrangements? How should fully permissionless ledgers or similar mechanisms and a decentralized issuance of stablecoins be treated? Are there any conditions under which such arrangements could provide the necessary degree of accountability?

4.5. FSB High-Level Recommendation 5

FSB high-level recommendation 5 provides that authorities should ensure that GSC arrangements have effective risk management frameworks in place especially with regard to reserve management, operational resilience, cyber security safeguards and AML/CFT measures, as well as 'fit and proper' requirements.

Issues identified as important to consider when implementing this recommendation include the following:

- What is the ability of authorities assess the effectiveness of risk management frameworks across a GSC arrangement?
- What are the types of requirements, including prudential and investor protection requirements, that should apply to (i) the issuance of stablecoins, including requirements for permissible reserve assets and for the issuer to ensure direct redemption of claims at all times; (ii) the transfer of stablecoins; (iii) the provision of custody and trust services for reserve assets, (iv) the operation of the underlying technology infrastructure; and (v) the storage of the private keys providing access to stablecoins (wallet) of stablecoins?
- What are the types of prudential and other requirements that should apply to regulated financial institutions, such as banks, that undertake the issuance of stablecoins in addition to other regulated activities, such as deposit taking and lending?

4.6. FSB High-Level Recommendation 6

FSB high-level recommendation 5 provides that authorities should ensure that GSC arrangements have in place robust systems for collecting, storing and safeguarding data.

The issues to consider in the implementation of this recommendation include the following:

- Can GSC arrangements conform to data privacy and security requirements while maintaining the ability to identify and address AML/CFT and other risks that may emerge across the entire GSC arrangement?

4.7. FSB High-Level Recommendation 7

FSB high-level recommendation 7 provides that authorities ensure that GSC arrangements have appropriate recovery and resolution plans.

Issues identified as important to consider when implementing this recommendation include the following:

- Should reserve assets be subject to segregation in insolvency or resolution if the issuer fails?
- Are existing resolution and insolvency regimes suitable to deal with the failure of the issuer of a GSC and provider of a critical activity related to a GSC?
- Should at least some stablecoin claims be protected by deposit insurance or similar protection schemes in case of failure of the issuer?

4.8. FSB High-Level Recommendation 8

FSB high-level recommendation 8 provides that authorities should ensure that GSC arrangements provide users and relevant stakeholders with comprehensive and transparent information necessary to understand the functioning of the GSC arrangement, including with respect to its stabilisation mechanism.

The issues to consider in the implementation of this recommendation include the following:

- How can authorities ensure that disclosures to users across jurisdictions are consistent and meet the requirements in the relevant jurisdictions where users are located?

4.9. FSB High-Level Recommendation 9

FSB high-level recommendation 9 provides that authorities should ensure that GSC arrangements provide legal clarity to users on the nature and enforceability of any redemption rights and the process for redemption, where applicable.

Issues identified as important to consider when implementing this recommendation include the following:

- Are there specific requirements should apply to the nature and enforceability of a GSC redemption claim in normal times and in a stress?
- Are there limits or exceptions to redemption at par value in fiat currency that would apply?

- What is the enforceability of a redemption claim and is it ensured for all GSC holders wherever they are located?
- Which regulatory authority should be responsible for assessing the redemption rights and the process of redemption underlying a GSC arrangement?

4.10. FSB High-Level Recommendation 10

FSB high-level recommendation 1010 provides that authorities should ensure that GSC arrangements meet all applicable regulatory, supervisory and oversight requirements of a particular jurisdiction before commencing any operations in that jurisdiction and adapt to new regulatory requirements as necessary.

Issues identified as important to consider when implementing this recommendation include the following:

- Should authorities specify the criteria they will use to assess the determination of a GSC and additional prudential requirements that may apply?
- What are the ways jurisdictions can assure compliance with all applicable regulatory, supervisory and oversight requirements in their jurisdictions?

5. Areas to consider for further international work

The work on fostering the soundness of GSCs is an integral part of the roadmap for enhancing cross-border payments endorsed by the G20 in October 2020, which the FSB has developed in coordination with relevant international organisations and SSBs.[25] The Roadmap calls for a review by the FSB, to be undertaken in consultation with other relevant SSBs and international organisations, of the FSB high-level recommendations.

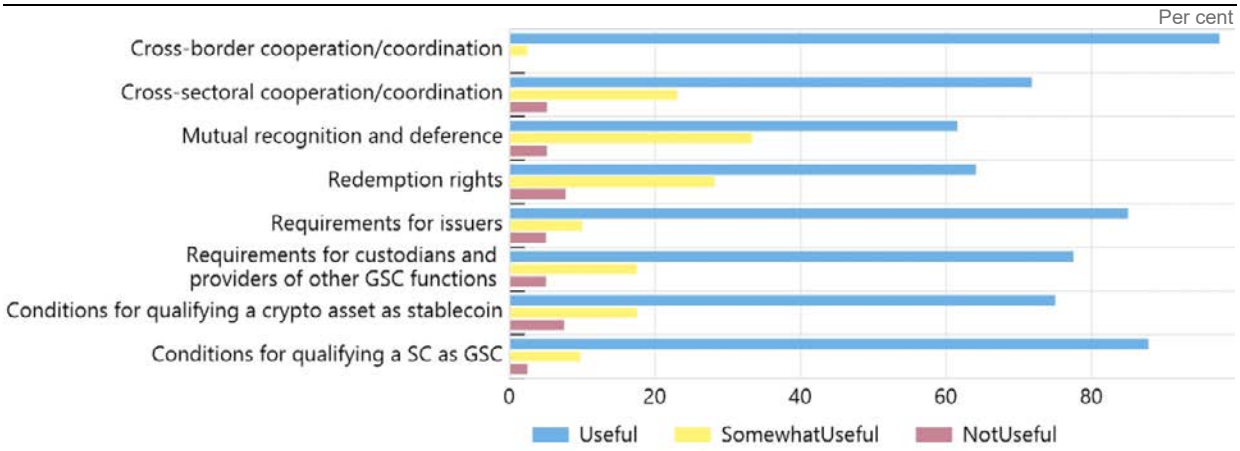
This progress report and underlying stock-takes, as well as ongoing and planned work, will inform that review. Amongst the areas of focus of ongoing and planned work on stablecoins, survey respondents identified cross-border cooperation and coordination as the highest priority followed by further work regarding when a so-called stablecoin may be appropriately identified as GSC. Beyond this, other areas where survey respondents consider further work at international level to be useful include requirements for issuers, custodians, and providers of other GSC functions (e.g., wallet providers), conditions for qualifying a crypto-asset as a stablecoin, the arrangements and conditions for cross-sectoral and cross-border cooperation and coordination, redemption rights, and mutual recognition and deference (Graph 4). Addressing these topics and issues on a broadly consistent basis across jurisdictions may help to support the effective implementation of the FSB high-level recommendations and to mitigate the risk of regulatory fragmentation and arbitrage, as well as help to inform the work that will be launched in the coming year on addressing any potential gaps in the FSB high-level recommendations.

[25] FSB (2020), *Enhancing Cross-border Payments: Stage 3 roadmap, October*. Fostering the soundness of global stablecoin arrangements is Building Block 18.

The FSB will continue to support the effective implementation of the FSB high-level recommendations and facilitate coordination among SSBs. Starting in January 2022, with an expected completion date of July 2023, the FSB will review, in consultation with other relevant SSBs and international organisations, the recommendations in the FSB report and how any gaps identified could be addressed by existing frameworks. The FSB will update its recommendations, if needed.

Specific topics or issues listed below where further international work may be useful

Graph 4



Source: FSB