

INTERNATIONAL LAW ASSOCIATION

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Introduction

The Committee (better known by its acronym, MOCOMILA) was able to meet only once (because of the pandemic) since the Conference of the ILA held virtually in Kyoto, Japan, in autumn 2020. The meeting was held virtually in June 2021 and hosted by the European Central Bank in Frankfurt, Germany. The meeting focused on topics that included: (a) the transition from LIBOR; (b) Wirecard; (c) Crypto-Assets in general and Central Bank Digital Currencies in particular; (d) the legal aspects of global warming litigation risk; and (e) recent developments in sovereign debt management. At that meeting, MOCOMILA voted unanimously to elect its new leadership: Professor Chiara Zilioli to move from Vice-Chair to Committee Chair and Professor Rosa Lastra to Vice-Chair. The Committee extends its deep thanks to former Chair Sir William Blair (who will remain as Honorary Chair) and former Vice-Chairs Thomas Baxter, Jr, and Antonio Sáinz de Vicuña y Barroso (who will remain as members).

MOCOMILA is proud to announce its forthcoming book, *International Monetary and Banking Law in the post COVID-19 World*, with contributions by its members. We expect the book to be published by the end of 2022.

The subjects of the foregoing meeting and other topics discussed by the Committee are reflected in the following sections of this report.

- I. Climate Change Litigation in Financial Cases (by Sir William Blair)
- II. Financial Stability-Related Measures Adopted in the European Union (EU) Amidst the Pandemic Crisis (2020-2021) (by Professor C Gortsos)
- III. Central Counterparty (CCP) Resilience, Recovery and Resolvability (by Dr. E Hüpkens)
- IV. Regulation of Crypto Assets: The EU Perspective (An Update of the MOCOMILA Kyoto Report, Chapter VII) (by Dr. K P Follak)
- V. Options for Regulation of Systemic Stablecoins in the UK (by Ms S Branch and Mr David Geen)
- IV. Focus on a Specific Case. Bitcoin as Legal Tender: What Did El Salvador Get Wrong in Going CBDC? (by Professor B Geva)

This report reflects the views of the individual members and not necessarily those of any institutions with which they are affiliated. The report has been shared with, and endorsed by, the whole Committee.

I. Climate Change Litigation in Financial Cases

Climate change in the financial field has been an area of study for MOCOMILA particularly in the field of international finance. The Paris Agreement and the Paris Rulebook finalised at Glasgow COP26 legally binds its signatories collectively to limit greenhouse gas emissions to keep the temperature rise “well below” 2.0 degrees Celsius this century with net zero by mid-century. Finance is recognised as a key area in the transition process both: (1) in providing the massive funding required; and (2) as regards institutional compliance. The chair of MOCOMILA, Chiara Zilioli, chaired the NGFS Legal Task Force on climate-related litigation, the outcome being published by the NGFS (Network for Greening the Financial System), *Climate-related litigation: Raising awareness about a growing source of risk*. For an account of climate change taxonomy in the EU, see the academic coordinator of MOCOMILA, Christos Gortsos, *The Taxonomy Regulation: More Important Than Just as an Element of the Capital Markets Union*, European Banking Institute Working Paper Series 2020 - no. 80.

An increasingly strong feature of the implementation of the legal aspects of climate change is litigation in national courts often brought by NGOs and most frequently brought against the Government. This is an uneven process, depending in part on the independence of the national court system and its willingness to engage with Government policy. Two recent cases notable in the monetary field concern bonds, one in the context of quantitative easing as applied to corporate bonds brought against a central bank, the other in the context of treasury bonds brought against a sovereign issuer.

In the first case, the NGO ClientEarth initiated proceedings against the Banque Nationale de Belgique (NBB), Belgium’s central bank, before the Tribunal de première instance francophone de Bruxelles, alleging that NBB’s purchases of corporate bonds under the Corporate Sector Purchase Programme (CSPP), as well as the European Central Bank’s decision on the implementation of the CSPP, violate the European Union treaties and fundamental rights, as – according to the plaintiff – neither the ECB nor the NBB took environmental requirements into account (*ClientEarth v NBB*). At the end of 2021, the Brussels Court of First Instance dismissed the action finding that ClientEarth’s claims were unfounded on the merits because it failed to establish that the asset purchases made by the NBB, insofar as they are based on an allegedly invalid decision of the ECB, would constitute a clear violation of directly applicable provisions of Belgian or EU law relating to the protection of the environment. In February 2022, ClientEarth appealed the decision, maintaining its request that the Belgian courts refer the question of the validity of the CSPP to the CJEU.

In the second case, *O'Donnell v Commonwealth of Australia* [2021] FCA 1223, the Plaintiff commenced a representative action against Australia on behalf of retail investors in sovereign bonds, namely exchange-traded Australian Government Bond units in the form of an exchange-traded Treasury Indexed Bond. The claim alleges that Australia has failed to disclose to investors in its disclosure documents material risks caused by climate change. In a preliminary hearing in October 2021, the Federal Court of Australia dismissed the claim so far as it related to duties of disclosure and alleged liability under the Public Governance, Performance and Accountability Act. However, the court held that a claim that Australia had engaged in conduct in relation to a financial service that was misleading or deceptive, or likely to mislead or deceive in contravention of the Securities and Investments Commission Act, should go forward to a full hearing. This is potentially a wide and novel avenue of potential liability.

The final results of these claims are not known at the time of writing. However, they are illustrative of the increasing campaign brought in national courts against climate change. Both these cases were brought against governmental bodies. It is likely that commercial financial institutions will increasingly be subject to similar claims. Such a claim against an oil major succeeded, though again at first instance and subject to an appeal, in the May 2021 decision of the District Court in The Hague in a claim brought by Milieudefensie (Friends of the Earth Netherlands) against Royal Dutch Shell. The court ruled that Shell must reduce the CO2 emissions of Shell group operations and energy-carrying products sold by 45% (net) by the end of 2030 compared to its emissions in 2019. It is believed that this is the first time a court has held a company legally responsible for its individual contribution to global greenhouse gas emissions. A highly significant feature of the decision as applied to the financial context is that the court considered that Shell had “a significant best-efforts obligation” along its entire value chain to take steps to remove or prevent the risk ensuing from the CO2 emissions generated by suppliers and end-users. Further, the court was unwilling to make any special allowances for Shell’s current obligations, such as those flowing from long-term oil and gas concessions. By the nature of their business, liability expressed in these terms could prove challenging if applied to financial institutions. More practically, members of the Net-Zero Banking Alliance, presently comprising over a hundred banks from 40 countries, are committed to aligning their lending and investment portfolios with net-zero emissions by 2050.

II. Financial Stability-Related Measures Adopted in the European Union (EU) Amidst the Pandemic Crisis (2020-2021)

A. Action by the European Central Bank (ECB) and the European Banking Authority (EBA)

1. Overview

The EU regulatory framework governing credit institutions’ micro- and macro-prudential regulation is based (mainly) on the Capital Requirements Regulation and Directive of the EU co-legislators, namely the European Parliament and the Council¹ (CRR and CRD IV, as in force²). On the basis of the consideration that making full use of the flexibility embedded in these legislative acts was essential to overcome the financing pressures faced by firms and households, the ECB, as a banking supervisory authority within the Single Supervisory Mechanism (SSM),³ adopted specific supervisory measures to ensure that credit institutions have the capacity to foster credit flows to households and businesses in a flexible way during (at least the initial phase of) the pandemic crisis, as briefly discussed below.

¹ OJ L 176, 27.6.2013, pp. 1-337 and 338-436, respectively.

² These two legislative acts were substantially amended in 2019 by Regulation (EU) 2019/876 (CRR II) and Directive (EU) 2019/878 (CRD V) of 7 June 2019 (OJ L 150, 7.6.2019, pp. 1-225 and 253-295, respectively), which apply since 2021.

³ This is governed by Council Regulation (EU) No 1024/2013 of 15 October 2013 “conferring specific tasks on the [ECB] concerning policies relating to the prudential supervision of credit institutions”, OJ L 287, 29.10.2013, pp. 63-89.

2. Macro-Prudential Measures – Buffers

An important element of flexibility in the application of the regulatory framework was the release of capital and liquidity buffers embedded in the micro- and macro-prudential banking regulatory framework. In this respect, in its announcement of 12 March,⁴ the ECB provided for the following: *First*, credit institutions were allowed temporarily to operate below the level of capital defined by the Pillar 2 Guidance (P2G), under the framework governing the supervisory review and evaluation process (SREP),⁵ the capital conservation buffer (CCB) and the liquidity coverage ratio (LCR).⁶ The consideration was that these temporary measures will be enhanced by the appropriate relaxation of the institution-specific countercyclical capital buffer (CCyB) by the national macro-prudential authorities.⁷ *Second*, they were also allowed to partially use capital instruments that do not qualify as Common Equity Tier 1 (CET1) capital, *i.e.*, Additional Tier 1 or Tier 2 instruments,⁸ in order to meet the (additional) Pillar 2 Requirements (P2R), under the SREP framework as well.⁹

These macro-prudential measures were complemented and reinforced by measures swiftly taken by several euro area macro-prudential authorities, which amounted to more than 20 billion euros of CET1 capital held by euro area credit institutions, facilitating the absorption of credit losses and supporting lending to the real sector of the economy.¹⁰ Noteworthy also is the critical importance of the capital and liquidity buffers built-up by credit institutions on the basis of the regulatory framework developed since the 2007-2009 Global Financial Crisis (GFC), which were available to allow them to effectively contribute to the short- and longer-term financing of economic activity and recovery in the EU. This is a manifestation of the “Basel III impact”, namely the fact that credit institutions benefited, in terms of both capital and liquidity adequacy, from having implemented the above buffers, which were introduced, at global level, by the 2010 “Basel III regulatory framework” of the Basel Committee on Banking Supervision (BCBS), as in force.¹¹

3. Micro-Prudential Measures

An equally important element of flexibility in the application of the regulatory framework was the interpretation and application of the micro-prudential regulatory requirements under the current exceptional circumstances. In this respect, and on the basis of its above-mentioned announcement of

⁴ See “ECB Banking Supervision provides temporary capital and operational relief in reaction to coronavirus”, 12 March 2020, available at: <https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200312~43351ac3ac.en.html>.

⁵ See Articles 97-101 CRD IV.

⁶ The CCB is governed by Article 129 CRD IV and the LCR by Article 412 CRR.

⁷ This buffer is governed by Article 130 CRD IV.

⁸ All these instruments are defined in Articles 28(1)-(4), 29(1)-(5) or 31(1), Article 52(1) and Article 63 CRR, respectively.

⁹ On the P2G and the P2R, see: <https://www.bankingsupervision.europa.eu/press/publications/newsletter/2016/html/nl161116.en.html>.

¹⁰ See ECB: “Macroprudential measures taken by national authorities since the outbreak of the coronavirus pandemic”, 26 May 2020, available at: <https://www.ecb.europa.eu/pub/financial-stability/macprudential-measures/html/index.en.html>.

¹¹ This consists of three Reports: “Basel III: A global regulatory framework for more resilient banks and banking systems” (June 2011, available at: <https://www.bis.org/publ/bcbs189.htm>); “Basel III: The Liquidity Coverage Ratio [LCR] and liquidity risk monitoring tools” (January 2013, available at: <https://www.bis.org/publ/bcbs238.htm>); and “Basel III: The net stable funding ratio [NSFR]” (October 2014, available at: <https://www.bis.org/publ/bcbs295.htm>).

12 March 2020, the ECB provided operational flexibility in the implementation of bank-specific supervisory measures as a response to the pandemic crisis, a flexibility further extended on 20 March.¹² This was followed by an announcement, of 16 April, to provide temporary relief for capital requirements against exposure to market risk.¹³

The stance of the EBA was complementary. On 12 March, it made a statement on actions to mitigate the impact of COVID-19 on the EU banking sector and then, on 25 and 31 March, it provided clarity to credit institutions and consumers on the application of the prudential framework in light of COVID-19 measures.¹⁴ Further guidance on the use of flexibility was provided on 22 April; in this statement, nevertheless, the EBA called for heightened attention to ensuing risks.¹⁵ *In addition*, on 12 March as well, the EBA decided to postpone the 2020 EU-wide stress test exercise to 2021.¹⁶ *Finally*, and in accordance with Article 16 of its founding Regulation,¹⁷ the EBA also issued a set of Guidelines: its Guidelines “on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis” (EBA/GL/2020/02)¹⁸ were adopted on 2 April; on 18 June, the EBA made use of the option to extend their application to 30 September;¹⁹ in the meantime, on 2 June, it had issued its Guidelines “to address gaps in reporting data and public information in the context of COVID-19” (EBA/GL/2020/07).²⁰

4. Temporary ban on the payment of dividends by credit institutions

The ECB also issued on 27 March 2020 a Recommendation “on dividend distributions during the COVID-19 pandemic (...) (ECB/2020/19)”.²¹ Pursuant to this act, which was addressed to significant supervised entities and significant supervised groups, the ECB recommended that, *first*, at least until 1 October 2020, no dividends (of any form) should be paid out by credit institutions and no irrevocable commitment to pay out dividends should be undertaken for the financial years 2019 and 2020; and *second*, credit institutions should refrain from share buy-backs aimed at remunerating shareholders.

¹² See “ECB Banking Supervision provides further flexibility to banks in reaction to coronavirus”, 20 March 2020 (available at: <https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200320~4cbbcf466.en.html>).

¹³ Available at: <https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200416~ecf270bca.en.html>.

¹⁴ Available at: <https://eba.europa.eu/eba-statement-actions-mitigate-impact-covid-19-eu-banking-sector>; <https://eba.europa.eu/eba-provides-clarity-banks-consumers-application-prudential-framework-light-covid-19-measures>; and <https://eba.europa.eu/eba-provides-additional-clarity-on-measures-mitigate-impact-covid-19-eu-banking-sector>.

¹⁵ Available at: <https://eba.europa.eu/eba-provides-further-guidance-use-flexibility-relation-covid-19-and-calls-heightened-attention-risks>.

¹⁶ Available at: https://eba.europa.eu/sites/default/documents/files/document_library/General%20Pages/Coronavirus/EBA%20Statement%20on%20Coronavirus.pdf.

¹⁷ OJ L 331, 15.12.2010, pp. 12-47.

¹⁸ Available at: <https://eba.europa.eu/eba-publishes-guidelines-treatment-public-and-private-moratoria-light-covid-19measures>.

¹⁹ Available at: <https://eba.europa.eu/eba-extends-deadline-application-its-guidelines-payment-moratoria-30-september>.

²⁰ Available at: <https://eba.europa.eu/eba-issues-guidelines-address-gaps-reporting-data-and-public-information-context-covid-19>.

²¹ OJ C 102I, 30.3.2020, pp. 1-2.

Based on the “comply or explain principle”, credit institutions which are unable to comply with the Recommendation, should immediately explain the underlying reasons to their joint supervisory team (JST). The Recommendation was also addressed to national competent and designated authorities regarding less significant supervised entities and less significant supervised groups, which were expected to apply it to these entities and groups, as deemed appropriate.

B. Earmarked Amendments to the CRR

On 24 June 2020, the co-legislators adopted Regulation (EU) 2020/873 amending the CRR “as regards adjustments in response to the COVID-19 pandemic”,²² with a view to maximising the capacity of credit institutions to support households and businesses to recover from the current crisis by providing credit and, to a certain extent, fully embed into the regulatory framework the above-mentioned initiatives by the ECB and the EBA. This applies from 27 June 2020 and contains provisions relating to several aspects, such as the amendment of the minimum capital requirements for non-performing loans (NPLs) under the so-called “prudential backstop”, in order to extend the preferential treatment of NPLs guaranteed by export credit agencies also to publicly guaranteed loans, subject to EU State aid rules, as well as the amendment of several arrangements relating to the introduction of the IFRS 9, allowing credit institutions to mitigate the potential negative impact of a likely increase in their provisions for expected credit losses.

C. The Contribution of the European Systemic Risk Board (ESRB)

Of significant importance was also the contribution of the ESRB in the field of financial macro-prudential oversight, to address pandemic-related systemic vulnerabilities. In this respect, on 6 and 27 May 2020, respectively, its General Board took two sets of actions in response to the coronavirus crisis, addressing the following major financial stability issues: *first*, financial system implications of fiscal measures taken to protect the real sector of the economy; *second*, market illiquidity and implications for asset managers and insurers; *third*, the impact of large-scale downgrades of corporate bonds on markets and entities across the financial system (as a by-product of increased volatility in capital markets and ‘flight to quality’ reactions); *fourth*, system-wide restraints on dividend payments, share buybacks and other pay-outs; and *fifth*, liquidity risks arising from margin calls.²³

D. Aspects Relating to Resolution Planning

1. Action by the Single Resolution Board (SRB)

In the context of monitoring the situation related to the pandemic crisis in the euro area and its impact on the financial system, the Chair of the SRB, Elke König, made three interventions in respect to the application of the resolution planning framework: on 1 April, a letter was addressed to banks under the SRB’s remit “on potential operational relief measures related to the COVID-19 outbreak”, coupled by a note titled: “An extraordinary challenge: SRB actions to support efforts to mitigate the economic impact of the COVID-19 outbreak”; one week later, on 8 April, the application of the framework governing the minimum requirement for own funds and eligible liabilities (MREL) was addressed in another note titled “COVID-19 crisis: the SRB’s approach to MREL targets”.²⁴ All three interventions were supportive of the measures taken by the ECB in order to help credit institutions in ensuring continuity of business and services for their customers. The SRB also presented its approach in view of the uncertainty and disruption caused to the economy by the crisis, setting out its remit on potential operational relief measures, its actions to support efforts to mitigate the economic impact of the crisis and its dealing with MREL targets. This approach was based on two complementary pillars: ‘preservation of financial stability’ and ‘flexibility in the application of the resolution framework’.

²² OJ L 204, 26.6.2020, pp. 4-17.

²³ Available at: <https://www.esrb.europa.eu/news/pr/date/2020/html/esrb.pr200514~bb1f96a327.en.html> and <https://www.esrb.europa.eu/news/pr/date/2020/html/esrb.pr200608~c9d71f035a.en.html>, respectively).

²⁴ Available, respectively, at: <https://srb.europa.eu/en/node/965>, <https://srb.europa.eu/en/node/966> and <https://srb.europa.eu/en/node/967>.

It thus became apparent that resolution authorities were determined not to compromise on these targets, which they consider to be essential in terms of financial stability. Concurrently, on 1 April 2020 as well, the SRB published its document “Expectations for Banks”,²⁵ which acted as a major catalyst for the acceleration of further action towards achieving resolvability in the Banking Union (the consultation on which had already started in 2019, well before the outbreak of the pandemic). Despite its legally non-binding character, this document is significant as a key reference for credit institutions to build and demonstrate, under the guidance of the SRB, the capabilities to become resolvable. The objectives and principles set out in this document tailored to the resolution strategy of each credit institution under the remit of the SRB and are subject to a gradual phase-in according to the general phase-in dates, and should be fully met, in principle, by end-2023, at the latest.

2. Action by the EBA

On 9 July 2020, the EBA published a statement on “resolution planning in light of the COVID-19 pandemic”.²⁶ The aim was to reiterate the importance of resolution planning in times of uncertainty to ensure that resolution stands as a credible option in times of stress, as well as to highlight the importance for resolution authorities (including both the SRB and national ones) to continue promoting institutions’ efforts to enhance their capabilities and increase their resolvability. In this respect, the EBA notes that resolution authorities should: *first*, take into account the impact of the pandemic on credit institutions and their business models when taking decisions on resolution plans and on the MREL; *second*, continue to promote credit institutions’ efforts to increase their resolvability by removing impediments thereto; and *third*, use and test resolution colleges as the main fora to exchange information and share decisions in these times of stress.

E. The Commission’s 2021 Legislative “Banking Package”

One of most important recent developments is the adoption, on 27 October 2021, by the Commission of its so-called 2021 legislative “banking package”,²⁷ which contains legislative proposals amending (predominantly) the CRR and the CRD IV. The aim of the proposed rules is to ensure that EU credit institutions become more resilient to potential future economic shocks, while contributing to the EU’s recovery from the pandemic crisis and the transition to climate neutrality. The key pillars of this package are the following:

The *first pillar* refers to the implementation into EU law of the BCBS’ Report of 7 December 2017 “Basel III: Finalising post-crisis reforms”²⁸ (also referred to as “Complement to Basel III”), considering the specific features of the EU banking system. This aims to ensure that “internal models” used by credit institutions to calculate their capital requirements do not underestimate risks, thereby ensuring that the capital required to cover those risks is sufficient, without resulting in significant increases in capital requirements. Compliance costs, in particular for smaller banks, are also further reduced without compromising on prudential standards.

The *second pillar*, on sustainability – contributing to the green transition, aims to strengthen the resilience of the banking system to environmental, social and governance (ESG) risks as part of the [Commission’s Sustainable Finance Strategy](#),²⁹ as set out in its Communication of 6 July 2021 on

²⁵ Available at: https://www.srb.europa.eu/system/files/media/document/efb_main_doc_final_web_0_0.pdf.

²⁶ Available at: <https://eba.europa.eu/eba-calls-resolution-authorities-consider-impact-covid-19-resolution-strategies-and-resolvability>.

²⁷ See at: https://ec.europa.eu/info/consultations/finance-2021-esas-review_en.

²⁸ Available at: <https://www.bis.org/bcbs/publ/d424.htm>.

²⁹ Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0390>.

“Strategy for Financing the Transition to a Sustainable Economy”.³⁰ Under the proposed rules, credit institutions will be required to systematically identify, disclose, and manage ESG risks as part of their risk management. Supervisory authorities will have to conduct regular climate stress testing and assess ESG risks as part of the SREP, while credit institutions will have to disclose the degree to which they are exposed to ESG risks. This is heavily influenced by the EBA Report of 26 June 2021 “On management and supervision of ESG risks for credit institutions and investment firms”.³¹

The objective of the *third pillar* is to strengthen prudential banking supervision in order to ensure sound management of EU credit institutions and better protect financial stability. In this respect and *inter alia*, the package: sets out stronger tools for supervisory authorities, by establishing a clear, robust and balanced “fit-and-proper” set of rules to assess whether senior staff have the requisite skills and knowledge for managing a credit institutions; equips supervisory authorities with better tools to oversee fintech groups, including credit institutions’ subsidiaries; and addresses – in a proportionate manner – the issue of the establishment of branches of third-country credit institutions in the EU by harmonising EU rules in this area, which will allow supervisory authorities to better manage risks related to these entities that have significantly increased their activity in the EU over recent years.

III. Central Counterparty (CCP) Resilience, Recovery and Resolvability

The COVID-19 pandemic not only tested our personal resilience and crisis preparedness, but also that of the financial system, and financial market infrastructures in particular. It was the first major test of the G20 reforms adopted after the global financial crisis of 2008.

The FSB report on the lessons learnt from the Covid-19 pandemic from a financial stability perspective stated that financial market infrastructures, and in particular central counterparties (CCPs), functioned well despite the very challenging operational conditions and heightened market activity in the early stages of the pandemic.³² CCPs themselves reported that their regular fire drills and business continuity planning had served them well in dealing with the pandemic.³³ While the COVID-19 event demonstrated the benefits that central clearing brings for global financial stability, it also served as a reminder of the growing systemic importance of CCPs, which is a result of policy action taken after the Global Financial Crisis when the G-20 leaders have called for all standardized over-the-counter (OTC) derivatives to be cleared through central counterparties (CCPs).³⁴

A. International Policy Development

To ensure the resilience, recovery and resolvability of CCPs, the FSB, the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO) worked together to develop international standards and guidance.

- CPMI-IOSCO set out standards on the resilience and recovery with its CPMI-IOSCO’s Principles for Financial Market Infrastructures (‘PFMI’) and further guidance on the

³⁰ COM/2021/390 final. This identifies four main areas (policy objectives, pillars) where additional actions are needed for the financial system to fully support the transition of the economy towards sustainability.

³¹ EBA/REP/2021/18, available at: <https://www.eba.europa.eu/eba-publishes-its-report-management-and-supervision-esg-risks-credit-institutions-and-investment>.

³² [Lessons Learnt from the COVID-19 Pandemic from a Financial Stability Perspective: Final report \(fsb.org\)](https://www.fsb.org/2020/11/lessons-learnt-from-the-covid-19-pandemic-from-a-financial-stability-perspective-final-report/).

³³ CCP12, “CCPs again demonstrate strong resilience in times of crisis”, 7 July 2020, [CCPs again demonstrate strong resilience in times of crisis.pdf \(ccp12.org\)](https://www.ccp12.org/ccps-again-demonstrate-strong-resilience-in-times-of-crisis.pdf).

³⁴ In September 2009, G20 Leaders agreed in Pittsburgh that: “All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest.”

implementation of the PFMI regarding governance, credit and liquidity stress testing, coverage, margin, and a CCP's contributions of its financial resources to losses, and recovery in times of stress.

- The FSB issued policies on the resolution of CCPs that build on the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions ('Key Attributes') and are set out in the FMI Annex to the Key Attributes, and its Guidance on Central Counterparty Resolution and Resolution Planning ('FSB Guidance') as well as the FSB [Guidance on Financial Resources to Support CCP Resolution and on the Treatment of CCP Equity in Resolution](#).³⁵

Taken together, standards and guidance reflect a clear recognition of how important strong CCP risk management, effective oversight of CCPs, and workable arrangements for the recovery and resolution of CCPs are for financial stability.

B. CCPs Deemed Systemically Important in More Than One Jurisdiction

To promote the effective implementation of resolution planning arrangements, the FSB publishes biannually a list of CCPs that are systemically important in more than one jurisdiction. The updating of this list is coordinated by CPMI and IOSCO on the basis of criteria set out in the [FSB's 2017 Guidance on CCP resolution and resolution planning](#). Criteria include for example the extent to which clearing participants are located in another jurisdiction, as well as the volume and value of cleared transactions that originate in another jurisdiction.

Once a CCP has been identified as systemically important in more than one jurisdiction, the authorities are expected to:

- develop resolution plans in accordance with the FSB guidance;
- establish a crisis management group that brings together the oversight and resolution authorities from the relevant jurisdictions;
- adopt a CCP-specific cooperation agreement that underpins cooperation and resolution planning and ensures that information can be exchanged amongst the relevant authorities; and
- launch a process of regular resolvability assessments.

Thirteen CCPs are currently qualified as "systemically important in more than one jurisdiction".³⁶ Authorities have established CMGs for almost all of them. They have also commenced resolution planning and initiated resolvability assessments.³⁷

C. Adequacy of Financial Resources for Recovery and Resolution

A critical element of resolvability is the availability of an adequate amount of financial resources to absorb losses in resolution. At present there are no international standards that set an expected specific minimum amount or prescribe the exact composition of financial resources for CCP recovery and resolution. While supporting an assessment by authorities of the adequacy of available resources the FSB [Guidance on financial resources to support resolution and on the treatment of CCP equity in resolution](#) does not specify neither the amount nor composition of financial resources for CCP resolution that should be available at all times.

³⁵ See [Crisis Management and Resolution - Financial Stability Board \(fsb.org\)](#). [Guidance on Central Counterparty Resolution and Resolution Planning - Financial Stability Board \(fsb.org\)](#) [Guidance on Financial Resources to Support CCP Resolution and on the Treatment of CCP Equity in Resolution - Financial Stability Board \(fsb.org\)](#).

³⁶ See FSB 2021 resolution report. [2021 Resolution Report: "Glass half-full or still half-empty?" - Financial Stability Board \(fsb.org\)](#).

³⁷ See footnote 36 above.

The consultation on the Guidance preceding its adoption gave rise to a lively debate about the incentives of CCP equity holders, management, clearing members and end users. Their [responses to the public consultation](#) reflected their different positions. For example, clearing participants have the incentive to reduce the likelihood that they will have to bear any losses and support therefore more CCP skin in the game being potentially mandated at different points in the default waterfall CCP management. CCP equity holders by contrast tend to be proponents of the status quo and want to let losses fall onto clearing members as required by the rulebook via the CCPs' funded and unfunded member contributions.

Respondents also raised concerns around the procyclical effects that the use of resolution tools and of the resources could have and the impact on financial stability. A question raised during the consultation was whether new types of financial resources, for example convertible instruments or bail-in bonds, could provide an additional source of CCP loss-absorbing capacity and reduce the risk of procyclicality. Related to that, the question was raised whether there is a need to distinguish for purposes of loss absorbency capacity between financial resources that are there to absorb losses and loss-absorbing resources that are 'operational resources' closely related to the critical clearing function and that can be avoided by members terminating business or closing-out contracts.

Most respondents to the FSB's consultation seemed to converge on the need for clearer policy and for more predictability as regards the distribution of losses, and the order of loss allocation in recovery and resolution, in both default and non-default loss scenarios.

D. Evidence Gathering and Analysis of Existing Financial Resources and Tools

In 2020, the Chairs of the FSB, CPMI and IOSCO, and of the FSB Resolution Steering Group [agreed to conduct further joint work on CCP financial resources through their respective committees](#). They agreed to gather evidence and conduct analysis in order to determine whether further policy work on the use, composition and amount of CCP financial resources and tools would be necessary. The results of an evidence gathering and analysis of existing financial resources and tools for CCP recovery and resolution are presented in a recently published report by the FSB.³⁸ The aim of the analysis was to: (i) assess whether existing financial resources and tools would absorb credit losses in default and non-default loss scenarios extreme enough to require the use of recovery and resolution tools;³⁹ and (ii) assess the financial-stability implications of the use of CCP recovery and resolution tools, cash calls and VMGH on the liquidity and solvency of clearing members in stressed market conditions.

While all the sampled CCPs would have had sufficient prefunded and recovery resources and tools to cover losses in the default loss scenarios, one of the non-default loss scenarios (a cyber theft scenario) would have resulted in the need to use resolution powers in the majority of CCPs. The analysis was however subject to a number of limitations and assumptions that suggest that the results are to be interpreted cautiously. For example, the analysis did not consider system-wide effects and economic circumstances that could cause the simultaneous default of the same clearing members defaulting in multiple CCPs, nor did it consider second and later order effects of the scenarios that might result in wider market stress, including potential increases in margin requirements, liquidity pressure and collateral scarcity.

A quantitative assessment of financial stability implications assessed the potential impact of the use of two CCP recovery and resolution tools, cash calls and VMGH, on the liquidity and solvency of clearing members, in stressed market conditions. It calculated the maximum amount of cash calls that bank clearing members could have been exposed to during the March 2020 'dash-for-cash' liquidity episode as well as VMGH applied to 100% of gains based on March 2020 payments. It then compared the liquidity and solvency impact from the use of these tools with the impact of pre-existing stress on bank clearing members. The quantitative analysis suggests that the use of cash calls and VMGH

³⁸ [Central Counterparty Financial Resources for Recovery and Resolution - Financial Stability Board \(fsb.org\)](#), March 2022.

³⁹ The scenarios were significantly more severe than the 'extreme but plausible' standard set out in the Principles for Financial Market Infrastructures (PFMI).

appear to have a notably less significant impact on bank clearing members' liquidity in comparison to their starting liquidity positions. Similarly, the impact of the use of cash calls and VMGH on bank clearing members' solvency was limited compared to their starting solvency position.

However, certain limitations apply to the chosen assessment methodology. First, given constraints stemming from data availability and confidentiality, the sample did not include non-bank clearing members and clients or those foreign bank clearing members for which data was not available. Second, the aggregation of results within a bucket masks individual variance within the sample. Third, the methodology did not model system-wide, aggregate effects, for example, the possibility that a clearing member may be subject to cash calls or VMGH from multiple CCPs.

A qualitative review of financial stability implications of the use of the recovery and resolution tools covered in the relevant CPMI-IOSCO and FSB guidance focused on potential consequences, in particular knock-on effects on the wider financial system, performance risk of the tools, and impact on market and public confidence in CCPs. This analysis concluded that the tools had varying effects across these factors. The analysis did not take into account whether or the extent to which the recovery and resolution tools covered in international standards are currently available for use by CCPs or resolution authorities under the applicable national regimes. The results are therefore to be interpreted cautiously. Whereas the analysis found only limited impacts on their liquidity and solvency from the use of cash calls and VMGH by an individual CCP at the level of individual bank clearing members, the potentially more complex system-wide effects of the use of recovery and resolution tools did not form part of the analysis.

E. The Way Forward

Informed by this evidence gathering and analysis, the FSB has decided to continue to review the sufficiency of the existing toolkit for CCP resolution, including, in particular, to address potential non-default loss scenarios. Further work will consider the need for, and costs and benefits (including the impact on incentives) of, potential alternative financial resources and tools for CCP resolution.

Possible alternative financial resources and tools for CCP resolution to be explored will include those that have been proposed in previous stakeholder consultations, including when the FSB developed the Guidance on financial resources to support CCP resolution and on the treatment of CCP equity in resolution in 2020. One such proposal consisted in requiring clearing members to subscribe to a bail-inable bond in a quantum equal to an average of each member's use of the CCP which, in the event of a CCP going into resolution would be written down to cover the losses, and partly converted into equity to restore the CCP equity.⁴⁰ Other proposals include the creation of a resolution fund for CCPs built up from contributions by CCPs and their clearing members.

IV. Regulation of Crypto Assets: The EU Perspective (An Update of the MOCOMILA Kyoto Report, Chapter VII)

A. Global Economic Context and Relevance to the EU Digital Finance Strategy

Crypto asset volumes still represent a relatively small market share of the global financial system with a total market capitalisation up to US \$2.5tn⁴¹ compared with US \$22tn for the S&P 500 alone and daily trading volumes up to US \$175bn. Nevertheless, crypto markets are very dynamic. This is why the FSB has warned of emerging risks from crypto-assets to global financial stability in its February 2022 report "Assessment of Risks to Financial Stability from Crypto-assets." At the same time, there is broad consensus among international regulators and practitioners that crypto assets as an emerging new asset class and related distributed ledger/blockchain technology (DLT) will have an immense

⁴⁰ See Statement by the Systemic Risk Council Addressed to the Chairman, Financial Stability Board, Bank for International Settlements on CCP Resolution, July 2020.

⁴¹ Overview: International Monetary Fund (IMF), Global Stability Report October 2021, chapter 2 p. 43, fig. 2.1.

potential for innovation and efficiency gains in the financial sector. Crypto assets and tokenization might revolutionise the financial markets in similar ways as has securitization in the past.

In the EU, crypto asset regulation is treated as an integral part of the Commission's digital finance strategy.⁴² In addition, the EU expects from the crypto asset sector a significant contribution to tackling the economic effects of the COVID-19 outbreak. At the same time, the Commission wants to address investor protection and market integrity concerns.

B. The EU Draft Regulatory Package on Crypto Assets

With growing peer-group pressure in the EU neighbourhood to take action, the Commission initiated formal proceedings with an "Inception Impact Assessment – Directive/regulation establishing a European framework for markets in crypto assets".⁴³ On 24 November 2021, the EU Council adopted its position in respect of a draft package on crypto asset regulation and mandated its Presidency to initiate formal "Trialogue" procedures with the Parliament and the Commission to finalize the legislative process.⁴⁴

Basically, this regulation can be characterized as a MiFID-type framework to cover crypto assets falling outside existing EU financial services regulation, as well as e-money tokens. Its aim is to:

- "establish uniform rules for crypto-asset service providers and issuers at EU level..."
- "establish specific rules for so-called 'stablecoins', including when these are e-money..."⁴⁵

It includes:

- an addendum to the "MiFID II" Directive 2014/65/EU clarifying that the existing definition of "financial instruments" as specified in Annex I sect. C includes "such instruments issued by means of distributed ledger technology";
- a proposal for a Regulation on Markets in Crypto-Assets ("MiCA" regulation) to cover crypto-assets falling outside existing EU financial services regulation, including "stablecoins" as well as e-money tokens;⁴⁶
- a proposal for a Regulation on a Pilot Regime for Market Infrastructures based on distributed ledger technology;⁴⁷ and
- an "EU passport" for crypto assets.

Due to the intention to fill regulatory gaps, the scope of the MiCA Regulation is limited by Art. 2, excluding assets qualifying as financial instruments under Art. 4(1) point (15) of the MiFID II Directive 2014/65/EU, electronic money as defined in Art. 2 point (2) of Directive 2009/110/EC, and certain other instruments. The ESMA's guiding principle in qualifying crypto assets as financial instruments is "substance over form"; they would have to be standardised, transferable and tradable in financial markets. Under MiFID II (Directive 2014/65/EU) Art 4(1)(15)/Annex I sect. C, these are typically transferable securities, money market instruments, units in collective investment undertakings and certain derivatives. In case crypto-assets qualify as financial instruments, the traditional set of specific regulatory frameworks is applied, in particular MiFID II.

⁴² European Commission, Communication on a Digital Finance Strategy for the EU, COM (2020) 591 final.

⁴³ EU Commission, Inception Impact Assessment – Directive/regulation establishing a European framework for markets in crypto assets (19 December 2019, Commission Ref. Ares (2019) 7834655).

⁴⁴ Council press release 886/21 of 24/11/2021.

⁴⁵ Draft MiCA Regulation, COM (2020) 593 final, Explanatory Memorandum, 10.

⁴⁶ COM (2020) 593 final

⁴⁷ COM (2020) 594 final.

As a result, Security Tokens would be normally captured by and integrated into the MiFID II Regulation rather than being regulated by the MiCA framework. Nevertheless, the proposed EU Regulation on a Pilot Regime for Market Infrastructures based on distributed ledger technology would also apply to crypto-assets that qualify as financial instruments/transferable securities under MiFID II, as specified and limited in Art. 3 of the draft regulation, and insofar to Security Tokens.

On the contrary, the following asset types will be governed by the MiCA Regulation:

- ‘asset-referenced tokens’: “a type of crypto-asset that purports to maintain a stable value by referring to the value of several fiat currencies that are legal tender, one or several commodities or one or several crypto-assets, or a combination of such assets” (Art. 3 para.1 (3) – this type has to be clearly distinguished from tokenized traditional securities classified as financial instruments. Commonly, this asset type is referred to as “stablecoins”);
- ‘electronic money tokens’: “a type of crypto asset the main purpose of which is to be used as a means of exchange and that purports to maintain a stable value by referring to the value of a fiat currency that is legal tender” (Art. 3 para.1 (4) – deemed electronic money for the purpose of Dir. 2009/110/EC and subject to additional stipulations under the Regulation);
- ‘utility tokens’: “a type of crypto-asset which is intended to provide digital access to a good or service, available on DLT, and is only accepted by the issuer of that token” (Art. 3 para.1 (5)).

C. Outlook

Developments in the crypto-assets industry will have an immense potential for innovation and efficiency gains in the financial sector. Nevertheless, significant risks and legal uncertainties are involved in both private and regulatory law. International financial centers will have to take up these challenges to position themselves as an attractive location through legal certainty, efficient regulation and good reputation in the field. Clear rules on crypto-assets in both private and supervisory law would be a cutting edge in the competition of financial centres in a future where “tokenisation” might revolutionise the financial markets in similar ways as has securitisation in the past. According to the general principles of EU legislation, private law such as classification as property, integration into bankruptcy and heritage estates, enforcement as collateral, seizure, trust etc. is not harmonised and hence subject to national legislation. In particular, Liechtenstein – an EEA Member State which will have to adopt the draft EU regulatory package - has successfully enabled the full deployment of crypto-assets and their underlying technology. Insofar, EU legislators will have to take care with a view to existing comprehensive national regulations to avoid any setback.

Basically, specific and comprehensive national and regional supra-national legislation may be an impediment to capital markets integration. This is why global agreements on uniform rules have been proposed, but it seems more than high-level principles similar to the FSB approach in respect of stablecoins cannot be expected in the near future. As long as this situation persists, sound and comprehensive national or EU legislation may offer satisfactory solutions in an environment allowing for choice of law and court.

V. Options for Regulation of Systemic Stablecoins in the UK

A. Introduction

The way in which people make payments has undergone rapid innovation over the past decade. Most notably, the use of physical banknotes for payments continues to decline: in the UK, transactional cash use fell from over 50% of payments in 2010 to only 17% in 2020.⁴⁸ Demand for convenience has fuelled public appetite for digital payments across the world, a trend which accelerated significantly during the Covid-19 pandemic.

Seizing the opportunity, FinTech firms and some large technology firms are developing alternatives to traditional forms of money. These include ‘stablecoins’: a form of cryptoassets that involve the

⁴⁸ Bank of England, Update on the future of Wholesale Cash Distribution in the UK, December 2021. UK payments statistics from [UK Finance](#).

issuance of digital tokens, often referred to as ‘coins’. Such firms are also engaged in the provision of exchanges, which are technology platforms providing networks across which transactions in the coins can take place. Stablecoins generally aim to reduce price volatility via some form of asset backing, designed to establish and maintain a stable value for the digital coins relative to fiat currencies.

A stablecoin payments ecosystem can consist of a number of different entities in a chain, each conducting separate activities, such as: the issuance of tokens or coins; redemption and stabilisation of the stablecoin; the exchange of the token; and the interaction with users.

This trend towards digital payments provides business opportunities, and potentially brings benefits for consumers, but also comes with risks. Those risks could become systemic, and threaten financial stability, if the use of stablecoins reached systemic scale⁴⁹ (a ‘systemic stablecoin’).

The Bank of England Act 1998,⁵⁰ gives the Bank of England (the Bank) a financial stability objective, to ‘protect and enhance the stability of the financial system of the United Kingdom’.⁵¹ The Bank has, therefore, been considering how it could regulate systemic stablecoins which operate in the UK.

In this part of the Report, we note that systemic stablecoins could present risks to UK financial stability. We highlight the expectations published by the Bank’s Financial Policy Committee (FPC) to ensure public confidence in systemic stablecoins. We then go on to consider the various regulatory models that could meet the FPC’s expectations. We consider the Bank’s current role in the regulation of systemic payment systems and the current UK regulatory proposals to extend those to systemic stablecoins. At the close, we summarise the international context.

B. The FPC’s Expectations

In December 2019, the FPC set out two expectations with a view to mitigating the risks posed by systemic stablecoins and, therefore, intended to ensure the same level of public confidence in stablecoins as in commercial bank money, both as a means of payment and as a store of value.⁵² These are important because, although they do not have the force of law, they act as a touchstone when evaluating the regulatory options for stablecoins.

- The FPC’s *first systemic stablecoin expectation* relates to the principles and expectations that payment regulation should aim to achieve. It states that payment chains that use systemic stablecoins should be regulated to standards equivalent to those applied to traditional payment chains. Firms in stablecoin-based systemic payment chains which are critical to the functioning of that payment chain should be regulated accordingly.
- The FPC’s *second systemic stablecoin expectation* relates to the use of stablecoins as ‘money’. It states that stablecoins that are used in systemic payment chains as money-like instruments should meet standards equivalent to those expected of commercial bank money in relation to stability of value, robustness of legal claim and the ability to redeem at par in fiat.

Requiring stablecoins to have protections equivalent to commercial bank money is intended to mitigate the financial-stability risks which could be associated with the introduction of systemic money-like products, which are potentially more prone to failure and/or which are likely to have a higher impact if they do fail than existing widely used money. It is important for financial stability that the potential

⁴⁹ The assessment as to whether a stablecoin was likely to, or had, become systemic would be undertaken by HMT on the recommendation of the Bank, based on criteria including the value and volume of transactions processed, the nature of the transactions and how substitutable they are, pursuant to the Banking Act 2009, Section 185.

⁵⁰ Bank of England Act 1998, [Section 2A\(1\)](#).

⁵¹ The Bank also has a monetary policy objective: to maintain price stability and, subject to that, to support the government’s economic policy (Bank of England Act 1998, Section 11).

⁵² [December 2019 Financial Stability Report](#).

use of stablecoins in systemic payment chains does not reintroduce the run risk and potential for widespread loss of confidence stemming from loss to customers that modern bank regulations, deposit insurance, and resolution are designed to address.

‘Crypto wallets’ could also pose risks to coinholders. Unlike commercial banks, stablecoin arrangements split the issuance function (performed by the stablecoin issuers) from the interaction with the customer (performed by the wallet providers). The roles of crypto wallets are still evolving. The risks that crypto wallets pose may differ as a result, and the regulatory framework will need to adapt accordingly.

C. Potential Regulatory Models for Stablecoins to Meet the FPC Expectations

The Bank’s existing payments regime alone will not be sufficient to ensure the safety of a new form of digital money. In terms of a more tailored regulatory regime for systemic stablecoins, a number of different models could potentially meet the FPC’s expectations set out above. This is under active consideration by the Bank at the moment, and no decision has been made on the appropriate model. The details of the Bank’s regime do not need to be finalised until next year, when we plan to consult on a tailored regulatory regime for systemic stablecoins.

In this section we will briefly describe various potential tailored regulatory models for systemic stablecoins and its strengths and challenges:

- **Bank model:** It would be possible to regulate a systemic stablecoin within the existing banking regime, supported by the necessary payments regulation. All elements of the flexible and risk-sensitive bank framework that protects depositors would apply. However, the banking regime is focused on the risks of the mismatch between short-term deposits and longer-term loans – known as maturity transformation – and so may not be the best fit for firms, such as systemic stablecoin issuers, which do not lend and have a different operating model to banks.

There may, therefore, be a case for offering an alternative tailored regulatory model, restricting the assets that systemic stablecoin issuers can use to back their liabilities. The following regulatory models set out these variations in backing assets.

- **HQLA model:** This model would restrict systemic stablecoins to holding only high-quality liquid assets (HQLA). Doing so could allow a regulatory approach that is more aligned to the risks posed by systemic stablecoins, and thereby offer a more proportionate way for systemic stablecoins to meet the FPC expectations than having to be authorised, and subsequently regulated, as banks. The HQLA in scope could be either highly liquid bonds or central bank reserves.
- **Central bank liability (CBL) reserve backing model:** In this tailored regulatory model, the systemic stablecoin’s liabilities would be backed by central bank reserves. Reserves are a claim on the central bank and so, along with banknotes, are the most liquid, risk-free asset in the economy. The model has some similarities with the Scottish and Northern Ireland banknotes regime,⁵³ which allows certain banks in Scotland and Northern Ireland to issue their own banknotes, as long as the issuing banks hold backing assets against these notes at all times.

The HQLA and CBL models are both variants of the bank model.

A different type of tailored regulatory model could be considered in which systemic stablecoins would be fully backed with deposits placed with commercial banks.

- **Deposit-backed model:** This would entail liabilities that are backed by commercial bank deposits. The commercial banks would safeguard these deposits by holding them in a trust on behalf of the systemic stablecoin customers in their reserves account or holding other highly

⁵³ [Scottish and Northern Ireland banknotes](#).

liquid assets. This would be similar to the backing model that is primarily used by e-money firms in the UK and EU. Indeed, some stablecoin issuers currently operate as e-money institutions. The current e-money regime⁵⁴ (or a comparable regime applied to systemic stablecoins) does not meet the FPC's expectations for systemic stablecoins and would need significant enhancements if it were to be used. HMT envisage that certain non-systemic stablecoins will be regulated as e-money by the FCA.

It will also be important to consider several other potential implications of evolving different regimes for non-systemic versus systemic stablecoins, such as the need for minimum standards across all stablecoins used for payments, impacts on competition and innovation, and the need to manage any so-called 'cliff-edge' effects between future regimes for non-systemic and systemic stablecoins.

There will also be a need to regulate appropriately all other material participants which could augment and/or introduce new risks to financial stability in the chain.

D. The Current Regulatory Framework for Systemic Payments Systems

As part of its financial-stability objective, the Bank has statutory responsibility for the oversight of the operators of systemically important inter-bank and non-bank payment systems under Part 5 of the Banking Act 2009 (BA09).⁵⁵ Responsibility for the initial, formal recognition of a payment system as systemically important lies with HMT.⁵⁶

A payment system is defined in BA09 as "arrangements designed to facilitate or control the transfer of money"⁵⁷ including credit but excluding the physical movement of cash".

The Bank has a broad set of powers under BA09 Part 5 with respect to systemic payment systems. These powers could be applied to systemic stablecoin arrangements once certain changes under HMT's proposed stablecoin regulatory framework are in place. Refining the existing regulatory regime as outlined in the BA09 Part 5 would enable the Bank to:⁵⁸

- Issue principles and binding codes of practice.⁵⁹ The codes of practice could be used to consider requirements on minimum capital, restrict backing assets and place limits on stablecoin issuance, amongst other things;
- Require an operator of a recognised payment system to establish or change system rules, to notify the Bank of changes to the rules and to make changes only with the approval of the Bank.⁶⁰
- Give directions to the operator of a recognised payment system.⁶¹ Such a direction may —

⁵⁴ Electronic money, or "e-money", is an electronic payment product. The concept derives from an EU Directive, the Second Electronic Money Directive (Directive 2009/110/EC), implemented in domestic legislation by the Electronic Money Regulations 2011 (S.I. 2011/99) ("EMR 2011").

⁵⁵ As amended by The Digital Economy Act 2017 with respect to non-bank payment systems.

⁵⁶ In accordance with s.184 BA09.

⁵⁷ It is worth noting that "money" is not as yet defined in BA09, and so is to be understood in accordance with its ordinary meaning.

⁵⁸ E-money regulations already include requirements for coins to be backed by highly liquid assets and to be redeemable at par. HMT is preparing a dual regulation regime in which aspects of the e-money regulations will be amended to allow the Bank to apply rules in its areas of competence.

⁵⁹ Sections 188 and 189.

⁶⁰ Section 190.

⁶¹ Section 191.

- (i) require or prohibit the taking of specified action in the operation of the system or the provision of services to the system;
 - (ii) set standards to be met in the operation of the system or the provision of services to the system.
- Take enforcement action against operators of recognised payment systems via inspections⁶² or the appointment of an independent expert to produce a report.⁶³

In addition, it is notable that BA09 already provides for the application of provisions of Part 5 to certain service providers in relation to a recognised payment system.⁶⁴

E. Changes to Capture Systemic Stablecoins

HMT are progressing legislation that would allow the Bank to bring systemic stablecoins (issuers, payment systems and crypto wallets) into the BA09 regulatory regime. The legislative package is due to be laid before Parliament in Q2 2022 through the Financial Services Bill 2022.

As the Bank set out in its Discussion Paper in 2021, ‘New forms of digital money’,⁶⁵ an important protection for commercial bank money is the backstop, consisting of the resolution regime and deposit guarantee scheme, which ensures that depositors are compensated if a bank fails. However, this stage of HMT’s planned legislation will not include a resolution regime or a deposit guarantee scheme for non-bank stablecoins. Systemic stablecoins that fail could instead be subject to the Financial Market Infrastructure Special Administration Regime, a modified insolvency regime.

The policy position behind the proposed legislative changes is informed by previous consultations, one on the UK payments landscape as a whole and one more specifically on stablecoins:

- HMT led a Payments Landscape Review in 2020. Its initial Call for Evidence in 2020⁶⁶ set out the Government’s aims for payments networks in the UK and asked questions about the opportunities, gaps and risks to be addressed in order to ensure that the UK remains at the cutting edge of payments technology. HMT published its response in October 2021.⁶⁷ This response references the UK payments landscape more broadly, but, in relation to stablecoins, it recognises⁶⁸ that appropriately regulated stablecoins “could pave the way for faster and cheaper payments, making it easier for people to pay for things or store their money.” In relation to regulation, it notes that, where possible, HMT will seek “to ensure consistency, in the spirit of ‘same risk, same regulatory outcome’, between regulation applied to stablecoins and comparable payments activities.”
- In January 2021, HMT published its consultation and call for evidence regarding the UK regulatory approach to cryptoassets and stablecoins.⁶⁹ The consultation closed on 21 March

⁶² Section 193.

⁶³ Section 194.

⁶⁴ Section 206A defines a service provider to a recognised payment system as, broadly, a person that provides services forming part of the arrangements constituting the system, and that has been specified as such by HMT.

⁶⁵ [New forms of digital money](#) (published on 7 June 2021).

⁶⁶ [Payments Landscape Review: Call for Evidence](#).

⁶⁷ [Payments Landscape Review: Response to the Call for Evidence](#).

⁶⁸ Paragraph 2.41.

⁶⁹ [UK regulatory approach to cryptoassets and stablecoins: consultation and call for evidence](#).

2021, and HMT is still considering the feedback.

F. International Context

Of course, developments in the UK do not occur in a vacuum. There has been consideration on the international level of the financial stability risks posed by stablecoins, particularly (in this context) so-called ‘global stablecoins’.

As the FSB noted in its recent paper, ‘Assessment of Risks to Financial Stability from Crypto-assets’,⁷⁰ international work on standards and recommendations for regulatory frameworks for stablecoins is ongoing. However, it also noted that there is a risk that a stablecoin could launch and scale rapidly before sufficiently comprehensive and tailored regulatory frameworks are in place.

The Bank’s existing approach to the regulation of systemic payment system operators is based on the CPMI-IOSCO Principles for Financial Market Infrastructure (PFMIs)⁷¹. The Bank’s proposed approach to regulating systemic stablecoins is consistent with internationally agreed principles. The CPMI-IOSCO consultative report (October 2021)⁷² proposed guidance on the application of the PFMIs to systemic stablecoin arrangements, including the entities integral to such arrangements.

The Bank will continue to contribute significantly to, and be informed by, this international work.

VI. Focus on a Specific Case. Bitcoin as Legal Tender: What Did El Salvador Get Wrong?

Sincere and serious experimentation of central banks throughout the globe in introducing a CBDC has gained a thoughtful and constructive discussion.⁷³ Against this, the widely shared negative comments on the specific El Salvador CBDC project stand out. Many of them are premised on a misunderstanding as to its salient features. At the same time the project truly merits a ‘fail’ grade. This is a unique case, and this part of the Report is designed to analyse it in depth and critically examine the essence of the project to explore its real deficiencies.⁷⁴

El Salvador President Nayib Bukele announced on June 5, 2021, that El Salvador would be adopting bitcoin as an official currency, running in parallel with the U.S. dollar, the latter being the country’s currency since 2001.⁷⁵ The [Bitcoin Law](#) passed 62–19, with three abstentions, just after midnight local time, early June 9. Nobody had seen the law except the president and perhaps the minister of the economy, Maria Luisa Hayem, before it was proposed at 8pm on June 8. Parliament discussed it for a few hours, and it was rammed through with Bukele’s [massive parliamentary majority](#). It was

⁷⁰ Published 26 February 2022, [Assessment of Risks to Financial Stability from Crypto-assets - Financial Stability Board \(fsb.org\)](#).

⁷¹ <https://www.bis.org/cpmi/publ/d101.htm>.

⁷² <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD685.pdf>.

⁷³ See e.g. 5th EBI Academic Debate 18 January 2022 Online (via Webex) focusing on “The ECB and the digital Euro – old wine in a new bottle?”, online: <https://ebi-europa.eu/event/5th-ebi-academic-debate/>, visited February 23, 2022.

⁷⁴ To a large extent, unless otherwise indicated, information on the topic is drawn from two articles by David Gerard, published in Foreign Policy: “El Salvador’s Bitcoin Law Is a Farce: The system doesn’t work, the currency crashed, and the public hates it,” 17 September 2021, online: <https://foreignpolicy.com/2021/09/17/el-salvador-bitcoin-law-farce/>; and “El Salvador Is Printing Money With Bitcoin: Nayib Bukele doesn’t want to ditch dollars. He just wants his own” 15 June 2021, online: <https://foreignpolicy.com/2021/06/15/el-salvador-bitcoin-official-currency-printing-money/> (both visited on February 23, 2022).

⁷⁵ For El Salvador’s transition to official dollarization see Andrew Swiston, *Official Dollarization as a Monetary Regime: Its Effects on El Salvador* (WP/11/129, Prepared by IMF Working Paper Western Hemisphere Department, June 2011).

accordingly reported that on September 7, 2021, bitcoin became legal tender in El Salvador, alongside the dollar. It was thus reported that El Salvador became the first country to use Bitcoin as legal tender.

It was reported that according to the Bitcoin law, Bitcoin would be legal tender⁷⁶ for all debts, including tax. Merchants *must* accept bitcoin for goods and services, unless they are technologically unable to (which is of course a loophole). For its part, any provision of a previous law that would regulate bitcoin was repealed.

According to the *Economist*,⁷⁷ a week before launching, those who had put plans in place to use bitcoin were the exception, rather than the norm. Three-quarters of Salvadorans surveyed in July were sceptical of the plan to adopt bitcoin. Two-thirds were not willing to be paid in it and just under half knew nothing about it. Both the World Bank and the IMF have warned against adoption, citing the potential impact on macroeconomic stability and bitcoin's environmental costs.

It was predicted that the experiment would be disastrous and there is a widely shared consensus that such has been the case. The decision led to large-scale protests over fears it would bring instability and inflation to the impoverished Latin American country. The BBC reported on January 26, 2022, that the IMF has urged El Salvador to reverse its decision to make Bitcoin legal tender.⁷⁸ The chance is that for his part, President Bukele will remain undeterred. In November 2021 he announced plans to build a Bitcoin city at the base of a volcano in El Salvador, with the cryptocurrency used to fund the project. The city will be circular to represent the shape of a large coin and will be built in the south-eastern region of La Unión. The site would take advantage of the Conchagua volcano's geothermal energy to power Bitcoin mining.⁷⁹

To a large extent the problem was with the implementation. Indeed, to entice customers, the government released a new digital wallet app, giving away \$30 in Bitcoin to every citizen. More than 200 new cash machines were installed, and 50 staffed kiosks were constructed around the country. However, the corporation operating the network, Chivo SA de CV, was not put together [until August 24](#), two weeks before launch. As well, no educational campaign took place. El Salvadoran domestic economy runs on physical cash; 70 percent of the adult population doesn't even have a bank account. Only [45 percent of Salvadorans have internet access](#), and around 10 percent live in rural areas. From this perspective a major flaw was the haste in which the scheme was introduced with no pilots, education, and adequate infrastructure.

There are however deeper structural flaws. It is tempting to start from the fact that Bitcoin has been known to be volatile so it is not surprising that its adoption as legal tender would raise eyebrows, to say the least. However, the media reporting was inaccurate and misleading. The law did not mandate the use of Bitcoin as legal tender; rather it created and mandated the use of the Chivo - Salvadoran slang for "cool" - a bitcoin-based cryptocurrency officially traded at par with the US dollar.

Generally speaking, a digital coin may be either 'self-anchored' (having its own unit of account) or a 'claim-check' ('stablecoin,' being a claim to a specified amount of a commodity or fiat currency. While Bitcoin is 'self-anchored', the Chivo is a stablecoin. From this perspective there is nothing wrong with the scheme.

Moreover, a quarter of Salvadoran citizens live in the United States, and send money home; remittances were [over \\$5.6 billion](#) in 2019, on the level of El Salvador's total export income. After fees, these dollars go to the recipients. For its part, the Chivo app is designed to be available

⁷⁶ See e.g., Ben Margulis, "Bitcoin becomes legal tender in El Salvador", *Central Banking*, 07 September 2022, online: <https://www.centralbanking.com/central-banks/currency/digital-currencies/7873556/bitcoin-becomes-legal-tender-in-el-salvador>, visited February 23, 2022.

⁷⁷ The Economist September 4th 2021, at 59.

⁷⁸ Online: <https://www.bbc.com/news/world-latin-america-60135552> (visited on February 23, 2022).

⁷⁹ Online: <https://www.bbc.com/news/world-latin-america-59368483> (visited on February 23, 2022).

internationally for remittances – dollars go into Chivo, with the government subsidizing transmission costs, and keeping the actual dollars. For his or her part, the recipient gets virtual “dollars” that are numbers displayed in the Chivo app. International remittances carried out through the banking system are known to be expensive;⁸⁰ costs may however be substantially reduced through the use of the Bitcoin remittance. Due to the speed in which a bitcoin transfer occurs the chance of a large fluctuation in value between dispatch and receipt is quite low. Hence, the use of the scheme for Bitcoin international remittances may be even justified as a rational cost saving device.

Indeed, the bitcoin scheme is run in partnership with Strike, a unit of U.S. payments company Zap, that claims to do remittances using bitcoin. Strike CEO Jack Mallers [outlined in January](#) how Strike will do remittances to El Salvador: Strike will take U.S. dollars from the sender, buy bitcoins, transmit those to El Salvador, and convert them to [tethers](#)—a dollar-substitute crypto token backed one-to-one by actual dollars.

In a way, the system is supposed to work like a currency board that issues its own currency only against 100% foreign currency to which the currency board’s currency is pegged.

It is however at this stage that problems arise. It is reported that [there is no evidence](#) that each Chivo dollar is backed by a ‘real’ USD dollar. It was thus observed that in effect in each case the recipient would get a dubious alleged crypto dollar in his or her Strike app, rather than the genuine dollar notes they would withdraw under a remittance going through the banking system. If one wanted to withdraw one’s tethers as dollars, tethers must be exchanged with the bitcoins, with which USD may be bought. I take this to mean that there is no direct exchange between the tethered Chivo and the USD. In effect, in the absence of a strict ‘currency board’ type regime, the scheme allows El Salvador to ‘print’ its own domestic ‘USDs,’ presumably even without a guaranty of parity beyond the point of issue.

And then nepotism, corruption and lawlessness joined incompetence and poor governance:

1. Chivo SA de CV is a private company, so it is not subject to freedom of information laws as a government department would be, despite being funded with \$60 million of public money;
2. The plan for Chivo was promoted by the president and his brothers Karim, Ibrajim, and Yusef Bukele Ortez, who are thought to be the main [bitcoin advocates](#) in the president’s circle. The president’s chief of staff, Carolina Recinos, is on the U.S. State Department’s Engel List of corrupt officials, and is a [director](#) of Chivo SA de CV;
3. The Chivo project is led by a [Venezuelan team](#), part of a long-standing “[shadow cabinet](#)” of unofficial advisers known to work with the Venezuelan opposition. Shadow cabinet leader Sara Hanna and cryptocurrency promoter Lorenzo Rey designed the Chivo network. Rey’s payments experience was promoting an alternate cryptocurrency, Dash, as a payment and remittances channel in Venezuela—but many of the Venezuelan merchants listed as accepting Dash could not even be;
4. Also the events of the first 24 hours of operation are telling. Chivo launched just after midnight on Sept. 7. The system started failing at 3.00 a.m. Server capacity was increased, and app installations were not re-enabled until 11:30 a.m. Transactions failed through the day; customer service lines were jammed; Chivo ATMs ran out of cash. Shortly after 10:00 a.m., the price of bitcoin crashed by \$10,000 in three minutes. Chivo users watched their \$30 in bitcoin drop below \$25 in real time. But not only individuals lost money: President Bukele had purchased [\\$20.6 million in bitcoins](#) for the national treasury the day before; and
5. The absence of El Salvador’s central bank from both the decision making and implementation, followed by its slavish support to the project,⁸¹ is distressing. In the final analysis CBDC is a matter for a central bank to be occupied with.

⁸⁰ See e.g. CPSS and the World Bank, *General principles for international remittance services* (BIS and the World bank, January 2007), online: <https://documents1.worldbank.org/curated/en/894291468313541470/pdf/388210ENGLISH01remittances01PUBLIC1.pdf>, visited February 23, 2022.

⁸¹ “El Salvador needs an IMF loan. Its central bank thinks Bitcoin can sweeten the deal”, Fortune, October 19, 2021, online: <https://fortune.com/2021/10/19/el-salvador-bitcoin-imf-loan/#:~:text=El%20Salvador's%20first%20Dof%20Dits,the%20country's%20central%20bank%20president.&text=Bitcoin%20will%20E2%80%9Cbecome%20a%20payme>

By way of conclusion: there are legitimate reasons not to adopt a cryptocurrency as legal tender. This is not the place to spell them out.⁸² As well, needless to say, selecting a ‘self-anchored’ currency notorious for its volatility (differently from stablecoins) is not a good choice for a legal tender, a point that was understood in El Salvador. What went specifically wrong is the haphazard way in which it has been conducted. It is the lack of preparedness and the combination of nepotism, corruption, lawlessness, greed and incompetence that are to be avoided. El Salvador’s experiment is truly a fiasco, even if not in the way described by the media. Significantly, the El Salvador disastrous project does not adversely affect the credibility of genuine CBDC undertakings worldwide.

[nt,a%20system%20for%20financial%20inclusion.%E2%80%9D](#), visited February 23, 2022.

⁸² For preferring Bit-minted currency created by quantum randomness premised on unpredictability, see e.g., Benjamin Geva, Seraina Neva Gruenwald, and Corinne Zellweger-Gutknecht (2021), *Oxford Journal of Legal Studies* 1119, at 1124-27, 1138 – 43.