Bank of England

The Bank of England's supervision of financial market infrastructures Annual Report

16 December 2022–15 December 2023

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18 December 2023

1. Please note, references to '2022/23' in this Report should be taken as referring to this reporting period.

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Foreword

Sarah Breeden
Deputy Governor, Financial Stability

The financial market infrastructure firms (FMIs) that the Bank of England (the Bank) supervises are crucial to the smooth operation of the UK financial system and the broader economy. The services that they provide are used every day and enable financial institutions and their customers to manage their risks more efficiently and effectively, and to make the payments that are critical to supporting economic activity. The UK is a leading global financial centre and UK FMIs play a critical role internationally as well as in the UK. And the way in which the Bank supervises FMIs plays an important part in delivering financial stability – by ensuring that the FMIs' risk management and resilience frameworks enable them to carry out these essential functions in normal times and during times of stress. This Report shares the key activities that we have undertaken to deliver against our primary objective of protecting and enhancing UK financial stability in three areas – ensuring FMIs' financial resilience, ensuring their operational resilience and enabling safe innovation, with significant international engagement in support of all three.

This year has seen significant change with the new statutory regulatory framework for UK FMI – the Financial Services and Markets Act 2023 (FSMA 2023) – approved with relevant sections expected to commence next year. This represents a very significant milestone for the Bank's regulatory regime. It grants us a wide-ranging rulemaking power in relation to central counterparties (CCPs) and central securities depositories (CSDs) in order to deliver our primary objective of financial stability. Consistent with these new powers, it establishes robust safeguards – including a new statutory FMI Committee – to ensure that we apply our new powers in a transparent and accountable manner. In practice this will allow the Bank to ensure that regulation for CCPs and CSDs is responsive, remains consistent with the highest international standards, evolves in response to current events and supports our supervisory approach. The report sets out how we are preparing for these new responsibilities.

The FSMA framework also introduces a secondary objective such that when advancing the Bank's financial stability objective, the Bank acts in a way which facilitates innovation in the provision of FMI services. The Digital Securities Sandbox (DSS) – which will explore the application of new technologies such as distributed ledger technology (DLT) to securities settlement and trading and which the Bank expects to open to applications in 2024 –

provides an early example of how the Bank, working with the Financial Conduct Authority (FCA) and HM Treasury (HMT), can support innovation. There has also been rapid innovation by the private sector in money and payments, and as a result of the new legislation the Bank now has regulatory remit over stablecoins widely used in payments. In November 2023, we published a discussion paper[2] on our proposed regulatory regime – to provide clarity so that innovators can plan ahead and so that innovation can be adopted safely. This will continue to be an area of domestic and international focus in 2024.

In recognition of the international importance of the services that UK FMIs provide, the FSMA framework requires the Bank also to have regard to financial stability in countries where UK FMIs provide services. This new requirement builds on the Bank's long-standing commitment to working with other international regulators. Indeed, over the past year, the Bank has recognised two incoming CCPs and one incoming CSD and is putting into practice our policy agreed in 2022 of informed reliance on home authorities. Supervisory colleges for the UK CCPs returned to in person meetings for the first time this year post-Covid. And the global CCP fire drill exercise saw over 30 CCPs participate this year. International policy co-operation is also key to establish robust standards. This year the Bank has contributed to international work on financial stability issues highlighted in the 'dash for cash' such as margining practices, as well as on non-default losses.

Over the past year, the Bank's supervision of FMIs has continued to contribute significantly to the delivery of its objective to protect and enhance UK financial stability. Market volatility overseas and banking sector stresses have underlined the importance of having resilient FMIs that support financial stability both in the UK and abroad. Our second CCP supervisory stress test published this autumn showed the continued resilience of UK CCPs. Alongside robust supervision, we continue to strengthen the framework where appropriate – for example consulting on the new framework for critical third parties and legislative changes to enhance the CCP resolution regime. And we continue to work closely with the FCA and Payment Systems Regulator (PSR) to facilitate effective supervision and policy making by exchanging information and minimising duplication.

This Report sets out how the Bank has continued to deliver and develop effective supervision of UK FMIs. Continuing to do so will be critical to supporting financial stability and safe innovation, now and in the future.

Sarah Breeden

Sarah Breeden
18 December 2023

2. **Regulatory regime for systemic payment systems using stablecoins and related service providers**.

1: Why does the Bank supervise FMIs?

FMIs are a key part of the financial system and the public relies upon the functions that they perform.

FMIs play an important part in ensuring financial stability. The services that they provide are critical and enable individuals and businesses to transact with each other. The consequences of disruptions to these systems can have an adverse impact across the financial system. As a result, the Bank's approach to supervision of FMIs is focused on ensuring that they can continue to provide their services at all times by being reliable and resilient.

The Bank regulates three broad types of FMI: payment systems, central securities depositories and central counterparties.

Payment systems are entities that allow funds to be transferred between, for example, businesses and individuals, and from business-to-business and individual-to-individual. They are used for many day to day transactions. CSDs keep ownership records of individual securities and facilitate the secure transfer of these securities between people or entities. CCPs sit between buyers and sellers of financial contracts so that both parties hold a contract with the CCP rather than with each other. This ensures that the obligations of a trade can be fulfilled if one party fails so reducing counterparty credit risk.

The resilience of FMIs is key to maintaining financial stability because of the way in which they are interconnected with the wider financial system.

FMI members include financial institutions and businesses and consequently FMIs are significantly interconnected with the wider financial system both within the UK and internationally. FMIs contribute to financial stability by making financial transactions more efficient and secure and by simplifying complex networks of counterparty exposures. They play a central role in the financial system which means that maintaining their operational and financial resilience is essential for maintaining financial stability.

Therefore it is important that FMIs are both financially and operationally resilient so that they are able to function predictably and reliably, even in a market stress.

FMIs can be exposed to multiple sources of disruption, including from other market participants and service providers, which can result in both financial and operational risks. FMIs must be resilient and have robust processes, systems and resources in place so that they are able to limit shocks that occur when these risks materialise rather than amplifying their effects across the financial system.

It is important that FMIs can respond to and learn from disruptions to their operations which have the potential to disrupt the fundamental payment, clearing, and settlement services that they provide.

The Bank supervises FMIs as part of its primary objective to protect and enhance financial stability.

The Bank has a primary objective to protect and enhance the stability of the financial system of the UK. To help achieve this objective, the Bank has legal powers to supervise FMIs, including with respect to their safety and resilience to risks, both financial and operational, which could lead to financial instability. The Bank's approach has an international as well as a domestic focus, recognising the importance of some Bank-regulated FMIs in other jurisdictions. More detail on this is set out in Section 2.

The Bank is also preparing to implement the revised framework for CCPs and CSDs introduced by FSMA 2023 which, in part, amends provisions of the Financial Services and Markets Act 2000. While FSMA 2023 has received Royal Assent, we expect many of these provisions to be commenced in 2024. See Box A for more information.

And the FSMA 2023 framework introduces a new secondary objective for the Bank to facilitate innovation in clearing and settlement services

FSMA 2023 introduces a new secondary objective to, so far as reasonably possible, facilitate innovation in the provision of CCP and CSD services with a view to improving the quality, efficiency and economy of the services. This objective is expected to be commenced in early 2024. Accordingly the Bank will ensure that its policy framework supports firms, and the services they offer, to evolve with the world around them, while maintaining their resilience in line with the Bank's primary financial stability objective.

Table A: The UK FMIs and specified service providers supervised by the Bank and a non-exhaustive selection of the functions that they perform

Central counterparties	Central securities depositories	Payment systems	Specified service providers
ICE Clear Europe (Exchange-traded derivatives)	Euroclear UK & International (EUI) (Securities transactions)	Bacs (The Bacs Payment System processes Bacs Direct Credits and Direct Debits)	Vocalink (Technology service provider for some payment systems and ATM switching platforms)
LCH Ltd (Repos, FX, listed and over-the-counter (OTC) derivatives and securities)		CHAPS[(a)] (High-value sterling payments, cross-border sterling payments, house purchases)	
LME Clear (Listed metals contracts)		Faster Payments Service (FPS) (The service facilitates real-time payments of up to £1 million)	
		LINK (Withdrawing cash)	
		Sterling Fnality Payment System[(b)] (High-value sterling payments)	
		Visa Europe (Facilitates payments between consumers and businesses)	

(a) The Bank's FMI supervisory area continues to supervise CHAPS (a non-recognised payment system) to the same standard as other recognised payment systems. CHAPS was formally de-recognised by HMT in December 2017, when responsibility for managing the system was transferred to the Bank.

(b) DLT-based Sterling Fnality Payment System (£FnPS) entered its initial phase of operations, focusing on ensuring system resilience and functionality, on 27 November. £FnPS offers settlement in a digital representation of central bank funds. It is currently operating under limits from the Bank and progressing to the next stage of scaling its operations will be subject to £FnPS meeting the Bank's operational and supervisory expectations. Sterling Fnality Payment System £FnPS is the UK's first wholesale settlement system that uses Distributed Ledger Technology through the Bank's RTGS Omnibus Account.

Table B: The incoming FMIs supervised by the Bank and a non-exhaustive selection of the functions that they perform

Central counterparties	Central securities depositories	Payment systems
CBOE Clear Europe N.V. (Clears a range of cash equities, depository receipts, ETFs and equity derivatives (single stock options, index futures and options))	Euroclear Bank (Securities transactions)	CLS (High-value FX transactions)
Eurex Clearing AG (Clears a range of listed as well as OTC securities and derivatives including equities, debt, interest rate, foreign exchange as well as repo transactions)		Mastercard Europe (Paying for goods/services)

2: What is the Bank's approach to supervising FMIs?

The Bank's supervision of FMIs is focused on maintaining monetary and financial stability.

The Bank seeks to ensure that the FMIs that it regulates support financial stability and so reduce systemic risk by:

- avoiding disruption to the vital payment, settlement, and clearing services that they provide to the financial system and real economy;
- avoiding actions that have an adverse impact on the safety and soundness of their members, subject to preserving the resilience of the FMI; and
- contributing to identifying and mitigating risks in the end-to-end process of making payments, clearing and settling securities transactions, and clearing derivatives trades.

Where necessary to avoid disruption, the Bank additionally regulates certain other firms regarding the critical services that they provide to Bank-regulated FMIs.

The Bank's approach has an international as well as a domestic focus. This international perspective is formalised in the new FSMA 2023 framework for CCPs and CSDs, as set out in Box A. This will require that when advancing the Bank's financial stability objective, the Bank must also have regard to the effects that UK FMIs have on the financial stability of other countries where they are established or provide services and the desirability of exercising FMI functions in a manner that is not determined by location.

And we supervise FMIs within a legal and regulatory context that is set at UK and international levels.

The Bank's supervisory approach is based on, and consistent with, the Principles for Financial Market Infrastructures (PFMI) developed by the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO). The PFMI set out international standards for FMIs in areas such as governance arrangements, financial resources, and the management of certain types of risk.

The Bank is an active member of the CPMI, an international standard-setting body which is composed of central banks. Until the end of October 2023, the Bank's then Deputy Governor for Financial Stability, Sir Jon Cunliffe, was chair of the CPMI and the Bank continues to actively engage in the work of CPMI and CPMI-IOSCO.

Domestically, the legal context has seen significant change through the FSMA 2023 framework.

The Bank regulates FMIs in accordance with a domestic statutory framework which includes the Banking Act 2009, the Financial Services and Markets Act 2000, and retained EU law, such as the UK European Market Infrastructures Regulation (UK EMIR) and UK Central Securities Depositories Regulation (UK CSDR).

The legal framework surrounding the Bank's supervision of CCPs and CSDs is in the process of change through the FSMA 2023 framework that will largely come into effect at the start of 2024, as detailed further in Box A and elsewhere in this report. The framework for payment supervision remains the Banking Act. HMT intends to progress a similar accountability framework, as contained in FSMA, to apply to the Bank's perimeter for systemically important payment systems, including its new scope over systemic digital settlement assets as well as its existing scope (as set out in the Banking Act) over systemic payment systems as detailed in Section 4.

The exercise of powers in relation to FMIs is currently undertaken by FMI Board.

The FMI Board is an executive committee constituted by the Governor to exercise the Bank of England's powers in relation to the three main types of FMI overseen by the Bank.

The Board, chaired by the Deputy Governor for Financial Stability, Sarah Breeden, plays a vital role in overseeing the Bank's FMI policy and supervision and, through this, helps support the Bank's statutory objective to protect and enhance UK financial stability.

In addition to senior executives from across the Bank, including the Executive Director for FMI, the Board includes three external members appointed by the Governor. The external members in 2023 were Professor Julia Black, Elisabeth Stheeman, and Martin Pluves. Decision-making authority is vested with the Board itself (rather than any individual) and Board decisions are reached by consensus where possible (or otherwise by vote).

As outlined in Box A – under FSMA 2023 the FMI Board is expected to be replaced from 1 January 2024 with a new statutory committee, the FMI Committee.

We take a forward-looking and judgement-based approach to supervision of FMIs to identify and address risks.

The supervisory risk assessment framework used by the Bank aims to identify risks to FMIs and to assess the actions that FMI have in place to protect against them. The framework assesses the risk environment in which the FMI operates and considers four broad categories of risk mitigants:

- Management and governance: whether the FMI has an effective Board, effective Senior Management and key individuals that are running the business prudently, and whether the governance framework is generally effective.
- Risk management and controls: whether the FMI's risk management and control processes are effective in identifying and mitigating risks.
- Operational resilience: whether the important business services are sufficiently resilient to ensure that disruptions, even under extreme but plausible scenarios, can be recovered within a set impact tolerance.
- Financial resilience: whether the FMI has sufficient financial resources to survive extreme but plausible shocks without the disorderly propagation of losses across its members/participants and whether there is any risk to the financial resilience of the FMI or its ecosystem including during a stress.

And our supervisory framework includes periodic assessments, technical risk reviews, stress tests and third-party reviews.

The Bank takes a forward-looking and risk-based approach to supervision. The level of supervision principally reflects our assessment of whether the FMI is within our overall risk tolerance, the proximity of the FMI to a disorderly failure to provide services, as well as our statutory obligations.

We have a structured programme of reviews for all firms which includes supervisory meetings, data assessments and firm regulatory submissions, and a programme of cross-FMI technical risk reviews. The programme of technical risk reviews is designed to provide assurance against each aspect of the risk assessment framework. The Bank uses data to support supervision and continues to develop its analytical capabilities to enhance the analysis and identification of the risks that underpin our supervisory activity.

This analysis is then reviewed in regular internal stocktake meetings for all FMIs that we supervise to discuss the major risks they face and whether they are within our risk tolerance. This is used to inform the supervisory strategy, and proposed remedial actions. There is senior-level involvement in these assessments, such that major judgements are made by our most senior and experienced individuals. These formal assessments are also subject to rigorous review by those not directly involved in day-to-day supervision, including risk specialists, independent advisers and relevant participants from the rest of the Bank.

We focus on the most material issues identified and supervisory interventions are clearly and directly linked to reducing risks to our objectives. As an output of these assessments the Bank sets actions (known as 'Priorities') that it expects the FMI to take to address its risks.

The Bank has powers to commission reviews into supervisory topics by third-party experts. During this reporting period, the Bank commissioned one of these skilled-person reviews under Section 166 of the Financial Services and Markets Act and Section 195 of the Banking Act – see Box C.

In November 2023, the Bank published the results of its second public CCP supervisory stress test (SST). This exercise assessed the credit and liquidity resilience of UK CCPs, and confirmed their resilience to stress scenarios that are of equal and greater severity than the worst-ever historical market stresses. The Bank will continue to conduct CCP supervisory stress testing and will use the findings from the 2023 CCP SST to support and inform its ongoing supervision and regulation of UK CCPs. Box B sets out more information on the results of the stress test.

The Bank has fee-raising powers to fund its supervision and regularly consults on the level of fees that are charged for authorisation, annual supervision and special projects.[3]

> **We have new supervisory powers under the FSMA 2023 framework which will widen our toolkit.**

The Bank will be granted new powers through FSMA 2023 that will strengthen its supervision. These include a broader 'requirements' power, which will allow the Bank to require a UK CCP and CSD (and a systemic non-UK CCP) to take specified actions or refrain from taking specified actions.

This power is similar to that already used by the Prudential Regulation Authority (PRA) and FCA and is in addition to the Bank's existing power of directions which also extends to payment systems. We are seeking to publish a consultation paper on the notification aspects of using the new power by the end of 2023. The Bank is also gaining a new 'permissions' power, which will allow the Bank to waive or modify rules applied to a UK CCP and CSD (and systemic non-UK CCP) made under its new rulemaking powers. This power is similar to that already used by the PRA and FCA and is in addition to the Bank's existing waiver power.

Taken together, these powers will enhance the supervisory toolkit available to the Bank. Alongside the Bank's new rulemaking powers they will enhance the Bank's ability to act in a more agile way in carrying out robust, risk-based supervision of FMIs in pursuit of its financial stability objective.

3. **The Bank of England's fees regime for financial market infrastructure supervision 2023/24**.

The Bank is planning to update the published supervisory approach document.

The Bank plans to update 'The Bank of England's approach to the supervision of financial market infrastructures'. The document sets out how we carry out our role in respect of supervision of FMI; it is designed to help regulated firms and the market understand how we supervise FMI, and to aid accountability to the public and Parliament.

The document will update on the changes to supervision as a result of FSMA 2023 and the operational resilience policy introduced in March 2021 as well as bring together the updates to the supervisory approach published in previous annual reports and policy statements into a single document.

And our published enforcement approach has also been reviewed with a consultation earlier this year.

The ability to take enforcement action such as imposing penalties and censure are an important part of a supervisor's toolkit. Earlier this year the Bank consulted[4] on its approach to enforcement policies to provide greater clarity on the scope of its powers and processes. The changes are designed to provide greater clarity for ease of usage and introduce options for speedier investigatory outcomes, including through the creation of a new route for early co-operation for subjects of an investigation and enhanced settlement discount of up to 50% for early admissions.

The consultation also set out the scope of the Bank's enforcement powers more clearly, including in relation to individuals, and drew together all relevant enforcement policies and procedures in one more accessible and comprehensive document for ease of usage. The consultation has closed and the Bank is considering feedback and will respond in the new year setting out next steps.

The Bank co-operates closely with other domestic regulators in supervision and policy making.

The Bank co-operates with the FCA and the PSR regarding market infrastructure and payment systems respectively. This facilitates effective supervision and policymaking by ensuring that information is shared appropriately and promotes efficiency by minimising duplication. The Bank also works closely with HMT on shaping the UK's financial services agenda.

4. **The Bank of England consults on its approach to Enforcement policies to provide greater clarity on the scope of its powers and processes**.

The frameworks for co-operation with FCA and PSR are set out in Memoranda of Understanding (MoUs)[5] [6] which are reviewed annually with the findings published. The FCA MoU[7] was also updated in 2023 and a revised version issued; further updates to the PSR and FCA MoU are planned to reflect FSMA 2023 and new issues such as stablecoin.

International co-operation is a fundamental component of the Bank's supervisory approach.

Where FMIs are licensed in multiple jurisdictions, the Bank recognises the importance of working in close co-operation with counterpart regulators to avoid overlap and to share priorities where appropriate. It has supervisory colleges for each of our UK CCPs to ensure appropriate arrangements are in place for cross-border supervisory co-ordination. These colleges returned to in-person meetings for the first time this year post Covid.

And we work closely with international peers, for example as part of the International CCP fire-drill exercises discussed in Section 3.

The Bank has also this year established a supervisory college for Visa Europe, applying the same fundamental principles of effective international co-operation to the supervision of a systemically important card system. Additionally, the Bank actively participates in international oversight forums for other systemically important FMIs.

The Bank's FMI supervisory and policy teams also contribute to international FMI-related committees and working groups, such as those hosted by the G20, Financial Stability Board (FSB), and the Bank for International Settlements, including the CPMI.

The new responsibilities for incoming CCPs and CSDs are now operational and reflect our informed reliance model.

Following the UK's withdrawal from the European Union (EU), the Bank has responsibility for recognising and supervising: non-UK central counterparties ('incoming CCPs') who provide clearing services to clearing members or trading venues established in the UK; and non-UK central securities depositories ('incoming CSDs') who provide settlement services for securities issued under UK law. The Bank has now recognised two incoming CCPs and one incoming CSD, as set out in Annex 1, which involved agreeing MoUs[8] with the

5. **Payment systems memorandum of understanding**.
6. **Bank of England and Financial Conduct Authority – Memorandum of Understanding on the supervision of financial market infrastructure and payment systems**.
7. **Memorandum of Understanding between the Financial Conduct Authority and the Bank of England, including the Prudential Regulation Authority**.
8. **MoUs agreed with relevant home authorities**.

home authorities. The Bank has also agreed a MoU[9] with the Reserve Bank of India with the intention of recognising an incoming CCP before the end of this year. The Bank is also responsible for providing information or advice in support of HMT's equivalence assessments of jurisdictions in which CCPs are seeking UK recognition. The Bank has this year submitted equivalence advice regarding four non-UK CCP regimes to HMT. On 7 December, HMT made an equivalence decision for the US Commodity Futures Trading Commission (CFTC) regime.

The Bank's approach for the supervision of incoming CCPs and CSDs is underpinned by the principle of informed reliance. The Bank expects to primarily interact with home authorities to ensure it can continuously place reliance on them for regulation and supervision of incoming CCPs and CSDs, sustained by the delivery of sufficient co-operation and information sharing arrangements agreed with the home authority.

The degree of co-operation and information sharing expected of the home authority is proportionate to the level of UK activity at the incoming CCPs and CSDs. Arrangements may include structured and regular engagement with the home authority to exchange views, and participation in multilateral forums or reviews led by the home authority.

Temporary regimes allow incoming CCPs and CSDs to continue to provide services prior to recognition subject to meeting certain requirements, FMIs otherwise enter a run-off regime. FSMA 2023 extended the maximum period of run-off for non-UK CCPs. During the period four CCPs entered the CCP run-off regime this year, and another four exited it.[10] The Bank has published a statement about its approach to the run-off regime.[11]

The Bank has also completed the designation of all eligible non-UK law systems in the Temporary Designation Regime that applied for 'steady state' settlement finality protection in the UK.

Our supervisory approach continues to evolve to reflect different types of firms.

New types of FMIs are also emerging in the field of securities settlement. Those firms seek to utilise new technology in the field of securities settlement to make the post-trade process more efficient. In the UK, we are launching a DSS to support this innovation. This will require specific supervisory expectations. See Section 4 for further information on the DSS.

9. **Memorandum of Understanding concerning cooperation and the exchange of information related to Clearing Corporation of India Ltd**.
10. **List of non-UK CCPs that are taken to be eligible for temporary deemed recognition in the UK**.
11. **Statement on the Proposed Extension of the Run-Off Regime for non-uk CCPs**.

Box A: FSMA 2023 Framework

FSMA 2023 introduces a number of new obligations and accountabilities for the Bank in its role as the UK's regulator for CCPs and CSDs. The Bank has been preparing to implement those provisions that HMT intends to commence by 1 January 2024 including:

A new FMI Committee

In line with the additional responsibilities being granted to the Bank and to ensure that the Bank can exercise these new powers in a transparent and accountable manner, FSMA 2023 introduces the Financial Market Infrastructure Committee (FMIC). This will replace the existing non-statutory Financial Market Infrastructure Board.

One of the Committee's responsibilities will be to make any new rules, and it will have independent members to provide challenge. The Bank will publish the Terms of Reference and membership of FMI Committee once the committee is established.

A clear objective and new secondary innovation objective

The framework introduced by FSMA 2023 will maintain that the Bank's primary objective for its CCP and CSD functions is to protect and enhance the stability of the financial system of the United Kingdom. When advancing its financial stability objective, the Bank must, where appropriate, also act in a way which facilitates innovation in the provision of FMI services with a view to improving the quality, efficiency and economy of those services.

Matters for the Bank to have regard to in its role as UK regulator of CCPs and CSDs

FSMA 2023 introduces the requirement that when exercising its FMI functions (as defined in statute) in a way that advances the Financial Stability Objective (and subject to that), the Bank must have regard to: (1) specified regulatory principles; (2) the effect that the Bank's regulation will or may have on the financial stability of other countries or territories in which CCPs and CSDs are established or provide services; and (3) the desirability of regulating CCPs and CSDs in a way that is not determined by whether the users of their services are located in the UK or elsewhere.

The specified regulatory principles are similar to those applicable to the PRA and FCA and include principles such as proportionality, transparency and the desirability of sustainable growth in the UK economy.

General rulemaking power

FSMA 2023 introduces a power for the Bank to make rules in respect of CCPs and CSDs to follow in pursuit of its statutory objectives. Our approach to the repeal and replace of retained EU legislation into Bank rules will be based, first and foremost, on our commitment to holding FMIs to the highest standards, in accordance with the PFMIs, as well as other international standards. Section 4 provides more information on the planned work on this repeal and replace process.

Requirement to carry out cost-benefit analysis (CBA), publish a framework for conducting CBA, and establish an independent CBA Panel

FSMA 2023 introduces a requirement to carry out CBA when exercising the new rulemaking power, to publish our approach to conducting CBA and to establish an independent CBA panel. The CBA Panel will be composed of external experts to provide advice in relation to cost-benefit analysis both to the Bank in its responsibilities in respect of supervising financial market infrastructure firms and to the PRA. The Panel is expected to be operational in 2024. The Bank will set out and consult on its approach to CBA as FMI regulator in due course.

Further accountability mechanisms and policy measures

The Bank's accountability mechanisms for CCP and CSD regulation will be more aligned with those of the FCA and PRA, with changes to the way the Bank interacts with Parliament, the government, and the public. This includes greater oversight by Parliamentary committees, and greater transparency over responses to consultations.

In addition, FSMA 2023 contains a number of significant policy measures relevant to the Bank's regulatory and supervisory powers elaborated further in Section 4, including:

- Introducing a framework for a Senior Managers and Certification Regime (SM&CR) in respect of CCPs and CSDs.
- Allowing the Bank, PRA, and FCA to directly oversee those third parties designated as being critical by HMT.

- Expanding the Bank’s CCP resolution powers.
- Bringing digital settlements assets used for payments, such as stablecoins, into the UK regulatory perimeter.

3: What have been the Bank's areas of supervisory and policy focus over the reporting period?

In the past year the Bank has ensured that FMIs continue to promote financial stability in the UK. We do this through robust supervision and a clear policy agenda to ensure financially and operationally resilient FMIs. Alongside this we have used our policy making and supervision to support safe and resilient innovation in payments, settlement and clearing.

The market has continued to test FMIs.

The market environment has remained challenging for FMIs and they have proved resilient and supported financial stability. During periods of market stress, both financial and operational resilience are key to maintaining confidence in the financial system. Events in the banking sector such as those involving Silicon Valley Bank and Credit Suisse have also highlighted the importance of all FMIs being ready to respond to such events given the important role that they play in bank resolution as set out in the FSB expectations on resolution.

3.1: Protecting and enhancing UK financial stability through financially resilient FMIs

The Bank ensures that FMIs have appropriate financial resources to maintain financial stability.

Financial resilience is important for all FMIs but it is particularly important for those FMIs that take counterparty credit risk – most notably CCPs. Ensuring UK CCPs and indeed global cleared markets are resilient to shocks is a key part of our supervision and policy making. This is achieved through high standards for the level of financial resources maintained by CCPs, complemented by transparent disclosure of the risks of clearing and how the CCPs mitigate those risks.

We undertook a range of supervisory reviews across the year looking at the adequacy of CCPs' models and risk management. We collaborate with overseas regulators on supervisory reviews of UK CCPs and have provided our input and expertise to reviews run by other FMI supervisors internationally. Work also continued to address issues identified last year – notably after the suspension of nickel trading at LME as outlined in Box C.

Supervisory stress tests are an important tool for reviewing CCPs' financial resilience. The Bank's 2023 CCP supervisory stress test showed that UK CCPs continue to be resilient to severe market stress scenarios. See Box B.

We remain at the forefront of international work on CCP margin which is now progressing towards its final outputs.

Reflecting its commitment to robust international standards, the Bank has taken a leading role in driving forward international work focused on cleared margin as part of the FSB's wider programme on non-bank financial intermediation. In September 2022 BCBS-CPMI-IOSCO published the 'Review of Margining Practices' report, which contained several recommendations for follow-up work, in particular to ensure that market participants have sufficient information on margining practices to manage their liquidity, and that margin calls are not unduly procyclical. The Bank made a significant contribution to a complementary report on 'Margin Dynamics in Centrally Cleared Commodities Markets in 2022',[12] published in May this year. This report built on the conclusions of the Review of Margining Practices, specifically in relation to the challenges faced by commodities markets during the high-volatility episode in 2022, and has helped to inform the wider BCBS-CPMI-IOSCO policy work on CCP margin.

The Bank has continued to co-chair the joint BCBS-CPMI-IOSCO group responsible for work to improve transparency and evaluate the responsiveness of initial margining practices and models in centrally cleared markets and has played an active role in the CPMI-IOSCO workstream on streamlining variation margining practices in centrally cleared markets. These different workstreams build on the work done in the 'Review of Margining Practices' report and are expected to culminate in a consultative report and a discussion paper, both due to be published late 2023 or early 2024, with work on policy implementation commencing shortly after.

And we have supported international work to deepen understanding of how CCPs approach risks related to non-default losses.

In addition to the risks CCPs face from member failures, CCPs must also consider other potential sources of loss such as investment losses and cyber attacks ('non default losses'). We contributed to an CPMI-IOSCO report published in August 2023 which presents current practices that CCPs employ to address non-default losses.[13] The Bank is now supporting the next stage of this work, which extends the scope to include other FMIs types. The work

12. BCBS-CPMI-IOSCO publish analysis of margining dynamics in centrally cleared commodities markets during 2022 stress events.
13. Report on current central counterparty practices to address non-default losses.

is expected to result in the publication of a consultative document on further international guidance or recommendations with respect to non-default losses.

Domestically, we have progressed the implementation of an enhanced CCP resolution regime.

FSMA 2023 included an enhanced CCP resolution regime, which brings the Bank fully in line with international standards. The regime comes into force on 31 December 2023, and the Bank – as Resolution Authority – will have access to a broader suite of tools to ensure any CCP resolution is efficient, effective, protects taxpayer funds and ensures the continuity of critical clearing services.

The new regime includes a financial stability trigger, whereby the Bank will be able to consider the effects of a CCP's recovery actions on the wider stability of the financial system as a factor when considering whether the conditions for resolution are met. It also includes a broad range of loss allocation and position balancing tools. The regime includes a robust 'no creditor worse off' safeguard, which ensures that creditors, including clearing members, could be entitled to claim compensation if they bear larger losses in resolution than the counterfactual of full deployment of the CCP's recovery tools followed by the CCP's insolvency.

FSMA 2023 also introduced additional supervisory powers for the Bank. These include the power to remove senior managers and directors, and to temporarily restrict or prohibit CCPs from making certain discretionary payments, such as dividend payments, variable remuneration, and share buybacks, in order to ensure the continuity of critical clearing services. In August 2023, the Bank published a consultation[14] on the draft statement for the latter power, which sets out the Bank's proposed approach to the circumstances in which the Bank would use the power and the process for giving directions under the power. The consultation closed in November 2023, and the Bank is currently reviewing responses. The Bank expects to publish the final policy statement in 2024.

And internationally, we continue to champion robust standards for CCP financial resources and tools in resolution.

The Bank is, and will continue to be, an active participant in international discussions aimed at ensuring the resilience and resolvability of CCPs. The Bank contributed to the development of the consultative report[15] that the FSB published in September 2023 on

14. **Ensuring continuity of critical clearing services: the Bank of England's approach to discretionary payments by central counterparties**.
15. **Financial Resources and Tools for Central Counterparty Resolution: Consultation report**.

financial resources and tools for CCP resolution and will continue to engage with this important work going forward as the proposals are finalised.

International readiness for failure is key given the interconnected nature of FMIs.

Alongside other international regulators, we have worked with CCP Global, a global association for CCPs, to deliver the 2023 CCP International Default Simulation. This exercise involved 31 individual CCPs, including ICEU, LMEC and LCH, actively conducting fire drills of their default management procedures simultaneously in November 2023 under a high-level common narrative. Co-ordinated exercises involving multiple CCPs have been conducted previously, however this is the largest of its kind and provided an opportunity for CCPs to share best practice and to identify potential inter-dependencies between individual CCPs' default management procedures.

Senior officials from the Bank, Federal Deposit Insurance Corporation, CFTC, Securities and Exchange Commission, and Federal Reserve Board convened a meeting to discuss CCP resolution.[16] US and UK agencies have been sharing views and reviewing progress on CCP resolution since 2017 through senior-level meetings. At the most recent meeting in 2023 the agencies reviewed recent joint work, in particular the information sharing and communications arrangements to support resolution planning for US and UK CCPs. Priorities for future work include continuing to share analyses and discussing policy formulation in relation to CCP resolution.

In September 2023, the Bank and Sveriges Riksbank (the Swedish central bank) published a joint statement reaffirming our existing strong commitment to effective oversight co-operation over LCH. The Bank also welcomed new powers that Riksbank received in January to broaden its ability to act in the interest of preserving the stability and efficiency of the financial system. The Bank and Riskbank will jointly consider possible policy tools to manage emergency situations.

16. **Joint Readout of Principals' Meeting of UK and U.S. Authorities Regarding Central Counterparty Resolution**.

Box B: CCP supervisory stress test

In November 2023, the Bank published the results for its second public CCP SST. Like the previous exercise, it explores the individual and cross-CCP credit and liquidity resilience of the three UK CCPs and their interconnectedness with the rest of the financial system. It focusses on resilience to a hypothetical stress scenario of a global economic downturn, combined with negative supply shocks in commodities markets. The Bank also extended the analysis to consider the impact of idiosyncratic shocks and reversing the direction of the stress.

Overall, the results found UK CCPs were resilient to a severe market stress scenario combined with the simultaneous default of the two clearing member groups whose default create the largest losses or worst liquidity balances. CCPs' financial resources have increased compared to the previous stress test, reflecting how market volatility during 2022 has fed through to their initial margin requirements and default fund sizing. As a result, for LCH defaulting clearing members' own resources were found to be sufficient to meet losses, while ICEU F&O and LME Base experience only partial depletion of mutualised funds even when accounting for concentration costs.

The stress test also explored CCP resilience to increasingly severe assumptions and to alternative scenarios including reversing the direction of shocks and exploratory analysis of product-specific shocks. These results confirmed our view on CCP resilience; no service fully depleted its resources except under a combination of assumptions far beyond historical precedent and regulatory requirements.

The CCP SST is not a pass-fail exercise, but the Bank will use the findings from the 2023 CCP SST to engage with CCPs and inform its ongoing supervision and regulation of UK CCPs at both domestic and international level.

The Bank plans to publish its approach to supervisory stress testing of CCPs in due course. Publication was deferred from this year as we continue to consider feedback on the discussion paper and lessons learned from the two public stress tests conducted to date.

Box C: Update on supervisory work following events of March 2022 in the nickel market

On 8 March 2022, on the back of unprecedented moves in the nickel market, the London Metal Exchange (LME) suspended nickel trading and cancelled trades placed that day. This in turn resulted in a cessation of clearing of new nickel trades at LME Clear during the period that nickel trading was suspended on the LME. The subsequent market disruption undermined confidence in the functioning of the nickel market.

Following these events, the Bank reviewed the operation of LME Clear during the period to determine whether lessons should be learned in relation to LME Clear's governance and risk management. The Bank was assisted by the appointment of a skilled person, under section 166 of the Financial Services and Markets Act 2000 with the scope agreed by the Bank. LME Clear and LME jointly also commissioned Oliver Wyman to conduct an independent review into the factors that contributed to nickel market conditions in March 2022.

Collectively, these reviews pointed to several shortcomings across LME Clear's governance, management and risk management capabilities. In March 2023, the Bank publicly announced that it expected LME Clear to appropriately address all the findings from the reviews and to strengthen its governance arrangements, increase independence in management and governance at the CCP and improve upon its wider risk management. In response, LME Clear set out an implementation plan to address all remedial actions and strengthen its markets, including strengthening and building confidence in its operations and governance, and enhancing its wider risk management. Over the course of 2023, LME Clear has also announced appointments of a new Chair of the Board, and a new Chief Executive Officer. These individuals were reviewed by the Bank in line with our supervisory approach prior to their appointment.

Recognising the importance of the timely implementation of the remedial actions to enhance the resilience of LME Clear's clearing services and maintain public confidence in the stability of the UK financial system, the Bank used its statutory powers under Section 166 of the Financial Services and Markets Act 2000 to appoint a skilled person to independently monitor, assess and report to the Bank regularly on LME Clear's implementation progress against remedial actions. The Bank will continue to review these findings and use the lessons learned from the various episodes of extreme market stress of recent years to inform our approach to protecting and enhancing the stability of the UK financial system. We have made progress on some of these topics including co-leading a working group of various international authorities focused on the transparency and predictability of margin practices in centrally cleared commodities markets.[17]

3.2: Ensuring FMIs are operationally resilient and can manage outages

FMIs have displayed operational resilience and managed incidents effectively.

The Bank has undertaken a number of reviews of firms to investigate their operational resilience, including use of specialists for technical reviews. Ongoing work around cyber resilience has included our delivery of the CBEST programme for FMIs. Overall FMIs have displayed resilience over the year and managed any outages well but it is important to continue to learn lessons from incidents – as set out in the example in Box D.

FMIs have also continued their preparations to ensure they are ready to meet the new standards set by the 2021 operational resilience policy. These require that by no later than 31 March 2025 FMIs have taken all reasonable actions to remain within their impact tolerances in the event of extreme-but-plausible disruptions to operations.

We have reviewed FMI change programmes to ensure safe innovation.

We have monitored innovations within FMIs to ensure continued resilience against potential risks. For example, the Bank continues to work with Fnality which was recognised by HMT in 2022 as the first UK payment system to enable wholesale settlement using DLT. Fnality's (£FnPS) sterling payment system entered an initial phase of its digital representation of funds at a central bank on 27 November. It is currently operating under limits from the Bank and progressing to the next stage of scaling its operations will be subject to £FnPS meeting the Bank's operational and supervisory expectations.

Existing UK FMIs are also considering changes to their operations and processes, with a number embarking on large scale infrastructure transformation projects. The Bank will continue to focus on ensuring that any innovations and changes undertaken by UK FMIs are completed effectively, efficiently and with robust standards to ensure UK financial stability. In line with our financial stability objective, the Bank will work with the Government in preparing the National Payments Vision, including the consideration of the role of the New Payments

17. **Margin dynamics in centrally cleared commodities markets in 2022**.

Architecture. We will continue to supervise Pay.UK, in line with our supervisory remit, as it works through next steps.

And we have strengthened our framework for managing risks presented by outsourcing and third party arrangements.

We finalised our policies on outsourcing and third-party risk management for FMIs in February 2023.[18] These policies seek to promote greater FMI resilience in relation to their outsourcing of services and reliance on third parties, including their adoption of cloud and other new technologies. The policies set out the Bank's requirements and expectations in relation to outsourcing and third-party risk management and complement the Bank's existing policies relating to FMI operational resilience.

The new policies provide that FMIs will need to take steps to comply with these expectations and obligations by February 2024. The Bank previously consulted on these policies in 2022.

By publishing its expectations and requirements on FMIs' outsourcing and third-party arrangements, the Bank seeks to ensure that its policies support and respond to FMIs' evolving business models, industry practices, and increasing reliance on the services and technologies provided by third parties. Requiring FMIs to manage the risks arising from third-party dependencies reduces potential risks to financial stability. The Bank also continues to support international work at CPMI and IOSCO on operational resilience of FMIs.

The authorities are establishing a new regime to oversee third parties that are deemed critical to the UK financial sector.

In 2022 the Bank, PRA and FCA published a joint discussion paper[19] setting out proposals for potential measures to assess and strengthen the resilience of services outsourced to critical third parties (CTPs). This was followed by the introduction through FSMA 2023 of a new statutory oversight regime for those CTPs that provide material services to firms and FMIs. The regime will seek to address systemic risks that may arise when FMIs (and other financial firms) rely upon a small number of third parties to provide services which, if disrupted, could significantly affect the authorities' objectives including the financial stability of the UK.

Broadly, under the new regime regulators will:

- identify potential CTPs and recommend them to HMT for formal designation;

18. **The Bank of England's policy on outsourcing and third party risk management for Financial Market Infrastructures (FMIs)**.
19. **DP3/22 – Operational resilience: Critical third parties to the UK financial sector**.

- establish specific operational risk and resilience requirements on a CTP's material services; and
- develop rules on information gathering and testing requirements, to support regulatory oversight and provide assurance of the resilience of the material services provided by CTPs to firms and FMIs.

FSMA 2023 also introduced a requirement for the regulators to co-ordinate in terms of the rules and expectations placed on CTPs.

In December 2023, the Bank, FCA and PRA plan to publish a joint consultation paper[20] setting out proposed requirements and expectations for CTPs.

Box D: Real-Time Gross Settlement outage

Responsibility for managing CHAPS, the UK high value payment system, was transferred to the Bank in 2017. Since that time, the Bank's FMI supervisory area supervises the Bank's operation of the CHAPS system, on a non-statutory basis, to the same standard as other recognised payment systems. The CHAPS system runs on technical infrastructure provided by the Bank, including the Real-Time Gross Settlement (RTGS) system.

On 14 August 2023, the Bank's RTGS system and consequently the CHAPS system suffered an outage of approximately six hours. Given the seriousness of the incident, and with agreement of the FMI supervisory area, the Bank's RTGS/CHAPS Board commissioned a review carried out by staff in the Bank's second-line risk and internal audit functions.

For further information on the outage and the key findings of the review, please see Box C of the RTGS/CHAPS annual report.[21]

The FMI supervisory area will now engage with the Bank, as operator of RTGS/CHAPS, to ensure the recommendations from the review are implemented.

20. **The Bank of England, PRA and the FCA issue joint proposals to increase resilience of the financial sector by overseeing critical third parties**.
21. **Real-Time Gross Settlement (RTGS) system and CHAPS Annual Report 2022/23**.

3.3: Enabling safe and resilient innovation in payments, settlement and clearing

Regulation lays the groundwork for safe and sustainable innovation and payments.

There has been rapid innovation by the private sector in money and payments over the past few decades, giving households and businesses more choice over how they make and receive payments. This includes the emergence of 'stablecoins'. They are a new form of privately issued digital asset that purport to maintain a stable value against a fiat currency. Stablecoins have the potential to be used by many people in the UK for everyday payments. It is important for policymakers to set out the regulatory requirements so innovators can plan ahead and so that innovation can be adopted safely.

Recent legislative changes brought stablecoins into regulators' remits. These changes provided the Bank with new powers to regulate systemic payment systems using 'digital settlement assets', including stablecoins, and related service providers, once these have been recognised by HMT. The FCA's remit was also expanded to include stablecoin issuers and custodians.

The Bank has published a discussion paper on the regulatory regime for systemic payment systems using stablecoins and related service providers.

In November 2023, the Bank published a discussion paper[22] on the regulatory regime for systemic payment systems using stablecoins and related service providers. It was published alongside a discussion paper from the FCA[23] on their proposed regulatory framework for stablecoin issuers and custodians that fall under its remit, a letter from the PRA to bank Chief Executive Officers[24] on innovations in the use by banks of tokenised deposits, e-money and stablecoins, and a cross-authority roadmap paper[25] setting out how the various regimes interact together. With these joint publications, regulators aim to provide clarity as to which regulatory regime each form of money and money-like instrument falls under, with regulatory boundaries between each regime clearly established.

The Bank's regime focuses on sterling-denominated stablecoins because it considers these are the most likely digital settlement assets to be used widely for payments. This regime is intended for business models that are focused on payments-related activities and innovation

22. **Regulatory regime for systemic payment systems using stablecoins and related service providers**.
23. **DP23/4: Regulating cryptoassets Phase 1: Stablecoins**.
24. **Letter from David Bailey, Nathanaël Benjamin and Vicky Saporta on 'Innovations in the use by deposit-takers of deposits, e-money and regulated stablecoins'**.
25. **Cross-authority roadmap on innovation in payments**.

within payments. It also focuses on retail uses, and proposed limits would constrain wholesale use of stablecoins at systemic scale.

The Bank's discussion paper represents an exploratory phase in developing the new regime. After receiving and considering feedback from the industry on these initial proposals, the Bank will consult on its final proposed regime. The regime could be adapted over time as the nascent industry evolves.

The Bank's proposed regulatory regime aims to maintain confidence in money and payments – this is core to preserving financial stability.

The Bank's proposed regime is guided by international standards including the Principles for Financial Market Infrastructures[26] and the Financial Policy Committee's expectations for stablecoins.[27] It follows the principle of 'same risk, same regulatory outcome'. To the extent that systemic payment systems using stablecoins pose similar risks to other systemic payment systems, they should be subject to equivalent regulatory standards. And, as a new form of privately issued money, issuers of stablecoins used in systemic payment systems should meet standards that are at least equivalent to those that apply to commercial banks.

The regime aims to be flexible and could accommodate different business models in which various functions are performed by different legal entities. These functions include the payment system/transfer function, the issuance of the stablecoin as the settlement asset, and the customer interface/storage of stablecoins. However, the transfer function or payment system would remain the Bank's 'regulatory hook'.

The Bank's proposed regime aims to address risks while following the principle of 'same risk, same regulatory outcome'.

Stablecoins present risks both in terms of their innovative use as a form of money or money-like instrument, and their use as a means of payment in systemic payment systems. The Bank's proposed regime aims to address both these risks.

The Bank would require that there is an entity in the payment chain that can be identified as the payment system operator. This entity would need to be able to see and assess all the risks arising from the different parts of the payment chain and ensure there are appropriate controls.

The Bank proposes that issuers would be required to back stablecoins fully with deposits at the Bank. No interest would be paid on these deposits. Combined with the other protections

26. **Principles for Financial Market Infrastructures (PFMI)**.
27. **Financial Stability Report December 2019**.

proposed in this discussion paper, this would aim to ensure that the stablecoins maintain their value and can be used for payments with full confidence.

Wallet providers, as the entities safeguarding coinholders' means of control over their stablecoins, would need to ensure that coinholders' legal rights and ability to redeem the stablecoins at par in fiat are protected at all times.

The Bank recognises the benefits that new forms of ledgers can bring for payments. However, some existing stablecoin payment chains using public permissionless ledgers do not have centralised governance arrangements. We are proposing that in order to be used at systemic scale, any such payment system would have to assure us that a legal entity or natural person could be held accountable and responsible for end-to-end risk management in the payment system and compliance with regulation.

The Bank has invited feedback on the proposed regulatory regime. Respondents should provide answers by 6 February 2024. After this, the Bank will assess the responses. These responses would inform our future work on systemic payment systems using stablecoins and related service providers.

We also supported the development of the FSB global regulatory framework for crypto asset activities.

The Bank has made significant contributions to the FSB work to finalise the global regulatory framework for crypto-assets, including stablecoins. In July 2023, the FSB published its framework. This consisted of two distinct sets of high-level recommendations: (1) for the regulation, supervision and oversight of crypto-asset activities and markets,[28] and (2) for the regulation, supervision and oversight of 'global stablecoin' (GSC) arrangements.[29] The final recommendations take account of lessons from events in crypto-asset markets and feedback received during the FSB's public consultation.

The framework provides for a high-level and flexible approach built on the principle of 'same activity, same risk, same regulation'. The final FSB Recommendations align with the FPC's expectations for stablecoins, which have guided the Bank's design of the UK regulatory framework for systemic stablecoins.

28. **High-level Recommendations for the Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets: Final report**.
29. **High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements**.

And we contributed to CPMI work to identify benefits and challenges of using stablecoins for cross-border payments.

In 2023, the Bank contributed to CPMI's report on 'Considerations for the use of stablecoins arrangements in cross-border payments' which was published on 31 October 2023. The report is part of the G20 cross-border payment programme and it assesses whether and how the use of properly designed and regulated stablecoin arrangements (SAs) could help enhance cross-border payments.

The report seeks to clarify how potential future properly designed and regulated SAs could help to make cross-border payments faster, cheaper, more transparent and more inclusive. The report further discusses how SAs' underlying technology or other novel features might help to achieve these objectives.

The Bank continues to support innovation in securities settlement by working with the FCA to open the Digital Securities Sandbox (DSS) for applications in 2024.

The Bank is working with the FCA to implement the DSS and be ready to accept applications. The DSS will initially explore the application of new technologies such as DLT for four activities: notary; settlement; maintenance; and operating a trading venue where existing legislation acts as a barrier to adoption. The broad outlines of the DSS are described in the consultation document issued by HMT in July.[30] It is intended that the Statutory Instrument creating the DSS will be laid before Parliament before the end of this year.

In addition to exploring the potential benefits of adopting such technology, the DSS will allow the Bank to observe whether new risks are created in the wider financial system from the adoption of these technologies and to design a regulatory approach which mitigates these risks while allowing any benefits to be exploited. The Bank will continue to work with the FCA to finalise operational details of the Sandbox and expects to open the Sandbox to applications in 2024. Section 4 sets out the planned future work on this.

We engaged with the Accelerated Settlement Taskforce which is exploring the case for moving to a T+1 settlement cycle in the UK.

The industry Taskforce, chaired by Charlie Geffen, is looking at the costs and benefits of moving to a faster settlement of financial trades in the UK. This includes examining how this could be implemented and any changes that would be required. We will continue to engage with the Taskforce and, working with other UK authorities, will consider the recommendations in the report once published.

30. **Consultation on the Digital Securities Sandbox**.

4: What are the Bank's future priorities?

The coming year will see us implement the most significant change to how the UK implements regulation of FMI in at least a decade. While the process for implementing standards is changing, our approach and commitments to the standards themselves remains unmoved. Our objectives for the coming year reflect this with work to embed the new accountability and toolkits established in FSMA 2023 as well as work to deliver robust, risk-based supervision of FMIs and enhance the supervisory approach; strengthen FMI financial and operational resilience, recovery and resolution; and facilitate safe innovation in payments, clearing and settlements.

4.1: Delivering robust, risk-based supervision of FMIs and enhancing the supervisory approach

> **We will focus on delivering against our new objectives and using our rulemaking powers to strengthen our supervisory framework.**

FSMA 2023 provides the Bank with a rulemaking power that it can use to replace relevant repealed parts of retained EU legislation with Bank rules. In practice this will enable the Bank to ensure that the regulation for CCPs and CSDs remains consistent with the highest international standards, evolves in response to current events and supports our supervisory approach.

The Bank will develop and implement the rulebook in an open and transparent way, consistent with its statutory obligations, and with a view to delivering a nimble, effective, and forward-looking regulatory regime. The initial focus will be EMIR.

A further example of where the Bank may use its new general rulemaking power is to implement the outcomes of international work to increase the transparency and evaluate the responsiveness of margin models in centrally cleared markets. The Bank is also exploring introducing 'fundamental rules' for FMIs, similar to those that the PRA has already introduced for banks and insurers, helping firms anticipate how we will assess their compliance with more specific rules.

The Bank now has the powers relating to exemptions from the clearing obligation for post-trade risk and reduction services. The Bank will work jointly with the FCA to ensure a consistent approach.

We will operate our new rulemaking powers within an enhanced accountability framework introduced as part of FSMA 2023 as set out in Box A that will ensure that the Bank's new powers are supported by high levels of transparency and accountability.

We will take forward work on the Senior Managers and Certification Regime (SM&CR) for CCPs and CSDs.

FSMA 2023 legislated for the creation of a high-level framework for a Senior Managers and Certification Regime (SM&CR) for CCPs and CSDs. The existing regulatory regime for CCPs and CSDs focuses supervisory and enforcement powers on the entities themselves, with limited provisions for the oversight of individual conduct. The main purpose of the SM&CR is to promote financial stability by creating a system that enables CCPs, CSDs and regulators to hold individuals employed by CCPs and CSDs – particularly senior decision-makers – to account. The regime does this through a variety of components, such as a Senior Managers Regime which grants the Bank powers to assess whether individuals who perform roles that pose a potential risk to financial stability are fit and proper to perform those roles.

The implementation of the regime will require secondary legislation. HMT is considering the outcomes of its call for evidence on the wider SM&CR, before taking any further action to implement.[31]

The Bank will continue to ensure the safe functioning and resilience of FMIs by monitoring ongoing risks to financial stability.

We will continue monitoring ongoing risks to financial stability and seek to ensure that FMIs are resilient and robust to them. We will enhance our use of data to support identification of risks to FMIs.

The Bank will continue to promote high standards of operational and financial resilience across UK FMIs. This will include undertaking a range of reviews, technical risk reviews, stress tests and third-party reviews, across the FMI population, responding to any outages and incidents that occur and continuing the follow up and lessons learnt on earlier incidents (such as Box C and Box D).

We will review feedback and thereafter publish the approach that the Bank will take to enforcement; and we will consider any further updates required to that document in line with the new enforcement provisions in FSMA 2023. We also intend to update our published supervisory approach document to show the changes to supervision as a result of FSMA 2023 and the operational resilience policy as well as bring together the updates to the

31. **Senior Managers & Certification Regime: a Call for Evidence**.

supervisory approach published in previous Annual Reports and policy statements into a single document.

We will monitor innovations within FMIs to ensure continued resilience against potential future risks.

Innovation within the sector continues apace. We will work with FMIs undertaking internal transformation programmes to ensure that changes are completed effectively and efficiently and with robust standards to ensure UK financial stability.

And we will continue to recognise incoming CCPs and CSDs.

The Bank will continue to process applications from non-UK CCPs and CSDs for recognition where the relevant requirements are met. These recognition requirements include a decision by HMT that the incoming FMI's home jurisdiction's regulatory framework is equivalent, and appropriate and proportionate supervisory co-operation and information sharing being agreed between the Bank and the incoming FMI's home authority.

The Bank will also work with HMT to provide advice on equivalence for overseas jurisdictions and is in contact with several overseas authorities on necessary MoUs to support recognition assessments. The Bank will continue to provide such advice, pursue MoUs and complete recognition decisions in the coming period where the necessary requirements are met. In the meantime, non-UK CCPs and CSDs in the Temporary Regimes may continue to offer clearing and settlement services in the UK.

4.2: Enhancing FMI operational resilience

Domestic implementation of new standards for operational resilience.

Operational resilience is key to maintaining confidence and stability in the financial system during periods of disruption. FMIs have been making progress over the last year to achieving this outcome through the implementation of our operational resilience policy.

The Bank continues to work with FMIs to ensure that by 31 March 2025, they have taken all reasonable action to ensure that their important business services remain within impact tolerances under extreme but plausible scenarios. FMIs will also need to take steps to comply with the outsourcing and third party expectations and obligations by February 2024.

We will finalise our policy relating to critical third parties.

As outlined in Section 3, as part of FSMA 2023, the government committed to enhancing the ability of the supervisory authorities (the Bank, the PRA, and the FCA) to manage risks posed by CTPs. CTPs can include cloud service providers, data analytics providers, or other

IT service providers which may become critical to the smooth functioning of FMI operations, meaning any outages of these services could pose a risk to UK financial stability. These services can improve the offering of FMIs to their clients through greater speed of delivery and cost savings and as such their adoption can contribute to FMI innovation.

FSMA 2023 provides HMT with powers to designate certain third parties as 'critical', enabling the supervisory authorities to develop regulation for, gather information from, and take enforcement action against these CTPs with respect to the services they provide firms, including FMIs. These powers facilitate FMIs' adoption of the services provided by CTPs by strengthening their operational resilience. The supervisory authorities published a consultation paper[32] outlining potential uses of these powers, including setting minimum standards for resilience and requiring resilience testing of CTPs. We will reflect on the feedback to this in 2024 and publish our response and next steps.

4.3: Enhancing FMI financial resilience, recovery and resolution

The Bank will continue to conduct regular CCP supervisory stress test exercises.

The CCP SST will continue to play a role in our approach to supervision and will take place on a regular basis. The Bank will continue to develop its stress-testing capabilities and explore opportunities to collaborate and share best practices with other CCP regulators internationally.

And we will continue work on enhancing CCP financial resilience, recovery and resolution.

Following the consultation[33] in 2023, the Bank intends to publish the final statement of policy on the approach to its power to temporarily restrict or prohibit discretionary payments to shareholders or employees of UK CCPs in severe circumstances. Furthermore, the Bank will continue developing policy on the financial resources held by CCPs.

HMT's consultation in 2021 and response in 2022, sets out that with the passage of FSMA 2023 and commencement of the rulemaking power, the Bank will be able to set the amount of capital CCPs must hold as a second tranche of their own resources for loss absorption and the methodology by which this should be calculated.

32. **The Bank of England, PRA and the FCA issue joint proposals to increase resilience of the financial sector by overseeing critical third parties**.
33. **Ensuring continuity of critical clearing services: the Bank of England's approach to discretionary payments by central counterparties**.

The Bank will continue to provide support to HMT's implementation of the enhanced CCP resolution regime. The Bank will consult on the relevant Statements of Policy set out in the Act.

We will continue to contribute to international policy work to ensure that consistent levels of resilience are maintained globally. This includes additional work across all FMI types building on CPMI-IOSCO's work relating to CCP practices to address non-default losses leading to publication of a consultative document on further guidance or recommendations in the near term.[34] The Bank will also continue to contribute to the FSB's work on financial resources and tools for CCP resolution.[35]

We will also contribute to enhancing CCP resilience and system-wide financial stability through international policy work on initial margin. In particular, we will continue to work with CPMI, IOSCO and BCBS to develop further guidance to the PFMI, designed to make initial margining practices and models more transparent, and aid the evaluation of model responsiveness.

We will strengthen our resolution toolkit for all FMIs.

The objective of the regulatory regime for systemic payment systems using stablecoins is to mitigate financial stability risks at all times including when a firm fails. The FMI Special Administration Regime (SAR) for failing systemic payments and settlement systems is currently being reviewed by HMT so that it can be applied to operators of systemic stablecoin systems, issuers and custodians of stablecoins used in these systems, and other designated service providers, with the view to decrease the likelihood of a disorderly failure of any of these firms, while protecting coin holders' rights.

HMT's key proposed changes include: (i) adding a new objective to FMI administration (ie timely return of assets/funds to creditors) alongside the existing one (ie continuity of services); and (ii) providing the Bank with the power to direct the court appointed administrators as to which objective should be prioritised. The Bank will continue to work with HMT on the modifications to the FMI SAR to ensure it provides appropriate tools to manage failure of firms involved in systemic payment systems using stablecoins.

And we will continue to focus on our international workplan.

The Bank is an active member of and contributor to both the CPMI, which promotes the safety and efficiency of payment, clearing, settlement and related arrangements, and CPMI-IOSCO, which work collectively to develop policy regarding clearing, settlement

34. **Report on current central counterparty practices to address non-default losses**.
35. **Financial Resources and Tools for Central Counterparty Resolution: Consultation report**.

and reporting arrangements for FMIs. CPMI-IOSCO are responsible for the Principles for Financial Market Infrastructure which are international standards for payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories. Their work also encompasses the development of any related further guidance and monitoring the implementation and effectiveness of the PFMI and related policies.

4.4: Facilitating safe innovation in payments, settlement and clearing

We will continue to support innovation in securities settlement by working with the FCA to open the Digital Securities Sandbox for applications.

The Bank is working with the FCA to open the DSS for applications. The DSS is designed to allow firms which provide securities trading and/or settlement services to test and adopt new technologies that are not supported under current legislation. The broad outlines of the DSS are described in the consultation document issued by HMT in July.[36]

We will implement international standards within a domestic regime for systemic payment systems using stablecoins.

The Bank's recent discussion paper set out the proposed regulatory regime for systemic payment systems using stablecoins. In 2024, the Bank intends to reflect on the responses received and publish a consultation paper on its final proposals. In doing this we will work closely with the FCA who will be working in parallel to develop a regulatory framework for non-systemic stablecoins, and for conduct purposes for systemic payment systems using stablecoins. The Bank will also monitor developments in stablecoins closely to identify any stablecoin or proposed stablecoin which is likely to become systemic in the UK. The Bank will also continue to contribute to international standards in this area, including future workstreams of FSB, CPMI-IOSCO and BCBS.

And we will continue to develop domestic policy regarding widening the payments perimeter.

In August 2023, HMT published a Response to its 'Consultation on Payments Regulation and the Systemic Perimeter'. In this, HMT committed to taking forward a number of reforms to the Bank's systemic payments perimeter and clarifying the Bank's powers in a number of areas. HMT intends to progress a similar accountability framework, as contained in FSMA, to apply to the Bank's systemic perimeter in the Banking Act, including its new scope over systemic digital settlement assets and its existing scope over systemic payment systems. HMT stated

36. **Consultation on the Digital Securities Sandbox**.

that it would take these changes forward at a future legislative opportunity, as they would require an Act of Parliament.

The Bank stands ready to support HMT in implementing these changes to its systemic remit. In the meantime, the Bank will continue to monitor the payments landscape to understand the financial stability risks that may be posed.

Annex 1: FMIs and specified service providers supervised by the Bank and the key supervisory legislation to which they are subject

CCPs are regulated under **FSMA 2000** as recognised clearing houses **(RCH)** and under **EMIR**. The embedded payment systems of LCH Ltd and ICE Clear Europe are also both recognised payment systems under the **Banking Act 2009**.

CCP	Description
ICE Clear Europe Limited	Clears a range of exchange-traded derivatives.
LCH Limited	Clears a range of securities, exchange-traded derivatives, interest rate swaps, inflation swaps, non-deliverable foreign exchange forwards, FX options, bonds, and repurchase agreements.
LME Clear Limited	Clears a range of metal derivatives traded on the London Metal Exchange.

Payment systems meeting defined criteria may be recognised by HMT. Recognised payment systems are supervised by the Bank under the **Banking Act 2009**.

Payment system	Description
Bacs[37]	Operated by Pay.UK, processes higher-volume and lower-value payments, such as salary, benefit, Direct Credit and Direct Debit payments.
CHAPS[38]	Operated by the Bank of England, the CHAPS system is the UK's high-value payment system, providing real-time gross settlement of sterling transfers between participants.
CLS	Operates the world's largest multicurrency cash settlement system for foreign exchange transactions in 18 currencies, including sterling.
Faster Payments Services (FPS)	Operated by Pay.UK, processes standing orders and electronic retail transactions, including transactions generated in internet, mobile and telephone banking.

37. Bacs and FPS are owned and operated by Pay.UK, which is the entity that the Bank supervises.
38. The Bank's FMI Directorate continues to supervise the CHAPS system to the same standard as recognised payment systems even though it was derecognised by HMT in December 2017 to reflect the fact that it is now operated by the Bank.

Payment system	Description
LINK	LINK is a network of card issuers and ATM deployers which allows cardholders to use their cards to withdraw cash at any ATM connected to LINK where the ATM deployer is not the same institution as the cardholder's issuing bank.
Mastercard Europe	Mastercard Europe is a four-party card scheme and cards payments processor operating in the Europe region, including the UK, EEA, and non-EEA, offering debit, credit, deferred debit and prepaid card products.
Sterling Fnality Payment System	DLT-based Sterling Fnality Payment System (£FnPS) entered its initial phase of operations, focusing on ensuring system resilience and functionality, on 27 November. £FnPS offers settlement in a digital representation of central bank funds. It is currently operating under limits from the Bank and progressing to the next stage of scaling its operations will be subject to £FnPS meeting the Bank's operational and supervisory expectations. Sterling Fnality Payment System £FnPS is the UK's first wholesale settlement system that uses Distributed Ledger Technology through the Bank's RTGS Omnibus Account.
Visa Europe	A four-party card scheme and cards payments processor operating in the UK, EEA, Israel, Turkey, and Switzerland, offering debit, credit, deferred debit and prepaid card products.

Specified providers may be **specified** by HMT where their service(s) are determined to form part of the arrangements constituting a recognised payment system. Specified service providers are supervised by the Bank under the **Banking Act 2009**.

Specified provider	Description
Vocalink	Vocalink is a technology company that designs, builds and operates IT infrastructure for account-to-account based payment systems and ATM switching platforms.

Recognised UK CSDs are regulated under **FSMA** and **CSDR**. Euroclear UK & International operates the CREST system, which is also a recognised payment system under the **Banking Act 2009** and is also subject to the **Uncertified Securities Regulations 2001**.

Recognised CSD	Description
Euroclear UK & International	EUI operates the CREST system – a securities settlement system for a range of securities including UK gilts and money market instruments, as well as UK equities – which settles on a delivery versus payment basis.

Incoming (non-UK) CCPs recognised by the Bank as a Tier 1 or Tier 2 incoming CCP under UK EMIR Article 25.

CCP	Description
Cboe Clear Europe N.V.	Clears a range of cash equities, depository receipts, ETFs and equity derivatives (single stock options, index futures and options).
Eurex Clearing AG	Clears a range of listed as well as OTC securities and derivatives including equities, debt, interest rate, foreign exchange as well as repo transactions.

Incoming (non-UK) CSDs recognised under Article 25 of UK CSDR

CSD	Description
Euroclear Bank SA/NV	Euroclear Bank (EB) operates the Euroclear System for securities settlement and provides banking type ancillary services. EB’s participant settle a range of internationally traded securities including debt instruments, equities and funds.

Annex 2: Data on FMIs

CCPs (by default waterfall) – average of daily figures over the period[(a)]

		Total initial margin requirement (£ equivalent, millions)[(a)]			Default fund (£ equivalent, millions)[(b)]			Number of clearing members		Operational availability of core systems (per cent)		Products cleared
		2023 H1	2022	2021	2023 H1	2022	2021	2023 H1	2022	2023 H1	2022	2023 H1 and 2022
ICE Clear Europe[(c)]	Credit default swap	5,714	7,990	7,028	1,235	1,052	924	28	28	99.97	100	CDS, credit default swap market
	Futures and options	84,726	121,190	56,742	2,594	2,607	2,335	74	72	100	100	Futures and options: exchange-traded energy markets (including ICE Endex, ICE Futures Europe, ICEU Futures Adu Dhabi, and ICE Futures US) and the financials and softs futures and options contracts traded on ICE Futures Europe.
LCH Ltd	EquityClear	4,119	3,954	3,468	150	150	150	31	32	99.97	99.99	2023 H1: Clears a range of OTC and exchange traded interest rate derivatives, FX derivatives, cash equities, cash bonds and repos. 2022: Clears a range of OTC and exchange traded interest rate derivatives, FX derivatives, cash equities, cash bonds and repos.
	ForexClear	5,283	6,113	3,849	1,559	1,832	1,290	36	36			
	Repo-Clear	11,027	11,632	8,789	513	1,311	1,146	120	119			
	SwapClear[(d)]	178,673	157,302	143,343	5,256	5,406	5,667	127	130			

		Total initial margin requirement (£ equivalent, millions)[(a)]			Default fund (£ equivalent, millions)[(b)]			Number of clearing members		Operational availability of core systems (per cent)		Products cleared
		2023 H1	2022	2021	2023 H1	2022	2021	2023 H1	2022	2023 H1	2022	2023 H1 and 2022
LME Clear	LME Base	8,890	9,092	6,867	1,209	1,358	1,007	42	42	100	100	Clears a range of base metal and precious metal derivatives traded on the London Metal Exchange
	LMEprecious	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			

(a) The end of day total margin requirement per default waterfall, averaged over all business days in the period.
(b) The size of the clearing member prefunded default fund, averaged over all business days in the period.
(c) ICE Default fund is average of requirement amount rather than deposit value.
(d) The SwapClear line covers the SwapClear and Listed Rates services.

Recognised payment systems and securities settlement systems[a]

		Volume			Value (£ millions)			Number of settlement bank members		Operational availability (per cent)[b]		Important payment types
		2023 H1	2022	2021	2023 H1	2022	2021	Jun 23	Dec 22	2023 H1	2022	2023 H1 and 2022
Bacs		27,205,825	26,750,310	25,780,406	22,422	21,340	20,034	31	30	100	99.99	Direct Debit/Direct Credit
CHAPS[c]		204,935	203,538	189,539	381,520	394,572	341,171	37	37	100	99.96	Financial markets and corporate treasury, crossborder, other wholesale, interbank, government, property completions and mortgages
CLS	All currencies	1,123,592	1,157,701	971,725	4,108,323	3,993,855	4,502,070	76	76	100	99.96	Settlement of foreign exchange, transactions in 18 currencies including sterling
	Sterling	78,050	83,415	70,944	417,433	438,078	399,504					
CREST	Sterling	209,435	214,793	230,602	816,917	893,710	878,146	24	24	99.88	99.77	Settlement of gilts, equities, and money market instruments (including in respect of the Bank's open market operations and repo markets transactions more generally)
	US dollar	5,709	6,703	7,320	1,277	1,673	1,459					
	Euro	953	1,018	2,300	559	510	1,023					
	Total CREST	216,097	222,514	240,222	818,754	895,894	880,628					
Faster Payments Service[d]		17,534,072	15,742,662	13,508,815	14,678	14,678	10,266	37	36	100	100	Single Immediate Payments, Standing Order Payments, Forward Dated Payments, Direct Corporate Access
Link[e]		3,951,214	4,347,206	4,168,944	209	227	216	32 (23 banks)	32 (23 banks)	100	100	Withdrawing cash from ATMs deployed by entities other than the withdrawer's card issuer

		Volume			Value (£ millions)			Number of settlement bank members		Operational availability (per cent)[(b)]		Important payment types
		2023 H1	2022	2021	2023 H1	2022	2021	Jun 23	Dec 22	2023 H1	2022	2023 H1 and 2022
Mastercard Europe	All currencies	141,354,686	129,311,875	123,051,232	4,773	4,260	3,492	839	832	99.94	99.98	Card payments
Visa Europe	All currencies	142,568,662	136,987,615	116,898,456	4,930	4,697	4,099	359	366	100	100	Card and digital payments

(a) All value and volume data represent daily average unless otherwise stated.

(b) The data on operational availability is not comparable between firms because each firm uses its own definition.

(c) Number of settlement bank members includes non-bank payment service participants and does not include suspended participants.

(d) Number shown in the above table are directly connected settling participants.

(e) Number of settlement bank members may vary as not all LINK members have their own RTGS account and will settle using other LINK members' RTGS accounts.

Annex 3: Glossary of terms

Term	Definition
Collateral	An asset or third-party commitment used by a collateral provider to secure an obligation vis-à-vis a collateral taker.
Credit risk	The risk of loss due to the failure of a counterparty to perform on a contractual obligation on time and in full. Credit risk arises whenever future cash flows are due from parties who may not provide them.
Default fund	A fund consisting of assets contributed by members of a system that would be used to pay liabilities of defaulting members.
Digital Securities Sandbox	The DSS is designed to allow firms which provide securities trading and/or settlement services to test and adopt new technologies that are not supported under current legislation.
G20	The G20 group comprises 19 countries and the European Union, representing the world's largest economies, whose finance ministers and central bank governors have met periodically since 1999.
Initial margin	Collateral which is posted at the beginning of a transaction by a member to a CCP to cover potential future adverse changes in the market value of the contract and is recalculated on a regular basis.
Liquidity risk	The risk that a party does not have sufficient funds to meet an obligation when it becomes due or can only obtain those funds at an unexpectedly high cost.
Operational risk	The risk that deficiencies in information systems or internal processes, human errors, management failures, or disruptions from external events will result in the reduction, deterioration, or breakdown of services provided by an FMI.
Securities settlement system	An entity enabling securities to be transferred and settled by book entry according to a set of predetermined multilateral rules. Such systems allow transfers of securities either free of payment or against payment.
Stablecoin	Stablecoins are a new form of privately issued digital asset that aims to maintain a stable value against fiat currency(ies) and can be used to make payments and/or settle financial transactions.
Systemic risk	The risk that the inability of one or more participants to perform as expected will cause other participants to be unable to meet their obligations when due.
Variation margin	Collateral which is posted during the life of a contract by a member to a CCP to cover actual changes in the market value of a contract.

Annex 4: Report on the exercise of relevant sub-delegated powers for the period ending 15 December 2023

Presented to Parliament pursuant to paragraph 32(2)(a) of Sch. 7 of the European Union (Withdrawal) Act 2018.

The European Union (Withdrawal) Act 2018 ('The Act') requires the Bank of England to report to Parliament annually if we exercise relevant sub-delegated powers.

This annex relates to the exercise of sub-delegated powers by the Bank in our supervision of FMIs[39] in the reporting period ending 15 December 2023. The previous report was issued on 19 December 2022.[40]

Changes to reporting requirements, procedures for data quality and registration of Trade Repositories under UK EMIR.[41]

The relevant power exercised for the purposes of this report is the power to make Technical Standards Instruments under Section 138P Financial Services and Markets Act 2000.

One standards instrument has been made during the reporting period:

Bank Standards Instrument: The Technical Standards (Emir Reporting And Data Quality And Miscellaneous Amendments) Instrument 2023.

The revised rules aim to ensure a more globally consistent data set, where appropriate, to enable authorities to better monitor for systemic and financial stability risk. They look to improve data quality and provide clarity to counterparties where required. The changes were introduced jointly with the FCA. This reflects that the Bank and FCA share supervisory responsibilities for UK EMIR: the Bank is responsible for the reporting by CCPs; the FCA is responsible for reporting by all other counterparties.

39. **Bank Standards Instrument: the Technical Standards (EMIR Reporting and Data Quality and Miscellaneous Amendments) Instrument 2023**.
40. **The Bank of England's supervision of financial market infrastructures – Annual Report 2022**.
41. **Changes to reporting requirements, procedures for data quality and registration of Trade Repositories under UK EMIR – feedback on CP21/31 and our final rules and guidance**.

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