



BANK OF ENGLAND

Financial Policy Summary and Record of the Financial Policy Committee Meeting on 2 October 2019

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This is the record of the Financial Policy Committee meeting held on 2 October 2019.

It is also available on the Internet:

<https://www.bankofengland.co.uk/financial-policy-summary-and-record/2019/october-2019>

The Financial Policy Committee (FPC) was established under the Bank of England Act 1998, through amendments made in the Financial Services Act 2012. The legislation establishing the FPC came into force on 1 April 2013. The objectives of the Committee are to exercise its functions with a view to contributing to the achievement by the Bank of England of its Financial Stability Objective and, subject to that, supporting the economic policy of Her Majesty's Government, including its objectives for growth and employment. The responsibility of the Committee, with regard to the Financial Stability Objective, relates primarily to the identification of, monitoring of, and taking of action to remove or reduce systemic risks with a view to protecting and enhancing the resilience of the UK financial system. The FPC is a committee of the Bank of England.

The FPC's next policy meeting will be on 3 December 2019 and the Record of that meeting will be published on 10 December.



Financial Policy Summary, October 2019

The Financial Policy Committee (FPC) aims to ensure the UK financial system is resilient to, and prepared for, the wide range of risks it could face — so that the system can serve UK households and businesses in bad times as well as good. At its meeting on 2 October, the FPC reviewed developments since its meeting on 4 July.

The resilience of the UK financial system to Brexit

Entrenched Brexit uncertainties, particularly in an environment of weaker global growth, continue to weigh on economic activity in the UK.

- Brexit uncertainty is weighing on business investment, the prices of UK assets and flows of foreign capital into the UK, most notably in commercial property and leveraged lending markets.
- Although actions by businesses and authorities have resulted in some improvement in the preparedness of the UK economy for a no-deal Brexit, material risks of economic disruption remain.

The core of the UK financial system including banks, broker dealers and insurance companies is resilient to and prepared for the wide range of risks it could face, including a worst-case disorderly Brexit.

- Major UK banks have maintained Tier 1 capital levels of around 17% of risk-weighted assets – more than three times higher than before the global financial crisis.
- The FPC continues to judge that its 2018 stress test of major UK banks was sufficiently severe to encompass a worst-case disorderly Brexit. The core UK banking system demonstrated its resilience to – and capacity to keep lending in – that stress scenario.
- Post-crisis reforms have made broker dealers, on which some markets rely, more resilient. This has reduced the risk that market-making losses could lead to their distress or failure. Insurance companies, whose behaviour can dampen market shocks, have sufficient surplus capital to withstand very sharp falls in property and equity prices.

The FPC is maintaining the UK countercyclical capital buffer rate at 1%.

- Underlying domestic vulnerabilities (excluding Brexit) that can amplify economic shocks have not changed materially since July and remain at a standard level overall. Despite continued signs of strong risk appetite from creditors and lenders, credit growth to UK households and businesses remains modest and debt-servicing burdens remain low.
- The FPC stands ready to move the UK countercyclical capital buffer (CCyB) rate in either direction as economic conditions and the overall risk environment evolve. If a major economic stress were to materialise, the FPC is prepared to cut the UK CCyB rate, as it did in July

2016. In the absence of such a stress, the FPC remains vigilant to developments, particularly in the domestic credit environment.

Reflecting extensive preparations made by UK authorities and the private sector, most risks to UK financial stability that could arise from disruption to cross-border financial services in a no-deal Brexit have been mitigated.

- Legislation, temporary permissions and other preparations have been made by UK authorities to ensure that UK households and businesses will be able to use existing and new services from EU financial institutions.
- However, in the absence of further action by EU authorities, some disruption to cross-border financial services in the event of a no-deal Brexit is possible. Such disruption would primarily affect EU households and businesses, but it could amplify volatility or spill back to the UK in ways that cannot be fully anticipated or mitigated.

Financial stability is not the same as market stability. Significant further asset price volatility is to be expected in a disorderly Brexit.

- In a disorderly Brexit, demand for UK assets could be expected to fall sharply, depreciating sterling and tightening financial conditions for UK households and businesses through adjustments in equity prices and corporate and bank funding costs.
- With over £1 trillion of high-quality liquid assets, major UK banks can meet their maturing obligations without any need to access wholesale funding for many months. They can also withstand an unprecedented loss of access to foreign currency markets. As a further precaution, the Bank of England is maintaining operations to lend in all major currencies on a weekly basis.

Irrespective of the particular form of the UK's future relationship with the EU, and consistent with its statutory responsibilities, the FPC will remain committed to the implementation of robust prudential standards in the UK. This will require maintaining a level of resilience that is at least as great as that currently planned, which itself exceeds that required by international baseline standards, as well as maintaining UK authorities' ability to manage UK financial stability risks.

The resilience of the UK financial system to global risks

The intensified trade war between the United States and China has weighed on global growth and poses the biggest near-term risk to the global economy.

- Following the latest announcements, average bilateral tariffs between the United States and China are around 20 percentage points higher than at the start of 2018. These tariffs – and the uncertainty associated with intensifying trade tensions – have contributed to slowing global growth and are likely to weigh on global growth in the coming quarters.
- The trade war has also increased downside risks to the global outlook. Global growth could slow more sharply if the trade war were to lead to a tightening of financial conditions or to further reductions in business confidence and investment. A broadening of the trade war beyond tariff measures to restrictions on technology and capital, and to other jurisdictions, would magnify global risks and fragment the global economy.

- Even if a protectionist-driven global slowdown were to spill over to the UK at the same time as a worst-case disorderly Brexit, the FPC judges that the core UK banking system would be strong enough to absorb, rather than amplify, the resulting economic shocks.

Future shocks to the global economy could be amplified by material debt vulnerabilities, some structural illiquidity in financial markets and reduced space for some monetary authorities to respond.

- The growth rate of debt in mainland China is rising again. The debt to GDP ratio exceeds 200%, having risen by around 90 percentage points since 2008.
- In Hong Kong, corporate and household debt levels are also high. Recent political protests have been accompanied by slowing growth and falling asset prices. Hong Kong's position as a major financial centre increases the risk of spillovers.
- US corporate debt is close to pre-crisis levels as a percentage of GDP and credit quality has continued to deteriorate. In recent years, there has been a significant increase in the share of BBB-rated bonds, which could drop to a sub-investment grade rating in the event of a negative economic shock.
- In global financial markets, the trade war has put further downward pressure on risk-free interest rates. In the face of weakening growth, some authorities have reduced official interest rates. Lower rates are likely to support global growth, but these moves have further reduced space for some monetary authorities to respond in the event of a shock to the global outlook.
- US repo market rates were highly volatile for a period in mid-September. A number of factors appeared to have pushed up repo rates. The subsequent actions of the Federal Reserve Bank of New York served to stabilise the market. However, the volatility could point to a more general tendency for markets to jump to illiquidity under stress. This could impair the ability of global markets to absorb future shocks while still functioning effectively.

The core of the UK banking system remains resilient to severe global and market stress.

- UK banks have substantial exposures to mainland China and Hong Kong, of around 230% of their common equity Tier 1 (CET1) capital base. Exposures of UK banks to the United States and the euro area are around 325% and 240% of CET1 capital respectively.
- The international exposures of major UK banks were tested against a global scenario more severe than the financial crisis in the 2008 stress test. That scenario included recessions in mainland China, Hong Kong, the euro area and the United States. It also included sharp falls in the price of a range of financial assets.
- Major UK banks with international and trading exposures were assessed to be resilient to that scenario. The results of the 2019 stress test will be published in December.

Tackling vulnerabilities in open-ended funds

The FPC continues to judge that the mismatch between redemption terms and the liquidity of some funds' assets has the potential to become a systemic risk.

- This mismatch creates incentives for investors to redeem ahead of others, which can lead to forced asset sales by funds and amplify asset price movements. Sharp falls in asset prices could increase the cost of finance to companies, leading to lower investment and output in the economy. These incentives should be reduced through greater consistency in the design of funds between:
 - i. The liquidity of a fund's assets, which determines the price that can be achieved during the redemption period;
 - ii. The price offered to redeeming investors for their share of the fund; and
 - iii. The redemption frequency or length of notice periods.
- The Bank and the Financial Conduct Authority (FCA) are undertaking a joint review to assess how funds' redemption terms might be better aligned with the liquidity of their assets in order to minimise financial stability risks without compromising the supply of productive finance. The progress of this review will be reported in the December *Financial Stability Report (FSR)*.

Ensuring that payment systems support financial stability

The FPC has agreed a set of principles that will guide its assessment of how prudential regulation and supervision should adjust to fast-moving developments in payments activities, which are currently a focal point for innovation in financial services.

- These principles are that regulation and supervision should:
 - i. Reflect the financial stability risk, rather than the legal form, of payments activities;
 - ii. Ensure end-to-end operational and financial resilience across payment chains that are critical for the smooth functioning of the economy; and
 - iii. Ensure that sufficient information is available to monitor payments activities so that emerging risks to financial stability can be identified and addressed appropriately.
- HM Treasury is leading a review of the payments landscape to support choice, competition and resilience and to ensure that regulation and infrastructure keep pace with innovation. These principles could usefully inform any assessment of existing payments regulation in that review.
- Libra has the potential to become a systemically important payment system. The FPC judges that such a system would need to meet the highest standards of resilience and be subject to appropriate supervisory oversight, consistent with the principles set out above. The terms of engagement for innovations such as Libra must be adopted *in advance* of any launch. UK authorities should use their powers accordingly.
- The FPC encourages exploration of alternative solutions to improve the efficiency of domestic and cross-border payments.

The transition away from Libor to alternative benchmark rates

The continued reliance of global financial markets on Libor poses risks to financial stability that can be reduced only through a transition to alternative benchmark rates by end-2021.

There is no justification for firms continuing to increase their exposures to Libor. The pace of market participants' transition efforts to alternative benchmark rates now needs to accelerate and the FPC will continue to monitor progress closely.

- The FPC welcomes measures taken by the Prudential Regulation Authority (PRA) and the FCA to step up their monitoring of regulated firms' exposures to Libor and firms' transition plans for reducing those exposures.
- In Q4, the FPC will consider further potential policy and supervisory tools that could be deployed by authorities to reduce the stock of legacy Libor contracts to an irreducible minimum ahead of end-2021.










Table 1 Checklist of actions that would mitigate financial stability risks that could arise from disruption to end-users of financial services

This checklist reflects the risk of disruption to end-users, including households and companies, if barriers emerge to cross-border trade in financial services immediately following the 31 of October. The risk assessment takes account of progress made in mitigating any risks. It assesses risks of disruption to end-users of financial services in the UK and, because the impact could spill back, also to end-users in the EU.⁽¹⁾

Risks of disruption are categorised as **low**, **medium** or **high**. **Blue text** is news since the FSR in July 2019.⁽²⁾

The checklist is not a comprehensive assessment of risks to economic activity arising from Brexit. It covers only the risks to activity that could stem from disruption to provision of cross-border financial services.











Most risks to financial stability that could arise from disruption to cross-border financial services in a no-deal Brexit have been mitigated.

	Risk to UK 	Risk to EU 	
Ensure a UK legal and regulatory framework is in place			<p>The passage of the EU (Withdrawal) Act 2018 and secondary legislation has ensured that an effective framework for the regulation of financial services will be in place, and that EU financial services companies can continue to serve UK customers.</p> <p>Some secondary legislation is still required to implement the domestic state aid framework and to ensure EU legislation that begins to apply during the Brexit extension period can operate effectively after exit day (eg parts of the revised Capital Requirements Regulation). The FPC expects this to be completed before exit day.</p>
OTC derivatives (cleared)			<p>The UK government has legislated to ensure that UK businesses can continue to use clearing services provided by EU-based clearing houses.</p> <p>Actions taken by EU authorities will allow EU counterparties to continue clearing existing trades, and new trades, with UK central counterparties (CCPs) until end-March 2020. The European Commission has provided a temporary equivalence decision in respect of the UK's regulatory framework for UK CCPs. The European Securities and Markets Authority (ESMA) has announced the recognition of the three UK CCPs until end-March 2020 in a no-deal scenario and agreed the co-operation arrangements to support this with the Bank.</p> <p>But UK CCPs will require clarity over future recognition arrangements by December, otherwise they may need to start the process of closing out or transferring EU clearing members' positions ahead of March 2020. There are currently £61 trillion of derivatives contracts between the UK and EU, £42 trillion of which is currently due to expire after March.</p>
Insurance contracts			<p>The UK government has legislated to ensure that the 16 million insurance policies that UK households and businesses have with EU insurance companies can continue to be serviced after Brexit.</p> <p>UK insurance companies continue to make good progress in restructuring their business in order to service £60 billion of EU liabilities after Brexit. £55 billion of this liability is expected to be addressed by 31 October 2019. Temporary regimes announced by EU states are expected to further reduce the residual 'at risk' liabilities by over 50%.</p> <p>Some EU countries are implementing national legislation to support affected policyholders. The European Insurance and Occupational Pensions Authority (EIOPA) published recommendations to national authorities supporting recognition or facilitation of UK insurance companies' continued servicing of EU contracts.</p>
Asset management			<p>Co-operation agreements between the FCA, ESMA and EU National Competent Authorities have been agreed. This enables EU asset managers to delegate the management of their assets to the UK after exit.</p> <p>The UK government has legislated for EU asset management firms to continue operating and marketing in the UK after exit. And to operate in the EU, the largest UK asset managers have completed their establishment of EU authorised management companies.</p>

(1) In most cases, the impact on EU end-users will apply to the wider European Economic Area (EEA).

(2) Bank of England *Financial Stability Report*, July 2019.

In the absence of actions by EU authorities, some risks remain. Although these issues primarily affect EU households and businesses, they can also be expected to amplify volatility or spill back to the UK.

	Risk to UK 	Risk to EU 	
Banking services			<p>The UK government has legislated to ensure that UK households and businesses can continue to be served by EU-based banks after Brexit. EU authorities have not taken similar action. As a result, major UK-based banks are transferring their EU clients to subsidiaries in the EU so that they can keep providing services to them. All material subsidiaries are now authorised, fully operational and trading. Firms continue building the capacity of their EU entities. On average, approximately half of clients of major UK-based banks have completed the necessary documentation to enter into derivatives trades facing the EU entities. The number of clients actively trading in the new entities is lower. Some operational risks therefore remain, including if many clients seek to migrate to the EU entities at the last minute. These could amplify any other disruption in the market.</p>
OTC derivative contracts (uncleared)			<p>Certain 'lifecycle'⁽³⁾ events will not be able to be performed on cross-border derivative contracts after Brexit. This could affect £22 trillion of uncleared derivatives contracts between the EU and UK, of which £17 trillion matures after October 2019. This could compromise the ability of derivatives users to manage risks, and could therefore amplify any stress around the UK's exit from the EU.</p> <p>The UK government has legislated to ensure that EU banks can continue to perform lifecycle events on contracts they have with UK businesses. The European Commission has not reciprocated for UK-based banks' contracts with EU businesses.</p> <p>Most EU states with material uncleared derivatives activity have implemented legislative measures which seek to address this risk at national level but the scope and effectiveness of these measures will vary between jurisdictions. For some jurisdictions, uncertainty remains about the scope of activity which will be possible once the legislation is implemented. And for some jurisdictions, the published measures only provide a partial solution.</p>
Personal data			<p>The UK government has legislated to continue to allow the free flow of personal data from the UK to the EU. The European Commission has not taken similar action to ensure the free flow of personal data from the EU to the UK in a no deal scenario. While the action by the UK government will reduce disruption, both UK and EU households and businesses may be affected due to the two-way data transfers required to access certain financial services.</p> <p>Companies can add clauses into contracts in order to comply with the EU's cross-border personal data transfer rules. The majority of firms intend to rely on these clauses. Firms are making use of the time provided by the extension of the UK's membership of the EU to continue to implement these clauses. An ongoing case before the Court of Justice of the EU (CJEU), judgement on which may be passed in the months after the UK's exit from the EU, could impact the validity of these clauses.</p>
Implementation period to allow mitigating actions by firms			<p>In November 2018, the European Council endorsed a Withdrawal Agreement that includes an implementation period. If ratified, such an implementation period would reduce all of the risks set out in the FPC's checklist.</p>

(3) These lifecycle events include amendments, compressions, rolling of contracts, or exercise of some options.

Table 2 Other risks that could cause disruption to financial services but are unlikely to cause financial stability risks

These risks could cause some disruption to economic activity if they are not mitigated and the UK leaves the EU without an agreement or implementation period. The FPC judges their disruptive effect to be somewhat less than that of those issues in its checklist.

Actions have also been taken to address other potential risks to financial services which are unlikely to cause financial stability risks with material economic effect.

Credit Rating Agencies (CRAs)	<p>EU rules will prevent some banks and insurance companies in the EU from calculating prudential requirements using ratings issued by UK CRAs unless endorsed by an EU CRA. This will mainly affect banks and insurers calculating requirements under the standardised approach/formula.</p> <p>A co-operation agreement exists between ESMA and the FCA and UK CRAs have registered EU entities to endorse UK ratings. ESMA has assessed the legal and supervisory framework for UK CRAs and concluded it meets the conditions for endorsement. The FCA has also issued a statement on the EU legal and supervisory framework, allowing UK CRAs to endorse EU ratings into the UK. The decision to endorse ratings lies with the CRA.</p>
Access to euro payment systems	<p>The Single Euro Payments Area (SEPA) schemes are currently used by UK payment service providers (PSPs, including banks) to make lower value euro payments such as bank transfers between businesses, mortgage and salary payments on behalf of their customers.</p> <p>The European Payments Council (EPC) has confirmed that the UK will retain SEPA access in the event of a no-deal exit. The EPC has published a statement noting that once the UK becomes a third country, processing some payments — notably direct debits — may require additional information to be included on the part of the debtor for the payment instruction to be effective.</p> <p>UK firms will also need to maintain access to TARGET2 to use it to make high-value euro payments. UK banks intend to access TARGET2 through their EU branches or subsidiaries or correspondent relationships with other banks.</p>
Servicing banking customers	<p>Major UK banks' continued actions to prepare their EU subsidiaries, as covered in the Banking Services row in Table 1, will enable their provision of services to many EU customers after exit.</p> <p>However, depending on national regimes, the loss of passporting might also impact the ability of UK banks to provide some services to existing customers resident in the EEA.</p>
Settlement finality protection for financial market infrastructure	<p>After the UK exits the EU, UK financial market infrastructure firms (FMIs) will no longer be protected under EU law against payments or transfers being revoked, or collateral being clawed back, in the event that an EEA member enters insolvency.</p> <p>EEA countries accounting for almost all the EEA members of UK FMIs have implemented national legislation intended to provide settlement finality protection in the event of insolvency of local firms using financial market infrastructure in non-EU countries. For countries where protections are not in place, UK FMIs can implement other mitigants, including seeking legal opinions to clarify the extent of protections in other jurisdictions or restructuring EEA members' participation to jurisdictions where protections are in place.</p>

Some remaining issues could restrict EU firms' ability to trade or invest in certain UK assets and vice versa, and increase the costs of doing so.

Ability of EEA firms to trade on UK trading venues	<p>EU-listed or traded securities are traded heavily at UK venues which offer deep liquidity pools for a range of securities traded by UK and EU firms. The EU's Trading Obligations requires EU investment firms to trade EU-listed or traded shares, and some classes of OTC derivative, on EU trading venues (or venues in jurisdictions deemed equivalent by the EU). The UK will also have reciprocal trading obligations when it leaves the EU.</p> <p>Firms and venues are taking action to ensure they can trade securities and affected derivatives in both the EU and UK and other equivalent jurisdictions. However, the process of adjustment might pose operational risks. And it would fragment liquidity across jurisdictions and venues, which may particularly impact EU clients given their reliance on UK liquidity pools.</p> <p>The EU and UK could deem each other's regulatory frameworks as equivalent, thereby mitigating risks of disruption.</p>
Increased prudential requirements	<p>EU regulations subject EU banks' and insurance companies' non-EU exposures (which, after exit, will include their holdings of UK securities) to stricter capital and liquidity requirements, and impose some restrictions on holdings of non-EU assets.</p> <p>UK legislation, which is aligned with EU rules, would similarly subject UK banks and insurance companies to stricter capital and liquidity requirements on non-UK exposures. Secondary legislation passed in the UK allows regulators to delay the impact for UK firms. The Bank expects to publish the final transitional direction ahead of the UK's withdrawal from the EU.</p>

Record of the Financial Policy Committee meeting held on 2 October 2019

1. The Committee met on 2 October 2019 to agree its view on the outlook for financial stability and, on the basis of that, its intended policy action. To do so, the FPC discussed the risks faced by the UK financial system and assessed the resilience of the system to those risks. Its aim was to ensure the UK financial system was resilient to, and prepared for, the wide range of risks it could face – so that the system could serve UK households and businesses in bad times as well as good.

The resilience of the UK financial system to Brexit

2. Since the referendum on the UK's membership of the European Union (EU) in 2016, the FPC and other authorities had identified financial stability risks that could arise from Brexit and worked to ensure they were addressed. The Committee had published its regular assessments in its Financial Stability Reports (FSRs), and in Statements, Policy Summaries and Records of its meetings.

3. The Committee reviewed developments since its meeting in July. **It continued to judge that the core of the UK financial system including banks, broker dealers and insurance companies was resilient to and prepared for the wide range of risks it could face, including a worst-case disorderly Brexit.**

The resilience of the UK financial system to Brexit

4. The Committee considered the impact of Brexit in light of recent developments in the UK economy and financial markets. Entrenched Brexit uncertainty had continued to weigh on business investment. Looking forward, contacts of the Bank's Agents had continued to report weak investment intentions.

5. Uncertainty over Brexit and the global outlook was also influencing UK asset prices. The 10-year nominal UK gilt yield was 0.5%, 33 basis points lower than at the time of the July FSR. Term premia on gilts were near all-time lows, reflecting perceived downside risks to the outlook. The Sterling Exchange Rate Index (ERI) had been volatile this quarter. Sterling implied volatilities and risk reversals were substantially higher than for other advanced economies, suggesting volatility was expected to persist for some time.

6. Since 2016, estimates of equity risk premia for domestically-focused UK equities had risen by around 2 percentage points relative to those of US and European equities. UK banks' equity prices had recovered slightly in recent weeks, but continued to perform below benchmark indices of UK-listed companies reflecting a weak outlook for their profitability. UK banks' long-term unsecured funding spreads were broadly unchanged since July.

7. House prices and mortgage approvals had been broadly flat.
8. In markets that were particularly dependent on foreign investors — notably commercial real estate and leveraged lending — investment into the UK was weaker in the first half of 2019 than in recent years. Foreign investment in commercial property fell from an average of £7.8 billion in 2018 (over 50% of transactions) to £2.8 billion in 2019 Q2 (35% of transactions). And UK property funds had seen an increase in net outflows. In 2019 Q2, commercial real estate prices fell 1.4% year on year. Meanwhile, in the leveraged lending market, gross issuance by UK private non-financial corporations syndicated abroad fell from an average of £7.4 billion in 2018 to £4.5 billion over 2019 Q1-Q3. This was sharper than the reduction in issuance in the global market, which had declined from \$67.6 billion in the first three quarters of 2018 to \$50.5bn in the first three quarters of this year.
9. **The Committee concluded that entrenched Brexit uncertainties, particularly in an environment of weaker global growth, had continued to weigh on the UK economy,** including on business investment, the prices of UK assets and flows of foreign capital into the UK, most notably in commercial property and leveraged lending markets.
10. In considering the risks arising from Brexit, the FPC had focused on outcomes that would have the greatest potential impact on financial stability, consistent with its statutory remit. In that context the FPC had considered the particular risks that could arise if the UK's trading relationships were to move abruptly to World Trade Organisation (WTO) terms.
11. As part of this work, the Committee had developed a worst-case disorderly Brexit scenario to assess the resilience of the UK banking system. In that scenario there was a sudden imposition of trade barriers and there was assumed to be severe disruption at the border, a sharp increase in the risk premium on UK assets, and negative spillovers to wider UK financial markets. In response to a request from the Treasury Committee, the Bank had first published this scenario in November 2018.
12. As the Committee had previously noted, actions by businesses and authorities had resulted in some improvement in the preparedness of the UK economy for a no-deal Brexit since November. For example, the UK had announced temporary simplified procedures for customs checks in the UK, and the port of Calais and Eurotunnel had announced that they had completed preparations on physical border infrastructure. And, as described in the FPC's checklist, EU authorities had mitigated risks of material disruption to cleared derivatives by announcing temporary equivalence and recognition for UK CCPs.
13. Material risks of economic disruption remained, but the improvements in preparedness meant that the appropriate set of assumptions to underpin a worst-case scenario would now be less severe

than in November, when the FPC had already judged the scenario to be encompassed by the severity of the 2018 stress test of major UK banks.

14. Reflecting this, and in response to a further request from the Treasury Committee, the Bank had published in September 2019 an updated worst-case disorderly scenario, based on a set of assumptions which took **account** of the improvements in preparedness since November.

15. The FPC judged that the severity of this updated scenario was also encompassed by the severity of the 2018 stress test scenario. Major UK banks had demonstrated their resilience to – and capacity to keep lending in – that scenario. And since the 2018 stress test, they had maintained Tier 1 capital levels of around 17% of risk-weighted assets – more than three times higher than before the global financial crisis.

16. **The FPC therefore continued to judge that the core UK banking system remained strong enough to continue to lend through the wide range of UK economic and financial shocks that could be associated with Brexit.**

17. Post-crisis reforms had made broker dealers, on which some markets relied, more resilient. This had reduced the risk that market-making losses could lead to their distress or failure. Insurance companies, whose behaviour could dampen market shocks, had sufficient surplus capital to withstand very sharp falls in property and equity prices.

Disruption to cross-border financial services

18. The FPC updated its assessment of progress against its checklist of actions that would mitigate financial stability risks that could arise from disruption to important financial services used by households and businesses to support their economic activity in the event of a no-deal Brexit (See Table 1).

19. There had been few developments regarding these issues since the Committee had met in July.

20. **The Committee continued to judge that, reflecting extensive preparations made by UK authorities and the private sector, most risks to UK financial stability that could arise from disruption to cross-border financial services in a no-deal Brexit had been mitigated.** However, in the absence of further action by EU authorities, some disruption to cross-border financial services was possible. Such disruption would primarily affect EU households and businesses, but it could amplify volatility or spill back to the UK in ways that could not be fully anticipated or mitigated.

21. Legislation, temporary permissions and other preparations had been made by UK authorities to ensure that UK households and businesses would be able to use existing and new services from EU financial institutions.

22. UK and global banks had continued to transfer activities to EU-incorporated entities, but the process was not yet complete and this could impact the range of services available to some EU clients. The process of migrating business, assets and contracts in a short period also posed operational risks given the scale of the firms, business and infrastructure involved. These risks could disrupt services in the EU and could spill back to the UK in ways that could not be fully anticipated or mitigated.

23. The Committee also reviewed progress in addressing other risks which could cause some disruption in the event of a no-deal Brexit (See Table 2).

24. The FPC reaffirmed its previous conclusion that while some of these issues posed some risk of disruption to cross-border services, they were unlikely to cause financial instability with material economic effect. **The FPC underlined that financial stability was not the same as market stability.** In a disorderly Brexit, demand for UK assets could be expected to fall sharply, depreciating sterling and tightening financial conditions for UK households and businesses through adjustments in equity prices and corporate and bank funding costs.

25. With over £1 trillion of high-quality liquid assets, major UK banks could meet their maturing obligations without any need to access wholesale funding for many months. They could also withstand an unprecedented loss of access to foreign currency markets. As a further precaution, the Bank of England was maintaining operations to lend in all major currencies on a weekly basis. **The FPC continued to judge that significant further asset price volatility was to be expected in a disorderly Brexit.**

26. **As the FPC had affirmed previously, irrespective of the particular form of the UK's future relationship with the EU, and consistent with its statutory responsibilities, the FPC would remain committed to the implementation of robust prudential standards in the UK. This would require maintaining a level of resilience that was at least as great as that currently planned, which itself exceeded that required by international baseline standards, as well as maintaining UK authorities' ability to manage UK financial stability risks.**

Other risks to financial stability

27. The Committee reviewed other financial system and economic developments to inform its overall judgment on the current risks faced by the UK financial system. The Committee considered global and domestic developments in turn.

Global outlook

28. The FPC discussed risks to the global outlook that might affect UK financial stability. In particular, the trade war between the United States and China had already contributed to slowing global growth. In addition to the direct effects on trade, heightened uncertainty had weighed on business confidence and investment growth had slowed in a number of countries. In part reflecting these developments, four-quarter global Gross Domestic Product (GDP) growth had slowed by around one percentage point over the past year to a little under 3%.

29. Since the Committee's previous meeting, the trade war had intensified further. The United States had announced increases of existing tariffs on US\$250 billion of imports from China, from 25% to 30%, and had introduced new tariffs of 15% on most of the remaining US\$300 billion of US imports from China. The Chinese authorities had retaliated, with tariffs of 5-10% applied to some goods on a US\$75 billion target list. As a result, average bilateral tariffs between the two countries were around 20 percentage points higher than at the start of 2018. This was likely to weigh on global growth in the coming quarters.

30. The trade war had also increased downside risks to the global outlook. Global growth could slow more sharply if the trade war were to lead to a tightening in financial conditions or to further reductions in business confidence and investment. A broadening of the trade war beyond tariff measures to restrictions on technology and capital, and to other jurisdictions, would magnify global risks and fragment the global economy. However, even if a protectionist-driven global slowdown were to spill over to the UK at the same time as a worst-case disorderly Brexit, the FPC judged that the core of the UK banking system would be strong enough to absorb, rather than amplify, the resulting economic shocks.

31. **Overall, the Committee judged that the intensified trade war between the United States and China had weighed on global growth and posed the biggest near-term risk to the global economy.**

32. Downside risks from a trade war were amplified by the large build-up of debt in China, where vulnerabilities remained elevated. Private sector debt amounted to 208% of GDP in 2019 Q1, around 90 percentage points higher than in 2008. Such credit booms had often been associated with

subsequent crises in other countries. Moreover, the growth rate of debt was rising again, as the Chinese authorities balanced managing financial stability risks with supporting growth. Credit growth had slowed in 2017 and 2018, but annual growth in total social financing had picked up from 9.8% at the end of 2018 to 10.7% in August 2019. That was more than two percentage points above the growth in nominal income, which had slowed from 9.1% in 2018 Q4 to 8.3% in 2019 Q2. However, the pick-up in credit growth had not been associated with strong growth in shadow banking. Annual growth in lending from non-banks had been 7.6% in August, compared with 12.2% for lending from banks.

33. Developments in Hong Kong were also material in that context. The Committee judged that vulnerabilities in Hong Kong were elevated. Corporate sector debt in Hong Kong had reached 222% of GDP in 2019 Q1, and household debt had risen to 73% of GDP. Property prices had also risen rapidly in recent years. In addition, recent political protests had been accompanied by slowing growth and falling asset prices. GDP had fallen in 2019 Q2 and survey indicators pointed to continued weakness in Q3. Equity prices had fallen by around 8% since the July FSR. Hong Kong's position as a major financial centre increased the risk of spillovers.

34. In the United States, corporate debt was close to pre-crisis levels as a percentage of GDP, remaining at 73.5% in 2019 Q2. However, debt-servicing burdens remained low, supported by low interest rates. The Committee had previously identified leveraged lending as a particular pocket of risk. Despite reduced new issuance, the stock of leveraged lending remained high. Moreover, credit quality had continued to deteriorate, with most new leveraged loans issued by companies with high debt-to-earnings ratios. In corporate bond markets, there had been a significant increase in the share of BBB-rated bonds in recent years, which could drop to a sub-investment grade rating in the event of a negative economic shock and amplify asset price moves as investors looked to rebalance their portfolios. Overall, vulnerabilities remained material in the United States.

35. In the euro area, the announcement of a new Italian government in early September had led to a sharp decline in Italian government bond yields. Public sector debt had remained high at a little over 130% of GDP in recent years, and Italy had the highest refinancing needs in the euro area for 2020 and 2021. Spreads for ten-year government bonds over German bunds, at 142 basis points, were around half the levels seen in February, and yields were over 80 basis points lower than at the time of the July FSR. If sustained, that would lower debt-servicing costs and improve debt sustainability. The trajectory of debt in Italy remained sensitive, however, to political developments and their impact on market sentiment. Overall, vulnerabilities remained material in the euro area.

36. Taking these developments into account, the Committee judged that global vulnerabilities remained material.

37. Risk-free real interest rates had fallen further since July, consistent with the deteriorating global outlook and heightened risks. In the face of weakening growth, some authorities had reduced official interest rates, and market expectations of the path for short-term interest rates had fallen further on the quarter. In addition, term premia had compressed as investors perceived increased downside risks to the economic outlook. The yield on ten-year government bond yields had fallen by around 50 basis points to 164 basis points in the United States and around 30 basis points to negative 57 basis points in Germany since mid-July.

38. While lower interest rates were likely to support global growth and limit the depth of the global slowdown, the latest moves had further reduced the space for some monetary authorities to respond in the event of a shock to the global outlook.

39. In the US and euro area, where concerns about low inflation appeared more acute, 5-year, 5-year forward inflation swaps had fallen since the beginning of the year, by 39 basis points to 1.17% in the euro area and by 18 basis points to 1.94% in the US. Partly reflecting the possibility of further declines in Sterling, UK financial market measures of inflation expectations remained somewhat elevated.

40. Risky asset prices had been supported by lower risk-free interest rates, and global financial conditions had remained broadly unchanged since the July FSR. However, US repo market rates had been highly volatile for a period in mid-September. A number of factors appeared to have contributed to poor liquidity in the market, leading to sharp increases in overnight repo rates. The Secured Overnight Financing Rate (SOFR) had spiked to 5¼% on 17th September. A subsequent series of liquidity-injecting repo operations by the Federal Reserve Bank of New York had served to stabilise the market. However, the volatility could point to a more general tendency for markets to jump to illiquidity under stress. This could impair the ability of global markets to absorb future shocks while still functioning effectively.

41. Oil prices had increased sharply following the attacks on Saudi Arabian oil infrastructure. The price of Brent crude oil had initially risen above US\$70 per barrel, but quickly fell back again following positive news on restoring production. That left the oil price lower than at the time of the July FSR, at US\$59 per barrel, reflecting falls earlier in the summer as the outlook for global demand had weakened. Heightened tensions in the Middle East raised the risk of a persistent increase in oil prices, which could further depress global GDP growth and expose existing vulnerabilities in some emerging markets that relied heavily on imported oil.

42. Overall, global financial imbalances had not increased in aggregate. Total private sector credit growth remained relatively subdued in advanced economies, with household sector resilience

in particular improving in recent years. Moreover, debt-servicing burdens were low, reflecting low interest rates. The global banking system had been significantly strengthened by post-crisis reforms and was more resilient. However, there were important pockets of vulnerabilities, mainly in the corporate sector, which could amplify future shocks to the global economy. **The FPC concluded that future shocks to the global economy could be amplified by material debt vulnerabilities, some structural illiquidity in financial markets and reduced space for some monetary authorities to respond.**

43. UK banks had substantial exposures to mainland China and Hong Kong, of around 230% of their common equity Tier 1 (CET1) capital base. Exposures of UK banks to the United States and the euro area were around 325% and 240% of CET1 capital respectively. The international exposures of major UK banks were tested against a global scenario more severe than the financial crisis in the 2018 stress test. That scenario included recessions in mainland China, Hong Kong, the euro area and the United States, with a 2.4% contraction in world GDP over the first year. It also included sharp falls in the price of a range of financial assets. Major UK banks with international and trading exposures had been assessed to be resilient to that scenario. The results of the 2019 stress test would be published in December.

44. **The Committee judged that the core of the UK banking system remained resilient to severe global and market stress.**

Domestic vulnerabilities

45. The Committee next considered whether developments since July had affected the scale of underlying domestic vulnerabilities (excluding Brexit), and hence the extent to which economic and financial shocks to the UK economy could be amplified.

46. The stock of UK private non-financial sector credit (excluding student debt) remained stable at 140% of GDP in 2019 Q2. This ratio was 20 percentage points lower than its level in 2008, but remained elevated relative to historical levels. Within this, household debt (excluding student loans) relative to income and corporate debt relative to earnings were both broadly unchanged in 2019 Q2.

47. Annual growth in UK private non-financial sector credit (excluding student loans) was 3.5% in 2019 Q2, 0.5 percentage points weaker than the previous quarter, and broadly in line with nominal GDP growth of 3.7%. In August, annual mortgage credit growth was stable at 3.2%, and consumer credit growth fell to 5.4%, 0.3 percentage points lower than May. Corporate credit grew at 5.0% in 2019 Q2 on an annual basis and leveraged lending issuance grew slightly.

48. The UK's credit-to-GDP gap, which measured the difference between the credit-to-GDP ratio and a simple statistical estimate of its long-term trend, remained significantly negative at -11.4 percentage points in 2019 Q2. This measure suggested a very low degree of underlying vulnerability at present. But the Committee judged that this indicator gave undue weight to the rapid build-up in credit prior to the global financial crisis, which had proven to be unsustainable. It had therefore been appropriate to put more weight on the growth rate of credit relative to incomes in recent years.

49. Credit conditions facing households and companies were little changed on the quarter and remained accommodative. In September, corporate bond spreads were broadly similar to their July level, with investment-grade sterling bond spreads 4 basis points higher than at the time of the July FSR.

50. For households, mortgage rates fell slightly over 2019 Q2. They had been broadly stable for over a year despite spreads on unsecured bank funding having fluctuated substantially. The additional interest charged on a 90% loan-to-value (LTV) mortgage compared to a 75% LTV mortgage was 51 basis points in August, well below its post-crisis average of around 150 basis points.

51. Debt-servicing burdens remained low, supported by low interest rates. The share of households with mortgage debt servicing ratios (DSRs) greater than 40% increased to 1.2% in 2019 H1, but remained below the pre-crisis average of 1.8%. Mortgage interest rates would need to increase by 200-300 basis points for this share to reach the pre-crisis average. In 2018, the proportion of debt of listed firms with interest coverage ratios (ICRs) – the ratio of earnings before interest and tax to interest expenses – below 3 remained low by historical standards at 30%. All else equal, global interest rates would need to increase by around 200 basis points for the share of debt owed by companies with an ICR below 3 to reach its pre-crisis average of 53%. In practice, a large proportion of this debt would be fixed-rate or hedged so this would take time to pass through.

52. The UK's current account deficit narrowed by 1.4 percentage points to 4.6% in 2019 Q2. Since 2016, the deficit had been primarily funded by capital inflows from foreign investors, making it vulnerable to a reduction in investor appetite for UK assets. Inflows in the volatile and short-term 'other investment' category, which mostly consisted of bank deposits and short-term loans, increased to 8.8% of GDP in 2019 H1. However, inflows in this category remained far smaller than those experienced prior to the crisis.

53. In summary, despite continued signs of strong risk appetite from creditors and lenders, credit growth to UK households and businesses remained modest and debt-servicing burdens remained low. Taking into account these developments as a whole, the FPC judged that underlying domestic

vulnerabilities (excluding Brexit) that could amplify economic shocks had not changed materially since July and remained at a standard level overall.

Banking system resilience and the UK CCyB rate decision

54. In 2019 H1, major UK banks' capital positions had been broadly stable. The aggregate Tier 1 capital ratio of major UK banks was 17.1% of risk-weighted assets (RWAs) in 2019 Q2, more than three times that before the financial crisis. In the 2018 stress test, despite facing loss rates consistent with the global financial crisis, the combination of high initial capital ratios and banks' management actions to reduce dividends and other earnings distributions meant that major UK banks' aggregate CET1 capital ratio after the stress was still twice its pre-crisis level.

55. Major UK banks' average leverage ratio was 5.3% in 2019 Q2, roughly double the ratio in 2007, when estimated on a consistent basis. In the 2018 annual cyclical scenario (ACS), this ratio fell to a low of 4.6% in the first year of the stress.

56. In light of this assessment, and its earlier judgement that the size of underlying vulnerabilities were broadly unchanged on the quarter, the FPC decided to maintain the UK CCyB rate at 1% in 2019 Q3.

57. If a major economic stress were to materialise, the FPC would be prepared to cut the UK CCyB rate, as it did in July 2016. This would enable banks to use the released buffer to absorb up to £11 billion of losses, which might otherwise lead them to restrict lending. Given losses of that scale, a cut in the UK CCyB rate to zero could preserve around £250 billion of banks' capacity to lend to UK households and businesses. This compared with around £75 billion of net lending in the past year.

58. In the absence of such a stress, the FPC would remain vigilant to developments, particularly in the domestic credit environment. Were Brexit uncertainty to fade, and lending conditions to remain accommodative, credit demand could rebound significantly, leading to an increase in the riskiness of banks' exposures. Given current accommodative lending conditions, that could require a timely policy response to ensure resilience.

59. Consequently, the Committee confirmed that it stood ready to move the UK CCyB rate in either direction as economic conditions and the overall risk environment evolved.

Resilience of market-based finance

60. The FPC had a statutory responsibility to identify, monitor and take action in relation to financial stability risks across the UK financial system. The FPC considered financial stability risks

stemming from beyond the core banking sector as well as those stemming from banks. Market-based finance had become more important since the crisis. It accounted for around half of financial sector assets and all of the net increase in debt finance to UK non-financial businesses since 2008.

Open-ended funds

61. At its October meeting, the FPC discussed the potential UK financial stability risks from open-ended funds. **The Committee continued to judge that the mismatch between redemption terms and the liquidity of some funds' assets had the potential to become a systemic risk.** The Bank and the FCA were undertaking a joint review to assess how funds' redemption terms might be better aligned with the liquidity of their assets in order to minimise financial stability risks without compromising the supply of productive finance.

62. The Committee agreed that it would be important to evaluate fully the existing and potential risks to financial stability from open-ended funds. In particular, the review should assess how liquidity mismatch in open-ended funds could affect the financial system and the real economy. The FPC had discussed previously how the mismatch created incentives for investors to redeem ahead of others, particularly if there was a perceived risk of suspension, which in turn could lead to forced asset sales by funds and amplify asset price movements. Sharp falls in asset prices could increase the cost of finance to companies leading to lower investment and output in the economy. Movements in asset prices could also affect other funds and financial institutions, and could create broader spillovers.

63. The Committee underlined that the incentives for investors to redeem ahead of others should be reduced through greater consistency in the design of funds between:

- i. The liquidity of a fund's assets, which determined the price that could be achieved during the redemption period;
- ii. The price offered to redeeming investors for their share of the fund;
- iii. The redemption frequency or length of notice periods.

64. Consistency between these features of a fund could ensure that investors redeeming their share could do so without placing a cost on remaining investors.

65. The Committee noted that there were different ways that greater consistency could be achieved, and that these could differ across types of fund. For funds invested in the most illiquid assets, it might not, for example, be possible to price a fund in a way consistent with a one-day notice period. Options would be evaluated according to their feasibility and their effectiveness in meeting

the objectives of the FPC and the FCA. The FPC would review progress in 2019 Q4 and provide an update in the FSR.

66. The FPC also noted the importance of addressing liquidity mismatches in open-ended funds internationally. Given the global nature of asset management, the effectiveness of domestic policy measures would depend in part on the policies implemented in other jurisdictions. Different approaches globally could lead to sub-optimal outcomes. This had underpinned the FPC's continued support for the Financial Stability Board's (FSB) 2017 recommendation that funds' assets and investment strategies should be consistent with their redemption terms. While endorsing the FSB's recommendation, subsequent principles published by the International Organisation of Securities Commissions (IOSCO) had provided flexibility to national authorities and funds themselves, and different measures had been adopted. The Bank and the FCA would continue to engage with the relevant international bodies to achieve consistent implementation across jurisdictions.

67. The FPC noted the publication of a Policy Statement by the FCA on 30th September setting out a number of changes to the way that certain open-ended funds should operate, following its October 2018 consultation. These changes addressed a number of specific issues that had arisen following the UK referendum on EU membership in June 2016. The Statement included a requirement for funds dealing in inherently illiquid assets such as property to suspend dealing if there was material uncertainty about the value of at least 20% of the fund's assets.⁴ The Committee agreed that, for such funds, prompt and consistent suspensions were important to ensure fairness to investors and to avoid fire sales of assets. Nevertheless, further work was needed to ensure consistency of redemption terms, pricing and the liquidity of funds' assets, and to remove the incentive for investors to redeem when they expected others to do so. That would be taken forward in the joint review by the FCA and the Bank, which would cover all open-ended funds, including those covered by the FCA's Policy Statement.

Supply of finance for productive investment

68. Subject to meeting its primary financial stability objective, the FPC's secondary objective was to support the government's economic policy, which included, where appropriate, facilitating the supply of finance for productive investment provided by the UK's financial system.

⁴ Unless fund managers agreed with the depositary that continued dealing was in the investors' best interests.

69. The Committee agreed that the Bank and the FCA's joint review should also consider how addressing the vulnerabilities in open-ended funds might affect the supply of productive finance over the longer term.

70. Facilitating the supply of such finance would require investment in sometimes very illiquid assets. There were restrictions on the extent to which the most illiquid assets could be held in open-ended fund structures that offered daily liquidity. A number of structures with longer redemption terms existed or had been proposed in Europe and in the UK. However, such structures could look unattractive to investors when compared to funds that invested in less liquid assets, such as real estate and infrastructure, but that still offered daily redemption. A closer alignment of redemption terms and the liquidity of funds' assets could help level the playing field among the different fund types and thus incentivise new fund structures specifically targeted to provide more finance for longer-term investment.

71. In Q2 the FPC had welcomed the recent van Steenis review on the Future of Finance and the Bank's response. At its meeting in October, the Committee reiterated its support for the work to facilitate access to finance for small- and medium-sized enterprises (SMEs) set in train by the Bank's response. Bank lending comprised around 85% of the stock of outstanding SME debt at the end of 2019 H1. The majority of this outstanding debt was held by larger banks. But since 2017 all of the net growth in SME lending had come from smaller banks or from alternative sources such as peer-to-peer (P2P) lending, underlining the importance of alternative forms of finance for SMEs.

72. Part of the issue affecting SME access to credit was an asymmetry of information, especially for new firms and in sectors more reliant on intangible assets. The reliance of SMEs on existing banking relationships made them vulnerable to a contraction of bank credit during a downturn. To address this, in its response to the van Steenis review, the Bank had proposed an Open Platform for SMEs to share data with bank and non-bank credit providers in a "Portable Credit File", which would make it easier for SMEs to access external finance and create a more level information playing field. The FPC welcomed the Bank's work to progress this.

73. In 2017 the Bank had conducted an extensive survey to collect data on firms' business investment and financing decisions through its Agency network. The survey was broadly representative across industries, firm sizes and UK regions, but was not representative of young businesses (such as start-ups). The survey had provided insights into the mix of financial and real economic barriers to investment. At its October meeting, the FPC supported a proposal from the Bank to repeat the survey and extend it to capture fast-growing and innovative firms more effectively. The survey could shed light on barriers to finance, including for fast-growing firms, and on the extent to which access to finance – rather than other factors – was constraining investment.

Developments in financial market infrastructure

74. Banks and other financial services firms relied upon financial market infrastructure to ensure the provision of financial services. It was vital, therefore, that financial market infrastructure providers (FMIs) maintained the highest standards of resilience and that the regulatory authorities had the appropriate tools to identify and mitigate potential risks to the critical services provided by FMIs.

Payments

75. In the July FSR, the FPC had set out an agenda for its work on payments infrastructure, with the aim of ensuring that systemically important payment systems could support financial stability, while allowing competition and innovation in payments to thrive.

76. The FPC undertook to:

- Assess developments in the scope and nature of regulation for payments and other innovative financial services, in order to ensure the approach reflected their systemic importance;
- Assess risks to the UK financial system associated with the use of tokens and other assets used to facilitate new payment options, in order to ensure appropriate safeguards for their use to maintain financial stability and the supply of finance to the economy; and
- Review the Bank's proposals on the appropriate level of access to its payments infrastructure and balance sheet in order to ensure that access supports fully the stability and resilience of the system while also allowing innovation in payments.

77. The Committee welcomed HM Treasury's (HMT's) review of the payments landscape to support choice, competition and resilience and to ensure that regulation and infrastructure kept pace with innovation. The Bank had announced its intention to engage fully with that as part of its response to the van Steenis review on the Future of Finance.

78. Payment systems were changing alongside the nature of commerce. Card payments had overtaken cash as the primary means of conducting payments in the United Kingdom, one in six adults were registered to make smartphone or online payments using digital wallets, and use of e-money was increasing. The infrastructure underpinning payments was becoming more complex. New technology and business models had allowed non-bank financial institutions and companies outside the financial sector to play a larger role in payments chains. The resilience of payment systems now required resilience in a greater number of links in payment chains.

79. **At its October meeting, the Committee agreed a set of principles that would guide its assessment of how prudential regulation and supervision should adjust to fast-moving developments in payments activities, which were currently a focal point for innovation in financial services.**

80. In the view of the Committee, payments regulation and supervision should:

- i. Reflect the financial stability risk, rather than the legal form, of payments activities;
- ii. Ensure end-to-end operational and financial resilience across payment chains that were critical for the smooth functioning of the economy; and
- iii. Ensure that sufficient information was available to monitor payments activities so that emerging risks to financial stability could be identified and addressed appropriately.

81. The first principle would ensure that the same level of risk attracted the same level of regulation. The FPC acknowledged that this could be achieved in different ways for different types of activities. The application of current regulatory and supervisory frameworks for payments differed primarily by type of entity. Given the increasingly diverse nature of companies becoming involved in payments, it was important to focus on the functions they undertook, and the risks that those functions posed to the stability of payment systems, rather than the nature of the company itself. For example, if payment tokens were used widely to facilitate routine payments, they should have the same level of operational resilience and safeguarding as the use of debit cards to make payments from current accounts.

82. The overall resilience of any payment chain was dependent on the resilience of each individual link in the chain. This underlined the second principle on the need for end-to-end management of risk. The fact that payment chains were changing rapidly and becoming more complex made this principle increasingly important. New elements handling payments in the chain could become systemically important, and failure in one or more of these critical links could materially affect economic activity.

83. The Committee agreed that an important aspect of the third principle would be to ensure that sufficient data were available to monitor emerging risks, both within and outside the existing regulatory perimeter. Data on some new types of payments activities were currently more limited than for traditional payment systems.

84. The Committee undertook to keep developments in payments activities and regulation under review. Where risks to financial stability were identified, the Committee would, consistent with its remit, consider whether activities needed to be brought within the regulatory perimeter or the nature of regulation within the perimeter needed to change.

85. The Committee also noted that these principles could usefully inform any assessment of existing payments regulation in HMT's review of the payments landscape to support choice, competition and resilience and to ensure that regulation and infrastructure kept pace with innovation.

86. Libra had the potential to become a systemically important payment system. The FPC judged that such a system would need to meet the highest standards of resilience and be subject to appropriate supervisory oversight, consistent with the principles set out above. The terms of engagement for innovations such as Libra must be adopted *in advance* of any launch. UK authorities should use their powers accordingly. The resilience of the proposed Libra system would rely on the stability of not just the core elements of the Libra Association and Libra Reserve but also the associated critical activities conducted by other firms in the Libra ecosystem such as validators, exchanges or wallet providers. This emphasised the need to ensure end-to-end resilience.

87. The FPC encouraged exploration of alternative solutions to improve the efficiency of domestic and cross-border payments. In particular, cross-border payments often still faced high costs and long transmission lines, with complexity also creating operational and liquidity risks.

The transition away from Libor to alternative benchmark rates

88. The FPC had been monitoring the risks associated with a disorderly cessation of Libor since 2013, and working with the Bank and the FCA to ensure that reforms to interest rate benchmarks progressed at a sufficient pace to facilitate a smooth transition. In July 2019, the FPC had agreed that **the continued reliance of global financial markets on Libor posed risks to financial stability that could be reduced only through a transition to alternative benchmark rates by end-2021.**

89. **At its October meeting the Committee reiterated its view that there was no justification for firms continuing to increase their exposures to Libor. The Committee continued to believe that the pace of market participants' transition efforts to alternative benchmark rates needed to accelerate, and committed to continue monitoring progress closely.**

90. The FPC was briefed on recent developments regarding financial markets' reliance on Libor. Sterling markets had continued to make good progress on the transition but considerable further work remained.

91. Important milestones in cash markets had been reached in 2019 Q3, including issuance of the first new Sterling Overnight Index Average (SONIA)-linked floating rate note by a non-financial corporate in August and further take-up of SONIA as the market standard in securitisations. Work

also continued to support efforts to develop a forward-looking term rate based on SONIA. Availability of SONIA-linked loans remained the largest outstanding gap.

92. Proactive reduction of existing Libor exposures remained limited, but there were signs of increased focus in this area in sterling cash markets. Following the first successful conversion of a Libor-linked bond to SONIA in June, two major UK financial issuers had announced their intentions to seek conversion of legacy liabilities. In derivatives markets, the primary focus remained on adoption of robust fallbacks.

93. The most commonly used Libor rate was that for US dollar Libor. The FCA had regulatory oversight of US dollar Libor rates. US authorities were leading work to transition from dollar Libor to their preferred risk-free benchmark rate, the SOFR. SOFR volumes continued to grow though at present they were relatively small. In this context, the Committee noted recent volatility in US dollar repo markets.

94. The Committee welcomed measures taken by the PRA and the FCA to step up their monitoring of regulated firms' exposures to Libor and firms' transition plans for reducing those exposures. Building on the earlier 'Dear CEO' exercise, regular dialogue between PRA supervisors and all but the smallest dual-regulated firms began in September 2019. The frequency and intensity of engagement would be set according to the scale and complexity of firms' Libor exposures to ensure proportionality. FCA supervisors would also be engaging with firms in a similarly proportionate manner. Supervisors' engagement would be underpinned by a joint PRA and FCA data request, which would yield information on firms' outstanding exposures to Libor and risk-free rates. Firms would also be expected to maintain and share transition project plans, and materials on scenarios and risks associated with transition, with the authorities.

95. In 2019 Q4 the Committee would consider further potential policy and supervisory tools that could be deployed by authorities to reduce the stock of legacy Libor contracts to an irreducible minimum ahead of end-2021.

The 2021 biennial exploratory scenario (BES)

96. Under the Bank's approach to stress testing, the BES was a flexible tool which helped to explore risks not covered by the Bank's ACS, including longer-term challenges to banks' business models.

97. In June, the Committee had agreed that the Bank should use the 2021 Biennial Exploratory Scenario (BES) to assess the financial stability risks associated with climate change. Such risks

could arise both from the physical risks associated with the increased frequency and severity of extreme weather events and from the transition to a carbon-neutral economy.

98. Given the distinct nature of the risks associated with climate change, and limited data and models on climate-related financial risks, the Committee had also agreed that there was merit in beginning an industry-wide dialogue now on some of the key parameters and scenario design features well in advance of 2021. To facilitate this, it agreed that the Bank should publish a Discussion Paper in autumn 2019 to gather views on the design of the exercise.

99. At its meeting, the Committee considered a framework developed by staff for conducting the climate BES. This included proposals for the number and nature of the proposed climate scenarios, their horizon and granularity, and the proposed coverage of the exercise. In discussing this proposal, the Committee emphasised the need to be clear about the steps participating firms would be expected to take in engaging with the stress test and, together with the Prudential Regulation Committee (PRC), advised on specific questions the Bank should consult on. Details of this proposed framework would be set out in the forthcoming Discussion Paper.

IFRS9 hurdle rate adjustment

100. In September 2017, the FPC had noted that without adjustments to its stress testing framework and / or associated prudential capital requirements, the interaction between the new accounting standard International Financial Reporting Standard 9 (IFRS 9) and the ACS stress test could lead to an unwarranted *de facto* increase in capital requirements.

101. In November 2018, the Bank had made downward adjustments to each bank's hurdle rate in the ACS to avoid such an unwarranted *de facto* increase in capital requirements, and to reflect the fact that in the early part of the stress, banks would have more provisions against potential future loan defaults than under the previous accounting standard. The firm-specific adjustments had been calibrated in line with the capital impact arising from those provisions newly made because of the introduction of IFRS 9.

102. The FPC and the PRC confirmed that the hurdle rates of the 2019 ACS should be adjusted following the same approach as in the 2018 ACS. The Bank was in the process of developing a lasting treatment of IFRS 9 that would not rely on comparisons with provisions under the old accounting standard.

The following members of the Committee were present:

Mark Carney, Chair

Andrew Bailey

Colette Bowe

Alex Brazier

Ben Broadbent

Jon Cunliffe

Anil Kashyap

Donald Kohn

Dave Ramsden

Elisabeth Stheeman

Martin Taylor

Sam Woods

Charles Roxburgh attended as the Treasury member in a non-voting capacity.

As permitted under the Bank of England Act 1998, Brad Fried and Dido Harding were present at the 2 October meeting as observers in their roles as members of Court.

ANNEX: PREVIOUS FPC POLICY DECISIONS

Outstanding FPC Recommendations and Directions

The FPC has no Recommendations or Directions that have not already been implemented.

Other FPC policy decisions which remain in place

The table below sets out previous FPC decisions, which remain in force, on the setting of its policy tools. The calibration of these tools is kept under review.

Topic	Calibration
Countercyclical capital buffer rate	<p>At its meeting in October 2019, the FPC set the UK CCyB rate at 1%, unchanged from July.</p> <p>The UK has also reciprocated a number of foreign CCyB decisions — for more details see the Bank of England website¹. Under PRA rules, foreign CCyB rates applying from 2016 onwards will be automatically reciprocated up to 2.5%.</p>
Mortgage loan to income ratios	<p>In June 2014, the FPC made the following Recommendation (14/Q2/2): The Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) should ensure that mortgage lenders do not extend more than 15% of their total number of new residential mortgages at loan to income ratios at or greater than 4.5. This Recommendation applies to all lenders which extend residential mortgage lending in excess of £100 million per annum. The Recommendation should be implemented as soon as is practicable.</p> <p>The PRA and the FCA have published their approaches to implementing this Recommendation: the PRA has issued a policy statement, including rules,² and the FCA has issued general guidance.³</p>
Mortgage affordability	<p>At its meeting in June 2017, the FPC replaced its June 2014 mortgage affordability Recommendation to reference mortgage contract reversion rates:</p> <p>When assessing affordability, mortgage lenders should apply an interest rate stress test that assesses whether borrowers could still afford their mortgages if, at any point over the first five years of the loan, their mortgage rate were to be 3 percentage points higher than the reversion rate specified in the mortgage contract at the time of origination (or, if the mortgage contract does not specify a reversion rate, 3 percentage points higher than the product rate at origination). This Recommendation is intended to be read together with the FCA requirements around considering the effect of future interest rate rises as set out in MCOB 11.6.18(2). This Recommendation applies to all lenders which extend residential mortgage lending in excess of £100 million per annum.</p> <p>At its meeting in September 2017, the FPC confirmed that the affordability Recommendation did not apply to any remortgaging where there is no increase in the amount of borrowing, whether done by the same or a different lender.</p>

¹ <https://www.bankofengland.co.uk/financial-stability#ccyb>

² <https://www.bankofengland.co.uk/prudential-regulation/publication/2014/implementing-the-fpcs-recommendation-on-loan-to-income-ratios-in-mortgage-lending>

³ <https://www.fca.org.uk/publications/finalised-guidance/fq17-2-fpc-recommendation-loan-income-ratios-mortgage-lending>