BANK OF ENGLAND

Record of the Financial Policy Committee Meeting on 19 June 2018

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This is the record of the Financial Policy Committee meeting held on 19 June 2018.

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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 03 October 2018 and the record of that meeting will be published on 17 October.

Record of the Financial Policy Committee meeting held on 19 June 2018

At its meeting on 19 June 2018, the Financial Policy Committee (FPC):

- Continued to judge that, apart from those related to Brexit, domestic risks remained standard overall. In recent months there had been some reduction in domestic risk appetite, although it remained strong. It agreed that risks from global vulnerabilities remained material and had increased.

- Maintained the UK countercyclical capital buffer (CCyB) rate at 1%. It would conduct as normal a comprehensive assessment of the resilience of the UK banking system in the 2018 stress test and review the adequacy of the 1% CCyB rate. It continued to judge that the UK banking system could support the real economy through a disorderly Brexit.

- Continued to monitor preparations to mitigate disruption to financial services that could arise from Brexit. It judged that progress had been made but that material risks remained. The biggest remaining risks of disruption were where action was needed by both UK and EU authorities, such as ensuring the continuity of existing derivative contracts. As yet the EU had not indicated a solution analogous to a temporary permissions regime. The FPC welcomed the establishment in April of a technical working group, chaired by the European Central Bank and Bank of England, on risk management in the area of financial services in the period around 30 March 2019.

- Reiterated that, irrespective of the particular form of the UK's future relationship with the EU, and consistent with its statutory responsibility, 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.

- Agreed to set standards for how quickly critical financial companies must be able to restore vital services following a cyber attack. Working with others, especially the National Cyber Security Centre, the Bank would test that firms would be able to meet the FPC's standard for recovering services.

- Agreed that continued reliance of financial markets on Libor posed a risk to financial stability that could be reduced only through a transition to alternative rates. The FPC would monitor progress and report regularly.

- Agreed to conduct and communicate the outcome of its planned review of its leverage ratio framework once there was further clarity on the finalised implementation of the leverage ratio requirement in EU law and how it might affect UK firms. In the meantime, it supported the Prudential Regulation Authority's plans to consult on implementing leverage ratio requirements in parallel with the introduction of risk weighted requirements for systemic ring-fenced bank subgroups and large building societies subject to a systemic risk buffer from 2019.

1. The Committee met on 19 June 2018 to agree its view on the outlook for financial stability and, on the basis of that, its intended policy action. To do so, it discussed the risks faced by the UK financial system and assessed the resilience of the system to those risks. The 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.

Risks to UK financial stability

2. The Committee reviewed financial system and economic developments since it published its *Financial Stability Report (FSR)* in November 2017 and since its previous meeting in March 2018, to inform its view on the current risks faced by the financial system. These would be set out in detail in the June 2018 *FSR*, and are summarised below.

Global vulnerabilities

3. The outlook for global growth remained strong by recent standards, but had softened slightly. Euro-area GDP in 2018 Q1 had been 0.3 percentage points weaker than in the previous quarter. In the United States, GDP growth had been slightly lower than expected.

4. Recent increases in Italian government bond yields suggested rising risks in the euro area and underlined the vulnerabilities created by high public debt levels and interlinkages between banks and sovereigns in a currency union. Italian bond spreads to German bunds had peaked at over 280 basis points on 29 May. This was their highest level since July 2013 but was well below the 500 basis points that they had reached in July 2012. There had been evidence of disorderly trading conditions in Italian bond markets that might have amplified the initial market reaction, with a sharp decline in trading volumes on the interdealer market and bid-ask spreads peaking at around 25 basis points, compared to less than 5 basis points in early May. By the time of the FPC's meeting, market tensions had subsided but remained elevated.

5. UK banks' exposures to Italy accounted for only 10% of their common equity Tier 1 (CET1) capital, and Italy accounted for only 3% of the UK's exports. This suggested that the risk of direct spillovers to the UK remained relatively limited.

6. But the UK had significant trade and financial exposures to the euro area as a whole, including to France, Germany, and the Netherlands. These countries in turn had close trading links with Italy and strong financial links with the Italian banking system. The market tensions in May that had originated in Italy had more limited effects on sovereign spreads in other euro area periphery

countries. A further deterioration in Italy's political situation and financial outlook which had a significant impact on the rest of the euro area could result in material indirect spillovers to the UK.

7. Credit growth in China had slowed since the Committee's March meeting, with annual growth in adjusted total social financing falling from 13% in February to 11.7% in May. This was likely to reflect to some extent Chinese authorities' actions to improve financial regulation. But debt levels in China remained highly elevated. And there might still be a risk that the authorities would boost domestic lending again to support growth. The Chinese authorities had already created additional room for the banks to expand credit by cutting the reserve requirement ratio – the reserves that Chinese banks are required to keep with the central bank – by 1 percentage point in April 2018 and announcing that a further half percentage point cut would take effect in early July.

Global debt market conditions

8. Longer-term interest rates had risen slightly, but remained close to historical lows, with estimated term premia – the compensation for holding longer-maturity assets – compressed. Volatility in long-term interest rates remained low by historical standards. The recent tightening in global financial conditions could be the precursor to a much more substantial snapback in world interest rates and more challenging bank, corporate and sovereign funding conditions. The US economy was growing considerably faster than potential output, against the backdrop of an already tight labour market and expansionary fiscal policy. This raised the risk of appreciable future increases in both the level and volatility of interest rates.

9. The extended period of very low interest rates in advanced economies had encouraged investors to acquire higher-yielding but riskier assets. This had contributed to a generally favourable borrowing environment for many emerging market economies (EMEs) and had been accompanied by a rise in both sovereign and corporate EME debt. However, smaller current account imbalances and flexible exchange rates meant that most EMEs were less vulnerable to an external financing crisis than they had been in the run-up to the decade of emerging market driven crises seen in the late 1990s and early 2000s.

10. Tightening conditions in US dollar funding markets were increasing risks in some EMEs. Since mid-April, bond and equity fund outflows from EMEs had totalled $12 billion and had been accompanied by an increase in emerging market bond spreads. While outflows so far had been limited when compared to net inflows of $67 billion earlier in the year, a continuation of outflows could have an impact on EMEs' economic outlook. Non-China EMEs had contributed over 45% of global growth between 2010 and 2017, and UK banks' claims on non-China EMEs accounted for around 135% of CET1. A broad-based slowdown would therefore have a range of direct and indirect impacts on UK banks and investors.

11. Trade tensions had intensified and could contribute to a further tightening in financial conditions. Over a longer horizon, a sustained retreat from global integration could lead to lower growth and higher domestic risks.

12. In addition to the low level of long-term interest rates, corporate bond spreads over long-term interest rates were also low. Spreads on euro and US dollar corporate bonds remained at levels comparable with those seen before the financial crisis, with high-yield more compressed compared to historical levels than investment-grade spreads.

13. The compression in corporate bond spreads had been accompanied by increased corporate financial leverage in the United States, with debt to earnings increasing from 254% in 2015 Q1 to 290% in 2018 Q1, close to 2007 levels. Higher corporate debt had also led to a rise in the debt servicing ratio in recent years but it still remained below its pre-crisis average.

14. Within that aggregate picture, there were particular risks associated with highly indebted US corporates. Issuance of high-yield bonds, leveraged loans and collateralised loan obligations had all been significantly higher than a year earlier. In 2017, gross issuance of leveraged loans had risen to above their 2007 peak. The share of leveraged lending deals with weaker covenants – where investors accept fewer safeguards in the event of a deterioration in the debtor company's finances – had increased to over 80% in 2018, from less than 5% in 2010.

Implications for UK corporate indebtedness

15. The FPC reviewed the impact of global debt market conditions on leverage in the UK corporate sector. Yields on sterling corporate bonds had suggested a high degree of investor risk appetite for some time. In recent months, there had been some reduction in risk appetite in domestic debt markets. For example, sterling investment grade corporate bond spreads had increased by around 30 basis points since their recent low in early 2018 and returned to levels last seen around a year ago. Nevertheless, when adjusted for movements over time in lower credit ratings, term premia and longer duration, the compensation investors had been demanding for interest rate and credit risk had been close to zero.

16. This had created the conditions for rapid growth of non-bank finance of UK corporates over the past few years, especially through leveraged loans. Gross issuance of leveraged loans by UK non-financial companies had reached a record level of £38 billion in 2017. Leveraged lending had continued to increase rapidly in 2018, reaching around £26 billion in the year to June. But leveraged loans tended not to remain on banks' balance sheets. A large share was typically repackaged into collateralised loan obligations or sold to credit funds.

17. In contrast to developments in capital market finance, bank lending to corporates had been muted, limiting the increase in overall corporate leverage and the effect on banks' resilience. Bank lending to corporates increased by just 2% in the year to April 2018, sufficient only to increase the overall stock of corporate debt by less than 1% over the year. In addition, the Bank's Agents had reported that credit supply for smaller firms had tightened over the year to May 2018, particularly for construction, development and consumer-facing sectors.

UK external financing

18. The FPC also reviewed the financial stability implications of recent developments on the UK's external financing position. Over the period 2012–15, foreign investors had been selling UK assets and UK investors had been selling overseas assets at a faster rate. However, since the beginning of 2016, this position had reversed: UK residents had been net buyers of foreign assets and foreign capital inflows had been substantial.

19. In addition, the proportion of UK capital inflows vulnerable to refinancing risk had risen. A material share of inflows had been in the 'other investment' category. An important component of this category was wholesale deposits to banks, which could be short-term and therefore subject to refinancing risk. Annual foreign inflows into the UK banking sector in the form of loans and deposits in 2017 were at their highest level since the global financial crisis. The FPC discussed mitigating factors around these risks. UK banks' material short-term foreign currency liabilities, at around £270 billion, were covered, in aggregate, by banks' foreign currency denominated liquid assets, which were around £330 billion. And, in contrast to the decade before the crisis, the UK banking sector was now a net lender to the rest of the world.

20. Overall, though, the recent pattern of cross-border flows made the UK more vulnerable to a reduction in foreign investor appetite for UK assets, which could lead to a tightening in credit conditions for UK households and businesses. And, within that aggregate picture, the share of inflows into UK commercial real estate and UK leveraged loan markets had been particularly marked.

Household indebtedness

21. Although banks' risk appetite in mortgage lending had increased over the past few years, weak demand had kept mortgage credit growth modest. Mortgage lending had increased by 3.4% in the year to April 2018, around a third of its average growth rate between 1997 and 2006 of 9.7%. National house price inflation had slowed to 2% in May 2018, from around 7.5% at its recent peak in 2016 Q1.

22. These developments were likely to have reflected headwinds to demand from the squeeze in real incomes, tax changes for additional properties, and slightly lower consumer confidence. Some easing of mortgage pricing and non-price terms had helped to partly offset these headwinds. Over the previous two years, spreads on new mortgages had fallen and loan to income multiples had increased.

23. In recent months, bank funding costs had risen in line with those for corporates more generally, with spreads on additional Tier 1 (AT1) instruments increasing by a little more than those on other forms of unsecured wholesale funding. Consistent with higher funding costs, spreads between mortgage rates and risk-free rates had increased, returning to levels of late 2017. Mortgage supply conditions had also shown some other modest signs of tightening, with a fall in the share of lending at high loan to income multiples.

24. Consumer credit had continued to expand rapidly, at 8.8% in the twelve months to April 2018. It had slowed from a peak of 10.9% in November 2016. The slowdown over that period had been driven by car finance, where banks did not have material exposures. Personal loan and credit card debt continued to grow rapidly, at 8.6% and 8.9% respectively in the 12 months to April 2018. The Committee had acted last year to ensure lenders were able to absorb severe losses on consumer credit.

25. More recently, there had been signs of tightening in consumer credit conditions. For example, a net percentage balance of 25% of lenders responding to the 2018 Q1 Credit Conditions Survey had reported a tightening in credit scoring criteria for consumer credit, and close to 40% of respondents reported tightening in the availability of consumer credit.

Overall domestic credit environment

26. Levels of household and corporate debt in the UK relative to incomes remained materially below their 2008 levels. The total stock of UK household debt (excluding student loans) as a proportion of household income had fallen by around 20 percentage points, from 144% at its peak in 2008 to 125% in 2017 Q4 – though it remained high by historical standards. Over the same period, the stock of UK corporate debt as a proportion of corporate earnings had fallen by around 75 percentage points, from 437% to 362%. As the Committee had discussed previously, it was important not to set too much store on comparisons to the period immediately before the crisis given the scale of vulnerabilities that had built up then.

27. The cost of servicing debt for households and businesses remained low, supported by low interest rates. For example, households' interest and mortgage principal repayments relative to disposable income were 7.5% in 2017 Q4, below their average in 1997-2006 of 8.7%. And the share

of households with mortgage debt servicing ratios above 40% (the percentage beyond which households are typically much more likely to experience repayment difficulties) stood at 1.3%.

28. Overall, total private non-financial sector credit growth remained broadly in line with the growth in nominal GDP. Annual credit growth (excluding student loans, where repayment was contingent on levels of income) in the year to 2017 Q4 had been 4.7%. Within that, non-bank (market-based) lending to corporates had expanded rapidly, but growth of mortgage and corporate lending by banks had been modest and had remained so in 2018. The UK's credit to GDP gap, measuring the difference between the ratio of credit to GDP and a simple statistical estimate of its long-term trend, remained significantly negative, at -16%. However, as the FPC had observed at previous meetings, the long-term trend on which this was based gave undue weight to the rapid build-up in credit prior to the global financial crisis and was at present, therefore, a less reliable indicator.

Risk overview and UK CCyB rate decision

29. In light of these developments, the FPC considered its view of the overall risk outlook and therefore its UK countercyclical capital buffer (CCyB) rate decision.

30. It noted that the aggregate Tier 1 capital ratio of major banks was 17.0% of risk-weighted assets in March 2018, and the Tier 1 leverage ratio was 5.4%. The 2017 stress test had shown that the UK banking system was resilient to severe domestic, global and market shocks.

31. The FPC had previously judged that Brexit risks did not warrant additional capital buffers for banks; developments since March had not changed this assessment. The 2017 stress test had encompassed a wide range of UK macroeconomic outcomes that could be associated with Brexit. The FPC continued to judge that the UK banking system could support the real economy through a disorderly Brexit.

32. The FPC turned to its assessment of non-Brexit domestic risks. As it had noted earlier, credit growth remained broadly in line with the growth in nominal GDP. Levels of household and corporate debt in the UK relative to incomes remained materially below their 2008 levels and debt-servicing burdens were low. As a result, the FPC continued to judge that, apart from those related to Brexit, domestic risks remained standard. The FPC's strategy was to set the UK CCyB rate in the region of 1% when risks were in a standard range.

33. In March the FPC had noted some signs of increased domestic risk appetite. Since then there had been some signs of reduction. Corporate bond spreads had increased globally including in

sterling markets. Bank funding costs had increased and mortgage loan spreads had widened a little. Demand in the housing market appeared to have weakened. There had been some decline in the growth of consumer credit, though it remained rapid, and lenders were reporting a marked tightening of conditions.

34. However, looking through quarter-to-quarter moves, indicators of domestic risk appetite had broadly persisted at around their late 2017 levels through the first half of 2018, and were higher than in 2016 when the Committee had first judged that a path to a UK CCyB rate in the region of 1% had been appropriate.

35. Domestic risk appetite remained strong in a number of areas and had been for some time. The direct implications of this risk appetite for the resilience of the UK banking system at this juncture had, however, probably been limited:

- Weak demand had kept mortgage credit growth modest. So, although spreads on new owner-occupier mortgages had fallen and loan to income multiples had increased, the direct impact on banks was unlikely to be material. The FPC's previous mortgage market measures had also insured against a marked deterioration in lending standards.

- Although consumer credit continued to expand rapidly, the rate of growth had slowed over the past year and lenders reported a tightening of credit supply conditions. In addition, the Committee had acted last year to ensure lenders were able to absorb severe losses on consumer credit.

- And while non-bank lending to riskier companies had continued to expand rapidly, lending by banks had been more muted, which had limited the increase in overall corporate leverage and the effect on banks' resilience.

36. Some members noted considerations that might challenge the adequacy of the 1% UK CCyB rate. Strong risk appetite could have had some effect on the resilience of the banking system since the end of 2016 (the date of bank balance sheets tested in the 2017 stress test). Riskier corporate lending by non-banks could have raised the risks associated with banks' own corporate exposures. In the mortgage sector, looser lending standards and the lower price of credit could have increased the risk of losses to banks, even in the absence of rapid mortgage credit growth. For example, to the extent that net interest margins had been squeezed, banks' ability to generate income with which to offset higher impairments in a stress could be reduced. However, given these effects were likely to have been relatively limited, the Committee agreed that they were best considered as part of the comprehensive assessment that would be conducted in the 2018 stress test.

37. Based on its earlier review of the global outlook, the Committee judged that risks from global vulnerabilities remained material and had increased. As the FPC had set out in March, these were relevant when considering the appropriate UK CCyB rate only to the extent that they could have spillover effects for the UK economy – and so UK credit exposures – via global trade and financial and asset price linkages. For some members, the increase in global risks could challenge the adequacy of a 1% UK CCyB rate. The Committee did, however, note that the 2017 stress test had shown that the UK banking system was resilient to severe domestic, global and market shocks.

38. More generally, the FPC recalled that its strategy was to set the UK CCyB rate in the region of 1% in a standard risk environment, which could mean moving the rate within that region to reflect risks as they developed. Furthermore, the one year implementation lag when the UK CCyB rate is increased meant that the Committee's risk assessment had to be forward-looking. Signs of domestic and global risk appetite could signal a future deterioration in the risk environment, if they led to higher leverage in the household and corporate sectors. Acting in the event only of a marked evolution in risks could result in a need to consider larger adjustments to the UK CCyB rate, which could have greater potential economic costs than a more gradual approach.

39. On balance, given there had been some signs of reduction in domestic risk appetite and in the context of moderate credit growth, the FPC decided to maintain the UK CCyB rate at 1%, unchanged from March. The FPC would remain alert to any increase in risks faced by the UK banking system, stemming both from domestic risk appetite and from material global risks that could spill over to the UK. It would conduct, as normal, a comprehensive assessment of the resilience of the UK banking system in the 2018 stress test and review the adequacy of the 1% CCyB rate.

40. The Committee reiterated that, although it was not relevant to the current risk environment, it was prepared to increase the UK CCyB rate beyond the region of 1% were risks to develop beyond the standard range.

Risks of disruption to UK financial services arising from Brexit

41. Consistent with its statutory duties, the FPC continued to identify and monitor UK financial stability risks associated with Brexit so that preparations could be made and actions taken to mitigate them. In this way, the FPC was aiming to promote an orderly adjustment to the new relationship between the UK and the EU. There were a range of possible outcomes for the future UK-EU relationship. Given its remit, the FPC was focused on outcomes that could have most impact on financial stability. That included outcomes in which there were barriers to providing financial services across the UK-EU.

42. In November, the FPC had published a checklist of actions that would mitigate risks of disruption to important financial services used by households and businesses to support their economic activity. In March it had set out its judgements of progress against this checklist and its intention to update and publish these on a quarterly basis. As the FPC had set out previously, it would be difficult, ahead of March 2019, for financial companies on their own to mitigate fully the risks of disruption to households and businesses.

43. At its meeting, the FPC reviewed progress against those actions. As previously, its judgement reflected the underlying scale of disruption to end-users, taking account of progress made in mitigating actions. Although the checklist was focused on the availability of financial services to end-users in the UK, the FPC also considered, where appropriate, risks of disruption to services available to end-users in the EU because the impact of that could spill back to the UK economy.

44. The checklist was not a comprehensive assessment of risks to economic activity arising from Brexit. It covered only the risks identified to date that could stem from direct disruption to financial services. There were also other risks to economic activity that could arise as a result of, for example, restrictions on exports of goods and services or a reduction in the appetite of foreign investors to provide finance to the UK. As outlined earlier, the FPC had considered these and concluded that its 2017 stress-test scenario for major UK banks encompassed a wide range of UK macroeconomic outcomes that could be associated with Brexit. It had therefore judged that Brexit risks did not warrant additional capital buffers for banks.

Legal frameworks

- <u>Ensure a UK legal and regulatory framework is in place.</u> Much of the UK's legal and regulatory framework for financial services is derived from EU law. Directly applicable EU law would need to be brought into UK law. Changes would need to be made to the resulting legal framework to make it workable when the UK was no longer a member of the EU. UK regulatory authorities would also need to make changes to their own rulebooks to reflect the new legislation. Shortly after the FPC's meeting, the EU (Withdrawal) Act had been passed by Parliament. HM Treasury had started publishing draft secondary legislation, and intended to lay the first financial services statutory instruments (SIs) shortly after Royal Assent. SIs establishing the temporary permissions and recognition regimes would be amongst the first laid. The Bank and the Financial Conduct Authority (FCA) expected to consult on rule changes shortly afterwards. The FPC judged that the risk to the UK was at a medium level, and that the passing of the EU (Withdrawal) Act would mean that there had been a reduction in risk since March.

- Implementation period to allow mitigating actions by firms. Financial institutions would need time to obtain necessary regulatory permissions and complete any necessary restructuring of their operations and re-papering of contracts. Since the FPC's meeting in March, the UK Government and European Commission had negotiated a political agreement on an implementation period and that would form part of the Withdrawal Agreement, elements of which were still in negotiation. Once finalised and ratified, this would reduce all of the risks set out in the FPC's checklist. The FPC judged that the risk to the UK and to the EU was at a medium level, and that there had been a reduction in risk to both the UK and EU since March.

Preserving the continuity of outstanding cross-border contracts

- Insurance contracts. Insurers in the UK and the European Economic Area (EEA) might not be able to service their existing contracts in the other jurisdiction without local authorisation. The UK Government had committed to legislate, if necessary, to allow EEA insurance companies to continue to service insurance policies held by customers in the UK (through a temporary permissions regime and additional legislation if required). Once this legislation was passed, risks to UK-based customers would be mitigated. In light of this, and since the FPC's meeting in March, the PRA had written to EEA insurers on 28 March 2018 to explain that these insurers could plan on the assumption that they would only need PRA authorisation by the end of the implementation period. EEA customers were currently reliant on their UK insurance company taking action (eg by transferring existing contracts to legal entities located and authorised in the EU). The FPC judged that the risk to the UK and to the EU remained at a medium level.

- OTC derivative contracts (uncleared). UK and EEA parties might no longer have the necessary permissions to service uncleared over-the-counter (OTC) derivative contracts with parties in the other jurisdiction. Effective mitigation of the risk, other than through a bilateral agreement, would require legislation in both the UK and EEA to protect the servicing of existing contracts. The UK Government had committed to legislate, if necessary, to allow EEA counterparties to continue servicing contracts with UK entities (through a temporary permissions regime and additional legislation if required). EU authorities had not announced an intention to enable UK counterparties to continue servicing contracts with counterparties in the EEA. The FPC judged that the risk to the UK and to the EU remained at a high level.

- OTC derivative contracts (cleared). Many major UK and EEA counterparties were required by EU law to clear contracts in certain products using central counterparties (CCPs) that had been authorised or recognised by EU authorities. If clearing houses were not recognised, clearing members' ability to meet existing contractual obligations to UK CCPs would be compromised. Absent action by EU authorities the risk to the UK could be mitigated by the orderly transfer of EEA clearing members and clients out of UK CCPs. The FPC judged that the risk to the UK remained at a medium level and the risk to the EU remained at a high level.

Avoiding disruption to availability of new financial services

- Clearing services. In the absence of an agreement or recognition by the European Securities and Markets Authority of UK CCPs (see above), EEA clearing members and their clients currently using UK CCPs would need to find new arrangements for future clearing services with CCPs authorised or recognised by EU authorities. The UK Government had committed to legislate, if necessary, regarding the recognition of non-UK CCPs, including a temporary recognition regime, so that these CCPs would continue to be able to provide clearing services to UK clearing members and clients in order to avoid disruption. Once this legislation was passed, risks to UK clearing members and clients would be mitigated. In light of this, and since the FPC's meeting in March, the Bank had written to non-UK CCPs on 28 March 2018 to explain these CCPs could plan on the assumption that they would only need recognition by the end of the implementation period. The FPC judged that the risk to the UK remained at a medium level and the risk to the EU remained at a high level.

- Banking services. Banks would need the necessary permissions and structures in place to continue providing services to customers on a cross-border basis. Some UK-based banks were in the process of undertaking restructuring and obtaining necessary regulatory permissions for EU subsidiaries. The UK Government had committed to legislate, if necessary, for a temporary permissions regime that would enable EEA banks to continue to operate pending authorisation. Once this legislation was passed, risks to UK customers would be mitigated. In light of this, and since the FPC's meeting in March, the PRA had written to EEA banks on 28 March 2018 to explain that these banks could plan on the assumption that they would only need PRA authorisation by the end of the implementation period. The FPC judged that the risk to the UK and to the EU remained at a medium level.

- Asset management. Restrictions on cross-border portfolio delegation could require disruptive changes to asset managers' business models. To avoid this, EU national competent authorities would need to enter into co-operation agreements with the FCA. Asset managers and their funds would also require authorisation to continue to market retail funds across borders. To enable funds domiciled in the EEA to continue to be marketed to investors in the UK, the UK Government had committed to legislating for a temporary permissions regime if necessary. Since the FPC's meeting in March, the FCA had said that affected firms and funds did not need to submit an application for authorisation at this point. The FPC judged that the risk to the UK and to the EU remained at a medium level.

- Personal data. Financial companies' ability to carry out new and existing financial services might be impaired by barriers to the cross-border flow of personal data between the UK and EEA. This could be mitigated if the UK and EU were to recognise each other's data protection regimes as 'adequate'. The UK Government had indicated it is pursuing this via an EU-UK agreement. Companies could also take steps to mitigate this risk by, for example, introducing new clauses into contracts that permit data transfer. But this may not be comprehensive or completely effective. The FPC judged that the risk to the UK and to the EU remained at a medium level.

45. The Committee judged that progress had been made but material risks remained. An implementation period had been agreed, subject to finalisation and ratification of the Withdrawal Agreement between the EU and the UK, elements of which were still in negotiation. The EU (Withdrawal) Act had been passed by Parliament. The UK Government had committed to legislate, if necessary, to put in place a temporary permissions regime to enable EU‑based financial companies to continue to provide financial services to UK end‑users. Once enacted, this would mitigate a number of risks of disruption to UK customers. The biggest remaining risks of disruption were where action was needed by both UK and EU authorities, such as ensuring the continuity of existing derivative contracts. As yet the EU had not indicated a solution analogous to a temporary permissions regime. The FPC welcomed the establishment in April of a technical working group, chaired by the European Central Bank and Bank of England, on risk management in the area of financial services in the period around 30 March 2019.

46. As the FPC had set out previously, irrespective of the particular form of the UK's future relationship with the EU, and consistent with its statutory responsibility, it 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.

47. The FPC continued its discussion of the financial stability implications arising from possible forms for the future relationship between the United Kingdom and European Union in financial services.

48. The FPC discussed whether it was now appropriate to publish parts of its previous Records where it had deferred publication of some of its discussions on the implications of the United Kingdom's withdrawal from the European Union. This text was predominantly on potential scenarios

of macroeconomic impacts of leaving the EU without a deal. It had not expected to be able to publish this text until after the United Kingdom had exited from the European Union, but had kept this under review. In the FPC's view, there continued to be a risk that publishing this material could undermine negotiations between the United Kingdom and the European Union – which, given the benefit of an orderly transition, would be at odds with financial stability. Given the uncertainty around the estimates, a suggestion of apparently precise scenarios could be misleading and liable to misinterpretation. Under Section 9U of the Bank of England Act, the FPC therefore agreed that it remained against the public interest to publish these parts of its previous Records. In line with its previous reviews, it also confirmed that it would review this again after the point of exit. It had published its judgement that its 2017 stress-test scenario for major UK banks encompassed a wide range of UK macroeconomic outcomes that could be associated with Brexit, and therefore that Brexit risks did not warrant additional capital buffers for banks. And the now regular publication of its checklist would continue to provide details of its assessment of progress on actions that would mitigate risks of disruption to important financial services used by households and businesses associated with Brexit.[1]

Cyber impact tolerance framework

49. In June 2017, the Committee had set out the key elements of the framework of regulation for the UK financial system's cyber resilience that are necessary to mitigate systemic risk: (i) clear baseline expectations for firms' resilience that reflect their importance for the financial system; (ii) regular testing of resilience by firms and supervisors; (iii) identification of firms that are outside the financial regulatory perimeter, but which may be important for regulated firms; and (iv) clear and tested arrangements to respond to cyber attacks when they occur. The FPC had agreed to focus initially on setting clear baseline expectations, by considering its tolerance to the disruption, in the event of a cyber incident, to vital services on which the real economy depended.

50. The Committee noted that firms had primary responsibility for their ability to resist and recover from cyber attacks. For example, within the PRA's Senior Managers and Certification Regime, the Chief Operations Senior Managers Function had responsibility for the internal operations and technology of a firm, including cyber security.

51. To guide firms in their planning, the FPC was establishing its tolerance for cyber disruptions. The FPC agreed that its 'impact tolerances' for vital services, including payments or the use of

[1] The text in this paragraph was omitted from the version of the Record that was initially published on 3 July 2018. The Committee agreed at its 20 November 2018 meeting to publish this text, for the reasons set out in the Record of that meeting.

derivative trading to insure against and disperse risk, should describe how quickly critical financial companies must be able to restore vital services following a cyber attack. Consistent with the FPC's responsibility to mitigate systemic risk, it would set a tolerance based on the time after which disruption to services could cause material economic impact.

52. The FPC recognised that firms would not be able to meet its tolerances under the most extreme circumstances. Doing so would make the effective provision of financial services inefficient. The Bank would test that firms would be able to meet the FPC's standards for recovering services in severe but plausible scenarios.

53. In stress tests of financial resilience, the FPC was able to use past macroeconomic data to calibrate a severe but plausible macroeconomic shock. The Committee noted that no such history existed for cyber events, even though experiencing a major cyber attack at some point in the future was inevitable. It would therefore rely on the independent judgement of experts, such as the National Cyber Security Centre, to assist calibration of the stress scenarios, drawing on up-to-date intelligence.

54. The FPC agreed that the Bank should launch a pilot of the approach to stress testing in 2019, and that this should focus on payments services. Further details would be published in 2018 Q4. Ahead of this pilot, the FPC would consider and publish its impact tolerances for relevant services. Following the pilot on payments, the FPC planned to consider more complex services.

55. The Committee observed that cyber risks were one example of operational incidents that could have a significant impact on firms' ability to provide vital services. It focussed on these risks, as it judged that cyber incidents were most likely to be part of a system-wide threat. In the Bank's latest *Systemic Risk Survey*, which would be published alongside the *FSR*, 62% of respondents cited it as a key source of risk, up from 51% a year ago.

56. While they did not have systemic consequences, recent episodes of disruption to customers using the Visa payment system and of TSB bank had highlighted the importance of operational risk beyond cyber incidents for individual firms and consumer protection. They would therefore inform further work of firm-level supervisors in this area. The authorities' broader approach to operational resilience, including cyber risk, would be discussed in an upcoming joint FCA, Bank and PRA Discussion Paper.

Reliance on Libor benchmarks

57. In March 2017, the FPC had judged that continued reliance of financial markets on term Libor benchmarks created a risk to financial stability. That judgement had reflected: the scarcity of unsecured deposit transactions to inform banks' term Libor submissions; the scale of financial contracts that used Libor as a reference rate; and the lack of clarity on the legal position of Libor-referencing contracts should Libor become unavailable. This had followed previous discussions in 2013 and 2014; at that stage, the FPC had issued a Recommendation to the Bank and FCA to promote the development of credible contingency plans, working with other authorities and bodies, and in July 2014 the Financial Stability Board had published its report on *Reforming Major Interest Rate Benchmarks*.

58. Since then, the FPC had been receiving updates on progress to address the risk in three areas: encouraging the development and usage of near risk-free transactions-based interest rate benchmarks as alternatives to Libor; developing robust contractual fallback provisions for new and existing Libor contracts; and maintaining Libor in the interim.

59. At its meeting, the FPC took stock on progress:

- Market-led working groups in key jurisdictions had identified preferred alternatives to Libor. These were robust overnight rates, firmly grounded in transactions data. In the UK, the Working Group on Sterling Risk-Free Reference Rates had recommended SONIA, administered by the Bank of England, as its preferred risk-free rate. The Bank had implemented reforms aimed at strengthening SONIA on 23 April 2018. In the US, the market-led Alternative Reference Rate Committee had chosen the secured overnight financing rate (SOFR) – a benchmark produced by the Federal Reserve Bank of New York, which had been launched on 3 April 2018. The same market-led groups had been co-ordinating important groundwork for the other elements of the transition away from Libor. In the UK, an active swap market referencing SONIA had long existed; futures referencing SONIA had now been launched successfully; and work had begun to develop conventions, standards and template documentation for loans and bonds referencing SONIA.

- In November 2017, the FCA had secured the agreement of the Libor panel banks to continue submitting to Libor until the end of 2021. This provided a window for transition to alternative rates — but after 2021 the availability of Libor could not be assured.

60. The risk that Libor would become unavailable after 2021 meant that market participants would – in managing their own financial exposures and risks – need to transition away from reliance on Libor. The FPC noted, however, that market participants continued to accumulate Libor-linked sterling derivatives for periods well after 2021. In the FPC's view, as long as the outstanding stock of contracts maturing after 2021 that referenced Libor continued to increase, so would associated medium-term financial stability risks. These medium-term risks could be reduced only through a substantial and lasting transition away from reliance on Libor. In addition, ongoing work to develop and implement more robust fallback clauses in existing contracts would be critical in mitigating these risks.

61. Two important market-led consultation exercises were due to be carried out soon that should – respectively – facilitate transition away from Libor for an important subset of end-users in sterling markets, and help coalesce views on the appropriate fallbacks for Libor:

- The Working Group on Sterling Risk-Free Reference Rates would consult on the development of a potential forward-looking term benchmark based on SONIA.
- The International Swaps and Derivatives Association was preparing a market consultation on the fallback rate that should replace Libor in derivatives documentation should Libor cease to be produced.

62. As Libor was an internationally used benchmark, transition would require close cross-border co-ordination. Different jurisdictions would have to find solutions to similar issues, and international firms were exposed to Libor in different currencies. Mechanisms for such co-ordination existed, including through the international Official Sector Steering Group (OSSG), which reports to the Financial Stability Board, and regular informal contact between national market-led risk-free rate working groups. The OSSG would publish a progress report in 2018.

63. Given its view that continued reliance of financial markets on Libor posed a risk to financial stability that could be reduced only through a transition to alternative rates, the FPC agreed that it would monitor progress across the different strands of work and report regularly.

Regular / other reviews

Leverage ratio

64. In September 2017, the FPC had set out its intention to review the UK leverage ratio framework in 2018, in light of progress towards an international standard for a minimum leverage ratio. Given continued uncertainty around proposed European legislation in this area, the Committee

agreed that it would not conduct the review this year. Instead, it would conduct and communicate the outcome of its review once there was further clarity on the finalised implementation of the leverage ratio requirement in EU law and how it might affect UK firms.

65. The Committee discussed the PRA's plan to consult over the summer on proposals to: apply the UK leverage ratio framework to ring-fenced bank (RFB) sub-groups within scope of the leverage framework; reflect RFBs' and large building societies' risk-weighted systemic risk buffer (SRB) in additional leverage ratio buffers; and to ensure that there continued to be sufficient capital within the consolidated group to address RFB group risk.

66. The FPC supported the PRA's plans to consult on these proposals. In its 2016 *Framework for the systemic risk buffer* publication, the FPC had expressed an expectation that from 2019, the leverage ratio would apply to major UK banks and building societies at the level of RFB sub-groups (where applicable), as well as on a consolidated level. It had also previously set out an intention that a corresponding supplementary leverage ratio buffer would be implemented in parallel with the SRB. In its March 2018 Record, the FPC had said that the group-level leverage ratio hurdle rates in the Bank's 2018 stress-test were likely to incorporate buffers to capture domestic systemic importance as well as global systemic importance. Subject to the consultation, the PRA's actions would ensure that leverage ratio requirements would be in place in time for the introduction of ring-fencing requirements and the SRB on 1 January 2019. The PRA would revisit the implementation of the UK leverage ratio framework, including at the level of ring-fenced subgroups, in the light of the future FPC review.

Concordat between the Bank's Executive and the FPC on the Bank's Sterling Monetary Framework

67. In January 2018, in response to a report by its Independent Evaluation Office, the Bank had decided to move to a different model for reviewing its sterling monetary framework (SMF) facilities: it would undertake an in-depth review at least once every three years and light-touch reviews in other years.[2] This was part of the Bank's commitment to ensuring an effective review and challenge process in relation to its liquidity facilities. The Bank would publish a factual report, documenting the usage of the facilities and key developments annually, and the key findings from the periodic in-depth reviews.

68. The FPC agreed to make changes to the concordat between the Bank's Executive and the FPC on the SMF to reflect this. As currently, the FPC would continue to be provided with regular information on the system-wide operation of the facilities, and would be consulted in the event of a material change to the facilities or in response to a specific FPC request.

[2] https://www.bankofengland.co.uk/news/2018/january/ieo-evaluation-of-the-boe-approach-to-providing-sterling-liquidity

Publication of the FPC's core indicators

69. The FPC discussed its current publication timetable for its core indicators. These indicators were those that had been helpful in identifying emerging risks to financial stability in the past, and which the FPC routinely reviewed to inform its discussions. They were only a subset of the wide range of economic and financial indicators, as well as the wealth of supervisory and market intelligence, that supported the FPC's assessment of the risk environment. Moreover, judgement played a material role in all FPC decisions and policy was not mechanically tied to any specific set of indicators.

70. These indicators were currently published on the Bank of England's website on a quarterly basis, and every six months in the FPC's *FSR*. Currently three sets of indicators were published, corresponding to one of the FPC's powers in respect of: the CCyB and leverage requirements; sectoral capital requirements (SCR); and housing policy tools.

71. The FPC agreed to amend the publication schedule, so that the CCyB indicators would continue to be published quarterly (along with a small number of additional indicators as recommended by the European Systemic Risk Board), and the rest half-yearly in the *FSR*. This would align more closely with the frequency with which the FPC considered the setting of each policy tool. It would also provide additional resource to allow the FPC to review and update the core indicators, as it had planned to do from time to time to take account of experience, new research, the evolution of the financial system and developments in data availability and quality. The FPC's policy statements on these powers would be updated to reflect this change.

Financial relationship between HM Treasury and the Bank of England

72. The Governor briefed the Committee on a planned new Memorandum of Understanding on the Financial Relationship between HM Treasury and the Bank. It would codify a new capital maintenance and income-sharing framework – the objectives of which were to ensure that the Bank's policy work was fully funded and that the Bank was equipped with capital resources consistent with the monetary and financial stability remits it had been given by Parliament, whilst maintaining responsible stewardship of public funds.

The following members of the Committee were present:

Mark Carney, Governor

Jon Cunliffe, Deputy Governor responsible for financial stability

Ben Broadbent, Deputy Governor responsible for monetary policy

Dave Ramsden, Deputy Governor responsible for markets and banking

Sam Woods, Deputy Governor responsible for prudential regulation

Alex Brazier

Anil Kashyap

Donald Kohn

Richard Sharp

Elisabeth Stheeman

Martin Taylor

Andrew Bailey, Chief Executive of the Financial Conduct Authority

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

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	At its meeting in June 2018, the FPC set the UK CCyB rate at 1%, unchanged from March. The UK has also reciprocated a number of foreign CCyB decisions — for more details see the Bank of England website.[1] Under PRA rules, foreign CCyB rates applying from 2016 onwards will be automatically reciprocated up to 2.5%.
Mortgage loan to income ratios	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. 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]
Mortgage affordability	At its meeting in June 2017, the FPC replaced its June 2014 mortgage affordability Recommendation to reference mortgage contract reversion rates: 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. 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.

[1] http://www.bankofengland.co.uk/financialstability/Pages/fpc/ccbrates.aspx
[2] http://www.bankofengland.co.uk/pra/Documents/publications/ps/2014/ps914.pdf
[3] https://www.fca.org.uk/publications/finalised-guidance/fg17-2-fpc-recommendation-loan-income-ratios-mortgage-lending