Financial Policy Committee statement on housing market powers of Direction from its policy meeting, 26 September 2014

2 October 2014

The Chancellor of the Exchequer announced in June that HM Treasury wanted to grant the Bank of England's Financial Policy Committee (FPC) additional powers to guard against financial stability risks from the housing market. The Chancellor said that he wanted to secure legislation and have powers in place before the end of this Parliament. He asked the Committee to make recommendations on the powers it would need. In his statement, the Chancellor said:(1)

'*I want to make sure that the Bank of England has all the weapons it needs to guard against risks in the housing market.*'

'*So today, I am giving the Bank new powers over mortgages including over the size of mortgage loans as a share of family incomes or the value of the house.*

In other words, if the Bank of England thinks some borrowers are being offered excessive amounts of debt, they can limit the proportion of high loan to income mortgages each bank can lend, or even ban all new lending above a specific loan to income ratio.

And if they really think a dangerous housing bubble is developing, they will be able to impose similar caps on loan to value ratios'

'*…the Bank of England should not hesitate to use these new powers if they think it necessary to protect financial stability…*'

In response to this request from the Chancellor, the FPC has assessed the form of the housing market instruments that it might require to meet its statutory objectives in the future.

Following discussion of this issue at its meeting on 26 September, the FPC recommends that HM Treasury exercise its statutory power to enable the FPC to direct, if necessary to protect and enhance financial stability, the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) to require regulated lenders to place limits on residential mortgage lending, both owner-occupied and buy-to-let, by reference to:

(a) loan to value ratios;
(b) debt to income ratios, including interest coverage ratios in respect of buy-to-let lending.

These instruments would sit alongside the FPC's power of Direction on sectoral capital requirements and its responsibility for setting the countercyclical capital buffer (CCB) rate, and complement the FPC's existing powers of Recommendation. The instruments would apply to all regulated lenders, and would cover residential lending in both the owner-occupied and buy-to-let sectors. The FPC judged that, taken together, these instruments were necessary, and should be sufficient, to tackle risks to financial stability that could emerge from the housing market in the future, rather than indicating likely FPC policy decisions in the short term.

(1) www.gov.uk/government/speeches/mansion-house-2014-speech-by-the-chancellor-of-the-exchequer.

The housing market can pose direct and indirect risks to financial stability, as has been seen in the United Kingdom and internationally.

The *direct* threat arises because mortgage lending is the single largest asset class held by UK banks in aggregate. It is therefore important to ensure that banks are resilient to risks emanating from the housing market.

The *indirect* threat arises because mortgages are the single largest liability of UK households, representing 80% of household debt. Highly indebted households cut back spending sharply when the unexpected happens, which is why recessions that follow periods of rapid credit growth tend to be deeper and longer lasting.

Furthermore, housing is the main source of collateral for the real economy, and so can give rise to a self-reinforcing loop of rising house prices and overextension of credit growth that acts as an *amplifier* of these risks.

It is not the FPC's role to control house prices, nor can it address underlying structural issues related to the supply of houses. Its role, as set out by Parliament, is to manage risks to financial stability, including from the build-up of unsustainable levels of leverage, debt or credit growth. The recommendation in this statement will allow it to fulfil that role in relation to the housing market.

Macroprudential tools, which can where needed be applied to specific sectors such as housing, lessen the need for monetary policy to be diverted to address these risks, allowing monetary policy to be reserved as the last line of defence against risks to financial stability.

The FPC's actions are subject to accountability safeguards, some of which are statutory. These are set out in detail in Box 1.

A supporting annex to this statement summarises evidence on the benefits of the FPC being able to mitigate housing-related risks to financial stability that could emerge in the future.

A. Key sources of risks associated with the housing market

In considering the housing market instruments over which it should have powers of Direction, the Committee's focus is on how such powers could mitigate threats to financial stability arising from developments in the UK housing market. The market includes two types of participant, owner-occupiers and buy-to-let investors. The actions of both groups affect market conditions and risks to financial stability. As discussed in the November 2013 and June 2014 *Financial Stability Reports*, the housing market and mortgage debt can pose *direct* threats to financial stability through lenders' balance sheets and *indirect* threats through household balance sheets. A cycle of rising house prices and overextension of credit can act as an *amplifier* of these risks. The Committee's concern is mitigating risks from these channels — rather than seeking to manage UK house prices in and of themselves.

Mortgages are the single largest asset class on UK banks' balance sheets. An increase in defaults on mortgage lending, especially against a backdrop of large declines in the value of the housing assets used as collateral for mortgage loans, can impair lenders' capital positions, their access to finance, and so, banks' ability to deliver the financial services the economy needs. In addition, in the recent financial crisis, the decline in the value of real estate exposures, even without large losses, damaged confidence in, and so access to funding for, some major UK lenders. Although losses on UK mortgages have been low in recent years, particularly relative to some other countries, in other periods — notably in the early 1990s — loss rates were significantly higher. In a housing market downturn, defaults on mortgages might also be accompanied by losses or declines in the value of collateral on related exposures, such as unsecured household loans and loans to the construction and commercial property sectors.

Mortgages are the single largest liability on the UK household sector's balance sheet. Households may react to an unexpected fall in income, increase in interest rates or large changes in their perceived housing wealth by cutting back on

spending, in particular to enable them to keep servicing their mortgages. That can weigh on wider economic activity, and may lead to losses on a wider set of assets on lenders' balance sheets.

In addition, the prevalence of floating-rate and relatively short-term fixed-rate (less than five year) mortgages in the United Kingdom makes housing particularly sensitive to changes in interest rates. This can amplify both the direct and indirect risks.

Housing is the main source of collateral in the real economy and so can give rise to a self-reinforcing loop of rising house prices and credit growth (a price-credit loop). This is because as valuations increase, rising wealth for existing homeowners and buy-to-let investors and higher collateral values for lenders can increase both the demand for and supply of credit, feeding back into higher valuations. This can be bolstered if rising prices generate expectations of further price increases. In the downturn, this amplification mechanism works in reverse. This dynamic is a source of macroprudential risk: decisions by individual borrowers and lenders accumulate into aggregate risks that are not immediately apparent to them, so are not factored into individual decisions.

These risks are reflected in experience internationally. More than two thirds of systemic banking crises were preceded by boom-bust housing cycles and recessions following property booms have been two to three times deeper on average than those without (see annex).

B. Criteria for identifying necessary instruments

The FPC's existing powers of Recommendation and Direction already give the Committee some scope to manage risks to financial stability arising from these channels. In establishing what further powers are required, the Committee's approach is to ensure that it has a set of tools sufficient to tackle all the sources of risk from the housing market, but not more than are needed. The Committee is of the view that there are clear benefits to accountability and policy effectiveness in operating with a parsimonious set of Direction powers, including aiding public understanding of the set of instruments that the FPC is likely to consider when forming policy decisions. There may also be compliance costs to lenders of operating in accordance with too wide a set of Direction powers, for example in setting up systems to monitor potential restrictions.

The FPC's existing powers over capital requirements, in particular to require a countercyclical capital buffer or to direct the PRA to vary sectoral capital requirements (SCRs), for example on residential mortgage lending, can increase the resilience of lenders to housing market downturns directly.(1) Higher capital requirements may also be helpful in preventing an overextension of credit, to the extent that they lead to a rise in the cost of borrowing, though this effect is uncertain and may be relatively weak at a time when confidence is high and lending is rising rapidly.

While capital tools can be used to tackle concerns about banking system resilience, direct limits on lending in the housing market have some advantages as complementary tools. In particular, they may be more effective in arresting the price-credit loop and so could reduce the need to deploy capital tools. This is supported by international evidence which finds that policies that affect the flow of new lending directly — for example by imposing limits on loan to value and debt to income ratios — are likely to be more effective in restraining overextension of credit through the cycle (see annex). This type of policy action may also lean against the competitive pressures that can lead to underwriting standards loosening over the cycle. Beyond this, there is a longer adjustment period for implementing changes to capital instruments than for product tools, as firms need to be given time to raise the necessary capital. Capital actions are also typically taken in relation to banks' modelled risk weights, which may be unreliable, whereas lending limits are applied directly.

C. Benefits of powers of Direction

The FPC already has the power to make Recommendations to tackle housing risks. In June 2014, the FPC took steps to limit the share of lending at very high loan to income ratios through Recommendations to the PRA and FCA.(2) In the future, working with the PRA and the FCA, the FPC could make other Recommendations to target risks that may emerge.

(1) www.bankofengland.co.uk/financialstability/Documents/fpc/policystatement140113.pdf.
(2) www.bankofengland.co.uk/publications/Documents/fsr/2014/fsr35sec5.pdf.

Since May 2014, the FCA's rules on the assessment of mortgage affordability require lenders to have regard with immediate effect to FPC Recommendations on the appropriate interest rate to use in affordability stress tests.(1)

But there are several benefits to also being able to use a power of Direction, even though the FPC may still choose to act via a Recommendation.

Implementation of Directions may be more timely than for Recommendations: a power of Direction requires the PRA and FCA not only to comply but also to act as soon as practicable. There is scope for HM Treasury when establishing a power of Direction to allow for the disapplication of procedural requirements for consultation periods, if that is judged necessary, which can help where urgent implementation is required. This can be an important consideration in a market like housing, where quick implementation may be necessary to prevent lenders and borrowers bringing forward transactions in anticipation of policy changes, putting more pressure on the market.

Direction powers are used within a clear framework, with a strong macroprudential mandate for varying policies over the cycle. For each Direction power, the FPC is required to produce and maintain a Policy Statement, including identifying core indicators that are used as a guide for policymaking. This can help borrowers and lenders to understand and anticipate how the FPC will act to lean against risks in the housing market, which may itself help prevent the overextension of credit. This is part of the wider accountability framework within which the FPC operates to meet its objectives (see Box 1).

D. Suggested powers of Direction

The FPC recommends that HM Treasury exercise its statutory power to enable the FPC to direct, if necessary to protect and enhance financial stability, the PRA and FCA to require regulated lenders to place limits on residential mortgage lending, both owner-occupied and buy-to-let, by reference to:

(a) loan to value ratios;
(b) debt to income ratios, including interest coverage ratios in respect of buy-to-let lending.

The Committee agreed to recommend that it be given new powers of Direction over loan to value (LTV) ratios and debt to income (DTI) ratios including interest coverage ratios in respect of buy-to-let lending. These additional powers, which apply to the flow of new lending directly, complement the FPC's existing powers of Direction over capital requirements, and thus provide the benefits of a Direction power framework over two key aspects of mortgage lending that can be a source of and amplify financial stability risks from the housing market over the credit cycle.

This Recommendation relates to the FPC's general ability to tackle risks that could emerge from the housing market in the future. The Recommendation does not reflect any FPC decision about the current state of the housing market.

These powers could be applied in respect of PRA or FCA-regulated firms. Owner-occupied mortgages can only be provided by regulated firms. While it is possible for a non-regulated entity to extend buy-to-let (BTL) mortgages, almost all buy-to-lending in the United Kingdom is currently undertaken by regulated lenders. If lending by non-regulated specialist BTL lenders grew in an attempt to evade FPC policy, the FPC could, as part of its duty to monitor the regulatory perimeter, recommend to HM Treasury that specialist BTL lenders be brought within the scope of the Financial Services and Markets Act for macroprudential purposes.

Some countries have restricted all lending above certain thresholds for LTV ratios or DTI multiples. While the FPC may in principle want to adopt such an approach in certain circumstances, it may instead operate in a similar way to the FPC's June Recommendation, which sets a limit on the share of lending at high loan to income multiples.(2) Specifically, the Committee's Recommendation is that these powers would allow the FPC to direct the PRA and FCA to impose a limit on the proportion of UK residential mortgage lending above a given threshold (eg 15% above 4.5 times income, as in

(1) http://fshandbook.info/FS/html/FCA/MCOB/11/6.
(2) In June 2014, the FPC recommended that the PRA and FCA should ensure that mortgage lenders do not extend more than 15% of their total 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.

Box 1
Accountability of the FPC

Under the legislation introduced by the Financial Services Act 2012, the FPC's primary objective is to contribute to the achievement of the Bank's Financial Stability objective 'to protect and enhance the stability of the financial system of the United Kingdom'. The Act states that the FPC's responsibility in this regard relates, 'primarily to the identification of, monitoring of and taking action to remove or reduce systemic risk with a view to protecting and enhancing the resilience of the UK financial system'. Those systemic risks are defined to include:

- 'Systemic risks attributable to structural features of financial markets, such as connections between financial institutions';
- 'Systemic risks attributable to the distribution of risk within the financial sector'; and
- 'Unsustainable levels' of:
  a. 'Leverage' (where leverage is, 'the leverage of the financial sector in the United Kingdom');
  b. 'Debt' (where debt is, 'debt owed to the financial sector by individuals in the United Kingdom and businesses carried on in the United Kingdom'); or
  c. 'Credit growth' (where credit growth is, 'the growth in lending by the financial sector to individuals in the United Kingdom and businesses carried on in the United Kingdom').

In addition, the Act 'does not require or authorise the Committee to exercise its functions in a way that would in its opinion be likely to have a significant adverse effect on the capacity of the financial sector to contribute to the growth of the UK economy in the medium or long term'. And it gives the FPC a secondary objective to, 'exercise its functions with a view to, subject to [the primary objective], supporting the economic policy of Her Majesty's Government, including its objectives for growth and employment'.

In meeting its objectives, the Committee is subject to accountability requirements, some of which are statutory.

- Under the Act, the Committee is required to respond publicly to any public recommendations made to it by the Treasury, explaining either how it is acting in accordance with them or reasons for not acting in accordance with them. To date, HMT has met its obligations via a public annual Remit and Recommendations document, to which the Committee has publicly responded.

- The Committee is accountable to Parliament and the public. To promote accountability, FPC members appear regularly before Members of Parliament at Treasury Committee hearings, including by giving evidence following publication of each *Financial Stability Report* (*FSR*), where they are required to explain their assessment of risks and policy actions. The Treasury Committee has also held appointment hearings for members. As required by the Act, the Governor meets with the Chancellor after each *FSR* to discuss matters relating to the stability of the UK financial system, with a public record of the meeting published within six weeks.

- The procedures followed by the FPC are reviewed by a committee of the Court of Directors of the Bank — the Oversight Committee established under the Act. It may appoint persons to conduct specific performance reviews, which would be published unless the Bank's Court judges that publication at a particular time is against the public interest.

- For each of its powers of Direction, the FPC must prepare, publish and maintain a written statement of the general policy that it proposes to follow in relation to the exercise of its powers. The FPC published a Policy Statement on its powers over capital requirements (the countercyclical capital buffer and sectoral capital requirements) in January 2014. This Policy Statement described those instruments and the likely impact of using them on financial stability and growth. It also described the circumstances in which the FPC might expect to use each instrument and provided a list of core indicators that the Committee routinely reviews when reaching decisions on these instruments. The Committee would publish such a Policy Statement on housing market Direction powers should they be specified in legislation.

- When exercising its functions, the FPC must have regard to the proportionality of its actions — that is, 'the principle that a burden or restriction which is imposed on a person, or on the carrying on of an activity, should be proportionate to the benefits, considered in general terms, which are expected to result from the imposition of that burden or restriction'.

- The FPC also has a duty to prepare an explanation when exercising most of its functions. Specifically, for the duty on proportionality, the explanation, 'must include an estimate of the costs and an estimate of the benefits that would arise from compliance with the direction or recommendation in question, unless in the opinion of the Committee it is not reasonably practicable to include such an estimate'. An illustrative example of how the FPC would approach such a quantitative analysis for the deployment of housing market instruments, based on its actions in the housing market in June 2014, is appended to this statement.

- FPC policy decisions, including any new Directions and/or Recommendations that have been agreed, are

communicated to those to whom the action falls — for example, the PRA or FCA. The policy decision is communicated and explained to the public in either a short statement typically released a week after the policy meeting — in the first and third quarters of the year — or in the *FSR* in Q2 and Q4. Under the Act, the *FSR* must include: the FPC's view of the stability of the UK financial system at the time of the *Report's* preparation; an assessment of the developments that have influenced the current position of the UK financial system; the strengths and weaknesses of the UK financial system; risks to the stability of the UK financial system; and the Committee's view of the outlook for the stability of the UK financial system.

- The key messages and policy actions in the *FSR* are conveyed to a wide audience. A press conference is held when the *FSR* is published. Participants in financial markets — including the Bank's network of market intelligence contacts — are also informed of policy decisions when the *FSR* is published. FPC members and other Bank staff hold regular meetings with financial market participants where FPC decisions are discussed. The Bank's network of Agents across the United Kingdom is able to promulgate and discuss messages with business contacts, often supported by FPC members or other Bank staff.

- A formal Record of the policy meeting is published at present around a fortnight after the corresponding meeting. It must specify any decisions taken at the meeting and must set out, in relation to each decision, a summary of the Committee's deliberations.

June 2014), either on the basis of the volume or the value of lending undertaken by all regulated lenders. If the FPC chose to set this limit at zero, this would be equivalent to restricting all lending above certain thresholds.

(a) Loan to value ratios

The Committee agreed that the power to Direct the PRA and FCA to limit the proportion of loans extended at high loan to value (LTV) ratios would add to its ability to tackle sources of housing risk that arise directly through lenders' balance sheets both by reducing likely losses for lenders on residential property, and by moderating housing cycles by limiting excessive mortgage credit growth in booms.

Limits on LTV ratios have been one of the most widely used macroprudential measures internationally, and cross-country studies suggest that they have been effective in attenuating housing and credit cycles (see annex).

In the upswing of a housing cycle, rising house prices may encourage borrowers to take on higher LTV mortgages in order to afford purchases. Rapid increases in house prices also improve the average LTV ratios on lenders' existing stock of mortgages, which might make them more willing to take on additional risk by offering more new high-LTV loans. An adverse dynamic may develop whereby some lenders ease underwriting standards in pursuit of market share, and others feel pressured to match that easing to avoid losing market share. By extending an increasing share of higher LTV mortgages, lenders become more likely to face losses on collateral if house prices subsequently decline — both because higher LTV loans have tended to be associated with higher default rates and because loss given default will be greater (see annex). Even if defaults do not materialise, falls in collateral values can pose risks via the effect on confidence in banks.

High LTV lending may also pose greater risks during periods when house price valuations appear stretched, and are more likely to face subsequent correction. Imposing LTV limits will tend to reduce the leverage of homeowners, thus limiting their own, and lenders', exposures to corrections in prices.

Given that there is a single housing market, credit and house price booms and busts can be buoyed, not just by lending to owner-occupiers, but also by buy-to-let lending — that is mortgage lending secured against a residential property that will not be occupied by the owner of that property or a relative, but will instead be occupied on the basis of a rental agreement. Evidence from the United Kingdom and United States, ahead of the recent crisis, indicates that cyclical exuberance in the buy-to-let sector can bolster house price increases, thereby amplifying risks from the housing market more broadly. Furthermore, in the United Kingdom during the recent crisis, arrears rates and write-off rates on buy-to-let lending peaked at higher rates than on owner-occupied loans — adding to losses for banks. The risks from the buy-to-let sector are explained more fully in Box 2.

The Committee agreed that Directions to limit high LTV lending must also be available to be applied to buy-to-let lending extended by regulated entities. This would prevent the FPC from having to apply a relatively tighter policy stance

on owner-occupied lending alone in order to achieve the same impact; would allow the FPC to help prevent buy-to-let investors from amplifying the house price cycle; and, prevent lenders becoming overexposed to falls in property values through a cyclical increase in high-LTV buy-to-let loans.

(b) Debt to income ratios, including interest coverage ratios in respect of buy-to-let lending

The Committee agreed that the power to Direct the PRA and FCA to limit the proportion of loans extended at high debt to income (DTI) ratios would also add to its ability to mitigate systemic risks that could otherwise arise from increases in the number of highly indebted households during an upswing.

Rapid growth in house prices, particularly relative to income growth, can prompt borrowers to take on larger debt burdens to finance house purchases. For existing property owners, both owner-occupiers and buy-to-let investors, increases in property values can also lead to greater borrowing as owners extract equity gains.

An increase in highly indebted households can then pose risks to the financial system either directly — in the event the borrowers eventually prove unable to service these debts — or indirectly if, in struggling to continue to meet debt obligations, households reduce other expenditure, weighing down on wider economic activity. Imposing limits on lending at higher DTI ratios should directly limit increases in aggregate household indebtedness and the number of highly indebted households during the upswing of the cycle. Limits on lending at higher DTI ratios may also be effective in leaning against a house price-credit loop.

For UK households, mortgages secured with a first-charge on the borrower's home make up around two thirds of aggregate household debt. However, other forms of debt, either secured on property or unsecured, can also put pressure on household finances and so pose similar risks to the economy and financial system. International experience also suggests that if a limit on debt relative to income only encompasses first-charge mortgages, lending activity can become displaced into other forms of debt, undermining the effectiveness of policies in limiting risks to financial stability (see annex).

In order to provide sufficient scope for the Committee to mitigate risks to stability arising from household indebtedness more broadly, the Committee agreed that it should recommend that it has scope to apply the power of Direction in respect of residential mortgage lending so as to take account of households' contractual, commercially extended debt (including for example first-charge mortgage debt, other mortgage debt eg second-charge loans, and other commercially extended secured and unsecured loans). In using the power of Direction, the FPC would need to decide what definition of household debt would be appropriate and proportionate to managing risks at that particular time.

The risks to financial stability posed by increasing debt relative to incomes can arise from the buy-to-let sector in a similar way to the owner-occupied market, albeit less directly. On the one hand the direct effect from buy-to-let landlords reducing their non-mortgage expenditure may be diluted both because for buy-to-let lending the borrower's ability to service the debt, or the effect on economic expenditure of continuing to meet debt obligations will be, in part, determined by the rental income on the property and because these borrowers may have a lower marginal propensity to consume. On the other hand, the role that exuberance in buy-to-let lending can play in bolstering the housing cycle can encourage other borrowers to take on more debt than otherwise — prompting aggregate household indebtedness to rise more than it would otherwise have done.

Given the importance of rental income in determining the ability of buy-to-let landlords to service their debt, a widespread market practice in the buy-to-let lending market is to use the mortgage's interest coverage ratio (ICR) in assessing affordability. For example, a number of lenders currently require that rental income must be at least 125% of mortgage interest payments when using an interest rate of 5% — although this practice is not universal.

In order to take rental income into account, and reflecting prevailing market underwriting practices, the Committee agreed that for the buy-to-let sector it would be appropriate to include a power of Direction over the extent of lending by interest coverage ratio extended by regulated entities, where the FPC would also be able to specify the appropriate interest rate to consider when calculating the ratio.

Box 2
Consideration of the buy-to-let sector

The Committee's Recommendation to HM Treasury is that the powers of Direction are able to be set, as appropriate, to cover lending to both the owner-occupied and the buy-to-let (BTL) sectors by regulated entities. This is because the actions of both groups affect market conditions and so can pose risks to financial stability.

Ensuring that macroprudential policies can be applied, as necessary and appropriate, to both sectors is consistent with their treatment in the FPC's existing macroprudential powers over capital, and matches the practice seen so far by macroprudential authorities in other countries with BTL sectors. Being able to apply a consistent approach to owner-occupied and BTL mortgage lending is appropriate for macroprudential purposes, given the effects that BTL activity can have on the dynamics of the housing and wider mortgage market, even if it may not be appropriate for other financial or consumer regulation.

BTL mortgage lending — a mortgage secured against a residential property that will not be occupied by the owner of that property or a relative, but will instead be occupied on the basis of a rental agreement — is a significant share of both the flow of residential mortgage lending and stock of mortgage lending on lenders' balance sheets. The BTL sector has undergone a rapid expansion over the past 20 years. In 2014 Q2, BTL lending was 12% of the total mortgage flow, having risen from 4% in the early 2000s. As BTL mortgages are predominantly interest-only, and therefore do not amortise, the share of lenders' mortgage portfolios that they represent grows faster than their share in the flow might suggest, increasing lenders' exposure to credit risk. An expansion in buy-to-let lending in the upswing of a housing cycle is likely to increase the direct risk to lenders' balance sheets, including through any increase in high-LTV BTL loans. Furthermore, the prevalence of floating, or relatively short-term fixed, mortgage rates for these non-amortising loans, heightens the sensitivity of this lending to changes in interest rates, which can simultaneously increase costs and reduce the value of the property.

As with owner-occupied lending, the FPC's existing power of Direction over sectoral capital requirements (SCRs) could, if necessary, be deployed to address some of these risks. A relatively high SCR could act to enhance the resilience of lenders to losses on BTL loans, and may also reduce incentives for lenders in scope to undertake BTL lending, although the effect of such measures in restraining lending is less certain. However, an SCR can only capture BTL loans extended by CRD IV regulated lenders, and so attempting to use the SCR alone to restrain BTL lending could result in an increase in BTL lending by lenders outside the scope of the requirement, meaning an SCR alone may not be effective in leaning against these risks, and the pressure on the wider housing market arising through BTL lending. As discussed in Section B, capital tools have other potential disadvantages relative to product tools such as a longer adjustment period, emphasising the importance of having both types of instrument in the toolkit for the entire housing market.

The scale and nature of BTL activity makes it a significant potential amplifier of housing and credit cycles: any increase in BTL lending in an upswing will add further pressure to house prices, which is likely to prompt owner-occupiers to take on even larger loans, thereby increasing overall risks to financial stability. As an investment asset on which landlords seek not only rental return but also capital gains, demand for BTL lending is likely to be highly cyclical. Optimistic BTL investors can bolster prices by investing further in an upswing, while pessimistic investors who do not already own property cannot express a negative view, biasing the market towards overoptimistic expectations. Ahead of the last crisis, there is evidence of this dynamic in BTL lending in the United States and the United Kingdom. In the United States, studies find evidence that those US states with a larger and increasing share of transactions by investors saw a bigger boom and bust in house prices. In the United Kingdom, BTL lending rose to be nearly 20% of the flow by early 2008, but the share fell to less than 10% by late 2009.

As discussed in Section D, the risks to financial stability posed by increasing debt relative to incomes can arise from the BTL sector in a similar way to the owner-occupied market, albeit less directly. The majority of BTL investors are small-scale landlords — owning fewer than five properties. Like indebted owner-occupier households, shocks to their income or interest rates which stretch their borrowing affordability could affect their spending. However the risk these debt burdens pose to financial stability is potentially tempered by the rental income BTL investors earn, and as they may have a lower marginal propensity to consume generally.

Not including BTL lending in the scope of macroprudential powers on residential mortgage lending may limit how effective measures applied to owner-occupied lending might be, and how tight any restrictions would need to be set. That is for two reasons. First, if in the upswing of a cycle an increase in BTL lending was a substantial contributor to price increases and an overextension of credit, in order to lean against this dynamic, the FPC would need to apply a tighter calibration on owner-occupied lending alone, than if tools could be applied to both sectors. Second, binding limits on mortgage lending that only cover owner-occupied lending and exclude buy-to-let are vulnerable to encouraging activity to be displaced into the buy-to-let sector.

E. Other potential powers of Direction also considered by the Committee

The Committee identified a range of other tools that might prove useful in tackling risks from the housing market. These included instruments used in some other countries, such as limits on the proportion of lending undertaken at long mortgage tenors, and constraints on the proportion of lending undertaken at particular debt-servicing ratios (DSRs) — the share of income required to meet monthly debt payments.

DSRs provide an alternative indicator to DTI ratios of the potential difficulties that households may face in meeting debt obligations or the extent to which other expenditure would be squeezed if debt-servicing costs rose. As well as the overall loan size, the DSR will also be affected by the interest rate used in the calculation and the amortisation period.

The Committee agreed that, while both should be monitored, DSR and DTI ratios provided similar indicators of potential income stretch and so a power of Direction over DTI ratios should be sufficient to mitigate those risks, while additionally capturing the risks that can arise from the total debt burden increasing.

Furthermore, the FPC's existing ability, supported by the FCA's rules, to recommend the interest rate stress that lenders should apply when assessing affordability provides an additional way in which the Committee could lean against overextension of debt. Partly reflecting the Committee's recent experience of making such a Recommendation to lenders,(1) the Committee agreed that this existing authority was likely to be sufficiently effective and expedient, that a power of Direction over these tests would add little extra value.

The Committee agreed that an increase in the proportion of mortgages at longer term, and an increase in lending into expected retirement, might in principle pose risks to financial stability, if it implied that household mortgage debt burdens were increasing, and that this risk should be monitored. But there was not strong evidence that mortgage tenor had played the same role over the cycle as other underwriting standards and so it was less likely that the FPC would need to take regular action to tackle such risks. As such the existing powers of Recommendation to the PRA and FCA were likely to be sufficient.

(1) Since June 2014, the Committee's prevailing Recommendation that when assessing affordability, mortgage lenders should apply an interest rate stress test that assess whether borrowers could still afford their mortgages if, at any point over the first five years of the loan Bank Rate were to be 3 percentage points higher than the prevailing rate at origination.

Annex
Supporting material assessing the impact and effectiveness of recommended FPC powers of Direction

As described in the FPC's statement, the FPC is recommending that HM Treasury grant powers of Direction over two new instruments in the residential mortgage market, covering both owner-occupied and buy-to-let lending.

The Committee's Recommendation would be implemented by HM Treasury establishing, in legislation, a framework for general use for these instruments. The recommendation does not imply that any of the powers of Direction will be exercised imminently, and as such no specific policy calibration is discussed. That would be decided by the Committee at the point at which a particular power of Direction was being used.

In light of that, this annex summarises evidence on the benefits in principle of the FPC being able to mitigate housing-related risks to financial stability, as well as the effectiveness in general terms of the proposed powers of Direction. In addition it also describes the other impacts and costs that the FPC would need to consider when using these powers.

While a quantitative assessment of the costs and benefits is neither practicable nor appropriate at this stage given that no specific policy calibration is proposed, an illustrative example is provided of how the FPC would approach such a quantitative analysis based on its actions in the housing market in June 2014.

Following a response from HM Treasury to this recommendation, the FPC intends to prepare a draft Policy Statement for the relevant powers that would provide more detailed guidance on the Committee's intended approach to using these powers and the core indicators it would use as a guide to policymaking, to inform Parliamentary debate.

What risks to financial stability would these powers address?

As set out in Section A of the statement, the housing market can pose direct threats to financial stability operating through bank balance sheets and indirect threats operating through household balance sheets. Furthermore, the link between rising house prices and the overextension of credit can give rise to a house price-credit loop, which amplifies both the housing and credit cycles and the risks to financial stability which can follow.

These risks are reflected in the experience across countries; more than two thirds of the 46 systemic banking crises (for which house price data are available) were preceded by housing boom-bust cycles, while viewed the other way only 30% of housing boom-bust episodes were not followed by a crisis (Crowe *et al* (2011)).

The next section discusses in turn how limits on the proportion of lending at high LTV or high DTI ratios can be used to attenuate these risks to financial stability, including international evidence on their effectiveness.

How would these powers address these risks?

Loan to value ratios

As set out in Sections A and D of the statement, imposing limits on the extent of lending at high LTV ratios can reduce threats to financial stability emanating from both the direct and indirect channels, and can additionally attenuate the price-credit loop.

The direct threat to financial stability from the housing market arises from losses, or the perception of a potential for losses, on mortgage assets. If confidence in the quality of a bank's loan portfolio is low, wholesale funding can dry up, causing liquidity problems. This mechanism is thought to have been behind the collapse in confidence that led to the failure of some large UK lenders during the recent crisis (FSA (2011)). The ultimate risk to banks' mortgage portfolios comes from an increasing risk of households defaulting, which in turn is more likely when households face both (i) an adverse shock, such as an unexpected fall in income or increase in interest rates and (ii) falling into negative equity (which prevents households from refinancing) (Schelkle (2012)).

Consistent with this, empirical evidence for the United Kingdom, as part of the Mortgage Market Review(1) found a positive correlation between LTV rates at origination and subsequent mortgage default. Such a correlation was also

(1) 'Mortgage Market Review', Financial Services Authority, *Discussion Paper No. 09/3*.

found in studies of US data: Demyanyk and Van Hemert (2008) find higher LTV[1] ratios at origination are associated with a greater probability of mortgage delinquency and foreclosure. Beyond a correlation between LTVs at origination and subsequent default, Wong *et al* (2011) find that the use of LTV limits reduces the sensitivity of mortgage defaults to property price shocks. In addition to reducing the probability of mortgage default, imposing LTV limits will, all else equal, result in lower indexed LTV ratios at the time of default, resulting in lower *loss given default* for financial institutions.

High LTV borrowing has also been associated with large drops in local consumption and employment during housing busts, presenting an indirect threat to financial stability. This effect can occur because high LTV ratios amplify the fall in housing wealth for a given reduction in house prices. One influential study for the United States found that counties with the greatest fall in household net worth saw consumption fall by 20% compared with 5% for the country as a whole (Mian and Sufi (2014)).

A key driver of the price-credit cycle in the housing market, which amplifies the risks from the housing market to financial stability, is that the housing wealth of mortgagors increases more than one-to-one as house prices rise. For example, if a household has a mortgage for 90% of the value of their property, a 10% rise in house prices results in a 100% increase in their housing wealth, greatly increasing the price they can pay should they move. As Stein (1995) has emphasised, this mechanism can explain the observed positive correlation between house price increases and housing transactions. Imposing LTV limits will tend to reduce the leverage of homeowners, thus limiting the increase in their housing wealth following price increases. The same mechanism also works in reverse, limiting the fall in housing equity during a housing downturn.

Consistent with this, the international evidence has shown that restrictions on LTV limits are effective in attenuating both mortgage credit growth and house price growth. For example, using cross-country evidence, Ahuja and Nabar (2011) find that LTV caps slow lending growth to the property sector, while Kuttner and Shim (2012) find that LTV caps have been effective in reducing house price growth. For comparison, the international evidence on sectoral capital requirements indicates that requirements might have to be increased substantially to have a material effect on credit growth (Bank of England (2014)).

Experience internationally shows that if only first-charge mortgage lending is regulated, there can be leakage into other forms of debt such as second-charge mortgages. For example, there was a significant increase in second-charge lending in the United States during the housing boom in the 2000s — likely reflecting a requirement for mortgage insurance on prime-conforming first-charge mortgages sold in the secondary mortgage market with an LTV over 80%. The combination of a prime-conforming mortgage of 80% LTV with a second mortgage with LTV of 10% or 20% enabled the purchase of a house with a significantly reduced deposit, making second mortgages particularly popular in cities where prices increased the most (Credit Suisse (2007)). Across ten major US cities the average fraction of transactions with a second mortgage rose from just under 10% in 1998 to almost 50% in 2006 (Adelino, Schoar and Severino (2012)). Slovakia also had a similar experience of leakage into further mortgage products following a 2001 decision to introduce an LTV limit of 70%. This limit did not cover 'other housing loans', and this category subsequently accounted for around 65% of loans in 2011.[2] This suggests that in order for policy measures to be effective, and avoid leakage, it is necessary to have the flexibility to define the measures of mortgage debt used within an LTV limit, so as to capture all forms of lending secured against the property.

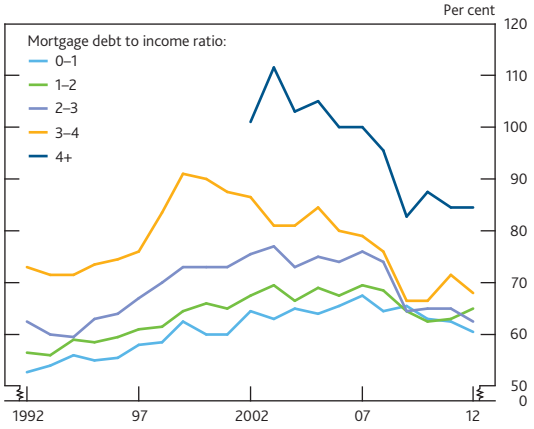
Debt to income ratios

As set out in Sections A and D of the statement, a key channel of risk to financial stability from the housing market arises from the relationship between the housing cycle and household indebtedness. Existing empirical evidence suggests that house price booms associated with rising household debt are more likely to end up in costlier recessions. Furthermore, rapid growth in aggregate credit is strongly associated with subsequent economic instability and the risk of financial crisis (Crowe *et al* (2011), Drehmann, Borio and Tsatsaronis (2011), IMF (2012), Jordà, Schularick and Taylor (2013) and Giese *et al* (2014)). As set out in the statement, for existing property owners, both owner-occupiers and buy-to-let investors, increases in property values can also lead to greater home-equity based borrowing. One study for the United States finds that homeowners borrowed 25 cents for every dollar gain in home equity from 2002 to 2006 (Mian and Sufi (2011)).

(1) Precisely this is the Combined Loan to Value Ratio (CLTV), including all mortgage loans used to purchase the property.
(2) The IMF has highlighted in at least three article IVs the issue of other housing loans.

Chart A Households with higher debt to income ratios cut spending by more in the crisis

UK mortgagors' non-housing consumption as a share of income by debt to income ratio group[a]

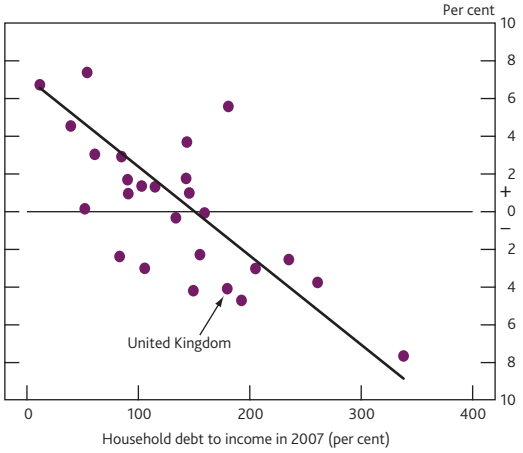


Sources: Department of Communities and Local Government, Living Costs and Food Survey, ONS and Bank calculations.

(a) Data for 4+ not shown before 2002 as they are erratic and are based on a small sample. Non-housing consumption as a share of income net of mortgage interest payments. Data are scaled so that the total matches the National Accounts. Debt to income is calculated using secured debt only.

Chart B Higher household indebtedness was associated with sharper falls in consumption during the crisis

Adjusted consumption growth over 2007–12[a]



Sources: Flodén, M (2014), 'Did household debt matter in the Great Recession?' and OECD National Accounts.

(a) Change in consumption is adjusted for the pre-crisis change in total debt, the level of total debt and the current account balance. See www.martinfloden.net.

Imposing limits on lending at high DTI ratios can reduce the indirect threat to financial stability from the build-up in household indebtedness during the upswing of a housing or credit cycle. Increased household indebtedness may be associated with a higher probability of household distress, and subsequent falls in consumer spending. This arises from the fact that households with the highest debt to income ratios tend to spend a greater proportion of their income on consumption than less indebted households. That was seen clearly during the recent financial crisis, with the share of income attributed to consumption falling sharply for households with higher debt to income ratios (**Chart A**). There is also evidence internationally that higher household debt to income ratios were associated with larger falls in consumption (**Chart B**). Falls in consumption can in turn weigh on wider economic activity.

Limits on DTI ratios have been shown to be effective in curbing mortgage credit growth, thereby helping lean against the procyclical extension of credit (Lim *et al* (2011)). For example, Kuttner and Shim (2012) show that DTI limits reduce mortgage credit growth in both the short run and the long run, while Ahuja and Nabar (2011) also show that DTI caps slow lending growth to the property sector.

The evidence on the role of household indebtedness tends to consider total household debt (IMF (2012)), suggesting that all household debt should be considered when assessing the risks to financial stability, and the importance of being able to act directly to limit lending at high DTI ratios when extending residential mortgages. While mortgage debt tends to account for most of household debt,[1] and so a loan to income (LTI) measure may seem sufficient to target a large part of household debt, international evidence — as discussed above for LTV measures — suggests that when restrictions are applied to only a subset of debt, there can be substantial leakages, reducing the effectiveness of the intervention. In addition to the leakages into secured mortgage debt, there can also be leakages into unsecured debt. For example, following the introduction in 2010 of an LTV cap in Sweden, banks stated that it was more common to grant an unsecured loan in 2013 than it was prior to the introduction of the cap, and over 10% of mortgagees now have unsecured loans which allow their total borrowing for housing purchase to exceed the 85% LTV cap.[2] Therefore, in addition to having broader coverage than an LTI measure, a DTI limit is likely to be less prone to circumvention via use of non-mortgage and unsecured forms of debt and so more effective in targeting the risks to financial stability from household indebtedness.

(1) Housing-related debt (mortgages) comprises about 70% of gross household debt in advanced economies. The remainder consists mainly of credit card debt and auto loans. (IMF (2012).)
(2) www.fi.se/upload/90_English/80_Press_office/2012/bolan2011_eng.pdf.

Inclusion of buy-to-let

As set out in the statement and Box 2, overextension of buy-to-let mortgages poses financial stability risks through similar direct, indirect and amplification channels as the owner-occupied sector, since the housing market is a single market.

The United Kingdom is one of a number of advanced countries with a clearly identified buy-to-let (BTL) mortgage sector within its residential property market. The sector has undergone a rapid expansion over the past 20 years. BTL lending currently represents 12% of the total mortgage flow, having risen from 4% in the early 2000s. As BTL mortgages are predominantly interest-only, and therefore do not amortise, the share of lenders' mortgage portfolios that they represent grows faster than their share of flow might suggest, increasing lenders' exposure to credit risk. BTL mortgages represent a disproportionate share of high LTV mortgages: currently for the major six banks, 20% of the stock of mortgages with a current LTV above 90% are BTL loans. Moreover, although arrears rates on BTL mortgages are currently lower than for owner-occupied mortgages, they peaked higher in the previous housing cycle. And possessions and write-off rates remain higher than for conventional mortgages — currently around 25% of total possessions are of BTL properties.

Furthermore, as an investment asset on which landlords seek not only rental return but also capital gains, demand for BTL is likely to be highly cyclical and to play an important role in driving the overall house price-credit loop, thereby amplifying direct and indirect risks to financial stability. This is commonly cited as a factor that exacerbated the recent house price cycle in the United States (Haughwout *et al* (2011)). In the United Kingdom, BTL lending rose to be nearly 20% of the flow by early 2008, but the share fell to less than 10% by late 2009.

The majority of BTL investors are small-scale landlords — owning fewer than five properties. Their behaviour as they become more indebted, particularly in the event of shocks to income or interest rates which stretch their borrowing affordability, is likely to be similar to that of indebted owner-occupier households. Therefore the risks to the economy and financial system, discussed above, are likely also to apply to the BTL portion of the mortgage market, albeit in a less direct manner.

One difference for the buy-to-let sector is that the rental income on the property is likely to be an important additional factor when considering how the borrower may respond to adverse shocks to income or an increase in interest rates. A widespread, although not universal, market practice in the buy-to-let lending market is to use a comparison of the servicing costs of the mortgage with rental income, the loan's interest coverage ratio (ICR), when assessing affordability. For example, a number of lenders currently require that rental income must be at least 125% of mortgage interest payments when using an interest rate of 5%. A small minority of lenders use the borrower's DTI ratio as the primary affordability criterion.

What might be the costs or unintended consequences of using these powers?

In using its power of Direction, the FPC will need to consider the appropriate scope (including application of any *de minimis* or other exceptions) and calibration given the outlook for the housing market and risks to financial stability at the time. In making that assessment, there are a number of potential consequences that the FPC will consider — including those which relate to whether the policy action affects the ability of the PRA and FCA to meet their objectives. These include, but are not limited to:

- **Impact on economic activity**: this includes estimating what impact the Direction may have on economic activity, given the outlook for activity at that time, for example through considering any possible negative impact on housing investment or household consumption in the short term, as well as the benefits for economic activity (reflecting a reduced probability of a financial crisis) over a longer horizon.
- **Compliance costs to firms**: this includes where the Direction would require firms to incur material additional (administrative) costs to comply with the rules — because they have either to modify existing or to create new processes. For example, if information required to monitor the definition of debt or income is not currently collected, the costs associated with collecting the information would need to be considered.
- **Leakages**: this includes any other leakages not already covered in the sections above. Leakages can reduce the expected benefits of the policy and also generate other risks to objectives of the regulators.
- **Competition implications**: this includes whether the Direction is likely to increase/reduce the number or range of suppliers or affect their ability to compete by restricting any particular specialist business models. If this is the case the

policy might have adverse impacts on competition (eg through increasing market power of other firms, introducing barriers to entry to some markets).

- **Unintended impact on the quantity, quality and variety of products**: this includes where a Direction may be likely to have any broader impact on the types of products offered by lenders. For example, a rule may reduce the incentives of firms to provide appropriately differentiated or higher-quality products to consumers, especially where the firms may have a specialised business model.
- **Distributional impact**: this includes whether the Direction will have disproportionate impact on certain types of firm or consumer in the market. For example, a limit on the extent of lending above certain LTV or DTI ratios, based on the value of loans may have more impact on mutuals and private banks that have a more sporadic pattern of lending than other lenders. A binding LTV limit might tend to affect more young borrowers and first-time buyers, with fewer savings and no existing housing wealth.

These need to be considered together with the expected benefits of the Direction to ensure that any policy put in place is proportionate.

Estimating the costs and benefits of these policies — an example

The costs and benefits of using these policies of course depends upon the calibration chosen, and the economic context and market dynamics at that time. In coming to any policy decision, the FPC would assess the costs and benefits relative to the outlook for housing activity and the outlook for credit growth.

An example of how the FPC might form this assessment is given by the assessment undertaken by the FPC in June 2014 to support the FPC's recommendation to the PRA and FCA to ensure that no more than 15% of residential mortgage lending is undertaken at loan to income ratios of more than 4.5 times income.

As laid out in Box 5 in the June 2014 *Financial Stability Report* — appended alongside this annex — the costs and benefits of implementing the recommendation were considered relative to two alternative scenarios for how the UK housing market and credit growth might evolve over the next three years. From these scenarios — which described quantitatively how housing market activity might evolve in aggregate, absent a policy intervention — a consistent set of projections for the distribution of loans by LTI ratio were constructed. The impact of the policy was considered relative to these projected distributions. These estimates were then used to calculate an updated projection for aggregate mortgage credit growth in both scenarios and an updated projection for expenditure variables, and GDP.

This type of analysis could be used to consider other calibrations of DTI limits.

Similar approaches could also be used to generate projections for the distribution of loans by LTV, and hence consider the impact of a limit on the proportion of high LTV lending. In that case, the analysis would also be extended to consider the benefits to financial resilience from the reduced exposure of lender balance sheets to changes in housing asset value.

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Box 5
Assessing the impact of the FPC's recommendations on the mortgage market

As described in Section 5, the FPC has provided guidance to lenders on the interest rate stress test to use in assessing mortgage affordability as part of the FCA's Mortgage Market Review (MMR) and recommended to the PRA and FCA the introduction of a limit on the share of very high loan to income (LTI) mortgages in new lending. The aim of the policy package is to limit the risks to economic and financial stability from excessive household indebtedness. This box summarises the FPC's analysis of the likely impact of the package, including an assessment of its costs and benefits.

The FPC's recommendations are designed and calibrated to provide insurance against a marked loosening in underwriting standards and a further significant increase in the number of very highly indebted households. These measures are not expected to have a material impact on mortgage lending and housing transactions in the near term. Indeed in a scenario — consistent with the MPC's central projection — where in the near term annual house price inflation remains at high levels and mortgage approvals pick up, but further ahead house price inflation moderates and mortgage approvals level off, the impacts of the FPC's policy measures are likely to be minimal. But the policy measures guard against the risk of a build-up of excessive household indebtedness if the underlying strength in the housing market turns out to be greater than expected. In doing so, they help to ensure the sustainability of the expansion over the medium term.

Affordability test

What action is the FPC recommending?

The FPC recommends that 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, Bank Rate were to be 3 percentage points higher than the prevailing 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).[1]

The FPC considered that the recommendation would not prejudice the advancement by the FCA of its operational objectives, and does not affect the United Kingdom's international obligations.

What is its expected impact on the mortgage market?

This recommendation is formulated with a view to reinforcing prudent standards currently practiced by most major lenders. The MMR requires lenders to take account of possible future increases in interest rates in assessing affordability. In considering the appropriate interest rate stress test to use, lenders must currently reference market expectations, subject to that implying an increase in interest rates of at least 1%. The increase in interest rates over five years implied by the three-month forward overnight index swap curve is currently around 2¼ percentage points. Market intelligence suggests that most major lenders are currently using stressed mortgage rates of around 7%. This is broadly equivalent to a 2½–3 percentage point 'stress', relative to current standard variable rates, which are largely in the region of 4%–4½% for most major lenders.

Given available information on current market practices by a number of lenders, the FPC expects the incremental impact of applying this recommendation on the volume of mortgage lending to be small, though some individual lenders may need to enhance their current practices to meet this recommendation.

LTI flow limit

What action is the FPC recommending?

The FPC recommends that the PRA and the FCA should ensure that mortgage lenders do not extend more than 15% of their total number of new residential mortgages at LTI 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 FPC considered that the recommendation would not prejudice the advancement by the PRA of its objectives and the FCA of its operational objectives, and does not affect the United Kingdom's international obligations.

What is its expected impact on the mortgage market?

The FPC's recommendation is calibrated to provide insurance against a significant increase in lending at very high LTI multiples.

As set out in Section 5, the FPC's policy judgement has been informed by a range of analysis. While the future path for the housing market is uncertain, in order to provide some quantitative assessment, the FPC considered estimates of the impact of its action against two alternative scenarios — a central view and an upside housing scenario. The scenarios are used to illustrate how the housing and mortgage markets might evolve, including the resulting effect on the distribution and overall level of household indebtedness.

The scenarios

The **central view** consistent with the MPC's central projection for developments in the housing and mortgage market in the May 2014 *Inflation Report*, assumes that:

- annual house price inflation continues at current levels until mid-2015, following which it slows to a growth rate that is broadly in line with income from 2016;
- income grows near its average rate over the past fifteen years of around 4%; and
- by the second quarter of 2015, total mortgage approvals pick up to an average level of 270,000 per quarter for the remainder of the scenario period — slightly below their 1987–2007 average.

The **upside housing scenario** is intended to consider how risks might evolve if momentum in the housing market continues to build — similar to patterns seen in the UK housing market in the early 2000s. In this scenario, mortgage approvals rise quickly to 350,000 per quarter and annual house price inflation rises to around 15% — similar to rates of house price inflation in the early 2000s.

These aggregate scenarios for the housing and mortgage markets are used to model how the underlying distribution of lending might evolve in the three-year period, 2014 Q2–2017 Q1.

Table 1 shows estimates of the increase in total lending and very high LTI lending in these scenarios, assuming a continuation of recent patterns of behaviour by lenders and borrowers.(2) The proportion of lending at higher LTI multiples increases under the central view, and increases further in the upside scenario (**Chart 5.12**).

Table 1 Summary of central view and upside housing scenario — 2014 Q2–2017 Q1(a)

Cumulative 2014 Q2–2017 Q1	Central	Upside	Memo: 2003–05
Rise in house prices	20%	45%	39%
Mortgage approvals (millions)(b)	3.0	3.5	3.8
Net secured lending(c)	15%	25%	35%
Share of mortgages with LTI at or above 4.5(d)	15%	25%	5%(e)
Change in GDP relative to central view(f)	n.a.	0.2%	n.a.

Sources: Bank of England, FCA Product Sales Data, Halifax, Nationwide, ONS and Bank calculations.

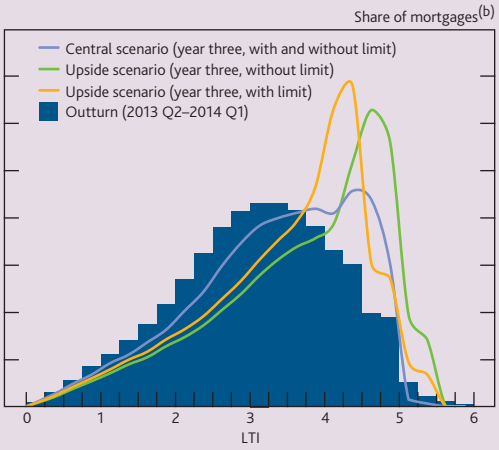
(a) All numbers in the table relating to the projections have been rounded to reflect modelling uncertainty.
(b) All approvals for house purchase, including buy-to-let.
(c) As a share of the stock of secured lending to households in 2014 Q1.
(d) Mortgage lending includes loans to first-time buyers and homemovers, for mortgage contracts only. It excludes other regulated mortgage products such as home purchase plans and home reversions, and unregulated products such as second charge lending and buy-to-let mortgages.
(e) Share of mortgages advanced in 2005 with an LTI at or above 4.5.
(f) The impact on GDP is estimated using an empirical mapping between the estimated impact on net lending, which is translated into an impact on the cost of credit for households, household consumption, and GDP (see *Bank of England Working Paper No. 442*, available at www.bankofengland.co.uk/research/Documents/workingpapers/2012/wp442.pdf; and the box on pages 20–21 of the November 2013 *Inflation Report*, available at www.bankofengland.co.uk/publications/Documents/inflationreport/2013/ir13nov.pdf). Change is relative to central forecast at end of period.

Impact of the LTI flow limit on the distribution of LTI multiples and mortgage lending

The impact of the limit on the distribution of LTIs is assessed on the basis of current market practices for judging affordability of mortgages. That is consistent with lenders testing affordability at higher interest rates broadly in line with the FPC's recommendation on affordability. Hence, the following illustrations provide a metric for the impact of the policy package as a whole.

If house prices and mortgage approvals grow in line with the central view, the impacts of the policy actions are likely to be minimal, including on the projected distribution of LTIs. In contrast, the LTI recommendation is expected to affect the distribution of LTIs on the flow of new lending in the upside housing scenario (**Chart A**). In practice, the precise impact will depend on how lenders and borrowers treat mortgage applications that fall beyond the flow limit.

Chart A Illustrative impact of LTI flow limit on distribution of mortgages advanced in year 3 of the central and upside scenarios(a)



Sources: FCA Product Sales Data and Bank calculations.

(a) See footnotes for **Chart 5.12**.
(b) Height of lines indicate frequency of population at given LTI. Area under each curve sums to 100%.

The policy measures are consistent with providing insurance against the possibility that the underlying strength in the housing market turns out to be greater than expected. Relative to the upside scenario, the share of lending at or above 4.5 times income is reduced — from 25% to 15% (**Tables 1 and 2**).

Table 2 Estimated impact of the FPC's recommendation to impose an LTI flow limit relative to alternative scenarios in Table 1(a)(b)

Cumulative impact 2014 Q2–2017 Q1	Relative to central view	Relative to upside scenario
Rise in house prices	0	-5 percentage points
Mortgage approvals	0	-0.2 million
Net secured lending	0	-2.5 percentage points
Share of mortgages with LTI at or above 4.5	0	-10 percentage points
Change in GDP	0	-0.25%

Source: Bank calculations.

(a) Estimates are shown as changes relative to numbers provided in **Table 1** for each scenario. Footnotes to **Table 1** also apply here.
(b) Both the central view and upside housing scenarios are consistent with current market practices around assessing affordability, and the FPC's recommendation on the appropriate interest rate stress to use in assessing affordability, being applied by lenders in the three-year scenario horizon. Therefore, no incremental impact of this action is shown here.

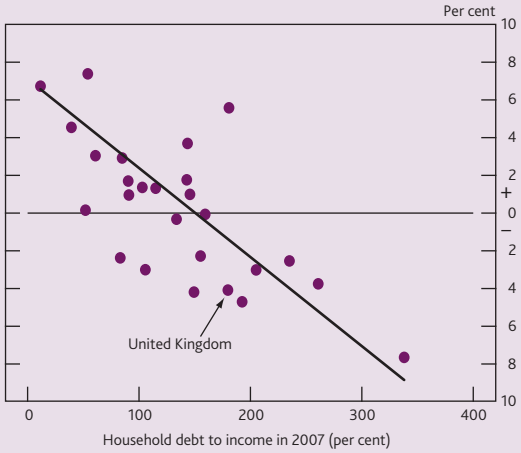
Benefits and costs of the policy package

The aim of the policy package is to insure against risks to economic and financial stability from excessive household indebtedness, consistent with the FPC's statutory objectives. Moreover, by acting at this stage, the FPC recommendations can reinforce existing protections against an erosion in lending standards in a strengthening housing market, and so also help to protect directly the resilience of banks' balance sheets.

As described in Section 5, increased household indebtedness may be associated with a higher probability of household distress, which can cause a sharp fall in consumer spending. This arises from the fact that households with the highest debt to income ratios tend to spend a greater proportion of their income on consumption than less indebted households. That was seen clearly during the recent financial crisis, with the share of income attributed to consumption falling sharply for households with higher debt to income ratios (**Chart 5.10**). There is also evidence internationally that higher household debt to income ratios were associated with larger falls in consumption (**Chart B**).

Chart B Higher household indebtedness was associated with sharper falls in consumption during the crisis

Adjusted consumption growth over 2007–12[a]



Sources: Flodén, M (2014), 'Did household debt matter in the Great Recession?' and OECD National Accounts.

(a) Change in consumption is adjusted for the pre-crisis change in total debt, the level of total debt and the current account balance. See www.martinfloden.net.

Falls in consumption can in turn weigh on wider economic activity. Furthermore, rapid growth in aggregate credit — which could be associated with a sharp increase in highly indebted households — is strongly associated with subsequent economic instability and the risk of financial crisis (IMF (2012) and Jordà, Schularick and Taylor (2013)).[3]

In the upside housing scenario, the policy package may dampen economic growth in the near term slightly (**Table 2**). But by guarding against a build-up in household debt the policy package aims to ensure that households can contribute to a durable expansion, and so should support stronger, sustainable growth further out.

Without policy action, the risk of excessive household indebtedness is material. The policy package is targeted to mitigate this risk in a prudent and proportionate fashion. It focuses on lending which causes the largest adverse risks for the economy — very high LTI loans — without providing a strict cap. It comes at limited cost.

What are the likely other impacts of this policy?

In the central case, the likely impact of this policy is minimal. To the extent that the upside scenario materialises and the policy begins to act as a restraint, the precise distributional impact would depend on the behaviour of lenders. It is possible that some potential borrowers would be more affected than others. In particular, those buying more expensive houses and houses in London and the South East and South West and, at the margin, first-time buyers have a greater reliance on high LTI borrowing. In the four quarters to March 2014, 20% of lending in London was at LTIs at or above 4.5, as was 12% of lending to first-time buyers for house purchase. That compares to 10% of overall mortgage lending for house purchase.

In addition, lenders may elect to focus their share of high LTI mortgage lending towards higher-value transactions. The FPC, with the PRA, will monitor such developments and take action accordingly.

It is also possible that, in the context of an upside scenario, activity is displaced to the buy-to-let market. Buy-to-let lending poses different risks to financial stability. Its consequences for bank resilience will be covered in the forthcoming stress tests. And the FPC will remain vigilant to developments in this market.

(1) http://fshandbook.info/FS/html/FCA/MCOB/11/6.
(2) The loan distribution has been modelled as explained in the Appendix in *PRA Consultation Paper 11/14*, 'Implementing the Financial Policy Committee's recommendation on loan to income ratios in mortgage lending', June 2014.
(3) IMF (2012), *World Economic Outlook*, Chapter 3, April, available at www.imf.org/external/pubs/ft/weo/2012/01/pdf/c3.pdf; Jordà, Ò, Schularick, M and Taylor, A (2013), 'When credit bites back', *Journal of Money, Credit and Banking*, Vol. 45, Issue S2, pages 3–28.