



BANK OF ENGLAND

# Speech

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## **Five years of macro-prudential: Regulating the Square Mile for all 94,000 square miles**

Speech given by

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It is now five years since the birth of the UK's post-crisis reforms to financial regulation.

Reforms that brought the 'twin peaks' of a conduct supervisor and, for banks and insurance companies (and the largest investment firms), a dedicated prudential supervisor.

But the novel addition, atop those twin peaks, was a new macro prudential look-out – the Financial Policy Committee of the Bank of England – that would have real duties and powers.

Its duty: to look up and out, from the rules for finance – the Square Mile – to the outcome they deliver for the end users in all 94,000 square miles of the UK.

The outcome it seeks: a financial system that serves households and businesses in bad times, as well as good; a system that doesn't disrupt the economy but still delivers for it.<sup>1</sup>

Its power: where the rules don't do that, change them.<sup>2</sup>

The addition of the look out to the twin peaks was a recognition of the obvious. There is no rule book that's good for all seasons, let alone all time.

So the new system hardwired in the duty to look up and out and to adapt.

The financial crisis had laid bare a failure to do that across advanced economies.

Regulation hadn't kept pace with the risks the system faced, from over-inflated housing and financial markets in the United States to a commercial real estate boom in the UK.

Nor had it kept pace with the way the system worked; with securitisation, SIVs and CDS.

The result is worth etching in our collective memory. A near collapse of the financial system and a sideswiping of the global economy of epic scale.

In the UK alone, a million more people unemployed.

And lost income over time equivalent to a bill of £20,000 for every person in Britain.<sup>3</sup>

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<sup>1</sup> The Bank of England's Financial Policy Committee identifies, monitors and takes action to remove or reduce systemic risks with a view to protecting and enhancing the resilience of the UK financial system. The FPC is not authorised to take action that is "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".

<sup>2</sup>The FPC has specific powers of Direction over the Prudential Regulation Authority and Financial Conduct Authority and the ability to make Recommendations (including on a 'comply or explain' basis) to both authorities. It also has the ability to make Recommendations within the Bank, to HMT and to any other person, with a view to achieving its statutory objectives.

The post-crisis reforms embody the lesson of that: keep up...

...with the risks the system faces. And with the shape of the system as it shifts.

To keep the system capable of serving in the bad times as well as the good.

Today – declaring my obvious conflict of interest – I want to look back to consider how, over five years, we've got the system to a place where it can serve the economy in bad times as well as good.

And then I want to look ahead, to the macro trends of Brexit, borrowing and the unbundling of banking and the challenges they present to keeping up.

**Looking back, we have largely corrected the fault lines that underlay the crisis.**

In particular, the banking system has been strengthened.

Not everyone agreed it should be strengthened so much.

But it was obvious that it needed to happen. The economic costs of major banks getting into distress are vast.

So they must be able to withstand – and keep lending through – even very severe and rare economic events.

That's why we stress test them to economic scenarios more severe than the financial crisis.

It's why the largest banks must fund themselves with 10 times more capital than they did before the crisis.

And this resilience had a reason. It created the confidence for banks to finally get lending again ...

It has allowed some turbulence to be withstood too.

Cast your minds back to July 2016. In the wake of the referendum, markets were pricing in a severe downturn in the UK economy and property markets.

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<sup>3</sup> Financial crises often lead to a long run reduction in GDP, with a persistent decline in output relative to pre-crisis trends. Bank estimates based on the impact of historical financial crises in a sample of advanced economies, reported in Brooke et. Al. (2015), suggest that the average cost of a financial crisis has been 73% of GDP, which translates to a cost of roughly £20,000 per capita if a financial crisis had taken place in 2016.

Bank and property company share prices were consistent with a rise in unemployment to 7.5%, falls in residential and commercial property prices of 15-20% and a cumulative 4% reduction in GDP growth.

But banks had been tested – in public – against a shock twice as severe as that. So confidence in the banking system was maintained. Remarkably by past standards, banks' funding costs moved very little.

We were able to do the opposite of what regulation had typically done in the past: we could release, rather than build, bank capital. Banks didn't need to rein in. And credit continued to flow.

The system was able to serve in – what were at least perceived to be – bad times as well as good.

Now, it would have been easy in the aftermath of the crisis to swing the regulatory pendulum right the other way; to demand that banks fund themselves with huge amounts of shareholders' equity.

The system would certainly have been safer. There is a respectable academic case for very high levels of bank equity. And with past banking crises costing 75% of annual GDP, an empirical base for it too.<sup>4</sup>

But two changes mean the baseline level of resilience does not need to be supercharged further.

The first is the advent of legal regimes to resolve failing banks and the powers to effect that.

We now have the powers to step in to recapitalise a failing bank using investors' – not taxpayers - funds.

There is more to do to here. But as long as major banks continue building debt that can be bailed in and making the necessary structural changes, there is every prospect that bank failure in the future can be less damaging to the economy than in the past.

The second change is our duty to keep regulation up with the risks the system faces. Baseline standards do not need to be supercharged at all times for risk levels that prevail only some of the time.

This, of course, makes it all the more important that levels of resilience keep up with the macro trends as they develop.

### **The first and most obvious of those is Brexit.**

The challenge is to keep finance capable of serving the economy through Brexit, whatever form Brexit takes.

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<sup>4</sup> Reported in Brooke et al (2015).

The first condition for that: UK banks must be able to withstand any economic shocks arising from Brexit.

In our judgement, that condition is met.

Even the most severe economic scenarios for Brexit are encompassed within the scenario we've tested the banks against in our annual tests.

They can pass that test. So they can pass the Brexit test too.

But that's not enough in this case. Because barriers to delivering wholesale financial services across the Channel could disrupt the end users in the real economy.

The UK is a net provider of such services to the EU, so end users there stand at most risk of disruption.

But end users in the UK would also suffer some disruption.

UK investors invest in funds domiciled in the EU and 10 million UK policyholders have insurance policies with EU insurers.

77 branches of EEA banks operate in the UK, providing services that benefit end users in both the EU and the UK.

That's why, from the very start, we have overseen contingency planning across the financial system.

And because it would be difficult, by March 2019, for all financial institutions to complete all the steps necessary to avoid disruption, we called for an implementation period.

So the recent political agreement on an implementation period is welcome.

There was always going to be an interlude between political agreement and legal certainty.

So authorities here have done what our mandate to keep the system capable to serving the economy implies.

Regulatory underpinning has been given to the political agreement. European firms can assume they'll be able to operate in – and serve clients in – the UK, much as they do now, until the end of 2020.<sup>5</sup>

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<sup>5</sup> See update on the regulatory approach to preparations for EU withdrawal, 28 March 2018, at <https://www.bankofengland.co.uk/news/2018/march/update-on-the-regulatory-approach-to-preparations-for-eu-withdrawal>

And that commitment is backstopped. The UK government has committed to legislate, if necessary, to allow European firms to operate and serve end users in the UK temporarily after Brexit.

The economy of the UK, at least, can be confident that – whatever happens – it can access financial services as it does now.

But still more action is needed because existing contracts could be disrupted.

Uncleared over-the-counter derivative contracts, with a notional value of £26 trillion, could be affected. That's around a quarter of derivative contracts entered into by parties in both the UK and EU.

Novation of contracts on that scale risks disruption, particularly if it were to take place in a short time frame.

As with the flow of new services, a backstop would have benefit.

It would need two parts. Most derivative contracts between UK and EU parties will remain serviceable only if both the EU end has permission to serve the UK and the UK end has permission to serve the EU.

So there is more to do.

But these issues are increasingly widely recognised. And we continue to strive for a point where, whatever the uncertainties of the Brexit process, users of finance can be confident that it will deliver for them, not disrupt them.

**At the same time, we must keep up with a second macro trend: increasing risk taking by the financial system.**

With credit markets priced for perfection, riskier forms of corporate credit are stirring.

The rapid run-up in consumer borrowing has been well publicised (see chart 1).<sup>6</sup>

But today I want to turn attention to the mortgage market, even though the numbers here are, on the face of it, less exciting.

Overall mortgage debt has been growing modestly for the past 18 months, mortgage approvals are a little lower than a year ago, and in the past 12 months house prices have increased by just 2.6%.

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<sup>6</sup> With default rates in downturns on credit card and personal loans some seventeen times higher than on mortgages, this can be risky for the lenders (Bank calculations based on the results of the Bank of England 2017 stress test of the UK banking system). We've taken action so this rapid expansion doesn't begin to compromise lenders' ability to deal with downturns. With default rates in downturns on credit card and personal loans some seventeen times higher than on mortgages, this can be risky for the lenders.

What lies beneath is of greater note.

Because underneath that calm surface, a sharp slowing in credit demand from buy-to-let investors after a set of tax changes, and subdued credit demand from new buyers as incomes have been squeezed, has masked the effect of looser credit supply to owner occupiers.

Mortgage rates have fallen materially relative to Bank Rate, especially at the riskier end of the lending spectrum (see chart 2). And lenders are now prepared to take a bit more risk.

Mortgage loan to income ratios are rising.

Households with high mortgage debt make cutbacks in downturns to keep paying the mortgage. More of these households in an economy typically means deeper recessions<sup>7</sup> (see chart 3).

That's why, when it comes to mortgages, the interests of the real economy can be served by guarding against excessive risk taking by lenders.

We put in such guards, as insurance, back in 2014.

They're centred on a limit on new mortgage lending at more than 4.5 times the borrower's income and on testing of the affordability of a mortgage to a borrower even if mortgage rates were in the region of 7%.<sup>8</sup>

With lenders now prepared to take more risks, those guards are now working.

Loan-to-income ratios have increased and are now hitting up against them. The proportion of new owner occupier mortgage loans at loan-to-income ratios just below 4.5 has almost doubled in the past 5 years.

Almost a fifth of new mortgages now fall into this bucket (see chart 4).

In part because of our guards, households' mortgage debt servicing burdens remain very low. Only 1.4% of households spend 40% or more of their income servicing their mortgage debts.

And even if interest rates were to be at 2%, that share - at 1.9% - would be no more than it has been on average in the past.

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<sup>7</sup> For example, Bunn and Rostom (2015) find evidence that more highly indebted groups of households made larger cuts in spending following the financial crisis. See [www.bankofengland.co.uk/working-paper/2015/household-debt-and-spending-in-the-uk](http://www.bankofengland.co.uk/working-paper/2015/household-debt-and-spending-in-the-uk)

<sup>8</sup> A loan to income limit, setting out that no more than 15% of new mortgages can be issued at loan to income ratios of 4.5 or higher; and an affordability test, under which lenders consider whether new mortgagors could still afford their mortgage if they switched to the mortgage reversion rate and interest rates were 3 percentage points higher.

So there is no flashing warning light here telling us to pull over urgently.

There is, perhaps, the light that reminds us the car is due for a service.

Developments in corporate credit, consumer credit and in the mortgage market could be signs of a more generalised pick-up in risk taking.

And when risk taking increases, it must not be at the expense of the resilience of lenders to any future downturn in the economy.

They must remain capable of serving in the bad times, as well as the good.

Our annual stress test provides the basis for checking that but, in this environment, more regular check-ups are needed too.

That's why (as we said in the Record of our March meeting) we intend to "re-consider the adequacy [of capital levels] in June, with a focus on the evolution of domestic risk appetite."

We'll keep standards up with the risks that are being taken.

**Alongside that, we must also keep up with the third macro trend: a fundamental re-shaping of the system.**<sup>9</sup>

In part due to regulatory efforts to level playing fields, banking is becoming more competitive.

Smaller banks are taking market share. In the past 12 months, smaller banks – that account less than a fifth of the outstanding stock of household lending – have delivered half the new lending to UK households (see chart 5).

Their newfound importance in the supply of credit means that, even though they are individually small, their collective risk taking has increasing relevance to the whole economy.

Collectively at least, smaller banks must – like their bigger cousins – have the resilience to withstand economic bad times.

That trend to greater competition should continue as Payment Services reforms and Open Banking come into play.<sup>10</sup>

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<sup>9</sup> Perhaps the most notable change has been the shift from bank to market-based finance. This was covered in my speech '[Market finance and financial stability: will the stretch cause a strain?](#)'

By allowing customers to connect to a range of banks and service providers through a single point, Open Banking could open the door to the 'unbundling' of banking.

Deposits could become more sensitive to returns. The ability of large incumbent banks to pay less for deposits – a benefit worth £1bn each year – may come to an end.

And it will be easier for customers to separate their payments services from their savings deposits.

The Bank of England is playing an active role by giving new non-bank payment service providers (provided they meet appropriate standards) access to the UK's real time gross settlement system.

The first non-bank payment service provider went live a week ago, and a number of others are set to join over the coming months.

This means the new payment providers will gain direct access to the UK's payment systems, including the world-leading Faster Payments service.

It should spur innovation in payments, increasing choice and reducing costs for customers.

Regulation will need to keep up with this unbundling to make sure the benefits to the economy in the good times don't bring with them unintended risks in the bad. How?

First, incumbent banks have had their possible strategic responses to greater competition reviewed in our first exploratory stress exercise.<sup>11</sup>

Second, existing bank liquidity regulation may need to adjust.

Regulations currently treat customer deposits as 'stable funding', requiring banks to hold few liquid assets against them.

As Open Banking develops, the stability of deposits connected via a central service provider will need to be monitored carefully.

And third, frameworks for operational resilience, particularly cyber risk, will need to evolve too.

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<sup>10</sup> The combination of the revised European Payment Services Directive (PSD2) and the Competition and Markets Authority's Open Banking reforms will require banks which provide online payment services to allow – at a customer's request – third parties to access account information and/or to initiate payments via a single common Application Programming Interface (API). This was covered in a recent speech by Karina McTeague, Director of Retail Banking Supervision at the FCA. See <https://www.fca.org.uk/news/speeches/payments-after-psd2-evolution-or-revolution>

<sup>11</sup> See 'Stress testing the UK banking system: 2017 results', section 2 'The 2017 biennial exploratory scenario', pp 12-22.

Such resilience is vital. That's why we're establishing clear expectations for the system's ability to recover critical services after an attack.

As customers access services increasingly through third party aggregators or payment service providers, that should not compromise the degree of resilience they can expect.

The FCA has set out its initial expectations for these new entities. And we'll work together to ensure that, if the safety of the system relies increasingly on them, the standards they meet reflect their systemic importance.

Because none of these competitive trends are to be stifled. In fact, they are to be spurred. Our job is to enable and encourage, ensuring these developments achieve their full potential.

## **Conclusion**

Five years ago, few could conceive of this unbundling of banking.

In the wake of the crisis, any return of borrowing seemed a long way off.

And Brexit wasn't even a word.

The lesson: stuff happens. And because it does, we all benefit from a financial system that can serve in the bad times as well as the good; from a system that doesn't disrupt the economy but can deliver for it.

But no set of rules, however detailed, will deliver that for all time.

The framework that's now five years old reflects that by hard-wiring the duty to keep up.

Keep up with the macro trends.

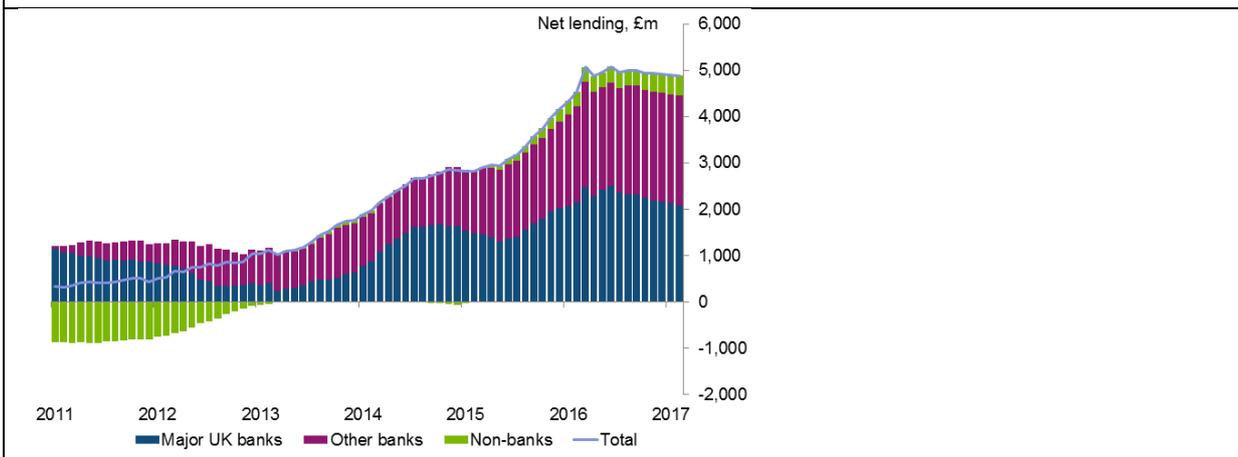
So that, whatever happens, the Square Mile is regulated for the good of all 94,000 square miles of the UK.

Thank you.

**Charts**

<p><b>Chart 1: Annual growth rates of UK mortgage and consumer credit lending<sup>(a)</sup></b></p>	<p><b>Chart 2: Spreads between quoted mortgage rates and risk-free rates<sup>(a)</sup></b></p>
<p>Source: Bank of England. (a) Sterling net lending by UK MFIs and other lenders to UK individuals. Seasonally adjusted. Consumer credit series excludes student loans.</p>	<p>Source: Bank of England and Bank calculations. (a) Spread between quoted rate on two-year fixed-rate mortgages and gilt yields (before August 2008) or overnight interest swaps (from August 2008) of matching maturity.</p>
<p><b>Chart 3: Household debt and consumption growth over 2007-12<sup>(a)</sup></b></p>	<p><b>Chart 4: Distribution of loan to income ratios on new owner-occupier mortgages, 2014 &amp; 2017</b></p>
<p>Sources: Flodén (2014) 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 'Did household debt matter in the Great Recession?' (Flodén, 2014).</p>	<p>Source: FCA Product Sales Data and Bank calculations. (a) Proportion of new regulated mortgages, bucketed by loan to income ratios in increments of 0.25. Excludes remortgages with no increase in principal.</p>

**Chart 5: Net lending to the household sector by lender type<sup>(a)</sup>**



Source: Bank of England and Bank calculations

(a) Calculated as the 12-month moving average of the net flow of lending to households.