BANK OF ENGLAND

# Speech

## Stability, Agility, Opportunity

Speech given by

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More than a decade on, it would not be surprising if memories of the financial crisis had begun to fade.

But the costs of that crisis have not.

The level of output is still 17% below the path it was following before the crisis struck.[1] So deep was the recession and prolonged was the recovery that each person in the UK is, on average, £20,000 worse off as a result.[2]

The huge costs of financial crises explain why Parliament decided in the aftermath to tie itself to the mast. It recognised that a day might come when there could be temptation to loosen up regulation; to go for quick wins at the risk of greater costs down the road.

It knew that temptation – if it ever came – must be resisted. So it delegated – in law - the job of maintaining financial stability to the Bank of England.

The job is to promote a financial system that can serve households and businesses not just in the good times, but also in the bad.[3]

The financial system of 2007 was totally unable to do that. It was too weak. Banks, in particular, had too little of their own capital on the line.

As the UK and world economies turned down, major UK banks faced losses of £200bn. But they had only £100bn of their own money – their shareholder capital – on the line.[4] So as losses mounted, banks buckled.

Credit was crunched, bringing the economy to its knees.

And because there was no way to deal with failing banks without harming their depositors and the economy, the taxpayer was forced to step in with a bailout of more than £100bn.[5]

So it's not surprising that our efforts focussed initially on fixing these fault lines in the system.

A resolution regime for dealing with failing banks is in place and banks are much stronger. They now have three times as much of their own capital on the line for the risk they take when they make a loan or a trade.

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[1] Based on OBR forecasts and ONS data.
[2] 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.
[3] 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".
[4] See Figure 1 of my article 'An evolving financial system: Don't leave it too late, simulate'.
[5] Peak amount of cash support in the form of loans and purchase of share capital. Source: National Audit Office.

Losses that would have wiped out the entire British banking system in 2007 can now be absorbed in buffers of capital.

Stress tests show major banks at the core of the system can now not just withstand recessions in the UK and world economies that are deeper than the financial crisis, they have the capacity to keep lending to households and businesses.[6]

This will serve the UK well in the next economic downturn, whatever causes it and whenever it comes.

That's the point of financial stability. It's not for the benefit of finance. It's for the benefit of the wider economy.

Regulation of finance is a means, not an end.

That's why it would have been a mistake to pursue the 'stability of the graveyard'.

Easy though that may have been when the memory of the crisis was raw, and though it would have been beneficial in the bad times, it would have brought too great a cost at all other times.

Our mandate means everything we do must cost the economy no more than the benefit it brings in the bad times.

That explains why, for example, we haven't gone as far as some would argue for in making banks bulletproof to all possible shocks, however extreme and implausible.

When it comes to the resilience of the core financial system, the regulatory pendulum hasn't been swung too far. It doesn't need to be brought back.

We've balanced the benefits of our actions with the costs. So it would be harmful to swing back from here. To so do would bring serious costs to the economy in the bad times without creating much benefit the rest of the time.

So while we're always looking for ways to make regulation as refined and efficient as possible, we are committed to robust standards of resilience in the financial system.

Looking ahead, we'll need a level of resilience in our system in future that's at least as great as currently planned.

[6] See 'Stress testing the UK banking system: 2018 results' in the November 2018 Financial Stability Report.

And reflecting the size and importance of our financial sector relative to our economy, we'll continue to need a level of resilience that exceeds what's required by baseline international standards.

## Agility

With the fault lines that caused the crisis largely dealt with, it might have been tempting to declare 'mission accomplished'.

But times change. The financial system changes shape. And new challenges emerge that it may need to one day face.

Regulation has to adapt if it is to ensure the new system stays able to serve households and businesses in the face of these challenges.

Continued stability needs regulatory agility.

That's why it makes little sense to base regulation of finance on a set of rules that's difficult to change and evolve. There is no set of rules that will deliver the right outcome for the economy for all time.

Such an approach would be a recipe for a regulatory framework that's well-crafted, detailed and intricate...

…but ultimately, irrelevant.

Regulation of finance is a means, not an end. So it makes much more sense to define the outcome that regulation should achieve and to give regulators the tools to achieve it. Then they can be held to account for doing whatever it takes to deliver that outcome, even as circumstances change.

The EU has, however, taken the first approach, putting a large body of rules in the equivalent of primary legislation. Those rules are inflexible and slow to respond as times change.

As my colleague Sam Woods has argued, this approach follows from a goal of harmonising regulation across 28 countries.[7] Given that, it would be an odd approach to follow outside the EU. And few non-EU countries have.

Indeed, even as a member of the EU, the UK has taken the second, very different, approach. By tasking us with promoting a financial system that serves households and businesses in bad times as well as good, it overlaid EU rules with an outcome to be pursued.

[7] See speech by Sam Woods (May 2019): 'Stylish regulation'.

And that outcome is what the UK Parliament holds us to account for delivering, even as times change. That has given us the freedom and responsibility to move regulation with the times; to be agile.

It's a responsibility we take seriously.

**Brexit**

Nowhere has that been more obvious than Brexit.

On June 24th 2016, we started contingency planning for a 'no-deal' Brexit.

With our focus on making sure finance can serve the wider economy, our work has had two elements.

First, checking that, whatever economic disruption arises as we leave the EU, major banks have the capacity to keep lending through it.

We know from our stress tests that banks can withstand an economic scenario for the UK that is worse than the financial crisis.

That stress test scenario encompasses even a Brexit scenario based on the very worst case – 'disorderly' – assumptions, including: severe disruption at the border, acute economic uncertainty and financial market instability, and sharp increases in inflation requiring interest rates to rise.

On that basis, we've been able to judge the core of the UK banking system to be able to continue to serve through Brexit, whatever form Brexit takes.

The second element of our work has been to ensure that households and businesses using services from EU financial companies can continue to draw on those services after Brexit.

70 branches of EEA banks operate in the UK and provide services to both EU and UK end users. UK households and businesses hold 16 million insurance policies with EU insurers.[8] UK investors invest in funds based in the EU. And clearing houses based in the UK sit at the centre of EU and global derivatives markets, helping the financial system to manage and distribute risks.
That's why the Bank, the Government and the FCA have put in place measures – Temporary Permissions Regimes - to ensure that UK households and businesses can continue to use these services and these contracts after Brexit.

[8] See 'Resilience of the UK financial system to Brexit' in the July 2019 Financial Stability Report.

And it's why we've worked with European authorities to ensure UK-based clearing houses continue to be allowed to serve their EU clients after Brexit, avoiding unnecessary disruption to financial markets.

All this work will not, on its own, guarantee either market stability or economic stability as we leave the EU. But it does mean that companies planning for Brexit don't need to add 'prepare for financial instability' to their to-do lists, freeing up their capacity to promote the smoothest possible exit from the EU.

**Climate risks**

We're also looking beyond Brexit, to prepare the financial system for the challenges of climate change.

The physical risks of climate change are already affecting financial companies. Since the 1980s, the number of registered weather-related insurance loss events – events resulting in property, infrastructure and/or structural damage in the affected regions – has tripled.[9]

The Intergovernmental Panel on Climate Change has warned that global temperatures are likely to rise further.[10] Our financial system needs to be able to manage the risks that come with that. For example, around 10% of the value of mortgage lending in England is on properties in flood risk zones.[11] Some UK banks also have large direct exposures to regions that are particularly vulnerable to the physical risks from climate change such as South and South-East Asia.

At the same time, the system will need to manage the risks associated with the economic transition that will be associated with reducing carbon emissions. Over 190 countries have committed to limit the global temperature rise to well below 2°C. The UK government is targeting a 100% reduction in net emissions by 2050.[12]

The transition to a carbon neutral economy will see material structural changes in the UK and world economies.
Some assets may become stranded: if global warming is to be limited to well below 2°C, close to 80% of remaining coal reserves and half of remaining oil reserves would become un-burnable.[13] Many other sectors, which ultimately rely on carbon emissions, will see their profitability and businesses challenged.

We cannot allow the financial system to be an obstacle to making the transition because it can't deal with it.

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[9] See Chart 1 in speech by Mark Carney (April 2018): 'A Transition in Thinking and Action'. Sources: Munich Reinsurance Company, Geo Risks Research, NatCatSERVICE.
[10] Intergovernmental Panel on Climate Change (2018), 'Global Warming of 1.5°C '.
[11] In particular, according to Met Office (2018), by 2100, in parts of the UK sea levels could rise by up to 70cm in a 'low emissions scenario', and by up to 115cm in a 'high emissions scenario', relative to their 1981–2000 levels. See Box 6 in PRA report (2018): 'Transition in thinking: The impact of climate change on the UK banking sector' for more detail on the impact of flood risk on residential mortgage portfolios.
[12] See announcement.
[13]See IEA and IRENA (2017), 'Perspectives for the Energy Transition'. The estimates are for a scenario compatible with limiting the rise in global mean temperature to 2°C by 2100 with a probability of 66%, as a way of contributing to the 'well below 2°C' target of the Paris Agreement.

Financial companies will need to continue to adapt if they are to be able to serve in this new environment.

Their business decisions will need increasingly to reflect the risks. So we're testing their ability to do this. We're going to stress test individual firms and the financial system for resilience to climate risks.

Our stress test will be the first of its kind to integrate fully climate scenarios with macroeconomic and financial system models.

The Network – of central banks and supervisors – for Greening the Financial System is currently working to develop a set of climate scenarios for regulators to use.

And before we go live with this exercise in 2021, we'll be consulting actively with risk specialists across the financial sector, climate scientists, other industry experts, and other informed stakeholder groups such as the Climate Financial Risks Forum.

Participants in the test will need to show how they measure, monitor and manage the physical and transition risks to which their businesses are exposed.

Our aim is to motivate companies to address data gaps and develop cutting-edge risk management so that the financial system can continue to serve households and businesses in the face of rising temperatures and reducing carbon emissions.

**Open-ended funds**

Regulatory agility is needed not just because the system will face new challenges in the future. It's needed because the financial system itself is changing.

It's to be welcomed that the system has become more diverse. Non-banks – and I mean things that really aren't banks, rather than the 'shadow banks' that proliferated before the crisis – have become more important. In this country, they've grown by almost 40%.
That's a net positive for the stability of the system and to its ability to channel savings into long-term investment.

But that doesn't mean the non-bank system is perfect at serving the economy in bad times and good. In particular, the structures in which long-term investments are held matters. Pretending such investments are liquid when they are not creates dangers.

In that regard, the growth of open-ended investment funds, many offering investors the chance to redeem their share in the fund at a day's notice, is notable. They have more than doubled in size since the crisis.

As they've grown, these funds have invested increasingly in illiquid assets. Open-ended mainstream equity funds have been joined by corporate bond, leveraged loan, commercial property and emerging market debt funds.

That growth has been an important source of finance for our economy. For example, these funds hold at least a quarter of the additional corporate bonds issued by UK businesses since 2008.

So their stability has economic significance. It has the potential to become a systemic issue.

While there is a role for these funds in our system, they do have a structural flaw when they start holding less liquid and truly illiquid assets.

Despite offering investors the chance to redeem their share at a day's notice, they typically offer a price for the share based on the quoted market prices of the funds' assets.

But when you hold anything other than the most liquid assets, it can be difficult to realise those quoted prices in one day, especially if a fund is forced to sell in scale. It can take weeks or sometimes months.

This isn't a problem when some investors are buying in as others are selling out. None of a fund's assets actually need to be sold to pay redeeming investors.

But when a fund experiences only redemptions, it can be a real issue.

If redeeming investors are receiving a higher price for the assets than the fund can obtain when selling them quickly and potentially at a discount, then it pays to be at the front of the queue for the exit.

Funds must treat their investors fairly. So when a fund holds illiquid assets, in the face of sustained outflows, suspension of redemptions may be unavoidable.

But suspension can take time. If a fund believes, optimistically, that redemptions are a temporary issue, it may choose to sell its most liquid assets as a way to buy time.

The problem is that, once redemptions start, they can be difficult to stop. Each investor sees benefit in racing to the front of the queue. If I expect you to redeem, I try to get in ahead.

By the time a fund suspends, a wave of sell orders may have been triggered. Resulting 'firesales' can disrupt the markets that companies – and countries – have come to rely on, and transmit to other parts of the financial system.

These issues go beyond any single market and are a global issue.

They have affected UK commercial property markets. After the 2016 referendum, open-ended property funds added 20% to normal market transaction levels, even though many eventually suspended redemptions and despite them holding only 5% of commercial real estate.[14]

And they have made the financing of emerging markets less stable too.[15]

This is a complex and challenging global problem.

The general form of the solution to this is known: funds' redemption terms should be consistent with the liquidity of their assets. This was in fact recommended by the G20's Financial Stability Board, with our support, in 2017.[16]

In principle, redemption terms could be made 'consistent' with asset liquidity in a number of ways.

Investors who want their money out in a day could be offered a price based on a quick-sale valuation of the fund's assets. At the other end of the spectrum, the redemption term could be limited to the time it takes to sell a fund's assets and realise quoted market prices, even under stress.

Either way, this consistency would ensure that no investor faced an incentive to get out before any other.

As yet, this general solution hasn't been translated by the relevant regulators into specific global rules. So in July, the Bank of England and the FCA announced that we will assess how funds' redemption terms might be better aligned with the liquidity of their assets.

That will include assessing the effectiveness of liquidity tools that are already used and the cost and benefits of aligning the redemption terms with the typical time it takes to sell a fund's assets.

The growing importance of these funds to the UK and global economies demands that we keep up to ensure they can continue to serve the economy whatever challenges lay ahead. So we'll report on our progress in our regular Financial Stability Reports.

[14] See page 18 of the Record of the Financial Policy Committee Meeting on 3 October 2018.
[15] See speech by Mark Carney (June 2019) 'Push, Pull, Pipes: Sustainable Capital Flows for a New World Order'.
[16] See report by the Financial Stability Board (2017): 'Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities'.

**Opportunity**

All this talk of stability may sound all a bit prudent and pessimistic.

But it's really not, because the pursuit of stability can unlock new opportunity.

Look back to 2006. Banks were weak and prone to failure but there was no way to deal safely with them when they did. So markets assumed that banks which were important to the economy would be bailed out; that they were too big to fail.

That meant those banks could take risks and finance themselves cheaply. The bigger and more important they became, the cheaper it became for them to take risks. There was every incentive to grow.

So the system became concentrated. Concentrated in banks, which provided 60% of debt financing. And concentrated in a few big banks.

Because the playing field was tilted, competition was driven out. Households and businesses didn't have a great deal of choice and opportunity when it came to finance.

But look at what's happened in the past ten years. As banks have been made safer and mechanisms put in place to deal with them if they fail, the too-big-to-fail public subsidy for banks has fallen by 90%.[17]

It's therefore no accident that our banking system is now more diverse. In the past year, for example, banks other than the big six have accounted for more than half of new lending to households and all of the net lending by banks to UK businesses.

And it's no accident that our financial system is more diverse. On net, all of the growth of credit to businesses since the crisis has been centred in non-bank forms of debt finance.

The lesson: reforms that promote stability can unlock opportunity for the system to serve the economy by levelling the financial playing field.

That lesson applies now to our work on climate risks.

Our primary aim is to ensure the system is resilient. But by forcing the system to measure, disclose and confront future risks, we could unlock the opportunity for finance to help the economy in its transition to carbon neutrality.

[17]See speech by Mark Carney (April 2017): 'What a Difference a Decade Makes'.

Already, thanks to the global Taskforce on Climate-related Financial Disclosures, four fifths of companies surveyed in the G20 are now disclosing climate-related financial risks.[18] Our stress tests will build on this.

Investments in sectors or industries exposed to a transition to carbon neutrality will not be able to be made while ignoring the risks.

Factoring these into decision making will help to level the playing field in finance between, on the one hand, established sectors that may look safe bets today but could face existential risks in the near future and, on the other, sectors that may look new and risky but could seize new opportunities as we transition towards a carbon neutral economy.

By levelling the playing field between these two investments, we may help to unlock financing for what's estimated to be a need for £20bn of investment in sustainable infrastructure in the UK, each year for decades to come.[19]

Opportunity could arise too from dealing with the risks in open-ended funds because another playing field could be levelled there.

It's probably no accident that funds offering daily redemption and investing in less liquid assets have grown so much faster than the overall non-bank financial system in the past decade.

These funds can be perceived to offer investors reasonable returns and access to your money.

That looks like a good deal. Except, as we've seen, access to your money isn't guaranteed or free. Liquidity always has a cost. In these funds, the cost is the risk of suspension or the risk of dilution as other investors exit first.

The opacity of those costs tilts the investment playing field towards funds that offer daily redemption. And that tilting of the playing field could have been a barrier to the opportunity to invest in the most illiquid assets – assets that require great patience, such as infrastructure, private equity or venture capital.

The fund industry itself notes that funds offering daily dealing are "not realistic for funds investing in highly illiquid assets". [20]

[18] See report by the Task Force on Climate-related Financial Disclosures (June 2019): '2019 Status Report'.
[19] See report to Government by the Green Finance Taskforce (March 2018): 'Accelerating Green Finance'.
[20] See page 49 of the Investment Association UK Funds regime working group report (June 2019) 'Final report to HM Treasury Asset Management Taskforce'.

So the unlevel playing field could have been a barrier to greater investment in patient forms of capital – a central tenet of the government's framework for raising productivity.[21]

For a fair and transparent fight, the risk of suspension or dilution would be properly factored into the pricing and redemption terms of open-ended funds. If that were the case, those funds that invest for the long term and require more patience from investors could look relatively more attractive.

That's why, as we review the issues with open-ended funds, we intend to have in mind not just how reform could promote financial stability, but also how it can promote the supply of productive finance too.

Because we all want not just stability in our financial system, but opportunity from it too.

**Conclusion**

We all want a financial system that serves the economy in bad times and good.

It's an ambitious outcome that we've been tasked with promoting. But it's an outcome that households and businesses deserve.

They didn't get what they deserved before the financial crisis and certainly didn't get what they deserved in the crisis.

Instead they saw opportunity constrained and the economy crunched.

Now, after a decade of reform, the core of the system is, or is being made, resilient to a wide range of challenges it might face.

And with that, opportunities have, or are being, unlocked for finance to better serve the economy.

It would be contrary to our mandate and costly to the economy if we were to row back on those reforms. Our focus is instead on the future. On sustaining a financial system that serves in bad times and good; a system offering stability and opportunity.

To sustain that in a changing world and changing financial system, we don't need more or fixed rules.

We need agility. Agility to respond to new challenges and ensure stability. And agility to open up new opportunity.

[21] See page 7 of the Remit and Recommendations for the Financial Policy Committee.

That’s what we’ve been tasked with.  It’s what we’ve done.  And it’s what we’ll continue to do.

Thank you.