BANK OF ENGLAND

Speech

New Economy, New Finance, New Bank

Speech given by

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I. Introduction

In recent years, this annual Mansion House dinner has been rightly cancelled in the wake of national tragedies. Two years ago, we were united in defiance after an attack on our democracy, and more profoundly in sorrow and admiration for Jo Cox MP, a remarkable woman who had dedicated her life to helping others. Last year, we were united in grief following the terrible fire at Grenfell Tower which claimed so many lives and scarred so many more. And we were united in determination that such a tragedy should never happen again.

Prior to this, the only other times Mansion House had not been held since its inception in 1877 were during the World Wars.

When the dinner resumed in 1920, the then Governor Montagu Norman emphasised the unity that the City needed in order to return to normal.

Norman's particular unity was around "the policy" proposed by the Bank of England. He believed "the policy was the one and only policy which ultimately would place the City and the country again on that eminence which it occupied before the war".

Such was his confidence that Norman mentioned only once, in passing, that "the policy" in question was to "attempt to regain the gold standard", and he spent no time at all explaining what, apart from normalcy, would be achieved by it.

Of course, this return to past certainties would eventually plunge the country into deflation and a deep recession. The old policy was not suited to the new normal and the UK was forced to abandon it a few years later.

After all, what is normal when there are tectonic shifts?

This dinner may look traditional, but its attendees have always recognised that the most longstanding and revered tradition of the City is its ability to anticipate, adapt to and accelerate change for the common good.

That is why the UK's financial system remains both a national asset and a global public good.

Domestically, there are over 1 million financial services jobs, two-thirds outside London. Financial services run a trade surplus of 3% of GDP, while the rest of the economy runs a deficit almost twice as large. Last year, the UK financial system channelled £300 billion in finance to UK businesses and helped 700,000 households to purchase homes. It provides pensions to 21 million people and insures the contents of 20 million homes. It contributed 11% of annual tax revenues or over £1¼ billion per week in 2016.[1]

[1] Employment and tax data is from "Total tax contribution of UK financial services, Tenth edition", City of London & PWC, November 2017. Lending data from Bank of England statistics and calculations.

Internationally, the UK is the pre-eminent financial centre. It accounts for 40% of global foreign exchange volumes and trades in over-the-counter interest rate derivatives. More international banking activity is booked here than anywhere else. The UK hosts the world's second largest asset management and fourth largest insurance industry. The City is Europe's investment banker, and it is leading the internationalisation of green, Islamic, renminbi and rupee finance.

Being at the heart of the global financial system reinforces the ability of the rest of the UK economy, from manufacturing to the creative industries, to compete globally. And it broadens the investment opportunities and risk-adjusted returns for UK savers.

This evening, I want to set out some of the ways the UK financial system can continue to serve the UK and the world in the face of major structural changes.

II. Core attributes of UK leadership

The City's pre-eminence reflects lessons learnt over the centuries that an effective financial system must be resilient, fair and dynamic.

Resilient so that it can finance households and businesses through good times and bad. A resilient system is anti-fragile – robust even to risks we do not anticipate.

To this end, we have comprehensively reformed the financial system since the crisis. Both capital requirements and contingent liquidity have increased ten-fold. The major UK banks now have the balance sheets to withstand a disorderly cliff-edge Brexit, however unlikely that may be. A series of measures have eliminated toxic forms of shadow banking and are transforming the rest into resilient market-based finance.

An effective financial system is fair: fair to end-users and fair to the taxpayers who provide the ultimate backstop to the system.

Fairness requires markets that are professional and open, in which everyone is accountable for their actions.

That is why the UK has led the global effort to address misconduct and restore trust in financial markets. We have sharpened incentives through compensation rules that align risk and reward. The Senior Managers Regime has re-established the link between seniority and accountability. And the private sector is developing standards of market practice that are well understood, widely followed and up-to-date with market developments.[2]

An effective financial system is dynamic. With the foundations of resilience and fairness reinforced, the UK financial sector is innovating to serve the changing real economy just as it did during three industrial revolutions and two waves of globalisation.

[2] The global FICC Market Standards Board (FMSB) is developing readily understood standards for their markets. And the global FX Committees have published the FX Global Code, the first globally consistent code of conduct for FX markets.

During the 18th century, regional banks acted as venture capitalists, providing equity to power the first industrial revolution.[3] In the mid-19th century, the City underwrote vast issuance of railway securities, spurring the creation of stock exchanges and the development of modern capital markets.[4]

During the first wave of globalisation in the 19th century, the development of correspondent banking and trade credit services drove an explosion in global trade,[5] hedged by a step change in activity in the Lloyd's market.[6]

During the second wave of globalisation in the 20th century, London quickly embraced new information technologies, becoming the first major centre to adopt electronic trading. The UK's openness to foreign currency banking, beginning with the creation of the Eurodollar market, spurred a renaissance of global capital flows. This financed enormous efficiencies through new global supply chains and unprecedented prosperity by opening up emerging markets.[7]

Throughout the centuries, it's been clear that private innovation works best when it is grounded in the right public infrastructure. That includes hard infrastructure – from liquidity facilities to payments architecture – and soft infrastructure – from the rule of law to up-to-date codes of conduct and effective regulatory frameworks.

This infrastructure must be overhauled now that the economy is on the cusp of the fourth industrial revolution and our demographic challenges are intensifying. And rebalancing of the global order is proving as dramatic as it was in Montagu Norman's time.

Such profound changes demand a new finance. And a new finance demands a new Bank.

Let me set out how we are responding.

[3] Brunt, L (2006), 'Rediscovering Risk: Country Banks as Venture Capital Firms in the First Industrial Revolution', The Journal of Economic History, Vol. 66, No. 1, pages 74-102.
[4] Mokyr, J (2009), 'The Enlightened Economy: An Economic History of Britain 1700-1850', *Yale University Press*.
[5] Hughes, J and MacDonald, S (2002), 'International Banking: Text and Cases', *Pearson*.
[6] Mokyr, J *ibid*.
[7] Schenk, C (1998), 'The Origins of the Eurodollar Market in London: 1955 – 1963', *Explorations in Economic History*, Vol. 35, Issue 2, pages 221-38; McGuire, P (2004), 'A Shift in London's Eurodollar market', *BIS Quarterly Review*, September 2004; Hughes and MacDonald (2002) *ibid*.

III. The Drivers of the New Finance

a) The New UK Economy

The economy is reorganising into a series of distributed peer-to-peer connections across powerful networks – revolutionising how people consume, work and communicate.

The nature of commerce is changing. Sales are increasingly taking place on-line and over platforms, rather than on the high street. Intangible capital is now more important than physical capital.[8] Data is the new oil.

We are entering an age when anyone can produce anything anywhere through 3-D printing, where anyone can broadcast their performance globally via YouTube or sell to China whatever the size of their business via Tmall.

In a hyper-connected, capital-light world, the future may increasingly belong to small and medium-sized firms, with platforms (such as taskrabbit, Amazon, Etsy, Shopify, and SamaHub) giving them direct stakes in local and global markets.

The financial implications of these developments are only beginning to be realised, but they are likely to be immense. In anticipation, the Bank is already creating the new hard and soft infrastructure that the new finance will require.

For example, the Bank of England is in the midst of an ambitious rebuild of the Real Time Gross Settlement (RTGS) system – the backbone of every payment in the UK.

There are three ways the Bank's new RTGS will provide a platform for private innovation. Each will make it easier for people to plug in and pay, even across borders.

First, RTGS is being re-built so that new private payment systems, including those using distributed ledger, can simply plug into our system. Our new, hard infrastructure will be future-proofed to your imaginations, opening up a range of potential innovations in wholesale markets, and corporate banking and retail services.

We have just opened up direct access to RTGS to a new generation of non-bank payment service providers (PSPs). No longer will access to central bank money be the exclusive preserve of banks.

Several non-bank PSPs, focused on retail and corporate services, are applying currently. The electronic money flowing through their systems will become more like its physical relative. Electronic payments are becoming instantaneous by using QR codes or mobile phone numbers. Checkout can be eliminated. The customer, not cash, will reign supreme.

[8] In the UK, intangible investment rose above tangible investment in the early 2000s, and stood at 11% as a share of output in 2014 compared with 10% for tangible investment. Investment in intangibles also exceeded that in tangibles in the US, Sweden and Finland [on average over 1999-2003], but not in other European countries including German, Italy and Spain. See Haskel, J and Westlake, W (2017), 'Capitalism Without Capital: The Rise of the Intangible Economy', Princeton University Press; and Goodridge, P R, Haskel, J and Wallis, G (2016), 'Accounting for the UK Productivity Puzzle: A Decomposition and Predictions', Economica, Vol. 85, Issue 339.

Second, RTGS is being re-configured to lower the excessive costs of cross-border payments. To this end, two private PSPs joined earlier this year.[9] In parallel, the Bank is working to connect RTGS and the systems run by other central banks. And we have just begun collaborating with the Bank of Canada, the Monetary Authority of Singapore and several private-sector firms to improve inter-bank cross-border payments, including initiatives based on distributed ledger.

The potential returns are large. At present, cross-border payments can cost ten times more than domestic ones.[10] We estimate that in the UK alone there is scope to realise annual savings of over £600 million. Most fundamentally, the more seamless are global and domestic payments, the more UK households and businesses will benefit from the new global economy.

Third, as we overhaul RTGS, the Bank is making it easier for the UK financial system to realise the promise of big data.

The new RTGS will capture much richer data on every payment made in a format that defines international best practice. The Bank is currently consulting on how to do this, including on the desirability of embedding the best corporate identifier, the Legal Entity Identifier (or LEI), in RTGS and all the UK's main payment systems.[11] This will improve access to the domestic and global financial system, support greater choice and competition for corporate end-users, and advance anti-money laundering and combating the financing of terrorism efforts.

The Bank is also ensuring our rules and regulations – or soft infrastructure – are fit for the new finance.

We have streamlined our approach to authorising banks to make it easier for banks with innovative business models to be approved. Since 2013, 37 banks have been authorised, of which 16 are new UK bank start-ups and four are internet-only.

With the FCA we're are exploring how artificial intelligence and machine learning could be used to make the reading of our rulebooks easier, the reporting of regulatory data quicker and the analysis of that data more efficient.

And the Bank is thinking through how regulation may need to change with the investment needs of the new economy, including new approaches to risk models and secured lending in a world of intangible capital and data-based finance.

[9] In April 2018: https://www.bankofengland.co.uk/news/2018/april/non-bank-psp-access-to-the-payments-system-announcement.
[10] McKinsey World Payments Map (2016).
[11] The G20's LEI, which originated as a risk management tool for the financial sector, standardises identities for companies. See https://www.bankofengland.co.uk/news/2018/june/iso-20022-consultation-paper-a-global-standard-to-modernise-uk-payments.

b) The New World

As the UK economy changes, the world is being reordered.

Over the past quarter century, emerging economies' share of global activity has risen from 40% to 60% and their share of global trade from one fifth to one third. Yet at present, their financial assets make up only 10% of the global financial system.

This will quickly change. As emerging market economies continue to open up, their share of global financial assets could treble to around a third by 2030.

Maintaining the UK's share of cross-border capital flows during this process could plausibly increase the balance sheet of our financial sector we host from the current 10 to 15 times GDP by 2030. This will significantly boost UK prosperity – provided the associated risks of such an open system are managed responsibly.

Responsible openness rests on three pillars.

The first is strong global standards. The UK has been at the forefront of G20 reforms to create a global financial system that is safer, simpler and fairer. Implementation is now being regularly assessed and transparently reported by the FSB and the IMF.

This second pillar is deep supervisory cooperation. To manage cross-border challenges to financial stability, international authorities must share relevant information and work together. As the home to four, and host to the other 26, globally systemically important banks, the Bank of England participates actively in all major supervisory colleges, sharing information and expertise gained from overseeing the multitude of complex risks unique to London. We expect the same from those whose firms operate and take on large risks here. The PRA's open, cooperative approach to supervision means wholesale activity in London can remain globally-integrated and highly efficient, without compromising resilience.[12]

The third pillar of responsible openness is ending "too big to fail". With enhanced resolution powers and planning, the Bank of England now has the ability to resolve failing banks. The UK's major banks are on track to complete this year the ring-fencing of their critical domestic high-street businesses from their riskier wholesale activities. And they already hold loss absorbing resources of 25% of their risk-weighted assets against a 2022 requirement of 29%. As a consequence of this progress, market discipline is returning, with the public subsidy enjoyed by the largest banks having fallen by 90%.

Now is the time to reap the benefits of these enormous efforts. Platforms are being created for deference to each other's approaches when they achieve similar outcomes. With the three pillars in place, an open, resilient global financial system is possible.

[12] See the Bank of England's Policy Statement 3/18, 'International banks: the Prudential Regulation Authority's approach to branch authorisation and supervision'.

The pillars underpin the government's new Global Financial Partnerships Strategy. The Bank of England will be particularly engaged in deepening our supervisory cooperation with major emerging economies and will continue to develop the infrastructure to support cross-border capital flows in their currencies.

With respect to the European Union, the Bank remains of the view that an ambitious future financial services relationship, founded on commitments to achieving equivalent outcomes and supervisory cooperation, remains both feasible and in the interests of the UK, Europe and the world.

The future economic and security partnership with the EU is for the government to negotiate and Parliament to approve. The Bank's role is to manage risks associated with the Brexit process and to provide technical support to the government as needed.

In this context, HM Treasury and the Bank are aligned on the importance of maintaining the high regulatory standards required by the world's most important and complex international financial centre. And we are both committed to responsible openness because it allows capital to move freely, efficiently and sustainably between jurisdictions and that supports trade, investment and jobs in the UK, Europe and the rest of the world.

More broadly, building on the progress already made, financial services could serve as a template for broader services trade liberalisation. Taking this high road could help solve the problem of persistent trade imbalances. Bank of England research suggests that reducing restrictions on services trade, to the same extent as those on goods have been lowered over the past couple of decades, could reduce excess global imbalances by close to one half.

Global partnerships also mean taking care of the global commons. In Paris in 2015, 195 global leaders committed to curbing carbon emissions to limit the rise in global average temperatures to 2 degrees, and now many governments, including the UK with its new Clean Growth Strategy, are taking the necessary policy actions.

In response, the private sector is recognising that financing the transition to a low carbon economy will be a major opportunity. On some estimates, this transition could require investments in infrastructure, equivalent to $6 trillion per year through to 2030.

Investment on this scale cannot be financed in niche markets. It must be mainstream and global. The City is showing the way by driving better disclosure of climate-related risks and opportunities and leading the underwriting of green bonds.

The City is showing the way. UK firms, including all of the largest banks, are driving better disclosure of climate-related financial risks and opportunities. They join global financial institutions responsible for managing US$80 trillion of assets – equivalent to annual global GDP – that are now publicly supporting the

G20's Task Force for Climate-related Disclosures (TCFD).[13] And the City is leading the underwriting of local currency green bonds, where annual issuance could range in the hundreds of billions of dollars.

For its part, the Bank of England has helped catalyse the private sector's TCFD. We are working closely with the People's Bank of China to build domestic and cross-border markets to finance the transition to a low carbon economy. And we are coordinating with fellow central banks and supervisors representing more than a third of global output and emissions to develop supervisory approaches to ensure the financial system is fit for the transition.

c) The New Demographics

As the world is changing it is ageing.

The ratio of the population aged over 65 to those of working age in advanced economies has increased from 15% in 1950 to 30% in 2015, and is projected to rise to 50% over the next twenty years. Over the same period, this ratio is projected to double to over 25% in emerging markets.

The macroeconomic consequences of these shifts are already evident, with the large, rapidly growing pool of retirement savings depressing interest rates and pushing up asset prices.[14]

The need to manage this growing pool of savings will drive further growth in the wealth management, insurance and pension industries. And it will require new products, for example to meet the unpredictable costs of long-term care.

In the process, market-based finance, which has already accounted for almost all corporate credit growth since the crisis, will become even more important.

Seizing the full potential of market-based finance requires the right soft and hard infrastructure for continually open markets. Hard infrastructure like resilient CCPs. Soft infrastructure like the regulation the liquidity management of funds that offer daily liquidity while investing in highly illiquid underlying assets.

In particular, it requires hard infrastructure like a robust Bank of England balance sheet that can support the banking system and the broader system of market-based finance.

The Bank's new approach can be summarised in four words: we're open for business. We now provide liquidity against a wider range of collateral, to a wider range of counterparties, for longer terms, and at lower fees than ever before. And we stand ready to provide liquidity in a range of foreign currencies if required.

[13] The financial sector supporters included 20 globally-systemic banks, 8 of the top 10 global asset managers, the world's leading pension funds and insurers, the largest sovereign wealth fund and the two dominant shareholder advisory service companies.
[14] See '[De]Globalisation and Inflation', 2017 IMF Michel Camdessus Central Banking Lecture given by Mark Carney, and Rachel, L and Smith, T (2015), 'Secular drivers of the global real interest rate', Bank of England Working Paper No. 571. For a contrary take, see Goodhart, C and Pradhan, M, (2017), 'Demographics will reverse three multi-decade global trends', BIS Working Papers No. 656.

This new approach was tested during the EU referendum. It passed. With hundreds of billions of pounds of pre-positioned collateral and regular, flexible and widely accessible Bank of England liquidity auctions, markets stayed open and price discovery was smooth and effective.[15]

Today marks a step change in our ability to provide the liquidity that the new finance may eventually require.

With the Chancellor's announcement tonight of a ground-breaking new financial arrangement and capital injection for the Bank of England, we now have a balance sheet fit for purpose and the future.[16] One that reflects the Bank's much wider range of responsibilities including banking supervision, macro-prudential policy and resolution. And the framework enhances our independence, transparency and accountability.

The additional capital will significantly increase the amount of liquidity the Bank can provide through collateralised, market-wide facilities without needing an indemnity from HM Treasury to more than half a trillion pounds.[17] This lending capacity would expand to over three quarters of a trillion pounds when, as designed, additional capital above the target level is accrued through retained earnings.

The new framework will also strengthen the Bank's ability to fulfil its monetary stability remit.

In August 2016, the MPC launched the Term Funding Scheme (TFS) in order to reinforce the pass-through of the cut in Bank Rate to 0.25% to the borrowing rates faced by households and companies. The Bank required an indemnity from HM Treasury for the loans it extended under the TFS.[18]

Today's announcement increases the amount of risk the Bank can carry on its balance sheet. As a result, the Bank plans to bring the £127 billion of lending extended through the TFS onto our balance sheet by the end of 2018/19 the financial year. The additional capital means the MPC could, if necessary, re-launch the TFS in future on the Bank's balance sheet, cementing 0% as the lower bound.

Bringing the TFS onto the Bank's balance sheet next year will mark the first step in winding down the Bank's Asset Purchase Facility (APF). After the TFS has been transferred, the APF will fall to £445 billion – the value of the government and corporate bonds purchased by the MPC as part of its Quantitative Easing programme.

The MPC updated its guidance today on unwinding its asset purchases. Previously, the Committee had noted that it would not begin reducing the stock of assets until Bank Rate had reached around 2%. That reflected the MPC's preference to use Bank Rate as the primary instrument for monetary policy and its

[15] In the run-up to the vote, the Bank undertook extensive contingency planning which included encouraging banks to pre-position enough collateral in our facilities to enable them to draw down up to £250 billion in liquidity. The combination of this war chest and coordinated G7 central bank action helped ensure markets functioned normally as the system absorbed a result that had been assigned a 10% probability hours before. And it meant we could credibly communicate to the public that we were well prepared for the result.
[16] See https://www.bankofengland.co.uk/letter/2018/banks-financial-framework-june-2018.
[17] The exact amount that can be provided will depend on a range of factors, including the type and amount of collateral, the currency composition of the lending and the concentration to individual counterparties.
[18] See https://www.bankofengland.co.uk/-/media/boe/files/letter/2016/governor-apf-letter-040816.pdf.

desire to have sufficient scope to cut Bank Rate materially – relative to the effective lower bound on Bank Rate of 0.5% at that time – if necessary to respond to adverse shocks.[19]

Although the principles guiding the MPC's choice of threshold still hold, with the lower bound on Bank Rate now permanently close to 0%, the MPC views that the level from which Bank Rate can be cut materially is now around 1.5%.

Reflecting this, the MPC now intends not to reduce the stock of purchased assets until Bank Rate reaches around 1.5%.

Any reductions in the stock of purchased assets will be conducted over a number of years at a gradual and predictable pace. The MPC continues to view sales and reinvestment decisions as equivalent from a monetary policy perspective. While any reduction will be solely a decision for the MPC based on meeting its objectives, the Bank will liaise with the Debt Management Office ahead of implementing any change in its asset purchase programme.

As asset purchases unwind, decisions on Bank Rate will take into account any impact of changes in the stock of purchased assets on overall monetary conditions in order to achieve the inflation target. In the event that potential movements in Bank Rate were judged insufficient to achieve the inflation target, the reduction in the stock of assets could be amended or reversed.

The Bank is minded to continue to use a variant of the current floor system[20] to control short-term interest rates as the stock of purchased assets is reduced, with the Bank meeting banks' demand for central bank reserves in full at Bank Rate.

The assets purchased by the MPC are currently indemnified by HM Treasury. Once the APF has been unwound, the Bank will decide what assets to hold to back its liabilities.

There is, for example, a strong case for holding some longer maturity assets, such as gilts, outright to back the stable portion of demand for banknotes. Indeed the Bank had made this intention clear and already started to do this prior to the crisis. The overall size and composition of the Bank's balance sheet will be determined by private demand for reserves under the floor system, what is needed to support efficient market functioning and the financial arrangement between the Bank and HM Treasury under the Memorandum of Understanding published earlier today. Over time, the Bank expects to learn more about the demand for reserves, and hence the likely size of its balance sheet in the medium term, including through engagement with market participants.

[19] For more details, see the box on page 34 of the November 2015 *Inflation Report*.
[20] See https://www.bankofengland.co.uk/-/media/boe/files/markets/sterling-monetary-framework/red-book.pdf.

V. Conclusion

My Lord Mayor, three weeks ago the Chancellor and I attended the G7 in Canada.

Even though there were threats of protectionism in the air, the UK had consistently positive agenda focused on openness and partnerships.

- Global Financial Partnerships to take advantage of the enormous progress reforming the financial system over the past decade;
- Free trade in services to address chronic trade imbalances, while promoting inclusive growth; and
- Free trade for SMEs so that the many can take advantage of the new platforms, the new finance and the new economy.

This eagerness reflects our confidence that the UK can seize enormous, new opportunities by building connections.

The Bank recognises that a new economy, a new world and new demographics demand a new financial system.

That's why we are building the infrastructure so that UK households and businesses can transact anywhere, anytime with anyone whether around the corner or around the world.

That means connections between small businesses in Scunthorpe and their clients in Shanghai and between households in Belfast and firms in Bangalore.

We now have a balance sheet fit for a new world order with greater reliance on markets in a wider range of reserve currencies.

That means connections between banks, investors and markets around the world consistent with the City's traditional global role.

Having put in place the pillars of responsible, open financial system, we are ready for deeper Global Financial Partnerships with the emerging economies that will be the most important drivers of global growth in the decades ahead.

It is in this context of a confident, open and forward-looking City that the government's discussions with Europe will take place.

My Lord Mayor, this evening I have outlined the Bank's priorities, but unlike a century ago, the Bank's "policy" won't be handed down to an unquestioning City. The new finance will develop for the new economy, not in isolation from it.

Over the course of this year, Bank colleagues, led by Huw van Steenis, will explore these and other themes in roundtables, workshops and forums with a broad range of stakeholders up and down the UK.

While we prepare for great change, we will be guided by one constant: our mission to promote the good of the people we all serve.