Andrew Bailey: Loughborough lecture - banking today

Loughborough lecture by Mr Andrew Bailey, Governor of the Bank of England, at the Loughborough Business School, Loughborough, 12 February 2024.

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It's an enormous pleasure to be here at Loughborough University this evening. I can give you three reasons for this, it's not just the polite thing to say at the beginning of a lecture. In order of importance, I am going to start with David Llewellyn. David is very modest, you have to search quite hard to find out that he has been Professor of Money and Banking here since 1978. To say the least, that is impressive. David has been a leader in the field throughout that time. He has had many students, and he has provided the Bank of England with many of our excellent staff. As well as a big thank you, David, I think we must start planning your 50th.

The second reason for the pleasure this evening is to continue a tradition of Bank Governors giving lectures here at Loughborough. Robin Leigh-Pemberton did so in 1986, and Eddie George ten years later in 1996. The gap has been 28 years this time, but I can lay claim to a bit of continuity because in 1996 I was Eddie's Private Secretary, and I had a bit of a hand in writing that lecture.

The third reason for the pleasure is that I am a native of Leicestershire, Leicester itself to be precise. And, I have good memories of visiting Loughborough. One particular memory is that I saw my first county cricket game here, a Sunday league game between Leicestershire and Nottinghamshire in 1970. So, it's good to be here.

This evening, I am going to focus on banking, and particularly on issues that, looking forwards, are important both for banks themselves and for broader monetary and financial stability.

I am going to start with an important and very positive point. The last four years have seen major macroeconomic disruptions that we have had to work through. But, they have not created disruptions to the UK banking system, and thus to financial stability, of the sort that we have seen in the past. This time the banks have supported the economy through lending not the other way round, and that's how it should be. So credit where it's due – sorry for the pun.

This point on lending to support the economy is important. In his 1986 Loughborough Lecture, Robin Leigh-Pemberton concluded that: "The detailed study of liquidity and of the development of credit are essential elements in judging financial conditions, even though they cannot be, and never have been, the sole elements".

So, what has been going on recently in terms of UK credit conditions? Going back to early 2020 as Covid broke out, among companies there was an extraordinary, but understandable, increase in demand for liquidity and credit, often as a precaution in the face of hugely uncertain and worrying conditions. This need was – rightly in my view –

met by a combination of the commercial banks, the Government and the Bank of England, with the banks, rightly, first in line, and the public authorities coming in only as the full and unprecedented magnitude of the economic shock became clearer.

Turning to the present day picture, large parts of the precautionary draw-down of credit during the early Covid period are being repaid, consistent with the unwinding of the Covid shock. But to judge the current effectiveness of the banking system, we need to look at whether gross new lending is getting to those who need it.

For both small and large firms, gross lending is back to around the 2019 average in nominal terms. Our regional Agents tell us that this picture is broadly consistent with what they hear, but they caution us that there remain businesses that find it difficult to access working capital. Of course, all lenders have to take the risk of borrowers into account.

In the household sector, consumer credit appears to be robust, while secured lending remains weaker but with some early signs of strengthening based on more forward-looking measures such as mortgage applications and approvals. In our latest Quarterly Credit Conditions Survey, lenders expect demand for both secured and unsecured credit to increase over the next three months. Our assessment of lenders is that they are well placed to meet such a pick-up in lending.

This period of time has been the first big test of the post Global Financial Crisis (GFC) banking reforms, and the system in this country has come through effectively. But, there is a puzzle expressed often by banks. If it is a good news story, why are the valuations of banks so much in the doldrums?

On the subject of bank valuations, let's start with some facts, and particularly comparisons to the pre-GFC period. I am going to use the major UK banks as the evidence base. This is not because I am uninterested in the mid-tier and small banks, but simply because it is easier to make the data comparisons for the major banks to the pre-GFC period. Today, the average price-to-tangible book ratio for the major UK banks (how the market values them relative to their book or accounting values adjusted for intangibles such as goodwill) is 0.7. In other words, the market values them at a discount to the accounting values.

In the two years leading up to the failure of Northern Rock in September 2007, the equivalent figure for the then group of major UK banks was 3.4. The paradox is starkly apparent – a period when banks were valued by markets at more than 300% of tangible book value ended in disaster. Today's greater stability looks the better place to be, but not for market valuations.

That leaves us with the puzzle. Let's bring in some more data. Today, the average return on assets for the major UK banks is 1%, and for the three years pre financial crisis it was also 1%. But in the period of low interest rates after the financial crisis, average return on assets fell to around 0.4%. There is therefore a link between the level of interest rates and returns on assets for banks. I will come back to this point.

The story on returns on equity is at first sight rather different. For the three years prior to the financial crisis, average return on tangible equity for the major UK banks was 27%.

For the post-crisis low interest era it was around 6%. On the latest figures for the third quarter of last year, it was 13%. A back of the envelope adjustment[1] for the increase in capital requirements post-crisis would suggest that the equivalent pre-crisis return on tangible equity would be 18 percentage points lower. So, given return on assets is the same, most of the decline in return on tangible equity of UK banks since before the GFC can be attributed to reduced levels of leverage, as banks are now capitalised appropriately. Banks are a lot less levered than pre-crisis – the tangible book value of their equity has increased by more than 200% whereas assets increased by only around 70%. Of course, having little capital pre-crisis turned out to be not smart, and the rest is painful history.

Except, that is not the end of the story. We need also to look at the return investors demand for the risk they take, often referred to as the cost of equity. We cannot observe the cost of equity directly, but Bank of England staff estimates give a plausible range of around 10% to 15%, across the pre-crisis period, the post-crisis low interest rate period, and the latest numbers today.[2]

What is immediately apparent is that the cost of risk – the return equity investors demand – does not seem to have fallen in line with what appears to be greater stability and lower risk per unit of equity. The cost of equity remains at pre-crisis levels even though it was clearly mispriced before the crisis.

Maybe this is because investors don't accept the story of greater stability? I would give two responses to this. First, I can accept that it takes time to build up the story of greater stability and for it to be put to the test, but I think we have now seen banks coming well through some pretty extraordinary times. Second, it's useful to go back briefly to the arithmetic. Capital for banks is on the liability side of the balance sheet, as such it is part of the funding of the assets. There is a hierarchy of loss absorbency within the funding structure of the liabilities, but for the most part this does not determine the risks faced by banks. So, if more of the funding liabilities take the form of equity and the risks faced by the bank remain the same, you might expect the cost of equity per unit of capital to fall. This is because, other things equal, each £1 of equity is then exposed to less risk.

There is a puzzle here, in terms of the market valuations of banks. But there are two arguments I do want to rebut.

First is the notion that the post GFC reforms have required banks to hold too much capital. Capital is funding that stands first in line to bear losses. Requiring more capital, as we have done, does not on its own increase, or reduce, the likelihood of losses. But it does increase the protection of depositors, by raising that first in line buffer. And this greatly benefits the stability of the financial system.

Second it is sometimes asserted that the capital rules, and requirements differ across national jurisdictions, and this influences valuations. I don't agree with this argument. Capital requirements for banks are shaped by international agreement – the Basel process. There will be differences in implementation at the edges, reflecting national features, but the outcomes are broadly aligned. This alignment is important both to limit system-wide risk and to ensure appropriate competitiveness among banks.

Currently, we are implementing what should be the last leg of the post financial crisis capital reforms – known as Basel 3.1. Given the advances made by the UK authorities in increasing the safety and soundness of the banking system after the GFC, we expect that Basel 3.1 will have a relatively marginal impact on the overall level of capital for UK banks.

The key thing here is that across jurisdictions it is implemented faithfully, neither more nor less. And, as we get near to finalising the post-crisis reforms this is the moment to check whether we have achieved a broad alignment of capital requirements across countries. I say this because now is the important moment in time to carry out this check.

To conclude on this issue, banks should be able to make decisions on risk taking unconstrained by concerns about the capacity of their balance sheets to support that risk in a wide range of plausible states of the world. That is where we are today, and the approach has served us well over the events of recent years.

I am going to stay with bank liabilities and funding costs for the next issue. This concerns the rates paid on deposits and the net interest margin or NIM. The last year has illustrated well how central the NIM is to the returns that banks make, and also how important it is to the public's perception of banks and competition among them.

I will start with some history which is important to understanding what has gone on with NIMs. Starting again before the financial crisis, when the Bank Rate was in what can be described historically as more normal territory – i.e. above near zero rates – it was typical for the average funding cost of banks to be a bit below the official Bank of England Rate. The average NIM for the major banks pre-crisis was 3.1%.

For the decade between the end of the financial crisis and the onset of Covid, the average NIM was 2.8% and the average return on assets for the major banks was 0.4%. The lower NIM may have reflected several forces at work. One of the main ones, if not the main one, was that when Bank Rate fell to near zero as the economic effects of the financial crisis took hold, average deposit rates did not fall by as much, and so the effective cost of deposits moved from being somewhat below to somewhat above Bank Rate, but without being fully offset in lending rates.

We can now answer the question what has happened to these relationships as the Monetary Policy Committee has raised Bank Rate back up into the range that was more typical before the financial crisis? The answer is that the old relationship whereby deposit rates averaged below rather than above Bank Rate has been re-established. NIMs are currently around where they were in late 2005, immediately before the financial crisis at 3.2%.

On the face of it, more normal conditions have returned. But let me end this section with two comments on the current situation. First, this reversion to past patterns does imply that overall deposit rates have risen by somewhat less than Bank Rate. Bank Rate has risen by 5.15% since we started to increase it in December 2021, and on average overall effective rates on interest-bearing deposits have risen by 2.5 percentage points. That is not, however, the end of the story, because more has gone on under the surface. If we split deposits into fixed-term and instant access or sight deposits, we see two very different parts to the story. On average, fixed term deposit rates have risen by 3.7 percentage points since December 2021.

But the effective rates on interest-bearing sight deposits have risen by less, on average by 2.1 percentage points. Why has this happened, and what is the consequence of it? Regulation plays a part here. One of the important regulatory responses to the financial crisis was to create a liquidity regulation framework, including the Net Stable Funding Ratio, which incentivises banks to take relatively more term deposits which cannot run as quickly.

This was a deliberate choice to increase stability. My conclusion is that the incentive to take more stable deposits has been carried through into pricing. The second conclusion, again consistent with the incentives, is that there has been a notable shift from holding sight to holding term deposits. The evidence indicates that the share of deposits held in time deposits has increased by 8 percentage points since the start of the tightening cycle.

Let me finish this section with a short answer to the question, what happens next for net interest margins, and thus for returns to banks? It depends no doubt on quite a lot of things. But the answer to what should happen is that competition within the banking system should exercise the strongest influence on returns.

The subject of deposit runs brings me to the next issue I want to cover this evening. While I said that the UK banking system has to date come through recent economic shocks well, and I expect it to continue to do so, last year did see some major events among banks elsewhere. March last year was quite a month. It reminded us never to take stability for granted, and pointed to how some of the features of bank problems have evolved. The most prominent, I think, was the speed and scale of bank runs. Traditionally, if we can use that word about bank runs, banks have not lost, say, 25% of their deposits in one day. As a case in point, Northern Rock lost on average around 5% in one day.

Sadly, for those of my age anyway, in Star Trek Mr Spock never said "It's life Jim, but not as we know it". But for someone like me who has seen a few bank failures, last March had that sort of feeling to it. Except that, of course, it is life, and we do now know it. It's life with digital technology – both digital banking and payments and digital communications. Confidence in a bank can be lost, and runs can be effected and spread at a speed that was unknown in the past. Queuing in the street is not required.

So, bank liquidity and runs are subjects of the moment again. I want to step back briefly at this point and try to answer the question, but is liquidity really the issue in such cases, isn't the solution to be found elsewhere? Yes and No is my answer to that. The question of whether bank failures are caused by liquidity or solvency problems is as old as the hills, and has chicken and egg like characteristics. I remember the CEO of a bank experiencing a run telling me that their bank was the best capitalised in the country, to which my response was to ask in that case why the depositors were heading for the doors? In my experience, runs mostly point to a solvency problem, though it may be one ahead rather than one visible today, that is the nature of a loss of confidence.

But beyond that, even if a run is a symptom, it has to be dealt with in order to stabilise the problem and allow a solution to be put in place, as to do that requires some time, which also reinforces the need for liquidity buffers. As part of the post financial crisis reforms, the second plank of the reformed liquidity policy was put in place, namely the Liquidity Coverage Ratio. The Liquidity Coverage Ratio requires banks to hold a sufficient stock of high quality liquid assets in normal times to survive a significant stress scenario lasting 30 days, combining idiosyncratic and market wide shocks. The Net Stable Funding Ratio intends for banks to maintain a stable funding profile in relation to the composition of assets and off-balance sheet activities, including limiting overreliance on short-term wholesale funding. The two planks are meant to reinforce each other, with the Net Stable Funding Ratio focused on the maturity mismatch between assets and liabilities, and the Liquidity Coverage Ratio focused on the holding of high quality liquid assets that can easily be turned into cash to meet outflows.

The numbers involved are sizeable. The major UK banks today hold £1.4 trillion of high quality liquid assets, which corresponds to an average of 149% of their LCR. The NSFR is 135%. In other words, the banks are holding excess liquidity above the requirements in both cases. But the world moves on, as we saw last spring.

These ratios were calibrated after the financial crisis, in response to the runs and liquidity losses we saw then. What we have now seen is a much more powerful version of that experience.

So, does that make the calibration inadequate, and in need of supplementing? A simplistic answer would be yes. More money can go out of the door more quickly, hence it must follow.

I don't think the answer is that simple. This would amount to saying that banks should self-insure more. But it would move banking significantly towards a narrow bank model which would disrupt the process of credit creation – lending – in the economy, with negative economic consequences. Supporting economic activity is an important part of so-called fractional reserve banking, in which only part of deposit liabilities are backed by banks in highly liquid assets. Changing this arrangement does not strike me as the right way to go. The alternative, and better way I think, is to supplement the existing liquidity regime with more ready access for banks to liquidity insurance at the Central Bank, which is appropriately priced and risk managed. This could be alongside more targeted adjustments to the liquidity regime, perhaps aimed at firms with more vulnerable business models, and for banks to be prepared to access liquidity insurance to monetise assets at speed.

Now, a Governor of the Bank of England cannot make a speech on this subject without invoking the spirit of Walter Bagehot, it's just not done. It was Bagehot in his book "Lombard Street" written in 1873, who chastised the Bank of England for the hesitancy of its approach towards advancing liquidity. I'm going to use two quotes from Bagehot if you don't mind. I say this not just because I like reading Bagehot, which I do; or just because of the quality of his prose, he wasn't Editor of the Economist for nothing; but because in substance the principles and lessons haven't changed. So, here is Bagehot on liquidity crises of the nineteenth century.

"And though the Bank of England certainly do make advances in time of panic, yet as they do not do so on any distinct principle, they naturally do it hesitantly, reluctantly, and with misgiving. In 1847, even in 1866 – the latest panic, and the one in which on the whole the Bank acted the best – there was nevertheless an instant when it was believed the Bank would not advance on Consols [gilts as we now know them], or at least hesitated to advance on them. The moment this was reported in the City and telegraphed to the country, it made the panic indefinitely worse.

In fact, to make large advances in this faltering way is to incur the evil of making them without obtaining the advantage. What is wanted and what is necessary to stop a panic is to diffuse the impression, that though money may be dear, still money is to be had"[3]

And here, more briefly, is Bagehot on the liquidity management of the joint stock banks of his day:

"Not only did they keep their reserve from the beginning at the Bank of England, but they did not keep as much reserve as they would have kept if there had been no Bank of England"[4]

Bagehot's thinking is just as relevant to the situation we face today. The panics are not telegraphed out to the country, they get there by digital means at much greater speed, but the essence is the same. The second point that remains the same is that unless the response is convincingly robust, to use Bagehot's words you incur the evil without the advantage. Finally Bagehot's conclusion, that there is a balance to be struck between the self-insurance of commercial bank liquidity and the insurance that comes from the central bank, remains just as true today. However, two points are worth emphasising here, one of which we must credit to Bagehot, and the other of which is new.

The new point is that Bagehot lived well before deposit insurance and formal bank resolution tools came into existence. So, there is now a third and fourth form of protection. Deposit Insurance means that more focus, in terms of calibrating defences, should be put on uninsured deposits as more run prone. But we can only downplay insured deposits for this purpose if we can all be confident that our bank accounts are continuously available to us, for instance to make and receive payments. That's where bank resolution tools are crucial, and I think that here over recent times the UK has a good story to tell.

The much older Bagehot point is also crucial. He was very clear that central bank insurance should appropriately reflect and price the risk of the lending and should be at an appropriate penalty rate. This is a principle that we must stick to – it echoes my second quote from Bagehot, namely that with a central bank playing the role he described, there is an incentive for banks to reduce their self-insurance. That is one reason why today we have both liquidity regulation for banks and central bank insurance, it can't be an either/or.

This brings me to the conclusion on how to respond to last year's events. If we want to preserve the benefits of fractional reserve banking for credit creation in the economy, the answer should substantially be to ensure that the assets created by the credit process are available for re-discount at the central bank in greater scale and under a process that can be operated very quickly. That's what we have done in recent years.

The adjusted market value of the total collateral held in all pools at the Bank of England has increased by £310 billion since the start of 2011, from £205 billion to £515 billion at end-2023. This is welcome progress, but there is more to do on this front.

The last issue I want to cover is also highly relevant today and relates to the reserves banks hold at the Bank of England, just as in Bagehot's day. Why is this a relevant issue now?

Central bank reserves are the most liquid asset in the system – they are in effect cash in the sense of central bank money. They are an essential anchor to financial stability. They also play a second key role in today's system. They are remunerated at the official Bank Rate, and as such they provide the anchor for ensuring that the MPC's decisions are put into effect – they pin down the near-end of the interest rate curve. There are other ways of operating as a central bank for monetary policy purposes, but all involve reserves to some degree or other.

The question of what degree or scale of reserves there should be in the system is important. We can produce two answers to this question – one for monetary policy, and one for financial stability purposes, and the overall answer should be the higher of the two. But that doesn't tell us the answer, just how the question needs to be answered.

Before the financial crisis, the major UK banks held £10 billion of reserves at the Bank of England. Today, they hold £467 billion, a substantial part of the stock of high quality liquid assets. It's fair to say that the pre-crisis number did not adequately take account of financial stability needs. Today's number includes reserves created as a product of so-called Quantitative Easing. By undertaking QE, the Bank increased the supply of reserves for monetary policy purposes. QE is an asset swap – the central bank provides cash reserves or money in return for buying less liquid assets. We thus increase the liquidity of the financial system and its capacity to support activity in the economy. QE therefore increased the stock of reserves for monetary policy purposes, but its important to remember that there is another reason for banks to hold reserves, namely financial stability.

The question then is what is that steady state number for reserves? The trite answer is higher than pre-crisis and probably lower than today. Thanks for that observation you might say, the gap left seems pretty large. I expect the future level of reserves to fall from where it is today (£467 billion), and to settle at a point which is likely to be determined more by the financial stability demand for reserves – the traditional Bagehot point. Pre-positioning assets at the Bank of England will make that level lower than otherwise as Bagehot said, but not below a certain point. I will go a bit further and say that my best guess today is that the demand for reserves by the banks will settle at a level higher than we would even in the recent past have expected. That may be for more than one reason, of which one may well be the lessons of last year.

To sum up: UK banks have come through the turbulence of the last four years in sound health, and that has enabled them to contribute to maintaining financial stability and to support the economy and their customers during these difficult times. That was not always the case in the past. There have been major reforms to bank capital regulation since the financial crisis. Those reforms are almost fully done, and before we call them done we should check that the UK system is appropriately competitive on an international basis. My sense is that the system is competitive but as we come to the end if the reforms we should check again.

One remaining puzzle is the market valuation of the large UK banks, which by the way is not uniform unsurprisingly. With interest margins restored to more normal levels, and loan impairments subdued by historical standards, this puzzle deserves further study.

Last year we did see strains in banks elsewhere, and this has raised questions about appropriate liquid asset buffers as digital technology appears to increase the potential speed and potency of bank runs. I have set out two views on what follows from this, which are closely linked. First, I think the answer is more for banks to supplement their liquid asset holdings with efficient and extensive access to the liquidity facilities provided by the Bank of England. Second, those liquid asset holdings will, however, most likely mean that banks hold larger reserves at the Bank than was the case before the financial crisis.

And then, one final conclusion: David, there are still many questions on which we need the benefit of your wisdom.

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[1] Banks' CET1 ratios are estimated to have risen roughly three times from around 5% to around 15% over this period on a risk-weighted basis. This simple calculation holds all other factors constant.

[2] These staff estimates are based on (1) a capital asset pricing model, which estimates the cost of equity based on the estimated sensitivity of bank equities' daily excess returns to market-wide excess returns, market-wide equity risk premia, and a measure of risk-free rates; and (2) a dividend discount model, which models banks' equity prices at a given point in time as the sum of all expected future dividends (based on analyst expectations where available, grown forward in line with long-run nominal GDP growth forecasts) discounted by the implied cost of equity.

[3] Lombard Street P64

[4] Lombard Street P253