

Andrew Bailey: Growth and regulation

Speech by Mr Andrew Bailey, Governor of the Bank of England, at the Mansion House Financial and Professional Services Dinner, London, 14 July 2026.

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Back in early February I was foolish enough to remark to a colleague that on the economic front things were looking more settled, and of course that was a good thing. We seemed to be in more stable times. I was expecting inflation to return to its 2.0% target in around April or May, and then we would need to assess what level of interest rate would keep it there.

Well, that jinxed it. Shortly afterwards, the Middle East conflict broke out. Since then, energy prices have gone up and then returned to levels a bit above where they were before it started, although we are now seeing renewed volatility. Inflation hasn't returned to target, though the evidence we have seen over recent months has tended to reinforce my view that it would otherwise have done so. Moreover, we are operating in a fairly soft economic setting activity-wise.

We will ensure inflation returns to target and the context is currently encouraging, although uncertainty remains a feature of the situation. But, it will take longer.

I want to step back this evening and consider the longer-term context for the UK economy. Two things stand out for me in terms of the economic context here in the UK. First, we have had lower growth in the economy for the last fifteen years or so. Second, the economy has been hit by a sequence of negative supply shocks which have contributed to the lower growth rate – we can think of Covid, the Ukraine war, the impact of Brexit, etc.

When we think about sustainable growth we have in mind an upper limit that can be achieved without over-heating the economy - something we call the growth of potential supply. This is a speed limit on sustainable growth, and it is influenced by the amount of labour in an economy and how productive it is. For around fifteen years before the financial crisis, the average annual rate of growth of potential supply in the UK economy was around 2.8%. Productivity contributed 2.4pp and labour supply 0.4pp. For the roughly fifteen years since the financial crisis, the potential growth rate has fallen to 1.3% pa, of which productivity contributed 0.4pp and labour supply 0.8pp.

This has had a direct effect on living standards in the UK. Between 1990 and the financial crisis, the average annual growth rate of national income per head was 2.0%, whereas post-crisis it has been 0.6%.

It must therefore be a priority to raise the potential and actual growth rates. Macroeconomic policy provides an important backdrop to doing that. And the best thing we can do on this front is to create and maintain stability – and here I am talking about monetary and fiscal policy. My strongly held view is that, notwithstanding the sequence of adverse shocks, including the latest one from the Middle East, we have the policy frameworks, and policies themselves, in place to provide that stability.

Longer-term growth – the sort we need more of – comes from the supply side. As well as being impacted by negative supply shocks, growth can also be spurred by positive developments that allow us to take leaps forwards.

In this context, what are the longer-run causes of growth in an economy? The list is quite long: physical capital accumulation; technological progress; human capital including education and skills; trade; financial development; markets and competition; infrastructure; and institutional development, both public and private, including public policy and regulation.

Tonight, I want to focus mainly on the role of the final item on that list, regulation.

There is a lot of commentary that regulation is having an excessive negative effect on growth. We shouldn't ignore this. Well-designed regulation should support economic growth, not hinder it. It can correct market failures; reduce transaction costs; lower entry barriers; and support competition and innovation. In our world, regulation has lowered the probability and severity of financial crises, thereby supporting sustainable growth by safeguarding the supply of finance – in other words, allowing companies and households to plan with confidence for the long term.

Of course, if regulation *isn't* well designed and executed, this will not be true. And, to be clear, this would be a real issue across the whole economy.

What do we mean by well-designed and executed? Regulation should always be defined in terms of a positive purpose. In other words, we want to achieve an objective and regulation should help to do that. We should then design the precise regulatory regime that achieves this positive objective as quickly and effectively as possible whilst minimising any undesirable side effects.

This framing should lead to a better debate on the principle and practice of regulation. Are we achieving our objective or not? This is a much better way of framing the issue than simply a too much / too little debate about regulation which is divorced from the objective. Yet too much of the debate on regulation is precisely of this too much / too little sort, in abstract from the outcomes we want to see.

Much of our regulation has the objective of maintaining financial stability. We strongly believe that financial stability is a prerequisite of economic growth. However, we should never say that therefore every one of our rules and regulations is perfectly formed. That will not be the case. But, likewise, to simply argue for less regulation is unhelpfully reductive.

With that in mind, let me move on to look at three highly relevant current policy issues that we face, which are important in their own right but which also bring out the role of the regulation in public policy and the sort of issues we can face. The three current issues are: the level of capital held by banks; payments; and artificial intelligence, particularly so-called Frontier AI.

I will start with bank capital and go right back to basics to make the point that simply arguing for "more" or "less" are not sensible positions in and of themselves.

The main reason for regulating banks is to protect deposits. This begs the question, what is special about deposits? They constitute for all of us the main stock of money that we hold. Regulation exists to ensure confidence in the nominal value of that money. We could achieve this by requiring all the assets of banks to be risk free. But this is neither practical nor helpful from the point of view of supporting activity in the economy, where a degree of risk-taking is of course essential to support growth.

We have, therefore, a banking system that combines deposits as money with lending in the form of credit creation, also known as fractional reserve banking.

This puts banks at the centre of the financial and economic system. It also means that as well as wanting an assured nominal value for deposits, as policymakers we want banks to be able to extend credit across a wide range of activities at all times, thereby supporting the economy right through the business cycle. Striking this balance is the basis of macroprudential regulation and the work of the PRA and the Bank's Financial Policy Committee in deciding how much capital banks must hold.

Capital is there to absorb losses and thus preserve the nominal value of deposits. It provides assurance to a bank's customers and counterparties that they can go about their business with confidence. This means that capital instruments are performing the essential function of backing up the assured value of money. They bear the risk, and the return they earn must exceed the amount of loss providers of capital might expect to bear. This gets to the heart of why calibrating capital sensibly – not simply seeking more or less of it – is critical.

This is an important point, because for much of the post-financial crisis period major UK banks earned returns below 10 per cent, a lower-end estimate of the return required by equity investors over the longer term. Aggregate returns rose above 10 per cent in 2023 and reached 15.4% earlier this year. These banks' price to book ratios are also now around 1.7 times, indicating that equity investors expect future returns to exceed the cost of capital.

There should not, to be clear, be a cap on returns set by regulators. That is a matter of commercial strategy for firms and good regulation should help markets to flush out supranormal profits by reducing barriers to entry. But conditions of financial stability do require that the return earned by investors is above the cost of capital, else capital will simply not be supplied. Regulation must therefore strike the right balance.

That leaves the important question of how much capital should be required. That is a debate that we can have, and are having, but it must be set within the context of maintaining financial stability. We announced changes to the capital regime last week to remove some anomalies, set within the positive objective of financial stability. We are very much open to simplifying and adjusting regulations where needed. But, doing so must contribute to sustaining a healthy banking system which can support and foster stronger growth in the economy.

What does this mean in practice? Sometimes, I hear arguments made which bear some resemblance to the old lump of labour fallacy – except that here it would be a lump of capital. Just as the lump of labour argument assumed a finite amount of labour input could be used in an economy, there is also I fear assumed to be an invariant amount of

bank capital, and therefore lightening regulatory rules is necessary to allow that sum of capital to support more lending.

But capital is not invariant. The health of the banking system, and thus the support it can provide to the economy, are in good part interlinked with the returns it earns relative to the opportunity cost of supplying that capital. Banks that earn healthy returns which exceed the cost of capital will be in a stronger position to justify retaining earnings – building capital - to support more lending.

Regulation can support this outcome. Effective regulation which is proportionate will support a lower cost of capital, while weak and ineffective regulation will tend to raise the cost of capital.

I would contend that the position of UK banks today is one of good health and resilience, and this is supported by returns that exceed the cost of capital. The lump of bank capital is therefore not fixed. The system is competitive. This is a positive state of affairs, to which regulation contributes.

Let me move on to the second case, payments, something I spoke about at the end of my remarks here at the Mansion House last year. I am going to talk about regulation in a very broad sense, including the operational role of the Bank of England.

There are two critical positive objectives in the regulation of payments. One is to achieve the so-called singleness of money – which is the assured nominal value of money across all its forms. The second is so-called finality of settlement – the knowledge that payments, once made can be relied on. Together, these anchor confidence in the role of money as a means of payment.

Let me give a simple illustration of why these anchors are important. If we make a payment to each other, we want to know – and not have to spend our time worrying about - two things. First, that the pound in my account and in your account are the same – the nominal value point. And, second, that the payment will be finalised both operationally and legally, so a payment gets made and stays made. Regulation and public policy can help these outcomes happen, while also supporting innovation and competition.

As I said last year, we want to modernise payment systems. We think doing so will enhance their efficiency and functionality and support confidence in the role of money in the economy, thus supporting growth in the economy. We must also continue to enhance the operational resilience of payments, notably to protect against fraud and cyber attacks.

These more modern systems bring the potential benefits of digital technology to payments, for instance so-called programmable payments – "money with instructions" if you like. We think there is scope for important progress in tackling fraud, reducing payment delays, and benefitting trade by increasing the speed of cross-border payments. Innovation can also reduce contracting costs and increase transaction scope in a more digital economy, for instance by allowing small firms to participate better in ecommerce and thereby support growth in the economy.

Last year, we implemented a key part of the infrastructure to achieve this through the renewal of the RTGS system. This will enable innovation – something the Bank is doing jointly with the private sector through our Synchronisation lab.

And in our Digital Securities Sandbox we are supporting the issuance of tokenised assets. The first DSS participant was approved for live activity yesterday. This development will help support the issuance of a UK digital gilt, known as DIGIT. We will work with HMT to enable DIGIT's eligibility as collateral in the Bank's market operations.

We are now working with the banks to design and implement the introduction of so-called tokenised money. This will create the ability to tokenise bank deposits and allow the exchange of money to happen on digital tokenised ledgers, in turn enabling programmable payments.

Tokenisation sounds gimmicky and nerdy I admit. Put simply, it is another enabling step, in this case enabling things like faster, more assured payments or the contingent performance of contracts through smart contracts and programmability – i.e. payments that will only be made conditional on the other party first delivering. What might that deliver in the real world? It could be formally making a payment linked to the delivery of goods. It could be formally making a payment dependent on the recipient delivering proof of identity. The first could reduce late payments, the second could reduce fraud. Critically, it changes the point of review or audit of the payment from ex-post to ex-ante. These benefits are worth having, but need a policy framework to enable them to be exploited in an orderly fashion.^{[1](#)}

We are also moving to enable competition in this field. Recently, we issued proposed rules for so-called systemic sterling stablecoins, to enable these to come into existence as a means of payment beyond the crypto world. These rules will put into effect the key principles of assured nominal value and settlement finality.

This is all about making innovation happen, something that as a public authority and regulator we also do by working closely with industry. In the field of payments innovation using commercial bank money we now have the Bank chaired Retail Payments Infrastructure Board up and running to drive forward work on the design of the next generation retail payments infrastructure. It issued a consultation document on 25 June covering what types of retail payments are likely to be demanded by end-users in the future, and the resulting design issues and principles. The next stage will be to produce a Blueprint and Requirements which will be handed over to an industry owned Delivery Company to build. We are looking for feedback on this consultation by 11 September.

In turn, this kind of regulation supports outcomes that can spur growth in the economy, a positive outcome that we can do best by defining the public good outcomes that we want – these include setting the conditions for assured nominal value of money and settlement finality – and then getting on with them.

This brings me to the third case that we are dealing with, the impact of artificial intelligence. Obviously, it's a big subject on which much can be said, so in no sense do

I pretend to be comprehensive here. On a modest scale, I will make some more general comments relevant to the issues around economic growth and some big public policy and regulatory issues, and then I will add some thoughts on so-called Frontier AI.

I think that General Purpose Technology (GPT) innovation has been, and will continue to be, a major source of longer-run growth in the economy. A GPT is a technology with broad, economy-wide applications that advances over time and enables complementary innovations across many sectors of the economy. Looking back, I would say the following qualify as GPTs: the steam engine; the internal combustion engine; electricity; and information processing and the internet. GPTs come in long cycles, but there can be gaps between them which demonstrate lower growth.

Is this a reasonable description of the last fifteen years or so? Yes. The internet is everywhere but, as it has become so, its contribution to growth will have diminished. You can only get so much of it – honestly. One clue for this as a characterisation of the last fifteen years or so is declining productivity growth.

The obvious question is what will be the next GPT? It's most likely to be AI, though I would add that AI – like most GPTs – will act to support advances elsewhere: in diagnostics, in research, or with robotics. This underscores that GPTs are enabling technologies – they make other things happen which support growth. The first invention often triggers a sequence of secondary innovations which spread its reach.

But timing is everything, and I think we are between two major cycles of technological innovation showing up in the productivity and growth statistics – between the internet and AI if you like. And innovation can take time to show up in productivity and growth at the economy-wide level. In 1987, the economist Robert Solow commented that "you can see the computer age everywhere but in the productivity statistics".

A similar thing could be said about James Watt and the steam engine and Thomas Edison and electricity. This is not so surprising. Change can be gradual, and it often requires complementary innovations – as well as trial and error -to get the economic benefit of the GPT, and those take time. And, for now, we are really experimenting with the new technology before we get the economic benefits, which is certainly true of me and AI.

This does not detract from the view that AI is likely to be the next GPT and is likely to raise growth levels in the economy.

But, in doing so, it will raise very big public policy and regulatory issues which we will need to solve, and I would argue we should do so positively and promptly. In other words, we should be regulating for the positive outcome of safe, productive use of AI.

I could set out quite a few big questions of this sort which AI prompts. I am going to stick to two, to provide illustration. These are not questions for the Bank of England to answer, but certainly ones in which we all have a great interest.

First, there are questions on resource allocation. It is said to me by people in the AI industry that there is not enough foreseeable clean power supply (here I mean "clean" in the technical sense of high quality, uninterrupted supply) needed by datacentres to

meet all the likely demand from AI. This ultimately, creates the need to make trade-offs. So, should we prioritise medical research (which has great potential), drone technology, finance, entertainment, etc? Markets can always answer that question, but they may well not do so in ways that capture the public interest. This is a big issue, at least potentially.

Second, the rise of AI creates problems of law. Consider so-called agentic AI where we can create AI agents to act on our behalf – say, to buy or trade things. But a feature of AI, including AI created agents, is learning from its own experience, and this learning capacity is growing rapidly. And they can develop bad habits of their own – like lying, or covering up gaps in knowledge in an attempt to please us. These are not new issues.

But, typically, in law a principal becomes responsible for an agent while the agent operates within the remit given to it by the principal. If the agent goes beyond that remit, or acts improperly, it becomes responsible. Traditionally that had depended on the agent having a legal persona, i.e. being a human or a company etc.

But when the agent has no legal persona does that leave the principal responsible at all times? If so, principals may need to constrain agents in ways that cut against the direction of innovation in AI models.

Put another way, is agentic AI in this context more a tool of the principal rather than strictly an agent, with the principal fully liable for all that is done and not done? Does this apply when real money is spent in ways that are final and binding, as and when agentic AI is allowed to hold the purse strings? This removes questions around the boundary of authority but should leave principals wondering how their governance frameworks can effectively operate with this technology. We must think about these things now: and I use this case study to illustrate why we must take a positive and proactive approach to solving problems which are critical to ensuring effective innovation.

These are very big questions, on which there will need to be public policy input, and probably a mixture of law and regulation. My general argument is that we should tackle them pro-actively and positively, and not get stuck in a negative debate on regulation.

Let me turn to another aspect of AI, namely frontier AI and the risk it poses to the security of IT systems and the potential for cyber attacks. Suffice to say, it appears to have moved on very rapidly, and represents a major threat to the security of systems and thus in our world to financial stability.

To cut the story short, the ability of cutting-edge models to find, and potentially to exploit, vulnerabilities in systems poses some very important public policy and regulatory challenges, as well as challenges for all of us in relation to the systems we use ourselves. Here there are two big challenges relevant to the world of financial stability.

First, we need much stronger co-ordination of testing of frontier models before they go into wide circulation. This needs to be co-ordinated internationally because no country can seal itself off from the cross-border nature of systems that are prevalent today. Such co-ordinated testing needs to start at the level of public authorities. Here, the UK is in a strong position because the AI Security Institute is world leading. And, new

models need to go on to testing across the Critical National Infrastructure. Again, the UK is well placed because of the strengths of the National Cyber Security Centre. We at the Bank are working very closely with firms we regulate, including establishing forums to share and improve the efficiency of work on patching systems where needed.

Second, we need to move to much more robust approaches to allow us to recover when things do go wrong. This is often described as Bare Metal recovery – think of it as restoring systems from scratch to a fully operational state. A bigger and more immediate threat means we simply must have the right capabilities. Again, these are big issues, and ones where the best sort of regulation involves working together to facilitate an agreed positive outcome.

To conclude. Economic growth is hugely important and regulation – done right - can play a hugely important role. Growth will come from innovation on the supply side of the economy. I believe technology is a source of growth, and AI is the most likely next big contributor. Inevitably, very big issues come with such change, ones that must be solved with a strong input from public policy and regulation.

But, as in other aspects of regulation, we must do this in a positive way – define what we want to achieve, by when, and then work out how to achieve it in the most effective way. We have to roll our sleeves up and get on with it. Yes, we must question existing regulation, but we must do so in a positive spirit of what we want to achieve.

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¹ There are other benefits of Tokenisation. Atomic Settlement – whereby all legs of a financial transaction either complete together or not at all, thus simultaneous settlement - can enable greater efficiency and less risk in wholesale markets.