



BANK OF ENGLAND

Speech

What Has Central Bank Independence Ever Done for Us?

Speech given by

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UCL Economists' Society Economics Conference

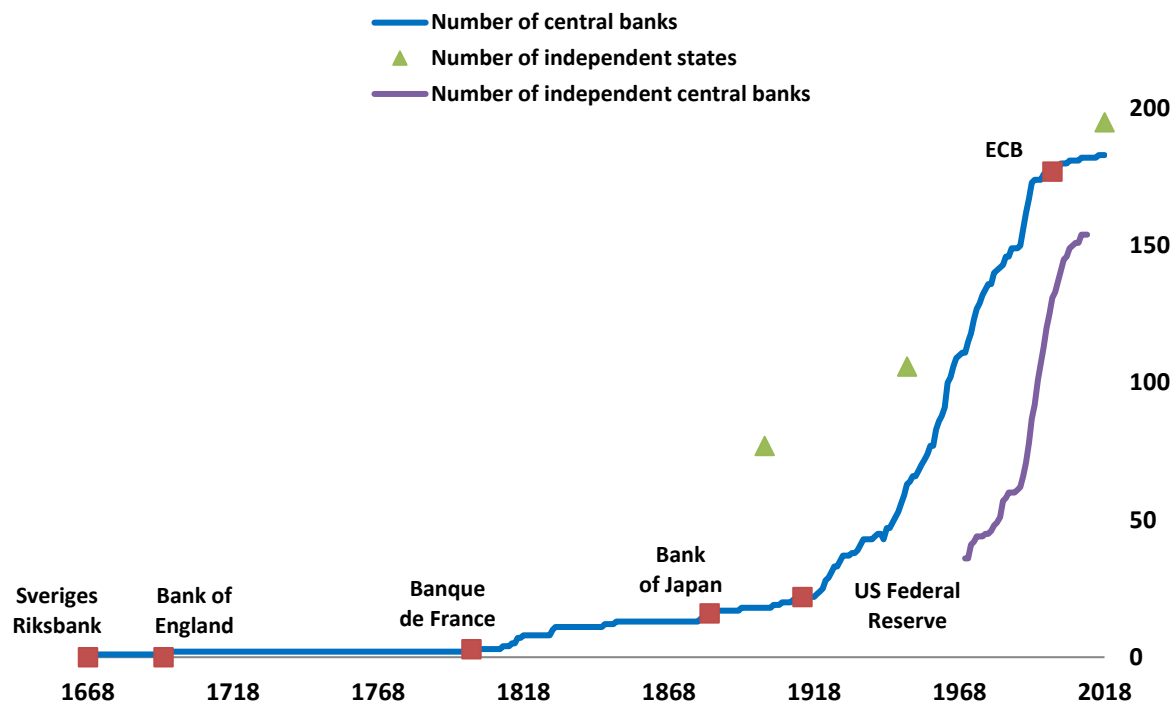
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I am delighted to be giving this talk at the UCL Economists' Society conference (even though it is on a Saturday). Many congratulations to the organisers for assembling such an excellent array of speakers from around the world. I want to discuss a topic close to my own heart – central bank independence.

In many respects, central banking came of age in the 20th century. At its start, the world had only 18 central banks (*Chart 1*). Most did not have a well-defined statutory, much less independent, role in setting monetary and financial stability policies. They operated, by and large, as an operational agent of government.

Chart 1: Number of central banks



Source: Central Banking Directory

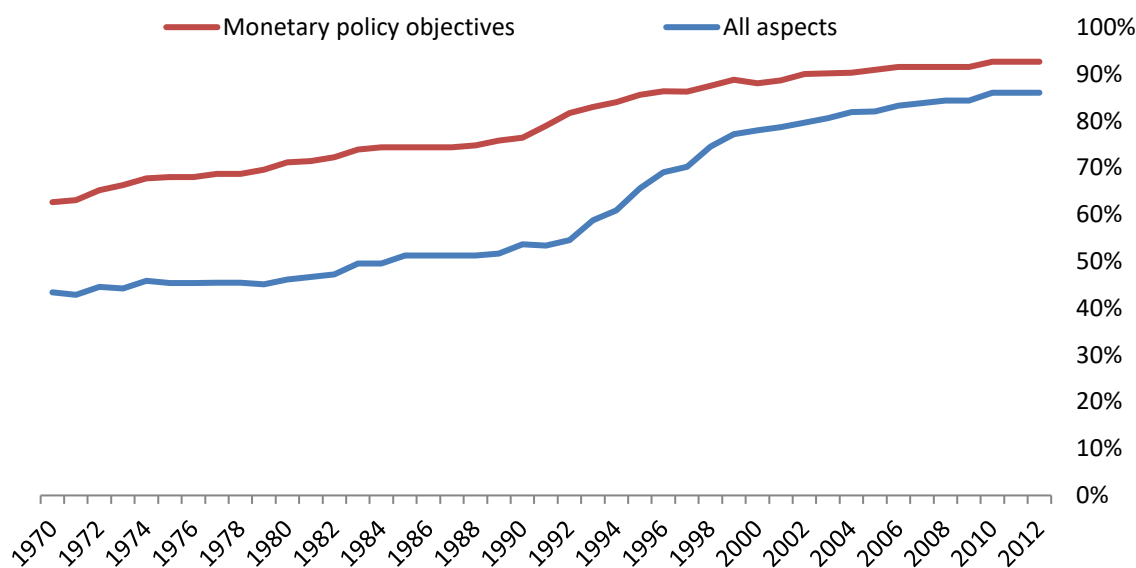
By the end of the 20th century, the world had around 200 central banks, pretty much one for each nation state. The fraction of them with operational independence for the setting of policy had risen to 80-90% (*Chart 2*). Central banks and their independence had become an international norm in the space of a century.

Three years ago, the Bank of England hosted an event to mark the 20th anniversary of the Monetary Policy Committee (MPC) and operational independence in the setting of monetary policy in the UK.¹ The most notable, and for me surprising, feature of that event was the number of speakers who said they thought “peak” central bank independence had been reached.²

¹ See <https://www.bankofengland.co.uk/events/2017/september/20-years-on>

² For example, Balls et al (2018).

Chart 2: Percentage of independent central banks



Source: Garriga (2016) using index of Cukierman et al (1992).

Notes: Central banks with values greater or equal to 0.4 on the index are defined as independent. 'Monetary policy objectives' measures whether the central bank's objective is price stability. 'All aspects' includes variables related to the appointment of the CEO/Governor, policy formulation; and limitations on lending to the government

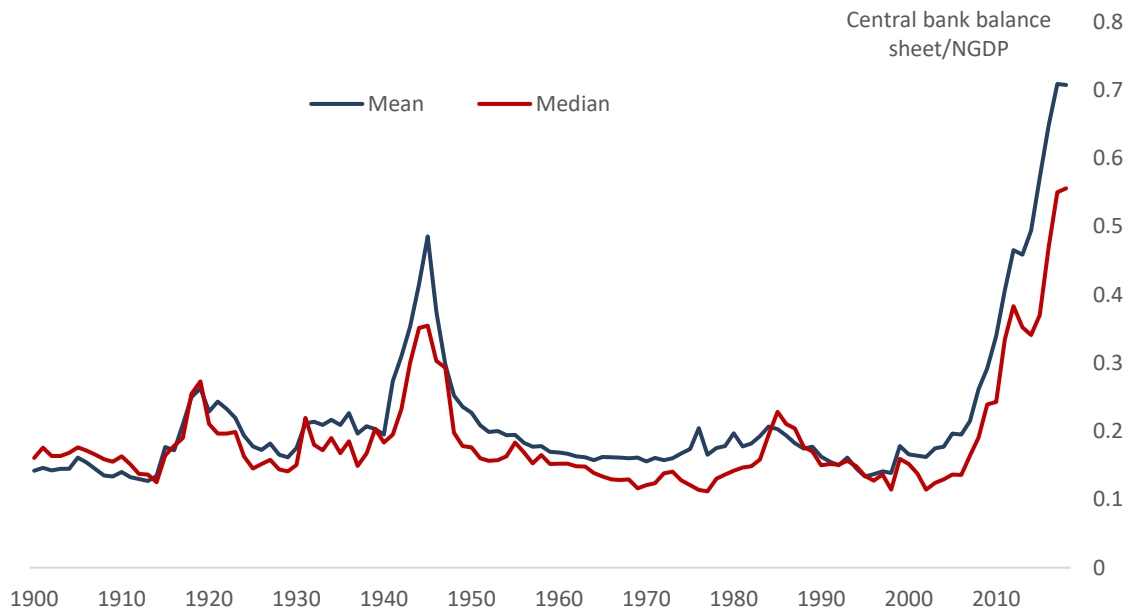
The reasons for this included central banks' rising role in dealing with financial stability issues in the light of the Global Financial Crisis; the rising populist geo-political tide; and, perhaps most significantly, the increased purchases of government securities by central banks, so-called Quantitative Easing (QE). At the time, global QE stood at around \$11trillion, and global central bank balance sheets were around 55-65% of global GDP, their highest levels in at least a century (*Chart 3*).

This year has seen central bank balance sheets expand further. Global QE now stands at around \$17 trillion and is set to rise further. For some, this has blurred the distinction between monetary and fiscal policies to an even greater extent than in the past. It has also intensified the debates and concerns around central bank independence expressed at the Bank's conference three years ago.

Against that background, now is an opportune moment to ask some questions, and assemble some evidence, on the case for central bank independence. How has it affected monetary and financial stability? What challenges does it face at present? And how might it evolve in future?

Those are the aims of this lecture. I start with some definitions of central bank independence, which is a multi-faceted and often misunderstood concept. I then discuss some of the theory and evidence on the role of central bank independence in supporting monetary and financial stability, as well as its links with fiscal policy. I will conclude with brief thoughts on central bank independence looking forward.

Chart 3: Central bank balance sheets relative to GDP



Source: Data from Ferguson, Kornejew, Schmelzing and Schularick (2020). I am grateful to the authors for sharing this data with me. Bank calculations.

Notes: Countries included are: Canada, France, Germany, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Switzerland, the United Kingdom and the United States.

As a central banker, you might expect me to extoll the virtues of central bank independence. Spoiler alert, I will not disappoint. As best evidence can tell, central bank independence has delivered “twin-wins” for price and financial stability: low inflation and stable banks at no cost to the economy’s output or efficiency. Equally, this is a challenging time for the economy and for central banks. They will need to adapt to these new challenges to boost public understanding of, and maintain democratic legitimacy in, central banks.

The Definition of Central Bank Independence

Independence is very rarely absolute or binary in any domain of public policy. It is almost always subject to constraints on actions *ex-ante* and accountability mechanisms for those actions *ex-post*. Most forms of delegated decision-making in democracies are accompanied by checks and balances.

Central bank independence is no exception. In no country in the world is it absolute, typically being subject to multiple *ex-ante* constraints and *ex-post* accountabilities. The precise mix of these constraints and accountabilities means there are many different degrees, dimensions and models of central bank independence.

As a legal matter, independence can be framed in terms of “four pillars”:³

- a) Quasi-constitutional independence;
- b) Institutional independence;
- c) Personal independence; and
- d) Financial and economic independence.

Taking each in turn, the legally-strongest form of independence arises when there is a *quasi-constitutional* declaration of central bank independence, for example through a Treaty. That is the case in the European Union where the Treaty on the Functioning of the European Union provides that the European Central Bank (ECB) “shall be independent in the exercise of its powers”. Significantly, this independence extends to the *national* central banks of the EU, meaning no individual EU Member State can unilaterally amend or repeal independence.

With no codified constitution, there is no constitutional provision safeguarding the Bank of England from political interference. The Bank’s independence can be repealed by ordinary legislation. However, as former Chancellor Nigel Lawson observed “the mere announcement of the intention to do so would in itself be so damaging to market confidence that any Government would be extremely reluctant to attempt it.”⁴ This illustrates that wider (political, market and social) considerations are crucial for determining the *de facto* degree of independence, whatever the *de jure* position.

Institutional independence arises from the legal remits and safeguards granted to central banks to carry out their tasks, without fear of interference or instruction from the executive branch of government. There are a range of institutional models of independence. One important design dimension is, in the language of Debelle and Fischer (1994), the distinction between *target* and *instrument* independence.

In the UK, the objectives of the Bank’s three policy committees (the Monetary Policy Committee (MPC), Financial Policy Committee (FPC) and Prudential Regulation Committee (PRC)) are defined in primary legislation and set by Parliament. In other words, the Bank is *target-dependent*. This again differs elsewhere – for example, in the euro-area where the ECB is *target-independent*. UK legislation also requires HM Treasury to elaborate on these objectives periodically.

The Bank operates with operational independence over its tools to meet its statutorily-set objectives. In other words, the Bank is *instrument-independent* for monetary policy and financial stability tools. Even these powers are, however, constrained. HMT has a set of statutory powers of direction over Bank decisions which constrain its institutional independence in pre-specified, exceptional, circumstances.⁵ And the Bank is

³ Lastra (2015).

⁴ Lawson (1992).

⁵ Salib and Skinner (2019).

subject to a wide range of statutory accountability devices, including publishing formal minutes and reports and regularly appearing before Parliament.

A third dimension is *personal* independence – the appointment procedures and legal protections given to individuals assuming decision-making responsibilities. The Bank of England Act 1998 provides for a range of protections in relation to qualification for appointment, remuneration and security of tenure. Subject to these, most appointments to the Bank’s statutory policy committees are made by HM Treasury, with parliamentary oversight through the Treasury Committee.

The final legal pillar of independence is *financial* and *economic independence*. Even if a central bank has the other three protections, its independence could still be compromised if it had insufficient resources to achieve its mandate (financial independence) or could be pressured to engage in monetary financing of the government (economic independence).

For its financing, the Bank has legal powers to levy industry to recover the costs of its supervisory functions. Supervisory levies are set annually after public consultation. The Bank finances its monetary policy and financial stability operations through a Cash Ratio Deposit (CRD) Scheme which was placed on a statutory footing by the Bank of England Act 1998. The terms of the CRD Scheme are set by HM Treasury through a statutory instrument at least every five years after a public consultation process.

Protection of the Bank’s economic independence is provided by the “prohibition on monetary financing”, encapsulated in Article 123 of the Treaty on the Functioning of the European Union. Some have questioned whether the expansion of central bank balance sheets through QE constitutes a breach of the prohibition on monetary financing. For example, the German Constitutional Court recently considered whether the ECB’s Public Sector Purchase Programme (PSPP) was in breach, concluding it was not. Nonetheless, some commentators continue to associate QE with monetary financing, a point to which I shall return.

The multiple dimensions of independence mean a wide spectrum of central bank independence models operate in practice internationally. This is clear from central bank legal statutes and from analysis of their different practices. A cottage industry has emerged among academics to construct indices of central bank independence, weighting together different of these dimensions of independence.⁶

Table 1 uses the indices of *de jure*, or legal, independence index recently constructed by Garriga (2016) for some of the OECD countries. This illustrates the spectrum of independence models that exist internationally. It also demonstrates that central bank independence is, in every case, partial. Along the international spectrum of central bank independence models, the Bank of England occupies an upper-quartile position.

⁶ See for example, Cukierman et al (1992).

Table 1: *De jure* measures of Central Bank Independence

Country	CBI Measure
Australia	0.25
Austria	0.86
Belgium	0.86
Canada	0.47
Denmark	0.50
Finland	0.86
France	0.86
Germany	0.86
Italy	0.86
Japan	0.44
The Netherlands	0.86
New Zealand	0.35
Norway	0.45
Spain	0.86
Sweden	0.30
Switzerland	0.77
UK	0.70
US	0.48

Source: Measure based on Garriga (2016).

Central Bank Independence and Monetary Stability

During the 1980s, the key macro-economic concern was the so-called Great Inflation of the 1970s. Why did inflation prove so persistent? And what role did monetary policy play in generating this persistence? The time-consistency theory of Kydland and Prescott (1977), Nordhaus (1975) and Barro and Gordon (1983) provided an elegant answer to these questions. Governments had a natural tendency to over-inflate their economies, especially around election time, generating an “inflation bias”.

To curb this inflation bias, some institutional means was needed to constrain government’s policy hand. Rogoff (1985) developed a model which provided such an institutional fix. Monetary policy decisions were to be delegated to a “conservative”, inflation-minded, central bank acting independently from government. In this way, central bank independence could prevent, at source, a return to the Great Inflation of the 1970s.

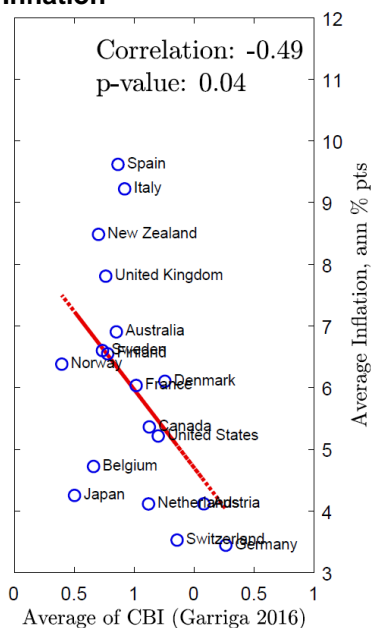
The macro-economic benefits, in theory, did not end there. Provided inflation expectations were well-anchored and central banks were not too inflation-averse - “inflation nutters” in the language of Mervyn King -

monetary policy could be effective in stabilising output in the economy too.⁷ In other words, central bank independence was a potential twin-win, reducing inflation biases at no cost in increased output variability.

Empirical evidence followed to test these hypotheses. During the 1980s and 1990s, a number of papers established a statistically significant link between the level and variability of inflation and the degree of central bank independence across a range of countries.⁸ These cross-country correlations strongly suggested central Independence was an important contributor to reduced inflation bias. And this evidence, in turn, helped spur moves towards central bank independence in the latter-part of the 20th century.

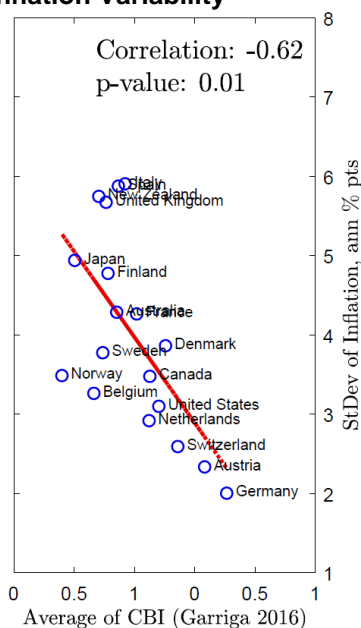
Charts 4 and 5 plot the relationship with inflation and inflation variability and central bank independence in 18 countries based on data from 1970 through to 1999. It confirms the negative, statistically significant, relationship between (the level and variability of inflation) and independence. Chart 6 plots independence against output variability over the same period; it suggests independence did not result in an increase in output variability. Taken together this evidence implies independence has, indeed, been a twin-win.

Chart 4: Independence and Inflation



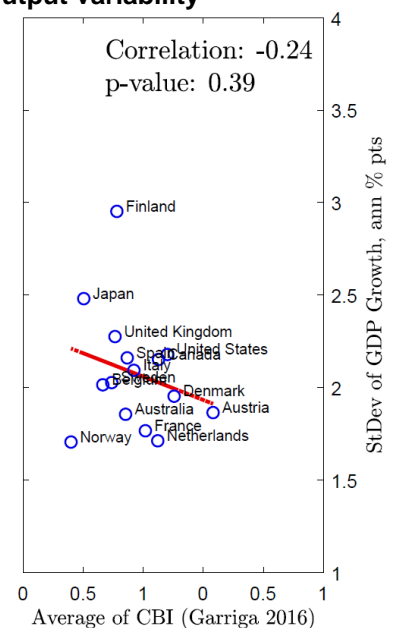
Source: Bank of England

Chart 5: Independence and Inflation Variability



Source: Bank of England

Chart 6: Independence and Output variability



Source: Bank of England

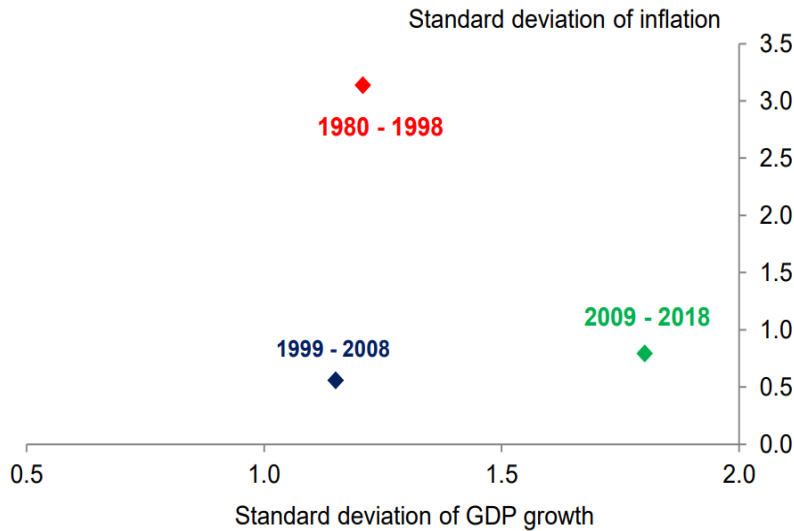
For the UK, Chart 7 plots a measure of inflation and output variability over a number of sample periods. In the period since the Bank became independent in 1997, inflation uncertainty has fallen by a factor of around four compared with the earlier 20-year period, while output variability has been unchanged, absencing the

⁷ King (1997).

⁸ For example, Alesina and Summers (1993).

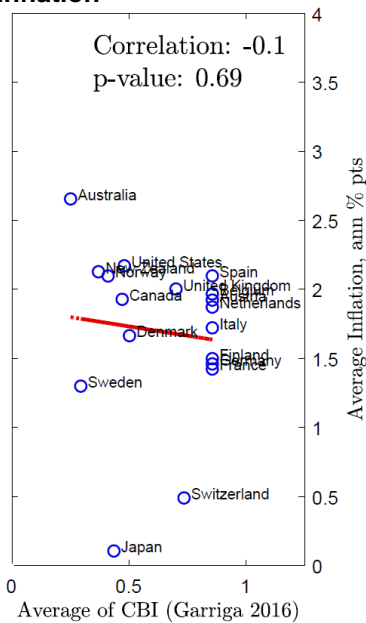
financial crisis of 2009. Consistent with international evidence, central bank independence in the UK appears also to have been a twin-win.

Chart 7: Inflation and Output Variability in the UK



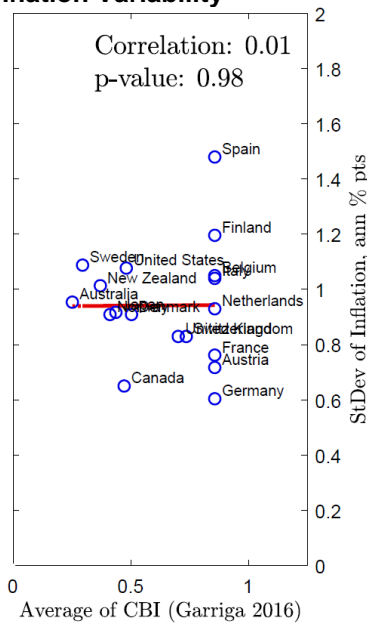
Source: Bank of England.

Chart 8: Independence and Inflation



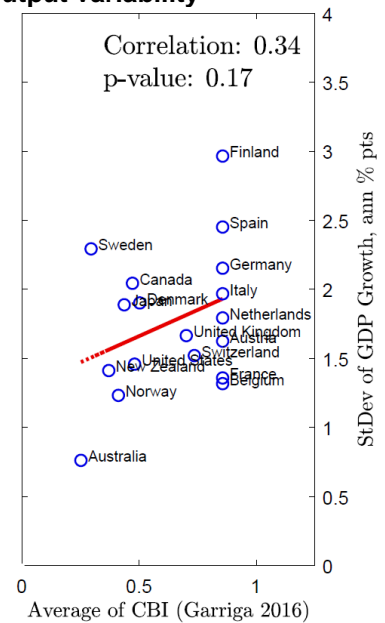
Source: Bank of England

Chart 9: Independence and Inflation Variability



Source: Bank of England

Chart 10: Independence and Output variability



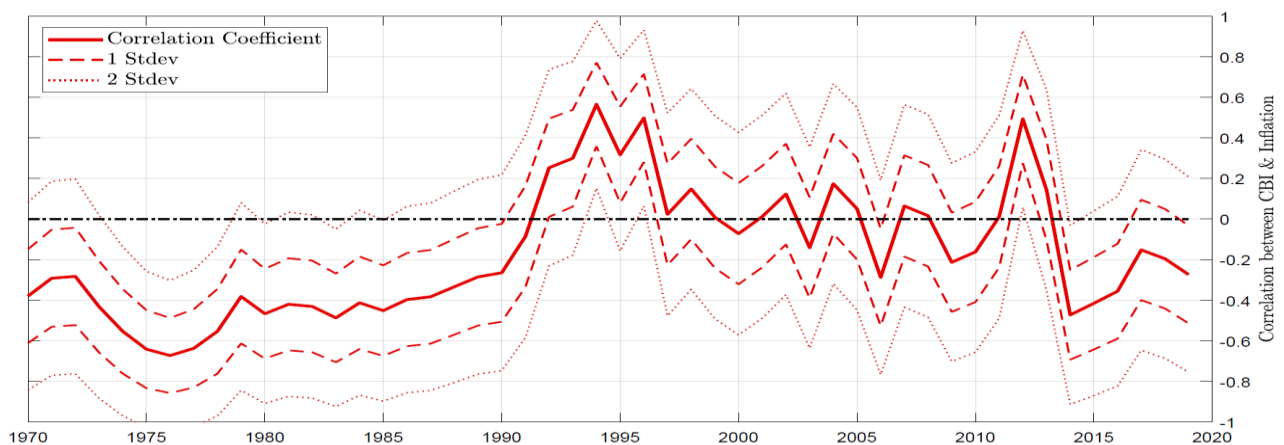
Source: Bank of England

More recently, empirical evidence on the effects of independence has become less clear-cut. Charts 8-10 plot the same cross-country relationships since 2000. The correlation between central bank independence

and inflation has all but disappeared. Chart 11 plots the rolling cross-country correlation coefficient between the two variables to illustrate this point. Meanwhile, the relationship between independence and output variability is now positive, if insignificant. In the UK, the outward shift in output, variability over the past decade is also noteworthy (*Chart 7*).

What explains this disappearing correlation? Some have used it to question whether the earlier link between independence and low inflation was no more than a statistical mirage.⁹ It could be argued that the fall in inflation over this earlier period was instead the result of the benign macro-economic environment of the Great Moderation.¹⁰ In other words, better inflation outcomes in the late 20th century might have reflected good luck rather than good central bank management. There are two reasons why this alternative reading of the macro-economic runes is not entirely convincing.

Chart 11: Correlation between Independence and Inflation through time



Source: Bank of England.

First, it is well-known that reduced-form correlations between variables may not accurately capture the true impact of policy, especially during episodes of regime change. An effective policy regime prevents a bad outcome, such as high inflation, emerging in the first place, eliminating any reduced-form correlation between the policy regime or action and the eventual macro-economic outcome. The impact of policy is, in this sense, unobservable from reduced-form correlations.¹¹

In the late-20th century, most countries moved towards a high central bank independence/low inflation equilibrium. This regime shift may have effectively extinguished any reduced-form correlation between the two. Certainly, it would be dangerous to infer from the disappearing correlation that independence did not contribute to the shift to a lower inflation equilibrium. And it would be more dangerous still to conclude that any reversal of this regime shift – away from independence – would have a no impact on inflation.

⁹ Benati (2008), Stock and Watson (2002).

¹⁰ Bernanke (2004).

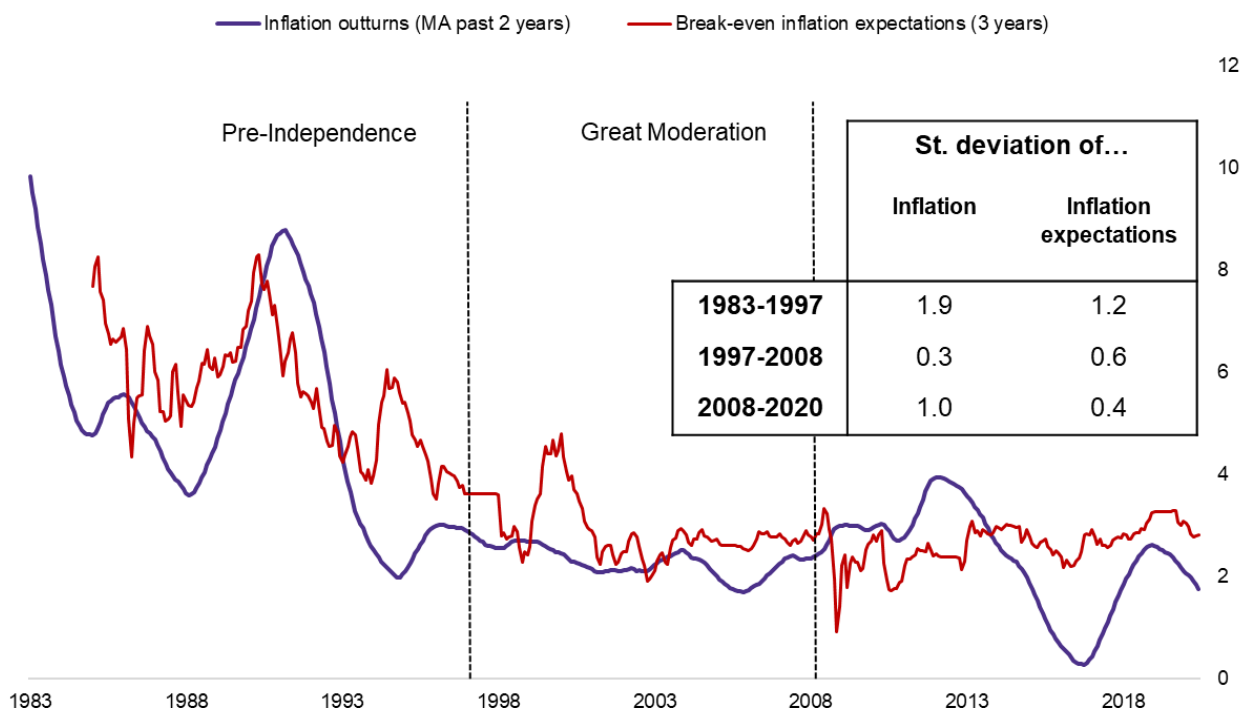
¹¹ See McLeay and Tenreyro (2019) in the context of the Phillips curve.

It is revealing to look at the behaviour of inflation expectations. They are a key diagnostic on the credibility of a monetary regime over time. If a regime is credible, these expectations ought to be anchored around the target and relatively unaffected by short-term shocks to the economy. Chart 12 plots UK inflation expectations, inferred from financial markets at the 3-year horizon, over the period since 1983. It also plots measured inflation over the same period. Three distinct periods are worth identifying.

In the period prior to inflation targeting and independence, the variability of both inflation and inflation expectations was high. Shocks to inflation were large and the credibility of the monetary regime was low. In the period since independence up to the Global Financial Crisis – the Great Moderation – the variability of both inflation and inflation expectations fell by a factors of between 6 and 2, respectively. That is consistent with both the good luck (benign shocks) and good management (central bank independence) hypotheses. Over this period, it is difficult to identify separately their effects.

Subsequent events have made identification somewhat easier. Since the Global Financial Crisis, the variability of inflation has roughly trebled in the UK, as the incidence of macro-economic shocks has increased. Yet over this period, the level and variability of inflation expectations has actually fallen. Expectations have remained anchored, despite the less benign environment. This suggests an important role for the monetary regime and central bank independence in safeguarding stable inflation.

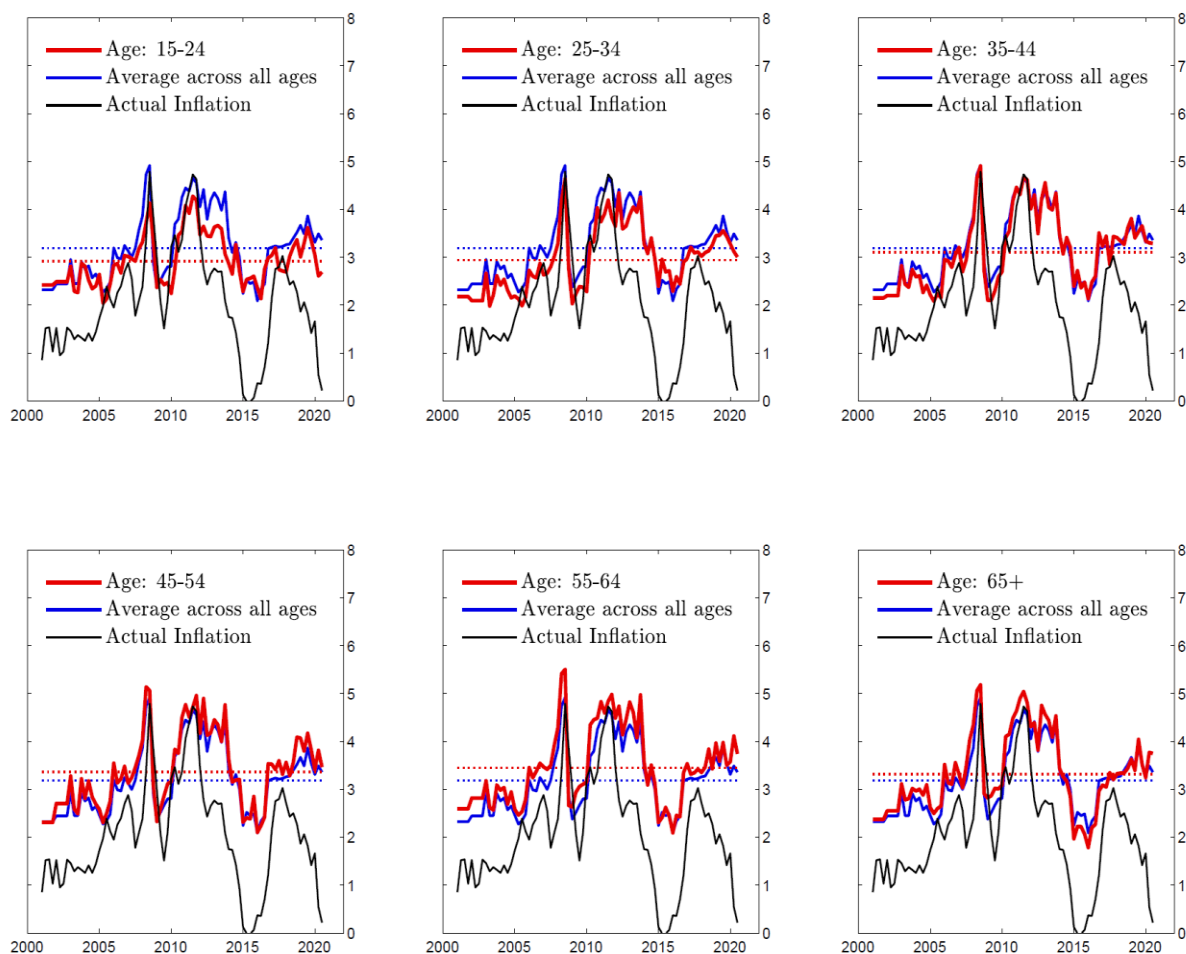
Chart 12: Inflation and Inflation Expectations in the UK



Source: Bank of England

Before concluding on monetary stability, let me add just one small fly to the ointment. Several recent empirical studies have looked at the behaviour of inflation expectations across different household cohorts, often finding quite large and widening differences. One of the most striking of those is between young and older generations, with the latter tending to have higher inflation expectations, perhaps reflecting their lived experience during the Great Inflation of the 1970s.¹²

Chart 13: Inflation and Inflation Expectations Across Age Cohorts in the UK



Source: Bank of England

Notes: based on 1 year ahead inflation expectations taken from the Bank's TNS Inflation Attitudes Survey.

Chart 13 plots the inflation expectations of different age cohorts in the UK. In general, and unlike in some other countries, these age-related differences are not especially large. Nonetheless, in general inflation expectations among young people are not only lower, but also appear to be more sensitive to actual inflation outcomes. This, too, is likely to reflect the different lived inflation experience of young people.

¹² For example, Diamond, Watanabe and Watanabe (2019) and Malmendier and Nagel (2016).

If these generational patterns were to persist, they might pose a challenge to the monetary policy regime. A less inflation-averse population, without experience of the costs of past high and volatile inflation, might mean a less strong constituency for price stability – and, potentially, central bank independence – than earlier generations.¹³ This is an interesting research question for us all. It is also a challenge central banks might wish themselves to reflect on, as I shall discuss at the end.

Central Bank Independence and Financial Stability

Until recently, neither the theory nor the practice of central bank independence was as well developed in the area of financial stability. That has changed since the Global Financial Crisis, with both greater amounts of research on the financial stability benefits of independence and greater numbers of central banks adopting independence in their regulatory and supervisory practices. Nonetheless, both remain in their infancy.

The time-consistency problem familiar from monetary policy has a clear read-across to the world of financial stability. Governments have an incentive to run their financial systems, as well as their economies, hot in the interests of growth and electoral advantage. This generates a tendency to loosen regulation too far during credit booms, increasing the risk of future bouts of financial instability. In other words, there is a potential problem of “instability bias” in regulatory policies, to accompany the “inflation bias” in monetary policies.¹⁴

In fact, I would argue this time-consistency problem is potentially greater in the financial stability sphere than for monetary policy, for two reasons.¹⁵ Credit cycles tend to be longer in duration, and larger in amplitude, than typical business cycles.¹⁶ This means wishful thinking and policy myopia (“this time is different”) are more likely to arise in credit booms than during typical business cycle upswings, exaggerating the time-consistency problem of financial stability policies.

The costs of financial instabilities and crises also tend to be larger than the costs of inflationary surges. This means the temptation to act in a time-inconsistent fashion – talking tough *ex-ante*, but acting weak *ex-post* – also tends to be greater. That can encourage risk-taking and amplify financial cycles and crises – a doom loop.¹⁷ The Global Financial Crisis, a long-duration credit boom that prompted massive government support *ex-post*, was a good example of these acute financial stability time-consistency problems in practice.

As with monetary policy, one institutional fix for this problem is to delegate prudential policy-making to an independent agency, better able to curb credit cycles and forestall financial crises. This helps explain the shift towards independence in the setting of regulatory and supervisory policies over the past decade. At the

¹³ Shiller (1996).

¹⁴ Quintyn and Taylor (2002), Herrera et al (2020)

¹⁵ A point also argued by Bianchi and Mendoza (2018).

¹⁶ Aikman, Haldane and Nelson (2015).

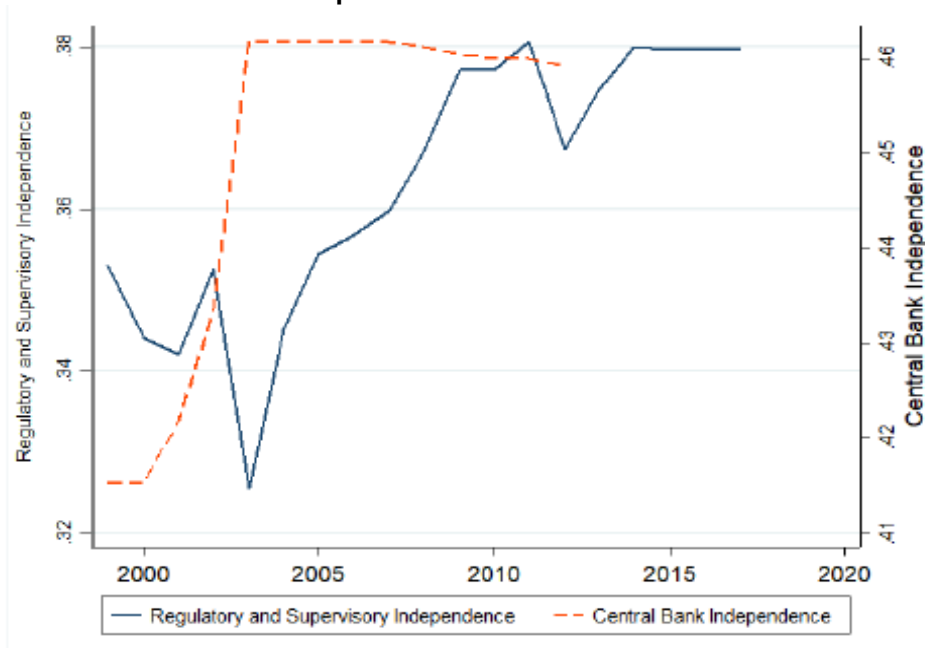
¹⁷ Haldane (2012).

Bank of England, this role is played by the Financial Policy Committee (FPC) for system-wide-risks, and the Prudential Regulation Committee (PRC) for institution-specific risks.

Academics have recently begun constructing indices of independence for financial stability regimes.¹⁸ For example, research at the Bank has developed an index of Regulatory and Supervisory Independence (RSI) based on legal characteristics.¹⁹ Chart 14 plots this RSI for 43 countries, alongside a monetary policy-based index of independence. The RSI starts lower but has increased rapidly since the Global Financial Crisis. The UK has a high degree of independence for its financial stability policies by international standards.

Research has also begun to link these measures of RSI to financial stability outcomes as a test-bed of time-consistency theory, again broadly mirroring the monetary policy literature. One additional challenge these studies face is finding an objective and continuous measure of financial instability. Bank and other research has often used proxies, based on Non-Performing Loans (NPLs) and the variability of the Returns on Assets (ROA) in the banking system.²⁰

Chart 14: Central Bank Independence and RSI



Source: Fraccharoli et al (2020)

Based on the research of Fraccharoli et al (2020), Table 2 looks at the relationship between RSI and NPL/ROAs across a selection of countries, controlling for a range of other macro-economic and institution-specific factors that influence NPL/ROAs. This suggests a statistically-significant, negative

¹⁸ For example, Dincer and Eichengreen (2013).

¹⁹ Fraccharoli et al (2020).

²⁰ Klomp and den Hann (2009)

relationship between the two across the 43 countries.²¹ In line with theory, independence in financial stability policies is associated with a reduction in financial instabilities, as proxied by NPLs and the volatility of ROAs.

Consider a rough ready-reckoner from Table 2. The average reform to increase the independence of central banks' financial stability policies over the past 20 years would be expected to have reduced the incidence of NPLs across the global banking system by somewhere between 1.7 and 2.9 percentage points, on average. Given prevailing levels of bank capital, and bearing in mind the costs of financial crises, this is a sizeable benefit of greater independence in financial stability policy-setting.

Table 2: RSI and Financial Stability

	Measures of financial stability	
	Non-performing loans	ROA volatility
RSI Reforms	-2.8***	-1.9***
<i>[coefficient range based on robustness checks]</i>	<i>[-1.7 to -2.9]</i>	<i>[-0.8 to -1.9]</i>

An interesting supplementary question is whether independence in financial stability policies has come at any cost in terms of the reduced efficiency of financial intermediation, perhaps because of more stringent regulatory and/or supervisory practices. This is the financial stability equivalent of asking whether independent monetary policies have imposed macro-economic costs through increased output variability.

Table 3: RSI and Bank Efficiency

	Measures of efficiency and profitability	
	Net interest margin	Cost to income
RSI Reforms	-0.6	-1.2***
<i>[coefficient range based on robustness checks]</i>	<i>[-1.9 to 0.4]</i>	<i>[-1.8 to -2.4]</i>

*Notes: *** means coefficient significant at the 1% level. Full list of controls for benchmark regressions and alternative specifications can be found in HLM (2020)*

²¹ Fraccaroli et al (2020).

Table 3 looks at the relationship between RSI reforms and two measures of banking system efficiency (net interest margins and the cost to income ratio) across banks in 43 countries.²² As with monetary policy, it finds no evidence of independence in financial stability policies having come at an efficiency or competitive cost.²³ In other words RSI, like its monetary policy counterpart, appears empirically to be a twin-win, with reduced financial instability coming at no discernible macro-economic cost.

Central Bank Independence and Fiscal Stability

A final dimension of the independence debate, and one of growing interest, is the way it interacts with fiscal policy. With central banks globally now owning around one-fifth of the outstanding stock of government debt as a result of QE, this increasing interest is not surprising.

Central bank balance sheet expansions have, for some people, blurred the distinction between monetary and fiscal policies and posed questions about central bank independence. Fortunately, there is a rich literature to help clarify some of these links between fiscal and monetary policies.²⁴ Although I do not have time to do that justice here, one or two general lessons are worth bringing out.

First, it is clear that fiscal policy actions can have significant effects on the macro-economic variables that are part of central banks' mandates, such as output and inflation. In the current environment, fiscal policy is highly expansionary and providing considerable support to activity and inflation, in the UK and globally, alongside the effects of the expansion of monetary policies.

Second, these macro-economic spill-over effects of monetary and fiscal policies could, in principle, lead to these policies acting at cross-purposes or imposing "externalities" on each other. Provided both the fiscal and monetary authorities have clear mandates, however, which they then pursue independently, this conflict will rarely arise.²⁵ Both bodies then simply take into account the choices being made by the other body when determining the policies necessary to meet their mandates – they internalise the externalities. In the Bank's case, this means taking account of the fiscal stance when judging the monetary policy stance necessary to meet the inflation target.

Third, the optimal balance of monetary and fiscal policies is not necessarily fixed over time and may change as we approach the zero lower bound (ZLB) on interest rates. Specifically, to the extent the ZLB reduces the effectiveness of monetary policy relative to fiscal policy in stimulating demand, this may justify a somewhat larger role for fiscal policies in the face of a shock to activity.²⁶ In the current environment, facing such a shock, fiscal policy has provided more of the support to demand than during the Global Financial Crisis.

²² The efficiency measure is taken from Barth et al (2013).

²³ Barth et al (2013) reach a similar empirical conclusion.

²⁴ For example, Leeper and Leith (2016).

²⁵ Bhundia and O'Donnell (2002).

²⁶ Eggertsson (2011).

Fourth, as both monetary and fiscal policies both act to support demand, it is natural to see them expanding in lockstep through increased government spending and higher QE in the current environment. As my colleagues on the MPC have clearly set out, this is not a sign of one policy driving the other, much less of monetary financing of government deficits.²⁷ Rather it is a reflection of both policies responding counter-cyclically, as they should, in the face of a very large cyclical shock to aggregate activity.

Nor should a rise in the proportion of debt held on central banks' balance sheets be taken as a sign of so-called fiscal dominance.²⁸ The latter arises when monetary objectives, such as the inflation target, are subjugated for fiscal objectives, such as reducing the cost of debt. The institutional safeguards in the UK's monetary regime – namely, the inflation target and the Bank's operational independence – offer strong protection against such fiscal dominance, from a legal, market and political perspective.

Indeed, in the current environment the situation is in some respects the very opposite of fiscal dominance. In the face of a huge shock, fiscal expansion has played an extremely helpful role in supporting demand and in helping the MPC return inflation to its target. What we have seen is better described as fiscal assistance than fiscal dominance when it comes to meeting the inflation target. The externalities from expansionary fiscal policy have in that sense been positive, rather than negative, from a monetary policy perspective.

Fifth, while concerns about monetary financing and fiscal dominance can be overdone, that is not to deny there are challenges facing central banks in this environment. One of these is the simple scale of the balance sheet expansions undertaken so far. In the UK, once its current programme is complete, the Bank will have a balance only just shy of 50% of both GDP and the outstanding debt stock (*Chart 15*). This is materially higher than at any time in its recent or distant history.

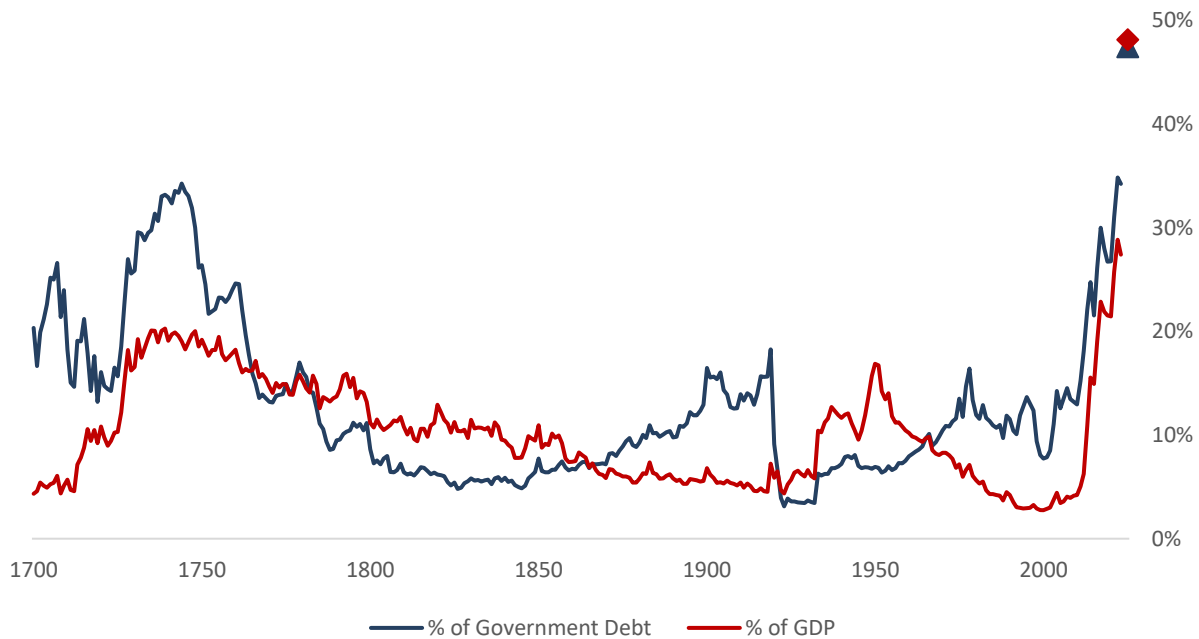
QE at these levels raises natural concerns about when, or indeed whether, these holdings will be reduced. These perceptions are not easily or quickly dismissed, any more than the holdings can be easily or quickly run down. These perceptions of permanence, and the potential ratchet in government debt holdings, have weighed with me as the MPC has announced £450 billion of extra QE – more than a doubling of its asset holdings - during the course of this year.

The justification for the QE actions taken by the MPC this year, and which I have supported, is that they will support demand and act as an insurance policy against any premature and undesirable rise in borrowing costs which would otherwise risk setting back the economic recovery and put at risk hitting the inflation target. I think this is a coherent rationale which is entirely consistent with the MPC's statutory mandate. It is not, however, without its implementation and communication challenges.

²⁷ See Broadbent (2020), Vlieghe (2020) and Bailey (2020).

²⁸ See King and Plosser (1985), and Leeper (1991).

Chart 15: Bank of England balance sheet relative to GDP and total debt



Source: Bank of England

One risk that might arise is if market expectations of QE are driven by fiscal financing, rather than macro-economic, needs. A central bank then could potentially face a dilemma. Not validating these QE expectations could be felt to run the risk of causing yields to rise, removing the insurance cover on borrowing costs and putting at risk the inflation target. But, on the other hand, validating expectations that are driven by fiscal financing, rather than macro-economic, considerations puts monetary policy on a potentially undesirable course over in the medium term.

This is not a dilemma the MPC has so far faced. Nonetheless, the horns of this dilemma grow sharper, the larger is the stock of QE.²⁹ Recent QE has placed central banks in deep, and uncharted, waters. My view is that these QE actions have been necessary to support the economy and hit the inflation target. But they pose rising challenges to public understanding of the purposes of QE and, ultimately, perceptions of independence. It is important central banks evolve their practices in response to these challenges, to which I now turn.

Conclusion

So what has central bank independence ever done for us? While no amount of theory and empirical evidence can ever be conclusive, it strongly suggests independence can, and has, contributed to securing two important twin-wins: low and stable inflation at no cost in increased output variability, and safe and

²⁹ This is in part due to the fact that QE lowers the duration of consolidated government liabilities, adding to the sensitivity of public sector finances to short-term interest rate risk. See <https://obr.uk/frr/fiscal-risks-report-july-2019/> for more.

secure banks at no cost to their efficiency. These gains were hard won. Given the uncertain environment, safeguarding them and the institutional regime in which they are embedded is more important now than ever.

At the same time central banks, and central bank independence, are facing new challenges. Not the least of these arises from the rapid expansion in central banks' balance sheets over the past decade. This has contributed to a loss of understanding, and perhaps some trust, in the role of monetary policy and its degree of separation from government actions.³⁰ Let me conclude with three observations which would I hope help central banks rise to these new challenges, safeguard their independence and build trust.

First, I am a supporter of central banks having a wide-angle lens on the economy and financial system when performing their tasks. It was blind-spots, and the absence of a sufficiently wide-angle lens, that contributed to the Global Financial Crisis. But central banks have been criticised by some for taking too great an interest in too wide a range of longer-term structural issues, such as inequality, climate and technological change, which often lie beyond their statutory remits.

It is certainly true that the scope for central banks to meaningfully shape these factors with their monetary and financial stability toolkits is, at best, very limited. What is also true, however, is that these structural forces have a direct and growing influence on the economy and the financial system, and thus indirectly on central banks' objectives. Understanding these structural forces, and their economic and financial impact, is essential for central banks when discharging their core responsibilities effectively.

At the same time, it is important this wide-angle lens does not detract or distract from the core mandates of central banks – keeping inflation low and banks stable. Take the current conjuncture. With inflation low and the output gap large, it would be easy to assume medium-term inflation risks are a secondary concern. Given the massive hit the economy has taken, policy measures this year have understandably focussed on stabilising economic activity and jobs in the near-term.

As we approach the New Year, the fantastic recent news on vaccines offers some economic light at the end of the long, dark tunnel of this year. Effective vaccines would be a life-saver, for businesses and jobs as well as lives. With luck, they will encourage a rapid economic recovery in the UK and globally. Taken together with the huge amounts of policy stimulus provided this year, this will in my view leave risks to the economic outlook more evenly balanced than for some time, including risks to inflation over the medium term.

Inflation risks in the UK are well contained and inflation expectations remain well-anchored. In its latest *Monetary Policy Report*, the MPC projected that risks to inflation were evenly-balanced around the inflation target at the two-year horizon. The uncertainties either side of that projection are, however, unusually large. As the economic recovery gathers pace next year, it will be important central banks remain squarely focussed on their core medium-term price stability mandates.

³⁰ Haldane (2017).

Second, the events of the past decade have taken central banks, and their balance sheets, into uncharted territory. Some of the novel instruments used by central banks, such as QE, are not well-understood. And, in some people's minds, they have blurred the distinction between governments and central banks. In some countries, but not the UK, inflation targets have been consistently undershot. Partly reflecting these developments, some measures of public trust in central banks have fallen.

These developments underscore the crucial importance of efforts to improve public understanding of the economy, financial system and build trust in central banks' role in supporting both. The Bank, alongside many other central banks, has been making strenuous efforts to do so across a number of fronts: from simplified communications to Citizens Panels and Community Forums.³¹ These initiatives aim to build understanding and trust about central banks and their policies across a broad cross-section of the public.

A particular focus of the Bank's efforts has been improving understanding of the economy among children and young adults. As earlier research demonstrated, this is a constituency whose inflation expectations and attitudes are not shaped by the high inflation episodes of the past. The Bank's new education programmes, EconoME (for 11-16 year olds) and Money and Me (for 8-11 year olds), together with the Bank's new Youth Forum, are attempts to help build that constituency for price stability among younger people.³²

Third, this lecture has aimed to set out some of the research conducted so far on important issues around central bank independence, monetary, financial and fiscal stability. But there is plainly more that can, and hopefully will, be done to deepen and widen this research knowledge. There are many open questions. How are inflation attitudes shifting generationally? How is central bank independence shaping price and financial stability? And how best can central banks build a strong constituency for their policies?

The Bank has set out some of the issues it wishes to explore, both in its own research and in collaboration with others, in its recent Bank of England Agenda for Research (BEAR). In the immortal words of George from the Hofmeister lager advert of the 1990s, I hope today's lecture will encourage many of you to follow the BEAR and help us at this crucial time for economics, the economy and economic policy.

³¹ See <https://www.bankofengland.co.uk/get-involved/citizens-panels> .

³² See <https://www.bankofengland.co.uk/education/education-resources> .

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