CHAPTER 3

Monetary policy: "Whatever it takes, within our (*new?*) mandate"

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Ahead of the global financial crisis, a broad consensus emerged regarding the conduct of monetary policy in advanced economies. Independent central banks steered short-term interest rates in pursuit of the goal of price stability, understood as a low and stable rate of consumer price inflation. In the UK, implementing this consensus took institutional form in the inflation targeting regime established as the Bank of England achieved operational independence in 1997.

For a sustained period, this framework not only offered admirable clarity of purpose and a certain intellectual elegance; it also delivered results. At the turn of the century, economists lauded the 'Great Moderation', which saw low and steady inflation rates delivered in a context of wider macroeconomic stability (Stock and Watson, 2002). Former Bank of England governor, Mervyn King, identified a "NICE decade" in the UK – a sustained period of **N**on-**I**nflationary **C**onsistent economic **E**xpansion (King, 2003). The improved design of monetary policy was widely seen as central to the achievement of these outcomes.

Why review the inflation targeting mandate?

The global financial crisis has challenged this comfortable view.

At a minimum, it has rendered the conduct of monetary policy more complex. The macroeconomic environment has become more challenging for conventional monetary policy – output has fallen, trend growth is weakening, supply-side developments are less favourable and the natural real rate of interest has declined. All this has brought central bank policy rates closer to their (perceived) lower bound. Policy transmission has been disrupted by dislocations to financial institutions and markets. As a result, central banks have been forced to adopt new instruments (such as quantitative and credit easing), while innovating along other dimensions of policy (such as liquidity operations and communication) (Pill, 2010). By nature, these innovations beg novel questions for the monetary policy mandate: how should new measures interact with one other, with the conventional interest rate instrument and with other non-monetary policy tools?

Moreover, during the crisis, central banks (with varying degrees of enthusiasm) assumed or extended responsibilities beyond their traditional monetary domain, into bank supervision, macro-prudential policy and quasi-fiscal support for credit provision. Rules are needed to govern how these responsibilities interact with monetary policy, as well as among themselves (Pill and Reichlin, 2017).

More profoundly for the monetary policy mandate — albeit less fully explored thus far — the financial crisis should raise doubts about the adequacy of the pre-crisis monetary policy consensus. Conveniently for monetary policymakers, responsibility for the crisis has largely been assigned elsewhere – to avaricious bankers, to misguided financial innovations, to incompetent bank supervisors and to regulatory weaknesses in the financial sector. This assignment may be convenient. That does not mean it is correct – at least not in entirety.

Through a variety of channels, monetary policy may also have played a role in creating and propagating the crisis.

First, inflation targeting encouraged policymakers to focus on shorter-term inflation dynamics. In its formulation, the Bank's two-year ahead inflation forecast became the central vehicle for the discussion, signalling and communication of monetary policy. In a jurisdiction with a poor inflation history, refocusing public attention on the impact of monetary policy on price developments was certainly desirable. But the focus on inflation two years ahead came at the expense of neglecting lower frequency dynamics in the economy, which threatened price, financial and macroeconomic stability at longer horizons.

In particular, and with the (considerable) benefit of hindsight, monetary policymakers gave too little weight to the accumulation of macroeconomic and financial imbalances during the 'NICE' decades. Self-sustaining but ultimately unsustainable developments in credit markets lay at the heart of this process. With the onset of the crisis, the sharp unwinding of these imbalances had profound implications for price and economic developments that had not been captured in conventional macroeconomic projections, including the Bank's famous inflation fan charts (Gennaioli and Shleifer, 2018).

Second, beyond encouraging neglect of them, the conduct of monetary policy under inflation targeting may have actively contributed to the accumulation of these underlying imbalances. In particular, the steepening of the money market yield curve associated with the well-signalled, gradual normalisation of the monetary policy stance in the mid-2000s created incentives for carry trades in the money market and a resulting build-up of excessive intra-financial sector leverage. This leverage proved to be an important propagator and amplifier of the financial crisis, if not its source.

These characterisations of monetary policy's role in the crisis are certainly not uncontroversial. But neither can they be dismissed lightly. Entertaining such arguments implies a need to review the UK's inflation targeting framework. Yet, a dozen years after the onset of the global financial crisis, monetary policy continues to operate in essentially the same institutional framework, as if nothing can be learnt from the trauma of the past decade.

This partly reflects the undeniable policy successes achieved within the current framework. Broad macroeconomic stability has been restored. The financial system has largely stabilised. UK inflation has hovered around target over recent years, albeit exhibiting somewhat greater volatility than during the NICE decades. Understandably, discussions about revising the Bank's mandate start from the premise "if it's not broken, don't fix it".

Yet the lack of a strategic review also reflects the character of the crisis itself. Monetary policy innovations after 2008 represent exceptional actions to address exceptional times – and were initially styled as such.[1] By nature, such measures are temporary and will be reversed once the crisis abates. They do not bring the underlying strategic framework and mandate of monetary policy into question; rather, they are the exceptions that prove the rule. In that context, the policy debate focused on questions of exit – how to re-establish the pre-crisis regime once the ephemeral crisis requiring exceptional action had passed.

But, as other chapters in this book discuss, both circumstances and the passage of time imply that many crisis-spawned monetary policy innovations are here to stay. Central bank balance sheets will be larger and show more varied composition on both the asset and liability sides than before the crisis, with the range, riskiness and maturity of monetary policy operations having expanded considerably. Rather than questions of exit, this situation demands a reform and modernisation of monetary policy's governance, setting out the procedures and limits to manage these new tools and the relationship among them. That is a mandate issue.

New policy responsibilities and novel policy instruments have shifted monetary policy and central bank activities much closer to the heart of political debate. With the advent of quantitative easing (QE) and other non-standard measures, the distinction between monetary and fiscal policy has blurred. Credit easing has subsidised financing for some sectors relative to others. Monetary policy choices are thus both more economically invasive and have more obvious distributional intent and impact than in the past. By nature, this exposes them to greater political scrutiny.

The pre-crisis 'social contract' between the Bank of England's monetary technocrats and the wider society they serve was founded on a willingness of the latter to give significant autonomy to the former in pursuit of a narrow and widely agreed objective (inflation at target two years hence) with a narrow and broadly neutral policy instrument (short-term nominal interest rates). The legitimacy of the approach rested on the complementary narrowness of both the means and the ends. As the nature of monetary policy evolves, means become more diverse and ends become more subject to question. These changing circumstances dictate that the pre-crisis central banking social contract is now under threat.

1 See Lenza et al. (2010), who discuss the policies introduced around the failure of Lehman Brothers in this way.

One approach to revising that contract would be simply to establish the price stability objective and leave central banks to design and use tools to achieve it as they see fit — in other words, to do "whatever it takes" (to coin a phrase)[2] to attain the inflation target. In essence, this entails minimising discretion over the ends of policy (at least in principle), but maximising discretion over the means used to achieve them. In the midst of crisis, the flexibility accorded policymakers by such an approach may be appropriate.[3] But there are several reasons why, as the crisis recedes, constraining discretion over policy actions, not just over policy objectives, may improve effectiveness and sustainability over time.

First, placing fully unconstrained discretion in the hands of unelected central bank technocrats is not consistent with liberal democratic principles.[4] Aggressive innovation in monetary policy on the grounds that "the ends justify the means" may undermine the legitimacy of such policies and the broader policy framework (including central bank independence and the primacy of the price stability objective). This is particularly the case if policy innovation has significant distributional impact and/or creates conflict with other policy domains. Better to do "whatever it takes, *within our mandate*" (emphasis added). Then, by implication, the mandate needs to be defined. And when novel tools are introduced, the mandate needs to be refined and extended to accommodate and manage them.

Second (and more subtly), in some circumstances open-ended policies may prove less effective as the private sector is always left 'waiting for more'. Imposing limits may enhance policy impact. And should circumstances dictate (say, in the face of another financial crisis) that further policy innovation is required, an abrogation of existing explicit limits may amplify the impact of a policy over what could be achieved by an incrementalist approach.

2 Draghi's (2012) intervention focused on preserving the integrity of the euro and the euro area, but has been used by others to address the price stability mandate.

3 Even if other objectives – notably around financial stability – enter monetary policy decisions at that point.

4 Tucker (2018) offers a rich discussion of these issues, in both central bank and other contexts.

Third, failure to review the strategic framework for monetary policy can also damage central bank communication, which is increasingly seen as an important channel of policy transmission. Monetary policy strategies fulfil two roles: (i) organising the flow and analysis of data internally in order to support monetary policy decision making; and (ii) offering a framework for the presentation of those decisions and their rationale to external constituencies, notably the public and financial market participants. To the extent that the internal decision-making process incorporates lessons from the financial crisis whereas the external presentation of decisions remains unchanged, the transparency, clarity, credibility and ultimately the effectiveness of monetary policy will be threatened. The danger exists that being forced to shoe-horn the presentation of policy decisions into a framework that has not evolved to reflect new realities will distort the policy message. Worse, by a process of backwards induction, policy decisions may be taken so as to be communicable within the existing framework, leading to poorer policy choices – the communication 'tail' wags the policymaking 'dog'. Some of the recent communication challenges faced by the Bank of England can be seen in this light.

All in all, more than ten years on from the onset of the global financial crisis, the time has come to review the Bank's mandate and assess whether it remains fit for purpose. Wholesale change is unnecessary; the existing framework has avoided the calamity that threatened in 2007-08. What is required is an update and refinement, which captures the main lessons drawn from confronting the crisis since 2008, while not endangering the considerable advances made within the inflation targeting framework over the preceding decades.

In what follows, I seek to complement specific policy proposals analysed elsewhere in this volume with some more general considerations on how the Bank of England's mandate may need to evolve. The discussion is organised around two themes.

First, without prejudice to the overall goal of price stability over longer horizons, greater flexibility in managing the unavoidable shorter-term trade-offs facing monetary policy may be needed than was recognised in the past. Explicitly recognising this shorter-term flexibility and the complexity that surrounds it is preferable to shoe-horning policy decisions into the existing narrower framework that generates excessive focus on short-term inflation developments.

Second, as a quid pro quo for offering greater flexibility in managing short-term economic trade-offs, discretion over the use of novel or non-standard policy instruments – which, by nature, was very high when they were first introduced in response to the crisis – should be limited in some ways.

Such limits serve the interests of two constituencies. For advocates of such policy innovations, accommodating them within the explicit central bank mandate improves the legitimacy, communicability and, ultimately, the effectiveness of such tools. For sceptics of such policy initiatives, the proposed limits stem the advance along the 'slippery slope' towards undesirable outcomes that the prohibition or avoidance of such measures in the past was designed to avoid.

Refining the definition of ends…

The neutrality of monetary over the longer term has not been fundamentally challenged by the recent financial crisis. As a result, identifying price stability as the ultimate objective of monetary policy remains uncontroversial.

Other chapters in this book discuss at length issues surrounding the quantification and operationalisation of the relevant notion of price stability. In particular, that analysis entertains a number of possible refinements to current arrangements: (i) raising the Bank of England's inflation target in order to reduce the frequency at which policy rates are constrained by the perceived lower bound; (ii) redefining the Bank's target in terms of the price level (or multi-year moving averages of inflation rates), so as to strengthen self-stabilising expectational mechanisms in the economy via real interest rates; and (iii) lengthening the horizon at which the price stability target (however defined) is to be achieved.[5]

I will not repeat the arguments surrounding these issues. Suffice to say that each proposal comes with pros and cons, raising issues of operational practicality and communication. But a common thread across proposals to refine the Bank's price-level objective is that they create greater flexibility for policymakers in the short term. In other words, the set of immediate monetary policy decisions that can be validated as compatible with the achievement of the Bank's target is broadened rather than narrowed by the refinements to the

5 These issues and proposals are discussed in Pill and Smets (2013), for example.

target under consideration. This begs the question of how central bank policymakers should choose from among the enlarged set of policy actions consistent with achieving their target.

Of course, this is not a new issue. The transmission of monetary policy to price developments famously operates with long, variable and (crucially) not fully predictable lags. As long as the economy is subject to shocks that influence inflation more quickly than a monetary policy response can offset them, central banks will not be able to stabilise inflation at target. And, if the magnitude and timing of policy transmission is uncertain, there will always be a residual uncertainty about the future evolution of inflation, again implying that full inflation stabilisation is impossible. Empirically, these two conditions are certainly met.

A central banker that seeks to minimise deviations of inflation from its target on a high frequency basis notwithstanding these practical constraints has been labelled an 'inflation nutter'. Although such an approach in principle minimises inflation deviations from target, it has been seen as a poor guide for monetary policy. The volatility imparted to other macroeconomic variables as a consequence of this narrow-minded minimisation of inflation deviations from target comes with significant welfare costs. As a result — and as reflected in the Bank of England's existing mandate and conduct of monetary policy — central banks have pursued a *flexible* inflation targeting strategy, whereby volatility of inflation around its target is traded off against the volatility of other macro aggregates, such as the output or employments gaps.

At least conceptually, this framework suggests a very simple approach to governing how the flexibility accorded monetary policymakers should be used: while remaining committed to achieving the price stability objective, any remaining flexibility with policy decisions should be used to maximise 'social welfare'. Implementation of such an approach requires social welfare to be defined, entailing a large number of difficult value judgements as well as a very sophisticated understanding of the mechanics of the economy and the preferences of households within it. Attempts in the academic literature are, by nature, highly model-specific and, as such, hard to make operational. Nonetheless, this thinking has been influential in thinking about how to govern monetary policy decisions.

Famously, standard New Keynesian models, which represented the workhorse model for monetary policy analysis a decade ago, exhibit no trade-off between the stabilisation of inflation and the stabilisation of the (welfare-relevant) output gap (i.e., the gap between actual output and efficient output). This result was labelled the ‘divine coincidence’ and foretold a comfortable existence for central bankers, as there was no tension between their pursuit of an inflation target and stabilising output at its efficient level.

Unsurprisingly to monetary policymakers, practice has unfortunately proved more complex. Even in the abstract modelling world, the ‘divine coincidence’ disappears with only modest departures from the benchmark model (notably when real economic frictions – such as those arising when wages, as well as prices, are ‘sticky’ and thus real wages exhibit some inflexibility – are entertained). In the simplest version of these refined frameworks, central banks then face a trade-off between inflation volatility and output gap volatility in the shorter run as they seek to maintain price stability over the medium term.

For a welfare-optimising monetary policymaker, the relative weight of inflation and output gap volatility in the loss function it seeks to minimise (typically labelled lambda) is determined by the parameters of the model. Somewhat more sophisticated versions of these models which incorporate other features that help mimic the observed inertia in economic aggregates complicate the situation,[6] but the essential intuition carries over.

The Bank of England has embraced this framework in the articulation of its monetary policy. Leading Bank officials often characterise their policy dilemmas in the form of exploring the trade-off between deviations of inflation from target and output from potential under various calibrations of lambda, seeking to signal robust policy conclusions that are not dependent on any specific model or value of lambda. In terms of simplicity and clarity, this approach has obvious attractions: it is embedded in a well-established and deeply researched academic framework, yet it frames policy decisions in a communicable way.

6 For example, changes in the output gap and not just its level may also enter the social welfare or loss function.

Unfortunately, recent experience has not been kind to the models that underlie this framework. In particular, these models neglect the financial sector, which by nature came to the fore during the financial crisis, disrupting monetary policy transmission and driving macroeconomic dynamics in a manner that the models did not anticipate. Incorporating financial effects is a rich and dynamic part of the current macroeconomic research agenda, but insufficient progress has been made thus far for the results of research to be fully operational from a policymaking perspective. Nonetheless, recognising that the accumulation of financial and macroeconomic imbalances can play a role in medium-term inflation developments that is not reflected in the baseline model is an important preliminary conclusion of such work. This suggests a need to move beyond framing the governance of monetary policy around a 'choice of lambda' given prospective shorter-term inflation developments and a preferred estimate of the output gap.

The practical challenge of how to conduct monetary policy given this need remains an open question. One traditional response is to adopt an intermediate target, whereby policy seeks to stabilise a macro variable (such as money, the exchange rate or nominal GDP) that has a stable relationship with the price level over the medium term. Such an approach is seen as both (i) reliably delivering price stability (the stable relationship implies that the intermediate variable acts as a 'nominal anchor' for the economy, since its stability through time delivers price stability through time); and (ii) giving a clear and transparent guide to the conduct of monetary policy to govern the flexibility available to policymakers in the pursuit of price stability.

Experience with an intermediate target, perhaps especially in the UK, has been poor. First, the professed stability between the intermediate variable and the price level has often proved unreliable, breaking down just as policymakers sought to exploit it. The archetypal example is intermediate monetary targeting in the 1980s, where even repeated redefinitions of the target monetary aggregate proved insufficient to underpin a sufficiently reliable relationship with price developments over the longer run. Moreover, for a small, open economy like the UK, nominal exchange rate flexibility can be an important adjustment and stabilising mechanism. As experience with the Exchange Rate Mechamish (ERM) in the early 1990s demonstrated, foregoing that flexibility can come at a high cost in terms of employment and growth.[7]

Nominal GDP targeting has more advocates of late.[8] Drawing on the discussion above, it can be viewed as a simple, communicable and neutral way of pinning down the lambda governing the inflation/output gap trade-off. That is attractive. But it suffers from many of the same shortcomings of that framework, notably, neglecting the financial channels of transmission and propagation in the economy and the potential for an accumulation of financial and macroeconomic imbalances over time.

I am therefore sceptical of an intermediate targeting approach. But that is not to suggest that policymakers should be blind to developments in the variables offered as intermediate targets. On the contrary, nominal GDP (and its components) and the exchange rate are variables central to the evolution of the economy. And the neglect of financial variables implicit in that would in part be addressed by close monitoring of developments in monetary and credit aggregates, as well as a wider assessment of the financial flows, interest rates and asset prices that determine wider financing conditions in the economy. But rather than attempting to stabilise nominal GDP growth, the exchange rate or a monetary aggregate around an intermediate target, central banks should seek to analyse and understand developments in these variables, extract the signals relevant for price and wider macro developments and use these as important inputs in coming to the overall assessment underpinning monetary policy decisions.

An alternative framework for governing the conduct of monetary policy in pursuit of price stability would be to adopt a Fed-style 'dual mandate', which explicitly recognises that monetary policy should seek to stabilise output or employment as well as inflation (with a similar weight on each) even as it seeks to ensure price stability is maintained in steady state. As with nominal exchange

7 In grappling with the impact of and uncertainties surrounding Brexit (which have implications for the appropriate UK real exchange rate), the Bank has proved adept at exploiting nominal exchange rate flexibility to manage that adjustment. Giving up that flexibility may therefore be especially unwise at present.

8 See Sheedy (2014) and Bean (2013) for discussions from a theoretical and policy-oriented perspective.

rate targeting, this approach can be seen as a communicable way of determining the 'lambda' in a loss function-based characterisation of the policy trade-off.

This approach is subject to two critiques. First, as with nominal GDP targeting, such a framework focuses attention on shorter-term developments in inflation and neglects lower frequency economic dynamics associated with financial and macroeconomic imbalances.[9] Second (and more profoundly), adopting a dual mandate dilutes (at least rhetorically) the prioritisation assigned to ensuring price stability in steady state. The dual mandate starts from the premise that steady-state inflation is credibly pinned down and emphasises the trade-offs faced at higher frequencies. In a jurisdiction with a poor inflation track record within living memory (such as the UK), taking this credible establishment of price stability in the medium term as a given may prove complacent. Better to emphasise the primacy of that requirement for monetary policy, while recognising that it is both possible and desirable for central banks to adopt a flexible approach to conducting monetary policy at cyclical horizons. This approach is embedded in the mandates of many central banks (including the Bank of England), which establish a clear hierarchy of objectives. Only with price stability over the medium term ensured can managing cyclical trade-offs be entertained. Now is not the moment for innovation on this dimension.

… constraining the use of means

A well-designed mandate will not only establish objectives for policy; it will also establish limits to the conduct of policy in pursuit of that objective. Given space constraints, I focus here on how this applies in the case to QE.

During the crisis, QE was motivated by two considerations. Initially, when faced with a seizing up of financial markets in the autumn of 2008, central banks engaged in massive liquidity injections to support market functioning and prevent the collapse of the banking

9 Interestingly, the Fed's mandate also includes a requirement that the flow of credit to the economy be maintained. One interpretation of this additional element beyond the well-known inflation/employment dichotomy is as a recognition that steering lower frequency monetary dynamics as well as underwriting effective transmission of monetary policy through the financial sector are also important guideposts for central bank conduct.

sector. In many cases (including the UK), a substantial part of this liquidity injection was implemented via QE. These were one-off emergency actions to contain specific financial stability threats.[10]

Latterly, as scope for easing via conventional interest rate cuts was exhausted by the approach of the lower bound, the motivation for QE shifted. By buying longer-maturity instruments using money created for the purpose, central banks absorbed duration from the market, squeezed term premia and lowered longer-term yields, thereby easing overall financing conditions and supporting the economy.[11]

These policy initiatives were no doubt well-intended and likely necessary. But implementing large-scale asset purchases came with side effects. In particular, QE inevitably blurred the distinction between monetary and fiscal policies.

Given the depth of market required for the magnitude of purchases and the understandable reluctance of central banks to assume private credit risk, central banks bought sovereign debt. Whatever the motivation for such actions, they had a fiscal impact. Of course, monetary policy has always influenced fiscal outcomes — interest rate changes influence sovereign financing costs. But, with QE, the character of the relationship has changed. Two channels can be distinguished.

First, central bank purchases of sovereign debt create space on heavily indebted government balance sheets, allowing the Treasury to ease fiscal policy even in the face of market reluctance to finance fiscal expansion. The government's intertemporal solvency is not brought into question; so-called monetary dominance is maintained over the price level. The central bank simply exploits its privileged status to resist market-dictated pro-cyclicality in fiscal policy when financial markets are unwilling or unable to finance government borrowing. In this, the central bank supports the government in using fiscal policy to sustain aggregate demand (a

10 For example, the Federal Reserve controversially appealed to "unusual and exigent circumstances" to justify some interventions during the crisis that were seen (even in its own eyes) as at the margins of its established mandate.

11 Admittedly, the implied flattening of the yield curve weighed on returns to maturity transformation, the profitability of banks and thus potentially credit creation and loan supply. Nonetheless, monetary policymakers judged that, on balance, the stimulative impact of lower long rates would be the dominant effect.

natural complement to the central bank's own monetary efforts in this direction, and a potential channel of transmission even when monetary policy options have been exhausted).

Contrast this with a second potential fiscal channel of QE transmission. In this, the central bank stands ready to finance a programme of fiscal easing the undermines the government's intertemporal solvency and establishes a regime of so-called fiscal dominance over the price level. It has been argued that such an approach may be the only way to revive inflation were the scope for stimulative monetary policy to be exhausted.

These two approaches are observationally equivalent at the outset. How the economy and price developments react to QE will depend largely on the market's expectations over whether policymakers are engaging the first or second transmission channel. The mandate of the central banks — and specifically the limitations placed on central bank financing of government deficits indirectly through purchases of sovereign debt in the secondary market — will be an important (if not the determining) factor shaping these expectations.

How these expectations are shaped has potentially profound implications for the inflation outlook and monetary policy. To take one example for the purposes of illustration: it is often said that, once constrained by the lower bound on policy rates, monetary policymakers should err on the side of aggression in implementing QE since the error of under-stimulus may be difficult to reverse if inflation expectations ratchet downwards, whereas the tools to contain any inflation overshoot are well-understood (raise policy rates to choke off excess demand). This logic holds in the first scenario, where monetary dominance over the price level is maintained. But if expectations of fiscal dominance take hold, higher interest rates may exacerbate rather than contain inflationary pressures as the present value of sovereign debt — the extent of government intertemporal insolvency — rises. When managing private expectations of the limits surrounding the implementation of QE, the stakes for monetary policymakers are therefore high.

Prior to the crisis, the institutional mechanism for managing these expectations was the prohibition of monetary financing. This implied very strict limits on the ability of central banks to finance fiscal activities: it aimed to shut down both of the potential channels of QE transmission described above on the grounds that (i) the implied rigid separation of fiscal and monetary affairs was desirable from an institutional accountability perspective; and (ii) the conventional interest rate instrument would provide sufficient leverage for monetary policy to achieve its objective. But in the face of the crisis, this very strict prohibition proved unworkable. With conventional easing via interest rates exhausted, other tools of monetary stimulus were needed. And (perhaps more controversially from the Bank of England's perspective), the need for central banks to support fiscal activities — in the UK, largely in the form of quasi-fiscal subsidies supplied to the banking sector through liquidity operations — became apparent. In that context, the strict prohibition of monetary financing became unenforceable in practice.

In reviewing the central bank mandate after the crisis, the challenge is to find a new framework for steering private expectations of the fiscal/monetary nexus. At present, central bankers remain rhetorically (and legally) constrained by the pre-crisis regime, even as they implement actions at the very margin of it, if not beyond. That is neither healthy nor transparent, and may lead to suboptimal policy choices that can be defended more easily in court, in front of Parliament or to the public, rather than what is efficient and effective in policy terms.

While no taboo should be left unchallenged by the financial crisis and its aftermath, a starting point for framing revisions to the mandate governing monetary/fiscal interactions would be to permit and institutionalise monetary policy support to fiscal activities via the first channel of QE transmission (while subjecting them to appropriate scrutiny and accountability), while proscribing exploitation of the second channel described above (which, by establishing fiscal dominance over the price level, begs a further, deeper set of issues about the allocation of policy responsibilities and objectives across various arms of government).

Efforts in that direction would not only offer institutional tidiness; they would also improve the effectiveness of policy actions. To the extent that private actors are concerned that QE is being employed to permit fiscal policies that undermine intertemporal government solvency, the stimulative impact of fiscal easing under the first transmission channel is likely to be weakened (on Ricardian grounds). By the same token, if a central bank really wished to 'cross the Rubicon' and embrace fiscal dominance on the basis that, with monetary tools exhausted across the board, this was the only way to revive inflation, then the expectational leverage associated with a very visible decision to alter the limits imposed by the central bank mandate on monetary/fiscal interactions would offer powerful communication leverage.

Conclusion: Some modest proposals

Summing up, this discussion leads to relatively modest innovation in the monetary policy mandate. Three points can be emphasised.

First, maintaining the primacy of the price stability objective is essential. For good reasons, monetary policy has been assigned responsibility for anchoring price developments.

Second, the mandate should recognise that achieving price stability at a meaningful horizon accords monetary policymakers considerable discretion in managing shorter-term cyclical trade-offs among macro variables. In governing how monetary policymakers employ that discretion, a number of innovations are desirable: (i) distinguishing more clearly between features of the mandate itself and how the Bank of England thus far has chosen to operationalise its approach (via inflation forecast targeting); (ii) by implication, de-emphasising the Bank's inflation forecast at a specific two-year horizon in favour of a more 'timeless' perspective on the outlook for price developments; in order to (ii) give greater weight to the lower frequency price and economic dynamics associated with slower moving accumulations of financial and macro imbalances; which in turn requires (iv) more prominent monitoring of developments in the financial sector and asset prices, including monetary and credit aggregates and the exchange rate, where the origins and drivers of such imbalances are most visible; while recognising that (v) monitoring of financial developments should not be understood as targeting monetary growth rates, the exchange rate or asset price levels either in their own right and/or as intermediate targets, but rather as instrumental in the pursuit of mandate itself.

Fortunately, on my reading, many if not most of these elements have been incorporated into central bank practice, especially in the aftermath of the financial crisis. Modernising central bank mandates to reflect such innovations is needed. Absent this, practice and presentation of policy actions will diverge, to the detriment of the transparency, accountability and ultimately the credibility of policy. But this is an evolutionary rather than revolutionary process.

Third, recognising and legitimising the flexibility available to central banks in the management of cyclical macro/financial trade-offs should be complemented by (re-)introducing explicit limits on the use of new or non-standard policy instruments.

Of late, circumstances have dictated that central banks adopt innovative policies. In the face of the financial crisis, such policies were both necessary and desirable. But, by their non-standard nature, the limitations to such policies were not fully established in pre-crisis central bank mandates. There is thus a need for mandates to 'catch up' with practice, particularly insofar as they relate to the interactions between monetary and fiscal affairs.

As central bankers become more concerned that conventional channels of monetary policy transmission are exhausted, advocacy of non-standard measures that blur the distinction between monetary and fiscal policy are inevitably being entertained.[12] This is understandable and inevitable, but not without its risks — after all, the motivation for imposing limits on central bank financing of government deficits has not disappeared. Defensible limits for the new, post-crisis world are preferable to no limits at all.

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