
To exit the Great Recession, central banks must adapt their policies and models

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During the Great Moderation, inflation targeting with some form of Taylor rule became the norm at central banks. This column argues that the Global Crisis called for a new approach, and that the divergence in macroeconomic performance since then between the US and the UK on the one hand, and the Eurozone on the other, is partly attributable to monetary policy differences. The ECB's model of the economy worked well during the Great Moderation, but is ill suited to understanding the Great Recession.

"Practical men...are usually the slaves...[of] some academic scribbler of a few years back" – John Maynard Keynes.

For monetary policy to be most effective, Michael Woodford emphasised the crucial importance of managing expectations. For this purpose, he advocated that central banks adopt explicit rules for setting interest rates to check inflation and recession, and went on to note that:

"[such] rule-based policy making necessarily means a decision process in which an explicit model of the economy...plays a central role, both in the deliberations of the [central bank's] policy committee and in explanation of those deliberations to the public." (Woodford 2003: 18).

During the period of the Great Moderation (circa 1983 to 2007), central banks were by-and-large persuaded to follow this advice and to adopt the sort of New Keynesian macroeconomic model Woodford had specified. Inflation targeting, with some variety of Taylor rule for interest rates to achieve this, became the norm.¹ But the forward-looking, rational-expectations model Woodford used provided no warning of the financial crisis that was to erupt in 2008/9 – such events had effectively been ruled out by the assumption of efficient financial markets and the omission of money and banking.

Fortunately, when the crisis hit and threatened a repeat of the Great Depression, central banks moved swiftly to slash interest rates to almost zero, issue widespread guarantees, recapitalise banks (with Treasury support), and – at least in the US and the UK – to inject massive amounts of liquidity in what was dubbed quantitative easing (QE). During the Great Recession, however, the Taylor rule was largely ignored as non-operational (it would have called for negative interest rates).

Four or five years later, the question is: when and how to exit from this prolonged recession? When will interest rates go back to normal? In this context, the forward guidance provided in the UK (Bank of England 2013) and the US can be seen as another experiment in expectations management, with results that provide a striking contrast between the UK, the US, and Europe.

Expectations and regime shift: How can forward guidance help?

As David Miles (2013) has emphasised, expectations will matter if moving from stagnation to recovery requires coordinated action both on the part of the private sector (putting people to work) and from the Monetary Policy Committee (keeping interest rates low). Or to put it in other words, forward guidance may have an important role to play when the issue is when to expect a *change of regime*, rather than what to expect *within a regime*.

How can forward guidance help? First, it may be a form of pre-commitment designed to assist the private sector. If the risk of rising rates threatens to prolong recession, then ruling out a rate rise until an unemployment threshold is reached offers a low-cost way of promoting recovery.

Second, in the special circumstances of a slump, forward guidance may be thought of as a way of clearly *overriding normal central bank policy* – in the form of a Taylor rule, for example.

Finally, it may be a way of *clarifying the objectives* of the central bank policy – when, for example, the inflation target is symmetric, as is the case for the Bank of England. The idea that forward guidance is effectively a way of reminding the public that the central bank wants to avoid low – as well as above-target – inflation is explored in Miller and Zhang (2014).

Since the policy of forward guidance was announced, unemployment in the UK has fallen dramatically, but inflation has stayed closed to target, despite interest rates being kept at the lowest ever level of 50 basis points. Some regard this as a policy failure, because the benchmark for reconsidering the policy rate has been reached so soon. Others, however, see this as proof of a successful policy initiative!

Rather than entering this debate, let us look more widely at the path of recovery in the UK and elsewhere.

US, UK, and EU compared

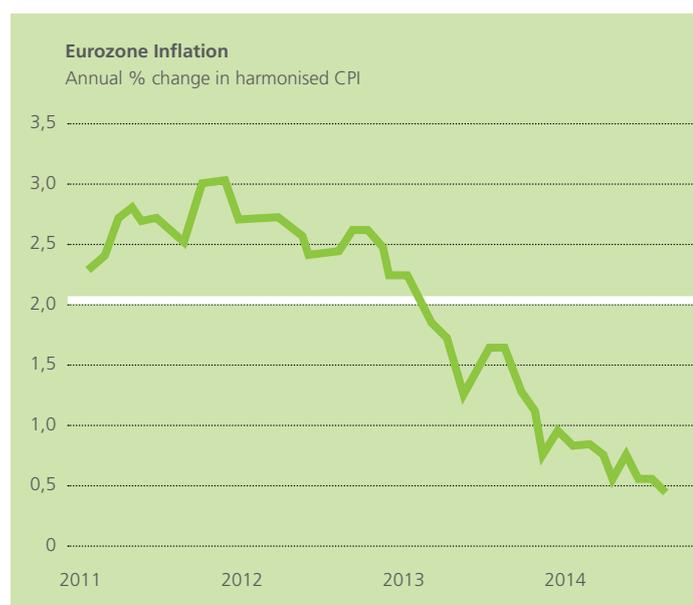
The chart showing the course of output since the financial shock suggests the US and the UK are back on track – GDP has passed its pre-crisis peak and is growing at about per year, and there is talk of ‘tapering’ QE in the US and raising rates in the UK. The Eurozone presents a sadly different picture. Though the ECB has set interest rates close to zero, output has yet to recover from the shock, and growth is close to zero. Why the contrast?

Figure 1. Output before and after the crisis



While the Eurozone is a currency union, it lacks the labour mobility and/or wage flexibility of an 'optimum currency area'; and, of course, it lacks the fiscal integration and transfers characteristic of politically unified states. These structural factors are undoubtedly important, but are they sufficient to explain why policy has been run so that European unemployment is now about double that of the US and the UK, while inflation has fallen so far below its guideline of 'close to but less than 2%' that deflation seems in prospect (see Figure 2)? There is, we believe, another factor.

Figure 2. Declining inflation in Europe: when will it stop?



Source: Thomson Reuters DataStream.

Model-based policy at the ECB

As Wolfgang Münchau has pointed out,

“The ECB is failing to deliver on its inflation target not because it has run out of instruments but because it has based its policy on a poorly performing economic model. The ECB never expects inflation to deviate from the target of just under 2 per cent. Yet each month inflation undershoots, and the ECB is apparently taken by surprise.” (Münchau 2014).

It so happens that the model referred to, based on Smets and Wouters (2003), was built on the basis of Woodford's analysis and fitted to pre-crisis European data. It worked well during the Great Moderation; but, as it had no financial sector, it failed completely to predict or rationalise the ensuing crisis.

In such models, the economy is inherently stable and, if left alone, will head for high output and target inflation. Could it be that the ECB, charged with managing the newly created euro, believed that it had found the philosopher's stone – a technically sophisticated model built in line with the latest academic principles that would serve it in good times and in bad?

If so, it could be making a mistake about the nature of economics. As Gilboa et al. (2014) warn in their recent paper, economic models are not in general designed to incorporate universal laws of behaviour. They are often more like elaborate 'case studies' fitted to particular circumstances – to be employed with care elsewhere. Thus, as in Table 1 below, the choice of model and policy should be adjusted as best suits the regime. During the Great Moderation, for example,

the ECB-style model with a Taylor rule could be appropriate, as shown in the top left; but this should be suspended during the Great Recession, in favour of QE, followed by forward guidance to exit, as shown in the bottom right.²

Table 1. Fitting policy to regime

Regime	Follow Taylor rule	Suspend Taylor rule
Great Moderation (pre-2008)	ECB-style model	(Fear of losing credibility)
Great Recession (post-2008)	(Risk of stagnation	QE plus forward guidance

But what if, for fear of losing credibility perhaps, the ECB continues to use a model fitted to the Great Moderation to guide its policy during the Great Recession?³ As indicated in the bottom left of the table, this runs the risk of perpetual stagnation.

Fortunately, however, policymakers usually have greater incentives to change their models than do academics! The IMF, for example, has shifted ground on the use of fiscal policy in recession; and on the desirability of capital-account management for emerging market economies. What about the ECB? The recent speech by Mario Draghi at Jackson Hole suggests that the ECB may not be the slave of seemingly scientific computer programmes written in earlier times. The hints of QE for the Eurozone and the call for more supportive fiscal policy may indicate that he is once again ready to do whatever it takes – even if this involves putting its macro model on the back burner.

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Footnotes

1 Under a Taylor rule, interest rates adjust to changes in inflation and output. John Taylor (2013) argues, indeed, that the low variance of output and inflation characterising the Great Moderation was, in part, due to improved monetary policy using interest rate rules.

2 Similar sentiments are expressed by Barry Eichengreen (2014).

3 That its model is more consistent with the laissez faire policies (associated with the German Bundesbank) than with the interventionist policies (sought by Italy and France) will give it added appeal.

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