Speech

Comments on 'Risk and Uncertainty in Monetary Policy' by Alan Greenspan

Comments given by

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COMMENTS ON 'RISK AND UNCERTAINTY IN MONETARY POLICY' BY ALAN GREENSPAN, AEA ANNUAL CONFERENCE, 2004

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The success of the American economy, and of the Federal Reserve in responding to the large economic and other shocks with which it has been confronted, is a tribute to Alan Greenspan and his colleagues. It ensures that his paper will be widely read and studied.

Some characterisations of monetary policy imply that it is possible to write down a state-contingent optimal policy rule derived from an underlying model, about which we may not know the parameters, but whose structure is generally well-understood. If so, then the optimal policy would essentially be mechanical, and central bankers, in John Maynard Keynes' (1931, pp. 373) phrase, 'humble, competent people, on a level with dentists'. Greenspan is widely acknowledged as a great central banker. Surely, he is more interesting than a dentist. Why is he invited to address the AEA? It is because the simple characterisation of monetary policy above misses much of what is essential about the monetary policy process ─ that is, learning, judgement about risks and communication – in the face of pervasive uncertainty.

The first part of the paper provides a summary of the Federal Reserve's management of the US economy during Greenspan's tenure as FOMC chairman. Although policy-makers can take some credit for keeping a firm hand on the monetary tiller, Greenspan acknowledges that: '…monetary policy in the post-Volcker era has been operating in an environment particularly conducive to the pursuit of price stability.' This has happened for three reasons:

i) increased political support for price stability;

ii) increased competition as a result of globalisation; and

iii) rising productivity growth, which has helped to subdue cost-push pressures.

There has also been a favourable monetary policy environment in the United Kingdom since the early 1990's, where we have enjoyed what can be described as a NICE (non inflationary consistently expansionary) decade. Will the favourable environment continue? There seems no sign of an end to higher productivity growth in the United States, nor to the impact of globalisation on competition in products for manufactured goods. But will the political support for price stability continue? Much of it derives from the experience of high inflation in the period from the late 1960s to the early 1980s. Some of you in the audience are too young to belong to the 'inflation generation'. One of the continuing responsibilities of a central bank is to build a constituency for price stability.

I shall comment briefly on three aspects of the paper:

- the 'risk management' approach to monetary policy-making;

- the discussion of how monetary policy should respond to asset prices;

- the discussion of inflation targeting.

1) The 'risk management' approach:

Greenspan defines the approach by saying that policy makers should look at a range of 'risks' to output and inflation; and give due consideration to those risks when setting policy. He argues that policy makers cannot just rely on the forecasts from a structural model of the economy when even deep parameters are drifting. They should also use their judgement; compare current experiences with previous, similar episodes; and continually test and update a range of reduced-form models, which should help give some insight into how the economy is evolving.

This is the approach taken at the Bank of England, where the Monetary Policy Committee takes into account the entire distribution of future outcomes for inflation and output when setting interest rates. A 'fanchart' for its forecasts of both inflation and output is published in the quarterly *Inflation Report.*

Greenspan suggests that the 'risk-management approach' is an application of Bayesian decision making when there is uncertainty about the true model of the economy. Policy that is optimal in one particular model of the economy may not be 'robust' across a class of other models. In fact, it may lead to a very bad outcome should an alternative model turn out to be true. Model uncertainty might be high at present: increasing globalisation and competition may be changing old-established economic relationships.

Of course, although such an approach is sensible, it is still vulnerable to policy makers giving excessive weight to misleading models of the economy. Greenspan's description of the current 'risk management' approach sounds similar to Timothy Cogley and Thomas Sargent's (2003) description of why the Fed failed to tighten policy in the 1970s. Even though the 'most likely' model of the economy at that time (the 'Lucas-Sargent' model with long-run neutrality) favoured a sharp policy tightening, the expected loss in competing models (with a long-run trade-off between output and inflation) was large. So a Bayesian decision maker would have behaved exactly as the Fed did, keeping policy looser than 'optimal' in the 'most likely' model.

This is not dissimilar to the monetary position in 2003. Greenspan provides a convincing explanation of why policy should be looser than 'optimal' in order to avoid the risk of deflation.

But, in the end, there is no escaping the need to make judgements about which models are more plausible than others.

2) Asset prices:

Greenspan argues that asset prices are not targets in themselves, but they are an important part of the transmission mechanism. I agree. In the United Kingdom, we have also had to deal with our fair share of large movements in asset prices during recent years - a 20% rise in the effective exchange rate in the late 1990s and, more recently, house prices rising at more than 25% per annum. This, of course, is in addition to the rapid rise and fall in equity prices during the past five years. Recent Bank of England policy has arguably been similar to that of the Federal Reserve, which is described by Greenspan as 'mitigat[ing] the fallout when it occurs'. It is hard to forecast asset price movements accurately or to identify asset price 'bubbles'. Even if we could identify them, it is not clear how effectively we could in practice control them. Greenspan points out that most of the tightenings during his period of chairmanship were followed by a rise in equity prices, leading to the conclusion that only a severe rise in short-term rates, and the associated economic downturn, would have been able to keep the stock-price 'bubble' in check.

There is agreement in the literature that a central bank should care about asset prices *at least* to the extent that they influence inflation and output. There is less agreement on whether it should respond directly to asset prices (Ben Bernanke and Mark Gertler (2001), Steven Cecchetti et al (2000)).

Within an inflation-targeting framework, a forward-looking central bank would bear in mind how asset-price movements affect output and inflation forecasts. Mervyn King (2002) and Charles Bean (2003) argue that the horizon over which inflation is brought back to target may need to be extended to prevent a build-up of financial imbalances. This may mean that the central bank is willing to sacrifice a small deviation from the inflation target in the short run in order to mitigate the risk of a larger deviation of inflation further ahead.

3) Inflation targeting:

Greenspan notes that the actual behaviour of central banks does not vary too much, regardless of whether they have an explicit inflation target or not. This is consistent with the view in King (1997) that any (coherent) monetary policy can be written as an inflation target plus a response to (supply) shocks. One difference, though, is the willingness in inflation-targeting countries to be explicit about the long-run inflation rate that constitutes price stability.

Inflation targeting allows a central bank to get (close) to the optimal state contingent rule by a process of 'constrained discretion'. The framework allows for a flexible response to supply shocks. Although Greenspan believes that there is no firm evidence that the announcement of an inflation target necessarily increases credibility, he acknowledges that the Bank of England's experience in anchoring inflation expectations has been encouraging.

In the United Kingdom we found that an inflation target brought three advantages. I do not claim that all, or indeed any, of these are relevant to the United States.

First, an inflation target is useful in establishing the political legitimacy for an independent central bank, especially when taking unpopular decisions. Politicians and voters are reminded of the framework of monetary policy to which they have agreed.

Second, an inflation target helps the transparency and accountability of monetary policy. In explaining to the public the risks to the outlook for inflation and output growth, it is helpful for the central bank to describe them in terms of deviations of outcomes from a central target. Many households are used to probabilities, for example in weather forecasts. There is no reason for their finding difficulty in understanding statements of the kind, 'the probability that inflation will exceed the target over the next two years is x percent'. So a target helps the transparency of policy when the reasons for decisions on interest rates are being explained to

the wider public. A target also helps when assessing *ex post* explanations of the behaviour of inflation, and so makes it easier for policy-makers to be held to account. Shocks of various kinds mean that inflation will hardly ever be precisely at the target, but it is difficult to appraise the explanations provided by the central bank if the public do not know the value of the target.

Third, a target makes it easier to manage inflation expectations. As Michael Woodford (2003) points out, inflation expectations are central to monetary policy. A numerical target helped to convince agents that the Bank of England was serious about meeting its target, and that therefore bargains on wages and prices should also take that target seriously.

In the end, however, what central banks have in common is more important than what divides them. The essential steps in constructing monetary policy common to central banks today are the following. First, a recognition that the lags in the transmission mechanism mean that policy must be forward-looking. Second, such a policy requires a forecast. A forecast is about probabilities, not point estimates. The key to communicating policy is to explain the nature of the risks to the outlook for inflation and output. Third, since policy is decision-making under uncertainty, it is pre-emptive and can be described as risk management. Some policy decisions in recent years, both in United States and United Kingdom, were seen as taking out insurance. Fourth, the policy reaction function will change over time as we learn about changes in the structure of the economy. Subject to that, however, the reaction function should be as predictable as possible. That is why central banks today give much weight to the need to provide reasons for their decisions and to explain both what we know and what we do not know. It is crucial to recognise the limits to our knowledge, and to do our best to explain that to the wider public. If we are successful, then policy decisions may

not be popular but they will be predictable. And that is the way successfully to anchor

inflation expectations.

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