Central Bank Forecasting

By C. Goodhart

Financial Markets Group

London School of Economics

Perhaps fortunately, no one knows the future

Assumption in most forecasts is that the distribution of possible outcomes has a single-peaked mode, and is often, but not always, symmetric around that.

Often not the case. Many contexts have a double peak. Either Trump or Biden wins the election. Either the war in Ukraine continues, or it ends. Assuming that the forecast should involve 50% of each eventuality would not be very plausible or likely.

Even if after taking proper account of all the likely risks, one still believed in a single peaked forecast, the probability of getting close to that outcome must be very low.

Concentrating on the single peak forecast is easy for observers, e.g. politicians, journalists, etc., to assimilate, but tends to lead towards focus on forecast errors, rather than changing risk outcomes.

Mervyn King tried to correct for this by developing the fan chart approach, with emphasis on both the scale of spread and skew. Turned out to be a gallant failure. Mark Carney ignored it. Not much note taken of Huw Pill's attempt at reinstatement. Not much used elsewhere.

Is a single-peaked forecast internally consistent with Central Banks claiming to be ‘data dependent’? If you are data dependent, it implies that forecasts should be adjusted as the various risks play out.

But when are, and should, CBs *not* be data dependent? Would that imply such confidence in the forecasting model that deviations of outcomes from predicted values are treated as transitory and/or erroneous? Would that be a sensible procedure?

What, however, would be a, hopefully better, alternative to the present methodology? One such would be to focus on key risks, and do scenarios for each pair of risks, e.g. real wage rigidity vs no such rigidity.

It would, however, be important to focus on an even number of risks. The Fed staff used to give the Board three scenarios, (Optimistic, Central and Pessimistic). Naturally everyone focussed just on the central forecast (as intended) and we immediately get back to a single-peaked forecast.

Observers would then immediately ask what was the relative probability of each risk scenario. It would be good if they should estimate that for themselves. The CB will much of the time not have strong confidence in any such numerical probabilities. As earlier noted, the process of giving risks in scenarios numerical weights with the aim of getting back to a single peaked forecast is not helpful.

At present the Bank of England uses market forecasts of future official short rates in its single-peaked forecast. This has been attacked, e.g. by Lars Svensson, as potentially inconsistent with BoE's own expectations. My guess is that Ben Bernanke will recommend that the BoE switch to the US dot plot approach. While this also has deficiencies, (e.g. what is the cause of the spread?), it would be well suited to a risk/scenario approach.

If one of the purposes of a scenario/risk-based approach is to focus on changing risk structures, rather than deviations from a single peaked forecast, would this make a CB less democratically accountable? My answer would be *not so*. The CB would still be accountable for hitting the inflation target, after responding to unforeseen shocks, over time.

The balance of responsibility for (persistent) failure to hit the target between unforeseen shocks and poor forecasts is always difficult to assess (as now), but having a risk scenario approach, rather than a single peaked forecast, might make this exercise easier, rather than more difficult.

What would happen if senior politicians, familiar with simple single-peaked forecasts, should instruct the CB to go on producing them? Let us cross that bridge when we come to it.