## GETTING TO THE (non-decimal) POINT

We should be sceptical of spurious accuracy in economic forecasts. Economists have an important contribution to make – but they would be listened to more if they understood their own limits, says **PHILIP BOOTH** 

f you google "economic forecasts", you will get 27,000,000 responses.

Many readers of this column might wish to have a career in forecasting. But, it is important for any expert to know their limits.

It could be argued that economists "oversell" themselves and pretend they can predict things which they really cannot predict. If economists had a proper professional body, this would be a serious matter. If a lawyer, for example, practises outside their area of competence, they can be taken to task by their profession.

Certainly, economic experts did not come off well in the financial crash.

The fact that most mainstream economists missed the signs of the crisis and did not forecast it is well known.

Indeed, it is so well known that, in November 2008, HM Queen visited the London School of Economics and asked about the crash: "Why did nobody notice it?".

That was a good question. The first sentence of the last Bank of England Financial Stability Report issued before the financial crisis started in the UK read: "The UK financial system remains highly resilient."

Just as the crash was not predicted, forecasters hardly covered themselves in glory.

In 2009, the Bank of England believed that there was a negligible probability of inflation rising over 4 per cent within two years. In fact, it rose to 5 per cent.

The over-estimate of growth figures by the OBR after its inception in 2010 was enormous. This was not equal and opposite errors in every year, suggesting that the timing of growth was different from forecast, but errors in the same direction year-after-year. In other words, something was missing in the model.

Further errors were made around the Brexit vote. Just before the Brexit vote, the Bank of England expected the economy to grow by 2.3 per cent in 2017. After the Brexit vote, they

adjusted that to 0.8 per cent before upgrading the forecast to 1.4 per cent in November 2016 and 2 per cent in February 2017.

There are at least two overlapping problems when it comes to economic forecasting.

The first is that economists focus in their thinking on what is measurable rather than on what is important.

The second is that economists have come to both over-value formal modelling and over-value spurious precision in modelling. These were important topics discussed by F. A. Hayek, not least in his Nobel laureate lecture.

## Don't ignore the difficult to measure

Let us take the example of monetary growth and inflation.

Presciently, Mervyn King noted back in 2002 that central bank models do not include money despite money being the main driver of inflation.

King, who became Governor of the Bank of England in 2003, said he believed inflation was a disease of money and that there were real dangers in central banks relegating money to a 'behind-the-scenes' role.

How right he was. Indeed, at least in the US, excess monetary growth almost certainly contributed to the asset price inflation that was a cause of the crash.

Mervyn King was an expert, but he was an expert who knew that what was not in the model was more important than the variables that were modelled. Unfortunately, central banks – including his own – did not heed his advice.

The reason that macro-economic models do not include money is that the relationships between the supply of money and the economy are not easy to model.

Typical models based on aggregate demand and supply and output gaps are easier to construct and test. But, in focusing on what is measurable, such models miss what is important.

## **Know your limits**

Modelling in economics is not like modelling physical sciences.

Économic outcomes depend on the behaviour of seven billion people all with a will of their own. Economists over-estimate their ability to model with accuracy, but what economists can judge is "tendencies" or "patterns".

We know that a minimum wage will probably increase unemployment. However, we don't know by how much, amongst which groups, over what timescale, and so on.

There are too many factors and interactions to understand the magnitude of the effect with any precision. Will people try to work more if there is a higher minimum wage? Will companies lay off workers, reduce hours, reduce fringe benefits or try to work employees harder?

Will labour intensive industries gradually be replaced by more capital-intensive competitors? Will immigration reduce – or perhaps increase?

The range of questions that have to be considered to understand the precise impact of a policy change is enormous and beyond economic modelling.

Indeed, in an era when economists are wheeled out more and more to present their forecasts, in the physical sciences it is being appreciated that we know less than we thought we did.

It is very clear, for example, that the impact of man-made climate change is very difficult to predict. Just to give one example, it now appears more likely that climate change will lead British summers to be wet and windy rather than hot and dry – but views on that might change again. What will happen to winters is anybody's guess.

These things depend on the interaction between the Gulf Stream, the melting of the polar ice caps, the position of the jet stream and the salt content of sea water. Something is likely to happen, but quite what and to what extent, we don't know.

A good dose of humility would be good for economic modellers. Perhaps a bit more focus on theory and less on number crunching would help them understand better what the effects of policy changes will be.

Economists should not need to pretend that we can predict things that do not really matter to several decimal places to justify our value to the world

After all, the really big questions, such as "what institutional frameworks best promote economic development for poor people?", do not require answers to three decimal places.

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