Global Counsel

Sizing up the British economy

Blog post by Chief Economist Gregor Irwin, 19 January 2018

Are economic statistics – such as for inflation, growth and productivity – no longer reliable? And if not, what does this mean for economic policy and for businesses?

These questions are being asked, again, following the publication of a research paper highlighting problems measuring growth in the UK's telecoms sector, which has been picked up by the FT's Chris Giles.

The paper looks at how the Office of National Statistics estimates price changes in the sector. The official estimate suggests prices fell by 2 percent from 2010 to 2015. Alternatives proposed by the authors estimate price decreases of between 35 and 90 percent. The implication is that the real growth rate of the sector – and the productivity of labour employed within it – may have been substantially under-estimated. It's not hard to imagine similar problems in at least some other sectors, calling into doubt aggregate measures and raising questions about how accurately the UK's economic performance is being assessed.

Measuring price changes may sound easy, but it's actually very hard when the nature of the product is changing. That's exactly what has been happening in the telecoms sector – and quite a large part of the rest of the economy.

The underlying problem is how to define the product or service, and measure its quality, not to mention the challenge of attaching a suitable weight to it when producing aggregate statistics.

This is conceptually difficult when the pace of innovation is high and consumer behaviour is changing rapidly, shifting the contours of markets to such an extent that consistency, or even something just approximating it, becomes an unobtainable ideal.

In the case of the telecoms sector, even defining the product is hard. Is it call time, broadband speed, data, or something else?

But these problems are not confined to the telecoms sector. For example, do statistics agencies really have a grip on how the quality of cars has improved, when it may be factors like environmental performance that really matters for some consumers? When more people increasingly want to buy experiences, rather than goods, how can quality be measured consistently over time? In a world where some of the digital services that many consumers highly value are free, or at least appear to be, how is this to be accounted for?

There is no single conceptually correct way to address these problems, as the telecoms paper makes clear. There are also plenty of financial and practical constraints on what statistics agencies can do, which is why they estimate from samples, often with a lag, rather than measure everything precisely.

What is important, is that there is no bias in the estimates, and this is where the UK statistics (and those of other countries) may be getting it wrong, with implications both for policy and for business.

The bias potentially comes because conventional approaches tend to use old patterns of consumption as their baseline, meaning they don't account for the better value consumers receive, at a given price, by substituting towards newer goods or services. That problem is not new – but is becoming more serious, as modern economies are now more about wifi than widgets, with products and services becoming more complex and the pace of change increasing. It's also likely that some economies will be more affected than others by this bias, given differences in their economic structures.

This adds up to a headache for the ONS, as Chris Giles' points out. The ONS plans to make changes to its national accounts methodology in 2019, but has never made backward-looking revisions to its consumer price inflation index before. There are good reasons for that, as it plays an important role in the indexing of pensions, welfare payments, and commercial contracts.

If there is a material bias in the figures – and for now this must remain an open question – then the implications for government policy are widespread, spanning monetary, fiscal and industrial policy. Just ask Chancellor Philip Hammond, whose budget last November was heavily constrained by revisions to the growth forecast, because the Office of Budget Responsibility concluded the outlook for productivity is bleak. Or Business Secretary Greg Clark, who must decide where to focus the government's efforts when striking sector deals to improve the UK's productivity performance. These are serious policy choices, which are being based on questionable data.