

## Post referendum developments in uncertainty measures: an update

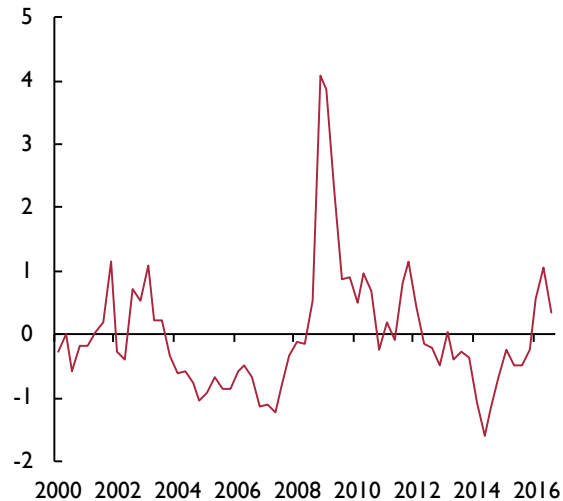
The run-up to the referendum on the UK’s membership of the EU and the period immediately following saw a surge in various measures of uncertainty in the UK economy. This is important in shaping the UK’s economic prospects since the consensus among economists is that firms tend to delay investment plans in response to elevated uncertainty. Bloom (2009) finds that heightened uncertainty leads firms to delay investment and hiring and results in diminished productivity growth as relocation of resources from low to high productivity firms is hindered. This box is an update to ‘Recent developments in uncertainty measures’, Box F in our August Review (NIESR, 2016). See this analysis for further discussion on the impact of uncertainty on the macroeconomy.

Our quarterly composite uncertainty index peaked at just over 1 standard deviation in the second quarter of 2016 (figure 1). This compares to a peak of over 4 standard deviations at the height of the financial crisis. In the third quarter, the index subsided to one third of its level in the previous quarter. This fall was largely driven by a significant drop in sterling 3-month option implied volatility, but FTSE 100 volatility also fell over the same period (figure 2). While the CBI uncertainty measure rose slightly, it remains below its long-run average level.<sup>1</sup> The only component to show a significant increase in uncertainty in the third quarter is the text-based economic policy uncertainty index.<sup>2</sup> This may, however, merely reflect an increase in media attention to policy uncertainty, perhaps self-referentially, rather than a true increase in uncertainty. This also highlights the deeper question of what these measures are capturing – be it fear, perceptions of uncertainty, or a combination of these and other factors.

Data on FTSE volatility and sterling 3-month option implied volatility, which are available at a daily frequency, show increases in October 2016 following Theresa May’s announcement that Article 50 will be triggered before next April (figure 3).

The uncertainty measures that our index is derived from are volatile and thus we cannot infer from the recent fall that uncertainty is on a downward trajectory. The exact timing of spikes in measures of uncertainty is unpredictable. Inevitably any path we assume for the future evolution of our uncertainty index will be far smoother than the reality of outturns. It is not inconceivable that uncertainty rises over the coming months, as we converge on and immediately after the triggering of Article 50, especially in the absence of information on the government’s negotiating strategy or objectives.

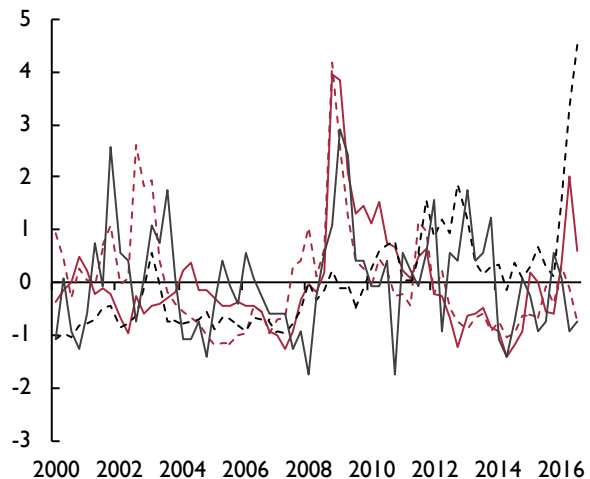
Figure 1. NIESR uncertainty index, quarterly



Source: Author’s calculations.

Note: Derived from principal component analysis. The series is an index with mean 0 and standard deviation 1

Figure 2. Measures of uncertainty

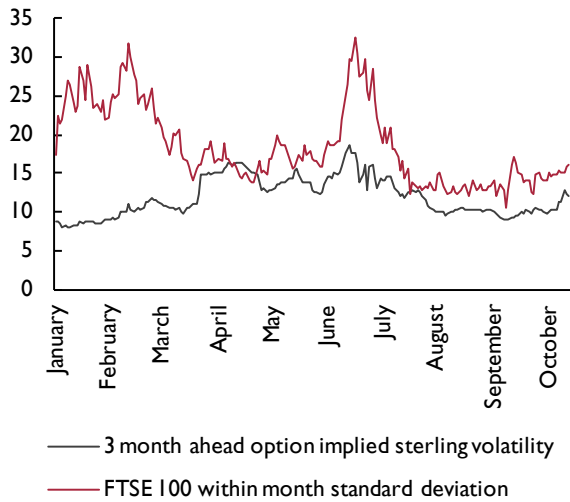


- FTSE 100 within month standard deviation
- 3-month ahead option implied sterling volatility
- Economic Policy Uncertainty
- CBI uncertainty score

Source: Thompson Reuters datastream, www.policyuncertainty.com..

## Post referendum developments in uncertainty measures: an update (continued)

Figure 3. FTSE 100 volatility and sterling volatility in 2016, daily frequency



Source: Thomson Reuters datastream.

### Notes

- 1 The CBI uncertainty measure is the 'Uncertainty about demand' score from the question 'What factors are likely to limit your capital expenditure authorisations over the next twelve months' in the Confederation of British Industry's (CBI) Quarterly Industrial Trends and Service Sector surveys.
- 2 More information on this index can be found at <http://www.policyuncertainty.com/index.html>.

### References

- Bloom, N. (2009), 'The impact of uncertainty shocks', *Econometrica*, 77(3), pp. 623–85.
- NIESR (2016), 'Recent developments in uncertainty measures', *National Institute Economic Review*, 233, pp. F69–71.

This box was prepared by Rebecca Piggott.