in brief...
Brexit: the impact on prices

In the wake of last year's referendum, what has been happening to consumer prices and real wages in the UK? **Josh De Lyon**, **Swati Dhingra** and **Stephen Machin** have collated and analysed data on price inflation before and after the vote to study whether there is any empirical connection between Brexit and consumer prices.

Both before and after the UK's referendum on membership of the European Union (EU) in June 2016, a number of research reports have estimated the likely economic impact of Brexit (see, for example, Dhingra et al, 2017a, 2017b). Typically, these studies have either been based on theoretical modelling or, if they drew on data, they have only used information from before the vote.

Now, however, some post-referendum data are available. Here, we report early results from our research on the evolution of consumer prices in the UK in the wake of the vote. We also show how the observed price changes are affecting trends in real wages.

We find that price inflation in the UK has risen relative to Eurozone economies in the period following the referendum.

Following the referendum, there has been a significant rise in consumer prices, particularly food prices

In turn, this has caused annual real wage growth once again to become negative.

The pattern of significantly higher price inflation is shown in Figure 1. This plots the annual consumer price index (CPI) before and after the Brexit vote, comparing the UK with what has happened in the 19 Eurozone countries. To a large extent, the CPI growth rates of both the UK and Eurozone move together, with both being driven by worldwide commodity prices.

The index is a cumulated annual index and so only shows the full effect of the referendum from May 2017, when it is no longer diluted by pre-referendum data. Taking this into account, the spike observed shortly after the referendum is significant. It is likely to have been driven by the devaluation of sterling, which occurred immediately after the referendum result.

The full effect is indicated by the divergence of CPI annual growth rates between the UK and the Eurozone a year after the referendum. This divergence in consumer price inflation partly reverses the convergence in price changes that occurred in the single market, when price dispersion of tradable goods started to converge to levels seen across US cities by the mid-1990s (Rogers, 2001).

Figure 1:
Consumer price inflation trends pre- and post-Brexit vote

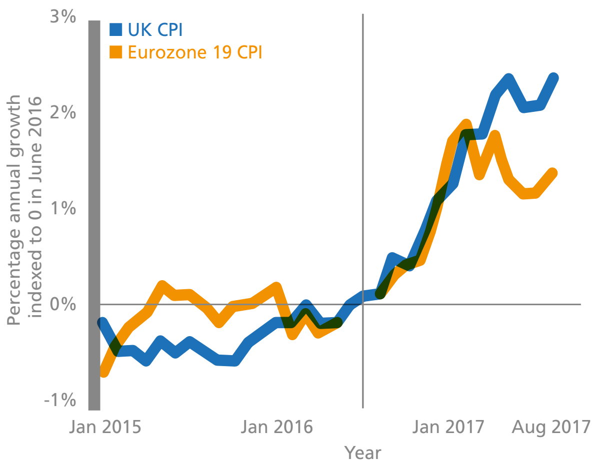
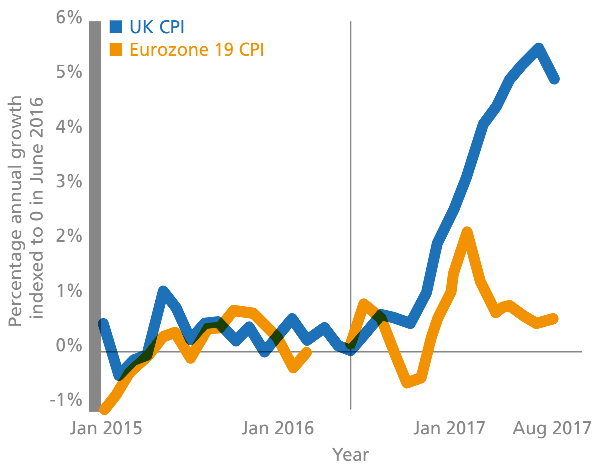


Figure 2:
Food consumer price inflation trends pre- and post-Brexit vote



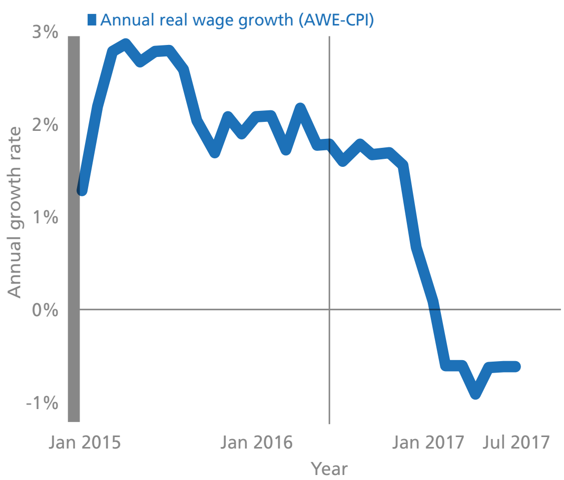
For certain commodity groups, the increase in the CPI growth rate has been more pronounced. Figure 2 presents the annual growth rate of CPI where the sample of goods and services is restricted to food. There is a distinct and substantial rise in the rate of CPI food inflation for the UK relative to the Eurozone.

The divergence that immediately followed the referendum is quite a bit larger than that observed for all goods in Figure 1, and becomes larger when amplified over time. This has important implications for how the vote has affected the purchasing power of different income groups. Low-income households spend a higher proportion of their income on food than rich households.

The UK experienced several years of real wage falls following the financial crisis of 2007/08, but in the period before the referendum, real wage growth in the UK had become positive (see Blanchflower and Machin, 2016; Blanchflower et al, 2017). This arose because of very low inflation, not because of any strength in nominal wage growth (which seems to have become stuck at a norm of 2% per year since the start of the decade).

But the increase in prices following the Brexit vote coupled with no significant rise in nominal wages has again caused real wage growth to become negative. This is shown in Figure 3, which indicates that the real wages squeeze is back because of the post-referendum price increases.

Figure 3:
Real wage trends pre- and post-Brexit vote



By the end of our data period, the price increases following the referendum have now fully appeared in the annual index. It seems that the Brexit vote has caused a one-off rise in prices, and that the annual growth rate of prices will begin to fall out of the index once it no longer includes the months that immediately followed the referendum.

Overall, this research points to a significant rise in prices occurring after the EU referendum. Future work that builds on these initial findings will quantify the role of the devaluation of sterling by focusing closely on price changes for imported goods and services.

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Further reading

David Blanchflower and Stephen Machin (2016) 'The Current 2% UK Wage Growth Norm', CEP Real Wages Update (http://cep.lse.ac.uk/pubs/download/rwu005.pdf).

David Blanchflower, Rui Costa and Stephen Machin (2017) 'The Return of Falling Real Wages', CEP Real Wages Update (http://cep.lse.ac.uk/pubs/download/rwu006.pdf).

Swati Dhingra, Hanwei Huang, Gianmarco Ottaviano, Joao Paulo Pessoa, Thomas Sampson and John Van Reenen (2017a) 'The Costs and Benefits of Leaving the EU: Trade Effects', CEP Discussion Paper No. 1478 (http://cep.lse.ac.uk/pubs/download/dp1478.pdf).

Swati Dhingra, Stephen Machin and Henry Overman (2017b) 'The Local Economic Effects of Brexit', CEP Brexit Analysis No. 10 (http://cep.lse.ac.uk/pubs/download/brexit10.pdf).

John Rogers (2001) 'Price Level Convergence, Relative Prices, and Inflation in Europe', FRB International Finance Discussion Paper No. 699.