

# Disentangling the UK productivity problem

[mainlymacro.blogspot.fr/2017/11/disentangling-uk-productivity-problem.html](http://mainlymacro.blogspot.fr/2017/11/disentangling-uk-productivity-problem.html)

Simon Wren-Lewis, 28 November 2017

As it has become clear to the non-FT/Economist media, and as it has been clear to economists for a long time, productivity growth is a far more important problem for the UK than the deficit. However I think discussion can get confused if it fails to distinguish between three aspects to the problem.

First, the UK is not alone in seeing large falls in productivity growth. Now some of that may be related to the global financial crisis, but not all of it is. As this chart taken from the [excellent](#) paper by Richard Jones shows, in the G7 productivity appears to have been declining since at least the 1980s.

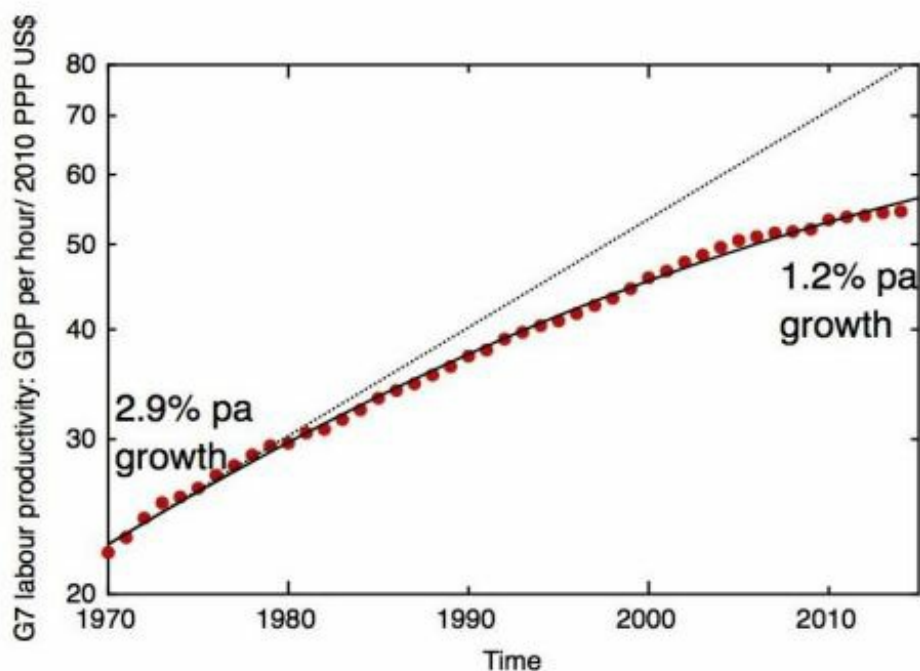


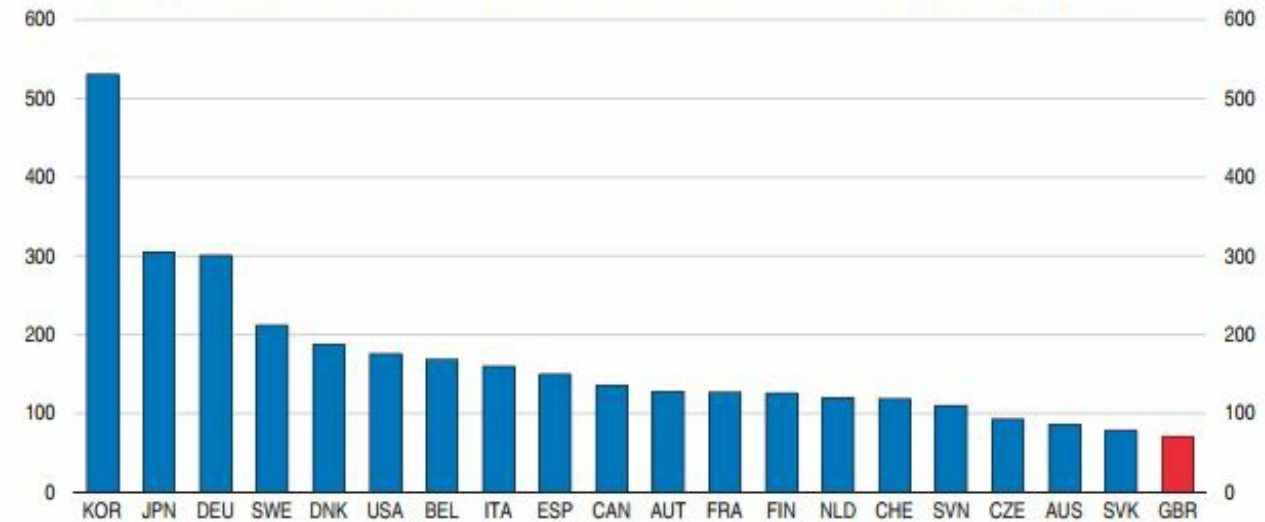
Figure 2. Labour productivity across the G7 group of nations – GDP per hour worked, currencies converted at purchasing power parity and expressed as constant 2010 US\$. The fit (solid line) is a logistic function, corresponding to an annual growth rate of 2.9% in 1970, dropping to 1.2% in 2014. OECD data.

For simplicity's sake I will call that the global productivity decline.

The second element in the UK's productivity performance is a structural weakness relative to other countries. I know of no better way of convincing you this exists than this chart, taken from the latest OECD [survey](#) of the UK economy.

Figure 23. **Industrial robot density is low**

Number of multipurpose industrial robots (all types) per 10 000 employees in the manufacturing industry, 2015

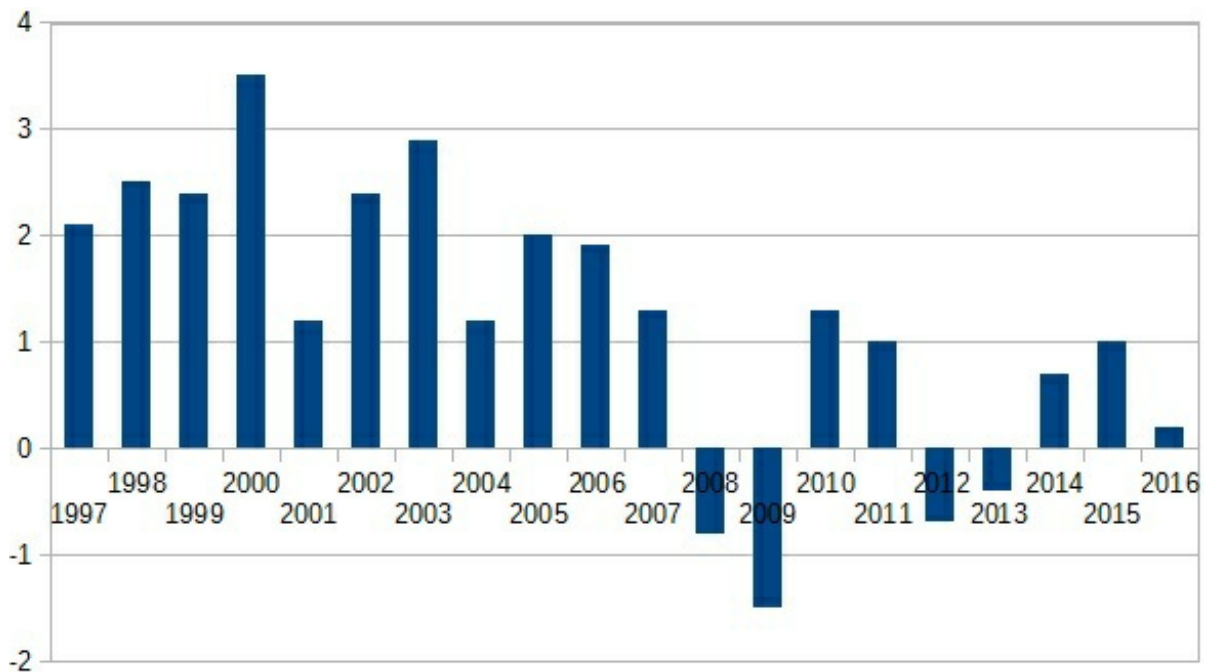


Source: International Federation of Robotics (IFR).

StatLink <http://dx.doi.org/10.1787/888933601056>

The robots may be coming to take our jobs, but at this rate UK manufacturing will be the last place this will happen. As this report and the Jones paper also show, the UK's R&D expenditure is weak and below the OECD average. Polly Toynbee [shows](#) it is no better on the workforce training side. [1]

I am fairly sure, however, that what we have seen since the Global Financial crisis is an additional third weakness. Here is the annual growth in UK output per hour.



The historic trend, which showed no clear sign of following the global trend and declining after 1980 (a clear UK success), is around 2.25%. Now it is clearly possible to argue that this data shows a decline from this long run trend starting in the mid-2000s based on this aggregate data. If you factor in as well that these aggregate numbers are flattered by unsustainably fast productivity growth in financial services from 2001 to 2006 then you can maybe detect the beginning of a slowdown from the start of the millennium. This would not be surprising, as

it would be very hard for the UK to buck the slowdown in global productivity for very long.

Having said all that, what happened after the Great Recession is something quite different. But it is wrong to view this period as just one of constant zero growth gloom. Productivity began to recover in 2010 and 2011, to levels that do not look too bad by international standards, but hit negative territory in the following two years. Another, this time more modest, two year recovery was followed by another collapse in 2016. This does not look like just the global productivity decline plus some additional structural weakness. Achieving negative productivity growth two years running indicates a deeper malaise.

This is why I think there is a third factor behind this terrible performance. To explain it we need to start thinking about productivity growth as not some kind of manna from heaven, churned out by our universities, or even the product of R&D by firms, but also as something akin to an investment. If you are confident of future growth and profitability, you are more likely to invest in productivity improvements (which may or may not involve physical investment) than if you are unusually uncertain or gloomy.

After recessions are over, productivity usually picks up. Firms understand the business cycle, and in UK business cycles over the last 40 odd years recessions are followed by strong growth. So when recessions have levelled out, it makes sense for firms to invest in productivity improvements. That is one reason why productivity growth resumed in 2010 and 2011. The only problem is that something quite unexpected happened. Growth did not return at all. At one stage people were talking about a second UK recession. Firms became both uncertain and gloomy, and productivity growth stopped. That shock, which we can reasonably call austerity, was the first shock that hit the economy after the GFC.

By 2013 it looked like the recovery had finally arrived. Productivity growth could resume, but maybe more cautiously than before. And that caution was justified because in the election of 2015 a new uncertainty arose: the possibility of Brexit. Brexit would be one of the most profound shocks to hit the UK for decades: certainly for firms involved in trading or international supply chains and probably wider than that. Just as the costs of waiting are small for a large investment decision when there is serious uncertainty, so Brexit meant that productivity improvements would once again be put on hold.

Thus we have three aspects to the UK's productivity slowdown. The first is the global slowdown, which we managed to avoid for two decades but no longer. The second is a long term structural weakness in developing and applying new technology. The third is the impact of two shocks, austerity and Brexit, which has caused UK firms to put productivity improvements on hold and become very gloomy about the UK's future. I somehow doubt that we can start doing something about the UK's long term structural weaknesses while we continue to shoot ourselves in the foot with crazy policies like austerity or Brexit.

[1] If you think the budget made a significant difference to all this, read Anna Valero [here](#)