

Is US productivity (finally) perking up?

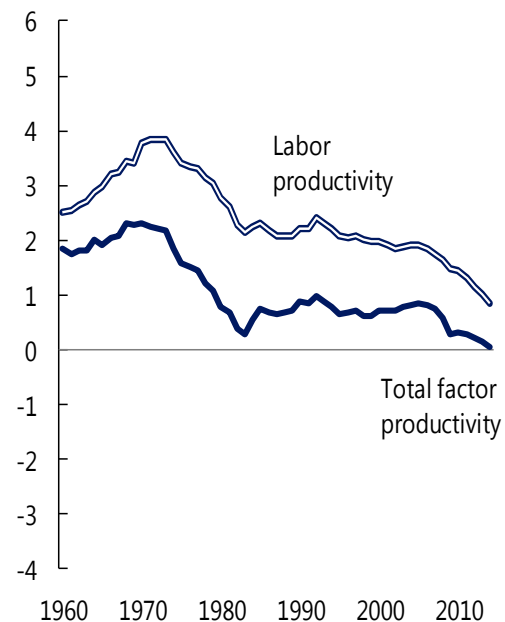
by GAVYN DAVIES*

The slowdown in productivity growth in the advanced economies in the past decade has been caused by a mixture of long term structural factors and shorter term problems caused by the Great Financial Crash. These latter problems should begin to abate as the financial sector, and risk appetite among corporate investors, returns to normal, allowing capital investment to recover. For a long period, the recovery in global GDP proceeded without any sign that these improvements in productivity were taking place. However, there are now some tentative indications of some acceleration in underlying productivity growth in the US, the leading economy in the global cycle. This supports the stronger growth in real output which we believe is emerging in the US this year, despite the weak GDP figures in the first quarter.

Growth in total-factor productivity in the advanced economies (i.e. the efficiency of labour and the capital stock combined) has fallen to zero in recent years, compared with a little below 1.0 per cent a year in the decades immediately before the Great Financial Crash. Growth in labour productivity (i.e. output an hour worked) has fallen even more (see Figure1). This collapse in TFP and labour productivity has been by far the main cause of the disappointing growth in GDP in the advanced economies since 2008.

Actually, the productivity “puzzle” is not so much of a puzzle, as a new study by IMF economists (Furceri et al., 2017) clearly demonstrates. In the long run, structural forces have been reducing productivity growth since the 1960s. These include slower rates of technological advance, the ageing of the population and slower advances in education. It is also possible that there has been some increased mismeasurement of inflation that has in turn resulted in underestimates of real output and productivity.

Figure 1: Advanced economies (10-year growth rates)

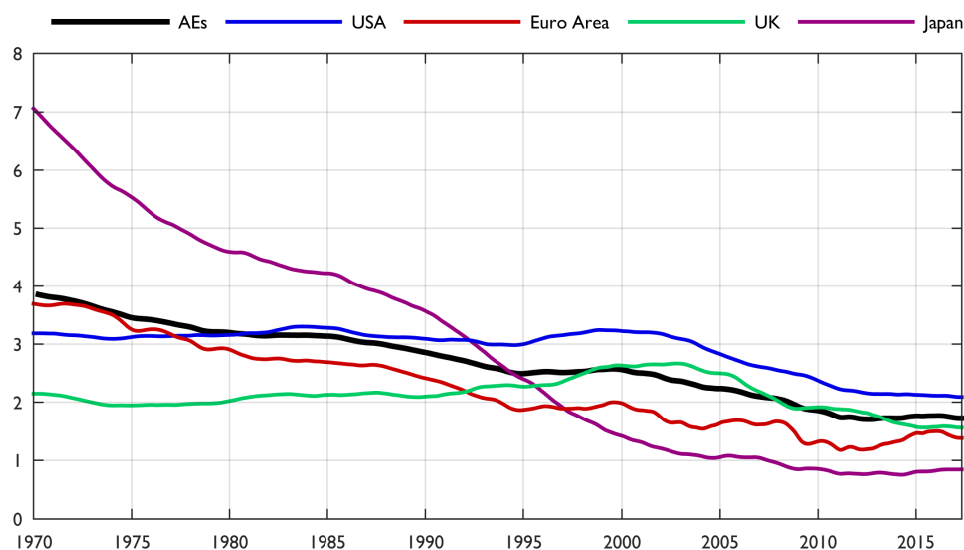


Source: IMF

The effects of these forces were in evidence well before the GFC, and they are still inexorably getting worse. There is no good reason to expect any improvement in these structural trends in the near future.

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Figure 2: Fulcrum Estimate of Long Run Growth (% MoM Ann.)



Note: Advanced Economies (AEs) is the PPP aggregate of USA, Japan, Germany, UK, France, Italy, Spain, Canada, Norway and Sweden.

However, there are also many reasons why productivity growth may have been temporarily affected by changes in economic behaviour since the GFC. Strained corporate sector balance sheets and a dysfunctional banking sector have weakened capital investment and led to slower implementation of technical advances and a misallocation of capital to zombie companies.

Elevated policy uncertainty and risk aversion among corporate management has added to the decline in capital investment. The recent IMF paper provides evidence that many of these forces have been significant in the advanced economies since 2008.

Some of these headwinds caused by the GFC should have become less powerful as the economic recovery has progressed, especially in economies such as the US and the UK, where labour markets have fully returned to normal. Until recently, however, there has been barely any sign of productivity turning a corner, and recent downgrades to global GDP

projections have been driven entirely by renewed disappointments on the productivity front.

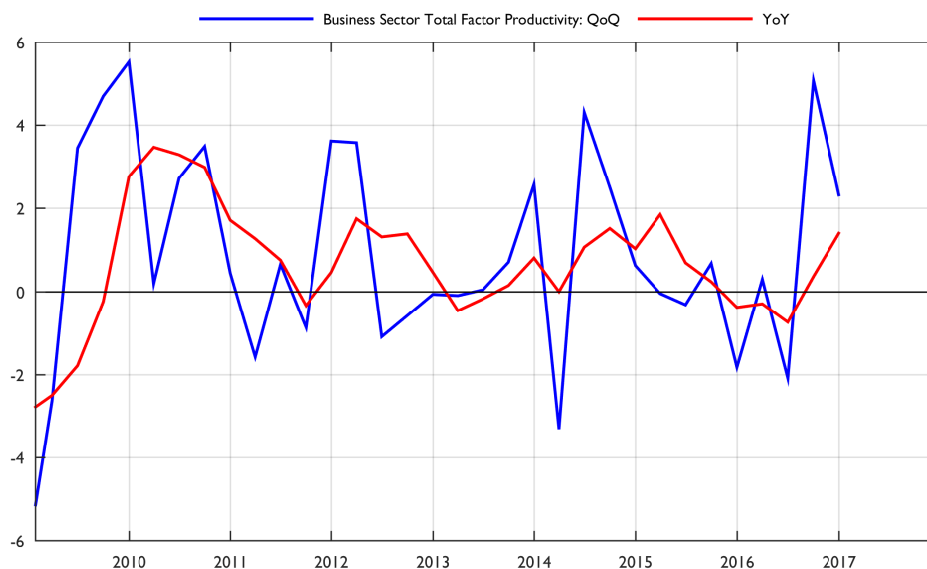
With US labour utilisation having little further room to grow, productivity has now, for the first time since 2008, become the main constraint on the GDP growth rate. US Treasury secretary Steven Mnuchin has set a target for “sustainable” GDP growth at 3 per cent a year, but this certainly cannot be attained without a big recovery in productivity growth.¹ Fortunately, there are finally a few early signs that productivity might be starting to recover in the US, which is the economy where we would expect to see the headwinds disappear first.

Trend growth in global GDP stabilising

The dynamic factor models used by Fulcrum to estimate “nowcasts” for the big economies also produce real-time estimates of long-term underlying growth rates in real GDP. Figure 2 shows latest results for the main advanced economies.

¹ “Mnuchin Calls IMF’s U.S. Forecast Conservative as He Chases 3%”, Bloomberg News, 22 April 2017.

Figure 3: Tentative Signs of Better Productivity Growth in US Official Data



Sources: Federal Reserve Bank of San Francisco/Haver Analytics.

The decline in the long-run trend in GDP growth, driven by lower productivity growth, is clearly visible. The good news is that the advanced economies' trend seems to have stopped falling in 2012, and recently there have been some very tentative indications that the trend may be starting to rise slightly. In some countries, notably the eurozone, the improvement in trend GDP growth has come mainly from a cyclical recovery from the recession during the euro crisis in 2011-12. This improvement is demand rather than supply driven, and has had little to do with any recovery in productivity.

US trend productivity growth improving slightly

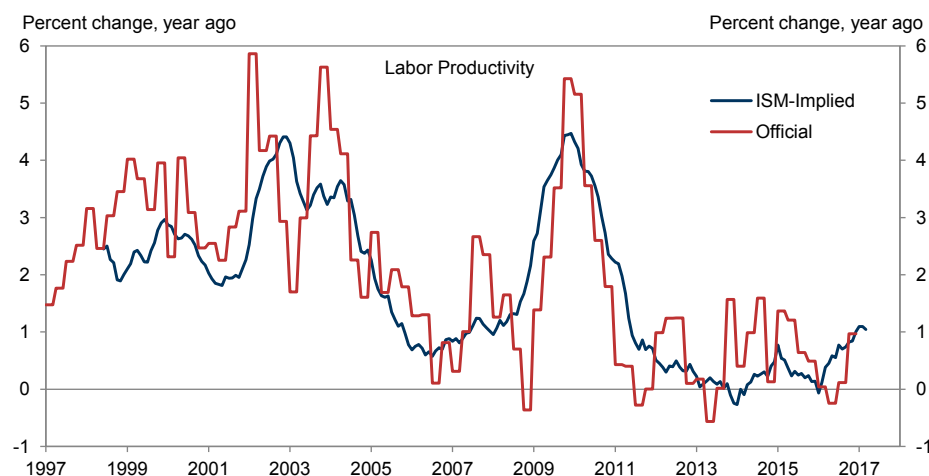
In the US, however, there have been some signs that productivity growth may be starting to recover from the low points reached a few years ago. Figure 3

shows the latest estimate of total factor productivity in the business sector, taken from official data.

Jan Hatzius at Goldman Sachs has derived an alternative estimate of labour productivity growth, using official data and the ISM purchasing managers' index. As Figure 4 shows, the official data are fairly volatile over short periods, but the series derived from the ISM survey shows a smoother picture, with a clear improvement since the beginning of 2016.

Finally, it is instructive to look at the latest estimates of trend productivity taken from the nowcasting model estimated by Antolin-Diaz et al. (2017). This is our preferred up-to-date estimate for underlying productivity, and it shows that trend growth has risen from a low point of 0.3% in 2012 Q2 to 0.7 per cent now (see Figure 5).

Figure 4: Better US Productivity Growth Confirmed by ISM Data



Source: Goldman Sachs

Clearly, these signs of improvement in the US are very tentative, but they support the theory that productivity will recover now that the headwinds from the GFC have started to abate.² In particular, the contribution to productivity growth derived from “capital services per hour worked” has begun to rise, implying that investment may finally be improving, as it normally does late in the economic cycle.

Disputes about data measurement problems

It also seems that the US official statisticians may now be willing to admit that they have been underestimating productivity growth because inflation is overstated, and real output is understated, in the GDP data. Until recently, economists in the Federal Reserve and other official sources (see Davies, 2016) have strongly rejected claims that there is any downward bias in the productivity data, and the latest IMF paper (Furceri et al., 2017) agrees with that conclusion. But economists in other countries, including the UK, have had a more open mind on

this question.

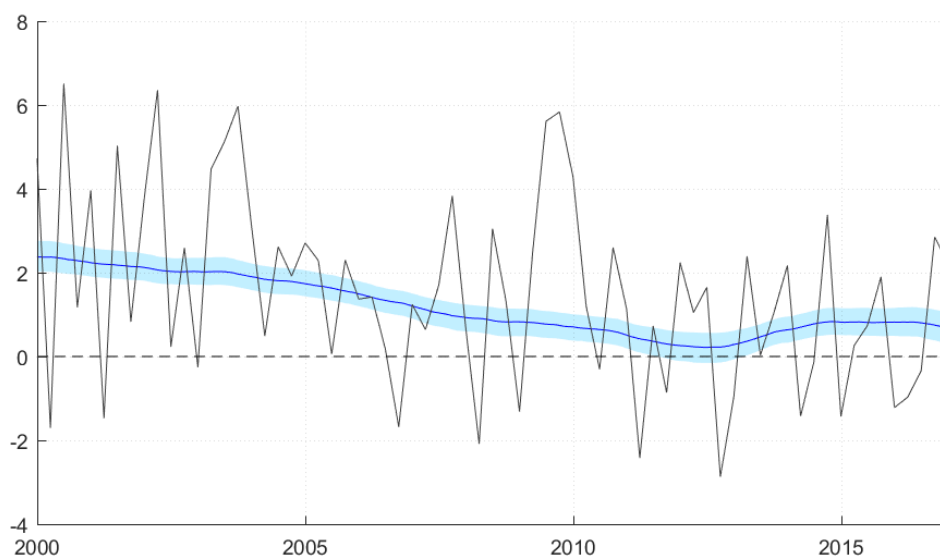
Jan Hatzius is one of the economists who believes that US data are understating the true rate of productivity growth by as much as 0.5-0.75 percentage points a year, a figure that is probably greater than the mismeasurement in earlier decades. If so, then the measurement problem may explain part of the slowdown in the official productivity data.

Hatzius argues that the sharp increase in the quality of services provided by new products in consumer technology has not been picked up in the data, so real output is higher, and inflation lower, than shown in the government’s data. A large part of the problem stems from the introduction of entirely new products (such as the iPhone). These products may greatly enhance the real value of services to consumers in ways that are not included in consumer price data.³ Hatzius believes that the US Bureau of Labor Statistics is now more willing to allow for these effects in calculating the CPI, especially in technology and health products.

²The drop in GDP growth in 2017 Q1, officially reported last Friday, may result in a temporary dent in the productivity growth rate. However, the GDP data have clearly been distorted downwards by residual seasonality that is not identified in the first estimates of GDP. In reality, output and productivity growth in Q1 are almost certainly much higher than shown in the official data.

³Aghion et al. (2017) study the effects of new products on the CPI estimates and find that productivity growth may be understated by 0.5-1.25 per cent a year from this source alone, up from 0.4-0.9 per cent a year before the mid-1990s.

Figure 5: US: Labour Productivity Growth and Long-Run Trend



Note: The black line is the quarterly annualized growth rate in total economy output per hour, and the blue line is the estimated long-run trend estimated from the model. The shaded area is a 1 standard deviation confidence band. Sources: BLS

Mnuchin's ambitious growth target

What is the conclusion from all this? There has probably been some recovery in US productivity growth in the recent past, driven by a reduction in the temporary headwinds that appeared after the GFC. Further gains are probable as the headwinds fade further into the distance.

But so far this is a tentative conclusion, and the improvement has not taken the productivity trend back to the levels seen just before the GFC, still less to the much higher rates seen in the golden years in the 1960s. Mismeasurement may explain part of this underperformance, but economists are sharply divided on that point.

Mr Mnuchin's 3% GDP growth target requires labour productivity growth to rebound to 2.25 per cent a year, double or triple the current trend. Given that the supply side benefits of reducing marginal

tax rates are shown in many economic studies to be fairly small, it is not clear how he expects to achieve that.

References

- AGHION, P., A. BERGEAUD, T. BOPPART, P. KLENOW, AND H. LI (2017): "Missing Growth from Creative Destruction," .
- ANTOLIN-DIAZ, J., T. DRECHSEL, AND I. PETRELLA (2017): "Tracking the Slowdown in Long-Run GDP Growth," *Review of Economics and Statistics*.
- DAVIES, G. (2016): "The internet and the productivity slump," *Financial Times* [Online; posted 3-April-2016].
- FURCHER, D., G. ADLER, AND K. KOLOSKOVA (2017): "Gone with the Headwinds : Global Productivity," *IMF Staff Discussion Notes*.

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