## 4 - The Twin Puzzles -Disappointing UK Trade and Productivity Performance<sup>1</sup>

#### **Key points**

- Since the Global Financial Crisis, the UK has been one of the better performers in terms of economic growth relative to the other G7 economies, with GDP increasing on average by close to 2% a year, a creditable record in the post-crisis "new normal" economic climate. But export and productivity performance has been less impressive – at or close to the bottom of the G7 league table.
- There has been a general slowdown in productivity growth across the major industrialised economies after the crisis. This reflects some combination of long-term structural factors, the unintended consequences of policies designed to cushion the impact of the financial crisis (including monetary policy), and a lack of investment of various forms.
- In the case of the UK, however, the lacklustre performance of the financial sector and property-related activities has also exerted a further drag on productivity growth. The impact of this drag on performance relative to the period before the financial crisis is reinforced by the fact that the same sectors provided a boost to productivity growth as the world economy expanded and trade opportunities increased in the 1990s and the first half of the 2000s.

- Disappointing UK export performance can also be attributed to a similar pattern in key services industries including financial services. Services exports boosted UK trade performance before the financial crisis, but have been very lacklustre since.
- There is no easy quick fix to address these issues, and a devalued exchange rate is not offering a significant boost to either trade performance or productivity. A modern industrial strategy which seeks to improve the conditions in which all businesses operate in the UK is likely to prove a more successful approach, but it needs to be pursued as a long-term strategy that will yield long-term dividends. This should be focussed on improving access to skills, developing better transport networks, providing stronger incentives to invest and innovate, and creating the conditions for more balanced regional growth.

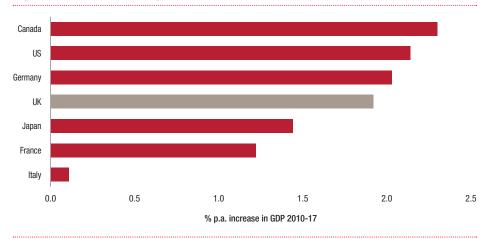
#### Introduction

We are now into the ninth year of economic recovery - both in the UK and globally. The turning point when most economies moved into a recovery phase after the Global Financial Crisis was around the middle of 2009. So this summer marked the 8th anniversary of that turning point, taking us into the ninth year of economic expansion.

The economic recovery has been very uneven across different advanced economies, however. Figure 4.1 shows the experience of the G7 economies in the eight years 2010-17, using the IMF's latest forecasts for this year. The fastest growing economy has been Canada, recording an average real GDP growth rate of 2.3 percent, and the slowest growing has been Italy, averaging just 0.1%. This is a massive difference – if Italy had enjoyed the same rate of growth as Canada, its GDP would now be nearly 20% larger than its current value.

<sup>1</sup> This article was written by Andrew Sentance, senior economic adviser at PwC.

Figure 4.1 - G7 economic growth in current recovery



Source: IMF World Economic Outlook, October 2017

Over the course of the recovery, the UK economy has been in the middle of the G7 league table for economic growth though it is one of four major industrialised economies which have achieved an annual average GDP increase of around 2% or more. But there have been two possibly related - aspects of UK economic performance which have been more disappointing: trade and productivity growth. UK export volumes have grown more slowly than any other G7 economy in the eight years of recovery so far despite the potential boost provided by a substantial currency devaluation. The UK also has the largest current account deficit as a percentage of GDP within the G7.

Meanwhile, productivity growth has been the second slowest of the G7 economies (only ahead of Italy) -though all the major industrialised nations have experienced sluggish productivity increases in the current recovery.

This article examines the evidence on these "twin puzzles" facing the UK economy and discusses how economic policy should respond. In particular, we consider the role of a "modern industrial strategy" in addressing the UK's disappointing trade and productivity performance. Section 4.1 reviews UK economic growth and productivity growth over the economic recovery so far. Section 4.2 looks at the widelydiscussed "productivity gap" between the UK and other major economies. Section 4.3 reviews the reasons for disappointing UK trade performance. And finally Section 4.4 discusses the implications for economic policy and industrial strategy.

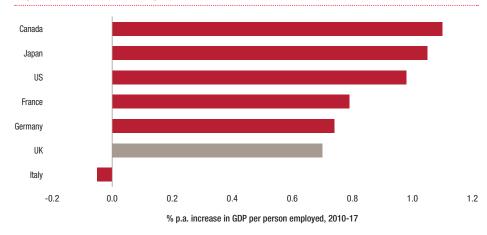
#### 4.1 - Growth and productivity performance

Economic growth across the richer industrialised countries in the world has been much slower in this recovery than in previous economic cycles. In the first eight years of the 1980s recovery (1981-88), G7 economic growth averaged 3.2 percent. The average rate of G7 GDP growth in the first eight years of the 1990s recovery (1992-99) was 2.6 percent. But economic growth is now expected to average just 1.8 percent in the first eight calendar years of the current economic expansion – 2010-17<sup>2</sup>.

A key feature of this slower economic recovery has been disappointing productivity growth. Employment across the G7 has increased at a respectable rate - by nearly one percent per annum, and the average unemployment rate has fallen to 5% - the lowest level recorded since the 1970s. The UK has been an above average performer in terms of jobs growth over this period. But even the best-performing G7 economies have struggled to achieve productivity growth much above 1% per annum over the eight years of recovery so far, as Figure 4.2 shows. This compares with around 2 percent average G7 productivity growth in the equivalent phase of the 1980s and 1990s recoveries.

The UK is therefore not alone in suffering a slowdown in productivity growth, though it has been one of the poorer performers as Figure 4.2 shows: UK GDP per person employed has risen over this recovery by an average of just 0.7% per annum, about a third of the longer-term average rate of increase of just over 2%.

Figure 4.2 - Productivity growth in G7 economies



Source: IMF World Economic Outlook, October 2017

How do we account for this productivity slowdown, which has been particularly noticeable in the UK economy? In the early days of the economic recovery it was tempting to blame it on the shock of the financial crisis. But over eight years into a sustained economic expansion, that explanation looks rather weak. In a recent review of its forecasting performance, the UK Office for Budget Responsibility<sup>3</sup> highlighted three main hypotheses.

First, a prolonged period of extremely low interest rates has dampened the incentive to move resources around the economy to find higher returns. In particular, the shake-out of labour we have seen in previous recessions did not take place. and many employees (including migrant workers) have been kept on in low-wage low-productivity jobs which might not have been sustainable if the normal forces of "creative destruction" had been allowed to play out after the financial crisis.

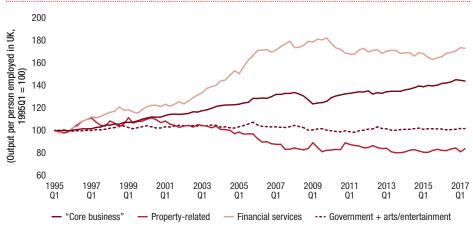
Second, business investment has been very subdued in this recovery - and possibly this might also reflect weakness in other forms of intangible investment, such as training innovation. Investment, skills and innovation are key drivers of economic growth, so weak investment in these areas would be a dampener on productivity increases.

Third, there may be long-term structural factors underpinning a productivity slowdown in the UK and other major economies. The UK economy and other major industrialised economies are becoming more services-oriented, and services industries have tended to demonstrate lower productivity growth than manufacturing, partly because the delivery of a service is often intrinsically labour-intensive. This idea was popularised by the economist William Baumol in the 1960s and became known as "Baumol's cost disease" - reflecting the tendency of the cost of services to rise faster than goods.

Figures taken from October 2017 IMF World Economic Outlook and include the IMF's forecasts for 2017.

http://budgetresponsibility.org.uk/fer/forecast-evaluation-report-october-2017/





Source: PwC calculations based on ONS data for output per job

These explanations may have all played a part in the productivity slowdown, but one other factor has been overlooked in the UK's case. The financial sector and property-related activities played a major part in supporting UK productivity growth in the 1990s and in the 2000s before the financial crisis. As Figure 4.3 shows, productivity in both of these sectors has stagnated or gone into reverse since the mid-2000s. In short, the financial and property sectors provided a boost to UK productivity growth before the financial crisis - based on the global credit boom which artificially inflated economic growth across many western economies. This productivity boost has now run out of steam and reversed. In addition, within the financial sector, the increased burden of regulation in response to the financial crisis has played a part in creating a drag on productivity growth.

By contrast, the productivity growth performance of most non-financial businesses has recovered reasonably well since 2009. Figure 4.3 also shows a measure of "core" non-financial business sector productivity growth based on 9 sectors which account for 55% of GDP and 90% of non-financial business output in the UK4.

This measure shows that there was a significant hit to productivity in 2008-9. But the productivity growth rate for this diverse group of activities has recovered to broadly the same rate as it was before the crisis. From 1990 to 2007, productivity in this "core" non-financial business sector rose on average by 2.1 percent a year. And from mid-2009 until the end of 2016, the average productivity growth rate was also 2.1%5. Productivity growth in these core non-financial businesses has dropped back in the past few quarters, however, as the UK economy has slowed in response to the impact of the Brexit referendum as discussed further in Section 2 above.

This does not mean that the recent disappointing growth of productivity in the UK or other major economies is a mirage. But it does highlight that it may reflect different trends in the wide variety of sectors which underpin a modern economy. And that the UK's relatively high exposure to finance and property may help to explain why our economy may have experienced a somewhat greater productivity slowdown than others since the crisis.

<sup>4</sup> The sectors included in the "core business" index in Figure 4.3 are construction, manufacturing, retail and wholesale distribution, transport and storage, hotels and catering, IT and communications, professional services, administrative support and other services

This analysis broadly supports the conclusions of an earlier article in the PwC UK Economic Outlook in July 2015: http://www.pwc.co.uk/assets/pdf/ukeo-section4-services-productivity-july-2015.pdf

### 4.2 - The productivity gap - myth or reality?

The discussion so far has focussed on productivity growth, which has been disappointing in the UK and other major western economies for a variety of reasons. But there is another angle to the productivity debate in the UK, which is the notion that employees here are generating less output when they turn up for work than in most other leading industrialised economies. What is the evidence which supports this idea?

The idea of a productivity gap between the UK and other major industrialised nations goes back to the 1960s, when various industrial policy initiatives were taken to recover lost ground in terms of the nation's competitive position in relation to European competitors and the US after the Second World War6. Then, British manufacturing industry was struggling to compete on world markets because of a combination of bad management and volatile industrial relations. These problems worsened in the 1970s, but there was an industrial recovery in the 1980s and 1990s aided by a new wave of inward investment (particularly from Japan) and a better tax and business policy climate for enterprise growth and start-ups.

From the 1980s onwards, the UK economy also became more diverse and services-oriented and so the performance of manufacturing firms became less important for overall economic growth and employment. In the mid-1960s, manufacturing firms employed around 35% of the workforce – the current proportion is 8%.

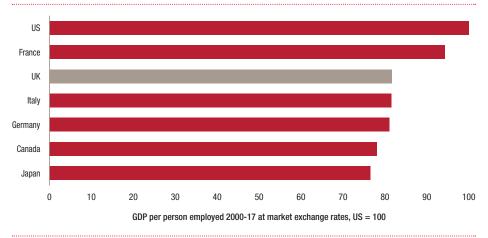
So how should economists measure and compare the combined output of the very disparate activities which make up a modern economy? The idea that factories in one country are less efficient or productive than elsewhere is very compelling, and that was certainly an issue in 1960s and 1970s Britain. However, in a modern services-oriented economy the issue of measuring relative productivity is much more complex. Germany, for example, will have a higher weighting in its economy towards manufacturing, while the UK will have a higher weighting towards services. The way in which these different sectors are combined together may also affect our conclusions about relative economic performance.

There are two basic approaches to this issue, which revolve around exchange rates. International organisations like the OECD use Purchasing Power Parity (PPP) exchange rates to compare the relative productivity performance of economies. These PPP exchange rates aim to equalise price differences across economies based on an extensive international data collection exercise for a broad, representative basket of goods and services in each country. Correcting for these price differences makes sense when trying to compare the relative living standards of people in different countries, particularly where you are comparing economies at very different stages of development where average price levels may vary hugely (e.g. India vs US).

It is not, however, an obvious correction to make for measuring the relative performance of businesses. Nobody actually makes trades or investments using PPP exchange rates. A more direct measure of the relative value of money across countries from a business perspective is the market exchange rate, which reflects the currency values at which people and businesses actually trade and carry out their transactions.

For an analysis of the UK's "productivity gap" with the US and Europe see Stephen Broadberry's paper from the early 2000s: https://www2.warwick.ac.uk/fac/soc/economics/staff/sbroadberry/wp/niesr9.pdf

Figure 4.4 – Output per person employed in G7 economies



Source: IMF World Economic Outlook, October 2017

Market exchange rates, however, are notoriously volatile. So any approach to comparing productivity levels across countries using actual currency rates has to take a long-term average to smooth out this volatility. Figure 4.4 shows a comparison of UK productivity with other G7 economies using average market exchange rates for the period since 2000. That would seem to be a reasonable basis for comparison, as it captures 8 years before the Global Financial Crisis (2000-07), the recession created by the financial crisis (2008-9) and the eight years of recovery since (2010-17). Some economies may have done better than others in these different phases of the global economy, and exchange rates will have varied widely over these different periods, but by combining them together we should arrive at a reasonable picture of the underlying relative productivity performance of the major industrialised nations since the turn of the century.

The clear leader for global productivity using this measure is the United States, followed by France. The other G7 economies are bunched much more closely together – about 20 percent behind the US and 15% behind France. The UK is actually at the top of this group of five G7 economies in terms of productivity. Our level of productivity using average market exchange rates since 2000 - is ahead of Germany, Italy, Canada and Japan. It is not therefore obvious that the UK is such a poor performer in terms of its level of productivity relative to other G7 economies as some alternative measures based on PPPs might suggest. But the US and France seem to stand out from the rest of the pack.

The productivity leadership of the United States is not hard to account for – it has a leading edge in many high technology industries. It is a large country which is less likely to suffer from the diseconomies of congestion which affect more crowded countries like the UK and Japan. Whether measured at market exchange rates or PPP exchange rates, the US has always come out as the world leader for most of the 20th Century.

Explaining the superior productivity performance of France is more contentious, but it is noticeable that France has one of the highest unemployment rates in the G7 and one of the lowest labour participation rates. Countries which have relatively low unemployment and high labour participation – like the UK and US – tend to have more flexible labour markets which support a wide range of lower-wage and lower-productivity jobs. The French approach to labour market regulation makes it more difficult for these jobs which offer lower wages based on lower productivity to be sustained, and hence the workers who would otherwise fill these jobs end up unemployed or outside the workforce altogether.

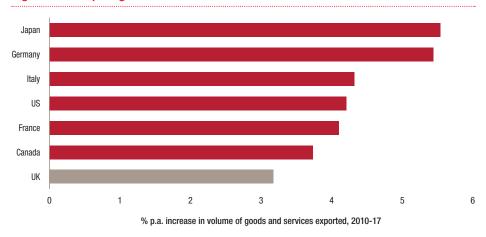
However, based on the evidence presented in Figure 4.4, it is not clear that the UK suffers a "productivity gap" or a deficit in productivity levels with the G7 economies excluding the US and France. Indeed, if the US is excluded, the UK's productivity level using market exchange rates is just 0.8 percent below the other five G7 economies – even with France included. This is not to say that improving UK productivity is not important – it is critical to improving living standards in the long run – but just that we should not be too negative about relative UK performance here.

#### 4.3 - Export performance

The other disappointing dimension to UK economic performance since the financial crisis has been on the export front. Figure 4.5 shows that UK export volume growth – including both goods and services - has been the lowest of the G7 economies on average since 2010. This is despite a substantial depreciation in the value of the pound versus other currencies just before this period in 2007-9. As a result, in the eight years from 2009 to 2016, the sterling Effective Exchange Rate was about 17% below its value in the decade before the Global Financial Crisis (1998-2007). It is not obvious that this fall in the value of the UK currency has helped UK trade performance (although, of course, it is always possible this may have been even worse had the pound remained at pre-crisis levels).

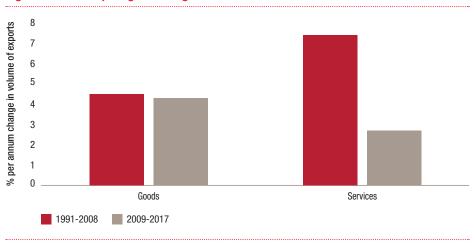
Discussion of trade performance tends to focus on exports and imports of goods - especially manufactures. But if we are looking for the reasons for relatively poor UK export performance over the recovery period since the crisis, we need to focus more on the services side of the account. Services exports are particularly important for the UK economy: in 2016, services exports were 45% of total overseas sales and accounted for 12.5% of UK GDP. This is a much bigger contribution to national output than for other G7 economies - the equivalent figures for Germany and France are around 8% and for the US only  $4\%^7$ .

Figure 4.5 - Export growth in G7 economies



Source: IMF World Economic Outlook, October 2017

Figure 4.6 - UK export growth in goods and services



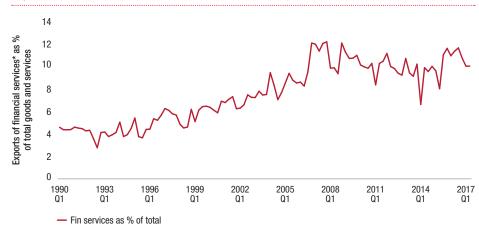
Source: ONS

See the July 2015 edition of UK Economic Outlook for a fuller discussion of UK services trade performance: http://www.pwc co.uk/assets/pdf/ukeo-section4-services-productivity-july-2015.pdf

Over the course of the current economic recovery, UK services exports have increased by just 2.7% per annum in volume terms compared with 4.3% annual growth in goods exports. The equivalent figures for the long expansion that started in the early 1990s and came to an end in 2008, were 7.4% and 4.5% respectively, as Figure 4.6 shows. The rate of growth of UK goods exports in this recovery has been very similar to that seen in the economic upswing before the Global Financial Crisis, but services exports have grown at only just over a third of their pre-crisis rate. It is, therefore, the relatively disappointing performance of services exports that explains most of the UK's lacklustre trade performance over this recovery period.

How can this be explained? The first point to recognise is that the 1990s and the first half of the 2000s saw an unprecedented opening up of the global economy supported by trade liberalisation in various forms – including the establishment of the Single European Market and a global trade regime overseen by the World Trade Organisation (WTO). This allowed countries to expand their exports in areas where they had a strong comparative advantage. In the case of the UK, this supported the rapid growth of a cluster of export-oriented services industries, including financial services, professional services and the creative industries (e.g. media, design, software etc). This one-off boost to UK services exports has now come to an end.

Figure 4.7 - Financial services as % of total UK exports



Source: Office for National Statistics
\*Excludes insurance/pensions

The second key factor has been the disappointing performance of financial services, which we have already noted in terms of its contribution to productivity. The percentage of the value of UK exports accounted for by financial services (not including insurance and pensions) peaked at over 12% in 2007/8 but has since fallen back to around 10%, as Figure 4.7 shows. The global credit boom which preceded the financial crisis also supported the growth of the UK financial services industries in the late 1990s and the first half of the 2000s, but has been much less supportive since the crisis<sup>8</sup>.

Third, the fall in the sterling exchange rate since the financial crisis is of limited benefit to services exports, which are mostly relatively price-inelastic. The main exception to this is travel and tourism activity, which is quite sensitive to the exchange rate. However, many activities linked to travel and tourism - such as hotels, restaurants, and visitor attractions - are relatively low wage and low productivity sectors. So when the exchange rate falls, it tends to support the growth of lower productivity activities in the services sector more than the growth in the higher value-added sectors such as financial and professional services and the creative industries.

<sup>8</sup> For an analysis of the pre-crisis financial boom, see "The Global Credit Boom" by Michael Hume and Andrew

#### 4.4 - Conclusions and policy implications

Nearly 80 percent of UK GDP is accounted for by services sector activities. So it is not surprising that the evidence trail of disappointing UK productivity and trade performance leads us to key services industries. In particular, the financial services sector - which provided a strong boost to the UK's productivity and trade performance in the 1990s and in the 2000s before the Global Financial Crisis – has delivered a much weaker contribution over the recovery period since mid-2009. This is apparent in both the productivity and trade figures.

On the productivity front, the core of the non-financial business sectors operating in the UK still seems capable of delivering productivity growth of around 2% per annum. Similarly, export performance in terms of goods has held up better since the financial crisis than exports of services - at least in volume terms. What might this imply for public policy?

One important conclusion is that we should not put too much faith in a devalued exchange rate to support improved trade and productivity performance in the UK economy. The key services sectors which have been underperforming are not particularly exchange rate sensitive.

The high value-added industries which make up the bulk of modern UK manufacturing industry are also not particularly exchange-rate sensitive either. Long gone is the heyday of bulk commodities like coal, steel and other basic manufactures which allowed the UK economy to respond positively to the move off the Gold Standard in 1931 or the post-war devaluation of sterling from \$4 to \$2.80 in 1949.

There are no quick fixes in terms of macroeconomic policy to the issues which have contributed to disappointing UK trade and productivity performance. Also, a return to the interventionist policies pursued by governments in the 1960s and 1970s does not look promising in the modern globalised economy. The UK government is right to focus on a "horizontal approach" to Industrial Strategy, which does not seek to favour individual sectors or businesses. The objective should be to create the best conditions for businesses of all types and across all sectors to contribute to national economic growth.

In a recent submission to the UK government on its Industrial Strategy, PwC has argued that four main themes should underpin the government's Industrial Strategy: developing skills and education; upgrading national infrastructure; supporting investment, innovation and business growth; and ensuring a more regionally balanced economy9.

The policies needed to implement a successful Industrial Strategy are not just the responsibility of one or even a few government departments. They cut across all areas of government policy. The tax system – which shapes the competitiveness of the economy in so many ways and affects business of all sizes - should play a key role. A successful Industrial Strategy also needs to be based on a consistent long-term approach to policy. It also needs to be focussed on delivery – and the outcomes from key policies need to be delivered efficiently and effectively so that economic benefits are realised in a timely fashion.

However, even with the right policies in place, any improvement in UK trade and productivity performance is likely to be a slow process – and Brexit risks add to the range of uncertainties. So policy-makers would be right to plan on the basis of a limited improvement from recent trends - which provides a sobering backdrop to the Chancellor's Autumn Budget in November.

<sup>9</sup> https://www.pwc co.uk/government-public-sector/assets/pwc\_industrial\_strategy\_response.pdf

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