

# 4 – The future shape of UK exports

## Key points

- The share of UK exports of both goods and services going to the rest of the EU declined from 54% in 1999 to 44% in 2013. However, the EU remains by far the UK's largest export market, followed by the US (18%).
- Although emerging markets have become increasingly important as UK export markets, they remain much smaller than the EU or the US. Indeed UK exports to Ireland are still greater than those to China and Hong Kong combined.
- The UK's largest export areas include machinery and transport equipment, business services and financial services, which together account for around 40% of total UK exports.
- Global growth of UK exports is projected to pick up to 3.6% per annum in real terms in the medium term (between 2014 and 2020) before moderating slightly to 3.4% per annum on average in the 2020s.
- The value of services exports, which have grown from 6% of GDP in 1990 to 12% of GDP in 2013, is also rapidly closing the gap with goods exports, and is likely to grow further in relative importance in the future.
- The share of UK exports going to the EU is projected to fall further to around 37% in 2030, while the share going to the seven largest emerging economies (the E7) is projected to rise from 9% now to around 13% in 2030, driven by the faster growth of emerging markets economies relative to those of the EU. But this reorientation will be a gradual process and we expect the EU and the US to continue to account for over half of total UK exports in 2030.

## Introduction

The UK has steadily recovered from the 2008-9 recession, but instability in the global economy remains a source of concern. Many countries in the rest of the EU, the UK's key trading partners, still face a sluggish recovery. The slowdown of the Chinese economy and some other major emerging markets also weighs on global prospects at present. This makes it a good time for us to consider how external influences have affected UK exports historically and how these may develop in the future.

In this article, we therefore provide an update of our long-term projections for UK exports (last published in the November 2012 edition of this report), using more recent trade data and our updated World in 2050 GDP projections. We focus our analysis on our key trading partners, including the US, the EU and the seven largest emerging markets – what we call the 'E7'<sup>1</sup>. We begin by looking at past trends in UK exports by destination country (Section 4.1). Next, we use our long-term global growth model to project how the geographical pattern of UK exports might evolve over the period to 2030 (Section 4.2). Section 4.3 then summarises and concludes. The technical annex provides further details of the methodology used in our projections.

## 4.1 - UK exports: past trends

Table 4.1 shows the UK's exports of goods and services to its top 30 destination countries. These countries accounted for 85% and 81% of UK goods and services exports respectively in 2013<sup>2</sup>. Exports include goods and services produced domestically that are purchased by foreign residents, including those consumed by foreign tourists in the UK.

Table 4.1 shows that the US remains the UK's largest single export destination. Other major export partners include developed European nations located close to the UK such as Germany, the Netherlands, France and Ireland, as well as large emerging market nations such as China. This partly reflects the "entrepot" effect, whereby some UK exports to other destinations are routed through continental ports such as Rotterdam and Antwerp.

Although much discussion has centred on the importance of emerging markets as UK export markets, it is notable that in 2013 total exports to Ireland were greater than those to China and Hong Kong combined. Total exports to Sweden exceeded those to India. Looking more broadly, we see that OECD countries – a club of (mostly) rich economies – still accounted for around 75% of total UK exports in 2013.

<sup>1</sup> The E7 comprises China, India, Brazil, Russia, Mexico, Indonesia and Turkey.

<sup>2</sup> Our analysis is based on trade data up to 2013 as we did not have a detailed geographical breakdown available for total UK exports for 2014 at the time of writing. More recent data are available for goods exports but not for services.

A key trend in UK exports has been the gradual decline in the relative importance of the EU market, as shown in Figure 4.1. Strong economic growth in many developing countries outside the EU has resulted in non-EU economies growing in importance to UK trade, with the proportion accounted for by the EU falling to around 44% of total UK exports in 2013, down from 54% in 1999. This EU/non-EU divergence accelerated during 2011-2013 (although this may be less marked in more recent data due to the slo

). The share of UK exports going to the EU has declined for both goods and services exports, but somewhat more markedly for goods, where it has declined from 61% in 1999 to 50% in 2013.

As EU markets have gradually decreased in importance, emerging markets have picked up in significance, albeit from a low base. China has risen from the UK's 10th largest export market in 2011 to the 6th largest in 2013. The share of exports accounted for by all of the E7 economies has increased from 3.7% in 1999 to 8.9% in 2013.

Table 4.1 highlights an important distinction – how the market for UK goods exports differs from the market for UK services. Figure 4.2 and Figure 4.3 provide further breakdowns of goods and services exports by destination. It is clear that UK trade with the EU is weighted more towards goods than services. The share of UK goods exports going to the EU is around 50%, whilst the share of UK services exports going to the EU is only around 35%. Furthermore, UK exports to emerging markets, including China, are focussed more on goods, which may be surprising, given the general perception that the UK's comparative advantage lies in services. On the other hand, China and other emerging markets may have high income elasticities of demand for

**Table 4.1 – UK goods and services exports by destination country in 2013 (£ billion)**

Rank	Destination country	Goods	Services	Goods and services	Share of UK goods and services exports
1	US	40.6	49.5	90.1	17.6%
2	Germany	30.5	12.2	42.7	8.3%
3	Netherlands	25.8	9.8	35.6	7.0%
4	France	21.3	10.9	32.2	6.3%
5	Ireland	18.9	7.8	26.7	5.2%
6	China	13.2	4.2	17.4	3.4%
7	Belgium	14.0	3.0	17.0	3.3%
8	Switzerland	6.1	9.7	15.7	3.1%
9	Italy	9.0	5.9	14.9	2.9%
10	Spain	8.8	4.7	13.5	2.6%
11	Japan	4.8	5.0	9.8	1.9%
12	Australia	4.3	5.4	9.7	1.9%
13	Sweden	5.9	3.8	9.6	1.9%
14	India	6.1	2.0	8.0	1.6%
15	Russia	5.4	2.3	7.6	1.5%
16	Hong Kong	5.6	1.9	7.5	1.5%
17	Canada	4.0	3.5	7.5	1.5%
18	South Korea	5.2	1.5	6.7	1.3%
19	Singapore	4.2	2.3	6.5	1.3%
20	Norway	3.3	2.9	6.2	1.2%
21	Saudi Arabia	3.4	2.4	5.8	1.1%
22	Turkey	4.1	1.3	5.3	1.0%
23	Denmark	2.9	2.4	5.3	1.0%
24	Poland	3.9	1.3	5.2	1.0%
25	South Africa	2.6	1.9	4.5	0.9%
26	Brazil	2.7	1.2	3.9	0.8%
27	Luxembourg	0.2	2.8	3.1	0.6%
28	Czech Republic	2.0	1.0	3.0	0.6%
29	Greece	1.5	1.3	2.8	0.6%
30	Malaysia	1.6	1.0	2.7	0.5%
<b>Total - Top 30 countries</b>		<b>261.8</b>	<b>164.8</b>	<b>426.6</b>	<b>83.4%</b>
Total - Other countries		45.0	39.7	84.7	16.6%
<b>World total</b>		<b>306.8</b>	<b>204.5</b>	<b>511.3</b>	<b>100.0%</b>

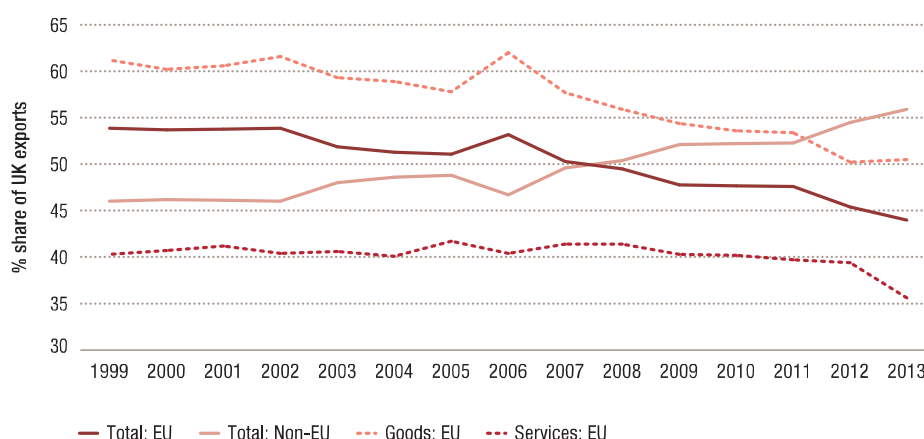
Source: ONS Pink Book 2014

manufactured and especially capital goods at this stage in their development. This issue is discussed further in Box 4.1 on exports to China. It is also worth noting that exports to sub-Saharan African countries accounted for less than 3% of total UK exports in 2013<sup>3</sup>. However, given that this is a fast-growing region, we discuss the potential for UK exporters to Africa in more detail in Box 4.2.

External demand for UK services is driven to a significant degree by the US, which alone accounts for almost a quarter of UK services exports. The US is followed by Germany, France and Ireland at some distance. Other non-EU countries such as Switzerland, Japan and Australia also account for a significant share of UK services exports.

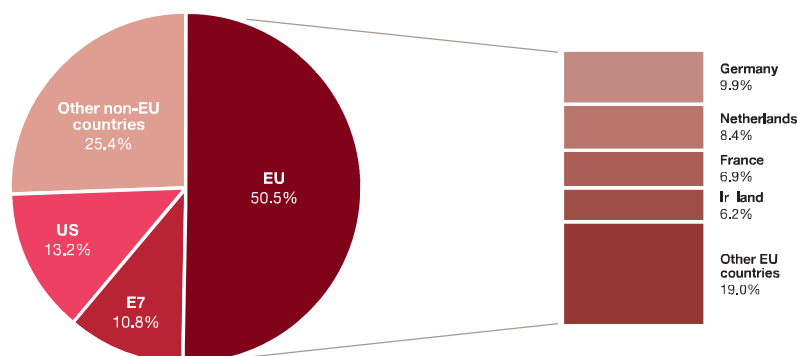
Figure 4.4 highlights an interesting trend to this effect. Overall UK export performance in recent years has largely been driven by services, which have grown from 6% of GDP in 1990 to 12% of GDP in 2013. Meanwhile, goods exports were 18% of GDP in 2013, falling from 19% in 1999. This has resulted from a faster rate of growth in services exports of just under 5% per annum on average between 1999 and 2013, compared to only around 2% per annum for goods exports. This is partly the result of stronger economic performance in key services exports markets such as the US and Australia, as well as continuing weak growth in key Eurozone markets for UK goods. If these trends continue, it is likely that the UK will begin to export more services than manufactured goods in the medium-term. We also note here that the UK has also been partially shielded from the direct trade effects of current recessions in Russia, Brazil and Greece due to the relatively small share of UK exports going to these countries.

**Figure 4.1 – Trend in share of UK exports to EU v non-EU countries**



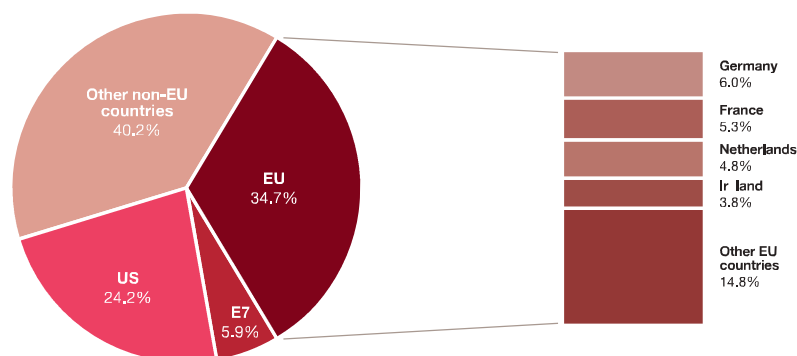
Source: ONS Pink Book 2014

**Figure 4.2 – Share of UK goods exports to key country groups in 2013**



Source: ONS Pink Book 2014

**Figure 4.3 – Share of UK services exports to key country groups in 2013**

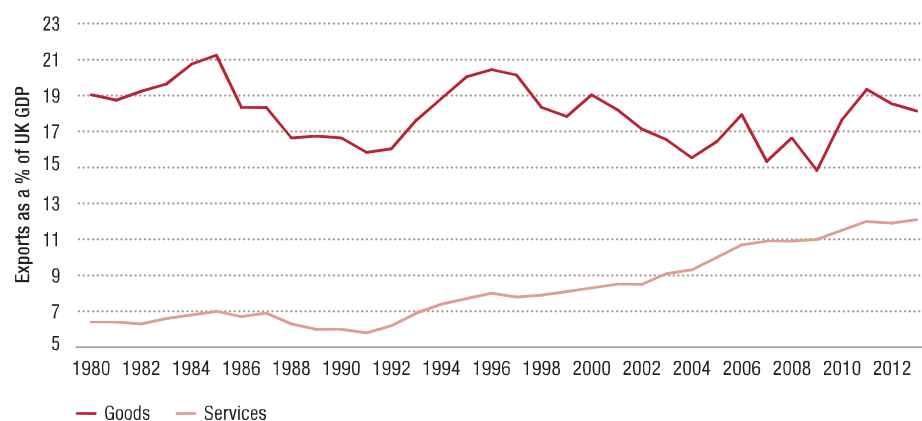


Source: ONS Pink Book 2014

3 Total exports to Africa (including both North and sub-Saharan Africa) account for 4.2% of total UK exports. Source: ONS

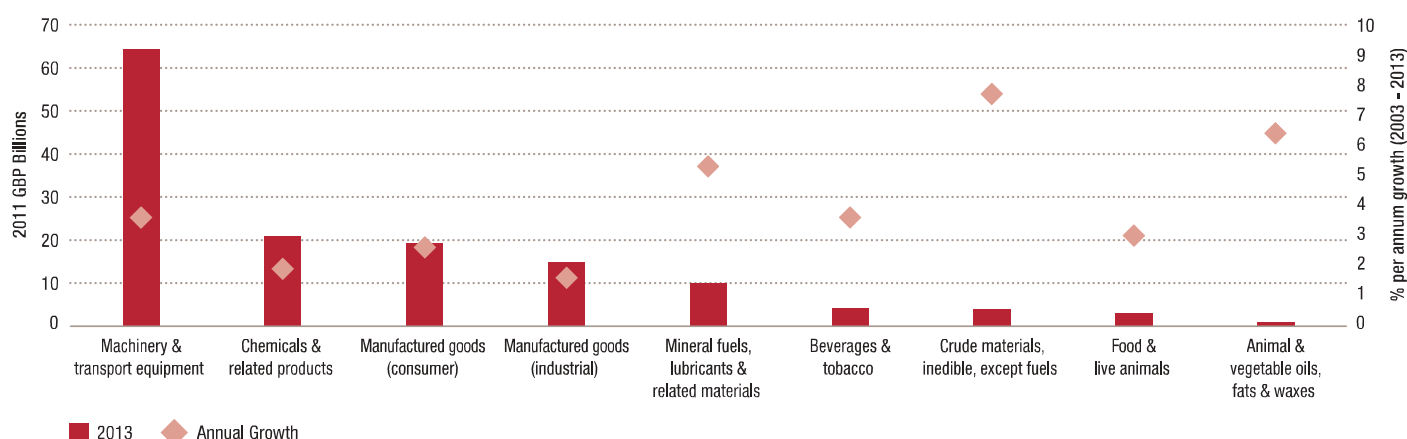
Figure 4.5 and Figure 4.6 show UK goods and services exports broken down by main product categories. These reveal the UK's largest exports to be machinery and transport equipment, business services and financial services. Machinery and transport equipment includes road vehicle and power generating equipment exports which accounted for 10% and 9% of total UK exports in 2013 respectively. Both of these categories grew at a quicker pace compared to overall UK goods exports. In addition, exports of financial services grew at an average of more than 7% per annum between 1999 and 2013 despite slowing during the financial crisis.

**Figure 4.4 – UK services exports vs goods exports**



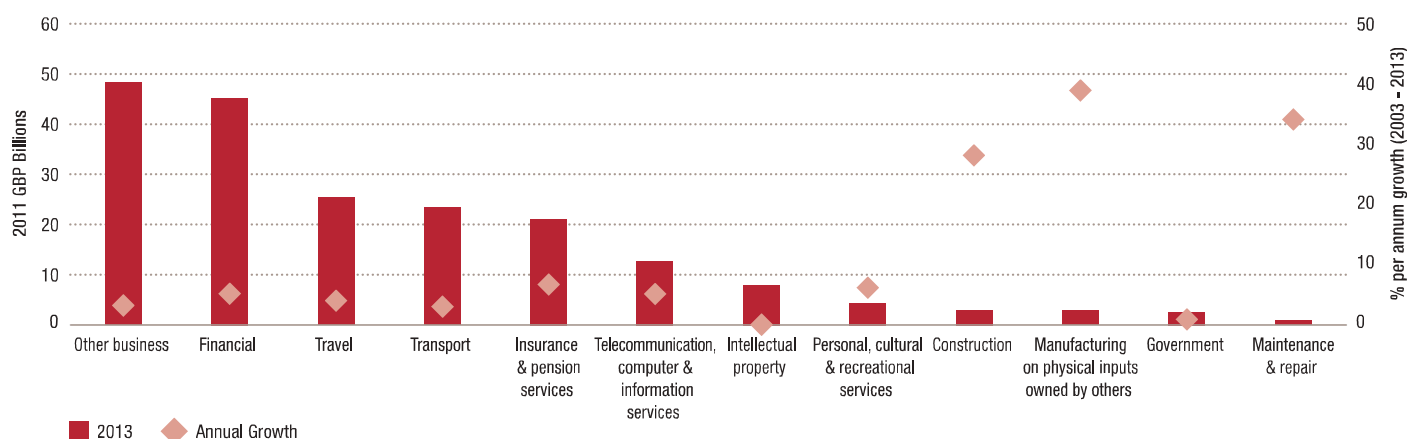
Source: ONS Pink Book 2014

**Figure 4.5 – UK goods exports by category**



Source: HMRC Overseas Trade Statistics

**Figure 4.6 – UK services exports by category**

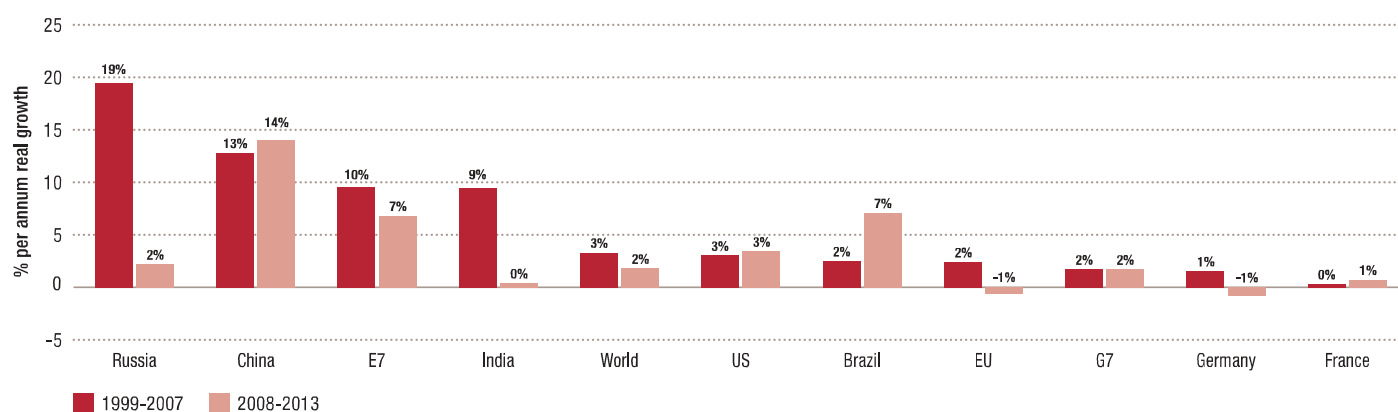


Source: ONS Pink Book 2014

We examine these country-by-country trends more closely in Figure 4.7. Overall UK export growth fell back from around 3% per annum before the global financial crisis (1999-2007) to only around 2% per annum since 2008, but trends vary greatly by country. UK exports to Russia, India and the EU have been particularly hit since the

crisis, whereas exports growth to the US has remained largely stable, and has actually picked up to China and Brazil since 2008. Overall, growth remained faster to the E7 than the G7 both before and after the crisis, but remains very volatile in the case of many emerging markets, which is likely to continue to be the case going forward.

**Figure 4.7 – Real growth in UK exports to key markets before and after the global financial crisis**



Source: ONS Pink Book 2014

## Drivers of UK export growth

As discussed further in the Annex, our statistical analysis shows that there have been two key drivers of past UK export growth:

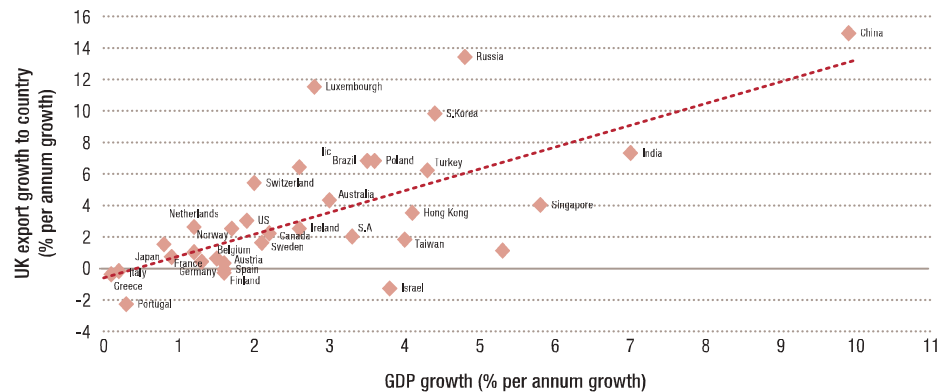
- First, and most importantly, GDP growth as an indicator of demand in the destination country; and
- Second, and somewhat less importantly, real exchange rate movements, as an indicator of relative price competi

the first of these relationships, where there has been a strong positive correlation between the UK's export growth to its trading partner and the latter's GDP growth. This is expected, as domestic economic growth is likely to generate demand for UK exports. In modelling our export growth projections (in Section 4.2 below), we have therefore included GDP growth projections for the UK's trading partners based on the latest estimates of our World in 2050 model.

There are some notable outliers to this historical relationship, however, such as Russia and Luxembourg which have higher UK export growth rates than their GDP growth rates would suggest. This is partly due to changes in the real exchange rate. In Russia's case, the growth in exports have largely been driven by an increase in consumer spending, which has grown faster on average than GDP since 1999.

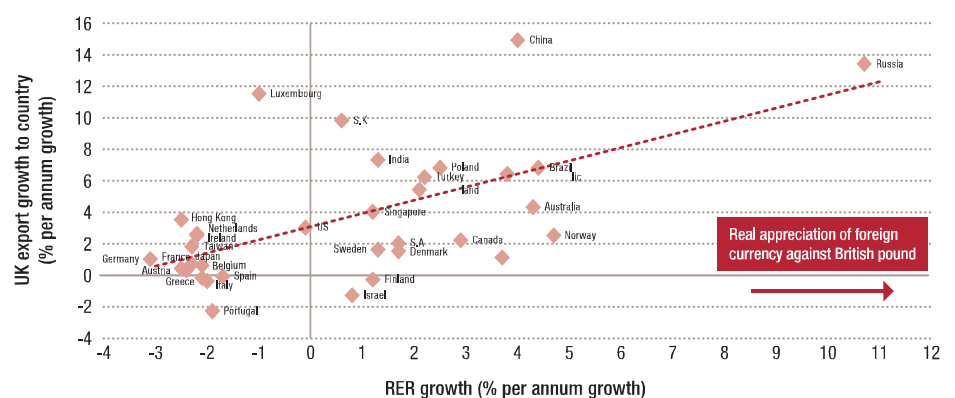
In addition, we might expect the price competi try, as measured by the real exchange rate (RER), to have an influence on export growth. As Figure 4.9 shows, there does appear to be a positive correlation here, although it is weaker than that between exports and GDP growth. Therefore, we also include projections of the RER in our UK export projections.

**Figure 4.8 – Real growth in UK exports vs real GDP growth in destination country 1999-2013**



Source: ONS Pink Book 2014, IMF, Thomson Reuters, BoE

**Figure 4.9 – Real export growth vs real exchange rate changes in destination country 1999 – 2013**



Source: ONS Pink Book 2014, IMF, Thomson Reuters, BoE



## 4.2 - Projections for UK exports to 2030

In this section, we present our projections of UK export patterns to 2020 and 2030 using the model described in the Annex. We do not attempt to predict year-to-year movements in UK exports by country, which can be volatile, but focus instead on broad long term trends. Given the uncertainties involved in any such projections, we would focus more on the general patterns indicated rather than the precise numbers.

Broadly speaking, we project that the UK's worldwide exports will continue growing relatively strongly in both the medium term and the long run. As mentioned before, the UK's largest export sectors are transport and machinery equipment as well as financial and business services, which have grown strongly since 1999.

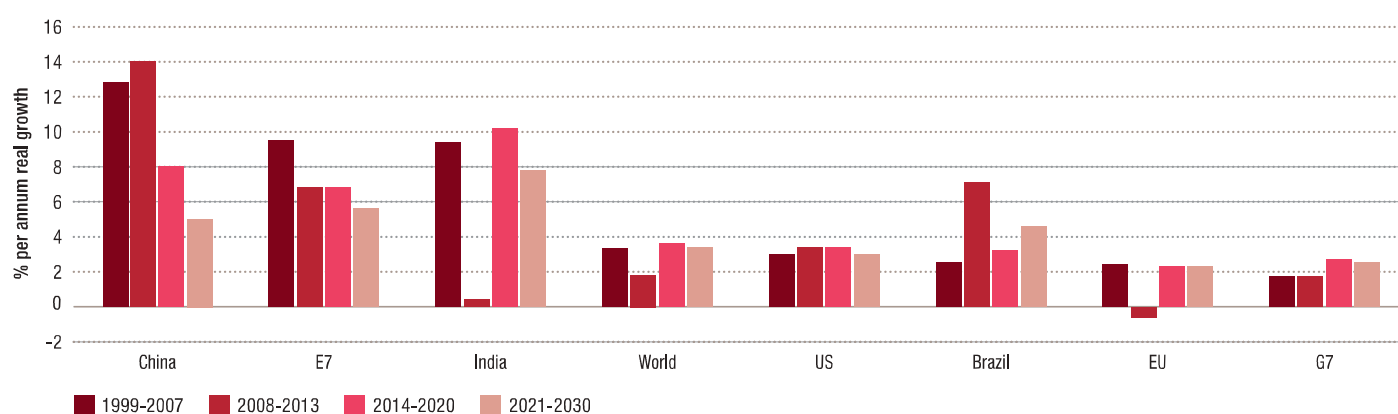
Furthermore, these sectors are high value-added sectors that are somewhat less vulnerable to price and exchange rate swings, which could make them more resilient to external shocks than other types of exports.

Looking at Figure 4.10, we see that global growth of UK exports is projected to be faster in the medium term (between 2014 and 2020) than it was in the post-crisis period, before moderating slightly in the longer term (2021-2030)<sup>4</sup>. The medium-term acceleration is primarily driven by high growth in exports to E7 countries, China and India in particular. However, this slows somewhat after 2020, especially for China, as its growth rate starts to converge with that of the G7.

Interestingly, this is not the case for Brazil, where the longer term projection for export growth is greater than in the medium term. This is because we assume that Brazil has the potential to gradually overcome its current socio-political and economic challenges, although clearly this is far from certain.

As growth resumes in the Eurozone in the medium- and longer-term, UK export growth to the rest of the EU is also likely to return to pre-crisis rates, assuming that we do remain in the EU (which is the assumption we make as a matter of convention throughout this article, although this should not be taken as any kind of prediction of the likely outcome of the referendum on UK membership of the EU).

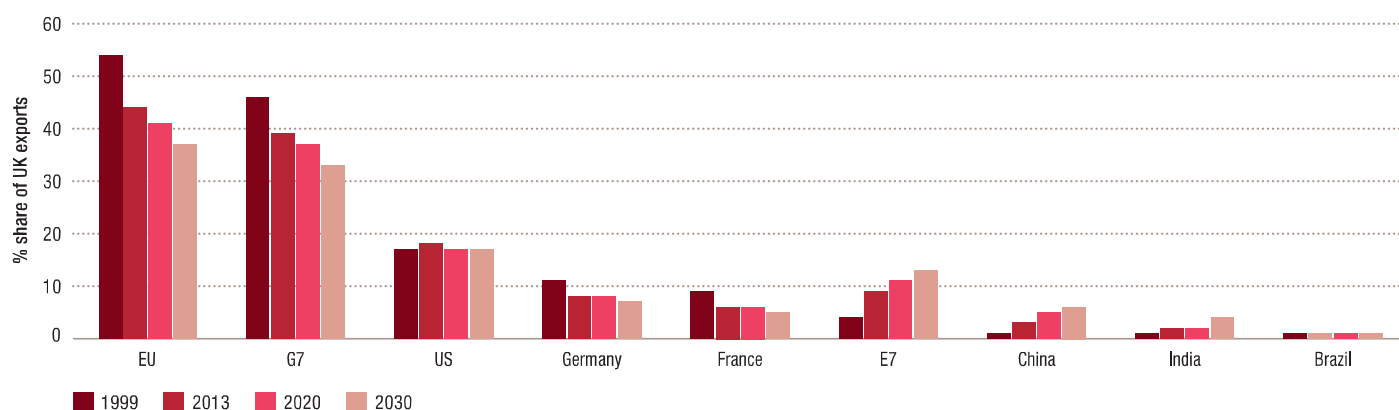
**Figure 4.10 – Real growth in UK total exports to key markets: 1999-2007, 2008-2013, 2014-2020, 2021-2030**



Source: PwC Analysis

<sup>4</sup> Our relative optimism here mirrors the arguments put forward in a recent speech by Professor Kirstin Forbes of the MPC: <http://www.bankofengland.co.uk/publications/Pages/speeches/2015/848.aspx>

**Figure 4.11 – Actual and projected UK export shares to key markets: 1999, 2013, 2020, 2030**



Source: ONS Pink Book 2014, PwC Analysis

Figure 4.11 shows the actual and projected shares of UK exports to key markets. While the share of UK exports to developed countries (as shown by the G7 columns) is expected to decline gradually over the medium- to longer-term, the US is an exception as its share is projected to remain broadly constant. As a result of faster relative GDP growth in E7 countries, the share of UK exports to these countries is projected to increase. By 2030, the export share to E7 countries is projected to have more than tripled from around 4% in 1999 to over 13% in 2030. It is important to note however that the growth in exports to the E7 is from a relatively low base. Therefore, the relative importance of these emerging markets will not come close to overtaking exports to EU nations by 2030. For example, the share of UK exports to Germany is projected to remain higher than that going to China in 2030.

Another influence on the growth of future exports will be the implementation of impending trade agreements, such as the Transatlantic Trade and Investment Partnership (TTIP). The TTIP seeks to further enhance trade between the EU and the US by reducing trade barriers, particularly non-tariff barriers such as regulatory and competitive requirements.

The TTIP is likely to lead to greater trade between the US and EU in the following goods and services in particular: motor vehicles, metal and metals products, processed food, financial services and insurance, as these are the sectors that have relatively high levels of actionable non-tariff barriers<sup>5</sup>. In addition, the UK, assuming as noted above it remains part of the EU, is negotiating trade deals with a number of emerging markets that include India, the member countries of the Association of South East Asian Nations (ASEAN) and Latin American nations. These trade deals could also provide further opportunities for higher UK export growth, but we have not explicitly taken this into account in our model as the terms of such deals remain to be agreed at the time of writing.

### 4.3 - Summary and conclusions

Our analysis shows that the EU will remain the most important destination for UK exports up to 2030, but its share of the total will decline from 44% in 2013 to around 37% in 2030. By contrast, the share of UK exports going to the US will remain more stable at around 17-18%. This partly reflects the importance of the

US for UK services trade, which is the fastest growing part of our exports.

Although much discussion has centred on the importance of emerging markets as UK export markets, they are not yet that significant. We still export more to Ireland, for example, than to China and Hong Kong combined. In the future, we expect this to start to change, but it will be a slow process – even by 2030, the share of UK exports going to the largest seven emerging economies will still only be around 13%, up from 9% now. UK trade is rather like a supertanker – it cannot be turned around quickly.

It is also important to note that, as recent developments show, exports to emerging markets also tend to be more volatile and susceptible to external and domestic shocks. Therefore it is important that the UK also continues to focus on its established trading partners in the EU and the US.

For UK companies, the key message is that whilst there are great opportunities in rapidly expanding emerging markets, including China and Africa as highlighted by our mini-case studies, businesses need to be well prepared to manage the risks associated with these markets<sup>6</sup>.

<sup>5</sup> CEPR (2013) “Estimating the Economic Impact on the UK of a Transatlantic Trade and Investment Partnership (TTIP) Agreement between the European Union and the United States”.

<sup>6</sup> Our Growth Markets Centre has conducted a lot of useful research on how companies can address these practical challenges – for more details see their website here: <http://www.pwc.com/gx/en/issues/high-growth-markets.html>



## Box 4.1

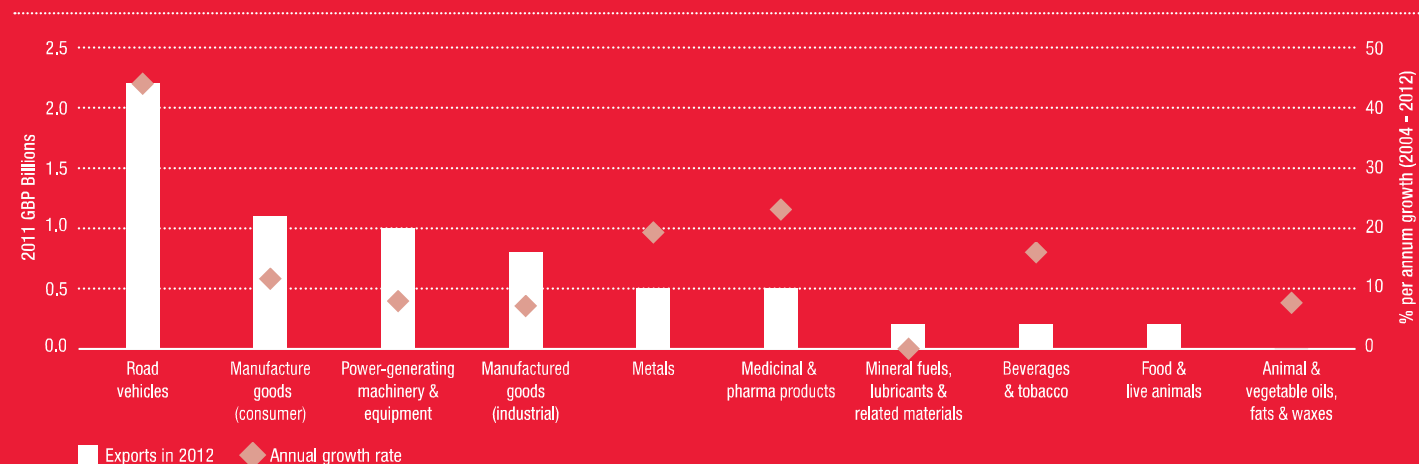
# Future of UK exports to China

In this box, we look in more detail at export trends to China in more detail and explore what opportunities this emerging giant may offer for UK exports going forward.

Figure 4.12 and Figure 4.13 show the UK's key goods and services exports to China in 2012. Looking at Figure 4.12, we see that the UK largest export to China was road vehicles. This was also the fastest growing

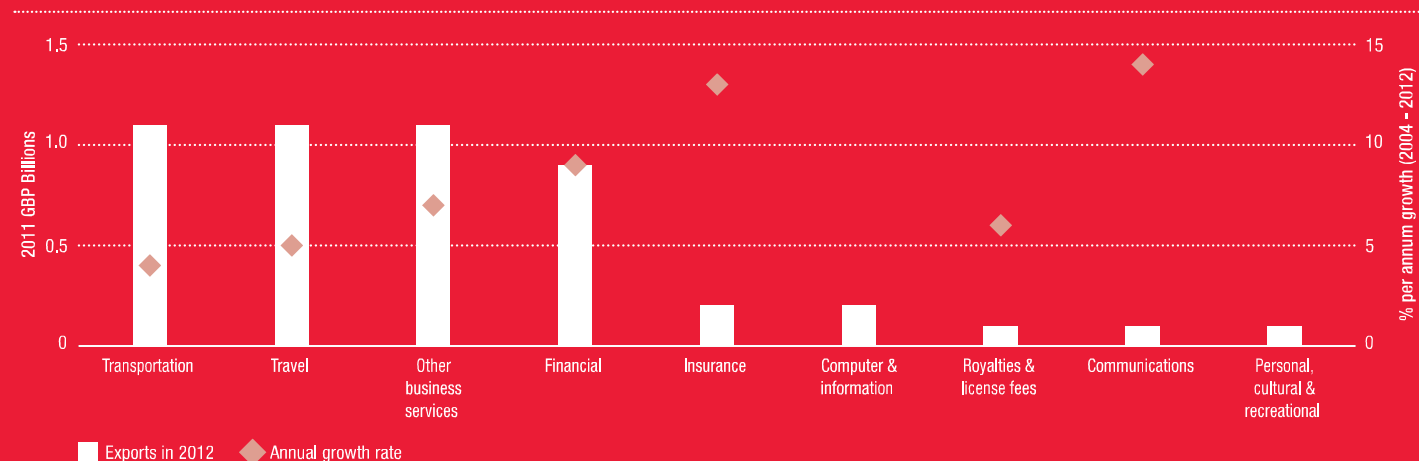
export between 2004 and 2012 with an annual growth rate of more than 40%. Other significant exports to China were manufactured goods, which included both those targeted at the consumer market and those at the industrial sector. Figure 4.13 shows that the largest UK service exports to China were transportation, travel and business services, each of which grew at more than 4% per annum between 2004 and 2012.

Figure 4.12 – UK goods exports to China



Source: HMRC Overseas Trade Statistics

Figure 4.13 – UK services exports to China



Source: ONS Pink Book 2014

## UK exports to China projected to slow down

Following three decades of growth averaging at 10% a year, it was inevitable that Chinese growth rates would decelerate and annual GDP growth is now running at closer to 7%. The slowdown in China is due to a combination of structural and cyclical factors. The former include a shrinking of China's working age population (which peaked in 2012), unsustainable levels of investment spending (reaching 46% of GDP in 2013) and a gradual closing of China's productivity gap with those of rich countries, which makes it harder to sustain growth just by copying rather than innovating.

The headwinds to China's growth also include shorter term cyclical factors, including the slowdown of its property market and a gradual correction to China's debt overhang following years of credit-fueled growth.

These factors combined are likely to dampen growth in UK exports to China in the future compared to past trends and this reflected in our model projections (see Figure 4.8 above). More specifically, UK export growth to China is projected to moderate from over 12% per annum on average in 1999-2013 to around 8% in the medium term (2014–2020) and less than 5% in the longer term (2021–2030), consistent with the projected slowdown in Chinese GDP over the coming years. But this is still much faster than projected growth in UK exports to the EU or the US, so the share of our exports to China is still projected to rise gradually up to around 6% by 2030 (see Figure 4.9 above).

## But opportunities for exporters remain strong

What kind of goods and services should the UK be exporting to China? Traditional economic theory dictates that the UK holds a comparative advantage in exporting services, such as financial and business services as well as education and tourism. However, in 2013, the UK exported more goods than services to China (Table 4.1). This may be explained by China's historic reliance on manufactured exports for growth, leading to imports of machinery, raw materials, plastics and chemicals as inputs to this manufacturing process. The slowdown in China's export growth could therefore affect the ability of UK exporters to continue supplying these types of goods at a similar pace as in the past (though other advanced countries like Germany will be more exposed to this trend).

However, the upside is that as the Chinese economy rebalances from exports and investment- towards consumption-led growth, the UK could benefit from an increase in demand for consumer goods and services. The UK continues to retain its comparative advantage in some areas of high value-added production, including health and pharmaceutical products, as well as luxury consumer goods.

Over the past decade, the share of the services sector in the Chinese economy has risen from 41% in 2001 to 48% in 2014. Growth in exports in financial and related business services, in which the UK has a comparative advantage, has been constrained in the past due to restrictions on the domestic financial services sector and cross-border capital flows. Despite this, as Figure 4.13 shows, the UK's fastest growing services to China were financial, insurance, other business services and communications – all high skill services in which the UK

has a comparative advantage. Gradual liberalisation should lead to even greater opportunities in these sectors. There are some promising early signs here: recent figures indicate that mergers and acquisitions (M&A) activity in the first half of 2015 surged by 57% relative to the second half of 2014<sup>7</sup>. In technology, finance and the real estate sector<sup>8</sup>, total deal value has doubled in size in 2015 compared to last year. The City of London, which is now the largest offshore renminbi trading hub globally (excluding Hong Kong), is also well-placed to benefit from the gradual integration of China's capital markets with global markets, as well as facilitating trade and investment between the UK and China.

The travel and tourism sector also offers opportunities for growth – this was one the largest UK service exports to China in 2012 (Figure 4.13). Up until recently, stringent visa regimes for Chinese tourists made it challenging for Chinese citizens to visit the UK. Most prefer to apply for a Schengen visa, which provide non-EU citizens with access to countries within the Schengen area (which the UK is not part of). As a result, the UK has fallen behind as a top tourist destination: Chinese tourist numbers to Europe increased by 7.5 million in 2012 but only by 179,000 to the UK<sup>9</sup>. The streamlined visa procedures introduced via a pilot scheme in July 2015 that will enable visitors to obtain both UK and Schengen visas simultaneously could boost tourism exports from China. In addition, the Prime Minister also announced plans in October this year for a new 10-year multi-entry visa for Chinese tourists, which could further boost tourist arrivals. Similarly changes to student visas could also help keep the strong flow of Chinese students coming to UK universities, which is another potential long-term export growth sector.

### Key PwC contacts for more information on doing business in China

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7 PwC (2015) "China M&A activity in the first half of 2015 surges 57% compared to 2H 2014".

8 The rise in real estate M&A activity in China has resulted from real estate developers in China requiring fresh sources of capital as the market has slowed down and traditional sources of capital harder to gain access to.

9 Tourism Alliance (2015) "UK Tourism Statistics 2014".

## Box 4.2

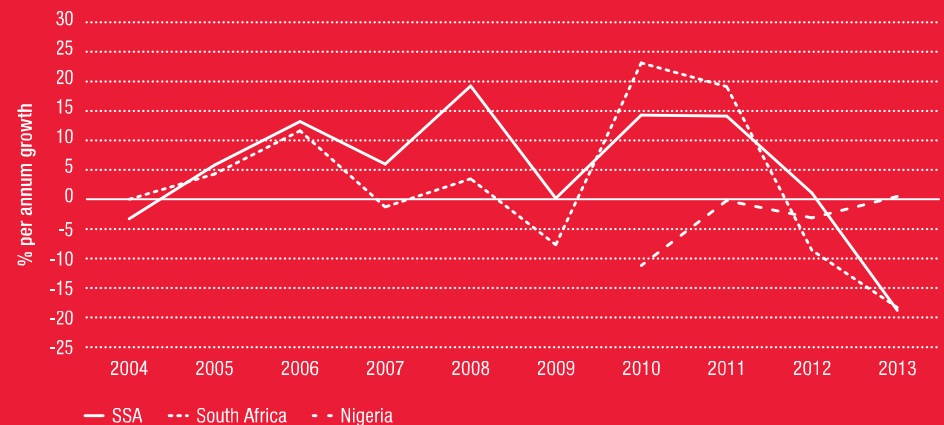
# Future of UK exports to Africa

In this box, we look at exports to Africa, and particularly Sub-Saharan Africa, in more detail. We explore the key economic and demographic trends affecting the region and how these may affect our export performance. Although Africa only accounted for 4.6% of UK goods exports and 3.3% of UK services exports in 2013, its importance as a trading partner is likely to increase as the region is likely to grow at a significantly faster rate than the world average.

The UK's key export partners in this region are South Africa and Nigeria, which accounted for £4.5 billion and £2.5 billion of UK exports respectively in 2013, so we focus our analysis on these two countries. Figure 4.14 shows the trends in exports growth to South Africa and Nigeria between 2004 and 2013. The average annual growth rate of UK exports to these countries was 4.6% during this period. However, as Figure 4.14 shows, growth has been volatile and exports declined following the crisis. The East African Community (EAC), which consists of Burundi, Rwanda, Kenya, Tanzania and Uganda, also accounts for around 9% of total UK goods exports to sub-Saharan Africa.

Machinery and transport equipment accounted for 47% of total UK exports to South Africa and 53% of total goods exports in Nigeria in 2013. Breaking this down into the components that form this category, we see that 43% of this was road vehicle exports in South Africa and 33% was power generating and general industrial machinery in Nigeria. In terms of services, the UK's largest exports to South Africa included financial services, telecommunications and transport services<sup>10</sup>.

Figure 4.14 – UK exports to Sub-Saharan Africa<sup>11</sup>



Source: ONS Pink Book 2014, IMF DOTS

### Sub-Saharan Africa remains a region of opportunities

Growth in sub-Saharan Africa has weakened somewhat in recent years due to external shocks such as falling commodity prices, which have knock-on impacts on UK exports to the region. The fall in oil prices in particular has affected a number of oil-exporting countries in Africa, including Nigeria and Angola. However, net oil-importing countries such as South Africa have benefitted from cheaper energy prices.

As commodity prices gradually recover or at least stabilise, growth in sub-Saharan Africa is likely to accelerate again in the medium term. The IMF projects the sub-Saharan African economy will grow at an average annual rate of 4.8% between 2015 and 2020, compared to 3.8% for the global economy as a whole<sup>12</sup>. With this growth comes greater potential for UK exports growth.

The UK's export potential to Africa can be best understood by looking at the large scale trends currently taking place in the continent. The first is rapid urbanisation: the African Development Bank projects that the share of the population living in urban areas across the whole of Africa will increase from 36% in 2010 to 50% in 2030. The growth in urbanisation offers tremendous opportunities for infrastructure-related investment in areas such as energy, water, transport and communications.

10 Services data not currently available for Nigeria.

11 Data for Nigeria excludes travel, transport and banking.

12 Our World in 2050 projections suggests that growth in South Africa is projected to be slower than the rest of sub-Saharan Africa in the medium term (2.4% per annum between 2014 and 2020), but improving to 4.4% in the longer-term (2020-2030).

Second, the size of the middle class populations in sub-Saharan countries is expected to more than triple to 107 million by 2030, which is likely to have a significant impact on household spending<sup>13,14</sup>. This, combined with the growth in urbanisation, should open up a number of opportunities for the UK to increase consumer goods exports such as road vehicles, a relative

low-income countries. Between 2004 and 2012, UK exports of road vehicles to Nigeria and South Africa grew by 15% and 11% a year on average, albeit from a low base.

The fastest growing services exports to South Africa have been in technology and personal/recreational-related exports. With a growing middle class and rising household wealth, this could also be an area of strength for UK exports.

Third, Africa is on the cusp of a “demographic dividend”<sup>15</sup>. The IMF projects that, by 2050, the working age population (those between the ages of 15 and 64), is projected to triple to 1.25 billion. Sub-Saharan Africa’s share of the global labour force is also projected to increase from 10% in 2010 to 37% in 2100<sup>16</sup>. The integration of the African labour force into global supply chains could drive greater levels of industrialisation, which will provide further opportunities for UK manufacturers to export industrial goods and machinery.

Although opportunities abound, however, Africa also remains highly susceptible to future shocks. Many countries in the region continue to rely on commodity exports to drive growth, which could leave them vulnerable to swings in commodity prices. Some UK exporters may be affected by government policy that seeks to reduce commodities dependence by diversifying into other manufacturing sectors<sup>17,18</sup>. However, this policy also offers prospects to boost exports of other higher value-added goods and machinery. The continent also faces other challenges, such as political instability and corruption, which means that it will take time for Africa to realise its full potential. But, in the long term, it is likely to become an increasingly important focus for UK exporters.

#### **Key PwC contacts for more information on doing business in South Africa and Nigeria**

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13 Middle class is defined here as those households with daily expenditures between \$10 and \$100 per person in purchasing power parity terms.

14 Kharas, H. and Gertz, G. (2010) “The New Global Middle Class: A Cross-Over from West to East”, Wolfensohn Centre for Development at Brookings.

15 Drummond, P., Thakoor, V. and Yu, S. (2014) “Africa Rising: Harnessing the Demographic Dividend”, IMF working paper.

16 IMF (2015) “Regional economic outlook: Sub-Saharan Africa Navigating Headwinds”

17 The UK has tended to export refined materials and machinery for mining in commodity exporting nations.

18 Export Britain (2014) “Nigeria tasks UK on trade strategy at NBCC forum.”

# Technical appendix

## Projecting UK exports to 2030

As discussed in the main text, there is a statistically significant historic relationship between UK real export growth to different countries and two key macroeconomic factors: real GDP growth in these destination countries and how their real exchange rate has moved against the pound. To explore this more formally we have performed a number of regressions, with the preferred model for total UK exports being as summarised in Table 4.2 below. These results cover the UK's 33 largest export markets using data over the period from 1999 to 2013.

The strongest relationship is with GDP, with a 1% increase in annual real GDP growth in a country being associated on average with a 1.07% rise in real UK exports to that country. We can see this relationship clearly when we use the results in Figure 4.15 to project forward UK real export growth by country using our long-term global growth model projections. As Figure 4.15 shows, there is a strong correlation between the two variables, with the relatively small variations from a purely linear relationship (shown by the dotted line in the chart) being explained by secondary effects from projected real exchange rate movements. The latter are largely associated with emerging market economies with relatively fast productivity growth, which are projected to experience rising real exchange rates on average against the pound over the period to 2030. This is in line with both economic theory and historical experience.

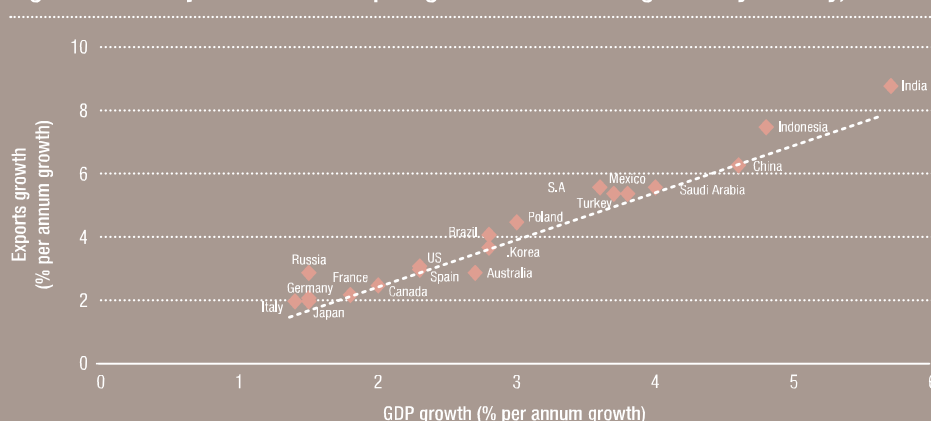
Other key results are summarised in Table 4.3, which shows period averages for real UK export growth and real GDP growth in key markets. As we can see, the export growth rate for China is projected to slow down. This is a result of the slowing GDP growth rate in China. For India, we see continuing strong expansion in the medium term, but also with some moderation after 2020 (but less than for China).

**Table 4.2 – UK export model estimates**

Dependent variable	Coefficients (t-statistics)
Real growth p.a. of total UK exports to destination country	
<b>Independent variables</b>	
GDP growth p.a. of destination country	1.072 (4.00)
Real exchange rate growth p.a. of sterling vs destination country currency	0.451 (2.47)
<b>Constant</b>	0.002 (0.26)

Source: PwC Analysis

**Figure 4.15 – Projected real UK export growth vs real GDP growth by country, 2012-30**



Source: PwC Analysis

**Table 4.3 – Real GDP growth and real UK export growth projections for key markets**

	UK Exports (% per annum growth)			GDP (% per annum growth)		
	1999-2013	2014-2020	2021-2030	1999-2013	2014-2020	2021-2030
US	3.1	3.4	3.0	2.3	2.5	2.2
Germany	1.1	2.1	1.9	1.4	1.4	1.4
France	0.5	2.1	2.3	1.7	1.5	1.8
China	15.0	8.0	5.0	9.8	6.3	3.7
India	7.4	10.2	7.8	7.1	6.7	5.1
Brazil	6.9	3.2	4.6	3.2	2.0	3.3
G7	1.7	2.7	2.5	1.7	2.1	2.0
E7	9.7	6.8	5.6	6.1	5.4	3.9
Eurozone	1.3	2.2	2.2	1.5	1.4	1.7
EU	1.5	2.3	2.3	1.7	1.9	1.8
World	3.0	3.6	3.4	2.7	3.4	3.0

Source: PwC Analysis

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