

UK Economic Outlook

Will consumer spending growth continue to fuel the UK recovery?

The future shape of UK exports





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Highlights and key messages for business and public policy

- The UK economy has slowed a little in 2015 but domestic demand growth remains relatively strong, helped by lower oil prices. The global outlook remains mixed with a gradual pick-up during the year in the US and the Eurozone, but a slowdown in China, recessions in Russia and Brazil, and increased volatility in emerging markets more generally.
- In our main scenario we expect UK GDP growth to average around 2.4% in both 2015 and 2016. Consumer spending and business investment will be the main drivers of UK growth in these years.
- Risks to growth are weighted somewhat to the downside in the short term due to international risks, particularly in relation to emerging markets. But there are also upside possibilities if the global environment improves and productivity growth rates accelerate in the UK.
- London and the South East continue to lead the recovery, with average growth of around 3% in 2015-15, but all other UK regions should also register positive real growth of around 1.6-2.4% per annum over this period.
- Inflation has been close to zero this year but seems likely to rise back towards its 2% target by the end of 2016, so the MPC may start to raise interest rates gradually during the first half of next year. Businesses and households should still plan for rates to be back to around 3-3.5% by 2020.
- The Autumn Statement is likely to confirm plans for further fiscal tightening to eliminate the budget deficit before the end of this decade (although there seems likely to be some softening of planned tax credit cuts). This will impose some drag on the UK economy, but the private

Key projections		
	2015	2016
Real GDP growth	2.4%	2.4%
Inflation (CPI)	0.1%	1.5%

Source: PwC main scenario projections

sector should be strong enough to offset this in terms of GDP growth. However, unprotected Whitehall government departments and local authorities in England could face cumulative real budget cuts of around 25% over the next four years.

Consumer spending growth may moderate in medium term

- UK consumer spending has grown by around 2.5% per annum in real terms over the past three years. This has been driven by rapid jobs growth and a falling household savings rate, which in turn has been supported by rising house prices and increased consumer confidence and borrowing.
- We expect this positive momentum to be maintained in the short term, helped by near zero inflation rates that are boosting real income growth and continued historically low mortgage rates.
- In the medium term, however, we expect real consumer growth to moderate to just over 2% per annum in 2017-20 due to slower employment growth and a gradual rise in inflation and interest rates towards more normal levels.
- Housing and utilities is projected to be the fastest growing category of consumer spending over the next five years, accounting for over a quarter of total UK household spending by 2020.
- The share of household spending on leisure-related activities should also

rise over time, but we project that the share spent on food and clothing will fall, in part due to continued intense price competition from online and high street discounters.

UK exports turning gradually from Europe to Asia

- In 1999, the EU accounted for 54% of total UK exports, but this has declined gradually to around 44% now and we expect it to fall further to around 37% by 2030.
- By contrast we expect the share
 of UK exports going to China,
 India and the next five largest
 emerging markets (which we
 collectively call the 'E7') to continue
 to rise gradually from around 9%
 now to 13% in 2030.
- Services have also become increasingly important for UK trade. Indeed we expect the total value of UK services exports to exceed that of manufactured goods exports by 2020. This will help to keep the share of UK exports going to the US, which is by far our largest trading partner for services, broadly stable at around 17-18% over the period to 2030.

1 - Summary

Recent developments

The UK economy grew by just under 3% in 2014, which was the fastest rate seen since 2006 and the strongest growth rate in the G7.

However, UK growth has slowed somewhat during the first three quarters of 2015, which appears to reflect the drag in that period from sluggish growth in the Eurozone and uncertainties related to problems in Greece earlier in the year and risks associated with China and some other emerging markets more recently.

In contrast, UK domestic demand growth has remained relatively strong so far this year, driven by rising employment, the recent pick-up in earnings growth and the benefits of lower global oil prices for UK consumers (and many businesses).

UK growth continues to be driven primarily by services, with manufacturing growth having slowed since last year and construction trends being erratic. Business investment has shown signs of a stronger recovery in the latest official data, although this has not yet translated into consistently stronger productivity growth.

Government departmental spending cuts have slowed down somewhat over the past couple of years, but the Budget indicated that real reductions will continue for the next four years. The Budget also announced net tax rises building up to around £7 billion by 2020 and welfare cuts that will hit some lower earners quite severely, albeit with a partial offset from the more generous National Living Wage in some cases. We would expect the broad thrust of these policies to be confirmed in the Autumn Statement, although there now seems likely to be some softening of the tax credit cuts (either by scaling these down and/or by introducing some form of transitional relief).

Table 1.1: Summary of UK economic prospects

Indicator (% change on previous year)	OBR forecasts (July 2015)		Independent forecasts (October 2015)		PwC Main scenario (November 2015)	
	2015	2016	2015	2016	2015	2016
GDP	2.4	2.3	2.5	2.4	2.4	2.4
Consumer spending	3.0	2.5	3.0	2.5	2.9	2.7

Source: Office for Budget Responsibility (July 2015), HM Treasury survey of independent forecasts (average values in October 2015 survey) and latest PwC main scenario.

The rate of consumer price inflation (CPI) has remained around zero in recent months as commodity prices have generally remained weak, partly due to relatively subdued global demand growth. The latter has also been a factor in causing both the US Federal Reserve and the Bank of England to hold off from interest rate rises in recent months.

Future prospects

Consumer spending growth is projected to be slightly stronger than GDP growth in 2015-16, with a boost from lower oil prices and increased real earnings growth, but it may slow later as discussed further below.

We expect continued relatively strong business investment growth in 2015 and 2016, but at a somewhat slower rate than in 2014. Business confidence could be affected by increased international risks relating to China and other emerging markets, as well as continuing uncertainties relating to Greece, conflicts in the Middle East and the planned referendum on UK membership of the EU (although there is little hard evidence of this having had a large effect so far). But the domestic outlook still seems reasonably favourable for UK business investment, helped by the further corporation tax rate cut announced in the Budget in July.

As always there are many uncertainties surrounding our growth projections, as illustrated by the alternative scenarios in Figure 1.1. There are still considerable downside risks relating to international developments, but there are also upside possibilities if these problems can be contained and a virtuous circle of rising confidence and spending can be established as in past economic recoveries.

Inflation will remain very low this year, but could rebound to close to its 2% target by the end of 2016 assuming there is no repeat of past falls in global energy and food prices. There could be upside risks to this inflation outlook in the longer term if domestic wages continue to recover without a corresponding rise in productivity.

We do not expect any immediate rise in official UK interest rates, but a gradual upward trend seems likely from the first half of 2016 onwards. In the long term, we would expect official rates to rise very gradually to more normal levels of around 3-3.5% by 2020.

Higher interest rates will help savers and reduce pension fund deficits, but borrowers (including businesses and the government) might gain from locking in funding now for long term investments such as infrastructure and housing. Households need to bear in mind likely future interest rate rises in any decisions on mortgages or other longer term loans.

Can the UK consumer continue to drive the recovery?

As discussed in detail in Section 3 of this report, consumer spending has grown relatively strongly over the past three years due to strong employment growth, low mortgage interest rates and higher personal income tax allowances. All of these have boosted household disposable incomes, although real cuts in non-pension benefits have partly offset these factors. In addition, increased confidence and borrowing since mid-2012 have been reflected in a declining savings ratio, giving a significant additional boost to real consumer spending growth (2.5% per annum in the three years to Q2 2015) over and above real disposable income growth (0.8% per annum over the same period).

Looking ahead, our analysis suggests that real income growth will pick up further in 2015-16, but may then moderate as jobs growth slows and further real benefit cuts take effect. With limited scope for further reductions in household savings ratios from already low levels, this is likely to cause either a moderation in consumer spending growth in the medium term, or a potentially unsustainable build-up in household debt.

More specifically, we project in our main scenario that real household spending will grow by around 2.9% in 2015 and 2.7% in 2016, but this could then slow down to an average of around 2.3% per annum in the 2017-2020 period (see Table 1.2).

There are considerable uncertainties around this, however, with alternative scenarios suggesting a plausible range for medium term real consumer spending growth of around 1.5-3% per annum.

Figure 1.1 - Alternative UK GDP growth scenarios



Source: PwC based on latest ONS data

Table 1.2: Main scenario projections of real consumer spending growth

% per annum	2015	2016	2017-20
Real household disposable income	3.5%	2.3%	1.8%
Adjusted savings ratio	-0.7%	-1.1%	-2.5%
Real household expenditure	2.9%	2.7%	2.3%

Source:PwC analysis taking account of actual ONS data for the first half of 2015

We also project that, by 2020, household will have to allocate more than 25% of their budget to spending on household and utilities. This is the fastest growing category, reflecting factors such as upward pressure on real rent levels from continued housing shortages. We also expect the share of total spending in leisure-related areas such as recreation, culture, hotels and restaurants will also increase assuming the economic recovery continues up to 2020. By contrast, the share of spending on categories such as food and clothing are projected to decline as online and high street discounters play an increasing role in these retail sectors.

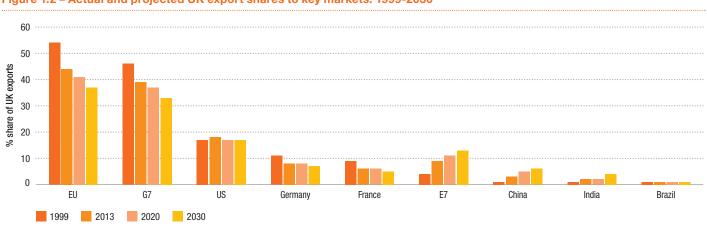


Figure 1.2 - Actual and projected UK export shares to key markets: 1999-2030

Source: ONS Pink Book 2014, PwC analysis

UK exports shift gradually from Europe towards emerging markets

Our detailed analysis in Section 4 shows that the EU will remain the most important destination for UK exports up to 2030, but we project that its share of the total will decline gradually from 54% in 1999 and 44% in 2013 to around 37% in 2030 (see Figure 1.2).

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 change, but it will be a slow process – even by 2030, the share of UK exports going to the largest seven emerging economies (the E7), led by the Asian giants of China and India, 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 in Asia and elsewhere, including Africa, businesses need to be well prepared to manage the risks associated with these markets.

2 – UK Economic prospects

Key points

- The UK economy has continued its pattern of steady services-led growth this year, although there appears to have been some moderation in the pace of expansion in recent months, reflecting global uncertainties.
- In our main scenario, we project the UK economy to grow at around 2.4% in both 2015 and 2016, down slightly from 2.9% in 2014, but still one of the strongest performances in the G7 along with the US.
- Consumer spending growth is estimated to be just under 3% in 2015, boosted by rising employment and a pick-up in real earnings growth as inflation has remained close to zero this year. We expect some moderation in real consumer spending growth next year as the inflation effect fades, but it should remain relatively strong at around 2.7%. Business investment is projected to be the other main driver of UK growth in 2016.
- Service sector growth has led the way since the recovery began in mid-2009 and this has continued in 2015. Manufacturing has weakened due to continued sluggish growth in the euro area and the relatively strong pound against the euro, while construction growth has been volatile.
- We estimate that London and the South East were the fastest growing regions in 2015 with output increases of around 3% and this seems likely to continue in 2016.
 Other UK regions are expected to see positive growth of around 1.6-2.4% in both 2015 and 2016, but Northern Ireland and the North East continue to lag behind somewhat.

- The UK recovery is still exposed to downside global risks related to possible problems in China and some other large emerging economies spreading to a more general loss of confidence in international financial markets. However, there are also upsides include the continued feedthrough to consumers of the benefits of low oil prices as well as falling unemployment and recent signs of stronger earnings growth in the UK.
- The Bank of England has so far kept interest rates at their record low of 0.5%, but we would expect a gradual tightening of policy to begin during the first half of 2016. The subsequent rise in rates is likely to be very gradual, but could still build up to official interest rates of around 3-3.5% by 2020. Businesses and households should factor this into their forward financial planning.
- The budget deficit has been on a gradual decreasing trend, but remains uncomfortably high. Given the government's stated objective to achieve a small budget surplus by 2019/20, it therefore seems likely that the Chancellor will largely stick to his tough spending plans in his Autumn Statement on 25th November, though there could be some softening of the policy on tax credits. This will imply further severe cuts for unprotected Whitehall government departments and local authorities in England¹.

Introduction

In this section of the report we describe recent developments in the UK economy and review future prospects. The discussion covers:

- 2.1 Recent developments and the present situation
- 2.2 Economic growth prospects: national, sectoral and regional
- 2.3 Outlook for inflation and real earnings growth
- 2.4 Monetary and fiscal policy options
- 2.5 Summary and conclusions

We provide further detail on medium to long term prospects for UK consumer spending and exports in Sections 3 and 4 respectively.

 $^{1\}quad Less \ severe \ reductions \ are \ expected \ in \ the \ devolved \ budgets \ for \ Scotland, \ Wales \ and \ Northern \ Ireland.$

2.1 Recent developments and the present situation

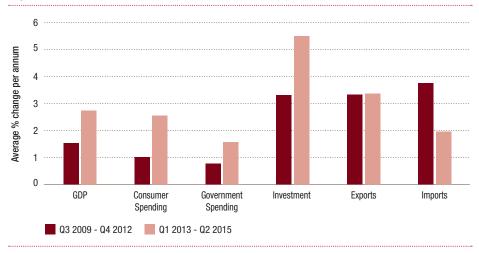
The UK economy has grown relatively strongly in recent years, averaging around 2.7% per annum since the beginning of 2013, as shown in Figure 2.1. This was up from an average of around 1.5% per annum in the first phase of the recovery from mid-2009 to the end of 2012, when UK growth was held back by the Eurozone crisis, rising oil prices and significant fiscal tightening in 2011-12 (including the VAT rise to 20%).

Quarterly growth rates have been somewhat variable this year, picking up from a below trend 0.4% in Q1 to a healthier 0.7% in Q2 before moderating again to 0.5% in the third quarter according to preliminary estimates. But the underlying trend is of a steady recovery at a similar average pace this year to long-term historical trend rates.

Fixed investment growth was hit hard by the recession and had a rather patchy recovery initially as increased private business investment was offset by sharp cuts in public investment in 2010-12, as well as subdued levels of housebuilding at that time. However, as Figure 2.1 shows, the investment recovery has picked up speed since early 2013 with housebuilding recovering and business investment generally strong at an average of 5.7% annually, despite some quarterly volatility.

Government consumption has continued to expand in real terms throughout the recovery period despite the fiscal austerity measures implemented by the last government, albeit only at a modest rate. Household spending has grown steadily at an average rate of around 2.5% per annum since the start of 2013, buoyed by strong employment growth and, more recently, a pick-up in real earnings growth (as discussed in more detail in Section 3 of this report).

Figure 2.1 - Two phases of UK economic recovery



Source: ONS

Rising current account deficit not a serious cause for concern at present

Figure 2.1 shows that all key elements of domestic demand have made positive contributions to the UK recovery, particularly since the start of 2013. The contribution of net trade to UK GDP growth has been more erratic, reflecting the fact that this is driven by relative export and import growth, both of which can be volatile in the short term.

As Figure 2.1 illustrates, however, looking at longer term periods shows fairly steady UK export volume growth of just over 3% per annum since mid-2009. Import volume growth was somewhat stronger in the first phase of the recovery, but somewhat weaker since early 2013 (though the calculation for the latter period may be distorted to some degree by unusually weak import volumes in the second quarter of 2015, which may well prove temporary based on the latest trade data for July and August).

More generally, there has been concern about the rising current account deficit in the UK in recent years, reaching near record levels of around 5% of GDP on average in 2014. Although this dropped to 3.6% of GDP in Q2 2015 it is too soon to say if this is a blip or the start of a more persistent downward trend.

However, the earlier deterioration of the current account balance was primarily due to net investment income shifting from positive to negative territory rather than weakness in the trade deficit itself, where a rising services surplus has broadly offset an increasing goods deficit.

Net investment income trade data are not easy to interpret, but part of the explanation for the deteriorating trend in 2012-14 is the feed through from losses incurred by UK investors in the Eurozone as a result of the persistent financial crisis in some of these economies. Ultimately, this effect should fade and we might therefore expect a return to the more favourable net investment income balance that the UK has historically enjoyed (although this cannot be guaranteed). Certainly, for the moment, there has been no apparent difficulty in funding the UK current

account deficit, with the pound actually strengthening as capital flows have been attracted by relatively strong UK growth in 2013-14 compared to most other advanced economies.

At present, therefore, we do not see the rising UK current account deficit as a serious cause for concern. This situation needs to be monitored, however, as a current account deficit at the 5% of GDP levels seen in 2014 would probably not be sustainable in the longer term and could make the pound vulnerable to an undesirably sharp downward correction at some point if the market ever lost confidence in the UK's ability to deliver a relatively strong economic growth rate.

Manufacturing output weakens but services remain stronger

Manufacturing output declined in each of the first three quarters of 2015, as shown in Figure 2.2. The latest contraction left manufacturing output around 6% below its pre-crisis peak in Q1 2008. Despite a low oil price, weak growth in Europe and sterling's appreciation against the euro have suppressed any significant increases in UK manufacturing exports.

The latest Markit/CIPS Purchasing Managers' Indices largely reflected this official data, as seen in Figure 2.3. However, October's manufacturing PMI jumped steeply to 55.5 (from 51.5 in September), showing some positive signs.

Figure 2.2 - Sectoral output and GDP trends



Source: ONS

Figure 2.3 - Purchasing Managers' Indices of business activity



Source: Markit/CIPS

Services growth has remained stronger but has also shown some signs of moderating during 2015. Quarterly growth rates fell from an average of 0.9% in 2014 to only around 0.6% in the first three quarters of 2015 (though Q3 was slightly higher at 0.7%). As Figure 2.3 shows, PMI data showed a surprisingly large decline in the services indicator from 55.6 in August to 53.3 in September, although it then recovered to 54.9 in October. We should also note that the PMI services index excludes retail sales, which rose strongly in September.

The construction sector has been volatile, with strong quarterly growth of 1.4% in Q2 2015 followed by an even larger decline of 2.2% in O3. The construction PMI tells a different story, however, standing at 58.8 in October and showing growth across all elements of construction, with housebuilding being the strongest sub-sector (though housebuilding levels remain low by pre-crisis standards and well below estimates of the supply increases needed to meet rising housing demand). Preliminary ONS estimates of construction output are often subject to large subsequent revisions, so we will have to wait and see if these eventually move more into line with survey data, but for the moment trends in the sector remain rather unclear.

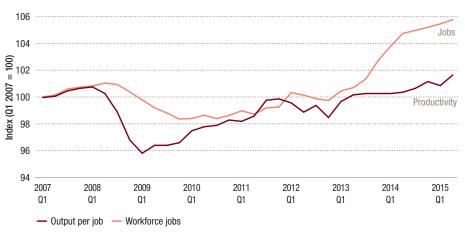
Productivity picks up somewhat in 2015 as jobs growth eases

Workforce jobs have been growing strongly in the UK since 2012. Employment is now 6% higher than its lowest point during that year, and the employment rate is at its highest level since comparable estimates were first made in 1971. There was some moderation in jobs growth in the second quarter, but it appears to have picked up again in July and August. The unemployment rate in August fell to 5.4%, its lowest level since the start of the recession in Spring 2008.

Following a disappointing few years of stagnation, as shown in Figure 2.4 productivity picked up somewhat in late 2014 and the first half of 2015, surpassing its pre-crisis peak for the first time in Q4 2014. This has also been reflected in strong real earnings growth recently as the jobs market has tightened.

Comparisons with other G7 economies by the ONS still show relative weak overall UK productivity growth and levels in recent years, but as discussed in detail by Andrew Sentance, our senior economic adviser, in the last issue of this report², there has for some years been reasonably strong productivity growth in the non-financial private services sector in particular. Weak UK productivity growth during the recovery period has been particularly focused on the financial services, energy and public sectors rather than being an economy-wide phenomenon.

Figure 2.4 – Workforce Jobs and Productivity



Source: ONS

 $^{2\}quad See full \ article \ at: http://www.pwc.co.uk/services/economics-policy/insights/uk-economic-outlook/ukeo-july2015-productivity-growth.html$

Relatively high consumer confidence supports retail sales growth

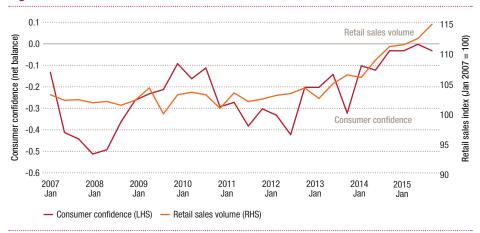
Consumer confidence as measured by PwC's own regular survey has been high recently, as shown in Figure 2.5, relative to the low sentiment and high volatility experienced since 2007. Together with strong employment and, more recently, real earnings growth, this has kept retail sales volumes growing at a relatively strong rate so far this year.

Stock market recovery suffers setback in the summer

Equity markets across the UK, the rest of Europe and the US had been recovering steadily since the sovereign debt crisis in Europe but suffered a setback over the summer months as shown in Figure 2.6. The FTSE fell over 9% in August alone, while Euronext fell by 12% as a stock market crash in China heightened worries about growth in the country, which spread across the globe.

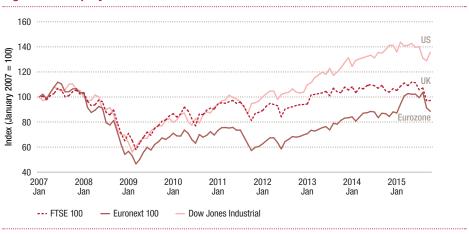
UK and European markets remained weak in September while the Dow regained some ground as it became clear the US Federal Reserve would delay raising interest rates. The relatively poor recovery of the FTSE was caused in large part by sharp decreases in mining and energy stocks, which have a relatively high weight in this index. In general, though there is limited empirical evidence of a close link between UK stock market trends and real economic growth, so these market fluctuations would only be of concern if we were to see a much larger and more persistent negative trend emerging.

Figure 2.5 - Consumer confidence and retail sales



Sources: PwC Consumer survey, ONS data for retail sales

Figure 2.6 - Equity market indices



Source: Thomson Reuters Datastream

2.2 Economic growth prospects: national, sectoral and regional

We project that the UK will remain one of the fastest growing economies in the G7, alongside the US, with GDP growth of around 2.4% in both 2015 and 2016.

These figures are similar to the projections in the July edition of this report, with only a small downward revision in estimated UK GDP growth in 2015 from 2.6% to 2.4%. This reflects our view that recent global volatility should not undermine the basic strength of the UK recovery, which continues to be driven by private domestic demand growth and non-financial services.

Consumer spending is expected to grow by 2.9% in 2015, slightly stronger than in 2014 in the light of a good first half of this year. However, we expect some moderation to 2.7% growth in 2016 as the past fall in the household savings rate slows and consumer spending growth becomes more dependent on real income growth. The basis for this projection is set out in more detail in the special article in Section 3 below, which also includes projections suggesting a further moderation in consumer spending growth to an average of around 2.3% per annum in the medium term (2017-20), broadly in line with trend growth in the UK economy as a whole.

2014 was a particularly strong year for business investment and housebuilding, leading to total fixed investment growth of 7.5% last year, the highest rate since 1998. Investment growth has moderated somewhat in the first half of 2015, partly reflecting temporary factors such as electoral uncertainty (now resolved) and concerns about a possible Greek exit from the euro area that have eased for now. We expect some pick up in investment growth in 2016 as the domestic recovery continues, though

Table 2.1 - PwC main scenario fo	Table 2.1 - PwC main scenario for UK growth and inflation						
% real annual growth unless stated otherwise	2014	2015p	2016p	••••••			
GDP	2.9%	2.4%	2.4%	••••••			
Consumer spending	2.7%	2.9%	2.7%				
Government consumption	1.9%	1.8%	0.5%	••••••			
Fixed investment	7.5%	3.8%	5.2%				
Domestic demand	3.2%	1.8%	2.3%	••••••			
Net exports (% of GDP)	-0.4%	0.7%	0.1%				
CPI inflation (%: annual average)	1.5%	0.1%	1.5%	•••••••			

Source: ONS for 2014, PwC main scenario projections for 2015-16

Table 2	2∙ Official	and inden	endent fo	recasts

(% real YoY growth unless stated otherwise)	Latest OBR forecasts estimates (July 2015)			Average independ forecast (October	
	2014	2015	2016	2015	2016
GDP	2.9%	2.4%	2.3%	2.5%	2.4%
Manufacturing output	2.7%	N/A	N/A	0.7%	1.5%
Consumer spending	2.7%	3.0%	2.5%	3.0%	2.5%
Fixed investment	7.5%	5.6%	5.6%	6.4%	4.8%
Government consumption	1.9%	1.2%	0.5%	1.7%	0.5%
Domestic demand	3.2%	2.6%	2.6%	2.4%	2.4%
Exports	1.8%	3.8%	3.8%	4.2%	3.4%
Imports	2.8%	5.1%	4.6%	3.2%	3.6%
Current account (£bn)	-92.9	-92.2	-74.5	-87.3	-81.8
Unemployment claimant count (Q4, m)	0.91	0.8	0.7	0.82	0.78

Source: ONS for 2014, OBR Economic and Fiscal Outlook (July 2015), HM Treasury Forecasts for the UK economy: a comparison f independent forecasts (October 2015)

this is subject to some downside global risks as discussed further below.

Government consumption grew at 1.9% in 2014 and 1.8% in 2015, the fastest rates since the coalition government took office in 2010. But with more spending cuts planned, we project this to moderate to around 0.5% in 2016, which would be similar to the trend during 2010-2013

when spending cuts were proceeding at a faster pace than recently.

UK net exports made a negative contribution to GDP growth in 2014, but this is expected to be reversed in 2015 based on data for the first half of the year. With global growth remaining relatively subdued, however, and the effects of past sterling appreciation still

working their way through, we expect the net trade contribution to growth to be broadly neutral in 2016. The global outlook is, however, one of the biggest areas of uncertainty associated with our growth projections as discussed further below (and in Section 4 as regards longer term UK export prospects).

Table 2.2 outlines estimates and projections for GDP and its key components from the OBR and independent forecasters. Overall, the views taken of growth prospects are similar to those in our own main scenario, particularly the average independent forecasts, which were made more recently than the latest published OBR projections from July.

Alternative growth scenarios

In addition to our main scenario as outlined in Table 2.1, we have also considered two alternative UK growth scenarios, as shown in Figure 2.7:

Our 'strong recovery' scenario projects growth accelerating to close to 4% in 2016. This relatively optimistic scenario assumes quicker growth in the Eurozone, the US and other major global economies, which

would also boost consumer and business confidence in the UK. This in turn would result in businesses undertaking greater investment activity, an increase in consumer spending and stronger UK exports.

Our 'renewed slowdown' scenario, by contrast, sees UK GDP growth slowing down to below 1% in 2016. This would be the result of adverse shocks to the UK economy relating to a renewed downturn in the Euro area as well as significantly weaker economic growth in China and other leading emerging markets resulting in significant global financial volatility. These events would have negative implications for UK financial institutions and other businesses, damaging confidence and leading to reductions in investment and employment, therefore also depressing consumer spending.

We do not believe that these alternative scenarios are the most likely outcome, but they are certainly well within the bounds of plausibility. Businesses should ensure that they have contingency plans in place to deal with the possibility of these kinds of events, particularly if

some of these downside risks were to materialise. At the same time, they should not lose sight of the fact that our main scenario for UK growth in 2016 remains relatively benign.

Growth likely to remain stronger in services than manufacturing

The sector dashboard in Table 2.3 shows the actual growth rates for 2014 along with our projected growth rates for 2015 and 2016 for five of the largest sectors within the UK economy. The table also includes a summary of the key issues affecting each sector.

Regional prospects

London and the South East are expected to continue to outpace all other regions in the UK, growing at around 3% in 2015, as seen in Figure 2.8. Most other regions are expected to expand at similar rates to the UK average this year of around 2.3-2.4%. Northern Ireland, the North East of England and Wales are set to grow at somewhat slower rates of around 1.6-1.9%.

At this stage, our main scenario for GDP growth in 2016 is the same as that for 2015 at the national level, so we would also expect regional growth rates in 2016 to be broadly in line with those for 2015 shown in Figure 2.8.

It is important to note here that regional output data are published on a much less timely basis than national data. As a result, the margins of error around these regional projections are even larger than for national growth projections and so they can only be taken as illustrative of broad directional trends. Small differences in projected growth rates between regions are not of any practical significance.

Figure 2.7 - Alternative UK GDP growth scenarios



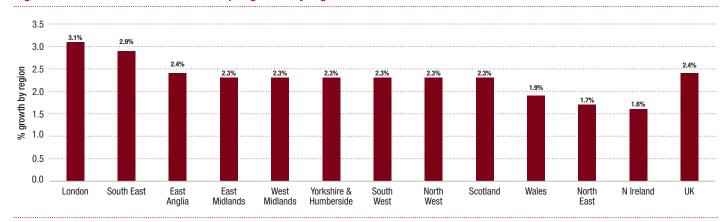
Source: ONS. PwC scenarios

Table 2.3: UK sector dashboard				
		Growth	•	
Sector and GVA share	2014	2015p	2016p	Key issues/trends
Manufacturing (10%)	2.8%	-0.1%	1.0%	Manufacturing PMI has been subdued at around 51-52 in 2015 but jumped to 55.5 in Q3, while official data shows declining output so far this year.
			_	Strengthening pound against the euro and sluggish Eurozone economy has limited growth of UK manufacturing exports.
Construction (6%)	8.1%	2.4%	2.0%	The construction sector demonstrated strong quarterly growth of 1.4% in Q2 2015, but then fell back by 2.2% in Q3 accordingly to preliminary official estimates
				But high construction PMI in September and October suggests a more optimistic picture, with output bouncing back after a relatively wet August.
Distribution, hotels & restaurants (14%)	4.7%	4.4%	3.1%	ONS figures show that retail sales growth picked up sharply in September after dipping in August, though the latest figures may be somewhat flattered by the temporary impact of the Rugby World Cup.
				Stronger real earnings growth and continued increases in employment have lifted consumer purchasing power, though the benefits of recent very low inflation may fade in 2016.
Business services and finance (31%)	3.9%	3.0%	3.3%	Business services and finance sector experienced somewhat weaker growth in Q1 2015 but has regained momentum since then according to official data.
				Services PMI fell in September but bounced back in October.
				Financial sector faces regulatory challenges but business services have been stronger in recent years.
Government and other services (23%)	1.4%	0.4%	0.4%	Civil service and local authority spending is expected to be cut back in real terms over the next few years, but growth should remain positive for the NHS and schools.
Total GDP	2.9%	2.4%	2.4%	

Sources: ONS for 2014, PwC for 2015 and 2016 main scenario projections and key issues.

These are five of the largest sectors but they do not cover the whole economy - their GVA shares only sum to around 84% rather than 100%.

Figure 2.8 - PwC main scenario for output growth by region in 2015



Source: PwC analysis

2.3 Outlook for inflation and real earnings growth

Inflation remains at record low levels, but is expected to pick up again in 2016

Consumer price (CPI) inflation in the UK has been close to zero throughout 2015, dipping in and out of negative territory. The primary drivers of these low inflation figures have been falling costs of fuel (as a result of the low global price of oil) and other commodity prices, as well as fierce price competition between retailers, particularly in the supermarket sector.

Core inflation, which measures changes of non-volatile prices (removing movements in the prices of energy, food, tobacco and alcohol), remains somewhat higher at around 1%, but still below the 2% inflation target. This partly reflects unusually low price rises for clothing over the past year, which is indicative of continued fierce price competition in this sector both on the high street and online.

The Bank of England estimates that about three quarters of the shortfall in overall inflation relates to low energy, food and goods prices. The other quarter, it says, is the result of low service price inflation as a result of weak domestic cost pressures, largely reflecting slow wage growth. The latter may not persist, however, given the recent recovery in earnings growth, unless this is also matched by higher productivity growth.

Alternative inflation scenarios

In our main scenario, we project the annual rate of CPI inflation to average 0.1% in 2015 and around 1.5% in 2016, as seen in Figure 2.9. These estimates are slightly lower than previously estimated, given recent indications that global commodity prices may remain lower for longer than we assumed back in July. Our latest inflation projections are broadly in line with those of independent forecasters. Higher inflation next year will result from past effects of commodity price falls dropping out of the 12-month inflation rate calculation, and from further growth in consumer spending and wages driving up domestic costs.

We have considered two alternative scenarios for UK inflation:

- In our 'high inflation' scenario we forecast inflation to average over 2% in 2016. This scenario could result from stronger UK and global demand growth and an associated pick-up in oil and other commodity prices.
- In our 'low inflation' scenario, by contrast, we assume that global GDP growth rates deteriorate as China and other emerging markets slow significantly while global oil and commodity prices fall further. In this scenario we project that the average inflation rate would remain well below 1% on average in 2016.

As with our GDP growth scenarios, these are not as likely as our main scenario, but businesses should plan for such contingencies.



Figure 2.9 - Alternative UK inflation (CPI) scenarios

Source: ONS. PwC scenarios

Figure 2.10 - CPI inflation vs average earnings growth



Source: ONS, PwC analysis

Real earnings returning to positive growth trend

Real average earnings in the UK fell between 2008 and 2014 as consumer price inflation exceeded growth in nominal earnings per employee. The trend has reversed this year as inflation has fallen to around zero while nominal earnings growth has picked up. As a result, real earnings are projected to grow at around 2.5% on average in 2015, with a positive trend through the year (the latest data for the period to August show real growth of around 3%, or around 3.5% in the private sector).

The upward trend in nominal earnings growth is expected to continue in 2016-17 (see Figurer 2.10) as productivity begins to recover and a tighter labour market pushes up wages. This will be offset in part by a gradual return of consumer price inflation to more normal levels, but we nonetheless expect real earnings growth to average around 1.5% per annum in 2016-17, though this would still be somewhat below typical pre-crisis rates of around 2%.

2.4 Monetary and fiscal policy options

Interest rates likely to rise gradually from the first half of 2016 onwards

In its latest meeting, the Monetary Policy Committee (MPC) again decided to maintain the Bank Rate at 0.5%, the record low that has been sustained for over six years. Market expectations have pushed out the most likely timing of the first rate rise from early 2016 to later next year in the face of increased global uncertainty and delays in the first rate rise from the US Federal Reserve.

While the exact timing of the first rate rise remains uncertain, we still expect this to occur at some point during the first half of 2016, assuming UK and global economic developments broadly follow what is projected in our main scenario. Subsequent increases may be very gradual, but we would expect rates to move up slowly to around 2-2.5% by the end of 2018 and around 3-3.5% by 2020. In their medium to long-term planning, businesses and individuals should take this possibility into account and stress test how such rate rises would affect them financially.

Chancellor set to press ahead with spending cuts but may soften tax credit impacts

The UK budget deficit stood at around £90 billion in 2014/15, just under 5% of GDP. Data for the six month period to September 2015 showed a £7.5 billion reduction in the deficit relative to the same period last year, but this still leaves quite a bit of work to be done to meet the OBR's July forecast that the 2015/16 deficit would come in around £20 billion lower than last year at just under £70 billion.

We think that the Chancellor can still meet his deficit objective for this year given that central government tax receipts in the first six months are up around 4% year-on-year, similar to the OBR forecast. Central government spending and local government borrowing are trending somewhat higher than projected, but the Treasury should have the means to bring these back to target by the end of the financial year, assuming the economic recovery continues more or less as we expect.

While the Chancellor may meet his objective for this year, however, there is still a long way to go from a prospective £70 billion deficit in 2015/16 to his target of a small budget surplus by 2019/20, in line with his new fiscal charter. Some economists have argued that this is not a sensible objective as compared to aiming to eliminate only the structural current budget deficit and have made the case for stronger public investment in areas like housing and transport infrastructure at a time when government bond yields remain close to historical lows.

However, it seems unlikely that the Chancellor will change his budgetary targets significantly at this stage, and economic growth alone will not bring down the deficit as fast as he desires. With large areas of spending such as the NHS, overseas aid, defence, schools and state pensions protected to varying degrees, this implies limited room to scale down the £12 billion of welfare cuts set out in his July Budget, although some softening of the impact of the tax credit cuts, perhaps through transitional relief to limit the initial losses to current tax credit recipients, seems likely at the time of writing.

We would still expect further severe cuts, perhaps of the order of 25% in real terms over the four years to 2019/20, in unprotected Whitehall government departments and local government budgets in England when the outcome of the Spending Review is announced as part of the Chancellor's Autumn Statement on 25th November. The cuts to devolved budgets for Scotland, Wales and Northern Ireland may, however, be relatively less severe³.

2.5 Summary and conclusions

UK economic growth has slowed a little in 2015, but still looks set to be around 2.4% in 2015 and continue at around this pace in 2016. This would still leave the UK, along with the US, as one of the strongest growing economies in the G7.

Consumer spending continues to provide the primary driver of UK growth, supported by a recent pick-up in real earnings growth as inflation has fallen to around zero this year, as well as a continued, but somewhat less rapid, pace of jobs growth. Real consumer spending growth may moderate somewhat in 2016 and beyond, however, as inflation returns to more normal levels and households become reluctant to reduce their savings rates further, as we discuss in more detail in the next section of this report.

Business investment should also make a positive contribution to growth in 2015-16, though this is more vulnerable to adverse global shocks to confidence, which remain the main downside risks to the UK economic outlook.

We are not too concerned at present about the rising UK current account deficit in recent years given that this largely reflects a deteriorating position on net investment income that may well prove to be transitory and because there are no signs yet of any difficulties in financing this deficit. This situation needs to be monitored, however, as a current account deficit at the 5% of GDP levels seen in 2014 would probably not be sustainable in the longer term and could make the pound vulnerable to an undesirably sharp downward correction if the market ever lost confidence in the UK's ability to deliver a relatively strong economic growth rates.

The public sector is likely to be a drag on growth for the next 3-4 years as the Chancellor pursues his objective of eliminating the budget deficit by 2019/20. Welfare cuts will act as a constraint on consumer spending growth, despite some expected softening of the proposed tax credit cuts, while unprotected Whitehall government departments and local authorities in England could face further real spending cuts averaging around 25% over the next four years. But other areas of government spending, notably on health, education, defence and state pensions will continue to rise in real terms.

With earnings growth picking up as the labour market tightens, we would expect the Monetary Policy Committee to start raising interest rates at some point during the first half of 2016, assuming no major adverse global shocks. In the longer term, however, businesses and individuals should factor in a gradual return of interest rates towards more normal levels, perhaps reaching around 3-3.5% by 2020.

³ See discussion by the Institute for Fiscal Studies, 'The Outlook for the 2015 Spending Review', October 2015.

3 - Will consumer spending growth continue to fuel the UK recovery?

Key points

- UK consumer spending has grown 2.5% per annum faster than inflation over the past three years, despite very modest real increases in average earnings until recently.
- This reflects rising employment levels, low inflation and mortgage rates, and a decline in the household savings ratio as consumers grew more confident about borrowing and spending in the light of stronger economic growth and sustained house price increase
- In 2015, we expect real household disposable income to grow strongly by around 3.5%, boosted by near zero inflation. But we expect real disposable income growth to slow to 2.3% in 2016 and just under 2% per annum on average in 2017-20 as inflation returns to more normal levels and social security benefit cuts dampen income growth for lower earners.
- We also expect the household savings ratio to continue its downward trajectory in 2015-16 but to stabilise in the medium term, which means that consumer growth will rely more on disposable income growth after 2016.
- As a result, we expect real consumer spending growth to moderate from relatively strong average growth of around 2.5-3% per annum in 2015-16 to just over 2% per annum in the rest of the decade, similar to trend GDP growth.

- We project that households will be spending more than 25% of their budget on housing and utilities by 2020. We also expect that the share of spending on financial and recreational services will increase by 2020, while that on food, alcohol and tobacco, and transport will fall.
- Survey data show that the face of the high street continues to change with mobile phone shops, clothing stores and pawn brokers retreating, while discounters, health food stores and coffee shops grow in numbers.

Introduction

Consumer spending makes up over 60% of UK GDP and has played a leading role in the recovery to date, but how robust is it? What might throw the recovery off course in the next few years? And which areas of consumer spending might growth the fastest over the rest of the decade?

To answer these questions we analysed the latest revised national accounts data in order to identify the main drivers of consumer spending over the past few years. We then considered future prospects for the two key determinants of consumer spending growth:

- Real disposable household income growth, which in turn is driven by trends in real income from employment, state benefits and pensions, and other private income; and
- Movements in the household savings ratio, which reflect household borrowing levels and wealth effects (in particular from changes in house prices).

The discussion in the rest of the article is organised as follows:

- Section 3.1 looks at recent trends and future prospects for each of the key determinants of real household disposable income;
- Section 3.2 looks at past trends in and future prospects for the household savings ratio;
- Section 3.3. brings this analysis together to produce projections for consumer spending to 2020 in our main and alternative scenarios;
- Section 3.4 assesses how consumer spending might break down by category over the period to 2020; and
- Section 3.5 summarises and draws conclusions from the analysis.

Box 3.1 provides some additional analysis of regional and local trends from other recent PwC research.

3.1 Recent trends and prospects for real household disposable income

The ONS defines household disposable income as the sum of earnings, net property income and state benefits (e.g. social security benefits and pensions) minus income tax and national insurance payments.

Table 3.1 shows how these key drivers of household expenditure have evolved over the three years to Q2 2015 (the latest available data point). This is the period during which the UK economy started to recover more strongly. Real growth rates in the final column of the table have been calculated by deflating the nominal growth rates using the household expenditure deflator (which over this period averaged 1.4% per annum).

The most notable feature of this analysis is that household disposable income grew by only around 0.8% per annum in real terms over this period, whereas household expenditure grew more than three times as fast at an average of 2.5% per annum. This can be explained by a marked decline in the household savings ratio from 9.4% in Q2 2012 to 4.7% in Q2 2015, as discussed in more detail in Section 3.2 below.

Table 3.1: Key drivers of household expenditure in the three years to Q2 2015

	2012 Q2	2015 Q2	Nominal	Deflator	Real
	£	billion	Averag	e growth rate	s per annum
Wages and salaries	173	190	3.2%	1.4%	1.8%
Household share of gross operating profits	59	65	3.2%	1.4%	1.8%
Pre-tax earnings	232	255	3.2%	1.4%	1.8%
Income tax paid	-47	-52	3.0%	1.4%	1.6%
National insurance contribution by workers	- 32	-35	3.1%	1.4%	1.7%
Post-tax earnings	153	168	3.3%	1.4%	1.9%
Social security benefits	82	85	0.9%	1.4%	-0.5%
Post-tax earnings and benefits	235	253	2.5%	1.4%	1.1%
Net property income received (interest, dividends, rent etc.)	39	38	-0.2%	1.4%	-1.6%
Other income	9	10	3.8%	1.4%	2.4%
Gross household disposable income	283	302	2.2%	1.4%	0.8%
Change in adjustment for pension entitlement	14	15	2.4%	1.4%	0.9%
Available household resources	297	317	2.2%	1.4%	0.8%
Household savings ratio	9.4%	4.7%			
Household expenditure	269	302	3.9%	1.4%	2.5%

Source: PwC analysis of ONS data Note: some numbers might not add up exactly because of rounding

Table 3.1 shows that pre-tax earnings increased by around 1.8% per annum over the period supported by a similar real increase in wages and salaries. This trend reflects very strong job creation over this period and, more recently, also a pick-up in average real earnings growth over the past year. Profits earned by the self-employed and owners of small businesses grew at a similar rate to total wages and salaries over this same period.

Table 3.1 shows that post-tax earnings have also grown at an average rate of 1.9% per annum in real terms since Q2 2012. This is slightly higher than for pre-tax earnings, reflecting the impact of higher personal allowances for income taxpayers, but overall direct tax and national insurance payments have largely followed pre-tax earnings at the aggregate level.

However, as Table 3.1 shows, there are two areas that have dampened the growth in real household disposable income significantly over the period. These are decreased social security benefits (down by 0.5% per annum) and net property income received (down by 1.6% per annum). We explain these movements as follows:

- Social security benefits: Two thirds of this income category is made up of transfers not covered by a social security fund (e.g. incapacity benefits) and other types of income including maternity benefits. In real terms, this income sub-category shrunk by 1.1% per annum in line with the government's objective of controlling welfare spending. The remaining third of the transfers is made up primarily of state pension payments, which are protected by the 'triple lock' and so grew by 0.9% per annum in real terms over the period.
 - Net property income received: This category is made up of net interest, property and investment income as well as notional income due to households from defined pension benefits. The majority of the decrease recorded is notional and can be attributed to changes introduced as part of the adoption of the European System of Accounts (ESA 2010), which requires the recording of pension liabilities in present value terms (as opposed to cash terms). Also, the income attributable to insurance policyholders decreased substantially by around 17% in nominal terms during the period. These are one-off effects, however, which should have less impact on growth in this income sub-category going forward. Other elements in net property income were more stable over the past three years.

Overall, these two effects have restricted real household disposable income growth to just 0.8% per annum over the past three years, as compared to 1.9% post-tax real earnings growth.

The final row in Table 3.1 shows that total household resources have also grown by 0.8% per annum after taking into account the change in private pension entitlements. The latter reflects the change in the volume and value of the underlying pension fund investments due to households. However, it is not clear that households regard this as spendable income as it is generally only realisable once pensions are paid out. We therefore prefer to focus our analysis on the household disposable income line in Table 3.1 when considering the drivers of household spending growth. This also leads us to adopt an adjusted definition of the household savings ratio as discussed further in Section 3.2 on the next page.

Future trends in household disposable income

So how will household disposable incomes fare in the future? Clearly there are many uncertainties here, but Table 3.2 sets out what we consider to be a plausible main scenario for real growth in each of the key elements of household disposable income growth in the period to 2020. The figures for 2015 take account of actual data for the first half of this year. Beyond that period we project that:

- Total income for wages and salaries will grow at a rate of 3.9% in real terms in 2015, moderating to 3.2% next year and settling at around 2.4% in the medium term. This will reflect somewhat slower job growth than we have seen in the last few vears and a return in inflation to more normal levels, which will offset higher expected nominal average earnings growth.
- Income of households from gross operating profit is expected to grow at around 3% per annum in real terms, reflecting stronger receipts from newly established businesses, particularly those set up after the financial crisis.
- Income tax receipts temporarily will grow faster than wage growth in 2015 as reflected in actual data, but real growth will then settle down at around the 1-2% mark on the back of a continued rise in personal tax allowances. We have assumed that national insurance contributions will grow faster at around 3% per annum in real terms, reflecting recent trends.
- Social security benefits (excluding state pensions) will continue to be cut in real terms in line with government plans.

Net property income is assumed to grow only modestly at 0.7% in real terms in 20151, but then is projected to pick up to 2.5% next year and an assumed medium-term rate of 3.3% per annum as net interest income increases gradually over time and real private rent levels continue to rise.

Based on this analysis we project that real household disposable income growth should grow strongly by around 3.5% in real terms this year (boosted by exceptionally low inflation), but is then likely to moderate to 2.3% growth in real terms next year and 1.8% per annum in 2017-20 as employment growth slows and inflation picks up, offsetting higher nominal earnings growth. Planned social

security benefit cuts also contribute to this moderation of growth, though it would still leave household disposable incomes growing significantly faster in real terms than the average rate seen over the past three years (as set out in Table 3.1 above). Of course, all of these projections are subject to some uncertainty, so we consider alternative scenarios where medium-term income growth could be 0.5% per annum higher or lower than our main scenario of 1.8% in Section 3.3 below.

To see how this disposable income growth translates to consumer spending growth we also need to consider how the household savings ratio will evolve over the same period.

Table 3.2: Main scenario projections of real gross household disposable income growth

Key indicators	2015	2016	2017-20
Wages and salaries	3.9%	3.2%	2.4%
Household share of gross operating profits	3.0%	2.9%	3.3%
Pre-tax earnings	3.7%	3.1%	2.6%
Income tax paid	4.4%	1.2%	1.9%
National insurance contribution by workers	3.8%	3.3%	3.3%
Post-tax earnings	3.4%	3.7%	2.7%
Social security benefits	1.7%	-1.0%	-1.0%
Post-tax earnings and benefits	2.8%	2.2%	1.5%
Net property income received (interest, dividends, rent etc.)	0.7%	2.5%	3.3%
Other income	44.6%	5.1%	1.0%
Gross household disposable income	3.5%	2.3%	1.8%

Source: PwC projections taking account of actual ONS data for first half of 2015

This reflects actual data for the first half of the year. As Table 3.2 shows, there is also an exceptional rise in 'other income' this year reflecting actual data for the first six months, but we assume this to be temporary and, in any event, this is a small item in overall household incomes.

3.2 Household savings ratio: trends and prospects

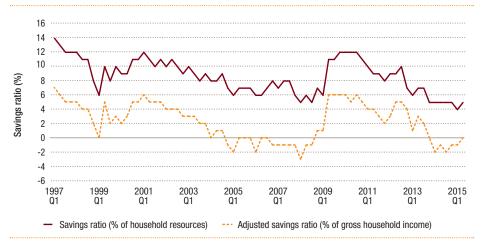
The household savings ratio is calculated by the ONS as the difference between available household 'resources' (household disposable income plus an adjustment for the change in pension entitlements as shown in Table 3.1 above) and household expenditure, expressed as a proportion of household resources.

As mentioned above, most households have little awareness of the changes in their pension entitlements². We therefore think that it is more relevant to focus on the 'adjusted savings ratio', which simply measures the difference between household disposable income and spending as a proportion of disposable income. Figure 3.1 plots both measures of the savings ratio as explained above.

The two savings ratios show broadly similar trends over time but with much lower levels for the adjusted savings ratio excluding changes in pension entitlements. We can see that the latter dropped gradually from around 6% in 1997 to around -3% just before the recession began. Households reacted to the onset of recession by boosting saving in response to increased uncertainty and lower house prices, with the adjusted savings ratio increasing sharply to around 6%, but once the recovery was underway and confidence gradually picked up alongside house prices, so the adjusted savings ratio has moved back into negative territory. Trends in the headline savings ratio have been similar but at a higher level due to the inclusion of changes in pension entitlements.

So how will the household savings ratio move in the future and is a negative savings ratio sustainable in the medium term? To answer that question we first need to understand the key drivers of the savings ratio.

Figure 3.1 – Historical trends in headline and adjusted savings ratio for UK households (1997 Q1-2015 Q2)



Source: PwC analysis, ONS

² Except possibly for those close to retirement, though even then valuation changes may be of limited relevance for people with defined benefit pension schemes.

Key factors underlying trends in the household savings ratio

In our November 2014 UK Economic Outlook³ we identified two main readily quantifiable drivers of the savings ratio over the period since the late 1990s. These were the household debt to income ratio and house prices, both of which we found varied inversely with the savings ratio (see Figures 3.2 and 3.3). This is corroborated by other research⁴ which suggests that the financial crisis had a bigger impact on household consumption for those economies where pre-crisis household debt levels were higher.

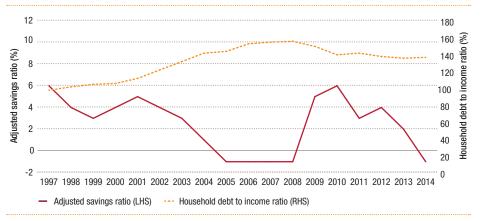
Projecting the household savings ratio

Projecting forward the adjusted household savings ratio is subject to considerable uncertainties, reflecting the fact that it is the difference between two larger numbers: disposable income and consumer spending.

To address this issue we refreshed our in-house savings model⁵ and projected this forward to 2020 based on our latest main scenario for UK house prices and the latest OBR projections for the household debt to income ratio. This gives an average adjusted savings ratio averaging around -2.5% in 2017-20 but stabilising over the course of this period (so that consumer spending growth becomes more dependent on disposable income growth as the period goes on).

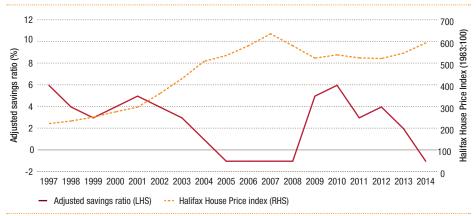
However, we also allowed for plausible variations in these assumptions to derive three possible scenarios for how the adjusted savings ratio might evolve, as summarised in Table 3.3 below. All scenarios envisaged some further decline in the adjusted savings ratio, but the medium-term average of the ratio could range from around -3.6% in an optimistic scenario where household confidence, borrowing and house prices remain high to -1.3% in a less optimistic scenario for these variables.

Figure 3.2 – Relationship between the adjusted savings ratio and household debt to income ratio



Source: PwC analysis of ONS data, Bank of England

Figure 3.3 – Relationship between the adjusted savings ratio and house prices



Source: PwC analysis of ONS data, Thomson Datastream

Table 3.3: Projections of the adjusted savings ratio in alternative scenarios

	2015	2016	2017-20
Greater fall in savings ratio	-1.0%	-1.5%	-3.6%
Main scenario	-0.7%	-1.1%	-2.5%
Smaller fall in savings ratio	-0.4%	-0.7%	-1.3%

Source: PwC analysis

In summary, the adjusted savings ratio has been on a downward path in recent years, which helps to explain why consumer spending has remained relatively strong despite comparatively subdued increases in real incomes. We expect some further falls in the ratio based on our modelling work, but it should stabilise in the medium term, although the level at which it will do so is uncertain.

³ How robust is the UK consumer recovery', UK Economic Outlook, November 2014 accessible via

http://www.pwc.co.uk/services/economics-policy/insights/uk-economic-outlook/ukeo-nov2014-how-robust-is-the-uk-consumer-recovery.html

⁴ IMF World Economic Outlook (2012), Bunn and Rostrom (2014) and House of Debt by Mian and Sufi (2014).

For further details, please see the Technical Appendix in the November 2014 edition of the UK Economic Outlook which is accessible via http://www.pwc.co.uk/services/economics-policy/insights/uk-economic-outlook/ukeo-nov2014-how-robust-is-the-uk-consumer-recovery.html

3.3 Alternative scenarios for consumer spending growth to 2020

We can now combine our household disposable income growth projections from Section 3.1 with our alternative savings ratio scenarios from Section 3.2 to derive scenarios for real consumer spending growth to 2020. Specifically, as set out in Tables 3.4 to 3.6 respectively:

- **Our main scenario** projects that real household expenditure will peak at around 2.9% this year followed by a slightly weaker growth rate of 2.7% in 2016 before settling at a medium term rate of 2.3% per annum on average in the 2017-20 period.
- Our optimistic scenario is stronger with real household expenditure growing at 3.4% in 2015-16 and around 3% in the medium term. This type of scenario could be associated with a significant improvement in the global and UK economy that would feed into higher disposable income growth, so making consumers feel more confident and prepared to save less and borrow more. However, as noted above, this would involve the adjusted savings ratio falling back to record negative levels and could make the economy vulnerable to later shocks due to the high implied levels of household debt in this scenario.

Our cautious scenario assumes that the savings ratio bottoms out at around - 1.3% in the medium-term and that real disposable income growth is more sluggish growing by just 1.3% on average in the medium term. This type of scenario would be associated with a less favourable global economic outlook, more cautious UK consumers and household spending growth moderating to a medium-term average rate of only around 1.5% per annum.

Whichever scenario we adopt, there is some moderation of consumer spending growth in the medium term as the 'catch-up' period of economic recovery gives way to more normal cyclical conditions. In our main scenario, consumer spending growth is close to estimated trend GDP growth at around 2.3% per annum in the medium term, while this varies from around 1.5-3% in alternative scenarios.

Table 3.4: Main scenario projections of real consumer spending growth

			_	
% per annum	2015	2016	2017-20	
Real household disposable income	3.5%	2.3%	1.8%	
Adjusted savings ratio	-0.7%	-1.1%	-2.5%	
Real household expenditure	2.9%	2.7%	2.3%	

Source: PwC analysis

Table 3.5: Optimistic scenario projections of real consumer spending growth

% per annum	2015	2016	2017-20
Real household disposable income	3.7%	2.8%	2.3%
Adjusted savings ratio	-1.0%	-1.5%	-3.6%
Real household expenditure	3.4%	3.4%	3.1%

Source: PwC analysis

Table 3.6: Cautious scenario projections of real consumer spending growth

% per annum	2015	2016	2017-20	
Real household disposable income	3.4%	1.8%	1.2%	
Adjusted savings ratio	-0.4%	-0.7%	-1.3%	
Real household expenditure	2.5%	2.1%	1.5%	

Source: PwC analysis

3.4 Projected consumer spending growth by category

From a business perspective, it is not just total consumer spending growth that matters but also how this is divided up by category of spending and geography. To address this question we have updated our UK consumer spending model, the results of which we last published in November 2014. We have also looked at the geographic distribution of consumer sentiment, which should correlate broadly with regional consumer spending patterns, in Box 3.1.

Our model is based on an econometric analysis of how factors like real income levels, relative price levels, income distribution and the age structure of the population influence the shares of household budgets allocated to the main categories of spending. We then project these factors forward to 2020 to produce estimates of future spending trends by category.

In these projections, as summarised in Figure 3.4 and Table 3.7, we have assumed that:

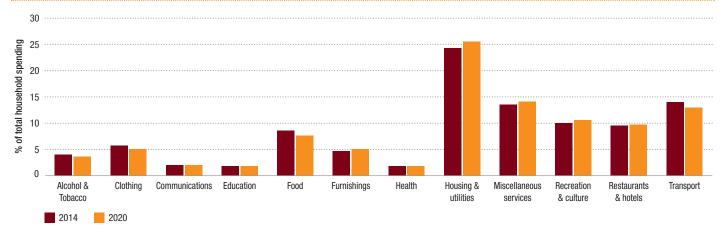
- total UK household expenditure grows as in the main scenario set out in Table 3.4;
- relative price levels in different expenditure categories evolve according to a mixture of recent trends and judgement as to how far these trends will continue up to 2020;
- income inequality remains at latest estimated levels; and
- the relative sizes of the different age groups evolve as in the latest ONS projections, implying in particular a steady rise in the proportion of the UK population above the age of 65.

Figure 3.4 shows that, by 2020, households are projected to allocate more than 25% of their spending to housing and utilities, which are estimated to grow at an average real rate of 3.5% per annum in 2015-20, faster than for any other spending category. This particularly reflects increases in rent levels due to continuing housing shortages.

The miscellaneous services category, which includes insurance and credit card payments, is projected to grow at the second fastest rate and increase its spending share to more than 14%, which is closer to levels last experienced before the financial crisis. This partly reflects higher expected interest rates over this period.

The leisure categories (recreation and culture and restaurants and hotels) are also projected to grow at an above average rate as the economic recovery continues and people have more money left over after paying for essentials. The same is true of the home furnishings category on the back of an assumed continuation of the housing market upturn, relatively strong levels of consumer confidence (see Figure 2.5 above) and a gradual easing of credit availability in recent years as the recovery from the financial crisis continues.

Figure 3.4 - Main scenario projections for household budget shares in 2020



Source: ONS for 2014, PwC main scenario projections for 2020

Private health spending is also projected to be relatively strong, rising on average at just under 3% per annum in real terms over the period to 2020. This reflects both the fact that private health may be a relatively 'superior' good that people are prepared to pay more for as their incomes rise, as well as the pressures on NHS services from an ageing population and the rising costs of new medical technologies.

By contrast, the share of consumer spending on food, alcohol and tobacco is expected to continue to decline steadily. For food in particular, this partly reflects relative price effects as discounters continue to represent a strong competitive constraint on traditional supermarkets, and we can also see this effect in the declining in spending shares projected for clothing (which includes footwear). The share of spending on transport is also expected to follow a declining trend, partly reflecting the 'lower for longer' oil prices we assume in our main scenario projections.

3.5 Summary and conclusions

Consumer spending has been growing relatively strongly in the past three years due to strong employment growth, low mortgage interest rates and higher personal income tax allowances, all of which have boosted real incomes, although real cuts in non-pension benefits have partly offset these factors. In addition, increased confidence and borrowing since mid-2012 have been reflected in a declining savings ratio, giving a significant additional boost to real consumer spending growth (2.5% per annum) over and above real disposable income growth (0.8% per annum).

Looking ahead, our analysis suggests that real income growth will pick up further in 2015-16, but may then moderate. With limited scope for further

Table 3.7: Household budget share projections for 2020 and average annual growth rate by household spending category in main scenario

	2014 spending share	2020 main scenario projection of spending shares	Implied average annual real growth rate (% pa)
Alcohol and tobacco	4.0%	3.6%	0.6%
Clothing	5.7%	5.1%	0.3%
Communications	2.0%	2.0%	2.6%
Education	1.8%	1.8%	2.4%
Food	8.6%	7.6%	-0.4%
Furnishings	4.7%	5.1%	3.2%
Health	1.8%	1.8%	2.9%
Housing and utilities	24.3%	25.5%	3.5%
Miscellaneous services	13.5%	14.1%	3.4%
Recreation and culture	10.0%	10.6%	3.1%
Restaurants and hotels	9.5%	9.7%	2.8%
Transport	14.0%	13.0%	1.4%
Total spending	100.0%	100.0%	2.5%
Courses DurC main assessment musications	•		•

Source: PwC main scenario projections

Note: Some numbers might not add up exactly because of rounding

reductions in household savings ratios from already low levels, this is likely to cause either a moderation in consumer spending growth in the medium term or a potentially unsustainable build-up in household debt.

More specifically, in our main scenario we project that real household spending will grow by around 2.9% in 2015 and 2.7% in 2016, but this could then slow down to an average of around 2.3% per annum in the 2017-2020 period. There are considerable uncertainties around this, however, with alternative scenarios suggesting a plausible range for medium term real consumer spending growth of around 1.5-3% per annum.

We also project that, by 2020, household will have to allocate more than 25% of their budget to spending on household and utilities. This is the fastest growing category, reflecting factors such as

upward pressure on real rent levels from continued housing shortages. Leisurerelated spending on recreation, culture, hotels and restaurants may also increase compared to spending on categories such as food and clothing as the recovery continues and discounters play an increasing role in these latter sectors.

Box 3.1

What can micro data tell us about regional disparities in consumer confidence?

Our analysis in this article focuses on national household expenditure trends, but most UK businesses have some degree of regional specialisation.

So what does the data on regional consumer trends show? Unfortunately, the ONS does not publish this in a timely way and, even then, focuses more on income than consumer spending by region. There are, however, various surveys available that provide additional information on regional consumption trends, including PwC's own periodic consumer sentiment survey, the latest of which was carried out across a representative sample of around 2,000 adults from across Great Britain in September 2015 (see Figure 2.5 in Section 2 and Figure 3.5 in this box).

Those with a 'positive' opinion are the consumers who said they are much and somewhat better off than last year.

Those with a 'negative' opinion are the consumers who that they are much or somewhat worse off than last year.

Figure 3.5 summarises our latest consumer sentiment survey results by broad region. Specifically, consumers are on balance more positive in the South East, broadly neutral in the North (which is an improvement on past results for this region), and more negative on balance in Wales, the South West and Scotland. This picture is more complex than a simple North-South divide and it should also be noted that the general trend in sentiment has been positive in recent years in most UK regions, reflecting rising employment rates and house prices across the country over the period since 2012.

At the same time, growth of online retailing, which has national or international reach, has also reduced the regional specialisations of some retailers, as well as intensifying price competition. Online retailing is also having an increasing impact across a wider range of product categories, including areas like gardening, DIY and white goods.

Separate PwC research carried out recently in conjunction with the Local Data Company (LDC)⁶ shows another important side-effect of growth in e-retailing: the freeing up of high-street retail space. Specifically, this research shows that the pace of retail store net closures across the UK has moderated somewhat this year, but still stands at the relatively high rate of 14 a day.

More detailed data from this survey shows how the face of the high street has changed in recent years with mobile phone shops, pawn brokers and clothing shops retreating while health food shops, coffee-shops, takeaways and other leisure-related stores have g rown in numbers.

The freeing up of city centre space could also provide an opportunity for converting empty stores into residential apartments, so helping to address the housing shortage that is one of the major challenges facing the UK today (as we discussed in detail in the July issue of UK Economic Outlook).

Figure 3.5 – Consumer sentiment by broad region, September 2015

40

30

20

10

-10

-20

-30

South East North England Midlands Wales & South West Scotland

Positive Negative Salance of opinion

Source: PwC Consumer Survey, September 2015

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 'E7'1. 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 2013². 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.

¹ The E7 comprises China, India, Brazil, Russia, Mexico, Indonesia and Turkey.

² 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 slowdown in some emerging markets since 2013). 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		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%
	Total - Top 30 countries	261.8	164.8	426.6	83.4%
	Total - Other countries	45.0	39.7	84.7	16.6%
	World total	306.8	204.5	511.3	100.0%

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 2013³. 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

65

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1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

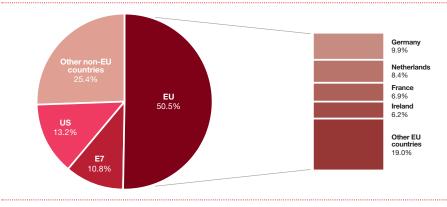
--- Services: EU

Source: ONS Pink Book 2014

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

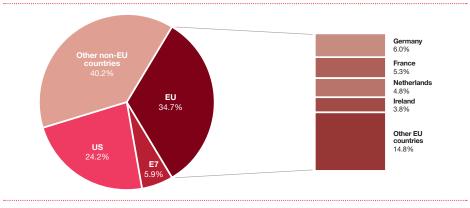
--- Goods: EU

— Total: Non-EU



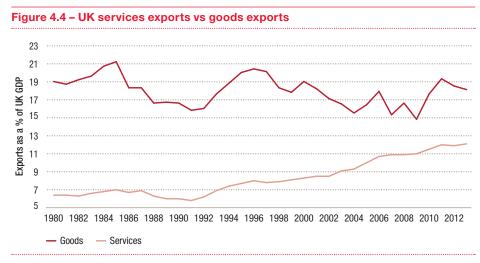
Source: ONS Pink Book 2014

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



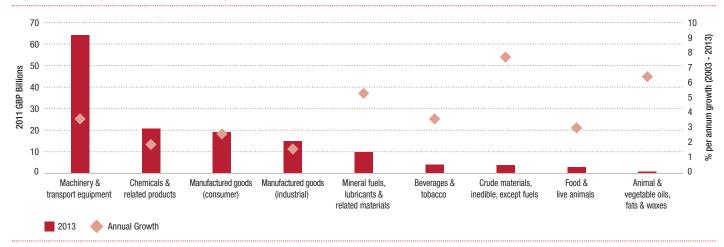
³ Total exports to Africa (including both North and sub-Saharan Africa) account for 4.2% of total UK exports. Source: ONS

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.



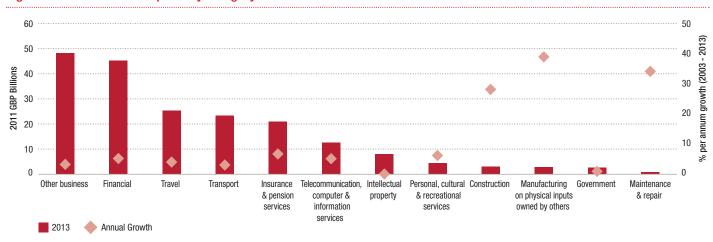
Source: ONS Pink Book 2014

Figure 4.5 - UK goods exports by category



Source: HMRC Overseas Trade Statistics

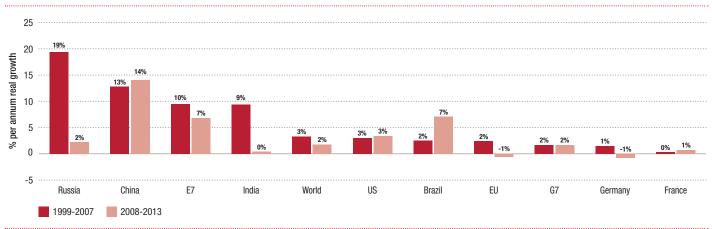
Figure 4.6 - UK services exports by category



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



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:

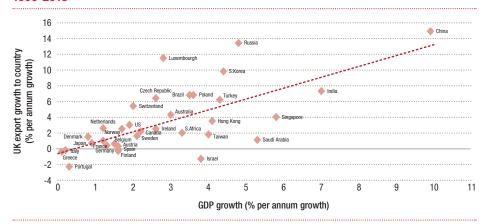
- First, and most importantly, GDP growth as an indicator of demand in the destination country; and
- Second, and somewhat less importantly, real exchange rate movements, as an indicator of relative price competitiveness.

Figure 4.8 shows 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.

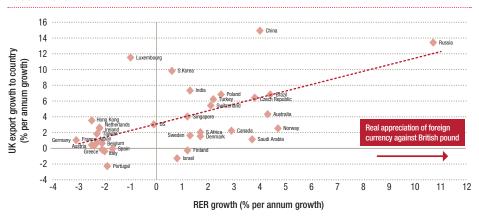
In addition, we might expect the price competitiveness of a country, as measured by the real exchange rate (RER), to have an influence on export growth. As Figure 4.9 shows, there does appear to be a positive correlation here, although it is weaker than that between exports and GDP growth. Therefore, 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)4. 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).

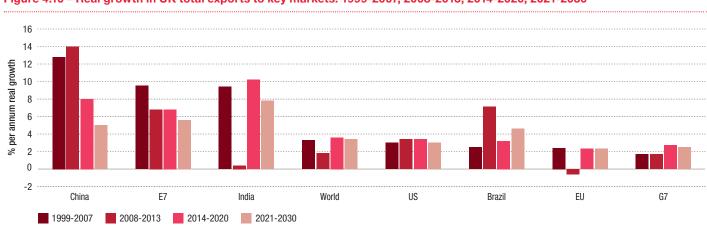


Figure 4.10 - Real growth in UK total exports to key markets: 1999-2007, 2008-2013, 2014-2020, 2021-2030

Source: PwC Analysis

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

60 50 % share of UK exports 40 30 20 10 E7 G7 Germany France China India Brazil 1999 2013 2020 2030

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 barriers5. 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 markets⁶.

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".

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

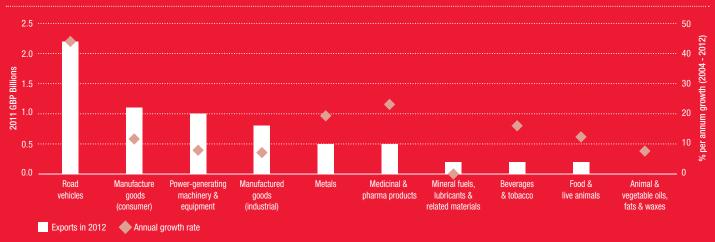
Future of UK exports to China

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

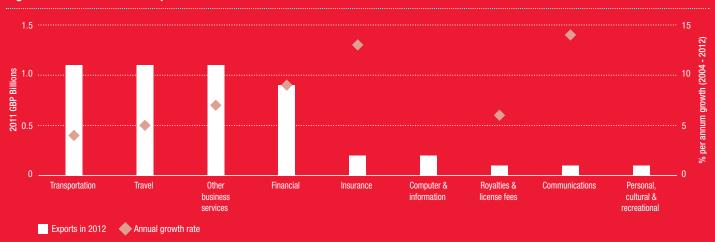
export between 2004 and 2012 with an annual growth rate of more than 40%. Other significant exports to China were manufactured goods, which included both those targeted at the consumer market and those at the industrial sector. Figure 4.13 shows that the largest UK service exports to China were transportation,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





Source: HMRC Overseas Trade Statistics

Figure 4.13 - UK services exports to China



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-fuelled 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 20147. In technology. finance and the real estate sector8, 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 wellplaced 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 UK9. 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.

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

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.

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 services¹⁰.

Figure 4.14 – UK exports to Sub-Saharan Africa¹¹ ber 2011 - SSA --- South Africa - - Nigeria

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 whole¹². 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.

Data for Nigeria excludes travel, transport and banking.

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^{13,14}. 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 luxury good in 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"15. 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 210016. 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^{17,18}. 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.

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

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

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

Miscolor in the UK passed of the East of Sub-Saharan Africa Navigating Headwinds".

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

Export Britain (2014) "Nigeria tasks UK on trade strategy at NBCC forum.

Technical appendixProjecting 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.

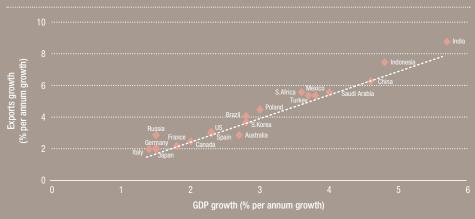
The strongest relationship is with GDP, with a 1% increase in annual real GDP growth in a country being associated on average with a 1.07% rise in real UK exports to that country. We can see this relationship clearly when we use the results in Figure 4.15 to project forward UK real export growth by country 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 Real growth p.a. of total UK exports to destination country	Coefficients (t-statistics)
Independent variables	
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)
Constant	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 Export	ts (% per annı	um 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		2.1	1.9	1.4	1.4	1.4
France	0.5	2.1	2.3		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		2.7	2.5		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	
EU	1.5	2.3	2.3		1.9	1.8
World	3.0	3.6	3.4	2.7	3.4	3.0

Source: PwC Analysis

Appendix A

Outlook for the global economy

Table A.1 presents our latest main scenario projections for a selection of economies across the world.

Growth in leading developed economies remains modest in 2015-16, with the US narrowly taking over from the UK as the fastest growing G7 economy. Overall Eurozone growth rate is picking up slowly led by Spain and Ireland rebounding from earlier crises, but remains modest in the big three economies of Germany, France and Italy.

Growth in emerging markets has lost some momentum with a slowdown in China and continuing recessions in Brazil and Russia, though the growth outlook appears brighter at present in India (which is a gainer from lower oil prices). In light of these uncertainties, global GDP projections remain moderate for 2015 at 3.2%, picking up slightly to 3.5% in 2016 (using PPP weights – rates are lower using MERs), though this is slightly lower than we previously projected.

Global inflation has fallen in 2015 as rates hover around zero for most of the G7. Inflation is expected to edge back up through 2016, however, as past commodity price decreases fall out of 12-month inflation rate calculations.

These projections (including those for the UK) are updated monthly in our Global Economy Watch publication, which can be found at www.pwc.com/gew.

Table A.1: Global economic p	rospects				
	Share of world GDP	Real GDP growth (%)		Inflati	on (%)
	2014 at MERs	2015p	2016p	2015p	2016p
US	22.5%	2.5	2.7	0.1	1.4
China	13.4%	6.9	6.5	1.7	1.8
Japan	6.0%	0.7	1.2	0.9	1.0
UK	3.8%	2.4	2.4	0.1	1.5
France	3.7%	1.1	1.3	0.2	1.1
Germany	5.0%	1.5	1.7	0.2	1.3
Greece	0.3%	-2.2	-1.4	-0.4	0.1
Ireland	0.3%	5.6	4.5	0.2	1.3
Italy	2.8%	0.7	1.2	0.1	0.9
Netherlands	1.1%	2.0	1.5	0.8	1.3
Portugal	0.3%	1.7	1.8	0.7	1.2
Spain	1.8%	3.1	2.6	-0.6	0.8
Poland	0.7%	3.7	3.4	-0.8	1.1
Russia	2.4%	-3.8	-0.5	15.6	8.9
Turkey	1.0%	2.7	3.0	7.9	7.0
Australia	1.9%	2.0	2.9	1.7	2.5
India	2.7%	7.3	7.9	-2.5	3.0
Indonesia	1.1%	4.0	4.1	6.8	5.6
South Korea	1.8%	2.8	3.3	0.9	1.9
Argentina	0.7%	2.1	1.7	20.0	25.0
Brazil	3.0%	-2.4	-0.5	8.5	6.5
Canada	2.3%	1.0	2.0	1.0	1.6
Mexico	1.7%	2.3	3.0	2.8	3.2
South Africa	0.5%	1.5	1.8	4.8	5.6
Nigeria	0.7%	3.5	4.5	9.3	9.5
Saudi Arabia	1.0%	2.8	2.3	2.1	2.5
World (PPP)		3.2	3.5		
World (Market Exchange Rates)	100%	2.7	3.0	1.7	2.4
Eurozone	17.4%	1.5	1.6	0.1	1.1

Source: PwC main scenario for 2015 and 2016; IMF for GDP shares in 2014 at market exchange rates (MERs).

Appendix B

UK economic trends: 1979 – 2014

Annual averages	GDP growth	Household expenditure growth	Manufacturing output growth*	Inflation (CPI**)		Current account balance (% of GDP)	PSNB*** (% of GDP)
1979	3.7	4.8			13.7	-0.6	4.5
1980	-2.2	0.1		••••	16.6	0.6	4.1
1981	-0.8	0.3		•••••	13.9	1.7	3.3
1982	2.1	1.2			12.2	0.7	2.5
1983	4.2	4.4			10.1	0.3	3.3
1984	2.3	2.5	***************************************	***************************************	10.0	-0.5	3.6
1985	4.1	5.1		••••	12.2	-0.2	2.8
1986	3.2	6.5			10.9	-1	2.2
1987	5.6	5.4	•	***************************************	9.7	-1.6	1.4
1988	5.9	7.8			10.4	-3.8	-0.7
989	2.5	3.9		5.2	13.9	-4.3	-0.7
1990	0.6	0.7		7.0	14.8	-3.3	0.7
1991	-1.3	-0.8		7.5	11.5	-1.4	2.8
1992	0.4	1.2		4.3	9.6	-1.6	6.0
1993	2.6	3.1		2.5	5.9	-1.4	7.2
1994	4.0	3.3		2.0	5.5	-0.5	6.2
1995	2.5	2.1		2.6	6.7	-0.7	5.0
1996	2.7	4.2		2.5	6.0	-0.6	3.6
1997	3.1	4.9		1.8	6.8	-0.2	1.8
1998	3.4	4.4	0.3	1.6	7.3	-0.4	-0.1
1999	3.1	5.0	0.6	1.3	5.4	-2.5	-1.2
2000	3.8	5.3	2.3	0.8	6.1	-2.2	-1.5
2001	2.8	3.7	-1.7	1.2	5.0	-2	-0.7
2002	2.5	4.1	-2.4	1.3	4.0	-2.1	1.8
2003	3.3	3.7	-0.6	1.4	3.7	-1.7	2.8
2004	2.5	3.5	1.7	1.3	4.6	-1.8	3.2
2005	3.0	3.1	0.0	2.1	4.7	-1.2	3.5
2006	2.7	2.0	2.1	2.3	4.8	-2.3	2.6
2007	2.6	3.1	0.7	2.3	6.0	-2.5	2.8
2008	-0.5	-0.7	-2.8	3.6	5.5	-3.6	4.9
2009	-4.2	-3.4	-9.4	2.2	1.2	-3	10.2
2010	1.5	0.0	4.5	3.3	0.7	-2.8	9.1
2011	2.0	-0.1	2.1	4.5	0.9	-1.7	7.1
2012	1.2	2.0	-1.4	2.8	0.8	-3.3	7.6
2013	2.2	1.9	-1.1	2.6	0.5	-4.5	5.8
2014	2.9	2.7	2.7	1.5	0.5	-5.1	5.4
Average over econor	nic cycles****						
1979 - 1989	2.7	3.7			12.0	-0.4	2.7
1989 - 2000	2.3	3.0		3.5	8.5	-1.5	2.9
2000 - 2007	2.8	3.3	0.0	1.5	4.7	-1.9	1.7

^{*} After the revisions to the national accounts data, pre-1998 data is not currently available ** Pre-1997 data estimated *** Public Sector Net Borrowing (calendar years excluding public sector banks) **** Peak-to-peak for GDP relative to trend Sources: ONS, Bank of England

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