

Article

# **Economic review: February 2015**

The key economic stories from National Statistics produced over the latest month, painting a coherent picture of the UK economic performance using recent economic data.

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## 1. Main points

- The preliminary estimate of Gross Domestic Product (GDP) indicated that the UK economy grew by 0.5% in Q4 2014, slightly slower than in Q2 and Q3. Growth of 2.6% in 2014 was the strongest calendar year figure since 2007.
- Despite continuing robust growth in services, overall output growth moderated as both construction and production contracted on the quarter, while manufacturing output was flat.
- The key driver of the recent fall in the UK current account has been a decline in the UK's primary income balance, which partly reflects weaker investment income from abroad.
- Despite the sustained economic recovery, price inflation has subsided to a ten-year low as a result of falling oil prices and the impact of recent sterling appreciation in particular on the cost of goods imported from the Euro area.
- The weakness of labour productivity growth in 2012 and 2013, in part reflecting a degree of 'capital shallowing', is matched by a weak profile for multi-factor productivity.

### 2. Introduction

The preliminary estimate of Gross Domestic Product (GDP) indicated that the pace of economic growth continued to ease in Q4 to 0.5% from 0.8% and 0.7% respectively in Q2 and Q3. While contributions to growth since the onset of a sustained period of recovery in Q1 2013 have been relatively well balanced across industries, output growth in Q4 2014 was dependent on services. This edition of the ONS Economic Review examines the performance of this industry during the recovery in more detail.

The relative performances of services and manufacturing are mirrored in the UK's external position. Strong recent growth in services has partly been driven by exports, reflected in a record surplus on trade in services in December 2014, which partially offset a record deficit on trade in goods. However, strong services exports have not prevented a widening of the current account deficit to joint record levels. This Economic Review finds that, while previous declines in the current account have tended to reflect a worsening in the balance on trade, the latest decline is a result of a fall in the primary income balance, in part due to lower UK earnings on foreign direct investment abroad.

Although UK economic growth has resulted in a tightening labour market, inflation has fallen to its lowest rate in more than a decade. This edition of the Economic Review finds that this development partly reflects the recent appreciation of sterling lowering the cost of imported goods from the European Union.

While economic growth has returned, productivity growth had remained subdued until recent quarters. This Economic Review notes that weakness in multi-factor productivity has played a key role, notably in oil and gas and financial and insurance services activities. Finally, the recent pickup in productivity has been reflected in a return to real wage growth, aided by low inflation. However, this Review finds that trends across industries differ; real hourly wages remain markedly lower than pre-downturn levels in both manufacturing and construction.

### 3. GDP estimate

The preliminary estimate of Gross Domestic Product (GDP) indicated that the UK economy grew by 0.5% in the fourth quarter of 2014, slightly slower than the 0.8% and 0.7% growth recorded in Q2 and Q3 2014 respectively. As is shown in Figure 1, output has now grown for eight successive quarters: the longest period of continuous growth since the onset of the economic downturn in 2008. The sustained nature of the recovery means that GDP has grown 10% since the trough of the economic downturn in Q2 2009, and is now around 3.4% higher than the pre-downturn level of output in Q1 2008. Taking 2014 as a whole, output was around 2.6% higher than a year earlier: the strongest calendar year rate of growth since 2007.

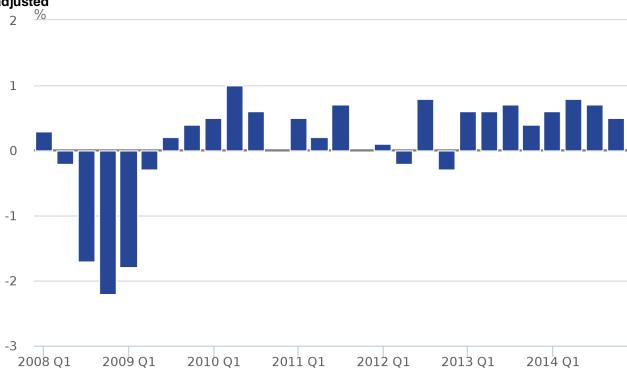


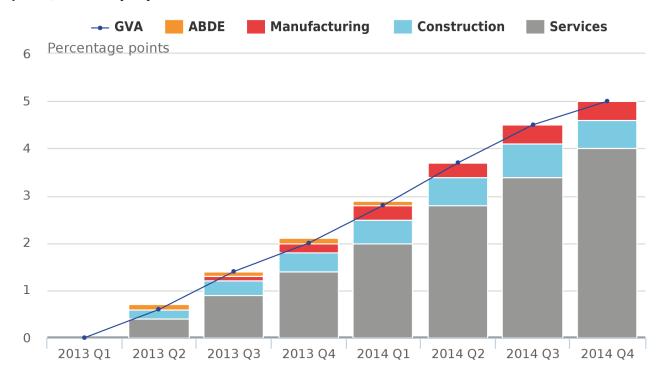
Figure 1: Gross Domestic Product (GDP) quarter on quarter growth rate, constant prices, seasonally adjusted

Source: Source: Office for National Statistics

While the lower preliminary estimate is not necessarily indicative of a broader slowing in the UK economy, the dependence of recent growth on the services industry does little to rebalance the economy towards production and manufacturing. Services output grew by 0.8% in the final three months of 2014, whereas output from the production and construction industries fell by 0.1% and 1.8% respectively over the same period.

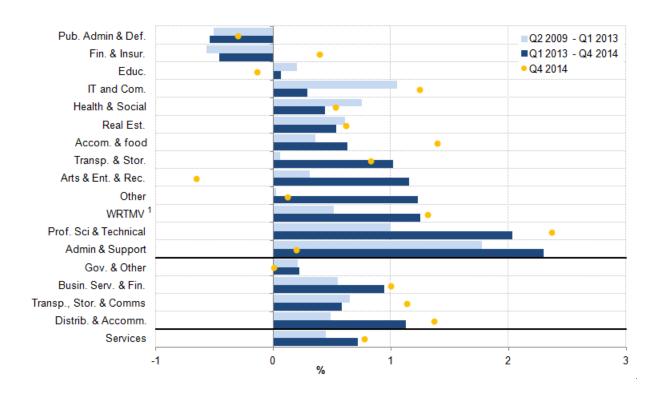
However, while output growth in the most recent quarter was entirely driven by the services industries, the contributions of the broad industry groupings to Gross Value Added (GVA) growth since Q1 2013 have been in line with their relative importance in the UK economy. The services industry – which accounted for around 78% of UK output in 2011 – has accounted for around 80% of output growth since the onset of a sustained economic recovery in Q1 2013 (Figure 2). The cumulative contribution of construction (12%) is almost twice that of its share of output (6%), while the performance of manufacturing has been more modest (accounting for 7% of output growth compared with an output share of 10%). Although growth in the recovery prior to 2013 was more heavily weighted towards the services industry, growth since Q1 2013 has been relatively well balanced – even if recent movements do little to rebalance the economy towards manufacturing.

Figure 2: Cumulative contributions to Gross Value Added (GVA) growth relative to Q1 2013, constant prices, seasonally adjusted



The recent output growth in the services industries has been as broadly based as it has been strong (Figure 3). Output in the industry as a whole has grown by 0.7% per quarter on average since Q1 2013 – well above the average it sustained during the first phase of the economic recovery. Two of the four main services components (shown towards the foot of Figure 3, below the dividing line), have also grown more quickly in recent quarters, while transport, storage & communications and government and other services output growth remains at around the same pace. In the most recent quarter, only government & other services experienced below-average output growth.

Figure 3: Average compound quarterly output growth of services sub-industries, selected periods, constant prices, seasonally adjusted %



### Notes:

1. WRTMV: Wholesale & Retail Trade; Repair of motor vehicles and motorcycles

At the sub-industry level (shown in the upper panel of Figure 3), the performance of the services industries is more mixed, with components dividing into three broad groups: those which grew strongly during both phases of the recovery; those whose growth rate has strengthened since Q1 2013, and those whose performance has acted as a drag on growth or has decelerated as the recovery has progressed. In the first group, both administrative and support services and professional, scientific and technical services have grown relatively strongly since Q2 2009. The second group – whose performance has improved recently – contains services related to arts, entertainment & recreation, transport & storage and wholesale & retail trade & the repair of motor vehicles.

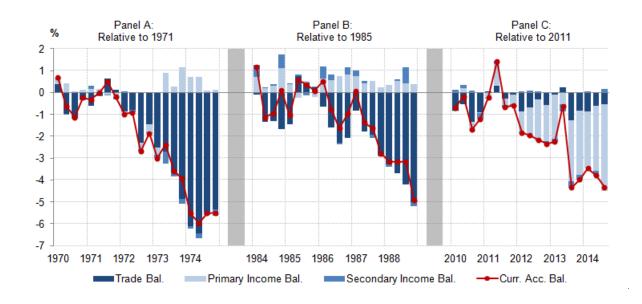
The third group – including several components of government services and financial & insurance services – have either slowed or continued to decline in recent quarters. Health & social services, IT & communications and education have all slowed during the second phase of the recovery, while the output of public administration and defence has continued to decline. Output growth in the financial & insurance industry, while negative over the longer run, was relatively strong in the most recent quarter.

## 4. Balance of payments

The recent output growth of the services industries is due at least in part to its export performance. In Q3 2014, the UK recorded a surplus on trade in services of 5.1% of GDP: the largest on record, and partially offsetting a record deficit on trade in goods worth 7.1% of GDP. However, despite a strong recent services performance, the UK's current account deficit widened to 6.0% of nominal GDP in Q3 2014 (Economic Review - January 2015): the joint largest deficit since ONS records began in 1955.

Although previous deteriorations in the current account balance have been driven by a fall in the balance on trade, the recent fall is a consequence of a sharply lower primary income balance (income earned by UK residents from investments overseas, less income earned by non-residents on their UK investments). Figure 4 compares contributions to the fall in the current account balance since 2011 (Panel C) to previous occurrences in the 1970s (Panel A) and 1980s (Panel B). The first two panels show that previous declines – of 6.0% and 4.9% of GDP respectively – were driven by the balance of trade (shown in the dark blue bars). In contrast, the latest decline of the current account of 4.3% of GDP since 2011 has been driven by a decline of the primary income balance (shown in the light blue bars).

Figure 4: Contributions to deteriorations in the current account relative to selected calendar years: % GDP



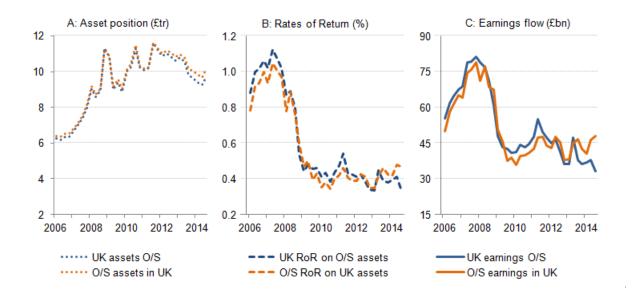
**Source: Office for National Statistics** 

#### Notes:

The figure shows falls in the current account relative to a selected base year, as well as the contributions
of the trade balance and the balances on primary and secondary income. Note that if the UK ran a current
account deficit (surplus) in the base year selected, the fall in the current account will be smaller (larger)
than the deficit recorded.

As the primary income balance reflects the difference between two earnings flows from investments, it can readily be decomposed into its four component parts: the stock of assets that the UK holds overseas, and the rate of return it receives on those assets, the stock of assets that overseas agents hold in the UK, and the rate of return that they receive on those assets. These components, along with the total earnings flows are shown in Figure 5. As a matter of accounting, the quantity of assets held by the UK overseas (Panel A) multiplied by the rate of return (Panel B) is equal to the total earnings flow (Panel C). Equivalent variables are shown for overseas investors in the UK, and the difference between the two lines in Panel C reflects the primary income balance.

Figure 5: Assets (£tr), rates of return (%) and earnings (£bn) for UK assets overseas and overseas assets in the UK



**Source: Office for National Statistics** 

#### Notes:

Panel A shows the value of UK (overseas) FDI assets held overseas (in the UK). Panel B shows the rate
of return that UK (overseas) investors earned on their assets held overseas (in the UK). Panel C shows the
gross earnings flow to the UK (from the UK) on FDI investments overseas (in the UK). As a matter of
accounting, the gross earnings flows in Panel C are equal to the asset positions in Panel A multiplied by
the rates of return in Panel B.

Figure 5 indicates that two factors appear to be driving the recent decline in the primary income balance. Firstly, the stock of assets that the UK holds abroad has fallen more sharply in recent periods than the stock of assets held by overseas agents in the UK. This is likely to be the result of a combination of currency effects and relative movements in FDI flows which have had a greater impact on the stock of UK assets held abroad. Secondly, the rate of return that the UK receives on its assets abroad has fallen slightly over the last few quarters, while the rate of return earned by agents overseas on assets in the UK has risen slightly. This likely reflects the strong performance of the UK economy, in particular relative to the euro area, where a large fraction of the UK's overseas assets are based. Both of these factors have driven a growing wedge between UK earnings overseas and overseas earnings in the UK, as shown in Panel C.

The primary income account divides overseas investments into three main categories: direct, portfolio and other investment. Direct investment (FDI) includes intercompany transfers and equity shares of more than 10%, while portfolio investment includes debt securities and equity of less than 10%. "Other" is a residual category mostly consisting of loans, deposits and currency. Historically, the UK has offset negative net income from portfolio and other investment with much larger positive earnings from direct investment. A larger deficit on portfolio investment and unchanged gross overseas earnings on FDI assets in the UK, combined with lower UK gross earnings on FDI abroad, account for the majority of the recent fall in the primary income balance.

Figure 6 analyses this fall in UK gross FDI income using the recently published directional FDI data ( Foreign Direct Investment - 2013). It shows that much of this fall is accounted for by lower earnings on assets held in the financial services, information and communication services, petroleum products, and mining and quarrying industries by the UK overseas.

Mining & quarrying
Petroleum, chemicals, pharmaceuticals, rubber, plastic products
Other manufacturing
Other services

Total

100

75

50

2010

2011

2012

2013

Figure 6: Contributions to UK earnings on outward Foreign Direct Investment assets by industry

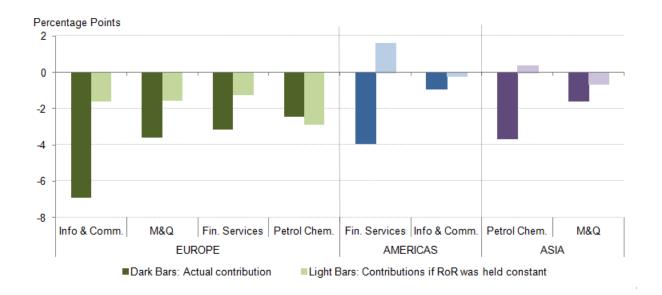
**Source: Office for National Statistics** 

### Notes:

1. Data used in this analysis are based on Foreign Direct Investment data published in Foreign Direct Investment, 2013. These data are based on the directional principle method and therefore not directly comparable to Balance of Payments, which is based on an asset liability principle method. This change in the methodology was required as part of Balance of Payments Manual 6.

While Figure 6 highlights the type of assets that have driven the fall in UK earnings on assets abroad, the data also permit a geographical analysis. 91% of UK gross FDI earnings were from Europe, the Americas and Asia in 2011, and these regions more than accounted for the 31% decline in UK earnings abroad between 2011 and 2013. To explore these trends in more detail, Figure 7 shows which industries in each region contributed most to this decline 1 (darker bars). The biggest driver at this level of detail was assets held in the information and communications industry in Europe, which accounted for 7 percentage points, or nearly a quarter, of the overall fall in gross UK earnings overseas between 2011 and 2013. Financial services earnings from the Americas and earnings on petro-chemicals FDI in Asia also made substantial negative contributions.

Figure 7: Contributions to the fall in gross Foreign Direct Investment earnings between 2011 and 2013, selected industries and regions: percentage points



#### Notes:

- 1. Key: Info & Comms is the 'Information and communication' industry. M&Q is 'Mining and quarrying'; Fin. Services is 'Financial services'; Petrol Chem. is 'Petroleum, chemicals, pharmaceuticals, rubber, plastic products'.
- 2. Darker bars indicate the contribution of a selected industry-region combination to the fall in gross UK earnings on FDI assets abroad between 2011 and 2013. Lighter bars indicate the contribution that these same industry-region combinations would have made to the fall in gross UK earnings on FDI assets abroad had their respective rates of return remained constant between 2011 and 2013.
- 3. Data used in this analysis are based on Foreign Direct Investment data published in Foreign Direct Investment, 2013. These data are based on the directional principle method and therefore not directly comparable to Balance of Payments, which is based on an asset liability principle method. This change in the methodology was required as part of Balance of Payments Manual 6.

Decomposing the income flow from these industry-region combinations into their respective asset positions and rates of return shows that both factors have been responsible to some extent for reducing gross UK earnings from FDI. The lighter bars in Figure 7 show the contribution each industry-region combination would have made to the change in gross earnings had their rate of return been fixed in 2011. The smaller negative contributions for all industries except petro-chemicals in Europe indicates that lower rates of return on these assets have played an important part in reducing the UK's gross earnings abroad over this period. The industry-region combinations shown in Figure 7 together accounted for close to 20 percentage points of the 31 percentage point decline in UK gross earnings on overseas assets during this period.

### **Notes for Balance of Payments**

1. Analysis at this level of detail is challenging because of disclosure issues. Consequently, this analysis examines industry by broad geographical area, rather than by specific countries.

### 5. Inflation

The sustained nature of the economic recovery has led to growing questions about the degree of spare capacity in the UK economy. The headline rate of unemployment – one measure of the degree of slack in the labour market – has fallen from 7.1% in the three months to November 2013 to just 5.8% in the three months to November 2014, while the employment rate remains close to record highs. Alongside ONS evidence of a growing number of job-to-job moves (<a href="Economic Review - October 2014">Economic Review - October 2014</a>), survey results from the Bank of England have indicated that recruitment difficulties have increased markedly over the last twelve months, as have capacity constraints in the services industry (<a href="Bank of England Agents">Bank of England Agents</a>' Summary). Together, these indicators point to a tightening of supply conditions in the UK economy. As firms continue to draw spare resources into productive use, greater demand and limited capacity may result in stronger price pressure.

However, while the labour market is clearly tightening, the Consumer Prices Index (CPI) rate of inflation has remained subdued and fell to 0.5% in December 2014, its lowest rate in more than a decade (Consumer Price Indices - December 2014). Much of this decline is due to the sharp fall in the price of oil – which has fallen more than 50% since mid-2014 (Economic Review - January 2015). This has lowered fuel prices for motorists in particular, while the marked increases in electricity and gas prices in December 2013 have also dropped out of the annual CPI comparison, acting to reduce the rate of inflation. The change in goods prices as a whole accounts for much of the fall in the rate of inflation, as prices for these products were around 1% lower than the same period a year earlier (Figure 8). Services inflation, while close to record lows, remained at 2.3% in December.

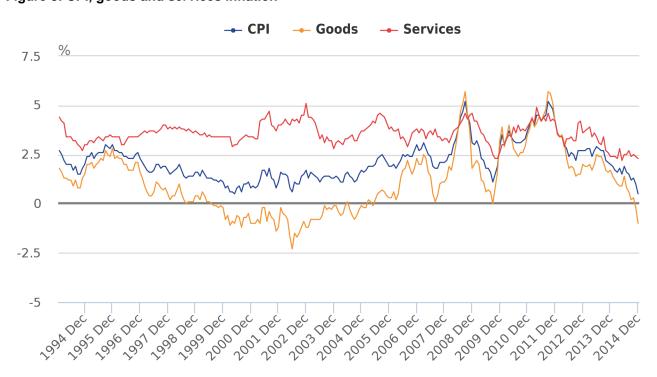


Figure 8: CPI, goods and services inflation

**Source: Office for National Statistics** 

The fall in the oil price makes it challenging to assess the underlying degree of price pressure in the UK economy – a determination that is made more difficult by recent exchange rate developments. In principle, a stronger (weaker) value of sterling reduces (increases) the price of goods imported to the UK. However, the rate at which this impacts on consumer prices depends on both the import intensity of consumer demand and the degree of exchange rate 'pass through'. This difficulty is compounded by recent changes in the value of sterling compared with the UK's key trading partners. The effective sterling exchange rate was around 12% higher at the end of January 2015 than in March 2013 (Figure 9). However, this trade-weighted average reflects an appreciation against the euro of 14.4% and a slight depreciation against the US dollar – although this latter exchange rate has moved substantially during this period.

Figure 9: Sterling exchange rates: effective, US dollar and Euro



Source: Bank of England

While these movements largely reflect developments overseas – including the continued economic difficulties of the euro-zone, the programme of quantitative easing announced by the European Central Bank and revised expectations of monetary policy tightening in the US – they are likely to reduce the price of imports from the euro-zone, and to raise the price of imports from the US in sterling terms. The importance of these effects is underlined in Table 1, which sets out the proportion of UK goods imports by product that are sourced in the European Union. It highlights that, while the UK sources a majority of its clothing, textiles and furniture imports outside the EU, a majority of its imports of motor vehicles, chemicals and other perishable goods come from the EU. Recent changes in the exchange rate may have had an impact on the relative price movements of these products, depending on the extent of hedging on these products, and the relative degree of market power held by both importers and exporters.

Table 1: Share of UK goods imports sourced from the European Union, for selected products, 2013

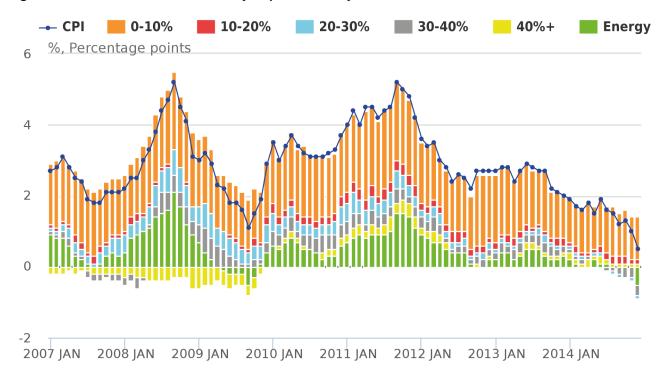
	Share of trade, %
Wearing apparel	24.1
Leather and related products	39.3
Textiles	43.5
Furniture	49.2
Vegetable and animal oils and fats	56
Tobacco products	45.8
Electrical equipment	49.3
Computer, electronic and optical products	49.9
Basic pharmaceutical products and pharmaceutical preparations	76.7
Alcoholic beverages	72.6
Printing and recording services	82.6
Soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations	73.2
Paper and paper products	76.7
Preserved meat and meat products	78.5
Motor vehicles, trailers and semi-trailers	86.2
Bakery and farinaceous products	92.6
Soft drinks	94
Dairy products	98.8

### Notes:

1. Products are from the Classification of Product by Activity (CPA)

While changes in the exchange rate can have an impact over a long period – as the price effect is only gradually transmitted through the economy – Figure 10 presents updated evidence that the appreciation of sterling since March 2013 has helped to hold down the rate of CPI inflation in recent times. It divides the 85 class level components of the CPI into five groups depending on the degree of import penetration. Products that households largely source from domestic suppliers are grouped into the lower import penetration categories, while products that are largely sourced from overseas are shown in the higher import penetration categories. Energy products – including gas, electricity and fuels or lubricants for motor vehicles – which are domestically sourced but priced internationally, are treated separately. The contributions of each of these to the CPI inflation rate are shown in Figure 10.

Figure 10: Contributions to the CPI by import intensity



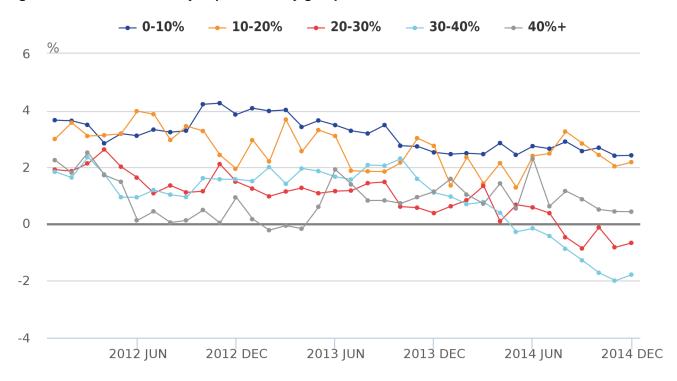
#### Notes:

1. These estimates differ from estimates published in the October 2014 edition of the Economic Review. The main difference between the two datasets is the revised treatment of margins, taxes and subsidies, which are now included in the import intensities for each product instead of being categorised separately, consistent with a move from basic price estimates of import intensities to purchasers' price estimates. This has the effect of reducing the import intensity of many COICOP classes, especially for goods, as margins, taxes and subsidies are all treated as domestic expenditure in the Input Output Analytical Tables.

Figure 10 shows that while products in the 0-10% and 10-20% categories have made a relatively stable contribution to the CPI during 2014, the contribution of the more import intensive categories – defined as those with import penetration above 20% – and energy has declined from around 2.1 percentage points on average in 2011, to an average of zero during 2014, turning negative over the last few months. Import intensive products alone added an average of 1.0 percentage point to the CPI in 2011, but reduced it by 0.3 percentage points in the final quarter of 2014.

Figure 11 confirms this analysis by plotting separate price indices for each of the import intensity categories presented above. It suggests that, with the exception of the 40% and above import intensity category (which is made up of motor vehicles, clothing and footwear), it is the relatively more import intensive items that have seen the lowest rates of inflation. Product classes in the 20-30% and 30-40% categories have, on average, experienced falling prices since around mid-2014.

Figure 11: Rate of inflation by import intensity group



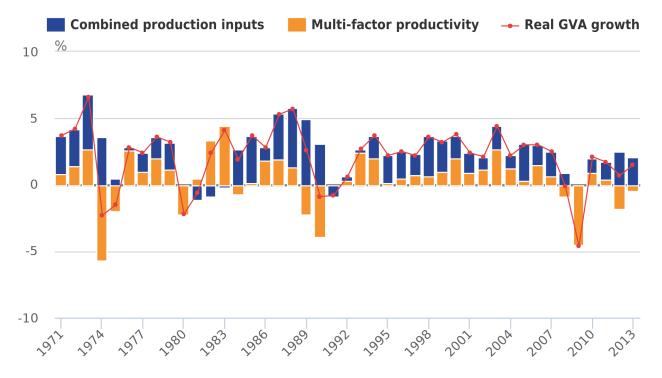
## 6. Productivity

As recent falls in the oil price and movements of exchange rates make it difficult to assess the underlying degree of inflationary pressure in the UK economy, developments in productivity – which govern how efficiently firms can convert inputs into outputs – take on even more importance. Signals from these data can help economists to understand whether – in the absence of a clear inflationary signal – the reduction of spare capacity presents a potential future inflationary threat. If, as spare capacity is eroded, the productive potential of the economy increases (falls or remains flat), then the scope for further, non-accelerating output growth is enhanced (limited). Recent analysis (Economic Review - January 2015 and Labour Productivity - Q3 2014) has shown that, despite output growth in 2012 and 2013, labour productivity (the amount of output produced per hour worked) broadly stagnated during these years and has only started to recover in the most recent quarter. At the whole economy level, output per hour was just 0.8% higher in Q3 2014 than the same period a year earlier.

While in the short run measures of labour productivity provide a guide to the efficiency of input use, over the long term firms may also adjust their capital inputs (for example, adding and changing machinery, or updating software), the quality of their labour input (increasing the number of highly-qualified employees) or change their management practices. To help understand the factors driving labour productivity, ONS have recently published estimates of Multi-Factor Productivity (MFP) growth (Multi-factor Productivity (experimental) - Estimates to 2013). These estimates divide output growth into the contributions from the changing use of capital and labour, the contribution of changes in labour quality and a fourth, residual component, which is typically interpreted as capturing technological progress. This is thought to include the effect of changes in management techniques, business processes or the more efficient use of inputs.

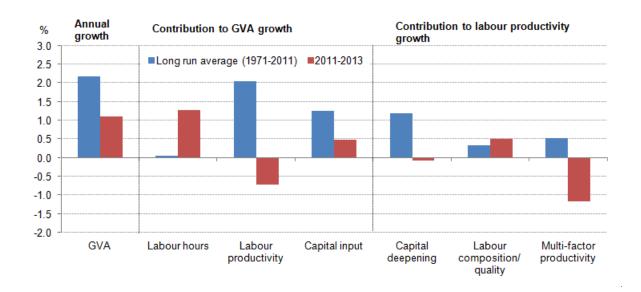
To what extent do these broader parts of firms' production functions help to explain this recent economic performance? Figure 12 presents estimates of annual growth in 'combined inputs' – including labour quality, hours worked and capital inputs – alongside real GVA and MFP growth. This shows that growth was supported by the greater application of factor inputs in 2012 and 2013, but that MFP made a negative contribution over this period – suggesting that the economy became less efficient in converting factor inputs into output during these years.

Figure 12: Contributions of factor inputs and Multi-Factor Productivity (MFP) to real Gross Value Added (GVA) growth



Falling MFP and labour productivity during a period of economic recovery represents a departure from broad historical trends. In previous economic downturns, MFP growth has typically fallen sharply before recovering again relatively quickly. This pattern also reflects a departure from the long-term experience of the UK economy. Figure 13 examines the drivers of falling productivity in more detail, focusing on growth in the two most recent years (2011-2012 and 2012-2013) compared to a historical long run average (1971-2011). This shows that output growth in 2012 and 2013 was more dependent on growing numbers of hours worked than the long run average. It also suggests that, while the amount of capital input increased in the two most recent years, it did so by less than the historical average, and by less than hours worked, resulting in a small reduction in the amount of capital available per hour worked (capital shallowing) (<a href="Economic Review - July 2014">Economic Review - July 2014</a>). Labour quality also improved, at a rate broadly equivalent to the historical average; however, the largest negative contribution to labour productivity growth came from the residual MFP component.

Figure 13: Key Multi-Factor Productivity (MFP) measures: % change and % contributions to labour productivity growth



Some of the weakness in this MFP component may be attributed to a small selection of sub-industries ( <a href="Economic Review - January 2015"><u>Economic Review - January 2015</u></a>). This is highlighted in Table 2, which sets out industry level detail for average labour productivity growth and its components from 2008-2013. 'Other production', which includes the North Sea oil and gas industry, has shown the weakest growth in MFP over the downturn and subsequent recovery (6.5% decline per annum). This may be partly explained by oil and natural gas becoming increasingly difficult to extract, as well as periods of maintenance.

Table 2: Industry decomposition of Multi-Factor Productivity aggregates (2008-2013)

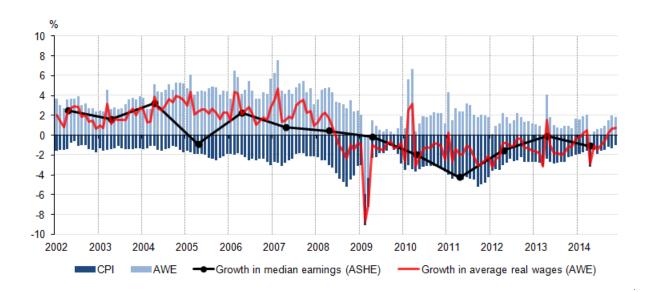
Contributions to labour productivity growth (%)	GVA	Contribution of hours worked to GVA growth	•			/IFP wth
Production						
Other production	-4.0	0.8	-6.5	-0.4	0.4	-6.5
Manufacturing	-1.4	-1.5	0.6	0.5	0.7	-0.6
Construction	-2.1	-1.4	-0.2	0.7	0.5	-1.5
Services						
Wholesale & retail trade; Accommodation & food services	0.1	0.0	0.0	0.5	0.6	-1.0
Transportation & Storage	-2.1	-0.3	-1.7	0.3	0.5	-2.5
Information & communication	1.9	0.6	1.1	-0.6	0.7	0.9
Financial & insurance activities	-1.3	-0.1	-1.0	1.1	0.7	-2.9
Real estate activities; Professional & scientific activities; Administrative & support activities	2.3	0.7	1.1	0.2	0.6	0.3
Public administration & defence; Education; Health & social work	0.9	1.2	-0.5	0.2	0.7	-1.3
Arts & entertainment; Other services	0.6	0.4	0.1	0.7	0.9	-1.5
Whole Economy	0.2	0.2	-0.1	0.4	0.7	-1.1

Financial and insurance activities experienced the second largest decline in MFP over this period, with falling output coinciding with broadly stable hours worked, a rise in the amount of capital available and a better quality workforce. This may also be a lasting effect of the 2008/09 global financial market shock ( <a href="The Productivity Conundrum - Interpreting the Recent Behaviour of the Economy">The Productivity Conundrum - Interpreting the Recent Behaviour of the Economy</a>), related to structural changes in the risks and returns of this industry.

## 7. Real wages

While productivity growth during 2012 and 2013 was negative, output per hour growth in the most recent quarter was relatively strong. On this measure, productivity was 5.2% higher in manufacturing in Q3 2014 than in the same period a year earlier, and 0.8% higher in the services industries. This recent revival of productivity has been accompanied by a return to real wage growth. Figure 14 shows the growth of average weekly earnings (AWE) alongside the rate of Consumer Prices Index (CPI) inflation, and the resulting employee real wage growth series. Although this recent rise in wages owes as much to lower rates of inflation as it does to stronger nominal wage growth, on this measure real wages have risen for three consecutive months. Recent movements in real wages on this measure are broadly matched by findings based on the Annual Survey of Hours and Earnings (ASHE), also plotted on Figure 14. These data suggest that median real earnings fell between 2010 and 2013, and fell by 1.6% in 2014 compared with a year earlier.

Figure 14: Average annual real wage and earnings growth, nominal wages and CPI inflation, %

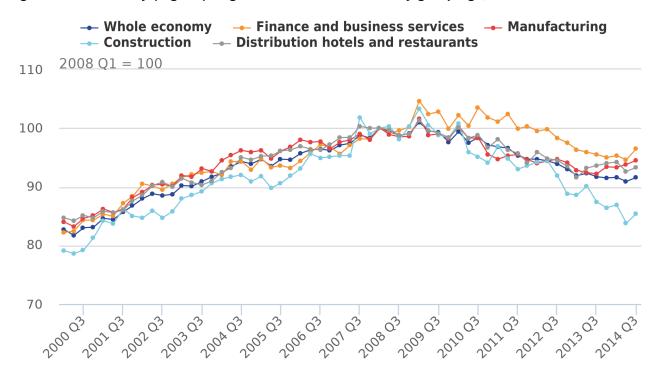


#### Notes:

1. CPI is the rate of Consumer Prices Index inflation. AWE is the growth rate of nominal earnings. The real wage series is the AWE series deflated by the CPI. The real earnings series is the growth of median nominal weekly earnings from the Annual Survey of Hours and Earnings (ASHE) deflated by the CPI.

To examine this performance in more detail, Figure 15 shows average hourly regular earnings for a range of industries, deflated by the CPI and indexed to their respective values in 2008. Similar to the varying performance of productivity across industries, trends in real hourly wages have differed across industries since the downturn. Of the four industry groupings for which seasonally adjusted data is available, hourly real wages fell most in construction between Q1 2008 and Q3 2014 – by 14.6%. Real hourly wages fell by less in manufacturing, and were 5.5% lower than their Q1 2008 level in Q3 2014. This could partially reflect the more favourable labour productivity performance of manufacturing compared to construction. Real hourly wages in finance and business services fell least over this period, by around 3.5% on average.

Figure 15: Real hourly (regular) wages across selected industry groupings, Q1 2000 to Q3 2014



## 8. Reference tables

**Table 3: UK Demand side indicators** 

2013	2014	2014	2014	2014	2014	2014	2014	2014
		Q2	Q3	Q4	Sep	Oct	Nov	Dec
1.7	2.6	8.0	0.7	0.5	:	:	:	:
1.9	3.0	1.0	8.0	8.0	0.5	0.3	0.1	:
2.5	3.9	1.3	1.0	0.9	8.0	0.3	0.1	:
0.3	1.1	0.4	0.2	0.0	0.0	0.0	-0.1	:
3.5	4.4	1.0	0.7	1.3	0.5	0.2	0.8	:
1.4	2.6	1.5	1.2	1.1	0.5	0.6	-0.1	:
-0.5	1.5	0.2	0.2	-0.1	0.7	-0.3	-0.1	:
-0.7	2.5	0.5	0.3	0.1	0.6	-0.7	0.7	:
-2.5	0.2	0.1	-1.6	-0.6	3.4	1.2	-3.7	:
1.4	6.0	1.7	1.6	-1.8	2.2	-1.9	-2.0	:
1.4	3.8	1.6	0.3	2.3	-0.3	1.1	1.6	0.4
2.0	4.2	1.9	0.4	2.3	-0.3	1.1	1.7	0.2
-0.2	0.6	1.5	-0.5	1.3	0.4	0.5	0.4	1.3
1.8	6.5	1.2	1.6	3.0	-1.7	2.0	2.5	-0.6
18.0	12.2	7.7	-1.4	3.2	4.3	-1.2	3.9	-0.7
-33.7	:	-9.2	-9.0	:	-2.8	-2.2	-1.4	:
3.0	:	-1.0	0.2	:	2.6	0.9	-0.4	:
2.7	:	-1.7	0.1	:	3.1	-0.5	-2.3	:
-24.0	-3.9	1.0	0.6	-1.7	0.4	-1.3	-3.2	2.8
79.3	80.9	80.0	79.8	80.9	79.8	79.5	79.7	80.9
	1.7  1.9  2.5  0.3  3.5  1.4  -0.5 -0.7 -2.5  1.4  2.0 -0.2 1.8 18.0  -33.7 3.0 2.7	1.7	Q2         1.7       2.6       0.8         1.9       3.0       1.0         2.5       3.9       1.3         0.3       1.1       0.4         3.5       4.4       1.0         1.4       2.6       1.5         -0.5       1.5       0.2         -0.7       2.5       0.5         -2.5       0.2       0.1         1.4       3.8       1.6         2.0       4.2       1.9         -0.2       0.6       1.5         1.8       6.5       1.2         18.0       12.2       7.7         -33.7       :       -9.2         3.0       :       -1.0         2.7       :       -1.7	Q2       Q3         1.7       2.6       0.8       0.7         1.9       3.0       1.0       0.8         2.5       3.9       1.3       1.0         0.3       1.1       0.4       0.2         3.5       4.4       1.0       0.7         1.4       2.6       1.5       1.2         -0.5       1.5       0.2       0.2         -0.7       2.5       0.5       0.3         -2.5       0.2       0.1       -1.6         1.4       3.8       1.6       0.3         2.0       4.2       1.9       0.4         -0.2       0.6       1.5       -0.5         1.8       6.5       1.2       1.6         18.0       12.2       7.7       -1.4         -33.7       : -9.2       -9.0         3.0       : -1.0       0.2         2.7       : -1.7       0.1	Q2         Q3         Q4           1.7         2.6         0.8         0.7         0.5           1.9         3.0         1.0         0.8         0.8           2.5         3.9         1.3         1.0         0.9           0.3         1.1         0.4         0.2         0.0           3.5         4.4         1.0         0.7         1.3           1.4         2.6         1.5         1.2         1.1           -0.5         1.5         0.2         0.2         -0.1           -0.7         2.5         0.5         0.3         0.1           -2.5         0.2         0.1         -1.6         -0.6           1.4         6.0         1.7         1.6         -1.8           1.4         3.8         1.6         0.3         2.3           2.0         4.2         1.9         0.4         2.3           -0.2         0.6         1.5         -0.5         1.3           1.8         6.5         1.2         1.6         3.0           18.0         12.2         7.7         -1.4         3.2           -33.7         :         -9.2         -9.0 <td>Q2         Q3         Q4         Sep           1.7         2.6         0.8         0.7         0.5         :           1.9         3.0         1.0         0.8         0.8         0.5           2.5         3.9         1.3         1.0         0.9         0.8           0.3         1.1         0.4         0.2         0.0         0.0           3.5         4.4         1.0         0.7         1.3         0.5           1.4         2.6         1.5         1.2         1.1         0.5           -0.5         1.5         0.2         0.2         -0.1         0.7           -0.7         2.5         0.5         0.3         0.1         0.6           -2.5         0.2         0.1         -1.6         -0.6         3.4           1.4         3.8         1.6         0.3         2.3         -0.3           2.0         4.2         1.9         0.4         2.3         -0.3           2.0         4.2         1.9         0.4         2.3         -0.3           2.0         1.5         -0.5         1.3         0.4           1.8         6.5         1.2</td> <td>Q2         Q3         Q4         Sep         Oct           1.7         2.6         0.8         0.7         0.5         :         :           1.9         3.0         1.0         0.8         0.8         0.5         0.3           2.5         3.9         1.3         1.0         0.9         0.8         0.3           0.3         1.1         0.4         0.2         0.0         0.0         0.0           3.5         4.4         1.0         0.7         1.3         0.5         0.2           1.4         2.6         1.5         1.2         1.1         0.5         0.6           -0.5         1.5         0.2         0.2         -0.1         0.7         -0.3           -0.7         2.5         0.5         0.3         0.1         0.6         -0.7           -2.5         0.2         0.1         -1.6         -0.6         3.4         1.2           1.4         3.8         1.6         0.3         2.3         -0.3         1.1           -0.2         4.2         1.9         0.4         2.3         -0.3         1.1           -0.2         1.5         -0.5         1.3&lt;</td> <td>Q2         Q3         Q4         Sep         Oct         Nov           1.7         2.6         0.8         0.7         0.5         ::         ::         ::           1.9         3.0         1.0         0.8         0.8         0.5         0.3         0.1           2.5         3.9         1.3         1.0         0.9         0.8         0.3         0.1           0.3         1.1         0.4         0.2         0.0         0.0         0.0         -0.1           3.5         4.4         1.0         0.7         1.3         0.5         0.2         0.8           1.4         2.6         1.5         1.2         1.1         0.5         0.6         -0.1           -0.5         1.5         0.2         0.2         -0.1         0.7         -0.3         -0.1           -0.7         2.5         0.5         0.3         0.1         0.6         -0.7         0.7           -2.5         0.2         0.1         -1.6         -0.6         3.4         1.2         -3.7           1.4         3.8         1.6         0.3         2.3         -0.3         1.1         1.6           2</td>	Q2         Q3         Q4         Sep           1.7         2.6         0.8         0.7         0.5         :           1.9         3.0         1.0         0.8         0.8         0.5           2.5         3.9         1.3         1.0         0.9         0.8           0.3         1.1         0.4         0.2         0.0         0.0           3.5         4.4         1.0         0.7         1.3         0.5           1.4         2.6         1.5         1.2         1.1         0.5           -0.5         1.5         0.2         0.2         -0.1         0.7           -0.7         2.5         0.5         0.3         0.1         0.6           -2.5         0.2         0.1         -1.6         -0.6         3.4           1.4         3.8         1.6         0.3         2.3         -0.3           2.0         4.2         1.9         0.4         2.3         -0.3           2.0         4.2         1.9         0.4         2.3         -0.3           2.0         1.5         -0.5         1.3         0.4           1.8         6.5         1.2	Q2         Q3         Q4         Sep         Oct           1.7         2.6         0.8         0.7         0.5         :         :           1.9         3.0         1.0         0.8         0.8         0.5         0.3           2.5         3.9         1.3         1.0         0.9         0.8         0.3           0.3         1.1         0.4         0.2         0.0         0.0         0.0           3.5         4.4         1.0         0.7         1.3         0.5         0.2           1.4         2.6         1.5         1.2         1.1         0.5         0.6           -0.5         1.5         0.2         0.2         -0.1         0.7         -0.3           -0.7         2.5         0.5         0.3         0.1         0.6         -0.7           -2.5         0.2         0.1         -1.6         -0.6         3.4         1.2           1.4         3.8         1.6         0.3         2.3         -0.3         1.1           -0.2         4.2         1.9         0.4         2.3         -0.3         1.1           -0.2         1.5         -0.5         1.3<	Q2         Q3         Q4         Sep         Oct         Nov           1.7         2.6         0.8         0.7         0.5         ::         ::         ::           1.9         3.0         1.0         0.8         0.8         0.5         0.3         0.1           2.5         3.9         1.3         1.0         0.9         0.8         0.3         0.1           0.3         1.1         0.4         0.2         0.0         0.0         0.0         -0.1           3.5         4.4         1.0         0.7         1.3         0.5         0.2         0.8           1.4         2.6         1.5         1.2         1.1         0.5         0.6         -0.1           -0.5         1.5         0.2         0.2         -0.1         0.7         -0.3         -0.1           -0.7         2.5         0.5         0.3         0.1         0.6         -0.7         0.7           -2.5         0.2         0.1         -1.6         -0.6         3.4         1.2         -3.7           1.4         3.8         1.6         0.3         2.3         -0.3         1.1         1.6           2

### Notes:

- 1. Percentage change on previous period, seasonally adjusted, CVM
- 2. Levels, seasonally adjusted, CP
- 3. Expressed in £ billion
- 4. Percentage change on previous period, seasonally adjusted, CP
- 5. Public Sector net borrowing, excluding public sector banks. Level change on previous period a year ago, not seasonally adjusted

Table 4: UK Supply side indicators

	2013	2014	2014	2014	2014	2014	2014	2014	2014
			Q2	Q3	Q4	Sep	Oct	Nov	Dec
Labour Market									
Employment Rate <sup>1, 2</sup>	71.5	:	72.8	73.0	•	73.0	73.0	:	:
Unemployment Rate <sup>1, 3</sup>	7.6	:	6.3	6.0	:	6.0	5.8	:	:
Inactivity Rate <sup>1, 4</sup>	22.4	:	22.1	22.2	:	22.3	22.4	:	:
Claimant Count Rate <sup>7</sup>	4.2	3.1	3.2	2.9	2.7	2.8	2.8	2.7	2.6
Total Weekly Earnings <sup>6</sup>	£475	:	£479	£480	:	£482	£484	£483	:
СРІ									
All-item CPI <sup>5</sup>	2.6	1.5	1.7	1.7	1.5	1.2	1.3	1	0.5
Transport <sup>5</sup>	1	0.3	-0.3	1.0	8.0	0.1	0.5	-0.2	-1.4
Recreation & Culture <sup>5</sup>	1.1	0.9	0.6	1.0	1.2	0.7	1	0.3	0.6
Utilities <sup>5</sup>	4.1	3	3.3	3.2	3.1	3.1	3.2	3.3	1
Food & Non-alcoh. Bev. <sup>5</sup>	3.8	-0.2	1.8	0.0	-0.9	-1.4	-1.4	-1.7	-1.7
PPI									
Input <sup>8</sup>	1.2	-6.5	-5.0	-4.6	-7.4	-7.4	-8.1	-8.2	-10.7
Output <sup>8</sup>	1.3	0.0	0.6	0.5	-0.3	-0.5	-0.6	-0.6	-0.8
HPI <sup>8</sup>	3.5	:	10.2	11.8	:	12.1	10.4	10.0	:

### Notes:

- 1. Monthly data shows a three month rolling average (e.g. The figure for October is for the three months Sep Nov)
- 2. Headline employment figure is the number of people aged 16-64 in employment divided by the total population 16-64
- 3. Headline unemployment figure is the number of unemployed people (aged 16+) divided by the economically active population (aged 16+)
- 4. Headline inactivity figure is the number of economically active people aged 16 to 64 divided by the 16-64 population
- 5. Percentage change on previous period a year ago, seasonally adjusted
- 6. Estimates of total pay include bonuses but exclude arrears of pay (£)
- 7. Calculated by JSA claimants divided by claimant count plus workforce jobs
- 8. Percentage change on previous period a year ago, non-seasonally adjusted

## 9. Background notes

1. Details of the policy governing the release of new data are available by visiting <a href="www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a> or from the Media Relations Office email: <a href="mailto:media.relations@ons.gsi.gov.uk">media.relations@ons.gsi.gov.uk</a>