

## 2 Forecasts of the Scottish economy

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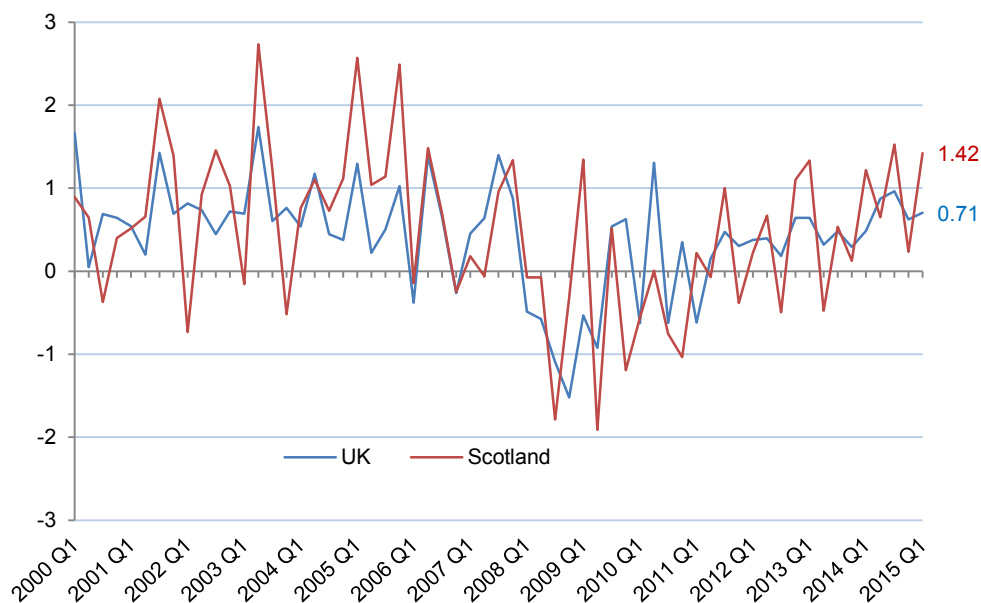
### Abstract

In the second quarter of 2015, the Scottish economy recorded its lowest rate of growth since the third quarter of 2012. There was higher than expected growth in the Construction sector (3.5%) in this most recent quarter, however the much larger Service sector recorded flat output and the Production sector contracted by -0.8%. Going into the second half of 2015, we find many indicators continuing to suggest growth continuing, however these are at or below historical standards. Survey evidence suggests that those factors which assisted growth in the first two quarters of 2015 – such as infrastructure investment – look less strong in the second half of the year. With new evidence about the weakness in Scottish growth in the second quarter of 2015, we have thus revised down our forecast for growth in 2015. The outlook for 2016 remains muted, with global economic growth anticipated to ease as a result of policy actions – e.g. a likely gradual increase in US interest rates – and uncertainty about the strength of growth across major emerging economies. These developments are likely to impact upon Scottish exports over the coming years. The labour market continues to create jobs, and we forecast a continued reduction in the unemployment rate over the next two years, albeit at a slower rate than we forecast earlier in 2015.

### Survey context and recent trends

#### Households

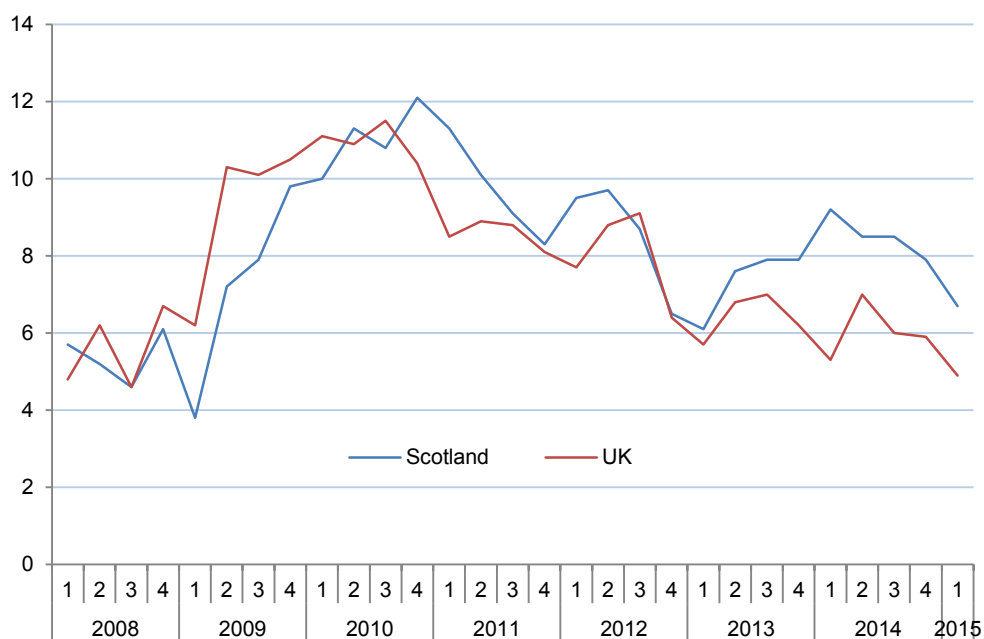
**Figure 1:** Household real consumption spending growth, Scotland and UK, Q1 2000 to Q1 2015, % q-on-q



**Sources:** Scottish National Accounts Project (SNAP) data (Scottish Government) and UK Quarterly National Accounts (National Statistics) and FAI calculations.

As we have noted in previous commentaries, the importance of consumption spending for Scottish growth in the last few years has been critical. Between 2013 and 2014, for instance, we estimated that consumption growth contribution roughly 50% more to nominal growth than did investment expenditure. The data however suggests that investment activity is increasingly contributing to growth – as we shall explore in the following section. At the time of writing we do not have estimates available for Q2 2015 as these will be published on the 4<sup>th</sup> of November 2015. In the absence of these data, we examine in Figure 1 and Figure 2 changes in Scottish and UK consumption spending growth and savings rate behaviours to the first quarter of 2015 (we note that the estimate of growth in the first quarter, and previous quarters, has subsequently been revised by the latest data).

**Figure 2: Household saving ratio, Scotland and UK, Q1 2008 to Q1 2015, %**

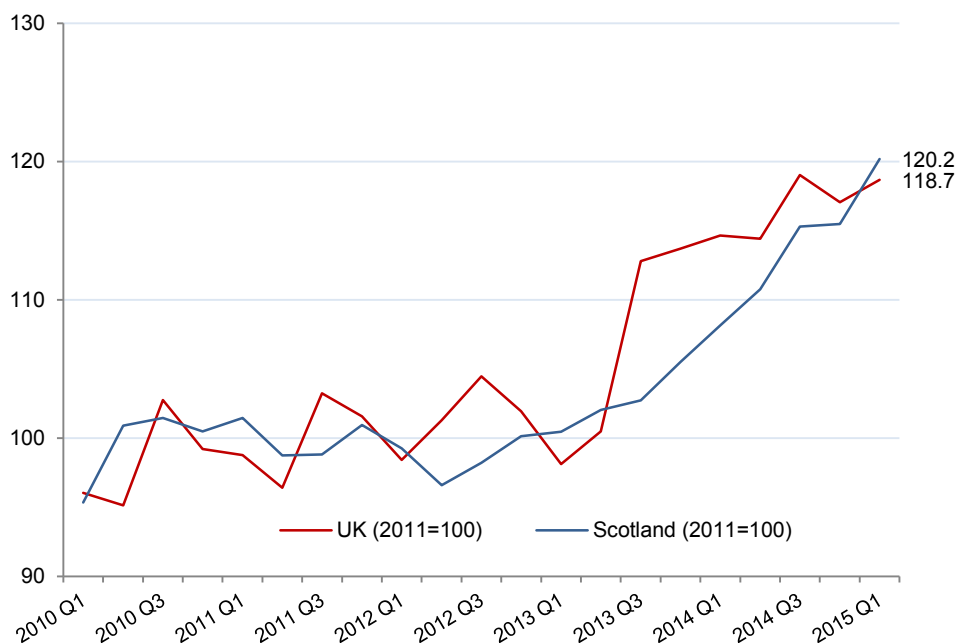


**Sources:** *Scottish National Accounts Project (SNAP) data (Scottish Government) and UK Quarterly National Accounts (National Statistics) and FAI calculations.*

The most recent data we have on a consistent basis however suggests that the scale of households' contribution to growth is reducing. This would be welcomed by some, given fears over the sustainability of a private debt funded and consumption driven model of growth. "Rebalancing" suggest an increased focus on both external demands – as we will discuss in a further section shortly – and towards investment-driven economic activity. Currently, we do not have data on the components of growth in the Scottish economy in the second quarter of 2015 – this is published on the 4<sup>th</sup> of November 2015 – and so we only have information on the first quarter. Using these data – which have subsequently been revised - we estimate that Scottish growth in household spending in real terms (1.4%) was higher than in the UK as a whole (0.7%) in the first quarter of 2015. Figure 2 suggests that the household saving ratio has fallen throughout 2014 and into the first quarter of 2015, consistent with increasing consumer-driven growth. We await new figures for growth to the second quarter of 2015.

Recent data on house price changes in Scotland continue to be affected by the introduction of Land and Buildings Transaction Tax in April 2015, and the change in behaviour around this point. Recent data from the Scottish Housing Market Review suggests that house sale transactions are up on the levels seen over much of the previous five years, and lending to both first time buyers and home movers are also up over this period, though house prices in Scotland continue to lag behind the UK (and the UK, excluding London). New statistics suggest that the rate of change in rental prices in Scotland lags the UK, have risen by 2.1% in June 2015 in Scotland compared to 2.5% in Great Britain as a whole. The rate of change in rental prices in Scotland appears to have been broadly stable since the last quarter of 2014, which appears to reflect region-specific effects of an easing in Aberdeen and strong growth in rental prices in Edinburgh.

**Figure 3: Real gross fixed capital formation, Scotland and the UK, Q1 2010 to Q1 2015**



**Sources:** *Scottish National Accounts Project (SNAP) data (Scottish Government) and UK Quarterly National Accounts (National Statistics) and FAI calculations.*

### Investment

Figure 3 shows comparable series for investment spending in Scotland and the UK to the first quarter of 2015. We should, again, note that these will be revised following the publication of Quarterly National Accounts for Scotland shortly. These suggest a sharp rise in investment spending in Scotland, which has grown faster than in the UK as a whole over the last two quarters for which comparable data is available. More recent data, such as the (current price) series on the Output of the Construction sector publication suggests that Scottish activity is stronger than that in other UK regions, and in particular due to the presence of major government-funded infrastructure projects. Continued growth in activity in such projects are a sensible explanation of the higher rate of growth seen in the Construction sector in Scotland than in the rest of the UK in recent quarters. However, we should also recall that there is increasing survey evidence that firms are anticipating a slowing in the rate of growth in investment and

that infrastructure activity is focused in a small number of very large projects (e.g. the new Forth crossing).

## Trade

As a small open economy, Scotland is impacted by the growth outside its borders. The rest of the UK is the single largest market for Scottish products, and there has been a broadly static forecast for the UK in the last few months, since our June 2015 forecast. However, we find greater growth concerns in Scotland's major external markets, and a general downgrade of global growth prospects since the summer months. As noted earlier, the IMF World Economic Outlook's latest forecasts suggest an easing of growth prospects in 2015 and 2016, and down from the rates experienced in 2014. The IMF revised down their estimates of global growth in 2015 and 2016 by 0.4 and 0.2 percentage points respectively since their forecasts in April 2015, while the OECD's September "Interim Economic Outlook" revised down their global growth forecasts for 2015 and 2016 by 0.1 and 0.2 percentage points respectively. These were impacted jointly by a growing expectation that the US Federal Reserve may begin to gradually raise interest rates, while they noted that while this increase is now likely, the pace of the "normalisation" of interest rates will be critical for global growth dynamics. The IMF's forecast for the growth prospects of the US in this year, for instance, has been reduced by 0.5 percentage points since its April forecast, while that of the UK has been reduced by 0.2 over the same period.

**Table 1: Economic growth forecasts for 2015 and 2016 for Scotland's major export markets, plus UK, China, Japan and the Euro area, % p.a.**

|             | Share of total (i.e. international and rest of the UK) exports, % 2013 | 2015                  |                          | 2016                  |                          |
|-------------|--|-----------------------|--------------------------|-----------------------|--------------------------|
|             |  | OECD (September 2015) | Revision since June 2015 | OECD (September 2015) | Revision since June 2015 |
| USA         | 5.3  | 2.4                   | +0.4                     | 2.6                   | -0.2                     |
| Netherlands | 2.8  | -                     | -                        | -                     | -                        |
| Germany     | 2.6  | 1.6                   | 0.0                      | 2.0                   | -0.4                     |
| France      | 2.5  | 1.0                   | -0.1                     | 1.4                   | -0.3                     |
| Denmark     | 1.9  | -                     | -                        | -                     | -                        |
| Norway      | 1.5  | -                     | -                        | -                     | -                        |
| UK          | 62.4   | 2.4                   | 0.0                      | 2.3                   | 0.0                      |
| China       | 0.8  | 6.7                   | -0.1                     | 6.5                   | -0.2                     |
| Japan       | 0.4  | 0.6                   | -0.1                     | 1.2                   | -0.2                     |
| Euro area   | -  | 1.6                   | +0.1                     | 1.9                   | -0.2                     |

**Sources:** OECD Interim Economic Outlook (OECD, September 2015). Notes: "-" indicates a country forecast is not produced, "n/a" indicates that the share of exports from Scotland to Euro area countries is not available from official sources.

Additionally, the OECD noted the growing “puzzles and uncertainties” to economic data and developments in China and Japan, and the mismatch between indicators suggesting that the recovery may be losing ground. For example, the OECD note an “implausibly large” discrepancy between recent recorded growth and demand for imports – usually a good proxy for growth. There appears to be increasing evidence that growth risks continue to be heavily weighted to the downside in these global forecasts.

Prospects for the Eurozone area have improved slightly during 2015, although indicators suggest that it continues to underperform relative to the “favourable” combination of low interest rates, low oil prices and a weaker euro aiding the competitiveness of its exports. The latest PMI index for the Eurozone, for instance, suggests positive increases in growth in October compared to the previous month – and accelerations of growth in Germany and France – but there is a weakening anticipated in the final months of the year.

Table 1 shows the forecasts for growth in Scottish key export markets through 2015 and 2016. The average of recent 2015 forecasts for UK growth in June 2015 was 2.5% and this continues to be the median forecast for the UK economy in this year. The OBR will issue revised forecasts for 2015 and 2016 in the Autumn statement later this year.

#### **Forecasts for the Scottish economy: in detail**

We now have official statistics on the first two quarters of economic growth for Scotland in 2015. October’s release of growth in the second quarter recorded growth of 0.1%, and suggests that growth has eased in two successive quarters following final quarter of 2014. Growth in the first quarter of 2015 has been revised down from 0.6% to 0.4%. The second quarter of 2015 saw the weakest growth since the second quarter of 2012, and is examined in more detail in the *Outlook* section of this Commentary.

The significant fall in sectors and activities associated with the (onshore) elements of activities in North Sea oil and gas may partly explain this reduction. While the low oil price is having a particular impact upon Mining and Quarrying activities generally, its effect is not limited to those sectors. Manufacturing and (in particular) service firms – such as business service firms providing support to offshore activities - have seen to contractions in their output in the second quarter. There is positive news from the Construction sector, which appears to be significantly bucking the downward trend seen across the Scottish economy as a whole between the first and second quarters of 2015. It recorded growth of 3.5% in the second quarter, and has now recorded six consecutive quarters of growth above 2 per cent. This appears to be primarily driven from new infrastructure projects currently being undertaken across the Scottish economy and while repair and maintenance work as well as private construction indicators are generally positive, they are up by a far smaller amount.

In an ongoing piece of research, Fraser of Allander Institute “Nowcasts” of the Scottish economy (published at [www.nowcastingscotland.com](http://www.nowcastingscotland.com)) reveal a slight slowing in Scottish growth continuing during the first three quarters of 2015. As well as suggesting the slowing of growth through 2015 for Scotland – as has now been observed between the first two quarters (and the only quarters to which we currently have official growth statistics for Scotland) – these nowcasts are consistent with a slower rate of growth in Scotland than the UK as a whole. Interestingly, the preliminary estimate of UK GDP in the third

quarter of 2015 is for growth of 0.5%. This suggests a slight reduction in the UK rate of growth (although this is still positive) between the second and third quarters for the UK. The third quarter estimate of growth in UK GDP *excluding oil and gas* – which is the most relevant comparison for Scotland – was unchanged between the second and third quarters at 0.5%.

Our latest nowcast for growth in Scotland in the third quarter, anticipates growth of 0.3% in the third quarter – a small improvement on Q2 – with stronger growth in Q4 (0.43%). This suggest that the final two quarters of 2015 will see growth of below trend performance for Scotland.

Looking to the short term, the most significant shift since our June 2015 forecast is the upward surge in investment and construction activity that the data suggest. This is line with earlier survey results for the second quarter. Current survey expectations however suggest that the growth in investment activity has eased in the second half of 2015. Household spending is anticipated to continue to underpin much of the (albeit) weak growth seen in activity in Scotland through the first half of 2015, and the upward trend of wages and incomes suggests some signs for optimism, despite this continuing to demonstrate the lack of success in “rebalancing” the economy away from a consumption-driven model. We continue to expect the growth in real wages to be sluggish through the next two years, with low inflation being matched by modest increases in aggregate income measures.

Growth forecasts in Scotland’s export markets have been reduced since our forecasts in June 2015, particularly with growing fears about the growth in the China economy. Closer to home, there are continued signs of modest expansions in growth in the Eurozone, however deflation and the weakness in output indices – as well as slow growth in employment – appear to be increasing the prospect of monetary interventions in the coming months. Manufactured exports to international (i.e. non-UK) markets – an important element of total Scottish exports – fell by 2.3% in real terms during the second quarter, with falls seen in the Drink, Mechanical Engineering and Transport Equipment sectors particularly affected (and with these three activities covering over 40% of Scottish international manufactured exports).

The outlook for total UK government spending (and, through the Barnett formula, the spending available to the Scottish Government) will be confirmed in the Spending Review of the 25<sup>th</sup> of November 2015. It was noted that the Scottish Government’s Draft Budget for 2016-17 will follow in the forthcoming months. With the additional devolved responsibilities around setting taxes under the Scotland Act 2012, as well as the continued operation of the Barnett element, this will have consequences for the level of public spending in Scotland.

## Results

In this section, we forecast year-on-year growth in Scotland’s key economic and labour market variables. In this issue, we forecast all variables for 2015, 2016 and 2017. Our forecasts cover Scotland’s Gross Value Added (GVA), employee jobs and unemployment. The model used is multi-sectoral, and where useful, results are reported to broad sectoral categories.

We begin with the forecasts for (real) GVA growth in the Scottish economy. The growth performance of Scotland between 2010 and 2014 and our forecasts for the period 2015 to 2017 are shown in Figure 4.

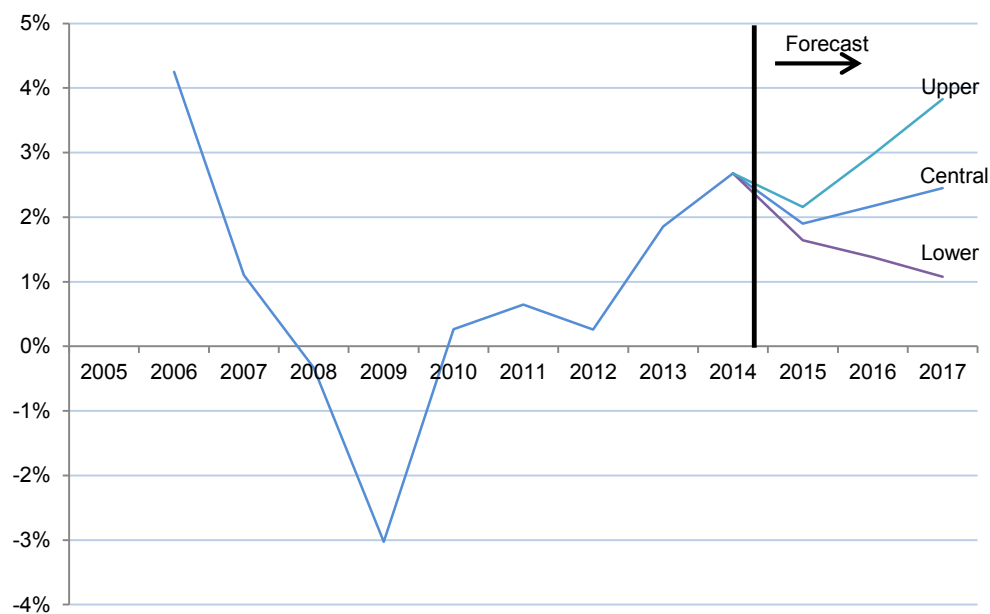
This also includes our upper and lower forecasts of growth. As previously, the range around the central forecast is based on our past forecast accuracy of the first release of growth data for the year.

Based on FAI forecasts since 2000, the mean absolute error of forecasts (i.e. the difference between forecast and “outturn” annual growth) made in the autumn for growth in that same year is 0.26 percentage points, while for the following year the average absolute forecast error is 0.80 percentage points. This gives the range for the upper and lower bands in 2015 and 2016. Our past forecast errors for the longest forecast horizon is 1.37 percentage points, so this is used to give the range around our central forecast for 2017.

Relative to our June 2015 forecasts we have now revised down our central forecast for GVA growth in 2015 from 2.5% to 1.9% (i.e. a downward revision of 0.6 percentage points since our June 2015 Commentary), which is largely driven by the lower than expected growth seen during the second quarter of 2015. Our June forecast for 2016 was 2.3% and we have revised this down by 0.1 percentage points, to 2.2% annual growth. On our central forecast therefore we forecast a slight increase in the rate of growth in 2017 from 2.3% to 2.5%.

For comparison purposes, the latest Office for Budgetary Responsibility (OBR) forecast for growth in the UK as a whole in 2015 (made in July 2015) and the median of new independent growth forecasts for the UK in 2015 are 2.4% and 2.3% respectively, while for 2016 the respective figures are of 2.3% and 2.4%.

**Figure 4: Actual and forecasts of annual real GVA (%) growth for Scotland, 2015 to 2017**



**Sources:** Fraser of Allander Institute forecasts, November 2015 ©

In addition to the aggregate growth forecasts in our central scenario, Table 2 presents our forecasts for GVA growth in 2015, 2016 and 2017 for three broad sectoral groupings: the “production”, “construction” and “services” sectors of the Scottish economy.

**Table 2: Forecast Scottish GVA growth (%) by sector, 2015 to 2017**

|              | 2015 | 2016 | 2017 |
|--------------|------|------|------|
| GVA          | 1.9  | 2.2  | 2.5  |
| Production   | 0.7  | 2.2  | 2.7  |
| Construction | 6.0  | 3.2  | 1.4  |
| Services     | 1.6  | 2.0  | 2.4  |

**Source:** Fraser of Allander Institute forecasts, November 2015 ©

### Employment and unemployment

Detailed commentary on recent developments in the Scottish labour markets can be found in the *Overview of the Scottish Labour Market* section of this Commentary. Here we present our forecasts for the number of employee jobs in the Scottish economy. We forecast the number, sectoral breakdown and percentage changes in employee jobs at the end of 2015, 2016 and 2017 respectively, as well as the ILO measure of unemployment over the same period.

The most up to date employee jobs series for Scotland shows that there were 2,389,000 employee jobs in Scotland in the final quarter of 2014, an increase of 32,000 jobs from the end of 2013 (and following a 2013 when 78,000 jobs were added in Scotland). The official statistics on the number of employee jobs estimated to be in Scotland in December 2014 has been revised down slightly since our forecasts in June 2015.

Our new forecasts for employee jobs are shown in Table 3, alongside a sectoral breakdown of employee job numbers. The number of total employee jobs is forecast to continue to increase in each year, and at a faster rate than that seen during 2014 (although not as strongly as in 2013). Our forecast for the number of jobs added in 2015 has been revised down marginally since June’s forecast, from 51,250 to 49,400. In the second quarter, the number of employee jobs were unchanged since the end of 2014. Within this, however, there has been rise of 10,000 in Construction, and an increase of 5,000 in manufacturing, with an equal sized contraction across the service sectors.

The number of jobs at the end of 2015 is now forecast to be 2,433,400,250, an increase of 2.1% in 2014 (the same percentage growth forecast in June’s Forecast). Our current forecast is that the Scottish economy will add 45,000 jobs in 2016, slightly lower than our June forecast, while we forecast the addition of 54,650 jobs in 2017. The net change in employee jobs in Scotland, consistent with our upper, central and lower forecasts for GDP growth, is shown in Table 4.



**Table 3: Forecasts of Scottish employee jobs ('000s, except where stated) and net change in employee jobs in central forecast, 2015 to 2017**

|                             | 2015      | 2016      | 2017      |
|-----------------------------|-----------|-----------|-----------|
| Total employee jobs, Dec    | 2,433,400 | 2,478,350 | 2,533,000 |
| Net annual change (jobs)    | 49,400    | 45,000    | 54,650    |
| % change from previous year | 2.1       | 1.8       | 2.2       |
| Agriculture (jobs,000s)     | 26        | 26        | 27        |
| Annual change               | 500       | 800       | 850       |
| Production (jobs, 000s)     | 245       | 250       | 256       |
| Annual change               | 5,600     | 5,200     | 5,800     |
| Construction (jobs, 000s)   | 148       | 150       | 152       |
| Annual change               | 15,052    | 1,873     | 2,365     |
| Services (jobs, 000s)       | 2,015     | 2,052     | 2,098     |
| Annual change               | 28,200    | 37,100    | 45,650    |

*Note: Absolute changes in the number of employee jobs are rounded to the nearest 50.*

*Source: Fraser of Allander Institute forecasts, November 2015 ©*

**Table 4: Net annual change in employee jobs in central, upper and lower forecast, 2014 to 2016**

|         | 2015   | 2016   | 2017   |
|---------|--------|--------|--------|
| Upper   | 54,950 | 65,500 | 88,800 |
| Central | 49,400 | 45,000 | 54,650 |
| Lower   | 43,800 | 24,450 | 20,500 |

*Note: Absolute job numbers are rounded to the nearest 50.*

*Source: Fraser of Allander Institute forecasts, November 2015 ©*

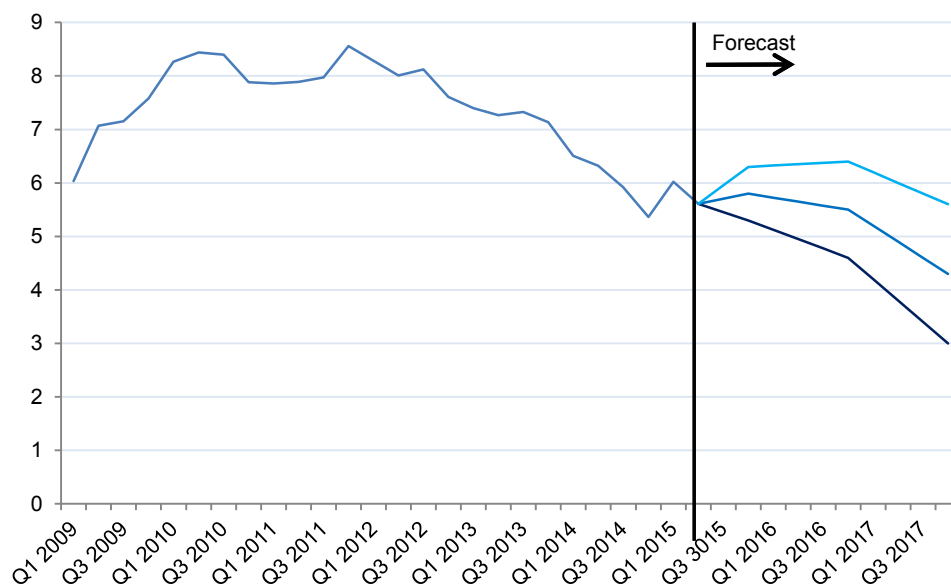
We present out forecasts for unemployment at the end 2016 and 2017 in our central scenario in our central forecasts in Table 5. We report the forecast number (and rate) of those unemployed using the International Labour Organisation (ILO) definition of unemployment. This is preferred to the claimant count measure as it gives a more complete picture of the extent of labour resources available for work but unable to find work, and so is a better measures of the level of spare capacity in the Scottish labour market.

**Table 5: Forecasts of Scottish ILO unemployment in central forecasts, 2015 to 2017**

|                       | 2015    | 2016    | 2017    |
|-----------------------|---------|---------|---------|
| Rate (%) <sup>1</sup> | 6.2     | 5.7     | 4.6     |
| Level (000s)          | 169,150 | 155,450 | 118,400 |

Note: 1 = Rate calculated as total ILO unemployment divided by total of economically active population aged 16 and over. The most recent labour market statistics are detailed in the Labour Market section.

Source: Fraser of Allander Institute forecasts, November 2015 ©

**Figure 5: Scottish ILO unemployment rate, 2009 to 2017 including forecasts from Q2 2015**

Sources: ONS and Fraser of Allander Institute forecasts, November 2015 ©

Our new forecasts of the ILO unemployment rate in Scotland at the end of 2015 and 2016 are 6.2% and 5.7% respectively, reflecting weaker growth forecasts over these periods, as well as weaker than expected labour market developments through 2015. Note, however that we forecast the overall general improvement in the number of jobs in Scotland to continue, albeit at a reduced rate to our forecasts earlier in this year. Figure 5 shows both the performance of ILO Scottish unemployment rate since 2009 as well as our forecasts for the ILO unemployment rate under the central, upper and lower forecasts to 2017.

The most recent figures for the labour market in Scotland (published on 14<sup>th</sup> October 2015) show an ILO unemployment rate of 5.6% in the three months to June 2015, down from 6.3% in the second quarter of 2014, and a fall of 0.4 percentage points from the first quarter of 2015. The level of unemployment stands at 155,000 in the same period this year, down 13,000 on the previous three months, and down by 19,000 from the same quarter one year ago.

Grant Allan

1 November 2015