2 Forecasts of the Scottish economy

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Abstract

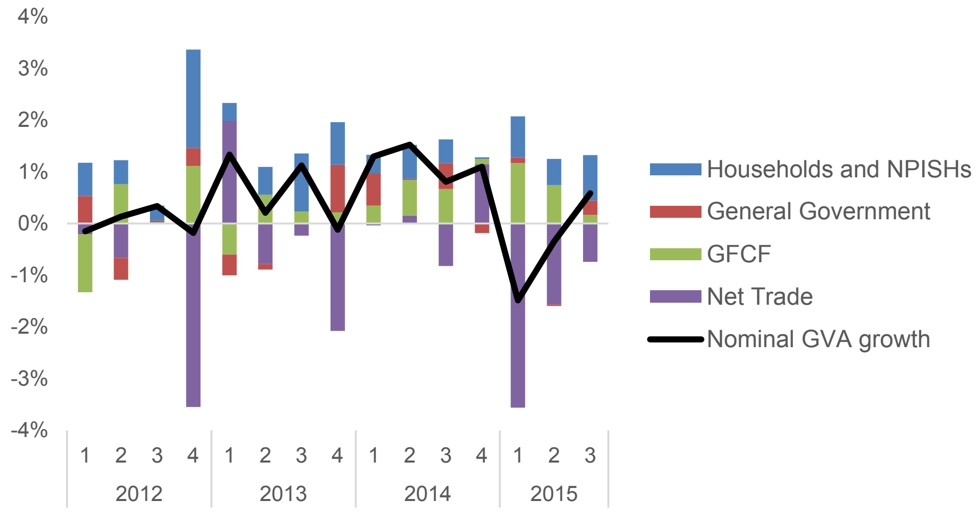
Economic growth in Scotland appears to have slowed towards the end of the year, partly driven by the knock-on impacts of reduced activity in the North Sea driven low a low oil price. Investment and domestic expenditure held up growth through the year as a whole, pointing to a domestically-supported growth model for the short term. Looking forward, the external environment for Scottish exports appears to have weakened since our last Commentary, in particular in developing countries, but also with downgrades to growth for the USA and the UK as a whole (with the rest of the UK being Scotland's largest export market). Additionally, with uncertain future investment spending, slowing growth to nominal incomes and the likelihood of a continued and prolonged period of low oil prices we have revised down our forecasts for economic and job growth over the next two years.

Households

It is evident from Figure 1 that domestic spending has driven a considerably portion of economic activity in Scotland through 2015. In the latest quarter (Q3 2015) household and government expenditure growth contributed 0.9% and 0.3%. Growth from Gross Fixed Capital Formation (GFCF) – that is, Investment - contributed 0.2%, well down from the spectacular figures seen in the first two quarters of the year (1.2% and 0.7%). (Incidentally, that Q1 contribution from GFCF was the greatest single quarter figure since the third quarter of 2006. On average, between Q1 2012 and Q3 2015, household consumption has contributed 0.7 percentage points to nominal quarterly growth, with Gross Fixed Capital Formation and Government (only) contributing 0.7 and 0.1 points respectively). Net trade has contributed an average of *minus* 2.0 percentage points over the same period. We return to the outlook for Scottish exports, however it is clear that these have been affected by developments in international markets (particularly the Eurozone) and it is crucial for Scotland's economic health that the factors underpinning this worsening of Scotland's trading position is understood.

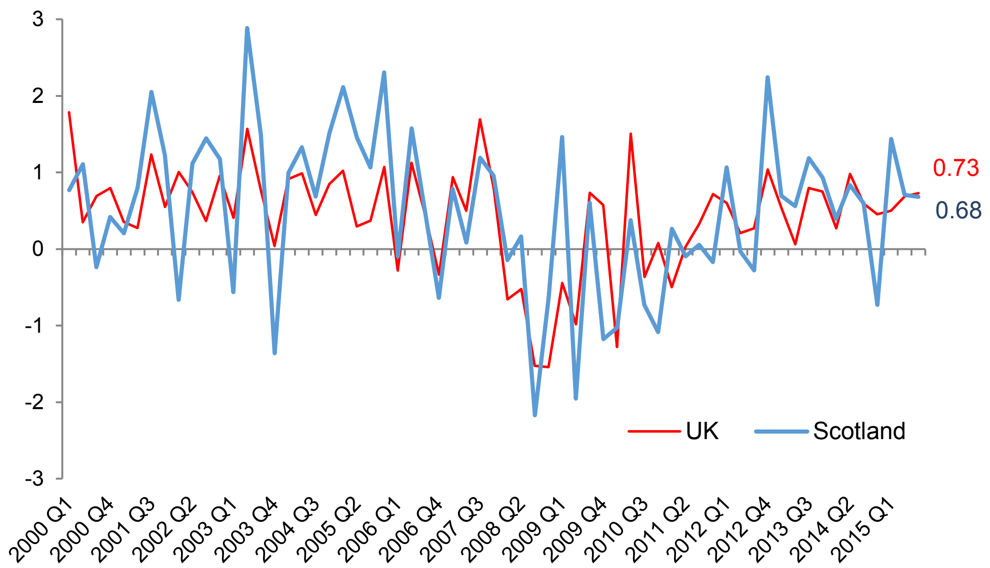
Figure 2 shows that the volatility of (real) consumption spending growth continues to be greater in Scotland that the UK as a whole, and that consumption expenditure since the start of 2011 has grown reasonably strongly (aside from a sharp reduction in Q4 of 2014 which was more than offset by a strong rebound in Q1 2015). In the most recent quarter for which data is available (Q3 2014), consumer spending grew by 0.68% in Scotland and 0.73% in the UK as a whole. Figure 3 shows that the savings rate in Scotland, although mirroring the fall in the UK as a whole, has fallen much more sharply through 2015 (down by 2.8 percentage points since the end of 2014, while the saving rate has fallen by 0.9 percentage points in the UK). The latest Scottish Retail Sales Index suggest that in the final quarter of 2015 growth in Scotland in the (nominal) volume of sales rose by 0.6%, while they rose by 1.1% in Great Britain as a whole. On a value basis, retail sales fell by 0.3% in Scotland while they rose by 0.1% across Great Britain.

Figure 1: Contribution to nominal quarterly growth, Scotland, Q1 2012 to Q3 2015 (% points q-on-q)



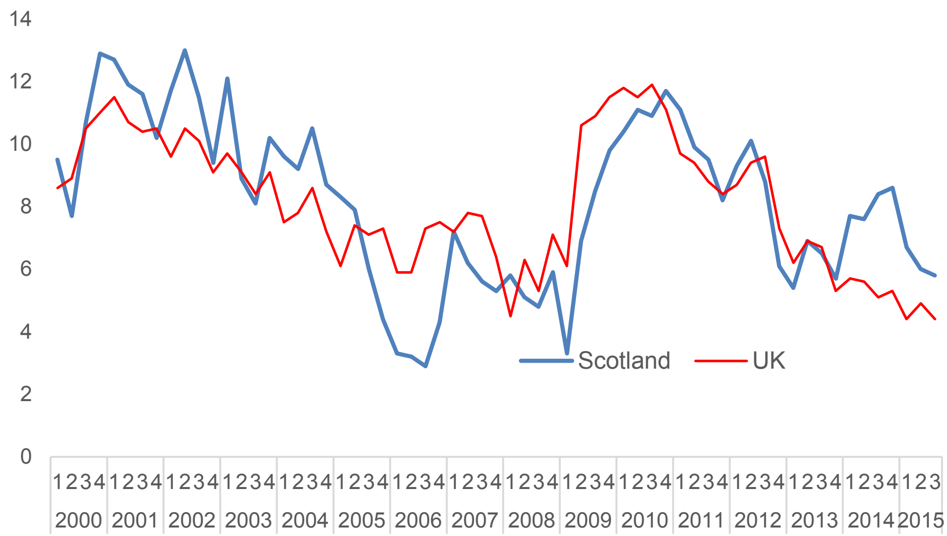
Sources: *Scottish National Accounts Project (SNAP) data (Scottish Government) and Fraser of Allander Institute (FAI) calculations. The columns shows the percentage point contribution of each element to quarterly Scottish (nominal) GVA growth, while the solid black line shows nominal GVA growth for Scotland for each quarter, e.g. in Q3 2015, household and government and Gross Fixed Capital Formation (GFCF), i.e. investment, contributed positively to (nominal) growth in that quarter, while net trade contributed negatively.*

Figure 2: Household real consumption spending growth, Scotland and UK, Q1 2000 to Q3 2015 (% q-on-q)



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

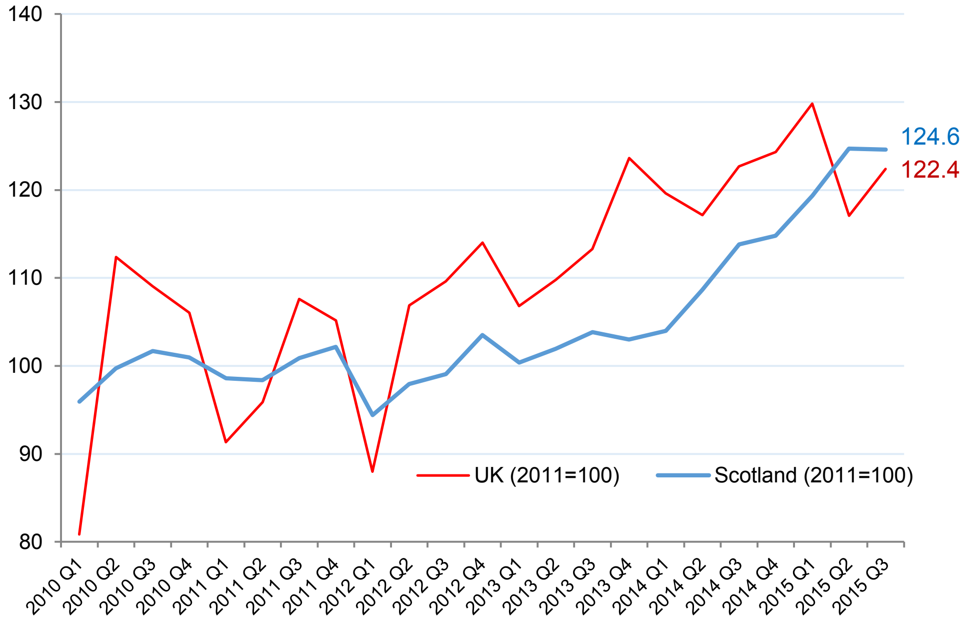
Figure 3: Household savings ratio, Scotland and UK, Q1 2000 to Q3 2015, %



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

Investment

Figure 4: Real gross fixed capital formation, Scotland and the UK, Q1 2010 to Q3 2015



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

Figure 4 shows comparable figures for Scotland and the UK for investment spending between Q1 2010 and Q3 2014. These suggest that investment spending in Scotland and UK are about 24% and 22%

above its average from 2011, and the strong increase in investment spending has continued through the middle of 2014 and into the first half of 2015 (this is consistent with the contribution to growth seen in Figure 1). ONS data on activity in the Construction sector suggests that Scotland has seen the greatest increase in activity in the year (up 20% in nominal terms). Detailed data suggests that this is in part due to above average activity in new housing, as well as a significant rise in infrastructure activity. In the year to Q3 2015, nominal activity in New Infrastructure work has increased by 57% in Scotland, making it the second fastest growing region of the UK on this measure – behind Wales - and first on the level of infrastructure construction activity in that quarter.

Trade

Latest exports from Scotland were reported on the 26th of January 2015 in the Global Connections Survey, now renamed “Export Statistics Scotland”. These are far from timely data in that the latest figures relate to 2014, and additionally they are denominated in nominal terms. Notwithstanding these significant limitations, they do provide a useful identification of the sectoral composition of exports from the Scottish economy, as well as information on the destination markets for Scottish goods and services. Now included in this series is an estimate of exports to the rest of the UK as well as to international markets. These data suggest that exports to the rest of the UK constituted 64% of all exports from Scotland in 2014, an increase of five percentage points since 2002. Between 2013 and 2014, exports to the rest of the UK had increased by 3.2% (in nominal terms). In total, £48.5 billion worth of exports leave Scotland for the rest of the UK.

The international (i.e. non-UK) exports data show another picture. Between 2013 and 2014 there was a reduction of £920 million (3.2%) in Scotland’s international exports, with a fall in the value of exports in “Coke, refined petroleum and chemical products” – where activity was hit by the short-term disruption at the Grangemouth refinery at the end of 2014 – and Whisky (down 7%), as well as reduction in “Computer, electronic and optical products” (down 30%).

The six top destinations for Scotland’s international exports are, by value, the USA, Netherlands, France, Germany, Norway and Ireland. In all, 51% of Scotland’s international exports are to European markets, with 42% to markets in the European Union (EU). These are down from 64% and 54% respectively over the period since 2002, with EU exports having grown more slowly than non-EU exports over the period.

We can use these data to analyse the growth in Scotland’s exports by their “destination” market. Note that this doesn’t necessarily relate to where the good or services is consumed as these data come from the destination of the exports from Scotland and so relate to their “first” destination. Further, we can breakdown the period between 2002 and 2014 into three parts:

1. the period prior to 2005 when Scotland’s exports fell to their lowest value in nominal terms
2. The period leading up to the Great Recession – i.e. 2005 to 2009
3. The period since 2009

Table 1 shows that over the period as a whole (given in the final column) the value of *all* Scottish exports has risen by 2.6% per year (again this has it been adjusted for inflation). *EU* exports in this period have averaged growth of 0.5% pa, while *non-EU* exports have grown by 4.7% pa. Much of the difference over the period from 2005 has been driven by the period up to 2005, when EU exports fell by 8.0% and total exports fell by 3.2% (recall, EU exports comprised a majority of all exports at the start of this series). Between 2005 and 2009, export performance was broadly similar for EU and non-EU markets. However, since 2009 the prolonged recession and recovery in the EU and Eurozone countries has had a damaging impact on Scotland's exports to the EU growing by 2.6%, while exports to non-EU markets rose by an average of 6.4% per year.

Table 1: Scotland's international (i.e. non-UK) export growth in nominal terms, % average annual growth rate, selected periods

	2002 to 2005	2005 to 2009	2009 to 2014	2002 to 2014
Total international exports	**-3.2**	**5.0**	**4.3**	**2.6**
EU exports	**-8.0**	**4.7**	**2.6**	**0.5**
Of which[1]				
Netherlands	-3.2	7.9	-4.0	0.0
Germany	-9.5	0.9	6.8	0.6
France	-9.7	4.6	2.7	0.0
Ireland	-8.3	6.9	6.1	2.6
Non-EU exports[2]	**0.6**	**5.9**	**6.4**	**4.7**
Of which				
North America	5.3	3.6	5.7	4.9
Rest of Europe	-7.4	8.3	5.2	2.9
Asia	0.7	5.8	3.1	3.4
Middle East	-2.7	6.1	10.7	5.7
South America	1.0	12.1	12.5	9.4
Africa	3.6	13.1	7.4	8.3
Australasia	-1.4	11.4	8.4	6.9

Sources: *Export Statistics Scotland (Scottish Government) and FAI calculations. Notes: figures given are compound average annual growth rates over the periods stated. [1] = The four largest EU export markets are shown. Overall EU exports account for 42% of all Scottish international exports during 2014. [2] = "Non-EU exports" refers to "Total Rest of the world" series, where this and all data for this table are sourced from Table 1 of stated publication.*

The most recent data on Scottish manufacturing exports to the rest of the world were released on the 20th of January 2016 ("Index of Manufactured Exports"). Though definitions vary slightly, the latest Export Statistics Scotland series suggests that the broad "Manufacturing" definition of exports shows that these now only account for 52% of all Scottish exports, while exports of services have tripled since the series started in 2002. This latest data show that in the third quarter of 2015 overseas manufacturing exports fell by 0.4%. There were declines in the Metals and Metals Products, Non-metallic, other manufacturing and repair, while there were increases in Food exports (up 17.3%): Drink exports were flat in the quarter (and have been flat now for almost two years). The overall quarterly decline was the first in this series since the same quarter in 2014, however the history of this exports series – which dates back to 1999 on a quarterly basis - shows that Scotland's manufactured exports have been broadly flat in real terms for the past thirteen year, since the start of 2003.

Table 2 shows the forecasts for growth in key global markets for Scottish products through 2016 and 2017. We discuss issues relating to the country-specific issues in Scotland's major export markets later. Since our last forecasts in November 2015, economic forecasts have typically been revised down. The OECD's "Interim Economic Outlook" of February 2016 noted the downward revisions to their forecasts since November 2015: including a 0.3% downward revision for global growth in 2016 (down to 3.0%) and the same downward revision to their estimate of growth in 2017 (down to 3.3%). Identical negative revisions the OECD's growth forecasts for both years were made for the UK, while growth in the Euro area was forecast to grow by 2.0 and 2.2% in 2016 and 2017, down by 0.5 and 0.2 percentage points from the OECD's earlier forecasts.

Table 2: Economic growth forecasts for 2014 and 2015 for Scotland's major export markets, including UK, China, Japan and the Euro area, % p.a.

		2016				2017			
	Share of total (i.e. international and rest of the UK) exports, % 2014[1]	IMF (January 2016)	OECD (February 2015)	Revision since last forecast		IMF (January 2016)	OECD (February 2016)	Revision since last forecast	
				IMF	OECD			IMF	OECD
USA	5.2	2.6	2.0	-0.2	-0.5	2.6	2.2	-0.2	-0.2
Netherlands	2.5	-	-	-		-	-	-	
France	2.4	1.3	1.2	-0.2	-0.1	1.5	1.5	-0.2	-0.1
Germany	2.4	1.7	1.3	+0.1	-0.5	1.7	1.7	+0.1	-0.3
Norway	1.6	-	-	-		-	-	-	
Ireland	1.5	-	-	-		-	-	-	
United Kingdom	63.8	2.2	2.1	0.0	-0.3	2.2	2.0	0.0	-0.3
China	0.7	6.3	6.5	0.0	0.0	6.2	6.2	0.0	0.0
Japan	0.5	1.0	0.8	0.0	-0.2	0.3	0.6	0.0	0.1
Euro area	-	1.7	1.4	+0.1	-0.4	1.7	1.7	+0.1	-0.2

Sources: *World Economic Outlook Update (International Monetary Fund, IMF, January 2016) and Economic Outlook (Organisation for Economic Cooperation and Development, OECD, November 2015) Notes: [1] = Sourced from Export Statistics Scotland. "-" indicates a country forecast is not produced.*

For the UK in particular, the average of new forecasts for 2016 as of the time of writing is 2.2%, and range between 1.5% and 2.6% (although there are only four of the 41 forecasting organisations included in the Treasury's publication forecasting UK growth below 2% in 2015). The Office for Budgetary Responsibility (OBR) forecasts for 2016 and 2017 are 2.4% and 2.4% respectively, and these were produced in November 2015. Forecasts for 2017 average 2.3%, and range between 1.2% and 3.0% (HM Treasury, 2015).

Forecasts for the Scottish economy: detail

We look at the likely impacts in this section on both the domestic and external economic environment for Scotland over the years 2015, 2016 and 2017. It may seem paradoxical to still be forecasting 2015 over two months into 2016, however we do not yet have a *first* estimate of the performance of the Scottish over the final quarter of the year just past, by which point we will have the first full picture of the economic growth in that year.

The evidence up to the third quarter of 2015 suggested that the Scottish economy was performing less strongly than it had begun the year, and this was partly driven by the significant "shakedown" of oil and gas-related activity in the North Sea, as the related consequences of the continuing low oil price on exploration and investment activity in this economic area. Although this has had a particularly damaging impact on the economy of the North East of Scotland, the impact has been felt across the Scottish economy as a whole, as the sectoral results in the *Outlook and Appraisal* section identify. Very positive numbers through the first three quarters for investment and household spending appears to have been sufficient to ensure that overall Scottish growth was positive in these quarters of 2015. Our latest "nowcast" data suggests that growth has been positive in the final quarter of 2015, although down from our earlier nowcasts. We are thus holding our forecast for Gross Value Added (GVA) growth in 2015 constant at 1.9%. This is broadly in line with trend economic growth of the Scottish economy over the last forty years, although is below the growth seen in the UK in 2015 (the first estimate of growth for the final quarter of 2015 was published in January at 0.5%, with an increase of 2.2% over the year). In November's Commentary we discussed the apparent divergence between Scottish and UK growth towards the end of 2015, and this appears likely to have manifest itself in a lower growth rate in Scotland for the year as a whole.

In March 2015's Commentary, we argued it was likely that Scottish economic activity would be more negatively affected by the drop in the oil price than the UK as whole. Great challenges remain for the oil and gas sector: the price has remained low for longer than was expected one year ago, and it seems unlikely that it will rebound to higher prices in the near-term or return in the medium-term to the prices seen during the three years prior to autumn 2014. With lower prices, comes a challenge for firms and operators, as well as opportunities in decommissioning of the existing infrastructure and facilities: this is likely to be more successful for the future of the sector when it is able to occur at a time of relative stability, and not driven by short-term decision making. Oil and Gas UK data suggest that in 2014 decommissioning accounted for roughly £1 billion of expenditure in the UKCS, in contrast to capital and operating expenditures of £14.8 billion was £26.6 billion respectively (Oil and Gas UK, 2015).

Looking to the longer term, it is clear that the domestic demand – particularly expenditure by households, but also investment expenditure – are likely to continue to drive much of the continuing – though slow - economic recovery through the next two years as the external environment remains weak and subject to volatility, and has worsened since our November 2015 forecast. With George Osborne, the UK Chancellor of the Exchequer, warning of a "dangerous cocktail of risks" to the UK economy at the start of 2016, and greater uncertainty in the financial markets, the external environment offers little by way of comfort. The OECD warned of "weak global trade and past currency appreciation holding back exports" in its November 'Outlook', with forecasts of global growth of 3.4% and 3.6% respectively – well below recent rates. It points to particular downward revisions to growth from developing countries, including Brazil, but also the Middle East, as these economies struggle with an oil price now expected to stay at or near its current price for longer that previously forecast.

Recent PMI evidence for the Eurozone from Markit (22nd February 2015) recorded the lowest measure in over a year, although the index still suggests an "expansion" in current activities (although not for France), with growing evidence of deflation. After beating forecasts, US monthly Non-Farm payroll data on employment rose by 151,000 in February 2016, around 40,000 below expectations. This followed strong employment growth through 2015, with household incomes rising and spending positively impacting on employment, wealth and activity in the construction sector. Further, the US continues to see little signs of inflation that would trigger a further increase in interest rates, which were raised by the Fed by 0.25 percentage points at its December 2015 meeting in the first sign of an attempt to "normalise" interest rates from the unprecedented monetary interventions since the global financial crisis of 2008. Indeed it is the Fed's first increase in US interest rates since 2006.

For the domestic economy, there is strong growth in employment in the UK, with historic highs to the numbers in employment in Scotland, a growing population, plus the windfall gains of "wealth" effects from rising house prices. The Bank of England's latest inflation report notes a slowing to wage growth, albeit that with low consumer price inflation real earnings are rising. The Bank also suggest that slower productivity growth is impacting on wage growth, as has the growth in low skills within the labour force overall. It notes that "roles than tend to be associated with lower pay, such as lower-skilled positions, have continued to form a larger-than-usual share of net employment growth" (Bank of England, 2016b, p. 25). More details on the composition of the growth in employment in Scotland on the recent data are given later in the Labour Market Section of the Commentary.

The Bank of England also identified faster than expected growth in business investment in the latest data for 2015, as well as the contribution of significant (around 20%) falls in investment growth in the oil extraction industry over the last 18 months. It does note that extraction investment is "import-intensive", and is therefore likely to have a lower impact on the UK as a whole than if it was entirely locally (i.e. UK) purchased (although it is likely that the UK-content of such expenditures is likely to impact more significantly in Scotland).

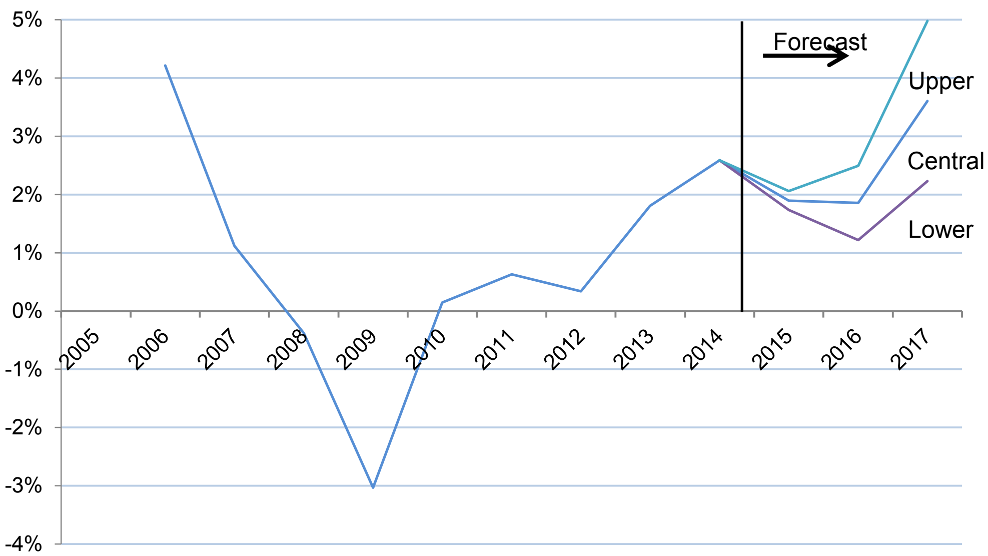
Overall, this discussion points to a domestic-supported growth model, driven by household and investment spending, with a worsening external environment for Scottish exports. With a slowing growth to nominal incomes and uncertain investment spending, and the likelihood of a continued and prolonged low oil price (including the knock-on effects of continued reductions in expenditures in the oil and gas sector), plus an external environment that has worsened since our previous forecast in November 2015 therefore, we have revised *down* our forecasts for 2016 and 2017. These latest results are given below.

Fraser of Allander Institute forecasts: 2015, 2016 and 2017

In this section of the *Commentary*, we forecast year-on-year real growth in Scotland's key economic and labour market variables. In this issue, we forecast all variables for 2015, 2016 and 2017. (The growth of the Scottish economy in the final quarter is published in mid-April 2016 which will complete our first understanding of Scottish economic performance during 2015). 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 GVA growth in the Scottish economy. The growth performance of Scotland between 2010 and 2014 and our forecasts for the period to 2017 are shown in Figure 5. This also includes our upper and lower forecasts 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.

Figure 5: Forecasts of annual real GVA (%) growth for Scotland, 2010 to 2017



Sources: *Fraser of Allander Institute forecasts, March 2016*

Based on earlier forecasts between 2000 and 2014, the mean absolute error of FAI forecasts in the spring period and growth in the year previously (i.e. 2015 in this forecast) is 0.16 percentage points. Growth forecast errors made in spring for the year currently in progress (i.e. our current forecast for 2016) are 0.64 percentage points. This gives the range for the upper and lower bands in 2015 and 2016. While our past forecast error for the year subsequent to the year in progress (i.e. made now for the calendar year 2017, which is our longest forecast horizon: recall, we will not know the true value for growth in 2017 until April 2018) forecast horizon is 1.37 percentage points. This is used to give the range around our central forecast for 2017.

Relative to our November 2015 forecasts we have now revised down our central forecast for GVA growth in 2016 from 2.2% to 1.9% (i.e. a downward revision of 0.3 percentage points) and largely driven by apparently slowing income growth, a weakening of strong domestic investment growth and a longer than expected period until a recovery in oil prices which is dampening overall investment expenditure activity. Our forecast for 2017 has been revised down from 2.5% to 2.2%, largely as a result of the generally weaker outlook for export markets over the longer term. We have held our forecast for annual growth in 2015 constant at 1.9% (incidentally, this is the same as our March 2013 forecast for growth in 2015).

For comparison purposes, recall from earlier that the UK's Office for Budgetary Responsibility (OBR) forecast for growth in 2016 (made in November 2015) and the median of new independent growth forecasts for the UK in 2016 are 2.4% and 2.2% respectively, while for 2017 the respective figures are growth of 2.4% and 2.3%.

In addition to the aggregate growth forecasts in our central scenario, Table 3 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 3: Scottish GVA growth (%) by sector, 2015 to 2017

	2015	2016	2017
GVA	1.9	1.9	2.2
Production	0.7	1.0	1.0
Construction	6.0	2.8	2.8
Services	1.6	2.0	2.0

Source: *Fraser of Allander Institute forecasts, March 2016©*

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 2,386,000 employee jobs in Scotland in the third quarter of 2015, an increase of only 1,000 jobs from the end of 2014. There were 66,000 and 37,000 employee jobs added in 2013 and 2014 respectively, while there were overall falls in the total number of employee jobs of 1,000 and 25,000 in the two previous years.

Table 4: 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	2,415,200	2,452,000	2,498,850
Net annual change (jobs)	31,200	36,800	46,850
% change from previous year	1.3	1.5	1.9
Agriculture (jobs, 000s)	25	25	26
Annual change	450	-50	650
Production (jobs, 000s)	259	264	269
Annual change	3,700	4,800	5,450
Construction (jobs, 000s)	140	142	144
Annual change	1,200	1,500	2,000
Services (jobs, 000s)	1,991	2,021	2,060
Annual change	25,850	30,550	38,800

Note: Absolute job numbers are rounded to the nearest 50.
***Source:** Fraser of Allander Institute forecasts, March 2016 ©*

Our new forecasts for employee jobs are shown in Table 4, alongside a sectoral breakdown of employee job numbers. The number of total employee jobs is forecast to increase in each year, and the number of jobs added in 2015, 2016 and 2017 have been revised down slightly since our November 2015 forecasts. The number of jobs at the end of 2015 is now forecast to be 2,415,200, an increase of 1.3% during 2015. Our new forecast is that the Scottish economy will add 36,800 jobs in 2016, down by around 9,000 from our November forecast, with a net of 46,850 jobs added in 2017, down by almost 8,000 from our November forecast. The net change in employee jobs, consistent with our upper, central and lower forecasts, is shown in Table 5.

Table 5: Net annual change in employee jobs in central, upper and lower forecast, 2015 to 2017

	2015	2016	2017
Upper	35,650	50,700	79,400
Central	31,200	36,800	46,850
Lower	26,850	24,250	31,200

Note: Absolute job numbers are rounded to the nearest 50.
Source: Fraser of Allander Institute forecasts, March 2016 ©

We present out forecasts for unemployment at the end 2015 and 2016 in our central scenario in our central forecasts in Table 6. In line with the forecasts produced since June 2013, 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.

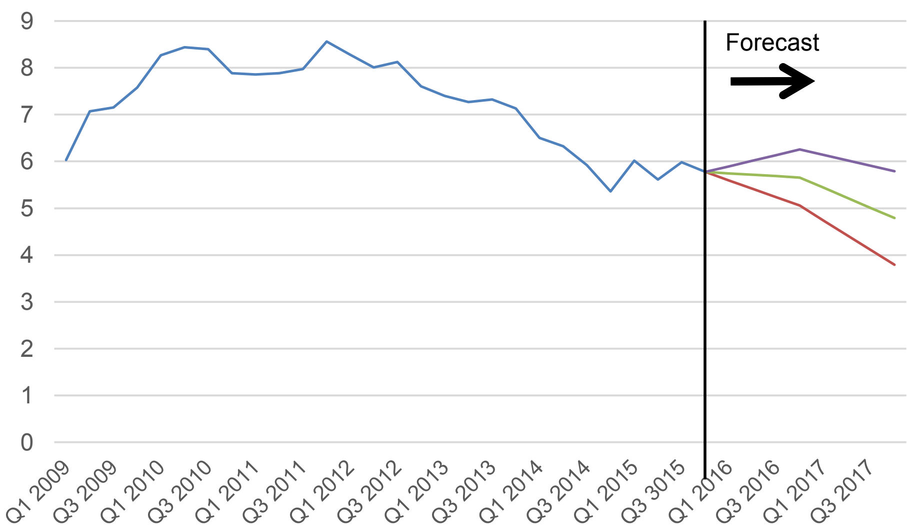
In November 2015 we forecast that the unemployment rate would fall to 6.2% by the end of 2015, with a level of unemployment of 169,150. The recent labour market data at time of writing (23rd February) indicates that the ILO unemployment rate in the final quarter was 5.8%, with a level of 162,000. Our latest forecasts for the unemployment rate in Scotland for the end of 2016 and 2017 are 5.7% and 4.8% respectively. Figure 5 shows the trajectory of the ILO Scottish unemployment rate since 2006 as well as our ILO unemployment rate forecasts under the central, upper and lower scenarios to 2017.

Table 6: Forecasts of Scottish unemployment in central forecasts, 2015 to 2017

	2015	2016	2017
ILO unemployment	162,000	153,350	159,850
Rate (%)[1]	5.8	5.7	4.8

Note: Absolute numbers are rounded to the nearest 50. [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, March 2016 ©

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



Sources: ONS and Fraser of Allander Institute forecasts, March 2016

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23rd February 2016

References

HM Treasury (2016), "Forecasts for the UK economy: A comparison of independent forecasts, February 2016", published 17th February 2016, available online at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/500929/201602_Forecomp_February_2016_v2.pdf

Oil and Gas UK (2015), "Economic Report 2015", available online at http://oilandgasuk.co.uk/economic-report-2015.cfm