The Scottish economy

Forecasts of the Scottish economy

Summary

The Scottish economy is likely to have seen negative growth in the final quarter of 2011. Further, the Scottish labour market has displayed weakness over the last few months as unemployment has increased and employment fallen. The outlook for domestic spending looks bleak in the short term due to slow wage growth and is further weakened over the medium term by reductions to household benefits, despite reductions in inflation easing some of the squeeze on real incomes. Prime export markets for Scottish goods and services appear to have returned to recession, with Euro Area forecasts cut radically since our last forecast. Without a switch of exports to fast-growing markets, or a (increasingly unlikely) quick return of stability to the Euro Area, the prospect for an export-led recovery appear limited in the near term. Job numbers are forecast to decline through 2012, recovering slowly through 2013 and 2014, with unemployment forecast to be 9.8% at the end of 2012 and decline from there to the end of the forecast window.

Monetary policy

Currently, inflation appears to be heading in a rapidly downwards direction, with the CPI measure having fallen in each of the last four months. Prices are still increasing on the year, but at a lower rate – largely in line with expectations, as temporary shocks (including the VAT increase back to 17.5%, one-off increases in energy costs and higher import prices) work their way through the inflation measure. At the time of writing inflation had seen a large one month move from 4.2% in December to 3.6% in January 2012. The RPI rate had fallen by further in this same month, down from 4.8% to 3.9%.

In the face of falling inflation, the Bank of England's latest Inflation Report (February 2012) notes that interest rates are not expected to rise by 25 basis points until the third quarter of 2014: a point almost two quarters beyond what was expected in the last Inflation Report. This reflects an increasing concern within the Monetary Policy Committee about the downside risks to inflation over the medium term as growth appears weaker. The Bank's central projections for inflation are (after continued falls through the first half of 2012) generally below its target of 2% into 2014. At its February meeting, the Committee discussed raising its programme of asset purchases ("Quantitative Easing") by £50 billion or £75 billion. From the minutes of that meeting we see that seven of the MPC voted in favour of a £50billion increase, up to £325 billion, with the other two members favouring a larger increase. There is increased speculation that this increase in asset purchases may not be the final movement of quantitative easing that the Bank undertakes.

Fiscal policy

The headline from the Scottish Budget introduced earlier this year, and relating to 2012-13 was that most budgets continue to decline in real terms out to 2014-5, with the exception of the NHS budget. Some resource DEL spending has been transferred to annual capital DEL spending, with an additional £382 million between 2012 and 2015 above that level of capital spending previously announced. Roads projects appear to see the largest share of this additional capital spending, but there are also increases in the planned expenditure on stated areas such as rural broadband, NHS capital maintenance and affordable houses. More details of the announced Scottish Budget plans for this coming financial year were addressed in the November's Commentary.

The UK government fiscal consolidation continues, with the IFS estimating that 88% of the department DEL spending reductions have yet to take place. The prospects for government spending, either from Edinburgh or London, to provide a boost to economic activity continues to be limited. Some recent figures for the UK, but not for Scotland, continue to show government spending contributing to GDP growth. This appears to either be severance payments being counted as government spending – and so distorting the "true" path of government spending, or a technical classification issue requiring resolution.

Output

The latest GVA figures for Scotland were published on the 18th of January and relate to Q3 2011. The headline figures show that through 2011 the Scottish economy has increasingly tracked developments in the UK economy as a whole. Q3 saw an increase of growth of 0.5%, identical to that seen in the UK as a whole. Over the year (i.e. a rolling four quarters), growth in Scotland was 0.9%, while the UK saw growth of 1.3%. Scottish GVA remains 3.3% below its peak from the second quarter of 2008, while – at the end of Q3 2011 – the UK was 3.6% below its pre-recession peak from the first quarter of 2008. It is therefore 13 quarters since the peak of output in Scotland.

Looking at the sectoral performance there were however, quite sizeable differences between Scotland and the UK. Over the last year, the Scottish production, construction and agriculture sectors all outperformed the sectors at the UK level. While on the surface this suggests a stronger performance in Scotland, the shifts in the third quarter for these broad sectoral groupings were all weaker in Scotland than the UK. Over the year, the service sector in Scotland grew 0.3%, while at the UK level this sector grew 1.2%. Over the last quarter the Scottish service sector outperformed the UK comparison. This was significantly affected by the growth of the business services and finance sector, which saw growth of over 2%. The construction sector, which had previously shown strong growth on a quarterly basis, shrank by 1.2% in Scotland compared to 0.3% growth in the UK. This confirmed four consecutive

quarters of negative growth for the construction sector in Scotland.

The largest contribution to Scottish growth in the third quarter was the business services and finance sector. Construction and production sectors (constituting around 8% and 17% of Scottish GDP respectively) both made negative contributions in this quarter.

The last quarter saw two changes in the methodology used to estimate the Scottish GDP series. The first of these introduced a new price deflator series, replacing Retail Price Index with a Consumer Price Index measure, making Scottish series more comparable to international methods. The second change was a substantial revision to the series on banks and building societies within the financial services sector (comprising around 7% of Scottish GDP). This change has been made retrospectively, with the consequence that developments in this important sub-sector of the Scottish economy now appears to have seen quite a different pattern of growth than previous estimated. The decline in this sector since the start of 2008 has been significantly lessened. Despite sizeable impacts on the financial services sector, the consequences of this change for aggregate Scottish GVA appear to be minimal.

Survey evidence on production during the final quarter of 2011 indicated that this saw a troubled trading period across many sectors, both in Scotland and the UK. Growth in output through January 2012 appears to have moved positively from the levels seen in December, according to the Regional PMI survey. January's PMI survey suggests that while growth across the UK has rebounded strongly at the start of 2012, Scotland has seen a far smaller increase in output than the UK as a whole. Only Wales, Northern Ireland and the South West of England have a lower index for January's figures.

At the UK level, January's preliminary estimate of Q4 2011 GDP was for a decline of -0.2% on the previous quarter. This appears to have been broadly in line with expectations, with a quarter of negative growth expected given weak demand signals in the final quarter. Production sectors at the UK level saw a decline of 1.2% overall, while there was also a contraction in the construction sector (-0.5%) . The aggregate measure of "services" grew by 0% in Q4. The strongest growth at the sectoral level within services was from the government and other public services sector, which grew by 0.4%, and by an estimated 2.5% during 2011. One possible suggestion as to how this can occur during a period of fiscal austerity is that these figures reflect redundancy payments or, indeed, are overstating the contribution of government spending to growth and will be revised down in future quarters – with the impact of revising down overall growth (Kirby, 2011).

Looking forward, January's minutes of the MPC suggest a forecast held by the group for flat growth in Q4 2011 and Q1 2012. This would therefore suggest that small positive

Figure A: Real household consumption, Scotland and UK 1998Q1 to 2011Q3, 2008=100

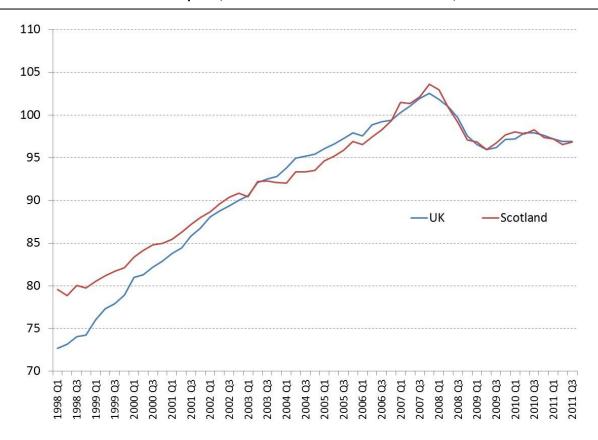


Figure B: Household savings ratio, Scotland and UK, 1998Q1 to 2011Q3

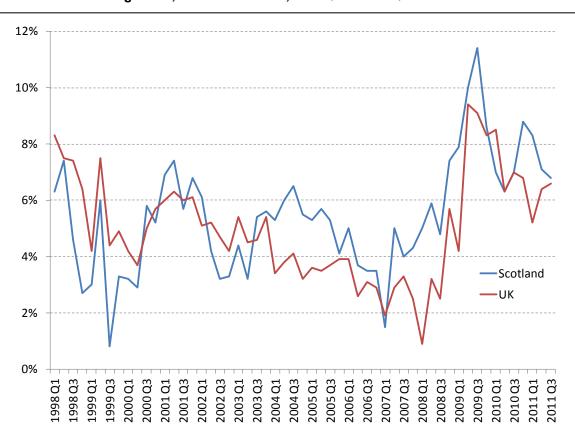
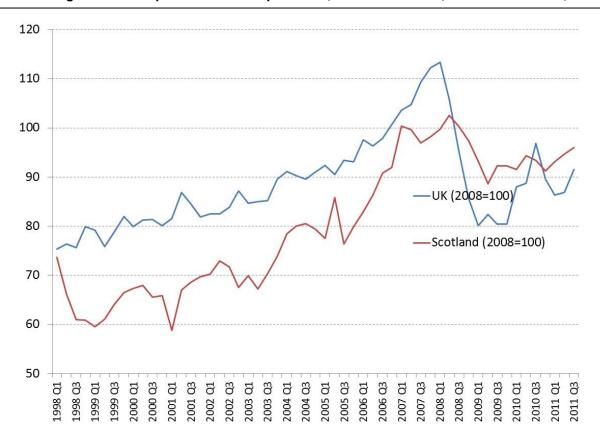


Figure C: Real gross fixed capital formation expenditure, Scotland and UK, 1998Q1 to 2011Q3, 2008=100



growth is anticipated in Q1 2012. Developments through 2012 continue to be shadowed by the prospect of "dislocation" within the core and periphery economies of the Eurozone. Growth forecasts for the UK are discussed alongside the central forecast for Scottish growth.

Household

As noted in the Overview of the Labour Market section of this Commentary, wage growth has fallen since 2007, and in the year to June 2011 real wage growth fell by over 3% for the second year in a row. This is being caused by weak income growth coupled with higher levels of inflation. Low income growth remains an issue across the Scottish and UK economies. It is likely that stronger wage growth would have come at the expense of much reduced employment levels. In our forecasts, weak household income growth is anticipated to continue to act as a drag on spending through 2012. Reductions in the rate of inflation ease some of the pressure on household budgets, but real terms growth in income is not expected through the first two years of our forecast (2012 and 2013). As well as weaker income growth and increasing prices, government policy on reductions in benefit levels and spending will continue to impact on those more reliant on these forms of income, with potential significant consequences for household income inequality.

Movements in wealth indexes over the recent past suggest that some household wealth measures have fallen during 2011. According to the Halifax House Price index, the average value of a home in Scotland fell in 2011 by 3.5%, slightly more than the fall in house prices across the UK in that year (-2.6%). Interestingly, the fall in house prices across the UK in 2011, by this survey, contrasts with the growth seen in 2010. Looking at the quarterly series, average house prices in Scotland were down 22.7% on their 2008Q1 peak at the end of 2011. At the UK as a whole, the peak in prices came in the third quarter of 2007, and prices are currently 18.9% lower than their peak.

As a barometer of household spending, the latest figures from the Scottish Retail Consortium for sales in January 2012 were not promising. Like-for-like sales were down 2.6% on a year previously, with the largest fall in total sales for any month since 1999. These figures are perhaps affected by the VAT changes at the start of 2011, making the comparison figure unrepresentative of January last year. SRC's figures also indicate lower consumer confidence in Scotland than the UK as a whole.

Of course, retail sales are only part of household spending. The most complete picture of Scottish household consumption is produced in the Scottish National Accounts Project data, which are comparable to UK series on consumption spending. We have previously noted that consumption spending in Scotland appeared to have been growing at a slower rate than the UK as a whole (while UK consumption growth was also weak). As of the third quarter of 2011, both Scottish and UK consumption indices were

down from levels seen during 2010. The Bank of England notes that real UK household consumption is only 1% above the trough seen in 2009Q2, while by our calculations Scottish spending is 0.9% above its trough in the same quarter. Scottish consumption spending is therefore appearing to grow (marginally) more slowly in Scotland. This is shown in Figure A.

Recent movements in the households savings ratio continue to show increased savings compared to pre-recession period. The UK level of household saving as a portion of gross income in the third quarter of 2011 stands at 6.6%, slightly below the rate for Scottish households (6.8%). In the growth years of 2002-2007, the average quarterly Scottish saving ratio was 4.6%, while for the UK this was 3.8%. Taking this back further, there was little difference between the average savings ratio between the UK and Scottish savings ratio between 1998 and 2007 at 4.7% in Scotland and 4.6% in the UK. Since the start of 2008, the average savings ratio has increased by more in Scotland, with an average of 7.5%, to the UK's 6.0%.

The Bank of England's February 2012 Inflation Report suggests three reasons for an increased household savings rate post-recession:

- Expectations of lower future earnings (including lower pensions);
- Job insecurity and fears of loss of income;
- Tighter credit conditions for households.

The question remains however, why are Scottish households exhibiting a higher rate of savings than UK households as a whole? Looking at the points above, we would not expect that household credit conditions (i.e. the availability of credit) are different in Scotland compared to the UK. What might differ on this point could be the willingness of households take on credit, although we are not aware of any evidence to support this. Fears of job security may be stronger in those employed in the public sectors, with fiscal consolidation continuing over the next few years. Scotland has a larger share of employment in the public sector than the UK; therefore households as a whole may increase their savings. The Scottish Government has, however, stated that there will be no compulsory redundancies in the activities under their control. Many workers, particularly those in public sectors, will be anticipating below inflation wage increases over the coming years, and may be increasing savings accordingly.

Investment

The third quarter of 2011 saw an upturn in the growth of stocks in the UK as a whole, perhaps due to weaker than expected demand in this quarter. Business investment spending in the UK is around 15% down from its prerecession peak, while the latest Bank of England Inflation report shows that the lack of demand continues to be the principal reason given for firms' holding back making investments. Since the credit crunch the importance of

availability of finance for not making investments has increased, although its importance compared to the demand outlook has not changed.

The method used to construct figures on investment spending in Scotland has been revised in the most recent quarter. These latest data come from the Scotlish National Accounts Project. Figure C shows the levels of investment spending over the period covered by the survey – from the start of 1998. Focusing on the period since the start of the recession, we see that real investment spending appears to have fallen less significantly in Scotland than in the UK as a whole. Where the most recent data suggests a sharp uptick in investment spending in Q3, this is not evident in the Scotlish figures, where the rate of growth appears to have slowed (slightly) during 2011. Given these are recently released data series, we hope to return to this series in later Commentaries.

Tourism

Looking forward, survey evidence suggests a weakening of demand from overseas visitors in Q1 2012. Over the rest of 2012, the London Olympics and Paralympics is arguably the most high profile single tourism driver in the UK. It is hoped that this will encourage tourism visits into the UK, and Scotland through overseas visitors taking additional within-UK trips around the Games themselves. In aggregate terms however, the tourism expenditure related to people attending the games is likely to be small. Much of the impact of the Olympics on tourism spending found by Blake (2005) for example, comes from increases in the level of tourism to the UK before and after the games a result of raising the profile of the UK tourism offering. It might be argued that this impact would be larger for locations with lower tourism profiles, seeking to position themselves internationally alongside a global elite of destinations (which London is arguably already part of).

In addition, Blake (2005) reports a negative effect on the spending of residents of where the games are held during the games themselves as residents go out for dinner/entertainment activities less during the period of the games. If Games-related expenditures by households come from reduced savings then there could be a net-benefit from additional spending. Of course, similar issues will be likely to arise around the Glasgow Commonwealth Games in 2014, and we will return to this in more detail in a later forecast. A recent paper in the Economic Journal (Rose and Spiegel, 2011) found that there was indeed an "Olympic effect" from hosting "mega-events" (such as major international sporting events), but that this was due to a trade (export) increase, which, the authors argued, was "attributable to the signal a country sends when bidding to host the games, rather than the act of actually holding a mega-event [like the Olympics]".

Trade

At the UK level, trade contributed positively to the growth seen in 2011. Indeed, the domestic economy – consumption (public and private) and investment – are estimated to have

declined in this year. While exports grew by 4.75% in the year to 2011, this was down on growth seen in 2010. Slowed import growth contributed to the net boost from trade at the UK level.

The most frequently updated measure of Scottish exports to the rest of the world (ROW) is the Index of Manufactured Exports (IME). This survey reports changes in the real (i.e. inflation adjusted) volume of exports by manufacturing companies based in Scotland to the rest of the world. The latest figures relate to Q3 2011 (and were published on the same day as Q3 GDP figures). The latest data showed a slowing of the growth in ROW exports to 0.2% from the previous quarter. On a rolling four-quarter growth, exports increased by 2.7% (up from 2.1%). At the submanufacturing level, the largest contribution to ROW export growth in the last quarter, and also over the last year, came from the food, drink and tobacco sector, which increased 2.6% in the last quarter and 4.6% over the year.

The Global Connections Survey (GCS) is a less frequent (i.e. annual rather than quarterly) but more comprehensive survey (i.e. all sectors) of Scottish export activity. The latest report, published in January 2012, painted a mixed picture of export performance over 2010, compared to 2009. These data, relate to the economic picture of over a year ago. While this means that these data are not directly useful for informing the trading picture at this moment, they do provide a useful snapshot of the performance of important sectors for the Scottish economy. With exports anticipated to contribute positively to economic performance over the coming years, with reduced reliance upon domestic (i.e. Scottish) demand, this type of information is critical.

The GCS reports that Scottish international (ROW) exports rose by £355million between 2009 and 2010, and stood at £21,980million during 2010. By destination, the major markets remains the EU (supporting almost half of this external demand) and North America. The importance of Asian markets fell by £300million during the year. This is particularly disappointing, given quite significant increases over the recent past in developing markets in Asia.

The same publication also reports the value of exports between Scotland and the rest of the UK (RUK), although these are published by the Scottish Government with significant "health warnings" about the robustness of this data sample. This would appear to be another area of Scottish economic data where evidence-supported knowledge lags economic, and also political, interest by a considerable margin. Many reasons exist why the data on intra-regional UK trade is difficult to capture – no statutory obligation on firms; definitional issues of what is an "export"; the specific residence of the final consumer, etc. – so this would be no easy task. It is promising therefore that the GCS notes that Scottish Government work is ongoing regarding the identification and quantification of RUK exports.

The GCS reports that RUK exports from Scotland rose by almost £2000 million in the year to 2010, up to £44,950million during 2010. The rest of the UK therefore is responsible for over two-third of exports from Scotland. This is what we would expect for a small very open economy located next to a much larger economy, i.e. the RUK. Further, we can also suggest that Scotland's direct exports understate the true importance of trade with the rest of the world for economic activity in Scotland. Items sold as intermediate items in the production process, or down the supply-chain of final products, would not count as exports from Scotland, but to the extent that they are sold outside the UK (and so count as UK exports) there was Scotlish activity at an earlier stage.

We discuss recent and historic trends in exports from Scotland to the rest of the UK and rest of the world in Box 1.

Looking forward, the major obvious challenge to Scottish exports during 2012 and future years is the continuing unfolding of stability in the Euro Area. This economic area is the prime destination for Scottish ROW exports: seven of the top ten export markets for Scottish goods are Euro members (the others being the USA, Norway and Switzerland). A recent report on the Euro Area (Euroframe, 2011) had a central forecast for growth in the Euro Area of 0% in 2012 and 1.4% in 2013, however on the "downside" scenario of -2.1% in 2012 and -1.2% in 2013. This is a remarkable range (2.6 percentage points in absolute terms) between alternative scenarios at such a forecast horizon, but reflects the potential for a decisive downturn in the economic prospects under plausible scenarios. Indeed, while presented as alternative scenarios, the report sets these on the work of Blanchard (2011) as some of the possible "multiple equilibria – self-fulfilling outcomes of pessimism or optimism". Continued sovereign debt fears increasingly threatening the core countries, accelerating fiscal consolidation in the core and periphery, and worries about the stability of the Euro banking system are not a recipe for stability or growth, and it would be unwise to attempt to predict with certainty the likely future of the Euro project over the coming years. On the other hand, our forecasts require us to make a case for growth in the coming years, and - relative to November's commentary we have revised down the growth in demand for Scottish goods from the rest of the world due to the continued worries about growth in the Euro area.

Table 1 shows the GDP growth forecasts for the main six export markets for Scottish (non-UK) exports. Growth prospects during 2012 appear poor, with only the US economy forecast to grow by more than 1.5%. The IMF forecasts a 0.5% contraction in growth in 2012 in the Euro Area, a revision down of 1.6 percentage points on their forecast from September 2011. This indicates one clear link between the rapidly changing political environment and economic outlook. Prospects in core Scottish export markets are forecasted to improve slightly through 2013, with the Euro Area forecast to grow by 0.8% (IMF) or 1.4%

Box 1: Export performance over the recent past

The figures for exports produced in the Global Connection Survey are in current prices, i.e. the values are in "nominal" terms, where the value of one pound between years will change with inflation. Small increases in nominal values for exports could be offset by increases in price levels, masking the "real" movement in the value of exports. An important adjustment is to convert this nominal series into a constant price series. This is not a straightforward task. As with previous Fraser Economic Commentaries, we have used Scottish-specific current and real price figures for manufacturing exports, alongside UK services export deflators, to estimate real growth in sectoral exports over time. These data should be considered illustrative given the data quality, particularly the lack of product specific Scottish trade deflator series for service sector exports. Where UK proxies are not appropriate, this would mean that the real rates of growth could be different from that reported here. Caveats notwithstanding, we present our results below, and begin to draw some tentative findings:

1.1 Rest of the UK exports

	Compound Annual Growth Rate (whole period)	Compound Annual Growth Rate (2002-2007)	Compound Annual Growth Rate (2008-2010)
All RUK exports	4.2%	9.9%	0.6%
THE CONTRACTOR OF THE CONTRACT		0.070	0.070
All RUK manufacturing exports	0.4%	1.9%	0.6%
All RUK manufacturing exports minus electrical and instrument engineering	1.9%	4.0%	1.4%
All RUK non-manufacturing exports	5.1%	13.0%	-1.1%
All RUK service exports (above minus utilities, construction, agriculture and quarrying)	5.5%	13.4%	-0.9%

The annual growth rate of exports to the rest of the UK was 4.2% over the period from 2002 to 2010. The impact of the recession is clear: looking at the pre-recession (up to the end of 2007), and the recession period (from 2008 onwards), we see that export growth fell from an annual rate of 9.9% to 0.6%.

Breaking this down by sectoral/product exports, we see that non-manufacturing exports have provided the strong support for export growth to the rest of the UK, rather than manufacturing exports. The annual growth rate over the whole period for all service sectors was 5.5%, with a very strong growth pre-recession and actually a real terms annual average decline over the years since the recession (-0.9%). Manufacturing exports on the other hand shows a far smaller, but positive, growth rate in both periods. Removing the electrical and instrument engineering exports, which fell sharply at the start of the sample, annual average growth was just 1.9% over the whole sample. These results suggest the growing importance of service sector exports for total exports to the rest of the UK.

1.2 Rest of the world exports

•			
	Compound Annual	Compound	Compound
	Growth	Annual	Annual
	Rate (whole	Growth Rate	Growth Rate
	period)	(2002-2007)	(2008-2010)
All ROW exports	-0.4%	-0.5%	-0.6%
All ROW manufacturing exports (IME)	-1.3%	-0.2%	-2.0%
All ROW manufacturing exports (GCS)	-3.8%	-4.2%	-2.3%
All ROW manufacturing exports (GCS) minus electrical and instrument engineering	1.3%	4.4%	-1.4%
All ROW non-manufacturing exports	6.4%	8.3%	1.3%
All ROW service exports (non-manufacturing minus utilities, construction, agriculture and	6.8%	8.9%	1.4%

The most striking result from the same analysis of ROW exports is that all these exports appear to have reduced on an annual basis by -0.4% over the period of the sample. The same growth rate is seen in both the pre- and recession periods. Again, we see the strong performance of the non-manufacturing and service sectors in improving Scotland's export performance, while manufacturing export growth has been considerably weaker.

Box 1 (cont'd)

1.3 Relative increase in importance of rest of the UK

Another interesting feature of the GCS data was the apparent emergence of the rest of the UK as the major destination of Scottish exports, rather than the non-UK rest of the world. These data suggest that Scotland's major export market over the last decade has always been the rest of the UK, but that the importance of the rest of the UK has grown. Using the full data series (2002 to 2010) of the Global Connection Survey (GCS) alongside the same measure from the Scottish Government produced Input-Output tables series (covering 1998 to 2007), as produced by the Scottish Government, we can examine this shift through time. The results are given in Figure B1 below.

50%
40%
30%
—IO
—GCS

Figure B1: Share (%) of total Scottish exports going to non-UK rest of the world, 1998 to 2010

This diagram appears to show that the rest of the UK has become a more important destination for Scottish goods over the last decade. Non-UK exports from Scotland have fallen from around 40% of all exports to just above 30%. The timing of the movement appears to be slightly different between the two series, but it seems to have happened over a small number of years. For example, the shakeout occurred in 2002-2004 on the GCS measure, while the IO tables suggest 2001-2003 saw the biggest change.

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 **Year**

Looking at the IO tables, it appears that the falling exports to the rest of the world by the Scottish electronics sector correspond entirely with this decline. These lost exports by this sector removed a significant portion of Scottish exports to the rest of the world. From 2001 to 2003, the nominal value of ROW exports from the "Office machinery and computers" sector declined from £3,950 million to £597 million. Figure B2 shows the share of total exports from Scotland which were produced by this sector between 1998 and 2007. This sector produced almost 10% of all Scottish exports in 2000, but by 2003, this had fallen to below 2%. Taking all electronics sectors exports (defined as sectors 69-75 in the IO tables) these reveal a similar pattern, declining from 15% in 2000 to 4% by 2003. As of 2007 the broad electronics sector produced only 2% of Scottish exports.

0%

Box 1 (cont'd)

Figure B2: Exports to the rest of the world by the "office machinery and computer" sector as a share of total exports from Scotland, 1998 to 2007

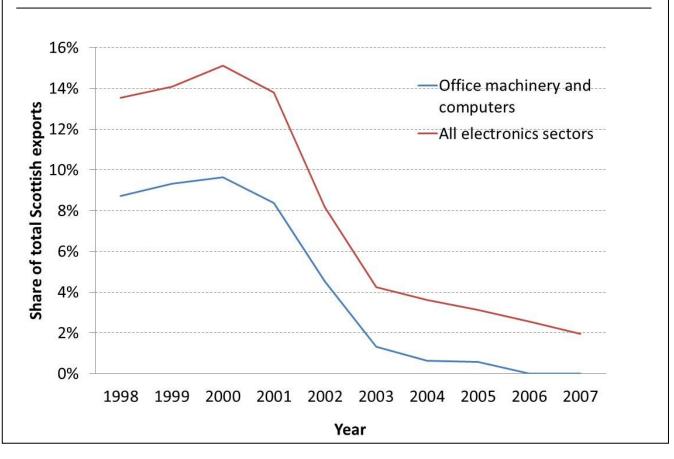


Table 1: GDP growth forecasts for 2012 and 2013 for export markets for Scottish products, plus UK, Euro area and China growth rate, including changes from earlier forecasts where available

		2012			2013	
	IMF	Change from Sep 2011 forecasts	OECD	IMF	Change from Sep 2011 forecasts	OECD
USA	1.8%	0.0%	2.0%	2.2%	-0.3%	2.5%
Netherlands	n/a	n/a	0.3%	n/a	n/a	1.5%
France	0.2%	-1.2%	0.3%	1.0%	-0.9%	1.4%
Belgium	n/a	n/a	0.5%	n/a	n/a	1.6%
Germany	0.3%	-1.0%	0.6%	1.5%	0.0%	1.9%
Ireland	n/a	n/a	1.0%	n/a	n/a	2.4%
UK	0.6%	-1.0%	0.5%	2.0%	-0.4%	1.8%
China	8.2%	-0.8%	8.5%	8.8%	-0.7%	9.5%
Euro area	-0.5%	-1.6%	0.2%	0.8%	-0.7%	1.4%

Sources: International Monetary Fund, World Economic Outlook (Update), 24th January 2012; OECD Economic Outlook, November 2011

(OECD). The UK picture is forecasted to improve slightly as well, with growth of around 2% predicted by both organisations.

Forward looking survey evidence on Scottish exports suggest a general agreement that export activity has slowed towards the end of 2011, particularly affecting output in manufacturing sectors. Scottish Engineering reported a downward trend in orders, while the SCBS survey – which had seen increases in export orders over the previous four quarters – saw export orders fall, with a continued decline in orders expected in Q1 2012. Across the board, business confidence in the key production sectors has weakened significantly since Autumn 2011, with continued fears about exports a primary factor.

Forecasts for the Scottish economy

The large unknowable in this forecast scenarios, as with forecasts over much of the recent past, remains the fragile political and economic state of the Euro area. At the same time, we are faced with continued weaknesses in the domestic (Scottish) economy. The last three months of 2011 are likely to have seen a fall in output, in line with earlier expectations given weak production figures. Sluggish signs of positive growth from surveys, along with weakening business confidence for orders in the first half of 2012 do not give a hugely positive outlook for the overall Scottish economy over the short- and medium-term.

The outlook for domestic demand remains weak with wages increasing at below previous rates and a continued high rate of household savings. With weak consumption spending, our forecast for household expenditure remains broadly flat (0.2%) through 2012, with small growth in 2013 and 2014.

Government (non-capital) spending is forecast to reduce in real terms over the next three years at an increasing rate as departmental cuts outlined in the CSR from Autumn 2010 are implemented. The IFS in January 2012 outlined that some 88% of planned DEL reductions have yet to be implemented. This will continue to exert a downward pressure on domestic demand. The data appears to suggest that government spending has fallen faster in real terms in Scotland than the UK as a whole, although there are some question marks around the measured expenditure contribution of government spending at the UK level. Where this relates to redundancy payments, for instance, it is unclear if these charges would show up in the data at the regional level, or if they would be processed within the Westminster "centre" (and so reveal themselves solely in the UK data, even for Scottish-located "reserved" employment). We would expect that any such payments would be included within the Scottish spending component. We anticipate an increasing rate of government spending reductions in Scotland through to the end of our forecast horizon in 2014.

As mentioned earlier, prospects for Scottish exports remain hugely uncertain. Growth prospects in the rest of the UK – Scotland's largest export market – remain low. The OBR

forecasts 0.7% growth in 2012, but this is above the average of new independent forecast of 0.4%. The OBR forecasts date from November and so are before any of the most recent developments in the Euro Area. Scottish export prospects to the rest of the UK are strongly correlated with UK economic growth, so weak growth is likely to be bad for Scottish exports. The continued reliance of Scottish non-UK exports on the economies of the Euro Area and EU, and falling sales to Asian markets in 2010, show the difficulties in expanding this critical part of Scottish output. We forecast that exports to the rest of the UK and rest of the World from Scotland grow in each year from 2012 to 2014 at an increasing rate, but that they only return to broadly trend growth by the end of the forecast horizon.

Prospects for investment growth in Scotland through the first half of 2012 appear weak as inventory growth at the UK level – for which more timely data is available – suggests a lower rate of stockbuilding in important sectors. Public infrastructure spending is likely to be critical for short-term developments, but is around one-third of all investment spending in a typical year, so the importance of private investment is clear. The OBR forecast a divergence in these (public and private) investment series as public austerity is partially offset by rebounding private sector investment.

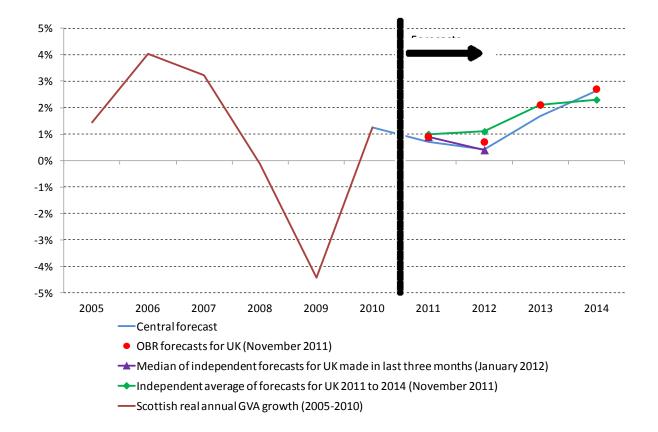
Results

We have extended our forecast horizon out to 2014. This means that we have a forecast horizon of over three years, as the final data for 2014 will not be known until April/May of 2015. As previously, we are forecasting year-on-year real growth in Scottish Gross Value Added (GVA).

The aggregate forecasts for growth in Gross Value Added in Scotland for 2011, 2012, 2013 and 2014 are shown in Figure 1. This figure also shows (for comparison only) the forecasts for the UK over the same period from a number of sources. Firstly, we show the forecasts by the Office for Budgetary Responsibility (OBR) produced in November 2011. Secondly, we show the median of new forecasts for the UK in 2011 and 2012 made by independent forecasts in the last three months. These are collated and produced monthly by the UK Treasury. Thirdly, we show the longer-term forecasts for the UK produced every three months by the Treasury, including forecasts for 2013 and 2014. Note that the OBR forecast of 0.7% for 2011 (made in November 2011) was itself revised down from 1.7% in the March of that year.

We have raised our central forecast for growth in 2011 up slightly from 0.4% to 0.7%. The increase in output measured for the third quarter of 2011 was stronger than expected (a 0.5% increase), and broadly tracked the UK growth in that quarter. This upward revision has brought our forecast in line with our earlier forecast from June 2011, where we forecast 0.8% growth during 2011. In March 2011 we had forecast annual growth of 1.0% in 2011. Our new forecast for 2012 of 0.4% would not be inconsistent with one or possibly two quarters of negative growth through 2012.

Figure 1: GVA growth for Scotland, 2011 to 2014 and comparison UK forecasts, annual real %



Indeed the Bank of England's Governor, Mervyn King, noted the possibility of a "zigzagging" phase for growth over the coming year.

As well as forecasting the aggregate shifts

In November 2011, we forecast growth in 2013 of 1.6%, so our latest forecast is revised up slightly. This is the first instance that we have forecast growth in 2014. The forecasted growth path from the third quarter of 2011 through to the end of our forecast horizon, and the

As well as forecasting the aggregate shifts in the Scottish economy, we present our forecast by broad industrial grouping. Table 2 gives real growth in sectoral GVA for the Production, Services and Construction sectors.

implications for the level of Scottish GVA, is discussed in

Table 2: Growth in the Scottish economy, 2011 to 2014, % change from previous year

	2011	2012	2013	2014
Gross Value Added	0.7%	0.4%	1.7%	2.6%
Production	2.0%	1.0%	4.0%	6.0%
Services	0.4%	0.3%	1.1%	1.9%
Construction	0.4%	0.3%	1.1%	1.7%

Box 2.

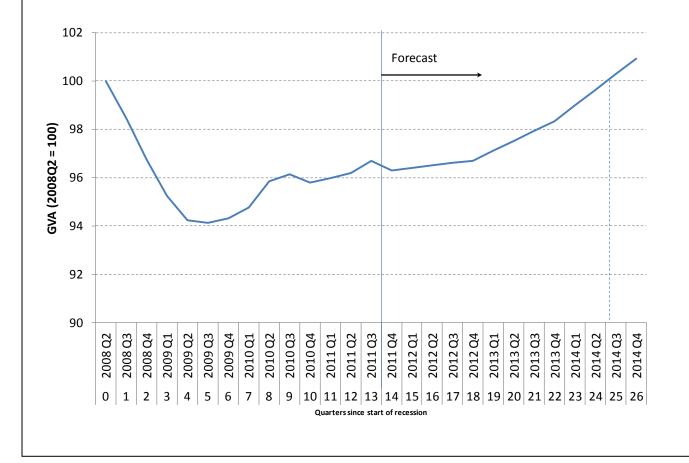
As previously explained, the weak outlook for domestic demand through the next few years means that sectors which are principally domestic-facing, i.e. serving Scottishonly customers, are expected to continue to bear the consequences of slower household expenditure growth and declining real government spending. The services sector is

forecast to see a relative slowdown in growth in 2012 compared to 2011, of 0.3% and recover to almost 2%

Box 2: A return to pre-recession real GVA could take over two and a half years

Taking our new forecasts we can predict at what point the pre-recession peak of real GVA will be reached. As others have commentated, whether or not growth is above or below peak, or indeed the UK rate, is slightly academic so long as the economy remains around depressed levels. Figure B1 gives the path of GVA for Scotland which is consistent with our (central) forecasts for growth. We have taken the starting point of this chart as the end of Q3 2011 and estimated a final quarter growth rate consistent with our new 2011 forecast. While we only forecast annual growth, and not quarter by quarter, we have assumed that each quarter grows at a rate consistent with its share of the annual growth rate.

By these calculations, in the third quarter of 2014 Scottish GVA will return to its pre-recession peak, just in time for the Commonwealth Games in Glasgow (23rd July to 3rd August 2014). Recall however that this is simply making up the output lost during the recession, i.e. bring it back to the Q2 2008 level. The gap between the path of GVA without the recession and the actual path will demonstrate the size of the output lost during what has been termed the "Great Recession".

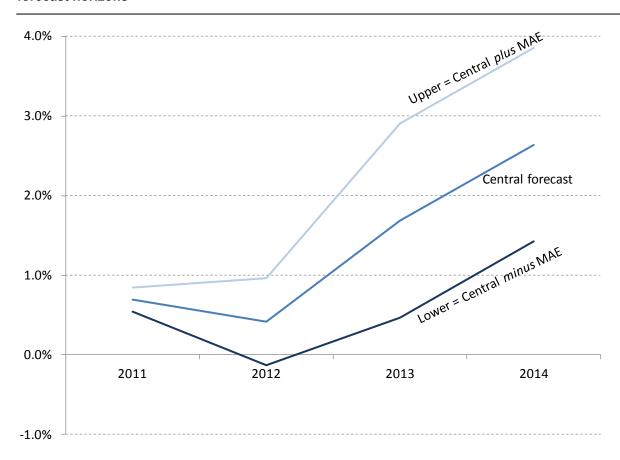


growth in 2014. A similar path is forecast for the construction sector, although this sector is likely to respond quickly to any upswing in business investment. The production sector is forecast to see the strongest growth over the coming years. We are forecasting that growth in the production sectors in 2012 will be only half (i.e. 1%, rather than 2%) its growth during 2011 as export markets for Scottish products see possible falls in output. In the later two years of our forecast window we expect to see a return to stronger export growth.

As reported in the last Commentary (Allan, 2011) we can use our estimated forecast errors to show ranges around our central point estimates. We roll this forward in this commentary and use forecast errors from the "Spring"

forecasts we evaluated. There were three forecasts made in the Spring of the year that were identified in this work: the spring after the year has finished but before the GVA figures are released (we called this the "following Spring", as its forecast related to the year completed); the forecast made in the Spring of the year that the forecast relates to, and; the forecast made in the spring of the year before the year it relates to. In this instance therefore, these three forecast horizons refer to the growth forecasts for 2011, 2012 and 2013 respectively. The measured Mean Absolute Errors for the spring forecasts and the first release estimates of GVA were 0.153 percentage points, 0.548 percentage points and 1.216 percentage points, respectively – with the forecast error increasing as the forecast horizon lengthens.

Figure 2: GVA growth in Scotland in central case and possible errors around forecasts for different forecast horizons



These MAE estimates are used to give ranges around the point estimates we predict for growth in each year to 2014. For 2014 we assume that the forecast error will be no larger than that for the spring of the year before (i.e. 2013's forecast), while in practice this is likely to underestimate the forecast error at this distance. The estimated ranges around our central case are given in Figure 2. Figure 3, Figure 4 and Figure 5 give the GVA changes for the Production, Services and Construction sectors respectively in the central, upper and lower cases.

Employment

The most recent data for the labour market in Scotland indicates that in the final guarter of 2011 (i.e. October to December 2011), employment fell by four thousand, while (ILO) unemployment increased by sixteen thousand, to stand at 2,458,000 and 231,000 respectively. The employment rate of those of working age fell by 0.4 percentage points to 70.7, while the ILO unemployment rate for the same group rose by 0.6 percentage points to 8.8%. The increase in the rate of unemployment is the largest such increase since the first quarter of 2010, and brings the unemployment rate above its earlier peak since the 2008-9 recession began. The unemployment rate is now equal to what is was in the final quarter of 1996. The rate of those of working age economically inactive remained constant at 22.5%. Detailed commentary on developments in the labour market are detailed in the Labour market section of the

Fraser Economic Commentary. The unemployment rate of young people remains a prime concern for forecasts of employment and unemployment in Scotland, as does an increasing duration of those individuals receiving Jobseekers Allowance (no such duration statistics are available for ILO unemployed). There is evidence from previous recessions that the longer term unemployed have greater difficulty getting back into work, while increasing unemployment on young people is a growing social and political, as well as economic, issue across the developed world.

The most recent data on employee jobs date from Q3 2011 and indicate that there were 2,272 thousand employee jobs in Scotland. This was down 11 thousand on the previous quarter, and down 23 thousand on the end of 2010 total. The employee jobs series has been revised slightly since our last commentary, with the number of employee jobs in Scotland in the second quarter of 2011 being reduced from 2,292,200 to 2,282,600 (down almost ten thousand).

Given the now lower level of employee jobs in Scotland, we are revising down our forecasts for employee jobs at the end of 2011. In November we forecast that there would be 2,299,000 jobs at the end of 2011 in Scotland. We now forecast that there will be 2,254,000 jobs in Scotland at the end of 2011 (a loss of 40,400 jobs during 2011).

Figure 3: GVA growth forecast in Production sector in central, lower and upper cases, 2011 to 2014

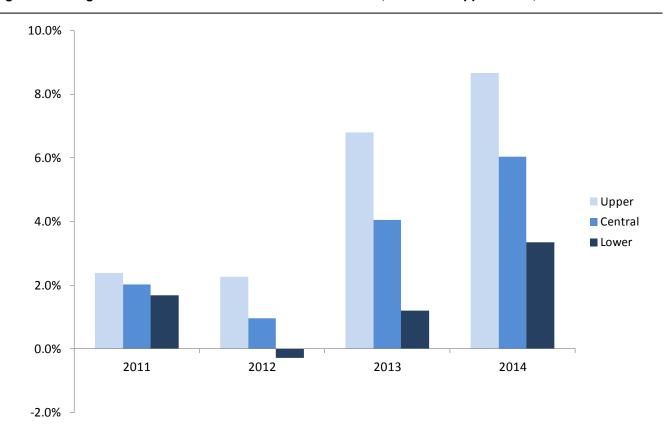


Figure 4: GVA growth forecast in Construction sector in central, lower and upper cases, 2011 to 2014

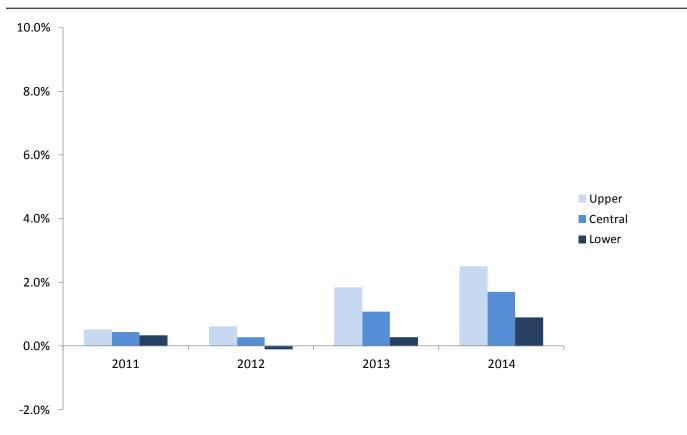


Figure 5: GVA growth forecast in Services sector in central, lower and upper cases, 2011 to 2014

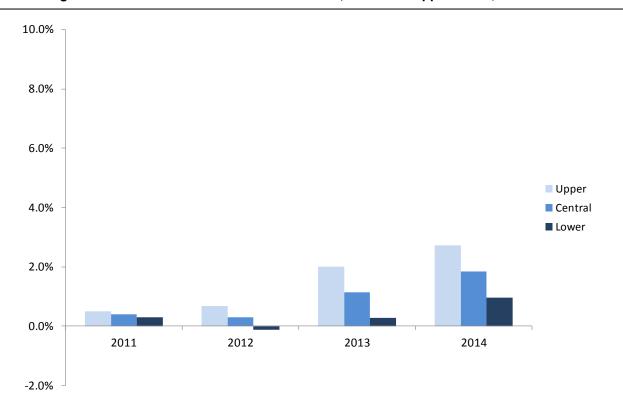
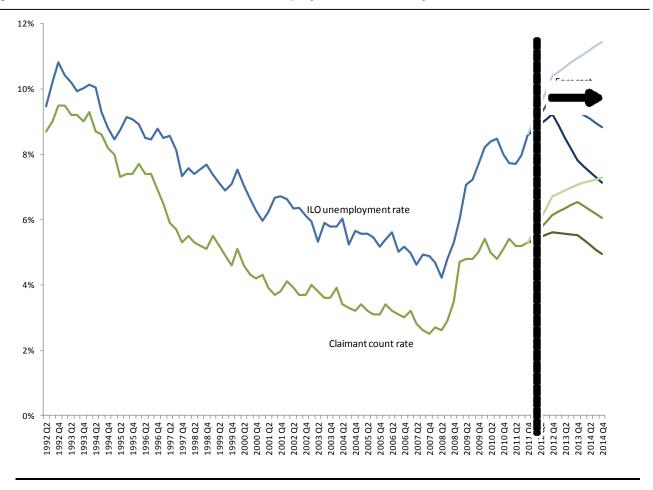


Figure 6: Scottish ILO and claimant count unemployment rate, history and forecast



Our forecasts for employee jobs, including a breakdown between broad sectoral groups, are shown in Table 3. The number of employee jobs in Scotland is forecast to decline during 2012 by just less than 16,000 jobs. Within the sectors, however, we are forecasting a reduction in jobs in the service sectors of over sixteen thousand jobs. Public sector reductions in employee jobs are forecasted to be around 7 thousand over the year, while there are also forecast to be reductions in jobs in Retail and Wholesale. Within the service sectors however, we do not forecast declines in job numbers, with increases in employment in Business Services sector. Through 2013 and 2014 we forecast increases in employee jobs in our central forecast, with annual increases of over 23 thousand and 38 thousand respectively. At the broad sectoral level we forecast employment increases, however, as in 2012 we forecast a "rebalancing" of employment within the services sectors towards non-public activities as public spending reductions continue. Construction employment is forecast to increase in both 2013 and 2014 as spending on (private) investment projects returns as confidence in the recovery returns. The employee jobs forecast consistent with our upper and lower forecasts are presented in Table 4.

Our employee jobs forecast are for lower jobs numbers than previous forecast, with our November 2011 forecast seeing (slightly) positive annual jobs growth in 2012. This more negative outlook for jobs is down to two major factors.

Firstly, the jobs market appears to have significantly weakened through the latter half of 2011, with increasing unemployment and falling employment. Combined with much of the public sector employee jobs reductions still to materialise in the data, we cannot ignore the possibility of further falls in the jobs series. Secondly, data revisions show there to have been a more significant jobs reduction in the early half of 2011 than was previously observed. It takes the jobs numbers longer to recover to their earlier (high) levels as they are starting from a lower base than was previously assumed.

We should caution that these jobs data themselves appear to be uncertain and therefore potentially subject to revision. The data on employee jobs for Scotland appear to suggest an increase of almost 45 thousand jobs in the "Health, social work and care" sector since the end of 2010. While these data are noted by ONS to be "unreliable", they are included in the total for employee jobs in Scotland. Such an increase in activity in this sector does not appear in the public sector jobs series - and any switching of classification, e.g. from public to private, would not show up as an increase in overall jobs numbers in these data. This suggests that further revisions are likely. Such revisions could further revise down the level of employee jobs in Scotland. It is hoped that the uncertainty around this jobs series can be resolved quickly as it has repercussions for the aggregate level of jobs in the Scottish labour market.

Table 3: Forecasts of Scottish employee jobs (000s) and net change in employee jobs in central scenario, 2011 to 2014

	2011	2012	2013	2014
Total employee jobs (000s), Dec	2,254	2,238	2,261	2,299
Net annual change (jobs)	-40,400	-16,000	23,200	38,000
% change from previous year	-1.8%	-0.7%	1.0%	1.7%
Agriculture (jobs, 000s)	32	32	33	35
Annual change	-550	300	950	1,900
Production (jobs, 000s)	220	222	233	248
Annual change	-3,950	2,150	11,250	15,400
Services (jobs, 000s)	1,869	1,853	1,861	1,878
Annual change	-33,500	-16,150	8,250	16,800
Construction (jobs, 000s)	133	131	134	138
Annual change	-2,400	-2,250	2,750	3,950

Notes: Absolute numbers are rounded to nearest 50.

Unemployment

We present our forecasts for unemployment in Scotland between 2011 and 2014 in central scenario in Table 5. We report both the "headline" unemployment measures, i.e. the measure used by the International Labour Organisation, as well as the numbers receiving unemployment benefits. The ILO measure is preferred as it gives a more full indication of the level of labour available for work in the economy, and so

is a better measure of the level of spare labour capacity. It has been an interesting feature of the recent recession that the ILO measure of unemployment has increased significantly in both absolute and level terms, but the claimant count has responded more slowly. For example, the unemployment rate (those unemployed of working age as a portion of the working age economically active) on the ILO measure at the end of 2011 was 8.8%, up from 8.2% at

Table 4: Net employee jobs growth in Scotland in central, upper and lower forecasts, 2011 to 2014

	2011	2012	2013	2014
Upper	-37,400	-4,800	47,250	63,750
Central	-40,400	-16,000	23,200	38,000
Lower	-43,450	-27,700	-1,850	12,150

Notes: Absolute numbers are rounded to nearest 50.

Table 5: Forecasts of Scottish unemployment in central forecast, 2011 to 2014

	2011		2012 2013		
	2011	2012	2013	2014	
ILO unemployment	231,200	265,250	253,950	234,300	
Rate1	8.8%	9.8%	9.3%	8.8%	
Claimant count	141,500	164,450	177,750	166,350	
Rate2	5.3%	6.1%	6.5%	6.1%	

Notes: Absolute numbers are rounded to nearest 50. 1 = rate calculated as total ILO unemployment divided by total of economically active 16+ population. 2 = rate calculated as claimant count divided by the sum of claimant count and total workforce jobs. The latest labour market figures are detailed in the Labour market section of the Fraser Economic Commentary.

Our forecasted levels of unemployment for the end of 2012 have been revised up from those made in November 2011, largely due to the worsening outlook in the Scottish labour market. Weaker than expected employment growth and increasing unemployment rates appear to suggest that the labour market in Scotland is underperforming compared to other regions across the UK. Our forecast for unemployment on the ILO measure at the end of 2012 is now 265,250, up 34 thousand from the level seen at the end of 2011. As with our last forecast, we are expected the unemployment position to improve through 2013, and are now forecasting unemployment at the end of that year of 253,950.

As discussed earlier, we have some concerns about the reported employee jobs series perhaps overestimating the growth through 2011. If these are subject to later revisions, and removed from the series, then the employment levels could be significantly worse than the current statistics suggest.

We are forecasting that the rate of unemployment at the end of 2012 will be 9.8%, up significantly from our earlier forecasts. It appears from the latest data that employment growth has been weaker in Scotland than other regions, reducing the pull of labour into employment. We show the history and forecasted values for the ILO unemployment rate and claimant count rate from 1992 to 2014 in Figure 6.

References

Allan, G.J. (2011), "How wrong were we? The accuracy of the FAI forecasts of the Scottish economy since 2000", *Fraser Economic Commentary*, Vol 35, No. 2, p. 45-53. Blake, A. (2005), "The economic impact of the London 2012 Olympics", Christal DeHaan Tourism and Travel Research Institute, 2005/5.

Rose, A.K. and Spiegel, M.M. (2011), "The Olympic Effect", *Economic Journal*, Vol. 121, No. 553, p. 652-677.