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Forecasts of the Scottish economy

Introduction
In summary, we revise down our forecast for Scottish GVA growth in 2011 from 0.8% to 0.4%. This is due to rapidly falling household consumption indices, suggesting (for the UK, and by implication Scotland) a rapid falling off in consumer confidence since the summer months and a worsening global (particularly Euro zone) economic environment which has seen unprecedented declines in business activity and confidence during the second half of 2011. Continued high inflation, driven by commodity and energy price increases and temporary factors from recent changes to the VAT regime, will squeeze household incomes. Incomes themselves are seeing slower growth as inflation expectations remain anchored in the medium term, meaning real reductions in household income. Indeed the Bank of England warn against downside risks to meeting their 2% inflation target over the medium term as persisting weak domestic and external demand. Indicators suggest that 2012 will be a more difficult trading year, and our forecast has been revised down from 1.5% to 0.9%.

Monetary policy
The Bank of England’s Monetary Policy Committee met on the 5th and 6th of October and took the view that UK inflation is likely to fall below its 2% target in the medium term as domestic and external conditions worsen, making a “compelling” case for a further round of asset purchases. The Bank’s own work on the impact of “Quantitative Easing” (QE) had argued that this has had real effects, principally – but not solely – through the “portfolio balance” channel. This is the consequence of the Bank buying assets from non-bank financial institutions with newly created reserves which those institutions then reinvested in “riskier assets like corporate bonds and equities”. This raises asset prices, lowering yields and borrowing costs, acting to stimulate spending (Joyce et al, 2011). Asset price increases also increase the net worth of asset holders, increasing their spending.

At its October meeting the Bank unanimously agreed to maintain interest rates at 0.5% and to expand the QE programme from £200 billion to £275 billion through the purchasing of gilts with maturities of more than 3 years.
Figure A: Compensation of employees, Scotland and UK, 1998 to 2010

Note: UK and Scottish household compensation of employees series' from Quarterly National Accounts (for the UK, published on 25th October 2011) and SNAP (for the Scottish figures, published on 15th September 2011) respectively.

Figure B: Household real expenditure (peak=100), UK and Scotland

Note: UK and Scottish household spending series from Quarterly National Accounts (for the UK, published on 25th October 2011) and SNAP (for the Scottish figures, published on 15th September 2011) respectively. Scottish figures given in current values converted to into real values using product deflators for components by UK consumption good series’ and applied to Scottish consumption components.
Fiscal policy
Since our forecast in June, the Scottish Government brought forward its Draft Budget for 2012-13, alongside spending plans to 2014-15. The headline policy announcements were the switching of £200 million from resource to capital spending, allowing capital projects (principally transport) across Scotland to be retained despite large reductions to the Scottish Government’s capital budget. Spending on health, being protected against inflation, means that larger reductions in resource spending are required in other areas of the Scottish budget. In response to the budget, CPPR noted the larger than expected reductions in the resource budget for local government from central government, but that non-domestic rates will increase to offset this reduction. CPPR notes that local government’s resource budgets will therefore become “increasingly dependent on Non Domestic Rates as opposed to grants, which makes it potentially more volatile”. The level of realised efficiency savings will be crucial therefore in preventing real reductions in the quality or quantity of public services provided. We remind readers that the Scottish Government’s own figures show that the resource and capital budgets in 2014-15 are estimated to be 9.2% and 36.7% lower (in real terms) than 2010-11 respectively.

Recent economic developments
We begin by comparing figures for Scotland from the Scottish National Accounts Project (SNAP) with comparable series from UK Economic Accounts. The UK figures used here were released on the 25th of October, and were substantially revised compared to earlier UK figures. In particular, wage income and consumption expenditure was revised down while the household savings ratio was revised up (as will be detailed later). This has resulted in the pattern in household consumption for the UK coming much closer to that which Scotland has seen (on the experimental measures). If the Scottish figures are revised in light of the UK revisions, then the differing pattern of household consumption between Scotland and the UK could reopen. This aside, we describe the pattern of income growth, demand and household savings, over the following sections.

Household income
Without specific National Statistics figures on weekly earnings for Scotland we cannot say how incomes growth differs between Scotland and the UK as a whole. Experimental statistics prepared under the SNAP are available however on Compensation of Employees – i.e. that portion of gross value added accruing to providers of labour (e.g. household income). This is the first time we have used these data in the commentary. Both data are available at current prices, so are not adjusted for inflation. Taking 2008 as the index year we can see from Figure A that the level of incomes fell slightly in 2009 and in 2010 is only slightly higher than the figure for 2008. The level of incomes in the UK had risen over this period to 3.5% above the 2008 level. This suggests – and we should note again that these Scottish data are experimental and so do not have the status of official National Statistics – that wage income growth in Scotland since the recession may have been weaker than for the UK as a whole.

Household consumption expenditure
Household consumption expenditure both in Scotland and the UK as a whole has fallen sharply during the recession. Total household spending in real terms remains significantly lower than its peak, and has fallen again in most recent quarter for which Scottish data are available (Q1 2011). This recent fall mirrors a decline in UK household expenditure. Household spending in Scotland is currently 4.5% below its pre-recession peak in real terms, unchanged from the level seen in Q42009. Household spending for the UK as a whole has fallen by 5.0% over the same period. These are shown in Figure B.

Household savings ratio
Part of the relative worsening of the household expenditure can be explained by examining the relative movements in the household savings ratio. This is the difference between total household resources (i.e. wage and other incomes minus taxes and transfers paid) and total household consumption expenditure. As was noted at time of publication at the end of October, the UK savings ratio was revised significantly upwards. This measure suggests that the savings ratio increased to 9.4% in a single quarter – an increase of 1.9 points on its previous estimate – at the start of 2009. Further, while previous data signalled an increasing savings ratio for households in Scotland and a fall in the UK ratio, the most recent UK data for Q2 shows an upwards jump. These data are shown in Figure C.

As the Bank of England notes in its August Inflation Report, households may raise their savings in anticipation of lower earnings growth, or increased uncertainty about employment prospects. The Bank also notes that any gains to households from the reductions in interest rates might have been offset by an increased riskiness of lending, and so households unable to borrow at reduced rates. It remains likely however that household savings rates will remain above their averages over the last decade for the coming quarters as households’ real earnings growth remains weak. This implies that growth in the service sectors will remain weak. We shall see the consequences of this for forecasts of these sectors in the Forecast section.

Output
The latest figures on Gross Value Added in the Scottish economy are discussed in the Overview and appraisal section of this Fraser Economic Commentary. In brief, data continues to suggest that the recovery in both Scotland and
the UK is weak, but that growth is stronger in the UK as a whole than in Scotland. Growth in the second quarter of 2011 in Scotland was 0.1%, the same as growth in the UK. The Scottish economy has grown 1.1% over the year, while the UK economy has grown by 1.5%. Growth in the UK economy over the year is stronger for both production and services sectors as a whole, with value added in the Scottish service sector still at an aggregate level comparable to that seen during the second quarter of 2009. Manufacturing growth remains stronger in the UK than in Scotland on an annual basis (4.6% vs. 1.9%). Scottish construction activity appears to be faring stronger than the UK, however much of the differences in the annual growth figures appears to be due to spikes in construction activity during Q3 and Q4 of 2010, not repeated in the UK. For the Scottish construction sector, there have been three quarters of negative growth since, while the sector grew in the UK in the recent quarter (although recent preliminary estimates of UK GDP for Q3 2011 suggests that this sector has seen growth of -0.6% in Q3).

The release of preliminary GDP data for the UK in Q3 reports that growth in the UK economy over the last two quarters has been 0.6%. Looking over the year as a whole annual GDP has grown by 0.5%, far below the official forecasts for growth.

**Investment**

Data on public and private expenditure on investment that are consistent with UK series’ are not available for Scotland. Experimental data under SNAP suggests that the fall in total investment expenditure in Scotland was less severe than for the UK as a whole, which would be consistent with overall activity in Scotland declining by less than activity in the UK as a whole, and a typically higher outturn on GVA for the construction sector in Scotland. This impression however cannot be fully understood without further examination of the links (including timing of activity) between investment spending and changes in the contribution of the construction sector. The relative lower decline in the sector in Scotland if corroborated in future figures, is of course an important issue. Current trends in Scottish construction activity appear to be weak, with three periods of declining GVA to Q2 2011, while the sector expanded in Q2.

The preliminary estimate for construction activity in the UK in Q3 showed a decline of -0.6% - indicative of, and consistent with, continued worries about the investment environment. As is noted elsewhere in this issue of the Commentary, the investment outlook remains weak across much of the Scottish surveys. An exception appears to be oil and gas, which expects increased capital spending on exploration and production. Smaller companies in the sector report issues around the availability of access to capital.

**Scottish trade**

Scotland’s exports to the rest of the world during the second quarter of 2011 were detailed in the Index of Manufactured Exports, produced on the 5th of October. This revealed a broadly flat growth in the real value of exports to non-UK destinations. Growth in the second quarter of 1.1% meant that on a rolling annual basis real exports had increased by 2.0%.
Within manufacturing sectors, the pattern of growth was mixed. Of continuing concern must be the growth missing in the “Engineering and allied industries” sectors, which was worth almost 46% of Scottish manufacturing exports in 2007. In the second quarter of 2011 the value of total exports by this sector was almost 20% below this peak. Within this sector, we note that it is the “Electrical and instrument engineering” sector where GVA has fallen sufficiently to offset stronger performances in the “Transport equipment” and “Mechanical engineering” sector. “Food, drink and tobacco” continued its strong showing on exports as did “Chemicals, coke, refined petroleum products and nuclear fuels”, recovering the outputs and exports to levels of early in 2009.

At the UK level, exports at the start of the year moved positively, in line with the evidence for Scotland as a whole. The Bank of England’s Inflation Report from August suggests that, while the lower level of Sterling should have helped exporters at the start of the year, demand from abroad is either being understated by surveys, or there has been an “adverse shift” in global demand away from the service exports produced by the UK. The only survey on Scotland’s service (and goods) exports is the Global Connections Survey, which is scheduled for release in January 2012 and will relate to the calendar year 2010. The timeliness of this survey means that we continue to rely on Manufacturing exports figures as indicators of the direction of Scotland’s exports.

Exports to the rest of the UK

Growth in the rest of the UK remains critical for the exports of Scottish firms. UK growth has remained broadly flat over the last three quarters, with preliminary data for Q3 2011 estimating a slight rebound in growth of 0.5%. Digging deeper under this however, one sees that a wide range of “special events” were estimated to have reduced growth in the second quarter by around 0.5%. Figures for the UK economy, the ONS suggested should be viewed grouping together quarters 2 and 3, giving growth of 0.6% over the last two quarters and 0.5% over the last year.

Continued weak economic figures and survey evidence for the UK, combined with a worsening labour market performance, suggests that growth in the second half of 2011 is likely to be flat. Indeed, some commentators have not ruled out a quarter of negative growth in Q4 2011. Against this background of worsening domestic demand in the UK, significant revisions to savings ratios and weak signs of the investment environment improving, it appears that external factors are not currently providing the sources of growth hoped for during the period of deliberate rebalancing. Indeed, the UK Economic Accounts reported that positive contributions to UK growth in Q2 came from General Government and Investment, while trade and household spending acted as a drag to growth. Household expenditure growth in Q2 for the UK fell by 0.8%, making the fourth consecutive quarterly decline in household expenditure. The persistence of General Government consumption expenditure growth underlines the importance of the announced reductions in public spending at all levels of government across the UK to be implemented fully through the current spending review period (and elaborated on during further previous forecasts). It appears that at the UK level real reductions in government spending have yet to feed through into the economic system. The consequences of fiscal consolidation would be expected to reduce domestic demand sources further. We await the publication of the Office for Budgetary Responsibility’s forecasts for the UK economy, to be published during November 2011. This is widely expected to revise down its growth forecast for 2011 from 1.7%, given that would require a significant positive growth in Q4 and most significant indicators are pointing towards a flat or falling quarter for growth. Between June 2011 and October 2011 the median new forecast for growth in the UK in 2011 and 2012 were both revised down by 0.5% to now stand at 1.0% and 1.5% respectively.

Exports to the rest of the world

As discussed above, Scottish manufacturing exports saw continued growth, albeit not increasing from an annual rate of growth of 2.0%. The global outlook has worsened significantly since we reported in June 2011. The IMF’s report on the world economy from September 2011 lowered forecasts for growth in every economy between its June and September publications, with the exception of Japan in 2011 – increasing its growth by 0.2% - and keeping its forecast for Spanish growth constant at 0.8%. World growth in real terms is forecast at 4.0% in 2011 and 2012, down 0.3% and 0.5% respectively in three months. (The IMF forecast for the UK was cut by 0.4% and 0.7% to 1.1% during 2011 and 1.6% during 2012).

The OECD pointed to the “Euro area debt crises and fiscal policy in the United States” as being likely to dominate economic developments over the coming two years. “Excessive” fiscal policy in the US and a disorderly sovereign debt situation in the Euro zone with contagion, could lead to their gloomy scenario. Weak growth persists for 2011 and 2012 in their main scenario with unemployment rates remaining high in developed countries. The largest reduction in growth forecast for a major economy was the downgrade of the US forecast for 2011 from 2.5% to 1.5%. This is lower than the OECD’s latest forecast of 1.7% for the US during 2011, but is higher than some forecasts for the US made earlier in this year. Perhaps most critically for world economic developments over the longer term, growth forecasts for China and India in 2012 were reduced by 0.5% and 0.3% respectively. The Eurozone situation remains deeply uncertain and appears to move from crises to resolution and back over the space of a few days. The announcement on the 26th of October of a series of reforms and funds agreed for Greece, including “haircuts” for holders of Greek government debt and additional loans to the country. This appears, at the time of writing, to have been undermined, perhaps fatally so, by the announcement that these options will be put to a referendum in Greece, perhaps into 2012. Continued uncertainty about the political will to implement reform.
programmes may undermine investor confidence in the ability of Eurozone economies to take steps necessary in the event of debt crises in larger economies. With some commentators laying out proposals for Greece to withdraw from the Eurozone, the future of the Euro in its current shape requires that growth returns to all economies across the economic area. The economic dividend to growth prospects for the UK and Scotland will critically affect the timing of these economies return towards long-term trends. SNAP data suggests that over half of non-UK exports from Scotland are to the EU economies, largely those within the Euro zone. Growth forecasts for key markets for Scottish goods are shown in Table 1.

### Forecasts of the Scottish economy

The outlook for Scottish domestic demand has worsened since June’s forecast. Household wage growth remains weak – and is likely to be weaker than for the UK as a whole going forward. Retail price inflation running at over 5 per cent, is anticipated to continue to squeeze real household spending, largely due to higher energy, transport and food prices. Evidence suggested that the Scottish and UK savings ratios were diverging with larger reductions in demand and higher savings ratios in Scotland, although this pattern is less strong since upward revisions to the UK savings rate. Whether Scottish households over the medium-term reduce their consumption at higher equilibrium rate of savings remains uncertain. Consumption spending in Scotland remains at levels seen during the worst of the recession (2009Q2). With an increased savings ratio and lower income growth our forecast for household consumption remains depressed for several quarters. The combinations contribute to us revising down our forecast for household growth through 2011, 2012 and 2013 from our forecasts in June 2011 in our central scenario.

Against this background, General Government spending – which remained broadly flat in real terms during 2010 while there were reductions in the UK as a whole – appears to have fallen further in Scotland in the first quarter of 2011 than in the UK. Only when we have a breakdown of the components of central and local government spending in real terms for Scotland will we be able to examine the scale of these differences. The outlook for growth in spending by governments of all levels in Scotland remains weak. We anticipate the largest reduction in local government spending within our forecast horizon to occur through 2011-12, with smaller reductions in real terms budgets in subsequent years.

The prospects for a return to higher growth remain weak while growth in demand centres for Scottish products remain sluggish. Continued uncertainty over the Eurozone economies, notably Greece – where a “rescue package” of financial support, “haircuts” for lenders and continued deep austerity appear to be the route by which the Eurozone is seeking to restore confidence in the single currency project. Developments in other Eurozone countries, particularly Italy, point to a winter of continued heightened market uncertainty, likely to be resolved only when European economies begin to show returns to growth. The latest data suggests that it is only Germany which is seeing positive growth at the end of 2011, which is concerning for the growth of the euro area as a whole. The self-fulfilling nature of market fears about specific countries’ fiscal stability means that we cannot rule out continued uncertainty and increasing volatility.
The implications for the Scottish economy of continued uncertainty in the Eurozone – Scotland’s major (non-UK) trading partner – is likely to produce slow overall trade growth through the coming years. The US, another key market for Scottish goods, continues to face economic and budgetary challenges. The US 2011 deficit is likely to be the third highest in 65 years, with the two previous years the 1st and 2nd highest figures. The US Congressional Budget Office now expects real growth of 2.5% this year and 2.0% in 2013. With the US economy not returning to near to trend growth until 2014, the outlook for the developed economies – and by extension, Scottish exports – indicates a continued depression. In this background, the recent export figures suggest that by the end of 2010 the share of manufactured exports accounted for by the “food, drink and tobacco” sector had risen from 26% of exports in 2007 to almost 30%, while "engineering and allied industries" had lost equivalent share. There is some positive news however in that total manufacturing exports grew for the second quarter of 2010 for the second consecutive quarter. Exports to the rest of the world are currently growing at around 2% on an annual rate, which is significantly below the rates seen through the early and middle part of the decade. Given a worsening external growth background we have slightly revised down the forecasts for Scottish export growth from the rest of the world from our June forecasts.

The impact of the reduced public capital spending in the current year will be having a direct effect upon the construction and affiliated sector of the Scottish economy. Public capital spending in Scotland is likely to see reductions in the next two years – up to the end of our forecast horizon – albeit at a slower rate than in this current year. Private capital spending on the other hand is showing some, albeit limited, signs of growth.

The latest data indicates that GVA in the construction sector fell sharply in recent quarters - down 2.9% and 2.3% in 2011Q1 and 2011Q2 respectively. With a reduction of 1.5% in 2010Q4, the level of activity in the construction sector in Scotland was at same level as during the start of 2010. The arithmetic of GVA calculations mean that the upward spike in construction sector activity seen in 2010Q3 will be in the denominator of the rolling four quarter growth calculations from the next quarter. Even with positive growth in the construction sector in the coming quarters, the loss of this quarter from January’s figure onwards will produce significant reductions in the rolling annual growth rate in this sector (down from its current figure of 11.8%).

Results
As with our commentary in June 2011 we forecast over a horizon of three calendar years – i.e. 2011, 2012 and 2013. We are forecasting year-on-year growth. We will know how accurate these (and previous) forecasts for 2011 are when growth in the final quarter of 2011 is released during April 2012. Elsewhere in the commentary we provide an assessment of the accuracy of the FAI’s forecasts for the Scottish economy made between 2000 and 2011.
The aggregate forecasts for Gross Value Added in Scotland for 2011, 2012 and 2013 are shown in Figure 1, alongside (for comparison only) the forecasts for the UK over the same period by the Office for Budget Responsibility (reported in March 2011). HM Treasury collects forecasts from City and non-City forecasting organisations on a monthly basis. These give a frequently updated picture of the trend in forecasts for the UK economy than the OBR forecasts. In Figure 1 we include the median of new (i.e. made in the last three months) forecasts (as published in the October release of HM Treasury’s collected forecasts for the UK). As an indication of the scale of possible revisions to the OBR’s earlier forecasts, the median growth rate forecast for 2011 and 2012 in October 2011 is 0.5 points lower than the median forecast in June 2011.

Table 2: Growth in the Scottish economy in central case, 2011 to 2013, % change from previous year

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Value Added</td>
<td>0.4%</td>
<td>0.9%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Production</td>
<td>1.2%</td>
<td>2.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Services</td>
<td>0.2%</td>
<td>0.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>0.2%</td>
<td>0.6%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Our central forecast for growth in 2011 is now 0.4%, down from 0.8% forecast in June and down from 1.0% forecast in March 2011. Our reduction in the 2011 growth forecast within this year is therefore broadly in line with that seen in forecasts for the UK as a whole.

We present our forecasts for growth over the forecast period for broad industry groupings. Table 2 gives the real growth in sectoral GVA and aggregate GVA for the central scenario. With continuing weak domestic demand due to reduced income growth, increased savings and higher inflation in the near-term squeezing household incomes, the domestic-facing sectors of the Scottish economy will face continuing troubles. The service sector as a whole – representing all private and public service activities is forecast to growth 0.6% in 2012 and 1.1% in 2013, well below trend growth for the sector. Of course within this sector there will be differing growth, with some public sector activities forecast to see falling GVA, while growth in the crucial retail and wholesale sector – comprising around 10% of Scottish output – moves broadly in line with the services sector as a whole. GVA growth within services is forecast to be stronger than the average for the services sectors in “hotels and catering”, however this is well below trend growth.

Production sectors as a whole are forecast to see the major growth in the Scottish economy over the forecast period. In 2012 we forecast production increasing by 2.2%, and an increase of 3.7% in 2013. Comprising around 17% of GVA in Scotland, this growth is supported by external demands from exports (to the rest of the UK and overseas) and investment. The positive boost from external consumption forecast is weaker than previously assumed, given the global weakening seen over the last six months as many leading economies have struggled to recover from recession. With the Eurozone banking system, sovereign debt and currency-uncertainty, low growth for the Eurozone will contribute to weaker than anticipated demand for Scottish products. As mentioned above, on the latest data the majority of Scottish exports were destined for European markets.

Elsewhere in this issue of the Fraser Economic Commentary, this author reviews the accuracy of FAI forecasts. The paper evaluates how accurate forecasts made at different points throughout the year were in correctly predicting the annual growth rate both for the year that the forecast was made in, and the following year. This process will be updated regularly, providing reflective evidence on the accuracy of the modelling framework used to produce these forecasts. In this first instance we use the estimated forecast errors to capture the likely range that the first estimate of Scottish GVA growth will lie between. This is the value of Scottish growth which will be released in April 2012 and give the first official estimate of growth during 2011.

Here, we use the Mean Absolute Error (MAE) between forecasts made during the last three months of each year (termed “winter” in the paper) to give the average difference between the central forecast published and the first estimate of growth. These are taken directly from Table 3 in that paper. The true value of the first estimate is, on average, 0.296 percentage points different from the forecast made in the winter of the year being forecast. Therefore, the “upper” and “lower” estimates for growth in 2011 are our central forecast (0.4%) plus (for the upper) and minus (for the lower) the MAE for winter forecasts.

The MAE for forecasts for the following year made in the winter period is 0.492 percentage points. Both of these MAE figures are used to construct the upper and lower estimates of growth in 2011 and 2012 respectively.
Figure 2: GVA growth in Scotland in central and upper and lower cases, annual real (%)

Figure 3: Forecasts of GVA growth in “Production” under three scenarios, 2011 to 2013
Figure 4: Forecasts of GVA growth in “Construction” under three scenarios, 2011 to 2013

Figure 5: Forecasts of GVA growth in “Services” under three scenarios, 2011 to 2013
Table 3: Forecasts of Scottish employee jobs (000s) and net change in employee jobs in Central scenario, 2011 to 2013

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employee jobs</td>
<td>2,299</td>
<td>2,308</td>
<td>2,324</td>
</tr>
<tr>
<td>(000s), Dec</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net annual change</td>
<td>4,900</td>
<td>8,750</td>
<td>16,200</td>
</tr>
<tr>
<td>(jobs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% change from</td>
<td>0.2%</td>
<td>0.4%</td>
<td>0.7%</td>
</tr>
<tr>
<td>previous year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture (jobs, 000s)</td>
<td>32</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Annual (absolute)</td>
<td>150</td>
<td>300</td>
<td>550</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production (jobs, 000s)</td>
<td>226</td>
<td>229</td>
<td>235</td>
</tr>
<tr>
<td>Annual (absolute)</td>
<td>2,400</td>
<td>3,400</td>
<td>6,100</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services (jobs, 000s)</td>
<td>1,905</td>
<td>1,910</td>
<td>1,919</td>
</tr>
<tr>
<td>Annual (absolute)</td>
<td>2,250</td>
<td>4,950</td>
<td>9,350</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction (jobs, 000s)</td>
<td>136</td>
<td>136</td>
<td>136</td>
</tr>
<tr>
<td>Annual (absolute)</td>
<td>100</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Absolute changes are rounded to the nearest 50 jobs.

Table 4: Net employee jobs growth in Scotland in central, upper and lower forecasts, 2011 to 2013

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper</td>
<td>11,150</td>
<td>18,850</td>
<td>41,100</td>
</tr>
<tr>
<td>Central</td>
<td>4,900</td>
<td>8,750</td>
<td>16,200</td>
</tr>
<tr>
<td>Lower</td>
<td>-1,550</td>
<td>-1,350</td>
<td>-9,250</td>
</tr>
</tbody>
</table>

Note: Absolute changes are rounded to the nearest 50 jobs.

Table 5: Forecasts of Scottish unemployment in Central scenario, 2011 to 2013

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILO unemployment</td>
<td>219,800</td>
<td>234,200</td>
<td>231,550</td>
</tr>
<tr>
<td>Rate1</td>
<td>8.3%</td>
<td>8.9%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Claimant count</td>
<td>149,500</td>
<td>166,300</td>
<td>164,400</td>
</tr>
<tr>
<td>Rate2</td>
<td>5.4%</td>
<td>6.0%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Note: Absolute numbers are rounded to the nearest 50.

Notes: 1 = rate calculated as total ILO unemployed divided by total of economically active 16+ population. 2 = rate calculated as claimant count divided by the sum of claimant count and total jobs. The latest labour market figures are detailed in the Labour market section of this Commentary.

We are forecasting 2013 as well, but forecasts more than two years in advance were not assessed in the paper elsewhere in this issue. This was outside the typical forecast horizon during the last decade. Until we have enough evidence on the accuracy of forecasting at this time horizon we will not be able to use measured historical forecast errors to inform possible ranges of uncertainty. In the meantime – for this commentary – we assume that the accuracy of forecasts made now for 2013 have the same errors as the longest forecast horizon. The range around our central case is given in Figure 2. Readers will note that the range is smaller for shorter forecast horizons, which is as we would expect.

Figure 3 gives the GVA changes in the “Production” sectors, while Figures 4 and Figure 5 give the forecasted changes in “Construction” and “Services” sector respectively for the central case. Note that these are given for SIC2007 categories, and so are consistent with the figures published 1A and 2A of the GVA release for Scotland.
Employment
As of December 2010 the number of employee jobs in Scotland stood at 2,294,400, with the current level of employee jobs (at the end of 2011Q2) giving a level of employee jobs of 2,292,200 (down 2,200 from the end of 2010). Forecasts for employee jobs are shown in Table 3.

In our central scenario we forecast that the number of (employee) jobs in Scotland at the end of 2011 will be 2,299,000. This is down from our estimate of the level of jobs made in June 2011, but is consistent with seven thousand additional jobs being between the end of Q2 and the end of Q4 2011. The largest number of jobs added during 2011 are forecast to come in the Production sectors, adding almost 2500 jobs from the end of 2010. The service sector is expected to expand employment by 2250 jobs, while there are only small employment gains in the construction sector over the forecast horizon. An evaluation of the accuracy of previous financial services sector employee jobs forecasts is given in Box 1.

The number of employee jobs in Scotland by the end of 2013 is forecasted to be thirty thousand higher than at the end of 2010, and almost sixty thousand higher than at the end of 2009. Employee jobs numbers are however forecast to be almost eighty thousand lower than at the end of 2008. Changes in net employee jobs under the forecasted range of growth scenarios are given in Table 4. With growth consistent with the upper points, net jobs of 70,000 are forecasted to be added to the Scottish economy. With growth at the lower end. Note that we expect the outcome to be closer to the central forecast than either of these two alternative points.

Unemployment
We present our 2011 to 2013 forecasts for unemployment in the central scenario, as measured by the ILO definition as well as those receiving unemployment benefits, in Table 5. The preferred measure of unemployment is the ILO definition as given by the Labour Force Survey. This is preferred as it is an indication of the level of labour available for work in the labour market, and so a better measure of the level of spare capacity in the Scottish economy.

Our forecasts for both ILO and claimant count measures of unemployment have been revised upwards since June’s commentary, again reflecting the worsening domestic and international economic climate, and weakening employment and unemployment statistics for Scotland over this period.
We show the history and forecasted values for the ILO unemployment rate and claimant count rate from 1992 to 2013 in Figure 6.

Grant Allan
November 2011

References:
Box 1: Forecasts of employment in the financial services sector

In February 2010 the FAI forecasted the level of employment in the financial services sector in Scotland. Produced over eighteen months ago, this forecast that the level of employment in the financial services sector would decline through 2009 and 2010 by a total of 16,500 jobs from the level at the end of 2008 (with most of these lost in 2010). It should be noted that the number of employee jobs in financial services at the end of 2009 was not known until after our forecast was published. Our forecasted jobs loss was picked up by some commentators as higher than would expected at that time.

The latest data reveal that our initial forecasts were generally correct in both direction and magnitude, if not exactly accurate on quantitative or timing. The (seasonally adjusted) employee jobs series for financial services reports that at the end of 2010 there were 10,100 fewer jobs in this sector. The time period of changes is particularly interesting though. Rather than a slower reduction in 2009 with a larger loss of jobs in 2010, the decline in jobs was 17,000 in 2009, and 2010 saw a recovery of almost 6,900 jobs. Our forecast of the number of employee jobs was 6,400 more than were lost between the end of 2008 and the end of 2010.

Taking things forward, our February 2010 forecast had predicted a gain of 700 jobs in 2011, bringing total employee jobs in the sector by the end of 2011 down from 2008 levels by 15,800. At the time of writing, official statistics give the number of job losses during the first two quarters of 2011 as 4,200 jobs. Without further job growth in the sector through to the end of 2011 our forecasts for the employee jobs in financial services by the end of 2011 will have overestimated the number of jobs lost by 1,500. Comparing to the size of employment in the sector at the end of 2008, this is an error of 1.4%. We will return to check and report on the accuracy of the forecasts for employee jobs in the financial services when Q4 figures for 2011 are available during 2012.

Figure B1: Changes in employee jobs in the financial services sector, end 2008 to end 2011