The Scottish economy

Forecasts of the Scottish economy

Economic background

In the four months since our last report in February 2010, several notable developments have occurred which will affect the short- and medium-term growth prospects for the Scottish economy. Most centrally, we have seen data confirming that the Scottish economy saw the first quarter of *positive* GVA growth since Q3 2008. This marked the Scottish economy officially exiting the recession of 2008-9. Most recent UK GDP data report that the UK as a whole was in recession for one quarter more than Scotland, entering recession one quarter before (Q2 2008) the Scottish economy, and exited from recession in Q4 2009. While the recession had a shorter duration in Scotland, output in Scotland fell 6.0% over this period, while GDP in the UK fell slightly less at 5.8%.

The monetary policy response has remained, with The Bank of England's Monetary Policy Committee voting in June to maintain the Bank Rate of interest at 0.5%. It has been at this rate now for fifteen months, since being lowered from 1.0% in March 2009. The use of the Quantitative Easing programme, commenced in January 2009, remained unchanged at £200 billion. The Governor of the Bank of England noted at the launch of the most recent Inflation Report that while inflation continues to be above 3% - and so outside the range set for it in the Bank of England's mandate – this continues to be a temporary outcome, driven by the restoration of VAT to 17.5%, oil price increases and the depreciation of Sterling. Inflation is predicted to remain above target through 2010, and is expected to fall from 2011 as spare capacity pushes prices down, although "the pace and extent of the fall in inflation are highly uncertain, and recent experience suggest there are substantial risks in both directions which the Committee will monitor carefully". That one member of the MPC voted to increase rates in June's meeting shows that one member is concerned about the upside risks to inflation over the coming years.

Since we last presented our forecast for the Scottish economy, the Labour Government presented its Budget in March 2010, and most recently, the Conservative-Liberal Democrat coalition government presented its Emergency Budget on the 22nd of June 2010. In this section we will briefly summarise the changes to planned spending and taxation as announced in the most recent Budget, as it supersedes that which has come before. The extent to which the reductions in Government spending in the coming years - set out in both March and June's Budgets – affects the level of spending by Government in Scotland is unknown at this time. The Scottish Government, for instance, will only learn its budget for years 2011-12 onwards following the Comprehensive Spending Review which we now know will report on the 20th of October 2010. While headline figures announce that Departmental Expenditure Limits could be cut by an average of 25% in real terms by 2014-15, the budget of the Scottish Government will not fall by this amount, given the ring-fencing of Health spending (an area which has been devolved to the parliament in Scotland).

Headlines from the June 2010 Budget include:

Increasing VAT from 17.5% to 20% from the 4th of January 2010:

- Capital gains tax changes, increasing the rate to 28% for higher rate payers;
- A levy based on the balance sheets of banks active in the UK, including foreign-owned banks (being introduced alongside France and Germany);
- Raising the personal income tax allowance by £1,000 to £7,475;
- The rate of employer National Insurance Contributions will rise by 1% to 3.8% for wages above £131 per week, but no employer NIC will be payable for wages below this figure;
- No further changes to alcohol duty, other than those announced in the March Budget which increase rates in 2013-14 and 2014-15;
- Increasing the basic state pension in line with earnings, prices or 2.5%, whichever is greater;
- Reductions in the rate of corporation tax from 28% to 24% over the four years from 2011;
- Freezing Child Benefit for three years;
- Introducing, from 2011, caps to the payable rates of housing benefit;
- Medical assessments for all claimants of Disability Living Allowances from 2013-14;
- Reducing tax credit eligibility for families with household income greater than £40,000 from April 2011;
- Linking public service pension increases to the rate of change of the CPI, rather than the RPI;
- Review the control and use of accumulated and future revenues from the Fossil Fuel Levy in Scotland.

Although downside risks remain to Scotland's future growth prospects, we forecast that the depths of the downturn seen through 2009 will not be seen in 2010. While the coming years are likely to see a slow and cautious return to growth across Europe, the UK and Scotland, it remains likely that experiences from 2008-2009 will damage confidence across domestic and overseas consumers, and businesses. Further, the unprecedented interventions of policymakers around the world in the use of monetary and fiscal instruments during the 2008-9 recession will have lasting impacts. While the impact of the fiscal and monetary policy responses to the recession will be a source of study for academic economists for many years to come, forecasting the short-term future requires that we also take account of the second-round of policy interventions: the fiscal policy tightening which will shape the scope and size of the public sector across Scotland and the UK.

We include the decisions from the most recent UK budget in the forecasts presented. The most significant changes affecting our forecast horizon to 2012 (and so not including changes which occur from 2013 onwards) are the increase in VAT and the larger than expected anticipated reductions in government spending. Taken as a whole, we estimate that the measures in the budget have revised down our GVA growth forecast for Scotland for 2010 and 2011 by 0.1% and 0.2% to now stand at 0.7% and 1.1% respectively in our Central scenarios.

We examine the possible impact of solely the government spending reductions on the Scottish economy in a section which follows the *Forecast* section of the commentary. Specifically, we use a Computable General Equilibrium model of Scotland to quantify the possible impact on the Scottish economy of the changes to government spending in Scotland. This shows the extent to which not only the public sector, but other sectors which rely upon the public sectors for sales, or on the spending of workers in the public sector, could be hit by the changes in the levels of public spending.

The Scottish economy

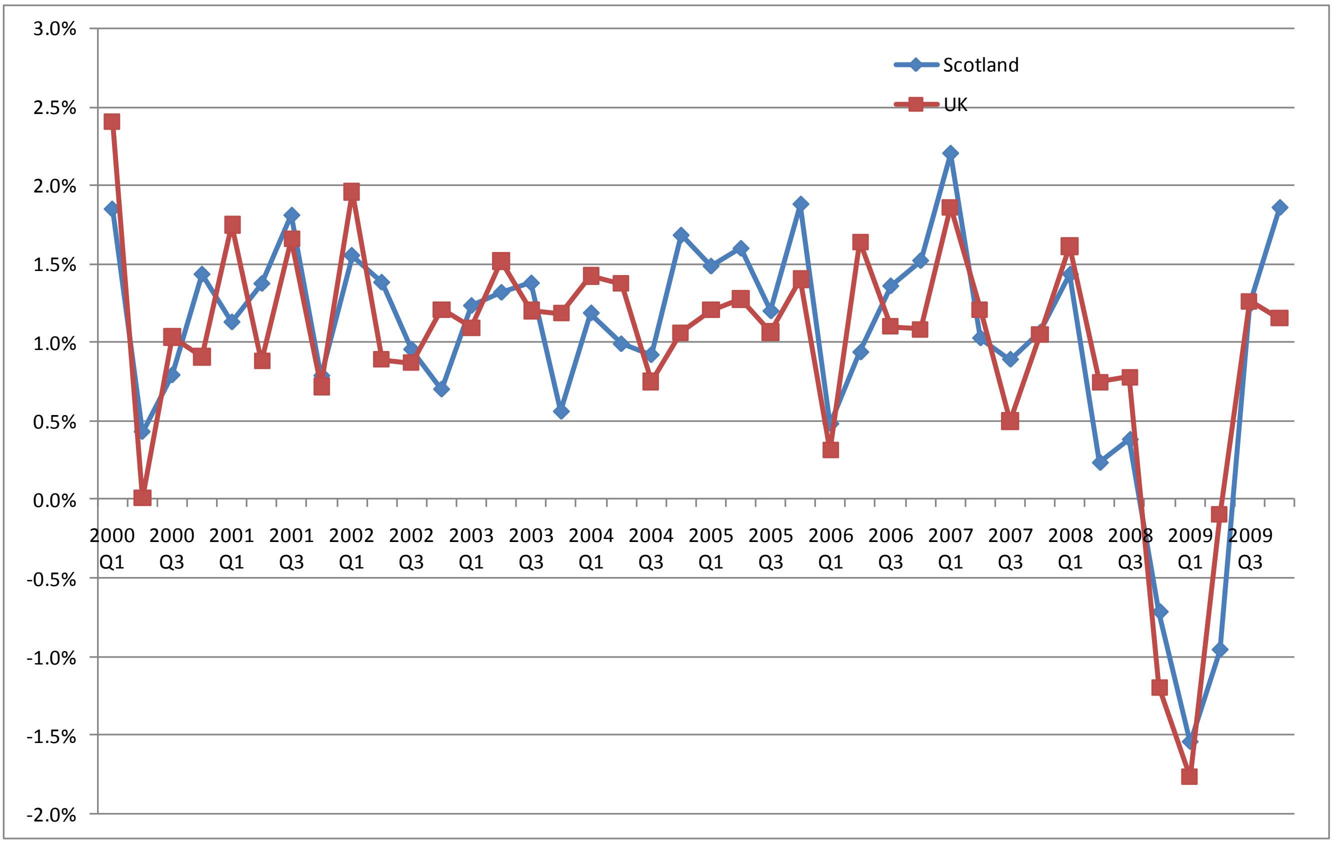
In the last quarter for which data are available (Q4 2009, published on 21th April 2010), the Gross Value Added (GVA) in Scotland rose by 0.2% from the previous quarter (Q3 2009). This marked the first quarter of positive growth since Q3 2008, and officially moved Scotland out of recession. Scotland entered recession following the second consecutive quarterly decline in GVA in Q4 2008 and saw five quarters of negative GVA growth.

The Scottish manufacturing sector, accounting for 14.1% of Scottish GVA, was up slightly (1.2%) over the final quarter of 2009, albeit that this sector has seen a decline of 9.6% over the year to Q4. Unlike the Scottish economy as a whole, this sector registered its second consecutive quarter of GVA growth since Q2 2008. GVA in the manufacturing sector is down 10.4% from its Q2 2008 peak. Within the Production sectors of the Scottish economy more generally, the largest quarterly and yearly decline continues to be seen in the Mining and quarrying industries (down 14.0% on the previous period). These industries, counting for 1% of Scotland economy, last registered a positive period of growth in GVA in Q2 2007.

Construction in Scotland (accounting for 6.5% of GVA) was down 2.8% on Q3 2009, and down 10.8% on the year. In all, the sector was down 15.2% on the peak seen in Q2 2008.

The Services sector (responsible for 74% of Scottish GVA, and 83% of the jobs in the Scottish economy in December 2009) grew by 0.2% in Q4 2009 – largely producing the

Figure 1: Quarterly nominal change in domestic household expenditure, Scotland and the UK Q1 2000 to Q4 2009



return to growth displayed by the economy as a whole during the quarter. The sector was down 3.6% in 2009 compared to 2008. Several points should be evident from the analysis of the sectors which have suffered. Firstly, all sectors saw declines, with a hollowing out of activity in production and manufacturing sectors. This recession has been no respecter of history or heritage in the sectors affected. Secondly, any retrospective analysis will need to consider the extent to which the industrial structure affected the ability of regions to weather the economic storm.

Labour market developments in Scotland to the end of April 2010 (published in June 2010) showed falling employment and increasing unemployment over the year and the most recent quarter. Between February and April 2010, employment of those aged over 16 stood at 2,432 thousand, down 83,000 (or 3.3%) on the same period one year previously. The majority of this fall in employment was seen in the most recent quarter, with employment falling by 47,000. The employment rate for those of working age (16 to 59 (for women) and 16 to 64 (for men) fell by 1.3 percentage points, falling from 73.1% to 71.8%. Rising labour market inactivity has been a feature of the Scottish labour market over the recent past, and the most recent quarter saw a rise in working age inactivity of 54,000, pushing the working age inactivity rate from 20.6% to 21.7%. There are currently almost 700,000 people of working age population not economically active in Scotland. The data on inactivity suggest that increases in inactivity rates are especially high in the 16-17 age group, and males 18-24.

Looking at unemployment, the number of people over the age of 16 who were unemployed rose by 7,000 compared to the previous three months. The rate of increase in unemployment slowing from a 16,000 increase in unemployment in the previous three months. Over the last year, the numbers of unemployed rose by 34,000. As of February to April 2010, the ILO level of unemployment stood at 212,000. The preliminary estimate of those receiving unemployment-related benefits – a more up to date, but less complete, measure of unemployment than the ILO definition - stood at 134,000 in May 2010.

While the number receiving unemployment benefits has fallen 5,000 since January 2010, and the rate of those in work or receiving benefits who do receive benefits has reduced from 5.0% to 4.8% over these five months, the level of “claimant count” unemployment is nine thousand higher than May 2009. Over the year, more women than men have begun receiving unemployment-related benefits (4,800 women versus 4,200 men), and the aggregate picture of falls in the number of claimants since January 2010 appears to be driven by the movements of the male, rather than female, claimants: whose numbers have increase month on month since the start of 2009.

Final demand and recent trends

The Fraser of Allander Institute (FAI) forecasting model acknowledges the drivers of economic activity in the Scottish economy to be consumption, government spending, investment, tourism and exports (to the rest of the UK and the rest of the World). For all three scenarios considered, the recent trends in each of these measures, and most recent survey evidence, are discussed below.

Consumption

Data being developed by the Scottish Government through the Scottish National Accounts Project (SNAP) were published on 21st April. These showed that Q4 2009 saw a small upward rebound in nominal household expenditure, following three quarters of reductions. These figures are in 'Nominal' terms however, so the real increase in spending will be lower, and may be negative. This confirms the evidence from previous quarters that the reduction in household expenditure is moderating, but it is unlikely that this small positive growth in nominal expenditure is signalling a return to previously strong positive growth in Scottish household consumption expenditure. Figure 1 shows the different patterns in quarterly nominal spending in Scotland and the UK since 2001. We can see clearly from this that in both Q3 and Q4 2009 nominal household spending increased in Scotland and in the UK. Note however that various measures of RPI inflation (excluding mortgage and/or housing costs in the final quarter of 2009 were between 2.8 and 3.4%). As noted in the last commentary, it is unclear how significant the return of VAT to 17.5% from the 1st of January would cause household spending to be brought forward to Q4 from Q1 of 2010.

As previously noted in *Forecasts*, household credit facilities have been crucial for the recent growth of household expenditure, and in the movement of the Scottish economy towards a more service-oriented structure, and the provision of goods for household consumption.

The decline in the availability of credit facilities to households, as well as households continued reluctance to take on credit in uncertain economic conditions as they rebalance and pay down debts, will continue to dampen household spending. The link between house prices growth and household spending is anecdotally important, and recent increases in house prices reported by the surveys of the Scottish housing market may indicate the beginnings of a return to growth, although total house sales remain weak, and bank lending capacity is forecast by the IMF to contract in 2010. Figures from the Council for Mortgage Lenders showed that lending for purchases of new homes in Scotland during the first three months of 2010 was 33% lower than the same period in 2009, with 9700 loans worth £1.1 billion advanced. As with the VAT point above causing spending to be brought forward into 2009, the CML notes that the decline in Q1 2010 might have been caused by the ending of the Stamp Duty "holiday" on properties up to £195,000 which ended in December 2009. While loans for home purchases are up on the lows of one year previous, the remortgage market remains sluggish with the number of loans down 36% on Q1 2009. Before the turn of the year, gross mortgage lending in the UK was well below half the levels seen throughout 2007. This demonstrates the devastating impact on the housing market of the "credit-crunch".

Figures released on the 19th of May 2010 by the Scottish Retail Consortium reported continued challenges across the sector, with the weakest like-for-like sales performance in April since March 2000. All categories of retail sales suffered, with food and non-food sales seeing like-for-like declines of 3.1% and 0.9%. It will be crucial for the path of the retail sector, and consumer expenditure more generally, that February and future months figures indicate whether figures since the start of the year are indicative of part of a longer term rebalancing of household balance sheets. This appears to be borne out by the most recent data here – albeit that total household spending in Q1 is not yet available. The most recent survey evidence (see the review of business surveys section), largely capturing small and independent retailers, continues to indicate declining business confidence and anticipates declining sales through not only the first half of the year, but continuing throughout 2010.

Government spending

As noted in previous *Forecasts*, UK fiscal policy measures enacted during 2008-9 and 2009-10 provided a stimulus designed to support activity and employment through the declines in growth seen in late 2008 and 2009. Similar packages were instigated across the world in response to what was a global downturn, in practice, stepping in to offset the increase in the household savings rates as consumers pegged back spending rapidly. Further, all UK political parties campaigned during the recent elections to the Westminster parliament for the need for a programme of real terms aggregate spending reductions over the lifetime of the new parliament as government deficits were to be reduced, and UK government debts repaid. The annual government deficit – the difference between spending and income – was predicted in the OBR's June (Pre-Budget) forecast at £156 billion (11.1% of GDP) for 2009-10. While £73 billion pounds of tax and spending changes designed to bring down UK government deficit had been announced in the March budget, the June Budget announced a further £40 billion of consolidation over the next five years. June's Budget set out the UK Government's fiscal target is to have balance in the current budget by the end of the five-year forecast period.

The UK Conservative-Liberal coalition government set out in some detail its immediate plans for government spending in a budget on the 22nd of June, and will carry out a Comprehensive Spending Review which will report in October 2010. These will set out a programme of (aggregate) public spending reductions, however the "devil will be in the detail" on a number of issues, particularly over the impact that reductions in UK government spending will have on the "block grant" budget of the Scottish parliament in the short-term. We should know this in more detail following October's spending review. Longer term, both members of the UK coalition government appear to have accepted that there might be a case for examining the (fiscal, as well as other) powers of the Scottish Parliament as set out the Calman Commission on Scottish Devolution (which reported in June 2009). This recommended options for “tax sharing” between Scotland and the UK, with, the headline proposal on income tax recommending that a “Scottish variable rate of income tax” be introduced, the revenues from which would finance spending by the Scottish parliament, with an offsetting reduction in the Barnett-formula calculated block grant given to the Scottish parliament.

Our forecasts capture the extent to which government spending is felt across the economy, and the knock-on impacts on activity and employment at the sectoral level of changes in the sectors whose output is important for the demands of the public sector. Put simply, the forecasting model will see reductions in government spending as directly affecting the public administration, education, health and social work sectors, and at the same time affecting those sectors which rely on public service sectors for the destination of their outputs (which could include suppliers to the public sector in the private business sectors). The scales of public spending reductions which are being discussed would suggest that in level terms, expenditures by the public sector will be reduced in the short-and medium-term, and that this will impact on activity, and likely employment, in sectors across the Scottish economy.

In a report released in April 2010, Scotland’s Chief Economic Advisor set out some scenarios for Scottish Government expenditure beyond the current year (2010/11). This report, carried out in advance of the UK June Budget, and so did not have access to the more detailed proposals for UK Government spending, nevertheless showed that the outlook for public expenditure is bleak. UK Department Expenditure Limits (DEL) are projected to fall by 3.0% on average per year in real terms between 2009/10-12 and 2014/15 or by 12.4% overall. Under the Barnett-formula allocation mechanism for Scottish DEL funding, the report argues that (if the UK reductions were equally shared across UK government departments) that Scottish Government expenditure could fall by 2.9% in real terms on average per year. This follows a period since 2000/1 and 2009/10 in which Scottish Government DEL has growing on average in real terms by 5% per year. The true extent of the reductions in Scottish Government DEL will depend upon the extent to which the reductions in UK DEL is felt by departments for which responsibility in Scotland has been devolved. Simply, real terms reductions to the armed forces budget, for instance, do not have a “Barnett consequential” for the DEL in Scotland since these are reserved to the UK parliament, but reductions in the budget for education– which is under the control of the Scottish Parliament in Scotland – would cause changes in the Scottish DEL funding available. Nevertheless, there is much to suggest, and would be consistent with recent IFS analysis, that the measures in the June budget could imply a reduction in real terms of 14% in Scottish Government DEL between 2009/10 and 2014/15.

In the GVA growth and labour market forecasts published in this *Commentary*, we include a range for Government spending in Scotland over the next three years. We intend these to capture the range of possible changes to government spending in Scotland, although we note that, even after the Budget on the 22nd of June, there are uncertainties about the extent to which changes which will follow from the Autumn UK Spending Review will feed through to the budget available to the Scottish Parliament. In all three of the forecast scenarios real government spending in Scotland falls in all three scenarios in 2011 and 2012.

Investment

As previously noted, there are no separate National Statistics on investment in Scotland. Business investment figures reported for the UK, which may typically be expected to be broadly indicative of the path of investment in Scotland, show in Q1 2010 the first upward growth in business investment seen since Q2 2008. Total business investment in Q4 2009 was up 6.0% on the previous quarter, but still down 11.0% on Q4 in 2008. The sectoral changes in investment continue to support the idea that manufacturing sectors have been hit particularly hard, with total business investment by the manufacturing sectors continuing to decline on the last quarter, down 29.3% on Q4 2008, and approximately two thirds of the levels seen through 2006-2008. Non-manufacturing investment was up 6.7% in the quarter, with increases in Construction (27.9%) and Other services (9.3%). Investment by Public Corporations was down 3.1% in Q4 2009, and down 18.9% on Q4 2008.

Tourism

Elsewhere in the *Commentary*, we report weak confidence in the tourism sector across Scotland, with declines in employment (full-, part-time and seasonal) as well as declining overtime. Most recent figures for the UK, published in June 2010, show that in the first three months of 2010 the number of visitors from overseas to the UK fell by 5.0%. Average occupancy figures in Scotland in February and March remained similar to previous years, while there were declines in the use of restaurant and conference facilities, perhaps caused by declining spending by Scottish and non-Scottish businesses. Most recent data for April suggests a slightly lower average occupancy than in the same month in previous years. The extent to which discounting continues to be used to support the sector through Q2 and into the summer months will have a crucial role in the outlook for the sector in the short term. While short-term factors such as the Icelandic volcanic ash disruptions, the harsh winter weather, rising fuel costs could mitigate or have ceased, and the sector could benefit from the weak exchange rate over the coming months.

Exports to the rest of the UK

Preliminary estimates of GDP growth for the UK in the 1st quarter of 2010, published on the 22nd of April 2010, revealed that growth continued for the second quarter, up by 0.2%, somewhat lower than many analysts had predicted. As noted before, the rest of the UK is the most important trading partner for Scottish industries, the future for demand for Scottish exports will depend crucially on the path of growth which occurs in the UK. Scottish IO tables for 2004 – the most recent year they are available – showed that exports to the rest of the UK were approximately double exports from Scotland to the rest of the World.

Recent forecasts for GDP growth in 2010 in the UK show a strong rebound from the declines seen in 2009. The newly-formed Office for Budgetary Responsibility's forecast in the Appendix to June's Budget document indicated that following a 4.9% decline in 2009, growth in the UK would return to positive in 2010 at 1.2%, and in 2011 and 2012 show a stronger growth performance of 2.3% and 2.8% respectively. Household consumption growth is forecast to remain weak, rising by only 0.2% in 2010, and reaching growth of 1.7% in 2012. Much of the growth forecast for the UK comes from strong forecasted growth in exports of goods and services from the UK to the rest of the world: forecasted to rise 4.3% in 2010, 5.5% in 2011 and 6.3% in 2012. These forecasts for UK household spending growth have been revised down in the light of the proposals in the June UK Budget.

As noted elsewhere in this edition of the *Fraser Economic Commentary*, Scottish Chamber and CBI respondents reported rising trends in expected export orders in Q1 2010, although demand from the rest of the UK remains fragile, and suggests a stronger upturn in orders and exports in Q2 2010.

Exports to the rest of the world

Recent forecasts for the growth in world trade were produced by the OECD in May 2010. Overall, world trade, which fell by 11.0% in 2009, is predicted to increase by 10.6% in 2010, and to grow by 8.4% in 2011. Alongside this, the IMF forecasts from April 2010 predict world output to increase by 4.2% in 2010, and 4.3% in 2011. The growth in markets for Scottish goods will be an important driver of the extent to which exports can drive the economic recovery.

As noted in previous *Forecasts*, Scottish exports have traditionally gone to other EU and other "advanced economies", which the IMF forecasts will grow by 1.0% in 2010 and 1.7% in 2011. The major traders for Scotland, and the recent forecasts for growth in these areas, are given in Table 1 below. Whilst the further development of existing destinations for Scottish goods and services is vital to the export-led recovery for Scotland, opening up previously underdeveloped markets could offer greater scope for economic gains over the next three years.

Despite upward revisions for the major (non-UK) destinations for Scottish exports, growth continues to be forecast to be relatively slow to return in 2010, particularly for the advanced EU economies to which Scotland has traditional exported its non-UK exports. It is in developing (European and non-European) countries that the highest forecasts for growth through 2010 and 2011 are found, and the success of an export-led recovery for Scotland may depend on the speed at which new markets in these previously less important export destinations can be found.

In past forecasts we have used experimental statistics on the manufacturing exports to the rest of the World by quarter produced by the Scottish Government as part of the Scottish National Accounts Project. The most recent data, published in April 2010, cover the period from Q1 2002 to Q4 2010. These data showed that over the year to the end of the 2009, Manufacturing exports from Scotland – which account for roughly two-thirds of Scottish exports to the rest of the world – fell by 10.1% in real terms (stripping out the impact of inflation). Having seen an increase in Q3 2009 manufactured exports (as commented on in the last *Forecast*), we saw a further increase in exports in Q4. This shows the extent to which the 2009 annual trade figures are hit by the collapse seen in Q1 and Q2 2009. Over 2009, the only sector for which results are separately reported to see an increase in manufactured exports to the rest of the world was the Food and drink sector, up 0.8%. The largest declines in percentage terms was seen in Metal and metal products (down 24.7%), with the largest absolute decline in exports to ROW in the Engineering and Allied Industries (down £948 million in 2005 prices).

The most recent survey evidence for the Scottish Manufacturing sector reports upward trends continuing in total orders, with exports trending upwards. Across manufacturing survey suggest that the worsening conditions seen through the first half of 2009 have ended, and while confidence is weak, upwards trends are anticipated through Q1 and Q2 2010.

The forecasts: Background

As with the forecasts published in the last five Economic Commentaries, we give three alternative scenarios for growth, employment and unemployment in the Scottish economy between 2010 and 2012. We give a "Central" case, with "High growth" and "Low growth" as two respectively upper and lower growth alternatives. We intend that these three scenarios capture the range of outcomes that are possible, given that there are considerable uncertainties surrounding any specific single or point estimates to the "Central" forecast, especially in 2012. The significant revisions to Scottish GVA growth discussed in the last commentary – which has been a particular feature of the 2008-9 recession - suggests that using a scenarios approach is sensible when first estimates of growth may be

Table 1: GDP growth forecasts for top five export markets for ROW exports from Scotland, % year on year change, plus United Kingdom and Euro Area

		2010		2011	
		IMF (May 2010)	**OECD (May 2010**	**IMF (May 2010)**	**OECD (May 2010)**
1	United States	3.1%	3.2%	2.6%	3.2%
2	France	1.5%	1.7%	1.8%	2.1%
3	Germany	1.2%	1.9%	1.7%	2.1%
4	The Netherlands	1.3%	1.2%	1.3%	2.0%
5	Ireland	-1.5%	-0.7%	1.9%	3.0%
	United Kingdom	1.3%	1.3%	2.5%	2.5%
	Euro Area	1.0%	1.2%	1.5%	1.8%
	Advanced European Economies	1.0%	n/a	1.7%	n/a
	Emerging European Economies	3.3%	n/a	3.4%	n/a

Sources: *International monetary Fund, Regional Economic Outlook: Europe, Fostering Sustainability, May 2010 and International Monetary Fund, Regional Economic Outlook: Western Hemisphere, Taking Advantage of Tailwinds*, May 2010 and *World Economic Outlook Update*, January 2010, and *OECD Economic Outlook*, May 2010.

revised (sometimes, significantly) some quarters into the future.

While we do not give explicit probabilities for each of these outcomes, we see the "Central" scenario as being that which is most likely, while "High growth" and "Low growth" reveal the possible range of outcomes for the Scottish economy from 2010 through to 2012.

The forecasts: Detail

In the three scenarios considered, the following features are assumed to influence the factors of demand, and economic activity, across the Scottish economy:

Household

In the "Central" scenario, we forecast that the significant reduction in Household spending seen in 2009 moderates, but overall expenditure growth only increases slightly in 2010, in part due to expenditure brought forward from 2011 when VAT will be higher. This can not bring forward purchases of non-durable items, such as food, for example which mitigates this effect being larger. Aggregate Household expenditure in 2011 and 2012 is forecast to increase slightly from weak 2010 levels, although spending growth in 2011 is damaged by the VAT increase and only by 2012 does household spending return close to trend expenditure growth. In "Low growth", household expenditure is damaged through lower consumer confidence, persisting job security fears and low wages growth. Household spending falls through 2010 in the low growth scenario, however less than was seen in 2009, and returns to flat growth in 2011 in this scenario. As with previous scenarios, it isn't until 2012 that household spending sees a return to positive growth in "Low growth". In "High growth", spending responds faster than in "Central", returning to sluggish, but positive, growth in 2010 before seeing a return to pre-2008 trend expenditure growth through 2011 and increasing marginally above trend in 2012. This scenario would be consistent with outturn unemployment increases being lower than anticipated, and household spending recovering through access to, and increased demand for, credit facilities.

Government

In "Central" we forecast an increase in government spending in Scotland through 2010 on 2009 levels, but this is the final year of government spending growth expected for the short-term. The Scottish Government has delayed making the reduction in aggregate spending from this current financial year, but the reduction in 2011 will be greater as a result. From 2011, we forecast annual real terms reductions in aggregate Government spending in Scotland, which are reduced by 4.2% in 2012 compared to 2011, and 4.5% lower in 2011 on 2010. In "High growth", government spending is still lower in 2011 and 2012 compared to the previous year's total, with less tightening across government budgets at the UK level in comparable spending programmes. Across all scenarios however, government spending in Scotland is lower and this will directly impact on the sectors and industries in which public spending in Scotland supports activity and employment. In the “Low growth” scenario, government spending falls in 2012 by close to the reduction seen in 2011.

Exports

In “Central” we anticipate a slow return to growth in world trade in 2010, with a return to strong positive growth in demand for Scottish exports from the rest of the world returning through 2011 and 2012, in part due to the increased competitiveness of Scottish products from the weakening in the value of Sterling over the last two years. In “High growth” and “Low growth”, this return to positive growth in exports to the rest of the world from Scotland takes less and more time, respectively. Exports to the rest of UK follow a similar pattern returning to slightly positive growth in 2010 across all three scenarios, albeit that, due to the measures introduced in June’s budget, growth in domestic demand in the rest of the UK is forecast to be lower in 2010 and 2011 than it otherwise would have been. In “Low growth” we forecast a small increase in export demand from the rest of the UK in 2010.

Tourism

Tourism is forecast to recover slowly from the challenging conditions seen through 2008 and 2009, largely driven by (non-Scottish) households reducing expenditure on travel and tourism activities (in line with domestic households experiences of reduced overseas travel). In “Central”, tourism spending in aggregate is forecast to remain flat in 2010 – in line with household spending growth – and returning to growth in 2011 continue through 2012.

Investment and stocks

As discussed above, 2009 saw reductions in investment demands which were unprecedented in modern times. As we have previously stated, the recovery in investment will be partly driven by the supply of credit, but also the demand for credit from companies, which will be linked with returning business confidence. Recent survey evidence for Construction, responsible for much of the investment activity in the Scottish economy, continues to show weak levels of overall confidence, with declines in order, albeit more slowly that seen previously. We forecast in “Central” that aggregate investment levels will return from the huge declines seen through 2009, but will show positive growth from 2011 and 2012. “High growth” sees investment increasing from 2009 levels in 2010, although the increase is forecast to be small.

Evaluation of earlier forecasts

February 2010’s forecast for GVA growth in Scotland 2009 under all three scenarios presented in the last Commentary was negative, and significantly so, ranging from -4.6% to -4.8%. We forecast the GVA change at the end of the (calendar) year when compared to the four quarters of the year before. Thus, for comparison the GVA forecast made now for 2010 can be evaluated against the GVA for Scotland in 2010 which will be first released with the publication of Q4 2010 likely to be around April 2011. The April 2010 release of Q4 2009 allows us to compare earlier forecasts to outturn data, which was for a decline in Scottish GVA of -4.8%, and thus in line with our “Low growth” forecast for Scotland published in February’s Commentary.

As readers of previous Forecasts will be aware, forecasters not only in the UK but across the world largely failed to predict the speed and depth of the 2008-9 recession. Equally forecasters, including the newly formed Office for Budget Responsibility, have had to revise their forecasts for 2010 and 2011 in light of the June budget. We will produce evaluations of the forecasts we have made over the last two years and report on these in a future issue of the Commentary (once revisions to data are smaller, and we can have confidence in the outturn). For comparison to earlier forecasts, our “Central” growth scenario for 2009 released in November 2009 was for -5.0% growth to be seen in 2009.

Results

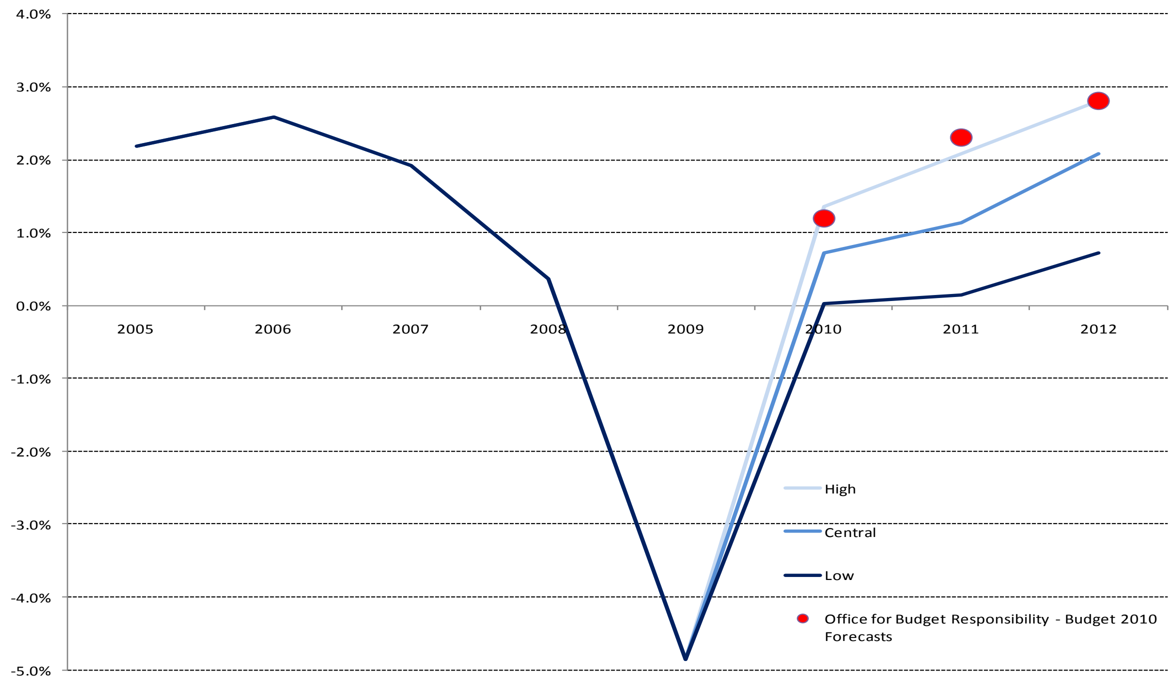
Gross Value Added

All three scenarios forecast out to 2012, by which time Scottish GVA growth in all scenarios is forecast to be positive. The recovery to positive growth occurs faster in the High growth scenario, and more slowly in the Low growth scenario. As stated above, we forecast that the Central scenario represents the most likely outcome for the Scottish economy given the current economic position and outlook at the start of 2010. Scotland is forecast to return to positive growth in 2010 in both the Central (0.7%) and High growth (+1.4%) scenario, and the Low growth scenario sees no growth (0.0%) in 2010 and positive growth in 2011 (0.1% respectively). As are noted above, considerable multiple downside risks remain to the strength of the expected economic recovery for Scotland.

These scenarios are presented in Figure 2, alongside (for comparison) the forecasts for the UK as a whole in 2010, 2011 and 2012 made by the Office for Budget Responsibility (OBR) (and published alongside the Budget on the 22nd of June 2010). Forecasts for the economic growth of the UK in 2010 and 2011 were collected by HM Treasury in June 2010, and the median of independent, private and institutional forecasts for UK GDP growth for these years are the same as those published by the OBR in its forecasts.

We are forecasting that the Scottish economy will perform better than the OBR’s forecasts for the UK in 2010 (1.2%) under the High growth scenario only, but less well under the most likely Central scenario. The average of recent independent forecasts for growth of the UK economy in 2010 has been revised downwards over the months since May 2010 from 1.4% to 1.2%. We anticipate the most likely

Figure 2: GVA growth 2008 and forecasts to 2012, Scotland and the UK



outcome in light of the June budget proposals is for a slower return to growth in Scotland than the UK as a whole, with our Central scenario forecasting lower growth in Scotland than the OBR forecasts for the UK in each year from 2010 to 2012.

Under the Central scenario, GVA growth returns to positive annual growth in 2010 (+0.7%) and 2011 (+1.1%). In 2012, Scottish growth is forecast to be 2.1%, slightly above long-term trend growth for Scotland, and marginally down from our forecast for 2012 in February 2010. Our headline forecast in the "Central" scenario, and the forecast for the broad sectors under this scenario are given in Table 2. Table 3 shows the GVA forecasts under each of the three scenarios. Under the Low growth scenario, negative growth is also seen in 2009, 2010 and 2011, with the Scottish economy not returning to positive growth in this scenario until 2012.

Table 2: Forecasts of the Scottish economy (Central scenario), 2010-2012

	2010	2011	2012
Gross Value Added	0.7%	1.1%	2.1%
Manufacturing	1.6%	3.2%	5.3%
Construction	0.6%	0.8%	1.5%
Services	0.7%	1.0%	1.9%

Table 3: Forecasts for aggregate GVA growth in the Scottish economy under three scenarios, 2010-2012, %

	2010	2011	2012
High growth	1.4%	2.1%	2.8%
Central	0.7%	1.1%	2.1%
Low growth	0.0%	0.1%	0.7%

Table 4: Forecasts of Scottish employment (jobs, 000s) and net employment change in central scenario, 2009-2012

	2009	2010	2011	2012
Total jobs (000s), Dec	2,336	2,303	2,318	2,354
Net annual change (jobs)	-48,847	-33,546	14,856	36,111
% change from previous year	-2.1%	-1.4%	0.6%	1.6%
Agriculture (jobs, 000s)	28	28	28	30
Annual change	-3,906	-140	716	1,340
Production (jobs, 000s)	239	238	248	263
Annual change	-12,280	-789	9,200	15,606
Services (jobs, 000s)	1,947	1,916	1,920	1,936
Annual change	-15,800	-30,872	3,478	16,543
Construction (jobs, 000s)	122	121	122	125
Annual change	-16,861	-1,745	1,462	2,622

Note: Figures are numbers of employee jobs, by industry, and not the numbers in employment, therefore these figures differ slightly from those reported in the labour market section of the Economic Commentary.

Table 5: Forecast Scottish net jobs growth in three scenarios, 2010-2012

	2010	2011	2012
High growth	-20,399	35,142	53,059
Central	-33,546	14,856	36,111
Low growth	-48,129	-6,036	6,615

Table 6: Forecasts of Scottish unemployment, Central scenario 2010-2012

	2010	2011	2012
ILO unemployment	227,820	223,646	210,749
Rate1	8.9%	8.7%	8.1%
Claimant count	145,143	152,935	144,115
Rate2	5.3%	5.5%	5.1%

Notes to Table 6: 1 = rate calculated as total ILO unemployed divided by total of economically active 16+ population. 2 = rate calculated as claimant count divided by sum of claimant count and total jobs. The latest estimates figures forecast in Table 6 were published in June 2010 in the Labour Market Statistics First Release for Scotland. These estimated the ILO unemployment levels and rates for the three months to april 2010 as 212,000 and 8.0% respectively. The same publication gave preliminary estimates of the claimant count and rate for May 2010 as 134,000 and 4.8%.

We present forecasts for GVA change in Scotland at broad industry levels for production and services, as well as the construction sector, under each of the three scenarios – Central, High growth and Low growth. Figure 3 shows the GVA change in Manufacturing under each of these three scenarios, while Figure 4 shows the GVA change in Services. Figure 5 shows the change in forecasted GVA in the Construction sector between 2009 and 2012.
Across Production (shown in Figure 3), a recovery from the observed declines in GVA in 2009 occurs in 2010 in the Central and High scenarios. There is GVA growth of 3.1% forecast for 2010 under the High growth scenario. The Low growth scenario on the other hand forecasts a (very) slight decline in GVA in Production this year. In 2011 and 2012, all three scenarios forecast positive GVA growth in the Production sector, with growth ranging from 0.9% to 5.3% in 2011 and 2.2% to 6.7% in 2012.

Figure 4 shows that Service sectors GVA growth across the three scenarios is more insulated to the economic downturn than the Production figures seen in Figure 3. Services GVA

Figure 3: Forecasts of GVA growth in Production, 2010-2012

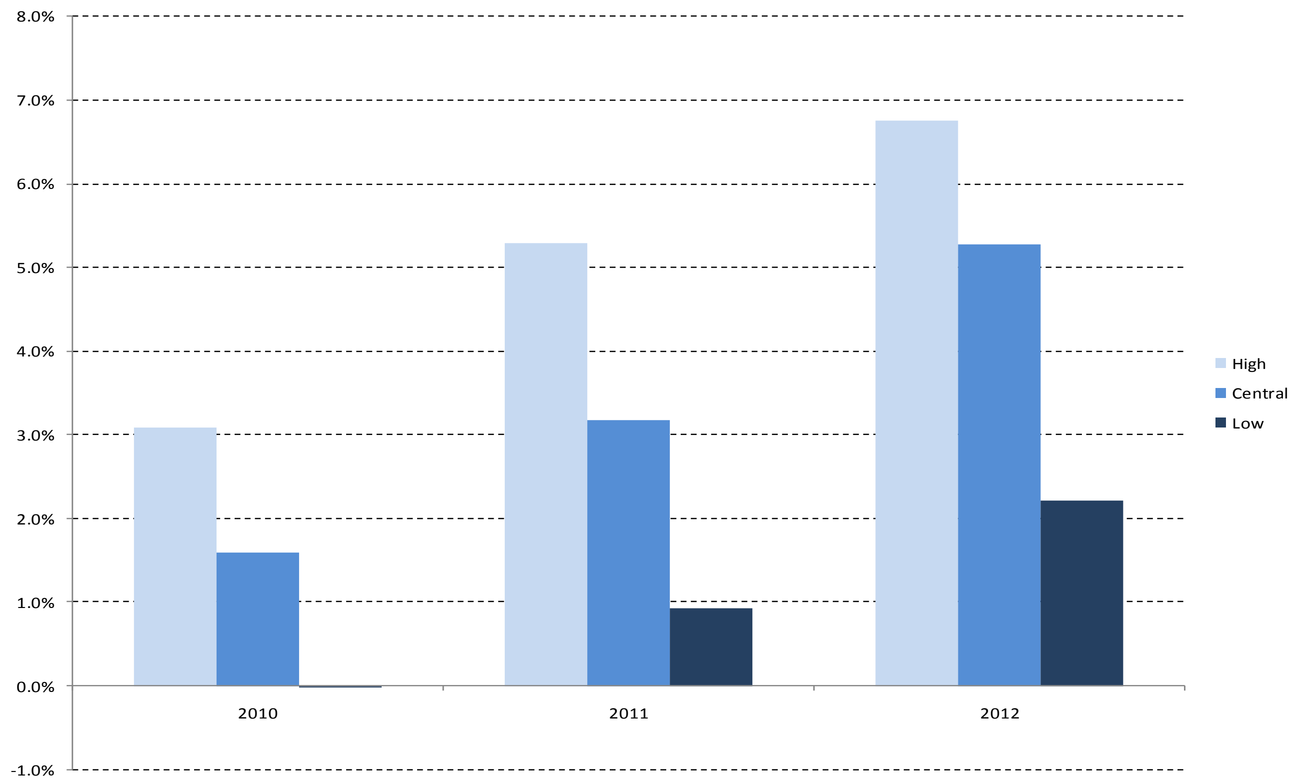
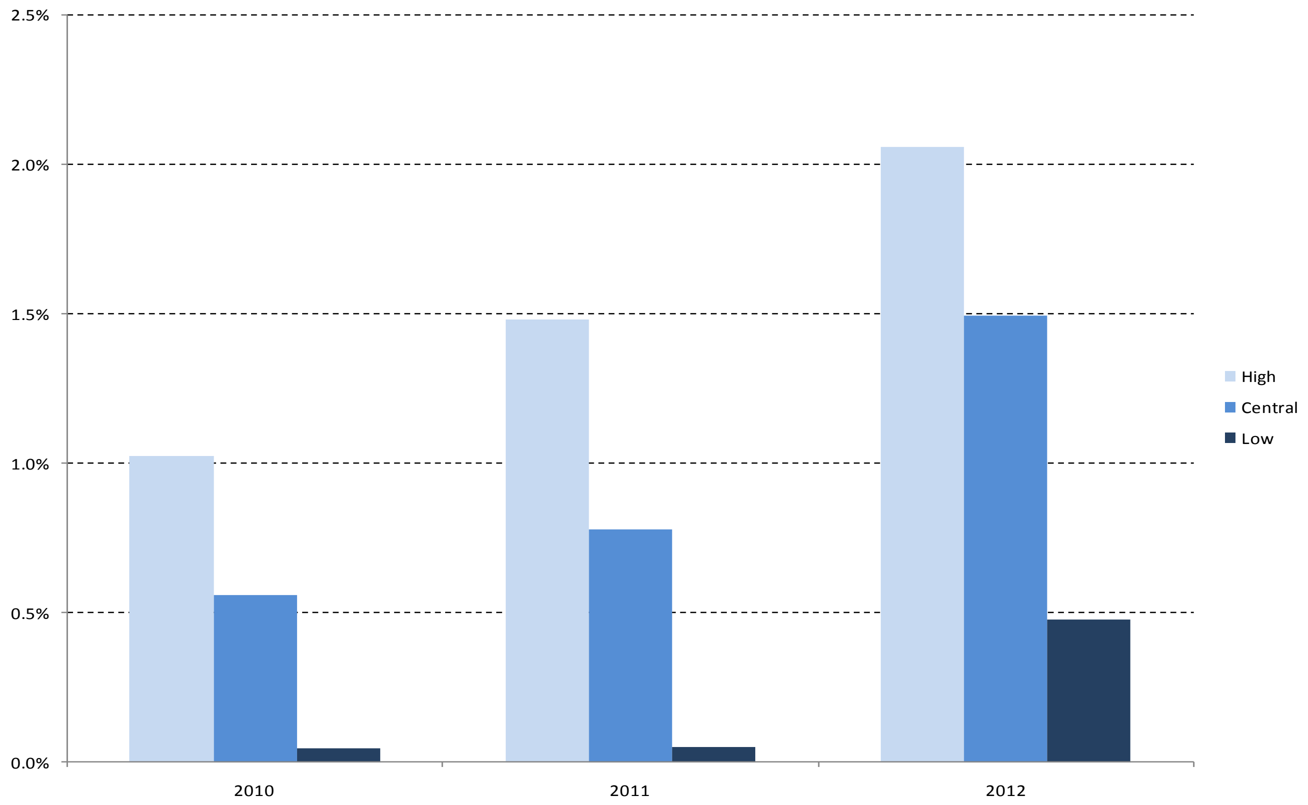


Figure 4: Forecasts of GVA growth in Services, 2010-2012



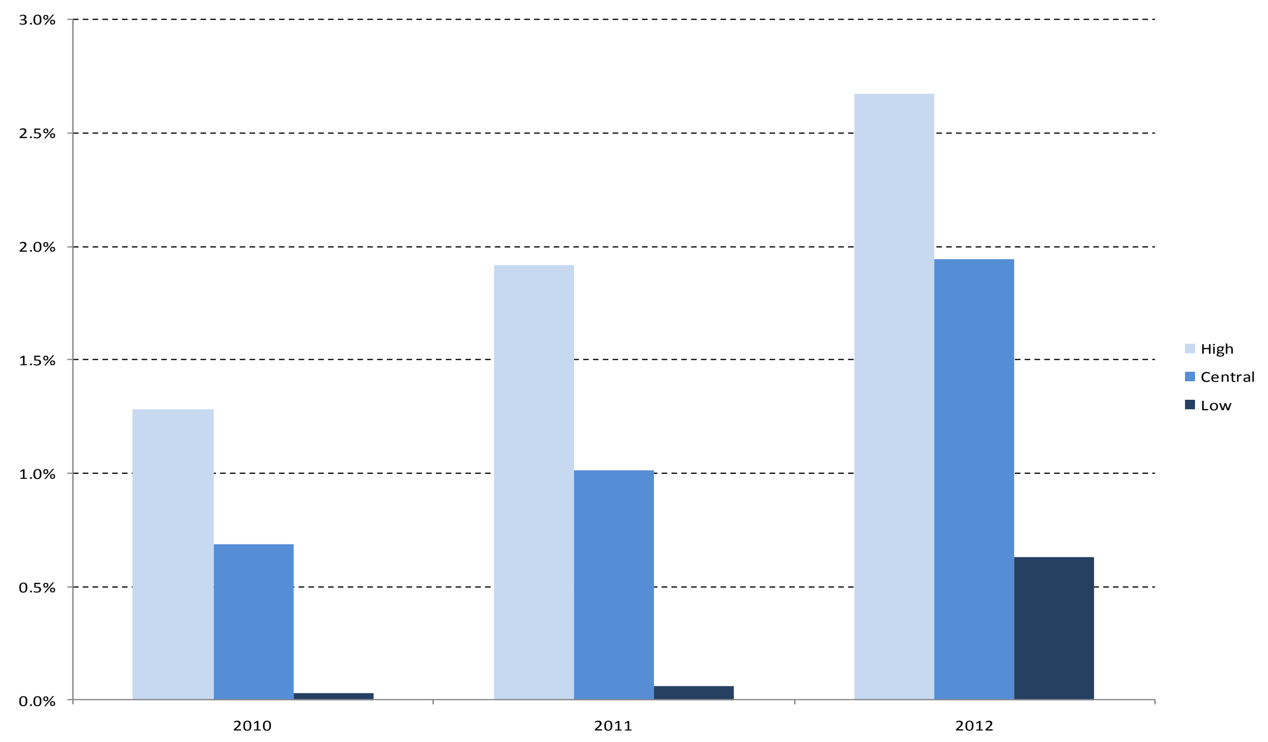
growth in 2010 ranges from 0.0% to 1.0%, while in 2011 GVA growth is forecast in the range from 0.1% to 1.5%. This range of outcomes for the services sector has been revised slightly upwards from that presented in February's *Forecast*. As previously noted, the recovery in consumer confidence and household spending (both in Scotland and in major, or new, export markets, particularly the rest of the UK) will drive the speed and duration of the recovery across the aggregate Service sector. One key area within the Service sector will be the future performance of Financial Services (which together with Business Services is worth almost 25% of Scottish GVA). We forecast this sector to see a small return to positive growth in 2010, although there continues to be significant job reorganisation across the financial services sector from 2010-2011. We expect that we will see continuing changes in the shape of the financial services sector well into 2011, and the future shape of the sector will be considerably different than prior to 2008.

Figure 5 estimates that declines in GVA in the Construction sector seen in 2009 do not continue into 2010. Having fallen 10.8% in 2009, we forecast that Construction GVA grows slightly from its current level across all three scenarios. The "Central" scenario sees the sector growing 0.7%, 1.0% and 2.0% over 2010, 2011 and 2012 respectively. Growth this year is driven, in part, by government spending growing in this year. Looking forward however, large declines in public spending are anticipated, but we forecast some increasing demand from private business investment.

Employment

Our forecasts for employment for each of the three scenarios are given in Table 4, along with the net aggregate employment change over the year. As in previous forecasts the employment figures relate to jobs, not FTEs, and are calibrated on the end-year (December) figures from the Employers' Quarterly Survey Series, as given in Table 6.06 of the Economic and Labour Market Review, published by National Statistics. This gave total jobs in Scotland at December 2009 as 2,336,220 (down 48,847 from December 2008). As we have previously forecast, we anticipate in our Central scenario that total job numbers in Scotland will fall in aggregate in 2010, and see a recovery to positive job growth in 2011.

Figure 5: Forecasts of GVA growth in Construction, 2010-2012



In "Central", the number of jobs is forecast to decline by 33,546 in 2010 (marginally down on the number of jobs forecast to be lost in February's Forecast). Total job numbers, and jobs in all of these broad industrial sectors, are forecast to increase in 2011 and 2012. Total jobs in 2012 are forecast to be around 31,000 lower than the jobs total for 2008 (a year when historic highs and lows respectively for the employment rate and unemployment rate were seen in Scotland).

In all scenarios, total job numbers in Scotland are forecast to continue to show a decline in 2010, following that decline seen through 2009. Table 5 shows the net annual growth in jobs in each of the three scenarios. The speed of the decline is however forecast to be much reduced. In the “Central” scenario, the forecast is for around 33,500 jobs to be lost in Scotland in 2010, down by approximately half from the fall of almost 49,000 jobs in 2009. Our “Low growth” scenario forecasts a fall of 48,000 jobs, approximately mirroring the number of jobs lost in Scotland in the previous year. The number of jobs in Scotland is forecast to increase across the “High growth” and “Central” scenario in 2011, In our “Central scenario” we forecast jobs growth of 14,850 in 2011, with an increase of 35,100 in the “High growth” scenario, and a decline of 6,000 in our “Low growth” scenario.

Looking at the sectoral breakdown for these employment changes, in all scenarios the Services sector sees the largest decline in job numbers in both 2009 and 2010. Overall, the number of service sector jobs are forecast to fall by 30,872 between December 2009 and December 2010. In the “Central scenario” the most significant number of jobs are forecast to be lost in 2010 in Health and Social work (down by 6,770 jobs), with large numbers of jobs forecast to be lost in Wholesale and Retail (down 6,071 jobs) and Real estate and business services (down 5,793).

The Construction sector, which lost 16,861 jobs in 2009 is forecast to lose over 1,700 jobs in 2010, and see a slow growth in job numbers through 2011 and 2012. As with the aggregate jobs total, the total jobs in Construction in 2012 (124,585) is forecast to remain below levels of 2008 (139,100). In the “High growth” scenario, job losses in construction are smaller in 2010, falling by over 1,000 jobs, while the “Low growth” scenario forecasts 2,530 jobs are lost in this sector. It is a typical feature of previous recessions, and in particular the investment-led recession of the credit crunch associated with the 2008-9 recession, that the Construction sector has seen both quicker, and earlier, declines than the rest of the economy. This would suggest that in the upswing phase of the recovery, it would be likely to see increased activity ahead of much of the economy. The sluggishness of a return to growth in the private and public building market may contribute to the growth of employment in Construction in the upswing being less, and starting later, than that seen in previous recessions in Scotland.

Production jobs were forecast to fall in 2009 by over 12,000 in the Central scenario, and outturn data showed that the number of jobs was indeed 12,282 lower in 2009 than in 2008. We forecast that the number of Production jobs in 2010 will decline only slightly in 2010, down almost 800 jobs. The forecasted job changes in the “High growth” and “Low growth” scenarios are 3,192 and -5,192 jobs respectively. Within the Production sectors in the Central scenario, the largest job growth is forecast in the Mining and quarrying sector (+236 jobs) and Textiles (+373 jobs), while those sectors forecast to see the largest reductions in job numbers are Food and Tobacco (-358 jobs) and Electrical and instrument engineering (-278 jobs).

Unemployment

We present our 2010 to 2012 forecasts for unemployment, as measured by the ILO definition, as well as those claiming unemployment benefit in Table 6. The preferred measure of unemployment is the ILO definition, as given by the Labour Force Survey. This measure is preferred as it reveals the extent of labour which is unemployed and available for work, rather than that portion of the available Scottish labour force which is currently in receipt of unemployment benefit. As such, it is a better measure of the extent to which labour resources are not currently employed in productive activity in Scotland.

Of crucial importance to the realised levels of unemployment will be the extent to which people who lose employment switch into the unemployed, or move into labour inactivity, i.e. are unemployed but not available for work. One potentially important feature of the 2008-9 recession has been the extent to which the inactivity rate in Scotland has increased (up 1.5% points in the last year), and it currently stands at 37.5% for 16+, and 21.7% for working age people.

Table 7 shows the ILO and claimant count measures of unemployment under each of the three scenarios of our forecasts.

Table 7: ILO unemployment rate and claimant count rate measures of unemployment under each of the three forecast scenarios

	2010	2011	2012
ILO unemployment rate			
High growth	8.4%	7.4%	6.2%
Central	8.9%	8.7%	8.1%
Low growth	9.5%	10.1%	10.7%
Claimant count rate			
High growth	5.0%	4.4%	3.9%
Central	5.3%	5.5%	5.1%
Low growth	5.6%	6.0%	6.8%

Modelling the impact of the public spending cuts in Scotland

As discussed above, it is anticipated that years (up to 2014-15) will see a combination of significant reductions in Government spending and increases in taxation. This follows increases in public spending over the last ten years which were themselves larger than seen in the previous decade. Between 2000-1 and 2009-10, Scottish Government figures report that the budget of the Scottish Parliament – funded through the block grant from the Westminster government through the Barnett formula – has risen in real terms by an average of 5.0% a year. The Scottish Government's own estimates from April 2010 predicted a reduction in real terms spending in 2010-11 of around 1% and then three years of an average real terms declines in public spending in Scotland of 2.9%. This would mean that by the year 2014-15, spending under the control of the Scottish Government would be 12.4% lower than in 2009-10, removing £3.7billion from annual public spending in this year.

The future budgets for the Scottish Government – determined as it is through the Barnett formula – will be clearer following the UK Governments Comprehensive Spending Review, scheduled to report on the 22nd of October 2010. Only after this will we know the spending of individual departments (DELs) for the three years, 2011-12, 2012-13, 2013-14, along with the anticipated budget for the Scottish Parliament over these three years. By all scenarios, however, it sees likely that these years will see large declines in public spending in Scotland in real terms. To the extent that the spending reductions across Westminster departments are greater than those anticipated after March's Budget, it is likely therefore that government spending in Scotland in 2014-15 will be approximately 14% lower in 2014 – 2015 than in 2009 – 10 (a greater reduction than the 12.4% anticipated by Chief Economic Advisor in April 2010's "Outlook for Scottish Government Expenditure" publication.

As of the first quarter of 2010 there are 610,200 people employed (headcount figures) in the public sector in Scotland (including public sector financial institutions, or 573,900 excluding these). To the extent that government spending directly employs workers across Scotland it is likely that reducing government spending will impact upon the number of jobs in the public sector over the next five years. Reductions in spending and employment in the public sector will also have impacts across the Scottish economy. This will happen as other industries across Scotland currently rely on the public sector for contracts and as purchasers of goods and services, and so they will be exposed to the reduction in public spending. With lower current spending – reducing the wage costs of the public sector in Scotland – it is difficult to imagine any sector of the Scottish economy being untouched.

We have modelled the impact on the Scottish economy of the reductions in government spending in Scotland. This uses a CGE model of the Scottish economy which captures the linkages between industries within Scotland and between purchasers of goods and services, including Government, produced by industries in Scotland. We can use it to demonstrate the impact on the Scottish economy of reductions in government spending in Scotland.

Reducing spending in the public sector by 14% over five years significantly acts to reduce demand across the Scottish economy. Use of the CGE model reveals that the impact of 14% government spending cuts in Scotland would not only reduce employment in the public sector, but also in sectors which are themselves linked to the public sector. Employment in the public sectors is lower by 89,559 with non-public sector employment falling by 36,681. Sectors which are themselves non-public, but which see reductions in employment are Distribution (which includes Retail activities) – which sees employment falling by almost 14,000 – and the Communications, finance and business sector – which sees employment falling by 13,500. The sectoral employment change of this simulation is shown in the first column of Figure 1. In this case, after five years employment across the Scottish economy is 126,240 lower than what it be without the public spending cut.

However, with lower government spending in Scotland, and lower demand for labour, wage costs in Scotland may be lower than they otherwise would be without the spending cut. This would reduce costs to industries in Scotland, and has been argued by some could lead to increased employment in the Scottish economy as firms grow. When we allow for wages to adjust to the levels of economic activity in Scotland, we get the sectoral employment change shown in the second column in Figure 1. Overall, employment is lower by 64,178 than it otherwise would be without the spending cut, and so is reduced from the previous case. Employment falls in the public sectors by 77,942, but increases in the non-public sectors by 13,764.

In conclusion therefore, spending cuts in Scotland of 14% over five years will lead to employment falling in both our scenarios. If wage costs in Scotland are lower than they would be without the public spending reduction, employment in the private sectors is increased – since wages are reduced – but not by sufficient to offset the declines in employment in the public sector.

Table 1 shows the absolute changes in sectoral employment in both scenarios – labelled Fixed price and Flexible price, respectively. Table 2 shows the key economic variables after five periods, and reveals that GDP/GVA in Scotland is 4.2% lower under the Fixed price scenario (i.e. when real wages are fixed and substitution is not possible). The GVA decline is less (-1.6%) under the Flexible price scenario, largely due to real wages being 1.8% lower than they otherwise would be, and partially offsetting the fall in employment through increased competitiveness of Scottish exports.

Figure 1: Sectoral change in employment after five years following 14% reduction in real government spending in Scotland

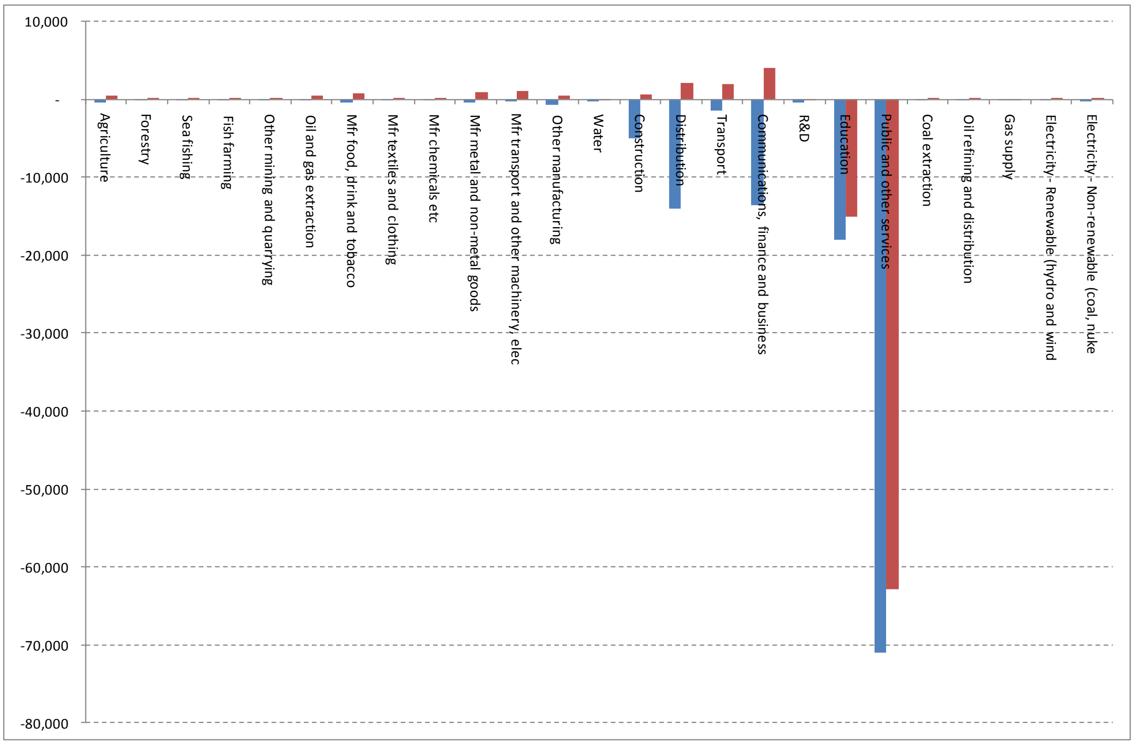


Table 1: Change in sectoral employment after five periods, absolute differences from base

	Fixed price	Flexible price
Agriculture	-374	562
Forestry	-14	66
Sea fishing	-4	98
Fish farming	-1	30
Other mining and quarrying	-45	47
Oil and gas extraction	-94	456
Mfr food, drink and tobacco	-408	733
Mfr textiles and clothing	-101	174
Mfr chemicals etc	-108	166
Mfr metal and non-metal goods	-400	927
Mfr transport and other machinery, elec	-181	1,048
Other manufacturing	-702	511
Water	-207	-95
Construction	-5,003	667
Distribution	-13,974	2,168
Transport	-1,390	1,963
Communications, finance and business	-13,514	3,979
R&D	-384	-53
Education	-17,959	-14,977
Public and other services	-71,009	-62,817
Coal extraction	-30	22
Oil refining and distribution	-36	16
Gas supply	-69	-1
Electricity - Renewable (hydro and wind	-27	14
Electricity - Non-renewable (coal, nuke	-205	120
Total	**-126,240**	**-64,178**

Table 3 shows the percentage changes in sectoral employment and GVA after five periods under the two modelled scenarios. As with the employment level changes shown in Table 1 , the sectors which are most dependent on the public spending for their activity suffer the most – with big reductions in output and GVA in the “Education” and “Public administration” sectors. While the size of these reductions in these two sectors is reduced under the “Flexible price” case, overall – as shown in Tables 1 and 2 – aggregate employment and GVA in Scotland is lower than it otherwise would be but for the reductions in government spending in Scotland.

Table 2: Key economic variable changes after five periods, % difference from base

	Fixed price	Flexible price
GDP	-4.2%	-1.6%
Investment	-2.9%	-0.7%
Real wage	0.00	-1.8%
Exports	0.00	2.1%
Imports	-2.8%	-3.0%

Table 3: Sectoral output and GVA change after five periods, % difference from base

	Sectoral change in output		Sectoral change in GVA	
	Fixed price	Flexible price	Fixed price	Flexible price
Agriculture	-1.1	0.8	-1.1	0.9
Forestry	-0.5	1.8	-0.5	1.8
Sea fishing	-0.1	2.3	-0.1	2.4
Fish farming	-0.1	1.9	-0.1	1.9
Other mining and quarrying	-1.8	1.2	-1.8	1.2
Oil and gas extraction	-0.4	1.3	-0.4	1.3
Mfr food, drink and tobacco	-0.9	1.0	-0.9	1.1
Mfr textiles and clothing	-1.0	1.2	-1.0	1.5
Mfr chemicals etc	-0.9	0.7	-0.9	0.9
Mfr metal and non-metal goods	-0.9	1.5	-0.9	1.8
Mfr transport and other machinery, electronic and electrical engineering	-0.3	0.9	-0.3	1.2
Other manufacturing	-1.9	0.8	-1.9	1.1
Water	-4.9	-2.1	-4.9	-1.8
Construction	-3.5	0.1	-3.5	0.4
Distribution	-2.6	0.1	-2.6	0.2
Transport	-1.6	1.8	-1.6	1.9
Communications, finance and business	-2.8	0.3	-2.8	0.4
R&D	-4.2	-1.0	-4.2	-0.6
Education	-9.1	-7.6	-9.1	-7.4
Public and other services	-10.8	-9.1	-10.8	-8.8
Coal extraction	-2.5	1.4	-2.5	1.7
Oil refining and distribution	-1.9	0.1	-1.9	0.4
Gas supply	-3.4	-0.7	-3.4	-0.2
Electricity - Renewable (hydro and wind	-2.4	0.5	-2.4	0.5
Electricity - Non-renewable (coal, nuke	-2.4	0.7	-2.4	0.8

Grant Allan
24 June 2010