Outlook and appraisal

Overview

Growth in the Scottish economy appears to be weakening again after some survey evidence of a pickup in the first quarter of the year. GDP fell slightly in the final quarter of last year and could fall again in the first quarter, despite survey evidence, if the Scottish economy continues to track the UK. The recovery from the Great Recession of 2008 - 2009 remains weak with Scottish GDP still just under 4% below its prerecession peak and employment 3% below. The UK figures are -4.3% and -1%. The recovery of Scottish GDP relative to the UK is also being overstated by the effect of falling oil and gas production. When oil and gas production is removed from the data the Scottish recovery is relatively weaker than previously thought with UK ex oil and gas GDP -3.5% below its pre-recession peak while the Scottish figure is -3.6%.

It is now clear that the recovery in output stalled after mid-2010. We are strongly of the belief that the UK government fiscal austerity programme is the main culprit, with the added effects of the impact on business confidence of the developing problems in the Eurozone and the impact of rising commodity price driven inflation on real incomes and consumption.

Considerable slack remains in the Scottish labour market, although the main indicators of unemployment, activity and employment rates have moved into line with the UK. However, it should be remembered that at the start of the Great Recession the Scottish unemployment rate was well below the UK rate at 3.9% compared to 5.5%. Jobs appear to be being created again but it is clear from the data to September 2011 that full-time jobs are falling while part-time and temporary jobs are rising. This is significant, because it is not impossible that labour demand has fallen with GDP even though the number of jobs rose recently and unemployment fell.

This would be the case if the loss of labour input through the fall in full-time employment was greater than the gain in labour services from the rise in part-time employment.

Growth is clearly weakening again as both domestic and external demand growth falters. Household income growth is sluggish, with wage growth falling below 2% in the UK in the first quarter. Investment spending picked up at the end of last year but appears to be weaker in Scotland than the UK. Despite the positive contribution of net trade to growth in 2011, manufacturing export performance in Scotland faltered in the final quarter with zero growth but volume was up by 4.8% over the year. Manufacturing export volumes are still nearly 6% below their prerecession peak.

Fiscal consolidation continues to bite and there is much more to come with only 12% of planned total spending cuts completed by the end of financial year 2011-12 but with large reductions already made in capital spending. The inflation rate is falling back more slowly than the Bank of England expected due to the effects of high energy prices, and the Eurozone crisis is worsening again. The monetary policy regime is permissive but even with £325 billion of quantitative easing the leverage on the real economy is limited because the economy continues at an effective zero interest bound in a liquidity trap. It remains to be seen whether the Bank and the Chancellor's new "funding for lending" scheme, announced on 14 June, with up to £100 billion to cut bank funding costs in exchange for lending commitments will work to any significant extent in raising aggregate demand in the economy. We doubt it. It is against this background that we have produced our forecasts for 2012, 2013 and 2014.

We have made minimal changes to our GDP forecast for three years. Annual growth is expected to remain weak but positive this year at 0.4%, rising to 1.6% in 2013 and 2.5% in 2014. Net jobs will continue to fall this year by around 15,000 but will turn

positive in 2013 with an additional 20,000 jobs forecast, rising to 36,000 in 2014. Unemployment, on the ILO measure, will rise to 246,000 by the year end, rising further to 252,000 by end 2013 but thereafter it should fall reaching 238,000 by the close of 2014.

The situation in the Eurozone complicates the forecasting picture considerably. We assume in our central forecast that for the medium term there is an essential "muddling through" process, with further support given first to peripheral country banking systems and then to their sovereigns if necessary. Through this process confidence remains low and growth is weak as austerity policies are not, or are insufficiently, relaxed. Moreover, complete steps to full fiscal union with Eurobonds and sizable fiscal transfers between countries, which would finally resolve the crisis, seem unlikely.

But there remains the risk of a Greek default and even exit from the Euro in the near term and the break-up of the Euro in the medium term. We have therefore considered these two outcomes as possible scenarios to assess their likely impact on the Scottish economy. This is therefore not a forecast but a 'what-if' impact study, with the impact on the Scottish economy assessed at the end of three years after each event occurs.

Our main conclusions are: First, a Greek exit leads to a drop in GDP in Scotland of -1.2% and a loss of just under fifty thousand jobs. This is not trivial but small compared to the other events show. Secondly, the consequences of the breakup of the Euro would be a major economic event for Scotland even though we are not in the Euro. With an estimated drop in GDP of -5.3% and loss of -144,200 jobs the effect would be comparable in scale to the effects of the recent Great Recession and worse than our simulation estimate of the effect of fiscal consolidation.

Recent GDP performance

Official data for the final quarter of last year show that growth in the Scottish economy turned negative again, although less so than in the UK. GDP contracted by 0.1% in

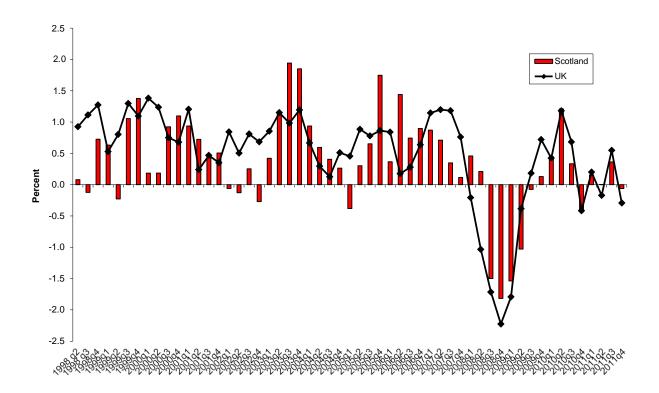
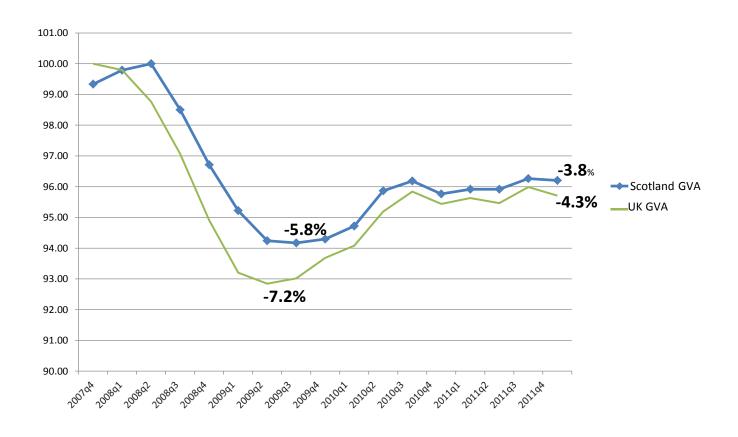


Figure 2: GVA in recession and recovery Scotland and UK to 2011q4 (Relative to pre-recession peak)



the fourth quarter compared to - 0.3% in the UK - see Figure 1. But over the year, GDP grew by less in Scotland, 0.5%, than in the UK 0.6%.

Overall Scottish GDP continues broadly to track the UK economy, which as we noted in the previous Commentary has been a feature of the "recovery" from the Great Recession of 2008 to 2009. Figure 2 shows the nature of that recovery in both the UK and Scotland.

By the end of the fourth quarter last year Scottish GVA stood at -3.8% below the pre-recession peak three and a half years ago. In contrast, the figure for UK GVA is -4.3%. However, while the depth of the recession was greater in the UK, at -7.2%, than in Scotland, -5.8%, the recovery of UK GDP has been somewhat faster than in Scotland.

Subtle changes to this picture are evident once we remove oil and gas from the GDP data. The Centre for Public Policy for Regions (CPPR) produced¹ at the end of April an important analysis of UK and Scottish GDP growth in 2011. A key finding of the CPPR analysis is that a comparison of overall GVA between Scotland and the UK in 2011 provides

a distorted comparison of the relative performance. This is because overall GVA includes all of North Sea Oil and Gas production in the UK figure but only includes on-shore activities in the Scottish figure. A more correct comparison is to compare GVA for the two excluding the extraction of oil and gas.

Normally this matters little if the performance of oil and gas is not much out of line with overall performance. But during the past year oil and gas production fell by 18% and 22% respectively, which has affected UK GDP and export performance. The effect of this fall is to dampen UK growth relative to Scotland.

In 2011, overall GVA grew by 0.5% in Scotland and 0.6% in the UK. But when oil and gas extraction is excluded the unfavourable gap between Scotland and the UK widens, with Scottish growth of 0.5% and UK growth of 1%.

We have taken CPPR's analysis further and extend the comparison back to the start of the recession and subsequent recovery. The analysis is presented in Figure 3.

Figure 3: GVA ex oil & gas extraction, recession and recovery to 2011Q4

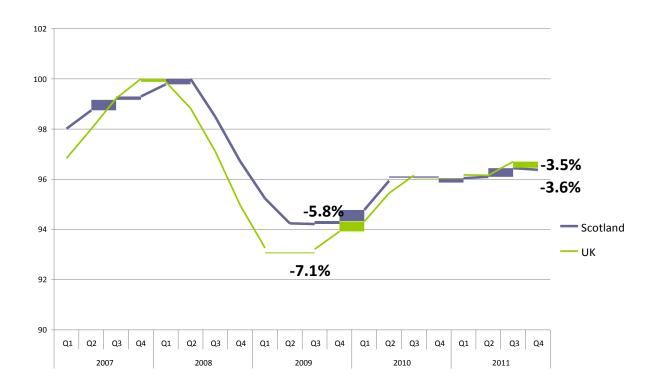


Figure 3 reveals that when overall GVA is considered UK growth is more damped recently relative to Scotland, compared to the position when oil and gas extraction is excluded where the UK recovery is relatively stronger. The

main conclusion from this analysis is that the Scotland's recovery from recession has been weaker relative to the UK than previously believed.

Figure 4: Scottish and UK Services GVA Growth at constant basic prices 1998q2 to 2011q4

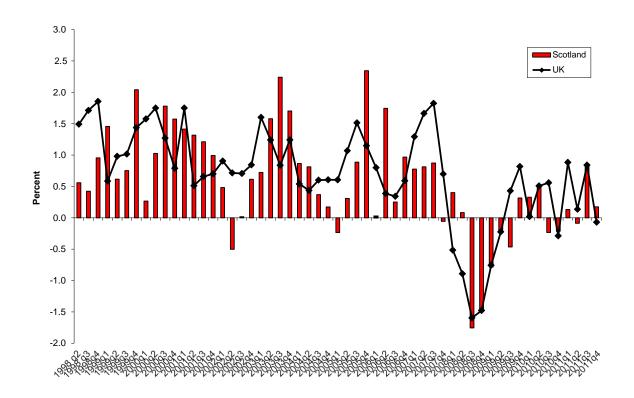
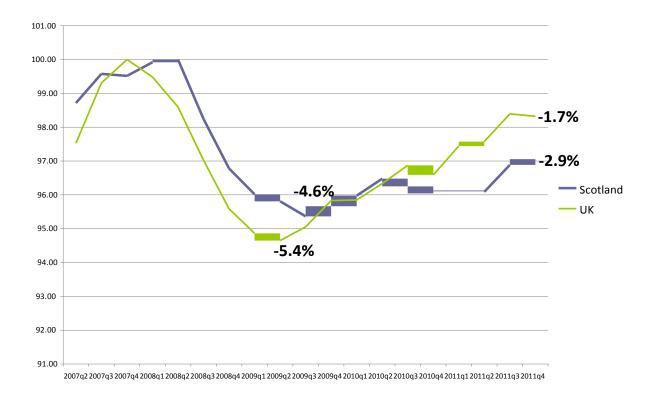


Figure 5: Services GVA in recession and recovery Scotland and UK to 2011q4



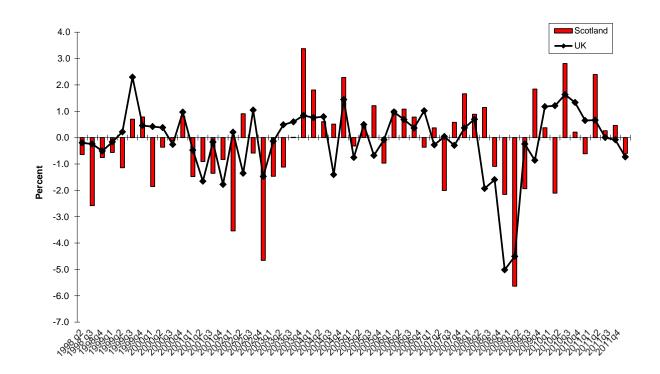


Figure 7: Manufacturing GVA in recession and recovery Scotland and UK to 2011q4

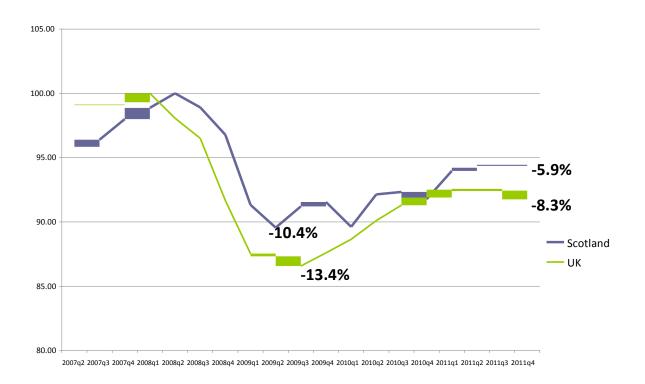
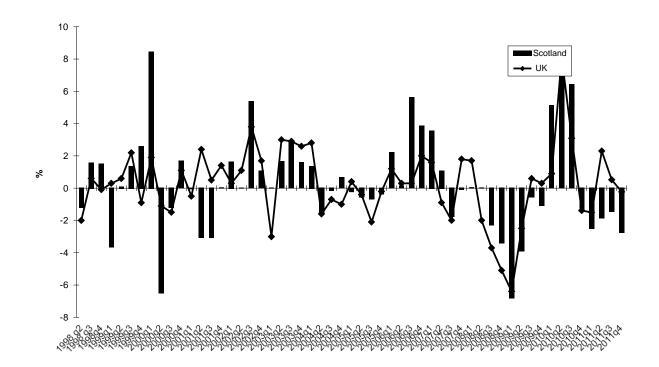


Figure 8: Scottish and UK Construction GVA Volume Growth 1998q2 - 2011q4



The Scottish service sector, which accounts for 73% of GDP, grew by 0.2% in the fourth quarter, compared to a fall of -0.1% in UK services - see Figure 4.

But UK services sector grew by 1.6% over the year while Scottish services could only muster growth of 0.4%. This underlying weakness of the recovery in Scottish services is highlighted in Figure 5.

Scottish services GVA was still -2.9% below its prerecession peak compared to -1.7% in the UK. Given that the
loss of Scottish service sector output in the recession was
-4.6% quite a bit less than the -5.4% output loss in services
in the UK, we can see that there has been little recovery in
Scottish services since the trough of the recession. In
numbers, the recovery from the trough amounts to 1.8% in
Scotland compared to 3.9% in UK services.
In manufacturing, GVA contracted by -0.6% in Scotland
compared to a marginally greater fall of -0.7% in the UK.

Growth over the year was also stronger in Scottish manufacturing with GVA rising by 3% compared to 2% in the UK - see Figure 6. It is quite clear from Figure 6 that the recovery in UK manufacturing stalled after the second quarter 2010. The same cannot be said for Scottish manufacturing which while weakening after the summer of 2010 has exhibited a more variable patter than its UK counterpart. Figure 7 charts the recession and recovery for both UK and Scottish manufacturing.

As with services the loss of manufacturing output in recession was less than in the UK, but the recovery was initially weaker in Scotland but then strengthened relative to the UK after 2010. GVA in manufacturing in the recession dropped by -10.4% in Scotland compared to -13.4% in the UK. In the most recent quarter manufacturing GVA in Scotland stood at -5.9% below its pre-recession peak compared to -8.3% in the UK. A driver of the recovery in manufacturing is exports, which appears to have faltered in 2011. (See more on drivers of recovery below.) The construction sector is going through a very difficult time in both Scotland and the UK. Figure 8 charts the recent growth performance.

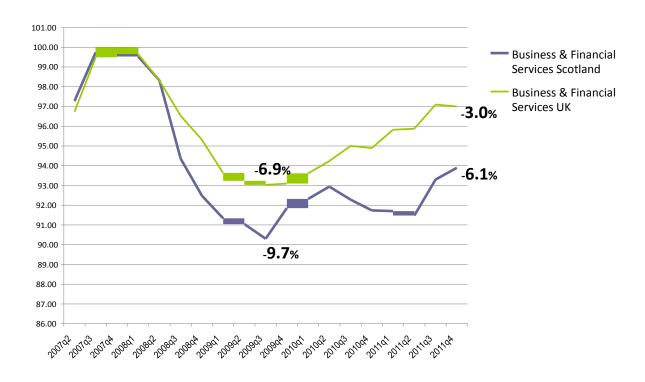
Construction output has been much weaker in Scotland for the last four quarters. In the fourth quarter GVA fell by -2.7% compared to a fall of -0.2% in the UK. Scottish construction growth was weaker over the year too with output falling by -1.5% compared to a rise of 2.8% in the UK. Figure 9 shows the performance of GVA in construction in Scotland and UK during the recession and recovery.

The drop in output in the recession was large and identical in Scotland and the UK at -18.3%. Scottish construction bounced back more strongly than its UK counterpart, until 2010 quarter 3 and then has contracted for 5 successive quarters, while UK construction contracted for 2 quarters, grew for 2 quarters, then contracted in the latest quarter. The result was that by 2011q4, construction GVA in

Figure 8: Scottish and UK Construction GVA Volume Growth 1998q2 - 2011q4



Figure 10: Business & Financial Services: Recession and Recovery to 2011q4



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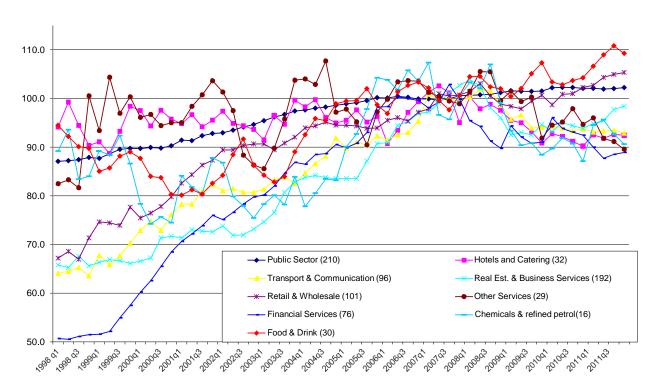
Scotland was -10.8% below its pre-recession peak while UK construction was -7.6% below its peak. A further large fall in UK construction output of -4.8% was recorded in the first quarter of this year. This was the largest decrease in construction output for 12 quarters and cannot be unrelated to fiscal consolidation where, so far, the bulk of the cuts have fallen on capital expenditure and buildings especially.

Within services, the most important sector by contribution to GDP, business and financial services - 26% of overall GDP and 36% of service sector GVA - grew by 0.6% in Scotland but contracted by -0.1% in the UK during the fourth quarter of last year. Over the year, though, the sector grew by only 0.3% in Scotland compared to much stronger growth of 2.1% in the UK. Figure 10 shows the path of GVA in the sector during the recession and recovery relative to its pre-recession peak.

As noted in the previous Commentary it is clear from the chart that this important sector experienced both a stronger recession in Scotland and a weaker recovery. GVA fell by -6.9% in UK business and financial services during the

recession whereas in Scotland the contraction was -9.7%. By the latest quarter the sector in the UK was -3.0% below its pre-recession peak while its Scottish counterpart was -6.1% below, which is little different from the trough of the recession in the sector in the UK. Elsewhere in services Distribution, Hotels and Catering again grew more quickly in Scotland in both the recent guarter and over the year. Growth was 0.2% in the quarter compared to -0.4% in the UK, while over the year the Scottish sector grew by 3% while its UK counterpart grew by 0.7%. In contrast, as in the third quarter both Transport, Storage, Information & Communication and Government & Other Services performed slightly better in the UK than in Scotland. The Transport et al sector contracted by -0.6% in the quarter while the sector in the UK contracted by -0.5%. Over the year, the sector contracted by -0.7% in Scotland while expanding by 1.3% in the UK. Similarly, in the government & other services sector growth was again flat in the quarter but was positive at 0.4% in the UK. Over the year, public sector output fell in Scotland by -0.6% but exhibited growth of 1.5% in the UK.

Figure 11: Growth of key sectors in Scotland 1998q2 to 2011q4



Within manufacturing, we again only have data for Scottish sectors. The main sectors driving manufacturing growth of -0.6% in the fourth quarter were Engineering & Allied and Other manufacturing and repairs, with growth of 1.9% and 0.2%, respectively. The Metals sector contracted by -3.5% during the quarter, while chemicals and refined petroleum contracted by -2.2%, food & drink contracted by -1.4% and output in textiles & clothing fell by -0.9%. Yet, again most of

the main manufacturing sectors grew quite strongly over the year. Let us hope the downturn in the latest quarter proves to be temporary, although as we note below the most recent UK outturn and Scottish survey evidence does not offer much hope for that.

Figure 11 charts the growth of key Scottish sectors over the last 14 years.

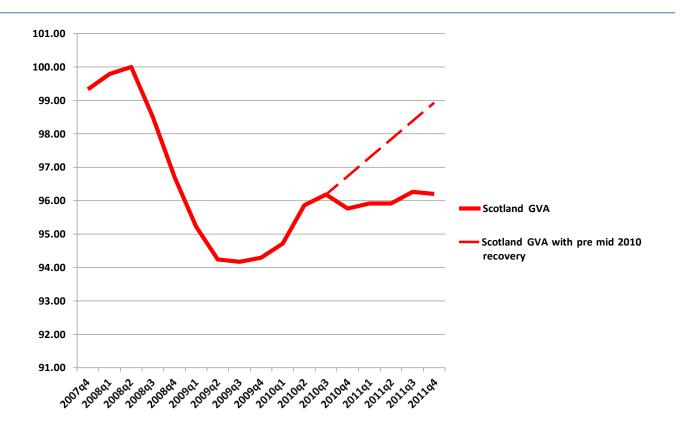


Figure 13: Expenditure component contributions to nominal Scottish GDP growth – percentage points

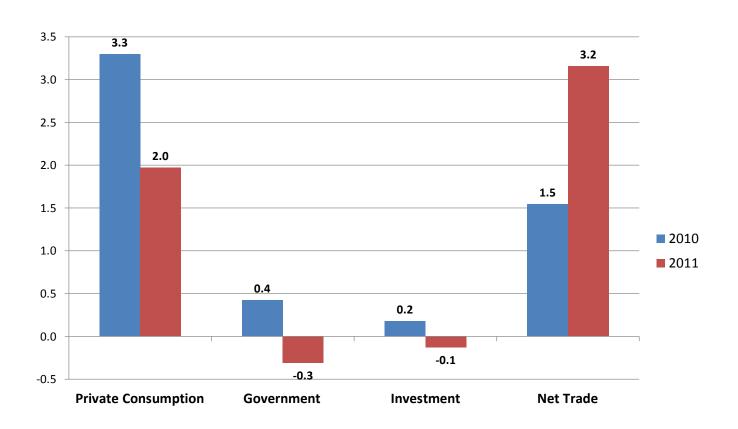


Figure 14: Scottish and UK jobs, 16 and over, compared to pre-recession peak

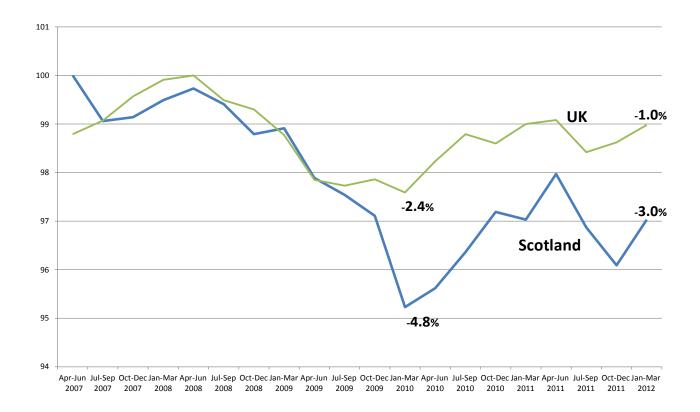
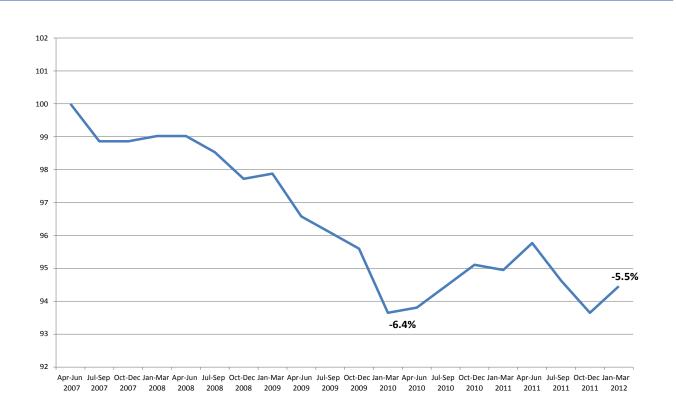


Figure 15: Scottish Employment to Working Population ratio compared to pre-recession peak in April-June 2007 to Jan-Mar 2012



In the past we have included electronics on this chart. However, the scale of the changes in electronics over the period from rapid growth in the late 1990s to collapse in the early 2000's and then continuing decline, compresses the performance of the other sectors when included on the same chart. What is now clear is that the contribution of electronics directly to GDP is guite small. In 2007, the contribution to overall GVA amounted to 1.6% and only 13% to manufacturing GVA. Back in 2000 the sector contributed more than 6% to GVA. Chemicals which is included in Figure 11 makes a similar current contribution to GVA. What Figure 11 reveals is the change in sectoral fortunes over the decade. The strong growth of financial services, decline in the recession and limited recovery is evident. Transport & Communication and Real Estate and Business Services are two other sectors that grew strongly before the recession and then were badly affected by it. But, in contrast, the Food & Drink sector experienced a fairly weak downturn during the recession and continued to grow strongly thereafter. Retail & wholesale also picked up quickly. The remaining sectors shown, with one exception, have yet to recover from recession and remain well below their pre-recession peak. The exception is the public sector, which grew steadily over the period with recent stagnation but fiscal consolidation has not resulted in a systematic contraction yet.

Drivers of Recovery

The weak recovery of Scottish GDP begs the question what the drivers of recovery are and what they might be. It is quite clear that the Scottish and UK economies were beginning to recover from the recession by mid-2010. But after that the recovery faltered as Figure 12 shows.

So what is the explanation of the stalled recovery?

We are strongly of the belief that the UK government fiscal austerity programme is the main culprit, with the added effects of the impact on business confidence of the developing problems in the Eurozone and the impact of rising commodity price driven inflation on real incomes and consumption.

From the Scottish Government's National Accounts Programme (SNAP) web pages, we can calculate the change in the contribution of the main expenditure components to Scottish nominal GDP growth in 2010 and 2011. This is an experimental dataset so it must be used with caution.

In 2010, Scottish GDP at current prices - nominal GDP - grew by 5.4%. In 2011 the growth rate dropped to 4.7%. Figure 13 breaks down the nominal growth into the main spending components in the two years.

What is clear from these data is that there was a switch in growth away from domestic spending to net trade as the UK government had hoped. However, that wasn't sufficient to offset the absolute fall in government and investment

spending and the slowdown in private consumption growth. There was a 1.7 percentage point switch in favour of net trade against falls of 1.3 percentage points in private consumption, 0.7 percentage points in government expenditure and 0.3 percentage points in investment. This doesn't prove that austerity was the cause but it looks suspiciously so.

It is highly probable that the rise in VAT lowered private consumption, which in turn led to less investment. Moreover, lower government spending also will itself have affected investment in buildings and plant and equipment. That said we should not forget that real incomes of households fell as inflation rose and that may have affected consumption too. But if the Scottish economy is to recover in the face of continuing fiscal austerity it is difficult to envisage much improvement in the other expenditure components under present conditions of continuing Euro crisis, weak real income growth, a flat housing market, and weak demand conditions in the main OECD economies. A further fall in the inflation rate may affect consumption favourably as real incomes rise, or fall by less. But as we noted in earlier Commentaries if households are striving to reduce their debt levels then a rise in real income may be used to pay down debt further rather than encourage more spending.

The Labour Market

The Scottish labour market data for the quarter January to March provide evidence of an improvement. Unemployment fell by 10,000 over the quarter to 220,864, as employment rose by 24,000, to 2,482,164. The Scottish unemployment rate moved into line with the UK rate of 8.2% and the employment rate, at 71.2%, stayed above the UK rate of 70.5% for the 16-64 age group. For all aged 16 and over, the employment rate in Scotland moved from slightly below the UK rate to parity at 58%. But within these numbers male employment is rising (+29k) while female employment is falling (-5k).

The employment position of Scotland compared to the UK during recession and recovery to the latest data point is indicated in Figure 14.

Even with the recent one-quarter rise in employment the level of jobs in Scotland is still 3% below the pre-recession peak. UK employment, in contrast, stands at 1% below its pre-recession peak. Moreover, as we have noted before in this Commentary the jobs position is worse than the bald employment figures suggest because the working population and hence labour supply is growing. Figure 15 provides data on the ratio of employment to working population. What this chart shows is that even with the recent rise in jobs the ratio is 5.5% below the pre-recession peak. That is only a little above the situation at the trough of the recession when the ratio fell to 6.4% below the pre-recession peak. The implication of this statistic is that there are significant unused labour reserves in the Scottish labour market and, in relation to the available labour supply, the

Figure 16: Scotland's Recession and Recovery by Type of Employment

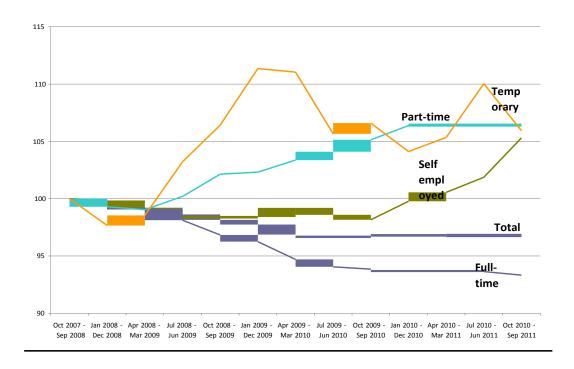
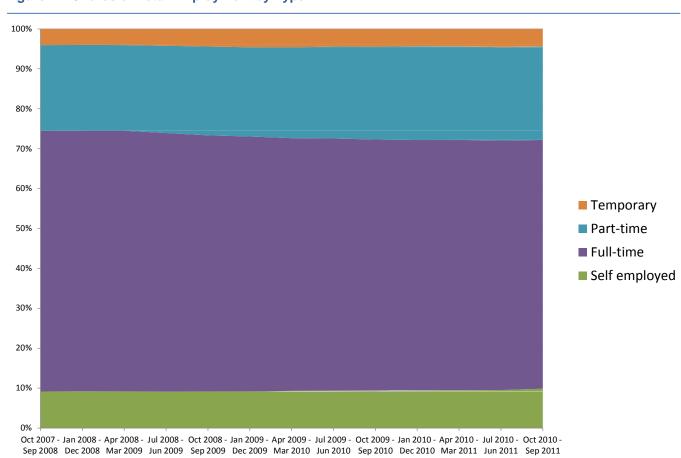


Figure 17: Shares of Total Employment by Type



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recovery of employment has been exceptionally weak. But that is generally the case across the UK, so that despite the weaker jobs recovery in Scotland, unemployment is equal to the UK rate and is the 6th lowest amongst the 13 UK regions and territories. It should also be remembered that Scotland started the recession with an unemployment rate below the UK - at 3.9% compared with 5.5% - hence the greater relative jobs loss has caused the unemployment rate and other main labour market indicators to move into line with the UK.

At first sight the recent jobs data from the Labour Force Survey (LFS) appear to conflict with what we know about the real economy. GDP fell in the UK in successive quarters to the first quarter and fell in Scotland in the final quarter of last year. We will not know what has happened to Scottish GDP in the first quarter until mid July. However, some analysts believe that the ONS is underestimating recent GDP growth, while others contend that we are slipping into a sustained recession again. So, there is no guarantee that unemployment will continue to fall. Indeed, it could worsen again.

Our estimates suggest that there needs to be Scottish GDP growth of 2% per year - approximately 0.5% per quarter - for unemployment to stabilise. Faster growth for it to fall and with slower GDP growth, the unemployment rate will rise. The economy seems to be quite a bit below the 2% per annum threshold at the moment.

Another reason for caution about these LFS data is the high sampling variability. There is a huge range within which one can have 95% confidence that the Scottish LFS estimates fall. So, while the LFS estimates that jobs rose by 24,000 in January to March, the actual change could have - with 95% certainty - been between minus 34,000 and plus 83,000. For unemployment, the LFS estimate is a 10,000 fall but the actual change in unemployment might have been anywhere between a fall of 42,000 and a rise of 22,000. A similar range of variation applies to the change in the numbers economically active and inactive.

Finally, we should be concerned that the data as currently released do not allow us to drill down and ask how the 24k jobs change is broken down into part-time jobs and full-time jobs, or hours worked. Nor do we know the age composition of the recent unemployment change. Yes, we are given data in the latest release on part-time and full-time jobs, hours worked and the age distribution of employment and unemployment. But these data are only provided up to the year Oct 2010 - September 2011. So, we just don't know what's happening recently.

It is clear from the data to September 2011 that full-time jobs are falling while part-time and temporary jobs are rising. This is significant, because it is not impossible that labour demand has fallen with GDP even though the number of jobs rose recently and unemployment fell. This would be the case if the loss of labour input through the fall

in full-time employment was greater than the gain in labour services from the rise in part-time employment. It is a possibility. Figure 16 shows the differential behaviour of types of employment in recession and recovery. Part-time and temporary employment dipped briefly but then picked up quickly less than a year after the recession began. Full-time employment continued to fall throughout the period, while self employment returned to its pre-recession peak in mid-2010 and continued to rise thereafter.

The rising share of part-time and falling share of full-time in total employment is shown in Figure 17.

Forecasts

Background

Real GDP in the UK economy contracted further by 0.3% in the first three months of this year. With UK GDP also estimated to have fallen by 0.3% in the final quarter of last year the latest quarterly data place the UK firmly in recession. The decline in first quarter real GDP was principally affected by a 4.8% fall in construction output and a further contraction in oil and gas production. On the expenditure front in the first quarter, growth was largely driven by government consumption and a slight pickup in household spending. Net trade contributed negatively to growth as exports remained flat and imports picked up slightly. The fall in inventories, or stock building, was the main expenditure driver of negative growth, which does not augur well for production in later quarters. Survey evidence for the first quarter in the UK appears to conflict with the UK GDP data as produced by ONS. The biggest difference is in the performance of construction, where the PMI indicates that growth was much stronger and indeed positive. The PMI also suggests that service sector growth was considerably stronger than the 0.1% outturn in the ONS data. But after March the PMI surveys indicate that the UK economy was slowing down in April and then again in May. A weakening in the growth of demand both domestically and from abroad, especially the Eurozone where growth is clearly slowing, with a slowdown evident in emergent markets as well. On the domestic front households are reporting concerns about their finances. Firms report weak demand for goods and services and export orders have been particularly hit. Markit, who produce the PMI surveys, suggest that UK growth should be weak but still positive in the second quarter to June.

The Scottish economy contracted in the final quarter of last year but at -0.1% the contraction was marginally less than the fall in UK GDP. First quarter Scottish GDP/GVA data are not available until the third week in July, so we must rely on business survey evidence. The Scottish Chambers' Business Survey (SCBS) revealed that the trends in all sectors in the first quarter were better than a year ago. There were more signs of a modest but uncertain recovery in 2012 as demand in the Scottish economy remained

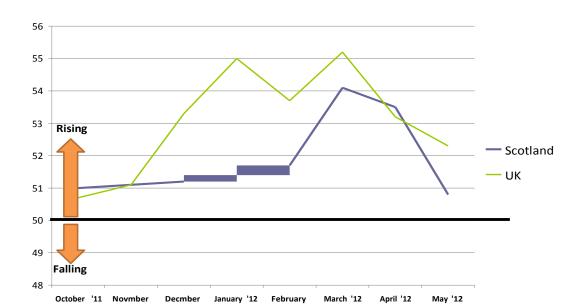


Figure 18: Bank of Scotland PMI Private Sector Index: Scotland and UK October 2011 – May 2012

weak. The Bank of Scotland PMI of private sector activity in Scotland noted that the private sector lost momentum in both April and then especially in May after picking up in the first quarter. Figure 18 charts the Scottish position compared to the UK.

In May growth was just positive according to the PMI but was weaker than in the UK.

So, the evidence is that growth is clearly weakening again as both domestic and external demand growth falters. Household income growth is sluggish, with wage growth falling below 2% in the UK in the first guarter. Investment spending picked up at the end of last year in both Scotland and the UK but remains below the pre-recession peak in both jurisdictions and appears from the SNAP data to be weaker in Scotland than the UK. Despite the positive contribution of net trade to growth in 2011 manufacturing export performance in Scotland faltered in the final quarter with zero growth but volume was up by 4.8% over the year. Manufacturing export volumes are still nearly 6% below their pre-recession peak. Fiscal consolidation continues to bite and there is much more to come with only 12% of planned total spending cuts completed by the end of financial year 2011-12 but with large reductions already made in capital spending. The inflation rate is falling back more slowly than the Bank of England expected due to the effects of high energy prices, and the Eurozone crisis is worsening again. The monetary policy regime is permissive but even with £325 billion of quantitative easing the leverage on the real economy is limited because the economy continues at an effective zero interest bound in a liquidity trap. It remains to be seen whether the Bank and

the Chancellor's new "funding for lending" scheme, announced on 14 June, with up to £100 billion to cut bank funding costs in exchange for lending commitments will work to any significant extent in raising aggregate demand in the economy. We doubt it. It is against this background that we have produced our forecasts for 2012, 2013 and 2014.

GVA Forecasts

For our latest GVA forecasts we continue the presentational procedure adopted in the previous Commentary. We present only a central forecast but use estimated forecast errors to establish the likely range that the true first estimate of the growth of Scottish GVA will lie between. In this forecast, we extend the forecast horizon to include 2014

Table 1 presents our forecasts for Scottish GVA - GDP at basic prices - for 2012 to 2014. The forecasts are presented in more detail in the Forecasts of the Scottish Economy section of this Commentary below.

Table 1 shows that we have made minimal changes to our forecast for three years. For 2012, we saw no reason to change out February forecast, which is for very weak but still positive growth and similar to the rate of growth seen through 2011. The increase in output measured for the third quarter of 2011 was stronger than we expected (a 0.5% increase), and broadly tracked the UK growth in that quarter. As we noted in February, our forecast of 0.4% for 2012 is not inconsistent with one, or possibly two, quarters of negative growth through 2012. In February, we forecast growth in 2013 of 1.7%, so our latest forecast is revised down slightly reflecting continuing weakness in both

domestic and external demand. Our forecast for 2014 is also reduced slightly for the same reasons.

Table 1: Forecast Scottish GVA Growth, 2012-2014

GVA Growth (% per annum)	2012	2013	2014
Central forecast November forecast	0.4	1.5 <i>1.7</i>	2.5 2.6
UK median independent new (May)	0.4	1.7	2.2
Mean Absolute Error % points	+/- 0.495	+/- 1.06	+/- 1.216

Table 1, also compares our GVA forecasts with the median of latest independent forecasts for the UK in, 2012 and 2013 and the average of the new independent medium-term forecasts for 2014 that are published by the UK Treasury. These show that we expect Scottish growth to continue to be much the same as UK growth: identical this year, a little weaker next year and a little stronger in 2014. So, we are now forecasting growth of 0.4% in 2012, 1.5% in 2013, and 2.5% in 2014. Given our previous forecast errors the lower and upper bounds for growth in 2012 are expected to be -0.1% and 0.9%, for 2013, 0.5% and 2.7%, and for 2014 1.3% to 3.7%.

Production and manufacturing output are again projected to be the main sectoral drivers of growth, with Production forecast to grow by 1% this year compared to service sector and construction growth of 0.3% which are largely flat-lining. In 2013, production continues to be the main sectoral driver of growth with growth of 3.6%. Stronger growth is projected for services and construction of 1% apiece but the two sectors will still be recovering slowly. It is not until 2014 that we see much pick-up in growth. GDP is forecast to rise by 2.5%, while production growth rises appreciably to 5.7%, service sector growth moves up to 1.7% and the growth of construction GVA reaches 1.6%.

Employment Forecasts

Table 2 presents our forecasts for net employee jobs for the 3 years 2012 to 2014 in terms of a central and upper and lower forecasts.

Table 2 indicates that our year-end employee jobs forecast are similar to those presented in the February Commentary. On the central forecast, net jobs grow by -0.7% in 2012, 0.9% in 2013, and by 1.6% in 2014. The number of employee jobs in Scotland is forecast to decline during 2012 by just less than 15,000 jobs. Within the sectors, however, we are forecasting a reduction in jobs in the service sectors of under sixteen thousand jobs. The production sector adds 2,400 jobs, while construction

sheds a further 2,100 jobs. Through 2013 and 2014 we forecast increases in employee jobs in our central forecast, with annual increases of around 20 thousand and 36 thousand respectively. There are job increases across all the main sectors, with a majority being created in the service sector. However, we continue to forecast a "rebalancing" of employment within the services sectors towards non-public activities as fiscal consolidation continues. Construction employment is forecast to increase in 2013 and 2014 as spending on (private) investment projects eventually returns with renewed confidence in the recovery.

Table 2: Forecast Scottish Net Jobs Growth in Three Scenarios, 2012-2014

Upper February forecast	2012 -5,200 <i>-4,816</i>	2013 41,000 47,244	2014 61,750 63,745
Central February forecast	-14,950 -15,988	19,950 23,213	36,050 38,023
Lower February forecast	-25,350 <i>-27,695</i>	-1,700 <i>-9,250</i>	10,450 <i>12,126</i>

Unemployment Forecasts

The key unemployment forecasts are summarised in Table 3 below.

Table 3: ILO unemployment rate and claimant count rate measures of unemployment under each of the three forecast scenarios 2012-2014

ILO unem _i	oloyment	2012	2013	2014	
Rate (ILO	un/TEA	9.3%	9.5%	9.0%	
16+)	Numbers	246,100	252,400	238,200	
Claimant count					
Rate (CC/	CC+total	5.7%	6.5%	6.1%	
	Numbers	152,550	176,700	169,100	

The ILO rate is our preferred measure since it identifies those workers who are out of a job and are looking for work, whereas the claimant count simply records the unemployed who are in receipt of unemployment benefit. We have revised down our forecasts for unemployment at the end of 2012. In part this is due to revisions in the employee jobs series affecting our forecasts for the level of employment at the end of 2011 and impacting on the

absolute level of jobs (and also unemployment) in the future. We are also mindful that the claimant count has risen more slowly than ILO unemployment since the start of the great recession in 2008. Our forecasts for unemployment in 2013 are broadly unchanged from those made in February (although the ILO rate forecast has increased slightly from 9.3% to 9.5% at the end of 2013), while our forecasts for 2014 are largely in line with our earlier forecasts. Our forecast for unemployment on the ILO measure at the end of 2012 is now 246,100. We are expecting the unemployment position to deteriorate slightly in 2013 compared to 2012 due to weaker output and employment growth. Unemployment is now forecast to be 252,400 by the end of that year. In 2014, unemployment falls to 238,200 as growth and job creation pick up during the year.

Impact of Breakdown of the Eurozone The

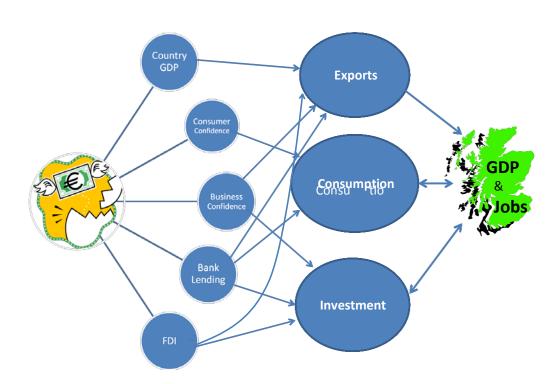
situation in the Eurozone has deteriorated again recently. As I write the yield on Spanish 10 year bonds has gone above 7%, making financing costs of government debt prohibitive or leading to a significant crowding out of key government expenditures. The Greek election will have taken place on Sunday after we have gone to press with the strong likelihood of a result which will put into government a party or parties that will refuse to accept the austerity programme that Germany and the other Eurozone countries are imposing upon it. There is therefore a strong likelihood of default and the value of Greek bonds will collapse. This will in turn affect Eurozone and other country banks that hold Greek debt. The balance sheet of Greek banks will contract and most Greek banks will become insolvent, lending will contract and many banks could fail. The default is likely to lead to a loss of Eurozone and IMF financing to Greece - about 180 billion Euros in loans which in turn will generate a further contraction of public expenditure and loss of economic activity and jobs. In these circumstances, the new Greek Government would be likely to seek new loans but they probably would not be forthcoming given the default. If they can get new loans then it will be possible to re-capitalise the Greek banks and the financial system in Greece would survive and Greece could stay in the Euro or use it as a shadow currency. In the absence of such loans Greece would almost certainly leave the Euro. The government would have to find a means of funding its necessary expenditure and so would be likely to re-denominate all Greek bank deposits from Euros into a new Drachma thus introducing a new currency. This new currency would drop dramatically in value in relation to the euro and other currencies as soon as it was traded on the currency markets. Capital controls would have to be introduced. Inflation would take off and output would be likely to fall further. But in the longer term a new currency at a much lower exchange rate would restore the country's competitiveness and could help bring growth back to the economy. This is broadly what happened after Argentina broke its peg to the US dollar in December 2001. The problem for Greece is that its export

sector is small and so it would also need severe demand reduction to choke off imports.

Meanwhile, the default could start a process of contagion. Banks in other Eurozone countries as well as banks in other countries such as the UK and Scotland, would need to contract loans faced with some reduction in their balance sheet as debt is written off. In addition, the fact of a Greek default and exit from Euro would likely lead to a capital flight and selling of government bonds from other peripheral Eurozone countries as holders fear defaults in these countries, or loss of asset value if the country leaves the Eurozone and introduces its own devalued currency. Government bond yields would be rising in these countries making it difficult if not impossible to finance their deficit and debt position and so the attractiveness to governments of default and exit from the euro would rise. The capital flight leading to rising bond yields would in turn undermine the balance sheets of local banks as well as foreign banks holding peripheral country bonds. That would lead to cutbacks in bank lending and a likely credit crunch both within the affected countries and elsewhere. Output would begin to fall first in the peripheral countries and then even in the core countries such as Germany. This in turn would via trade and foreign investment flows impact on countries across the world. And at some point if other countries began to leave the euro, the euro currency area could break up.

Of course this is only a possible process and not a forecast. The Eurozone has the European Financial Stability Fund (EFSF) and the new European Stability Mechanism (ESM), which may have sufficient funds to limit contagion from a Greek default and exit. But there again it may not. Our central forecast assumes that some compromise is made with Greece so that it neither fully defaults nor exits from the Euro. In addition, we assume that for the medium term there is an essential "muddling through" process, with further support given first to peripheral country banking systems and then to their sovereigns if necessary. Through this process confidence remains low and growth is weak as austerity policies are not, or are insufficiently, relaxed. Moreover, complete steps to full fiscal union with Eurobonds and sizable fiscal transfers between countries, which would finally resolve the crisis, seem unlikely.

But there remains the risk of a Greek default and even exit from the Euro in the near term and the break-up of the Euro in the medium term. We have therefore considered these two outcomes as possible scenarios to assess their likely impact on the Scottish economy. This is therefore not a forecast but a 'what-if' impact study, with the impact on the Scottish economy assessed at the end of three years after each event occurs. We do not allow for any offsetting monetary and fiscal policy actions that could be introduced by the Bank of England and the UK government. In this we



follow and draw upon the work of ING who have modelled the impact on GDP and jobs in major countries, but not Scotland, of these two events. Our analysis, modelling of the transmission mechanism and estimates of impact are discussed in greater detail in the Forecasts of the Scottish Economy section of this Commentary below.

The impact of both a Greek default and euro exit and a complete break-up of the Euro would impact upon the Scottish economy through several different channels. These are shown in Figure 19.

The figure suggests that the transmission mechanism embraces five main channels, through which GDP and jobs in the Scottish economy would be affected:

- · country GDP
- consumer confidence
- business confidence
- bank lending
- foreign direct investment.

Changes in the GDP of Eurozone countries and other major economies in the wider global economy such as the US and the UK would affect Scottish GDP and jobs through

a reduction in Scottish exports to such countries. Reduced consumer confidence would bear directly on household consumption in Scotland. Reduced business confidence would affect the willingness to export and invest. Reductions in lending from Scottish and UK banks as they sought to rebuild their balance sheets would be likely to affect all three sources of demand: exports, consumption and investment. A reduction in FDI flows from the Eurozone but also the US and elsewhere as their economies contract would clearly affect investment but also exports. Finally, as GDP and jobs began to fall directly as a result of these Euro events multiplier effects would kick in leading to further secondary falls in domestic Scottish consumption and investment and hence GDP and jobs.

The results of this modelling exercise are presented first for GDP and then for jobs in Figures 20 and 21, respectively, below.

It should again be stressed that these estimates are the result of a "what if" simulation with estimated impact after 3 years with all other things held equal. One countervailing force could be any monetary and fiscal policy responses

Figure 20: Scottish GDP Impact of Euro Breakdown Compared to other Events

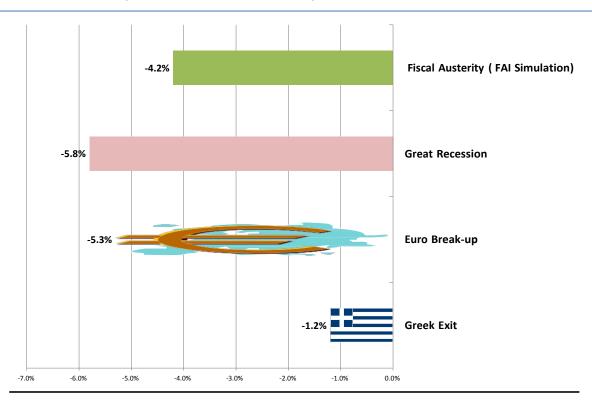
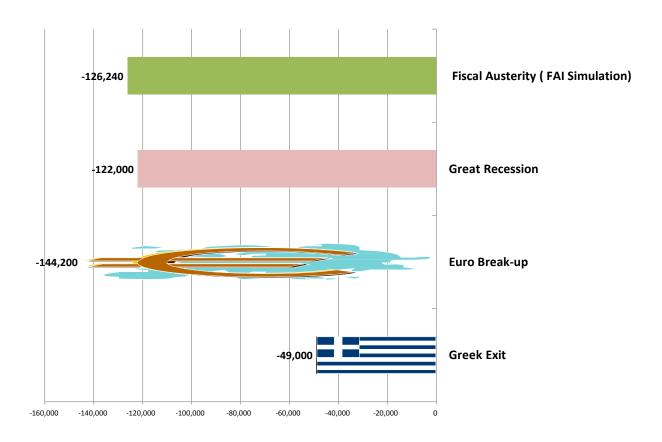


Figure 21: Scottish Jobs Impact of Euro Breakdown Compared to other Events



introduced by the Bank of England and the UK Government.

If that caveat is kept in mind we can draw the following conclusions. First, a Greek exit leads to a drop in GDP in Scotland of -1.2% and a loss of just under fifty thousand jobs. This is not trivial but small compared to the other events show. Secondly, the consequences of the breakup of the Euro would be a major economic event for Scotland even though we are not in the Euro. With an estimated drop in GDP of -5.3% and loss of -144,200 jobs the effect would be comparable in scale to the effects of the recent Great Recession and worse than our simulation estimate of the effect of fiscal consolidation. Such an event only a few years after two major exogenous shocks to the Scottish economy - Great Recession and Fiscal Consolidation - is something that we must hope can be avoided. Because if it does occur, the damage to the Scottish economy will be felt for many years to come.

Brian Ashcroft 15 June 2012

¹ See http://www.cppr.ac.uk/media/media_231879_en.pdf