

# The Scottish economy

## Forecasts of the Scottish economy

### Summary

Domestically, Scottish consumers are facing continuing income growth weakness and have increased savings, cutting back on spending. Falling inflation will help relieve the pressure on household budgets, but inflation is not predicted to fall below target until the end of 2012. Government spending reductions will focus on current spending after significant reductions in capital spending in 2011-2 – alongside private sector investment falling – damaged activity in the construction sector through 2011. Outside Scotland, the Euro area seems unlikely to have the same political or institutional shape at the end of our forecast horizon. In light of mixed but generally weak survey data we have revised down growth prospects for 2013 and 2014, and held our forecast for growth in 2012 constant at 0.4%. The number of jobs in Scotland have fallen by just over 20,000 each year of 2010 and 2011 and are forecast to decline to the end of 2012. Unemployment forecasts have been revised down as employee jobs series for Scotland have been themselves revised, and we are now forecasting that (on the ILO measure) that the unemployment rate will increase to 9.3% by the end of 2012.

In addition to our central forecast, we explore the consequences for the Scottish economy of two seismic events affecting the Euro area: the exit of Greece for the Euro currency, and the complete breakdown of the single currency area. These are discussed in Box A.

### Monetary policy

The rate of inflation in the Consumer Price Index measured 3.0% in April 2012, falling from 3.5% in March. This was the first month since February 2010 that CPI inflation had been within the inflation target set by the Chancellor of CPI of 2% with  $\pm 1\%$  band either side. Earlier, May's Inflation Report, produced by the Bank of England noted that underlying growth in the UK domestic economy remains likely to be weak through 2012 with no domestic pressure acting to increase inflation. While the Bank's Monetary Policy Committee have revised upward their expectations of the short-term path for inflation slightly, it remains likely in the Committee's judgement that inflation will fall below target towards the end of 2013.

At their most recent (June) meeting of the monetary policy committee, the nine members voted to maintain interest rates at 0.5%, and maintain the size of the bank's Asset Purchase Programme. Downside risks to UK growth, covered later in this commentary, mean that it appears expected that the size of the APP could be extended later in 2012 as inflation falls towards and below target.

## Fiscal policy

Scottish budget changes for the financial year 2012-13 were addressed in November's Commentary. DEL elements of resource spending were transferred to capital spending – some £382 million between 2012 and 2015 above the previously forecast level of capital spending – principally securing increased funding for road and transport projects, rural broadband and public building projects. The declining public funds in real terms are forecast to be maintained as the UK government implements fiscal consolidation and budget reductions are passed on through the Barnett Formula.

Changes to the fiscal structure of public revenue in Scotland through the Scotland Act received Royal Assent on the 1st of May 2012 and means that from 2016 the Scottish Parliament will have powers relating to varying the income tax rate in Scotland, as well as £5 billion worth of borrowing powers. In addition, the Bill passes Stamp Duty Land Tax and Landfill Taxes to the Scottish Parliament. Earlier this month the Finance Secretary, John Swinney, announced the start of consultations on replacing Stamp Duty Land Tax (which raised around £330 million in Scotland in 2010/11) with "Land and Buildings Transaction Tax". Further, he announced that a new agency, Revenue Scotland, would be set up this year to administer and collect taxes under the newly-devolved powers.

## Output

The latest figures reveal that Scotland saw a contraction in GDP of 0.1% in the final quarter of 2011. This was similar to the contraction in UK GDP registered for the same period. Preliminary figures for the first quarter of 2012 for the UK suggest that the UK has entered formal recession, with a second consecutive quarter of negative growth.

Over the year, Scottish GDP rose by 0.5% in 2011. Our forecast for 2011 GDP growth – published in February 2012 – was for GDP to grow by 0.8%. Some of the difference between our forecast for growth and the (first estimate) of growth was due to data revisions. Data for growth figures in 2011 were revised down in the latest release, largely due to downward revisions of estimates for growth in the construction sector, as well as revisions downward to the electricity and gas sector.

At a sectoral level, the construction sector figures display expected weakness, and register the fifth successive quarter of decline. This mirrors the decline in output for the sector at a UK level, affected significantly by reductions in investment spending, particularly public spending through 2011 on 2010. The service sector – accounting for around three quarters of Scottish output – has seen output expanding marginally for two quarters now, but with rates of growth below 1% this is insufficient to make up for weakness in construction and production, where growth is flat over the final quarter of 2011.

As noted elsewhere in the Commentary, survey evidence on the most recent developments in Scotland point to weaknesses in business and consumer confidence. Low rates of income growth, coupled to slow rates of growth in spending and the rate of growth in new orders slowing, indicates that it is likely that growth in the first quarter of 2012 has been slow, while the data we have for the second quarter (i.e. April and May) for the PMI index reports a sharp deterioration in activity. It is unclear however how much of the differences with one year ago from these survey is down to special factors in the first half of 2011 such as the Royal Wedding/Easter, reported on in last year's commentaries. What appears to be clear from the surveys is that any positive signs appear relatively muted in aggregate.

In April, preliminary figures for the UK confirmed analysts' fears that output had declined for a second successive quarter – marking an official "double-dip" recession in the UK. Output contracted by 0.2%, with particular weaknesses in construction and production sectors. Construction, in particular, is experiencing particularly tough times across the UK with output estimated to fall by 3% in the first quarter alone. Preliminary estimates are typically subject to revision as more data become available, but the ONS note that it is not impossible that construction figures could be revised down further. The services sector at the UK level, in particular financial services and public services appears to be contributing strongest to growth in the first quarter.

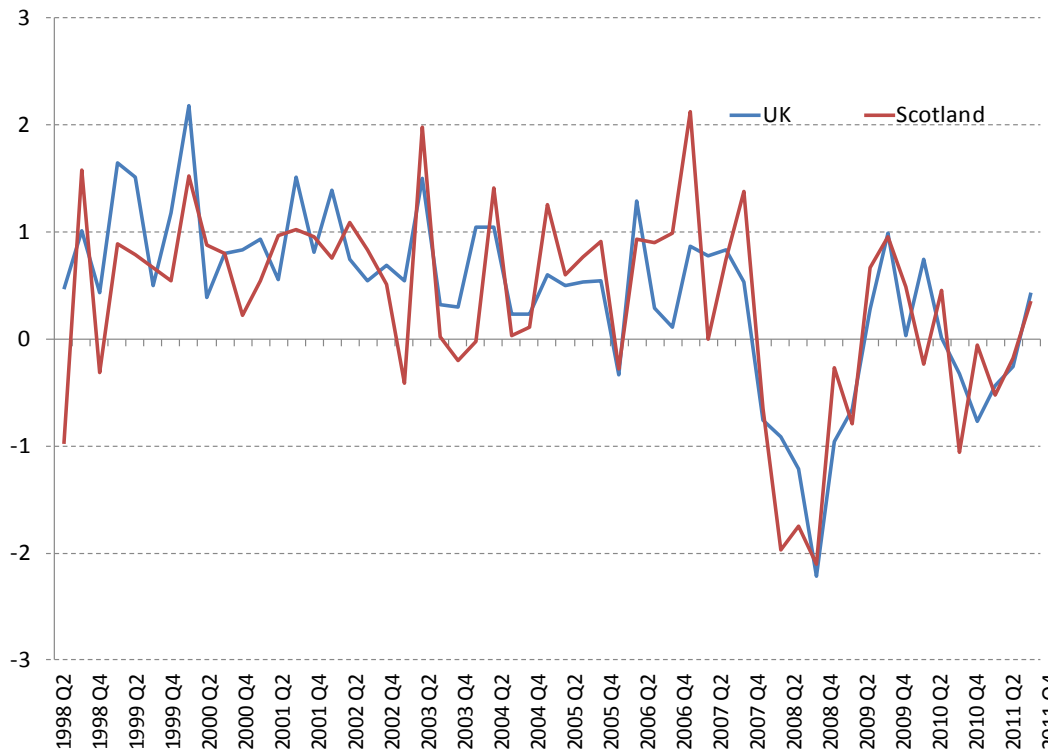
At the UK level the most recent survey evidence points to a falling business environment through the second quarter of 2012. The Purchasing Managers Index fell sharply between April and May, with a particular fall in "new orders". Evidence suggests that the particular weakness faced by firms was the domestic (i.e. UK) market, with little change to export orders. These, and other, UK survey data raised expectations of the MPC extending the Quantitative Easing programme earlier than perhaps was previously expected.

The average of new forecasts of UK growth in 2012 remains 0.4%, but there is a more skewed distribution of forecasts towards negative outcomes over the last six months. The Office of Budgetary Responsibility's forecast for growth in 2012 of 0.8% is lower than only four of the thirty-seven forecasts gathered by HM Treasury in May 2012.

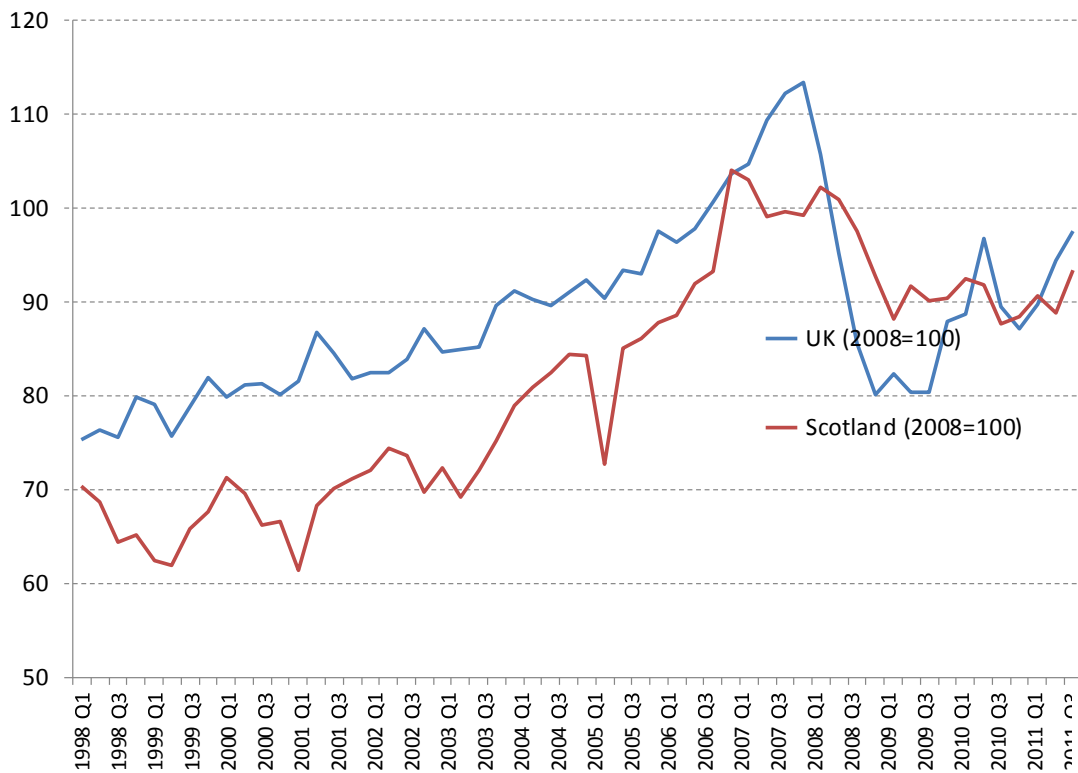
## Households

Household income growth remains sluggish across the UK. Wage growth (excluding bonuses) in the private sector has fallen from 2.9% in the first half of 2011 to below 2% in the first quarter for 2012. In part this reflects declining bonuses. Regular pay growth in the private sector (for the UK as a whole) has fallen slightly to just over 2% - broadly similar to their rate of increase one year ago. Unit labour costs continue to increase by long term average rate of around 2% with slow wage growth offset by slow productivity

**Figure 1: Quarter on quarter change in real household consumption, Scotland and UK, 1998Q2-2011Q4**



**Figure 2: Real gross fixed capital formation, Scotland and UK, 1998Q1 to 2011Q3, 2008=100**



As previously noted, we use our calculated forecast errors from previous forecasts and first release outturn values to data are only for private sector pay settlements, with public sector pay freezes (for those earning over £21,000) entering a second year in April, and following low increases in 2009-10, the real income of public sector workers has reduced considerably over the last four years.

On the spending side, surveys of Scottish household spending continue to suggest a difficult trading environment for retailers across the country. This is despite official statistics indicating a rise in retail sales in the first quarter of 2012. As noted elsewhere in the commentary making comparisons between retail figures for 2012 based on 2011 are made more difficult by one-off weather and other trading events, e.g. Easter, panic buying of fuel, etc. Survey data from retail sites continue to point to poor sales and a weak trading environment.

The difficult micro picture is matched by official data on household expenditures, although these have ticked up slightly over the last two quarters into positive growth. Aggregate household spending in real terms in Scotland is around 5.9% lower in the latest quarter than in the first quarter of 2008 and broadly unchanged from the first quarter of 2009. For the UK, the decline since the first quarter of 2008 is slightly less at -5.2%. Consumer spending since the first quarter of 2009 (aside from a slight rise through the end of 2009 and start of 2010), has remained broadly flat. Looking at the quarterly changes, Figure 1 shows that the latest quarter (Q4) spending by households actually increased in real terms for both Scotland and the UK, for the first time since the third quarter of 2010. This followed four quarters of decline in both Scotland and the wider UK economy.

## Investment

Latest official (experimental) data on investment spending in Scotland shows that there was a small (real) uptick in spending in Q4 of 2011, mirroring that seen in the UK. In real terms however over the year, investment spending was up marginally over the year, while falling slightly at the UK level. While the experimental nature of the Scottish data suggest we should interpret these as changes as illustrative, a more longer term analysis of investment spending in Scotland (Figure 2) suggests that spending in Scotland is below its pre-recession peak and (compared to 2008 levels) is below the UK figure by around 3 per cent. As previously noted, these data – prepared as part of the Scottish National Accounts Project – suggest that investment spending fell less heavily in Scotland initially following the 2008-9 recession. Most recent data suggest that investment spending in Scotland has not picked up as much as in the rest of the UK, where investment activity remains weak.

## Trade

The latest data on exports from Scotland to the (non-UK) rest of the world – available from the index of Manufactured Exports published in April – show that in the fourth quarter

show the potential range of outcomes around our central forecast. We use estimated errors from “Summer” forecasts of 2011, Scottish goods exports remained flat, and grew by 4.8% in 2011 compared to 2010. Strong growth in the “Food, drink and tobacco” sector over the year, matched by growth of more than 5% in the chemicals/fuel sectors, as well as a strong performance in the (relatively small) textiles sector. Weak export performance across the manufacturing sectors, including metals sectors, pulled down Scottish exports through the year.

The recovery to growth in overseas markets appears to be sporadic and likely to have large risks to the downside over both 2012 and 2013. In the US – a major export market for Scotland – appears to be recovering, with the OECD’s Economic Outlook (May 2012) noting private sector led growth recovering with relatively strong asset recoveries and well developed household deleveraging. The OECD also addressed the scale of distance still to travel in the Euro area to re-establish the economy towards a more balanced path. Prospects for growth in 2012 and 2013 remain weak, with continued weak, or falling, confidence, volatile financial markets and less-developed deleveraging, as well as continuing financial imbalances and competitiveness differences between the core and peripheral countries. Add in elections in some countries within the Euro area, and a relatively strong showing by parties opposed to the conventional medicine of fiscal consolidation and reforms then political, as well as economic, concerns point to an uncertain future for the Euro area over the coming years.

It would not be outside the bounds of possibility that the shape of the Euro area could be radically different by the end of 2013 than it is now. Such changes could take the form either of institutional changes to the Euro area such as raising the inflation target to raise wages in the countries running a trade surplus, steps towards the issuance of “Eurobonds”, perhaps with tighter fiscal controls over the medium term. While unlikely, it is not impossible that countries might exit the currency or, in the absolute extreme, the breakdown of the Euro project with countries reverting to national currencies.

Our central forecast assumes that combinations of institutional and economic steps are taken such as to allow the Euro area to slowly recover to growth from 2014 onwards. As alternatives, we explore the potential impact of these two more extreme events – a single country such as Greece leaving the Euro area, and the complete breakdown of the Euro area – in Box A.

Growth forecasts for major (non-UK) export markets for Scotland are given in Table 1. Growth forecasts by both the IMF and OECD for these countries have generally improved in their most recent publications, but the increases in growth estimates are typically small. Growth prospects appear strongest in the US, but the IMF and OECD identified downside risks to growth from large fiscal consolidation due

**Table 1: GDP growth forecasts for 2012 and 2013 for major overseas (non-UK) export markets for Scottish products, plus UK, Euro area as a whole and China, including changes from earlier forecasts where available**

	2012				2013			
	OECD (May 2012)	Change from November 2011	IMF (April 2012)	Change from January 2012	OECD (May 2012)	Change from November 2011	IMF (April 2012)	Change from January 2012
USA	2.4%	+0.4%	2.1%	+0.3%	2.6%	+0.1%	2.4%	+0.2%
Netherlands	-0.6%	-0.7%	-0.5%	-0.8%	0.7%	-0.8%	0.8%	n/a
France	0.6%	+0.3	0.5%	+0.3%	1.2%	-0.2%	1.0%	No change
Belgium	0.4%	+0.1%	0.0%	n/a	1.3%	-0.3%	0.8%	n/a
Germany	1.2%	+0.6%	0.6%	+0.3%	2.0%	+0.1%	1.5%	No change
Ireland	0.6%	-0.4%	0.5%	n/a	2.1%	-0.3%	2.0%	
UK	0.5%	No change	0.8%	+0.2%	1.9%	+0.1%	2.0%	No change
China	8.2%	-	8.2%	No change	9.3%	-	8.8%	No change
Euro area	-0.1%	-0.3%	-0.3%	+0.2%	0.9%	-0.5%	0.9%	+0.1%

**Sources:** International Monetary Fund "World Economic Outlook", April 2012 and OECD Economic Outlook, May 2012

to begin in April 2013. Both organisations warn about the dangers of fiscal consolidation "pulling the rug" from under the nascent recovery. fiscal consolidation due to begin in April 2013. Both organisations warn about the dangers of fiscal consolidation "pulling the rug" from under the nascent recovery

### Forecasts for the Scottish economy

The major unknown around forecasts of the Scottish economy over the next three years is developments in the Euro area, and the future of the single currency. We have explored the potential impacts of two significant developments (a Greek exit from the Euro, or the complete break-down of the currency) elsewhere in this commentary. As well as continued uncertainty surrounding the future of trading partners, there is continued domestic weakness. It is likely that the first three months of the year saw a decline in output (mirroring the decline seen at the UK level), although it appears that Scottish survey evidence points to a weaker performance than the UK as a whole in the second quarter of 2012. Combined with weak household income and earnings data and confidence, supports our continued view that growth through 2012 and 2013 will be below trend.

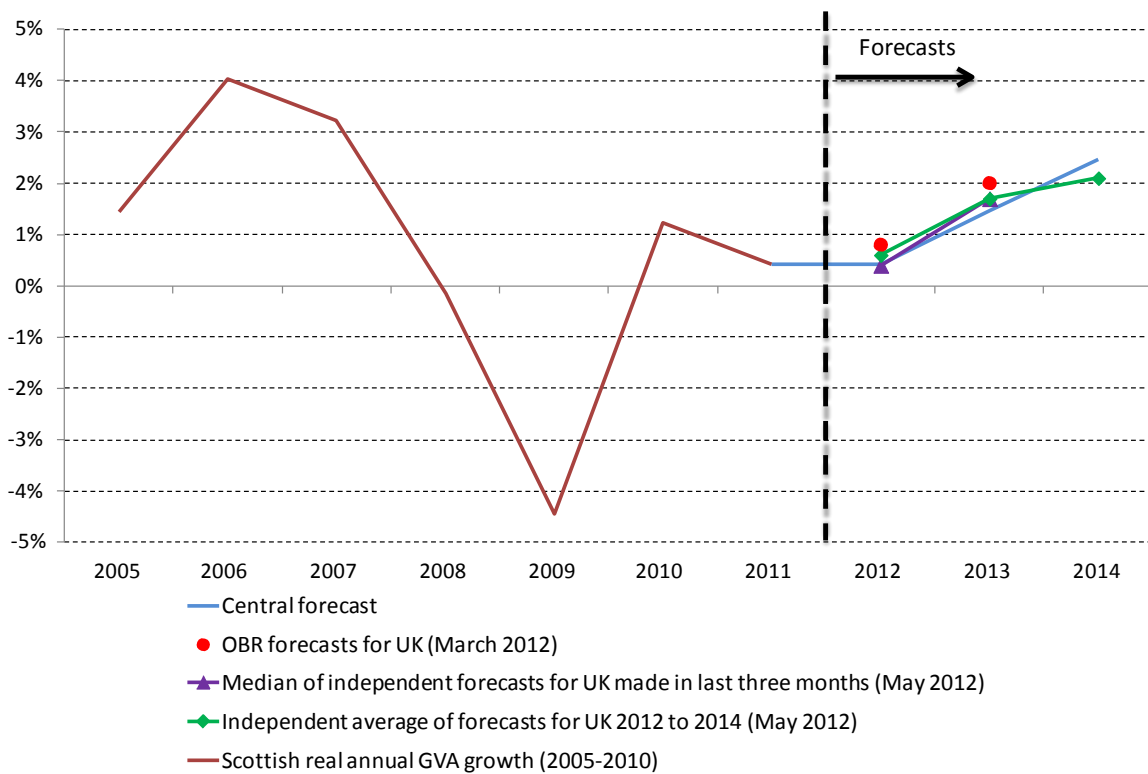
The outlook for domestic demand remains weak, with wage growth slowing from levels during 2011 and public sector pay freezes continuing. Household deleveraging appears to be continuing with savings rates at unprecedented levels (for the period that data is available for Scotland). If households have moved to a permanently higher level of savings then the consequences for short-term developments in the Scottish economy would be worsened.

Our forecasts for household expenditure is for spending to increase slowly through 2012 in real terms as inflation eases, gradually rising to stronger growth by 2014.

Government spending continues to reduce in real terms, with significant reductions in current spending at the UK government level impacting on non-devolved areas of government activity in Scotland. The IFS suggested that by the end of financial year 2011-2, only 12% of the planned total cuts to spending had been made, with only 6% of the planned cuts to current spending (i.e. the largest reductions made in capital spending). With significant reductions already made to the capital budgets alleviated in Scotland by the movement of income from current to capital spending over the next three years, the reduction in current spending will be greater than previously assumed (albeit only marginally at the aggregate level). Recent evidence on inventories (for the UK) suggests that there has been a down-shifting of stocks through the first half of 2012, indicating a lack of demand for increased production.

With almost half of Scottish overseas (i.e. non-UK) exports going to the Eurozone, the prospects for an export-led recovery in the short-term appear slim. Both the IMF and OECD forecast that the euro area is forecast to decline through 2012, and return to positive growth in 2013. Growth opportunities in non-European markets appear stronger, such as the USA, although changes to the US fiscal policy stance could impact upon growth through 2013.

**Figure 3: GVA growth for Scotland, 2012 to 2014 and comparisons to UK forecasts, annual real %**



## Results

Following February's forecasts, we forecast annual changes over the period 2012 to 2014. As previously noted, we are forecasting year-on-year real growth in Scottish Gross Value Added (GVA).

The aggregate forecasts for growth in GVA in Scotland for 2012, 2013 and 2014 are shown in Figure 3. This also shows (for comparison purposes only) the forecasts for the UK over the same period, from a number of different sources. These include the Office for Budgetary Responsibility, the median of new (i.e. within the last three months) forecasts produced by professional forecasters for 2012 and 2013, as well as the average of forecasts for 2014 taken broadly from these same (City and non-City) forecasting organisations. The average of forecasts for the UK between 2012 and 2014 are taken from the collection of forecasts gathered by the Treasury in May 2012.

We have held our forecast for 2012 constant at 0.4%, similar to the rate of growth seen through 2011. This forecast for annual growth would not be inconsistent with a quarter of negative growth in the first half of 2012, as of the survey indicators suggest. Overall this would represent a continuation of the slow recovery from the "Great recession" of 2008-9 we have been forecasting over the last two years, which would be consistent with previously observed recoveries from financial crises. Our forecast for 2013 is revised down and now stands at 1.5% (down from 1.7%), while our 2014 forecast is lowered by 0.1% to now stand at

2.5%. As alluded to earlier, and expanded on in Box A, the downside risks to these forecasts from seismic developments in the Eurozone and a "Credit Crunch II" remain, and have perhaps increased in likelihood since we last reported.

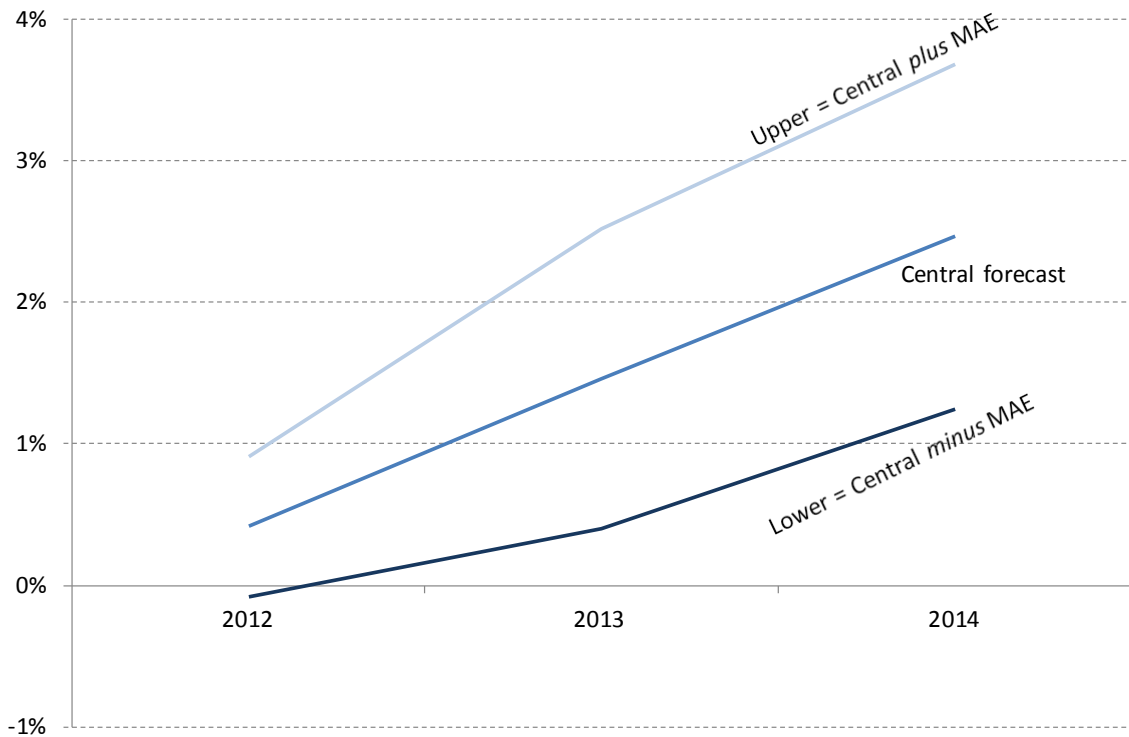
In addition to the aggregate growth forecasts, we present in Table 2 our forecasts for GVA growth by broad industrial grouping, i.e. for the "production", "services" and "construction" sectors.

**Table 2: Growth by sector in the Scottish economy, 2012 to 2014**

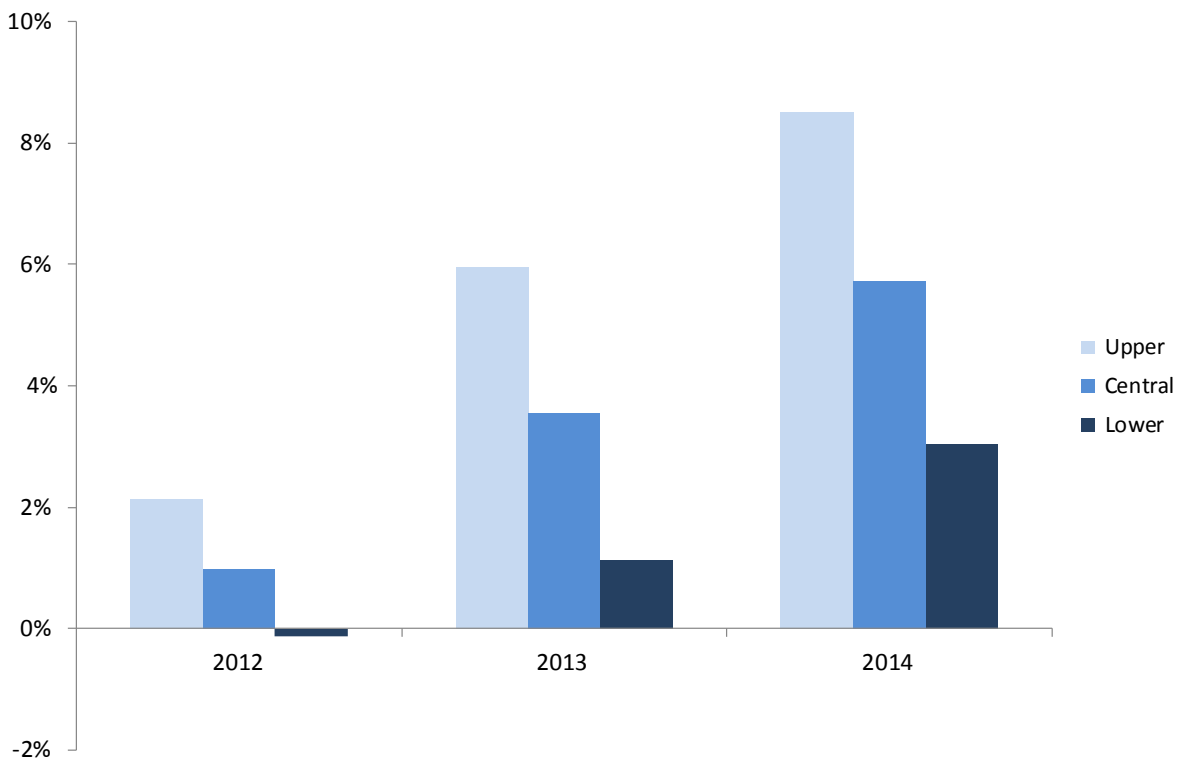
	2012	2013	2014
Gross Value Added	0.4%	1.5%	2.5%
Production	1.0%	3.6%	5.7%
Services	0.3%	1.0%	1.7%
Construction	0.3%	1.0%	1.6%

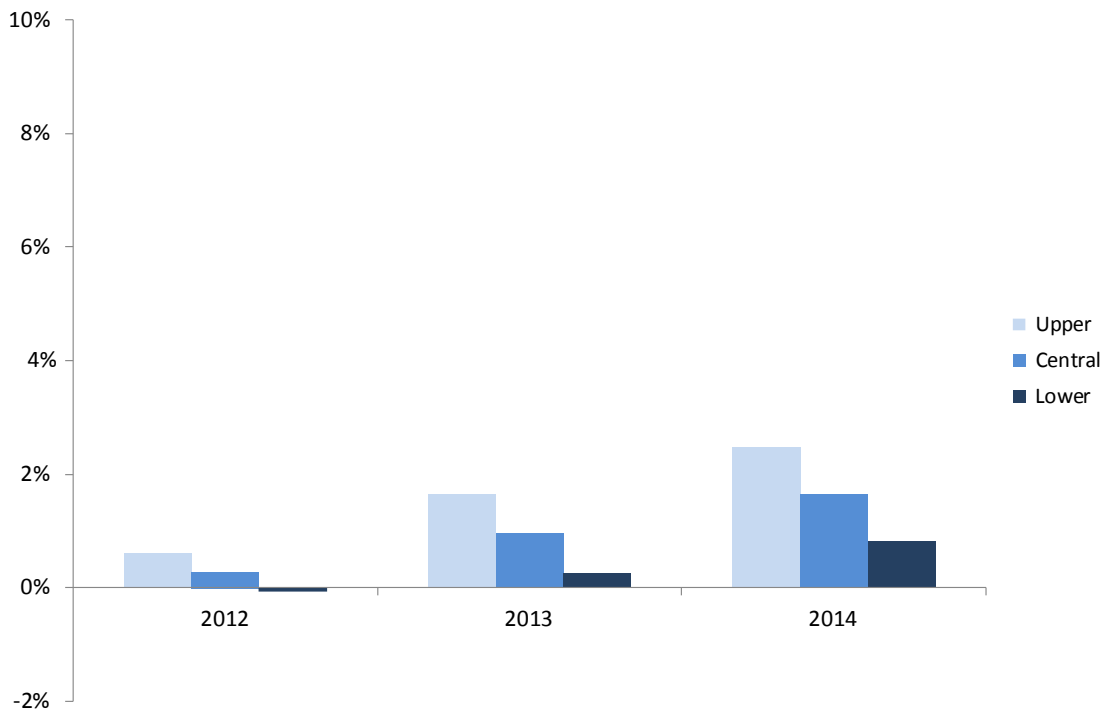
The outlook for household and domestic facing sectors look weak in the short term. These activities are expected to continue to bear the consequences of slow household spending growth, as well as falling current government spending. The construction sector has been principally

**Figure 4: GVA growth in Scotland in central forecast and estimated errors around forecasts for different forecast horizons**

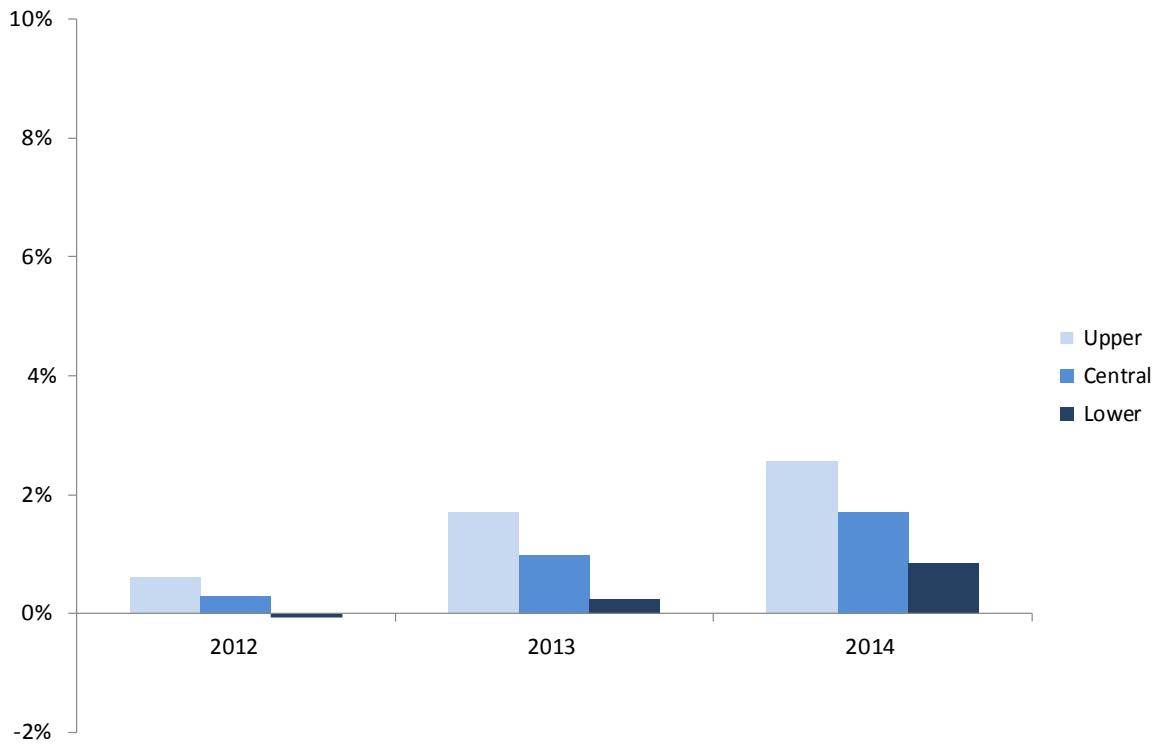


**Figure 5: GVA growth forecast in Production sector in central, upper and lower cases, 2012 to 2014**





**Figure 7: GVA growth forecast in Services sector in central, upper and lower cases, 2012 to 2014**





affected by declining public and private investment activity - the public spending reductions were heavily biased in first instance towards capital funding, which has exacerbated the fall in private investment. The construction sector is likely to respond quickly to upturns in private business investment. Weak export growth continues to restrain the growth of the production sector as a whole over our forecast horizon.

As previously noted, we use our calculated forecast errors from previous forecasts and first release outturn values to show the potential range of outcomes around our central forecast. We use estimated errors from "Summer" forecasts published over the last ten years (see Allan, 2011 for more details of our forecasting performance over the last decade). The measured Mean Absolute Errors (MAE) for "summer" forecasts for within year and following year are 0.495 percentage points and 1.06 percentage points, respectively. The MAE estimates are used to give ranges around the central forecast given above for these years. For 2014 - as we don't have a large sample of previous estimates made in the summer period for growth in two years' time - we use the longest forecast horizon error of 1.216 percentage points. In practice, this is likely to underestimate the forecast error at this (greater) forecast distance. The estimated range around our central forecast for growth in Scotland between 2012 and 2014 is given in Figure 4. Figures 5, 6 and 7 show the forecasted GVA changes in each of the aggregated production sectors (Production, Construction and Services) in 2012, 2013 and 2014 under the central forecast and the upper and lower estimates as given by our previous forecast errors.

## Employment

The most recent data for employment in Scotland at the time of writing (which were published in May 2012) indicate that the Scottish labour market has improved in the first quarter of 2012. Employment of people of working age rose between January and March 2010 by 17 thousand, while the numbers unemployed of that same category fell by 11 thousand in the same quarter. Over the year however, the numbers employed fell and the numbers of unemployed rose. The employment rate if those of working age rose over the quarter by 0.5 percentage points, to 71.2%, while the number of people unemployed as a proportion of those economically activity (employed and unemployment), i.e. the unemployment rate - fell by 0.3 percentage points to 8.3%. This is up 0.4 percentage points over the same quarter one year ago. Detailed commentary on developments in the labour market - including some details of the data released on the 20th of June 2012 - are available in the Labour Market section of the *Fraser Economic Commentary*.

The most recent data on employee jobs are available to the end of 2011 (i.e. 2011Q4). These indicate that there were 2,261,000 jobs in Scotland, a fall of 5 thousand on the previous quarter, and some seven thousand higher than our forecast of the figure of employee jobs made in February's commentary. In all, the number of employee jobs in Scotland at the end of 2011 was 188,000 fewer than at the

end of 2008, and down 22,000 in 2011 (the same annual decline as seen in 2010).

Our forecasts for employee jobs in 2012 to 2014, including a breakdown between broad sectoral groups, are shown in Table 3. The number of employee jobs in Scotland in 2012 is forecast to continue to fall over the year by almost 15 thousand to 2,246 thousand by the end of 2012. Employee jobs numbers are forecast to increase in both 2013 and 2014, rising to 2,302 thousand by the end of 2014. This would return employee job numbers in Scotland to where they were at the end of 2009, and still 148,000 lower than their previous peak in summer of 2008. The employee jobs forecast consistent with our upper and lower forecasts for GVA growth are given in Table 4.

**Table 3: Forecasts of Scottish employee jobs (000s, except where stated) and net change in employee jobs in central forecast, 2012 to 2014**

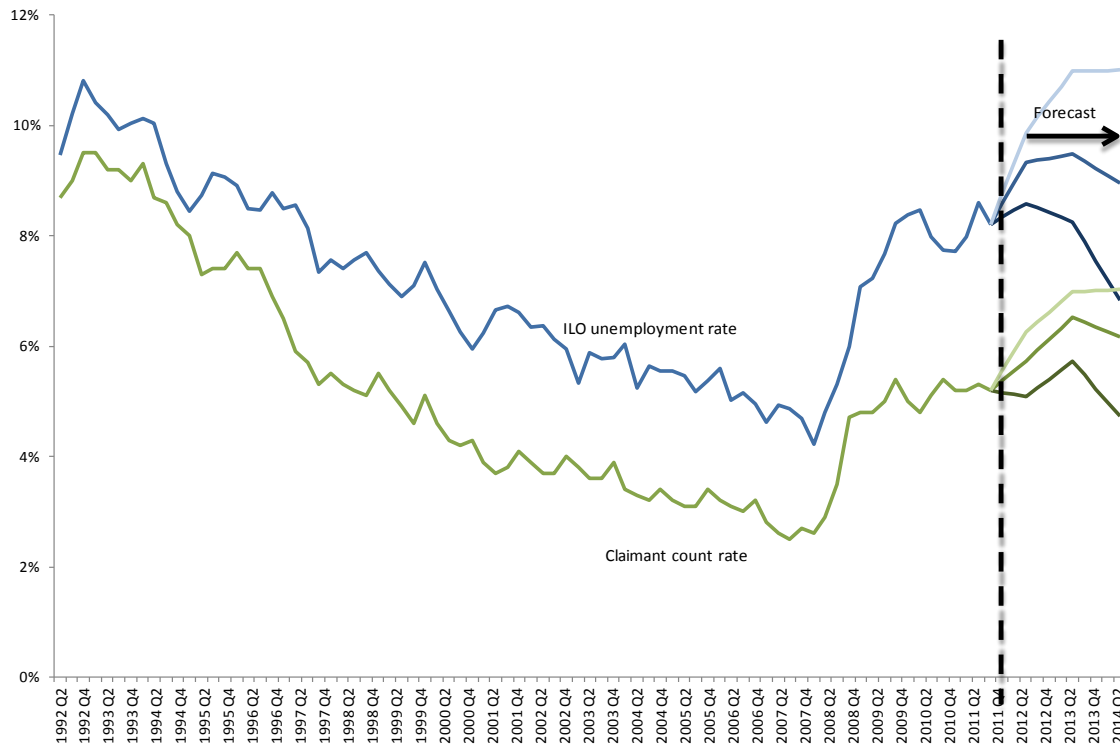
	2012	2013	2014
Total employee jobs (000s), Dec	2,246	2,266	2,302
Net annual change (jobs)	-14,950	19,950	36,050
% change from previous year	-0.7%	0.9%	1.6%
Agriculture (jobs, 000s)	32	33	35
Annual change	300	750	1,750
Production (jobs, 000s)	240	252	268
Annual change	2,400	11,100	16,000
Services (jobs, 000s)	1,850	1,856	1,871
Annual change	-15,500	5,650	14,650
Construction (jobs, 000s)	123	125	129
Annual change	-2,100	2,450	3,600

**Note:** Absolute numbers are rounded to the nearest 50.

**Table 4: Net annual change in employee jobs in central, upper and lower forecast, 2012 to 2014**

	2012	2013	2014
Upper	-5,200	41,000	61,750
Central	-14,950	19,950	36,050
Lower	-25,350	-1,700	10,450

**Note:** Absolute numbers are rounded to the nearest 50.

**Figure 8: Scottish ILO and claimant count unemployment rate, history (1992 to Q4 2011, and forecast 2012 to 2014)**

We show the history of both ILO and Claimant count unemployment rates, and our forecasts for these variables, between 1992 and 2014 in Figure 8

**Table 5: Forecasts of Scottish unemployment in central forecast, 2012 to 2014**

	2012	2013	2014
ILO unemployment	246,100	252,400	238,200
Rate1	9.3%	9.5%	9.0%
Claimant count	152,550	176,700	169,100
Rate2	5.7%	6.5%	6.2%

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

Grant Allan  
13 June 2012

## Box A: The possible impact on the Scottish economy of seismic events in the Euro zone: two scenarios

The Greek elections earlier in the year brought about the very real possibility that a party opposed to the continuance of Greece within the Euro area was elected the largest party. There has been much debate following that outcome of whether Greece would continue within the Euro area. While some of the heat might have been taken off the immediate possibility of Greece departing the single currency area, seismic developments in the Euro area would have large impacts on the Scottish economy. Abstracting from the possibility of such changes to the Euro area, in this section we discuss the possible economic consequences for Scotland of two distinct events (these events were quantified for the countries of the Eurozone, plus the UK, Japan and the USA, in a study published by ING, 2011):

- Greece leaving the Euro;
- The break-down of the Euro project, with all members reverting to national currencies.

There are many points along a spectrum between these events, and, indeed, both lie outside of the scenario assumed in our central forecast: that of a renegotiation of fiscal rules and increased transfers (explicit and implicit, i.e. Eurobonds) sustaining Greece within the Euro area through our forecast horizon.

What we conduct here therefore should be viewed as a “what-if” impact study, rather than a forecast. For this, we remove all other disturbances on and developments in the Scottish economy. The results reported therefore are those which could occur by the end of the third year following each event. It is assumed that these “events” occur at the start of year one, and we are examining the impact on the Scottish economy three years later.

We consider there to be four principal channels through which each event could impact on the Scottish economy. Scotland is a small open regional economy with heavy economic, banking and trade links to the Euro area and wider global economy. In attempting to quantify the scale of the impacts under the two events, we consider two channels through which a Greek exit from the Euro or a complete break-down of the Euro area could impact on Scotland. These are:

- Trade
- Impacts on business and consumer confidence

In addition, there are of course many other routes through which changes such as we are discussing could impact on the Scottish economy. These include:

- Exposure of banks to possible further (extreme) debt write downs and defaults
- Contraction in foreign direct investment flows to Europe and Scotland

Lack of data on these latter two issues means that we focus our analysis on quantifying the consequences for Scotland of impacts through the first two channels - reduced trade and weakened business and consumer confidence (with impacts on private investment and household spending, through reduced employment).

### 1. Trade

#### *Non-UK trade: Context*

Both of the Euro zone events will have a direct impact on Scottish exports as a fall in Euro zone economic activity means that overseas consumers will require fewer Scottish products.

What is unknown however is the extent of trade in goods and services between Scotland and Greece. The most comprehensive survey of Scottish exports – the Global Connections Survey – does not report trade separately for countries out of the “Top 10” destinations for Scottish exports.

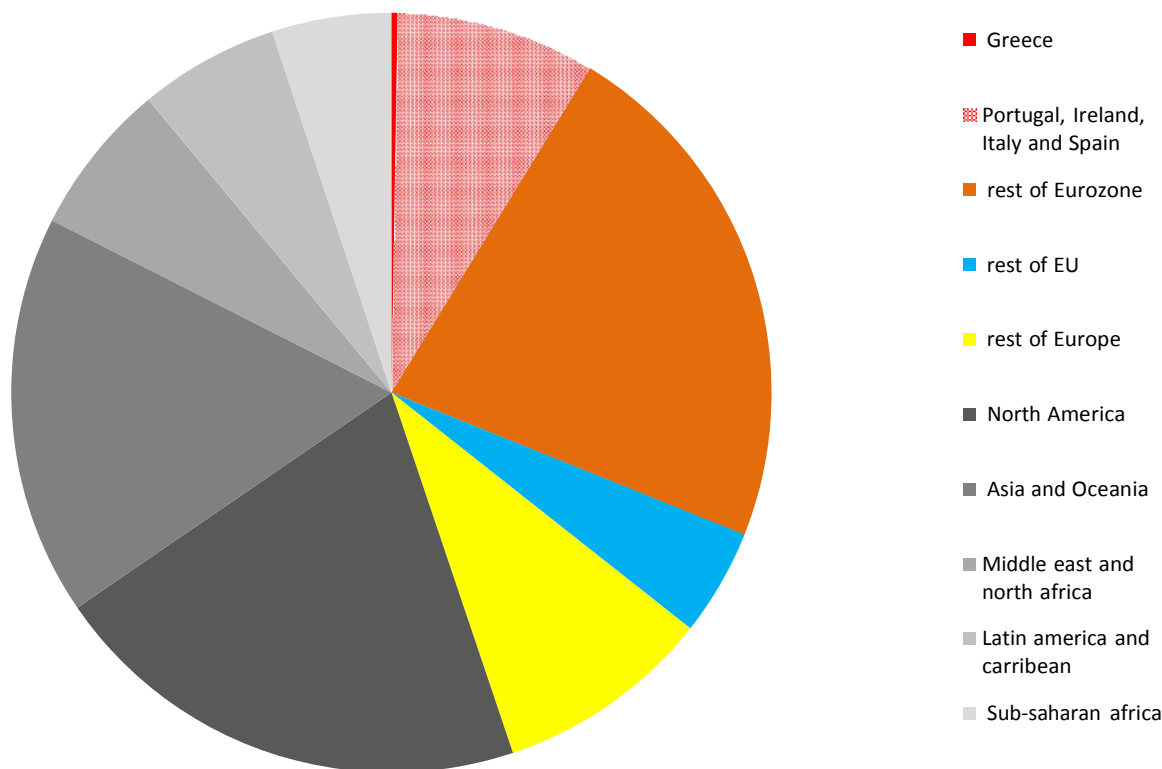
We can tell however the export destination of non-UK trade in goods from Scotland. HMRC trade data for 2011 estimates the value of Scottish goods exports to the rest of the world as £17.3 billion. Data produced by the Scottish Government through the Scottish National Accounts Project suggest that the value of all Scottish exports to the rest of the world in 2011 was £24 billion, therefore goods exports covers around seventy percent of the value of all Scottish overseas exports.

The same HMRC data indicate that Scottish direct exposure to Greece through conventional (goods) exports is minimal. In 2011, 0.3% of all Scottish overseas exports - a total of £45 million – were exported from Scotland to Greece in 2011.

Scottish exports are integrated across the rest of the Eurozone countries, with France, Germany, Netherlands and Belgium the prime destinations for Scottish goods exported to Europe.

Using the same HMRC statistics, 45% of Scottish overseas exports are destined for European markets, with Euro zone countries being the destination for two thirds of this (31% in 2011). The share of exports of goods from Scotland going to the Eurozone has in fact fallen from 47% in 2006, indicating just how much the events of the great recession have affected the traditional export markets for Scottish products. Figure B1 shows the share of Scottish goods exported by destination.

**Figure 1: Shares of non-UK exports of goods from Scotland by destination, 2011**



#### *UK trade: context*

As discussed in the February 2012 Fraser Economic Commentary, Scottish exports are increasingly reliant upon the rest of the UK market, rather than overseas export destinations. The share of UK exports has increased to almost 70% of exports from Scotland, up from 60% of exports in 1998. Part of this was the collapse in the period 2000-2003 of exports of electronic products to the rest of the world. As of 2011, SNAP statistics estimate that the rest of the UK was the destination for £35 billion of Scottish products, some £11 billion more than was exported to the rest of the World.

#### *Trade impacts following two events*

We have obtained data from ING on their modelling of the consequences of both events. Their data report the change in output (GDP) for countries of the Euro area and other major economies (the UK, USA and Japan) over a three year window, i.e. the cumulative impact on each country's output at the end of the third year after each event.

We use the HMRC data for exports of goods as a proxy for exports of goods and services from Scotland. By using each countries share of exports from Scotland and the ING forecasts of the change in output in each economy by the end of the third year following each event, we can construct a change in the rest of the world demand for Scottish exports. Note that we are only assuming there will be impacts on Scottish overseas exports to countries in the Euro area, the USA and Japan. This captures the majority of Scottish overseas exports, but not every market that goods are sold into, and so is likely to understate the consequences on Scottish overseas exports of both scenarios. Interestingly, given the Scottish economy's strong export link to the US, the relatively small impacts on US output forecast by ING have a large impact on the fall in Scottish exports we assume. The only export market for Scottish goods which has a larger impact on the modelled change

in total exports is France, even though this declines by considerably more than the ING analysis forecasts is the case for the US.

ING forecast that the UK economy could contract by 1.0% over three years under a Greek exit and 9.0% under a Euro area breakdown, and we assume that Scottish exports to the rest of the UK are reduced by this amount in each case.

After three years, the consequences for Scottish exports are:

	<b>Greek exit</b>	<b>Euro area breakdown</b>
Overseas exports	-0.6%	-4.3%
Rest of the UK exports	-1.0%	-9.0%

## 2. Impacts on business and consumer confidence

### *Confidence and expenditure*

Following the “credit crunch” in late 2008, banking uncertainty caused turmoil in financial markets, business lending to households and businesses was curtailed sharply as banks cut back their exposure to risky investments. The result was more expensive borrowing for those borrowers able to obtain finance and a sharp reduction in investment activity. It is highly likely that a country exiting from the Euro could lead to banks seeking to extract themselves from exposure in peripheral economies of the Euro area. Given interconnections between banks it is likely that this could lead to a “Credit Crunch II”, into which Scottish firms and households would face prolonged and significant borrowing restrictions.

### *Spending impacts following two events*

The first credit crunch saw a sharp increase in households saving ratios, as households paid down credit or didn't take on debt and spending fell quickly in real terms. The average households' saving ratio (gross savings as a portion of gross disposable income) before the first quarter of 2008 was 4.7%. In the second quarter of 2008, the average households saving ratio has been 9.6%, almost double the earlier period.

Uncertainty about future employment, provisions for pensions and a cutting back in expenditures and borrowing are all likely to increase the savings ration again following financial turmoil resulting from both the Euro zone events. We assume that in three years' time, in the absence of either event, the savings ratio would fall from its current level to 8%. Following Greek exit, we assume that the households' saving ratio in three year would remain at its post-2008Q2 average of 9.6%. Following the second event – Euro area breakup – we assume that households' saving ratio increases to the highest ratio seen since 2008 in Scotland. This was 15.7% in the second quarter of 2011. In each scenario, the assumed impact on household spending from increased savings in three years' time is given in the first row of the table below.

Similarly for business confidence, current figures suggest that investment spending in Scotland during 2011 was around 4% below its (real) level in 2008. We take this as the impact on investment which might occur three years following a Greek exit, with a 10% reduction assumed in the case of Euro breakdown.

	<b>Greek exit</b>	<b>Euro area breakdown</b>
Household spending	-1.8%	-8.7%
Investment	-4.0%	-10.0%

## Additional channels

### *The exposure of Scottish banks to Eurozone economies*

UK and Scottish banks are heavily exposed to developments in the Euro area. The December 2011 Bank of England “Financial Stability Report” noted that while banks have reduced their leverage since 2008, there was growing uncertainty in the Euro area. On some solvency indicators even at the end of 2011 there was an upward movement in leverage, indicating worsening credit positions. An “adverse feedback loop” between banks worried about losses raising the price of credit and tightening credit conditions could lead to weakness in the real economy, making it more likely that banks would suffer losses. The same Bank of England publication reported that major European banks had deleveraging plans of between 480billion euros and 2000billion euros. Royal Bank of Scotland – by these same estimates – had plans of deleveraging by between 93 and 121 billion euros.

UK banking exposure to Euro area countries is critical. As worried as banking systems are about developments in Greece, the UK sector is far more exposed to the Spanish than the Greek economy (an exposure of £57.5 billion to £6.0 billion).

## Results

**Table 1: Impact on GVA in three years following either Euro event, % differences from base level**

	<b>GVA</b>	<b>Employment</b>
Greek exit	-1.2%	-49,000
broad sector		
Production	-2.8%	-7,000
Services	-0.9%	-37,500
Construction	-0.8%	-3,500
Euro area breakdown By		
broad sector	-5.3%	-144,200
Production	-11.9%	-34,500
Services	-3.9%	-98,800
Construction	-3.9%	-7,200

**Note:** Absolute numbers are rounded to the nearest 100. Totals may not sum due to rounding.

Figures from the 2011 accounts of RBS show the bank had a total balance sheet exposure to the Eurozone countries of £203 billion. Half of this exposure was to the two largest markets for the bank, in Germany and Ireland, with Netherlands and France the next two largest markets. Exposure to Greece was, by comparison to these four countries, tiny at £1.2 billion. Exposure to the troubled peripheral economies was the following: Spain (£15 billion), Italy (£6.6 billion), Ireland (£43.5 billion) and Portugal (£1.1 billion). No such details appear to be directly available for Bank of Scotland.

As things stand, we assume that the shocks to private consumption and investment reflect increases in the cost of capital and decreases in its availability, which would result from "Credit Crunch II" in the case of Greek exit or the Euro breakup. Any further impacts on the Scottish economy from changes in the scale or scope of the major banks based in Scotland are not included in this analysis. The results above therefore are likely to underestimate the true effects of these events in the Euro area, for this reason.

### *Contraction in FDI flows*

Foreign Direct Investment is a major element of Scotland's economic performance over the last twenty years, and appears to have picked up over the recent past. We are unable to determine the extent of investment expenditure in Scotland which were made through FDI channels over the most recent years. For this reason changes to the volume of FDI – which would be likely to be heavily depressed in both events described above – are not modelled in this instance.

### Acknowledgement

We are extremely grateful to ING for providing information about their scenarios.

### **Reference:**

ING (2011), "EMU Break-up: Pay now, pay later", ING Global Economics, 1st December 2011

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