Forecasts of the Scottish economy

Summary

After two quarters of negative growth, the Scottish economy delivered a strong performance in the third quarter of 2012. The UK economy as a whole saw negative growth in the final quarter of 2012 - and it looks likely that Scottish growth over 2012 will be close to zero. Over the coming year, we see slowing earnings growth, the introduction of welfare changes and continued fiscal consolidation weakening the domestic economy, while there could be increasing volatility, including potentially critical political shocks, in important export markets. The net result is a lowering of our central growth forecasts for 2013 and 2014. It continues to be true that risks are aligned to the downside again. Growth in the United States – Scotland's single largest export market – appears strong, highlighting opportunities, albeit further concentrating Scottish reliance on this market.

Fiscal policy

The UK Chancellor will deliver his budget on March the 20th, in the shadow of recent downgrading of UK government debt from its AAA rating.

In their Green Budget of February 2013, the Institute for Fiscal Studies found that the progress towards the planned fiscal consolidation was partial in certain areas. While there had been significant progress towards the planned tax increases and cuts to investment spending, by the end of 2012-3 "just 32% of the planned cuts to benefit spending and 21% of the cuts to day-to-day spending on public services will have been delivered". This has implications for the Scottish Government's budget over the coming years.

Research by the Centre for Public Policy for Regions (CPPR) in February 2013 has specifically examined the implications for the Scottish Government's Budget to 2017-18. In their publication they projected Scottish Departmental Expenditure Limits between 2009-10 and 2017-18. This showed that in cash terms the Scottish Resource DEL budget will be unchanged in 2017-18 compared to 2009-10, meaning a real terms cut of £4.4 billion, or 16% while Capital DEL budget is projected to decline by £1.9 billion over the period, down 45% in real terms. The zero change between 09-10 and 17-18 in CPPR's words, "hides a slowly rising trajectory to 2015-16 which is then followed by year-on-year cash reductions". Their report discusses the "second wave" of spending reductions after 2015-16, with an estimated £1.6 billion real reduction in Resource DEL over two years, and Capital DEL spending held constant in real terms.

In terms of the trajectory towards these significant reductions in the public spending power in Scotland, they estimated that to the end of the 2012-13 year, two-thirds of the reduction in spending under Resource DEL has yet to be made. The front loading of Capital DEL reductions is evident from their estimate that current funding is four-fifths to the new reduced level. Clearly, the nominal 1% increase in public sector pay from April 2013 will help those workers earning under £80,000, but CPPR also acknowledge that some public sector workers (e.g. teachers, NHS workers, and police) have been protected from previous pay-freeze arrangements, as they were subject to existing multi-year deals. Whether such protection should continue into the future is likely an important decision to be made, and extending into these areas is likely to be both politically and socially controversial and offering the potential for significant savings to the public purse.

We noted in the last *Commentary* that in this issue we would examine the programme of welfare changes to start in April 2013. Earlier analysis by the IFS from March 2012 indicated that over £9 billion of spending reductions will hit in 2013-4, with the two largest negative impacts coming through reductions to Child Benefit eligibility and linking benefit and public pension increases to the CPI.
The IFS Green Budget sets out how tax and welfare reforms will impact in 2013-4. In their conclusion, the pattern is for a net tax 'giveaway' of £0.9 billion this year, but in context of £35.9 billion of net 'takeaways' since April 2010. In their analysis, the impact of changes introduced in 2013-4 have net impacts which will negatively affect incomes at the poorest deciles, while increasing incomes for the top three income groups – with the largest rise in the richest income group.

In the main, tax reductions introduced by the UK Government in 2013-4 include increasing the personal allowances and reductions in the rate of corporation tax and the corporation tax ‘Patent Box’, providing funding for a council tax freeze and freezing the increase in fuel duties planned for September, while welfare reductions include increasing benefits and tax credits by 1% (saving £505 million), linking benefits and credits to CPI (savings £425 million) and cutting housing benefit entitlement for under-occupancy of social housing (saving £490 million). Additionally, the funding for councils to provide rebates on council tax to low-income households is being reduced by £485 million this year, as well as freezes to child benefit (saving £270 million).

The specific impact on the incomes of Scottish households will be crucial for the impact that these changes might have on the Scottish economy. For example, the DWP impact assessment estimated that there are 80,000 recipients of housing benefits in Scotland, and they would lose on average £12 per week from the changes to Housing Benefit linked to under occupancy of social housing.

The Universal Credit also begins in Pilot areas during 2013-4, and is expected to save £70 million in its first year. The IFS call this “one of the biggest changes to the structure of the welfare system for working age people since 1948”. It introduces a single benefit claim – reducing complexity – but also moves to make payments monthly, rather than more regularly, requiring recipients to manage their finances, including Housing Benefit, which are currently paid to the landlord, but will be included within the single Universal payment in future.

It is likely that the move to Universal Credit (UC) will be crucial for many people in Scotland and the UK, and have a significant impact on the incomes of those people. As usual, the practical experiences from the pilot areas must be taken on board prior to roll-out to ensure that any concerns about the working of the UC be carefully examined. Additionally, the reduction in benefits income that will coincide with UC – as well as changes to eligibilities for the UC – will have specific impacts on many local communities across Scotland.

Monetary policy

Inflation in February remained above the Bank of England’s target rate of 2%, at 2.7%, in part driven by university tuition fees and energy, as well as food prices. Food price pressure has eased since the end of 2012 after increasing sharply in response to supply shocks to crop yields. February’s Inflation Report by the Bank of England noted that “regulated prices” in education, energy and other areas could add 1.0% onto average Consumer Price Index over 2013 and 2014.

The latest minutes of the Bank of England’s Monetary Policy Committee (MPC) note that the committee was split on whether to extend the asset purchase facility, known as quantitative easing. Of the nine member panel, three – including the Governor, Sir Mervyn King – favoured a £25 billion increase in the stock of asset purchases. Their case was based on an opinion that there was considerable slack in the UK economy and that above target inflation would not be worsened by some increased activity. Additionally they noted the case for persistence from prolonged unemployment and wasting of (physical and human) capacity.

The risks to activity in the UK – it is stressed through the latest MPC minutes – are on the downside, to persisting below-trend growth. Interestingly, the committee also discussed a range of other instruments which it might use to provide further monetary stimulus, if it were required. These include a reduction in Bank Rate (which is close to the lower bound at 0.5%, where it has been since March 2009), and “changing the marginal rate on remuneration on banks’ reserves at the Bank of England”. The latter option here might mean that depositors with the Bank would be charged for having money deposits, rather than receiving interest. Deputy Governor Paul Tucker has noted that negative interest rates on bank deposits would be “extraordinary”, but that the Bank would think about whether there are constraints to setting such rates. Such a move would not be without international precedent – between July 2009 and September 2010 the Riksbank (the Swedish central bank) charged 0.25% on deposits, for example.

An additional argument has been raised in recent months over whether the Bank’s target for inflation is sufficient, or whether there would be advantages in setting a target in terms of nominal GDP – e.g the sum of real GDP growth and inflation. In a recent speech, Charles Bean, a Deputy Governor of the Bank, suggested that it was sensible to reappraise the monetary policy framework on occasions. He concluded that in normal economic times the policy stance would be identical under either an inflation or nominal GDP target, but that three “real world caveats” suggesting that to change the target would not be useful. First, the recent recession appears to have involved both a significant negative shock on the demand and supply-side of the economy, with “the advantages of a levels target for nominal income less clear under such circumstances". Second, he points to the possibility of longer-term inflation expectations being adjusted higher in response to longer periods of higher inflation. Third, he warns of the danger of low rates of interest leading to speculative asset booms, which could result from long-term commitments to loose monetary policy. The fact that changes are being discussed appears to reflect the Bank seriously considering the full range of tools at its disposal in the face of the sustained weakness of the UK economy.

Output

Gross Domestic Product (GDP) figures for Scotland were released on the 1st of February 2013, and showed that in the third quarter (July to September) of 2012, economic activity rose by 0.6%. In particular this was due to a strong performance in the production sectors, while service activity also rose. Construction activity fell by 0.4%, after positive growth in the second quarter. As noted elsewhere in the commentary, there were methodology adjustments and improvements made to historical GDP series which has significantly revised the path of GDP growth over the Great Recession. A point about the presentation of output growth figures in Scotland is addressed in Box 1.

The second estimate of UK growth in the final quarter of 2012 (released on 27th February) was unchanged from the preliminary estimate of a month earlier. It kept the estimated growth in the final quarter at -0.3%, with a quarterly contraction in manufacturing and services, and a small rise in construction in the quarter. The contraction in manufacturing was the largest fall since the first quarter of 2009 and meant that manufacturing output has contracted for five of the last six quarters in the UK. By contrast, it is estimated that manufacturing performance in Scotland has been marginally better over the same period (to the third quarter of 2012) where manufacturing activity increasing in the third quarter after three quarters of decline. The general trend in both datasets however, is of continued weakness of manufacturing and production.

The OBR published its forecasts for UK growth on the 5th of December 2012. It forecasted growth of 1.3% in 2013, 2% in 2014 and 2.3% in 2015, revising down its forecasts made earlier in the year. The difference between their forecasts and outturn in growth was explained by "the weakness of net exports" – and export markets are anticipated to be weaker in the future than was previously assumed - although their report also notes that weak productivity growth will constrain the growth of incomes and a delay in the fall in inflation which would raise real incomes. It is noted that in their forecasts, the OBR are more optimistic for growth prospects than external forecasting organisations, such as the IMF and OECD.

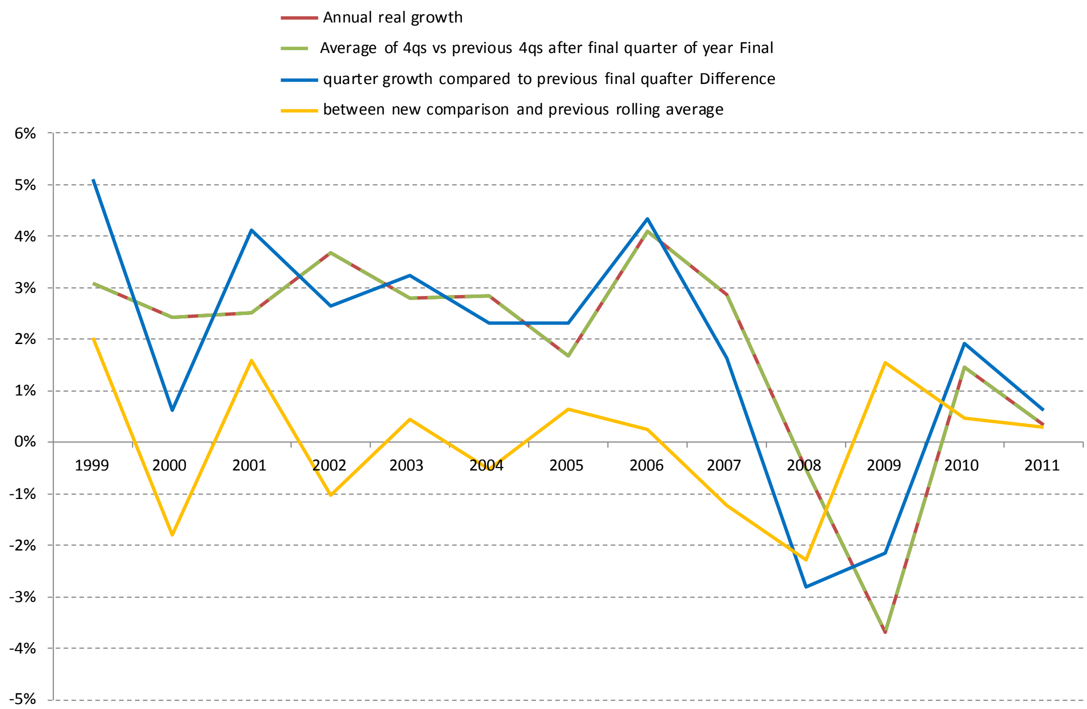
Box 1: Presentation of output growth

One point (Paul Krugman might call it "wonkish") about output growth regards the presentation of GDP changes in the Scottish Government figures. Until the publication of Q3 2012 figures, quarterly growth figures were presented alongside changes on a rolling annual basis – that is, comparing the average of the most recent four quarters with the average of the previous (non-overlapping) four quarters. The latest publication does not provide this comparison, but compares the most recent quarter both to the preceding quarter and that of the same quarter in the year previously (e.g. Q3 2012 vs Q3 2011). We understand that this change makes the Scottish Government presentation of quarterly growth consistent with UK standard practice. However, that does not mean that it is necessarily the most helpful presentation.

This appears to be the same as calculating annual income growth for an employee by comparing payslips in one month of each year, rather than averaging pay over each month or looking at an employee's P60. It says nothing about the change in the value of income earned by that individual over the period, in the same way that comparing the output of the Scottish Economy in Q4 2012 with Q4 2011 says nothing about what has happened to Scottish economic activity in the intervening period. The earlier "four-quarters on four-quarters" results are a much better measure of the true change in activity over a year, and we will continue to present these results in the *Commentary*, additionally, this measure also matches the real annual growth that that our GDP forecasts predict.

The figure below compares the history of Scottish growth as it is currently estimated over the last decade. It explicitly compares growth on an annual basis (i.e. from comparing the annual GVA figures in the latest Scottish publication), those obtained from comparing the rolling four quarter average upon completion of the final quarter in each year, i.e. by comparing the average of four quarters in each year to the previous (non-overlapping) four quarters, and growth in the final quarter of each year compared to that same period in the previous year. The yellow line shows the differences between these two measures, and indicates that confusing these two could lead to significant misunderstand of the true rate of growth in a year.

Figure B1: Comparison of growth measures for Scotland



Source: Scottish Government Gross Value Added series, and FAI calculations.

Households

Figures for wage growth across the UK as a whole – a comparable figure for Scotland is not available - show that (private sector) average weekly earnings growth expectation through 2013 appear to be broadly in line with outcomes during 2012, at around 2%. The most recent wage findings report by the Bank of England in fact appear to suggest a small decline in average weekly earnings towards the end of 2012. With inflation remaining above this rate, and the Bank of England's expectations for it to remain so through the medium-term, earnings continue their real terms decline. Recent research has suggested that real earnings have fallen to the same level as they were in 1999. Falling real wages are likely to prolong the point at which households feel their finances to be "sustainable", although some respite in Scotland could come from the restatement of some increases in public sector earnings, although these are capped at 1% which remains below cost of living increases.

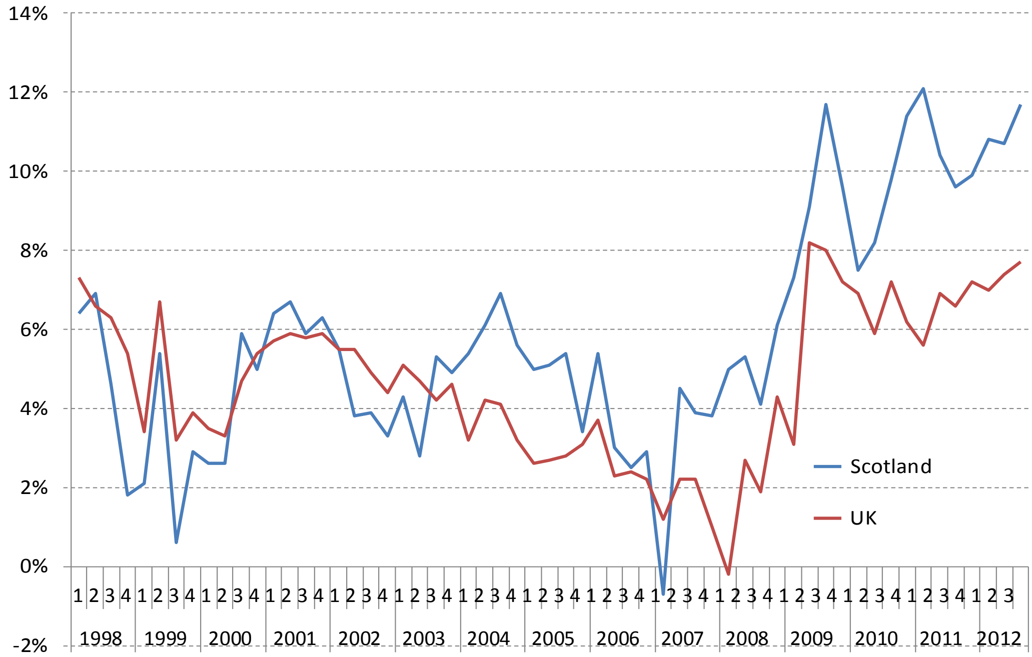
Equity indexes have risen consistently over the last three months, with upward trends perhaps reflecting growing investor willingness towards risk, rather than upward revision of returns. Of course the very recent turbulence in equity markets after the Italian election result on the 25th of February are being suggested by some to represent the end of a relatively calm six month period for the Eurozone, which will be dominated by political events during 2013 – including the German elections in September – and so provide further uncertainty for financial markets.

House price indices remain flat across Scotland and the UK, reflecting weak demand from the important first time buyers market. The flat prices are additionally delaying a return to the previously seen levels of house building, which would otherwise be a stimulant to construction.

Markit's Household Finance index for the United Kingdom fell in February, with living costs sharply increasing. While the overall index moved slightly downwards in the month, there were significant movements across income groups, with the top two income groups reporting rapid improvements in household finances, with a worse drop in the perception of household finances in the lowest two income groups. At 37.7 in February, the measure remains some distance away from the 50 base line of "no change".

Figure 1 shows how the household savings ratio has evolved to the third quarter of 2012 in both Scotland and the UK. These data imply that Scottish households have made more significant adjustments to their savings pattern than UK households. While through 2011 the gap between Scottish and UK savings ratios was closing, in the first half of 2012 this widened further. It has not yet reached the same gap as during the end of 2010, although the current savings ratio of 11.1% in Scotland is 3.4 percentage points higher than in the UK.

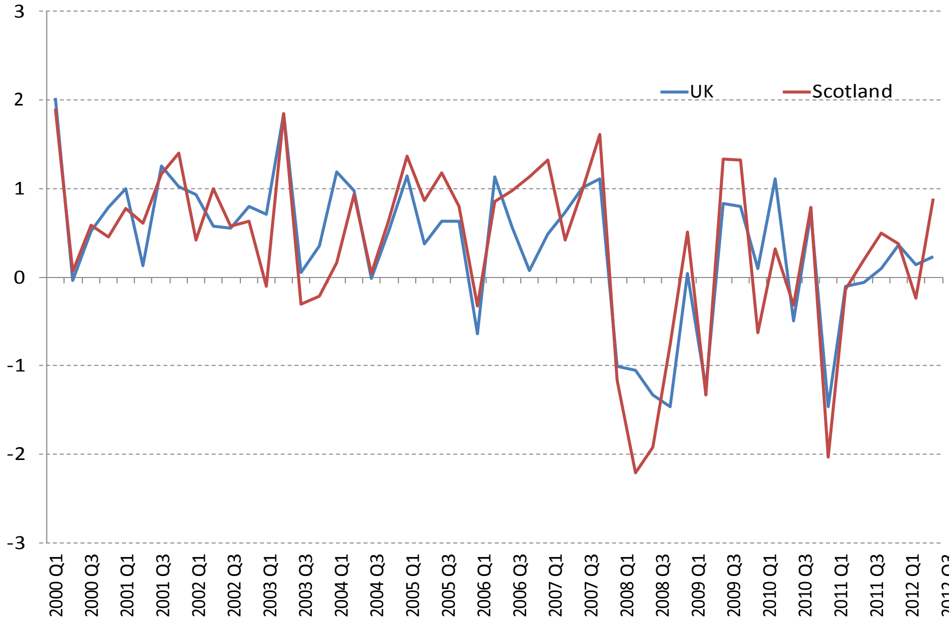
Figure 1: Household savings ratios, Scotland and UK, Q1 2000 to Q3 2012



Sources: (Experimental) Scottish National Accounts Project data (Scottish Government) and UK Quarterly National Accounts (National Statistics).

Comparable Scottish and UK data on household income and consumption growth are available up to the end of the third quarter of this year. These show that after a real terms contraction in Q2, spending in Q3 grew by 0.9% in the quarter. UK consumer spending grew by only 0.23% in the same quarter (See **Figure 2**). In terms of relative to the pre-recession spending peak, Scotland and the UK are respectively 4.5% and 3.8% below the peak seen in the final quarter of 2007.

Figure 2: Household real consumption spending growth, Scotland and UK, Q1 2000 to Q3 2011



Sources: (Experimental) Scottish National Accounts Project data (Scottish Government) and UK Quarterly National Accounts (National Statistics) and FAI calculations.

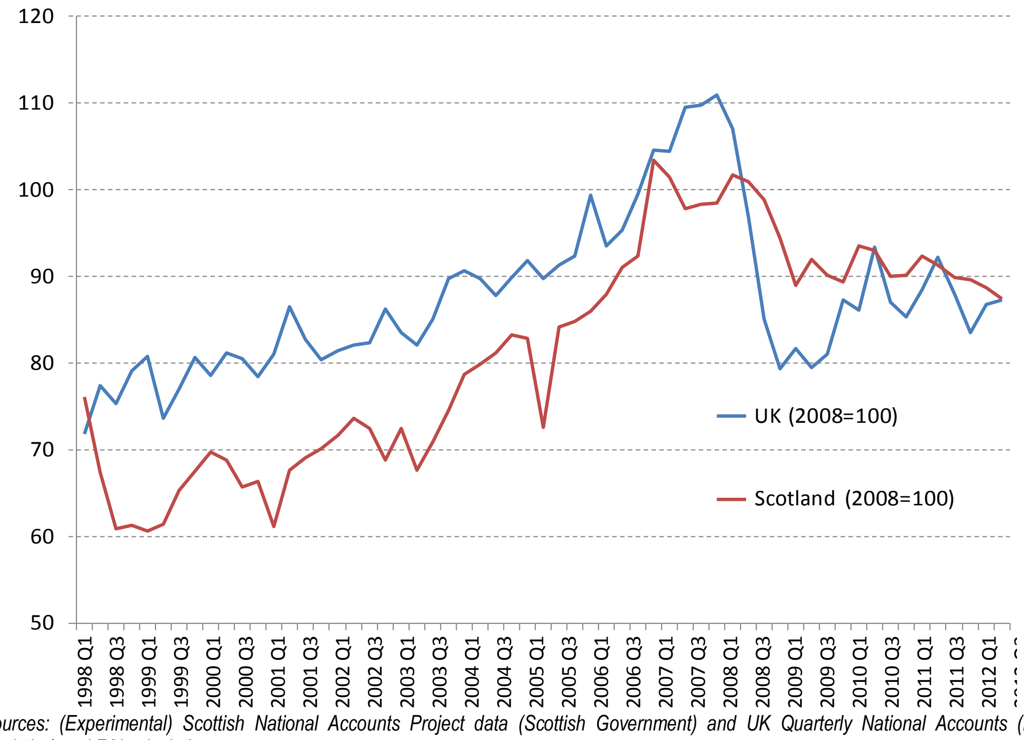
The Scottish Retail Index published on the 8th of February reported that the volume of sales fell by 0.5% in the last three months of 2012, while the value of sales was flat from the last quarter. Both measures were weaker in Scotland than the UK, which contradicts the pattern of Retail Sales Activity over the last few years. It remains in the “big ticket” durable goods market that households are postponing purchases, which demonstrates unwillingness to use store credit for such items: a key indicator of a persisting lack of consumer confidence about future income prospects.

Investment

The output of the Scottish construction sector – the sector most heavily affected by investment spending – fell in the third quarter of 2012, and remains well below levels seen during 2010 and 2011. In output terms, it seems likely that 2012 will be more like the output seen in the depths of the Great Contraction seen through 2009. Domestic housebuilding remains flat, while, as is noted in the *Business Surveys* section of this Commentary, the market appears to be firmly in “contraction territory” through the final quarter of 2012 – with 90% of firms reporting either ‘no change’ or a decline in activity. The surveys also noted a weakening of new orders and problems with procurement affecting the numbers of small construction firms looking to take on public projects due to upfront costs and limited success rates in the tendering process.

Figure 3 shows that real investment spending (including public and private spending) remains significantly below its pre-recession values. Additionally, it also indicates that while the two quarters to Q3 2012 saw increases in investment spending in the UK, since the second quarter of 2011 investment spending in Scotland has fallen relative to its level in 2008.

Figure 3: Real gross fixed capital formation, Scotland and UK, Q1:1998 to Q3:2012



Sources: (Experimental) Scottish National Accounts Project data (Scottish Government) and UK Quarterly National Accounts (National Statistics) and FAI calculations.

Trade

The latest data on exports from Scotland to the (non-UK) rest of the world show that during the third quarter of 2012 Scottish exports grew by 0.8 per cent, but have fallen 0.8% on an annual basis. The Index of Manufactured Exports, published on the 15th of February 2013 reported the first increase in manufacturing export sales since the third quarter of 2011. Within this good news, the reliance on a single sectors performance was striking.

The major explanation for this growth was the return to growth (5.9% in the quarter) from the food and drink sector. This one category – with a 2007 weight of 26% of manufacturing exports – is the only sector to see growth in the quarter of over 1.5%, and has grown its importance for Scottish manufactured exports significantly over the last few years. The latest figures show that it is only Food, Drink and Tobacco (up 2.3%) and Engineering and Allied Industries (up 0.4%) which have seen positive export growth over the last year.

The 23rd of January saw the 10th anniversary of the publication of the annual Global Connections Survey, reporting on all exports from Scotland – rather than the manufacturing element. In addition to rest of the world exports, this survey also covers exports to the rest of the UK. The headline news from this survey was an increase in export sales of £1.6 billion in 2011 compared to 2010.

While the USA continued to be the largest single first destination for Scottish exports – up £30 million to £3.5 billion in 2011 – growth in European markets continued, in particular the Netherlands (up £255 million) and France (up £430 million).

Most interestingly perhaps was the results on the export destinations of non-UK exports more generally. These suggested that Scottish export performance is potentially becoming more concentrated in major destinations, in particular the USA. Between 2002 and 2010 the share of exports going to the US rose from 11% to almost 15%. Other destinations also saw significant change in their imports of goods from Scotland. In June 2012's Commentary we looked at the impact of Greece exiting the Euro area and having an impact on Scottish activity through reduced demand for Scottish products. It was interesting to see therefore that in nominal terms the value of exports from Scotland to Greece fell by £40 million between 2009 and 2010. Also in current values, the last year saw a fall in the value of exports to non-EU Europe, the Middle East and Africa (down £65 million). There was a strong performance in sales to Asia – rising £180 million or 9% in cash terms, which reversed the downward trend seen in 2009 and 2010. The value of sales to Asia in 2011 however was still lower than 2007.

The most recent forecasts for the international environment suggest a worsening of countries' prospects as we begin 2013, extending into 2014. The International Monetary Fund, OECD and European Commission have all significantly cut their growth forecasts again, after doing so through the latter half of 2012.

Markit's Flash Eurozone PMI survey fell to 47.3, down from 48.6 in January 2013, with an accelerating rate of contraction to that seen in previous months. This has typically been a good predictor of Eurozone GDP activity, with figures below 50 indicating a contraction in growth. The index has moved down sharply after recovering slightly towards the end of 2012. The rapid worsening appears to be reflecting a sharp deterioration in France and (particularly) the Peripheral countries, while the German output measure has risen now for three months in a row. The survey noted that the divergence between Germany and France was the worst since the survey started in 1998.

In the last quarter of 2012 the advanced estimates for the US economy reported a quarterly fall of -0.025%, equivalent to an annualised decrease of 0.1%. This has recently been raised to 0.1% on an annual basis in the second estimate, released on the 28th February. The third quarter had seen an annualised growth rate of 3.1%. Despite the sharp contraction, the underlying strength of the US economy remains strong, with expanding consumer spending, and increasing residential and non-residential investment spending. The major factor in the final quarter was significant downturns in federal government spending, which contracted in advance of the "fiscal cliff" by 15.0 percent on an annual basis.

The impact of Superstorm Sandy which hit the Northeastern US in late October was estimated to have destroyed around $45 billion worth of assets, and could lead to insurance payouts of the order of $28.1 billion. The impact of the storm on GDP however, is not quantified by the US statistical agencies, although it is likely to have particularly hit activity through the closure of factories and disruption of transportation.

The latest information on developments in the US manufacturing sector showed an expansion of the sector into February with the rate of expansion slowing slightly from January. There was expansion across most measures of manufacturing activity, with output, new orders, employment and backlogs of work all remaining in expansion territory. Only new export orders fell, perhaps reflecting the worsening conditions in the Eurozone countries.

Table 1: Economic growth forecasts for 2012 and 2013 for major Scottish export markets, plus UK, China, Euro area and world, including changes from earlier forecasts where available, %

	2013			2014		
	IMF (January 2013)	Revision (since October)	OECD (December 2012)	IMF (January 2013)	Revision (since October)	OECD (December 2012)
USA	2.0	-0.1	2.0	3.0	0.1	2.8
Netherlands	-	-	0.2	-	-	1.5
France	0.3	-0.1	0.3	0.9	-0.2	1.3
Belgium	-	-	0.5	-	-	1.6
Germany	0.6	-0.3	0.6	1.4	-0.1	1.9
Ireland	-	-	1.3	-	-	2.2
UK	1.0	-0.1	0.9	1.9	-0.3	1.6
China	8.2	0.0	8.5	8.5	0.0	8.9
Euro area	-0.2	-0.3	-0.1	1.0	-0.1	1.3

Source: World Economic Outlook Update, International Monetary Fund (January 2013) and Economic Outlook, No. 92, OECD (December 2012).

Forecasts for the Scottish economy: Detail

On the domestic side of the economy, with continued fiscal contraction at the UK level, we must focus on the outlook for household and investment expansion. Household spending growth appears to have slowed at the turn of the year, with retail sales falling. Earnings growth appears to have slid lower in the last quarter, remaining below the rate of increase in prices. In our central forecast, we have revised down our forecast for household consumption growth, which is in line with current surveys of the domestic outlook. Government expenditure growth is expected to continue its real terms contraction, with latest figures for CPPR suggesting that there could be steadier real terms reductions to 2015, as well as a "second wave" of consolidation post 2014/5 to ensure that the (deferred) deficit target is met by the revised point.

Business confidence remains damaged through to the end of 2012, with signs that increased activity at the end of 2012 will be under pressure coming into 2013. Construction indexes point to continued weak demand and low rates of orders growth, both from the public and private sector intentions. Commercial construction activity remains weak through 2012 and into 2013 on our central forecast. Our later than previously forecast return of pre-growth trend increases in domestic consumption delays the signs of private investment picking up strongly until 2014.

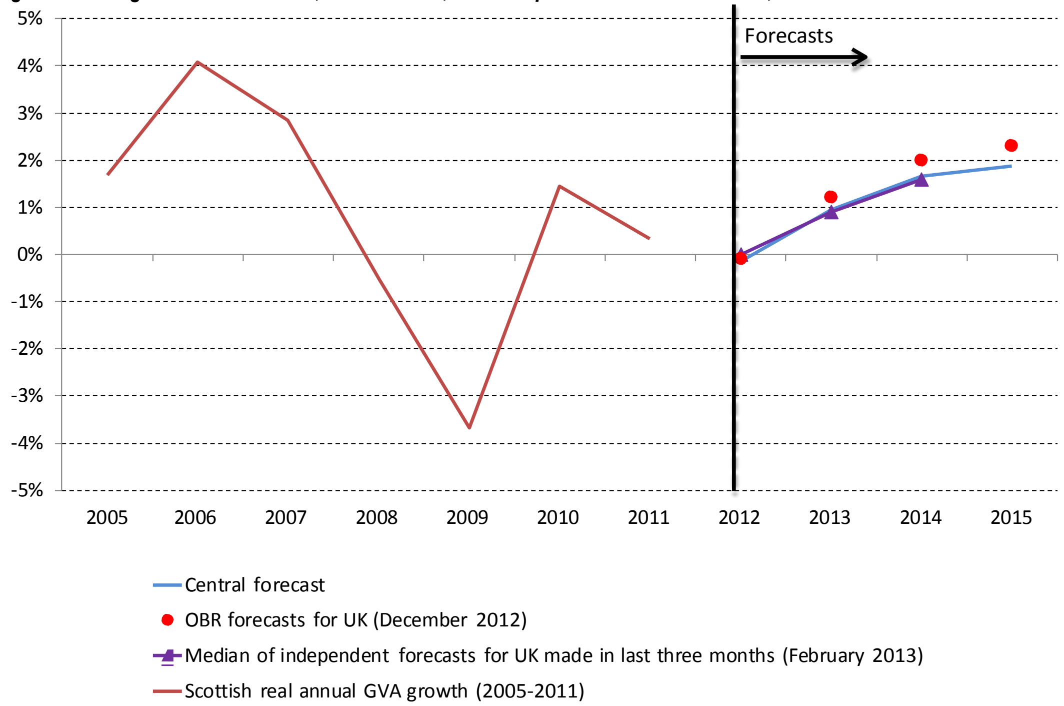
The external market for Scottish goods and services has considerably worsened in the last quarter, with growing polarisation of survey evidence in the Eurozone – Scotland's major non-UK market for exports – as well as most forecasters revising down growth expectations for the UK economy over 2013 and 2014. Major indexes continue to suggest recession the Eurozone through the first half of 2013, which will be exacerbated as market uncertainty, linked to political uncertainty returns after six months of relative calm in the Eurozone. Downside risks remain, and political events through 2013 are likely to drive the return of growth in the short term. Recent experiences in Italy suggest that voters are not inclined to support governments that have imposed austerity plans, causing those measures themselves – designed to ensure the continuation of the Eurozone project – to be even more widely questioned. The bright spot in export markets remains the underlying strength of the US recovery – albeit with a final quarter of 2012 with low growth, largely for one-off reasons – and the Scottish economy has become ever more reliant on US demand for its exports over the last decade.

Results

In this issue of the *Commentary*, we are forecasting the year-on-year real growth in key economic and labour market variables, including aggregate Gross Value Added (GVA) and employment and unemployment, over the period 2012 to 2015. This is the first issue in which we have forecast 2015, and will be the last in which we forecast 2012. The model used is multi-sectoral, and where useful, results are reported for sub-aggregate sectors.

We begin with the (central) forecasts for growth in the Scottish economy. Our new forecasts for 2012, 2013 and 2014 are shown in **Figure 4**. This also shows, for comparison purposes only, a number of different sources forecasts for the UK over the same period. These sources are the Office for Budgetary Responsibility (OBR) which last forecast in December 2012, and the median of recent forecasts produced by professional forecasters for each year of the forecast window.

Figure 4: GVA growth for Scotland, 2012 to 2014, and comparisons to UK forecasts, annual real %



Sources: Fraser of Allander Institute forecasts, Office for Budgetary Responsibility and HM Treasury (various months).

Our forecasts for real GDP growth in Scotland in 2013 and 2014 are now 0.9% and 1.7% respectively. These are lower than our forecasts from November 2012's *Commentary* due to continued weakness of domestic demand, in particular government spending and consumer expenditure, and weaker than anticipated growth in the rest of the UK and Eurozone markets to which Scottish exports are so reliant. The forecast for growth in 2013 has been revised down by 0.4%, while 2014's growth forecast is 0.5% lower. Any further delay from the political process leading to potentially critical disruption to activity in the Euro area is likely to produce downside risks to growth throughout the forecast horizon.

In addition to the aggregate growth forecasts, Table 2 also presents 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 2015

	2012	2013	2014	2015
Gross Value Added	-0.1	0.9	1.7	1.9
Production	-0.1	2.0	3.3	3.8
Services	-0.1	0.7	1.2	1.3
Construction	-0.1	0.6	1.1	1.3

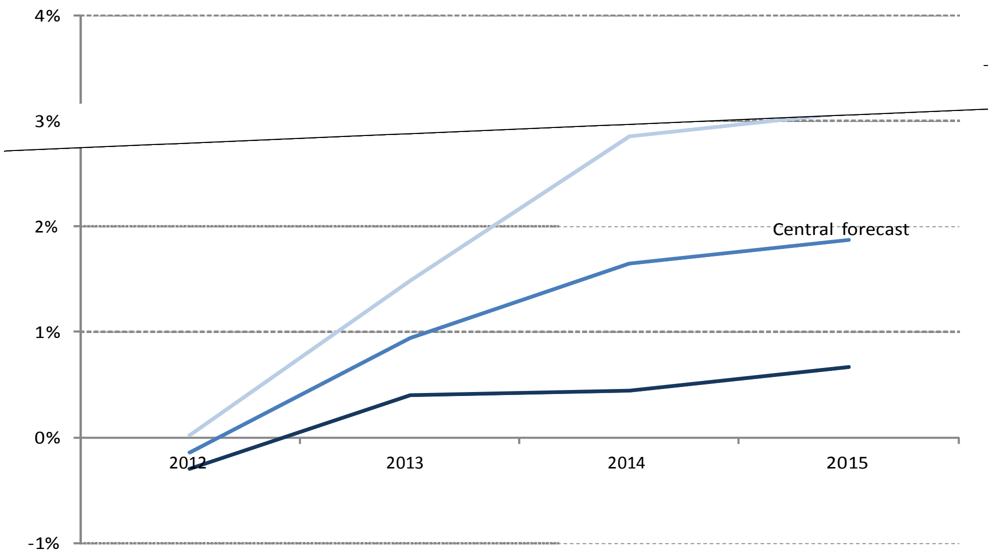
Source: Fraser of Allander Institute forecasts

As recent GVA data for Scotland suggests, the impact of the ongoing recession is being felt across the Scottish economy, i.e. in many manufacturing sectors, as well as more cyclical downturns in construction and household spending on durable goods. This is occurring concurrently with continued consolidation of UK public finances and real terms government current spending reductions through to the end of our forecast horizon. As we noted in June's *Commentary*, the construction sector is likely to respond quickly to upturns in private and public investment, where this occurs, but recent survey evidence indicates a continued weak outlook for the Scottish corporate sector making significant new investments – above those already announced.

We use our calculated past forecast errors (e.g. the difference between aggregate growth forecasts and what outturn figures were) to show the potential range of outcomes around our central forecast. For forecasts made in the spring period of a year, FAI forecasts have an average absolute error of 0.159 percentage points for the accuracy of the previous year (i.e. 2012 in this case). While for the year current in progress, our Spring forecasts have an average absolute error of 0.543 percentage points. The errors in forecasts for the following year (i.e. 2014) is 1.204 percentage points.

Again, we use the mean absolute error for the longest forecast period – in this issue, to 2015 - as we do not yet have a long history of forecasts of growth made over a three year horizon. These historical errors give the ranges around our central estimates of Scottish GVA growth shown in Table 2 above. The estimated range around our central forecasts of GVA growth in each year is shown in **Figure 5**.

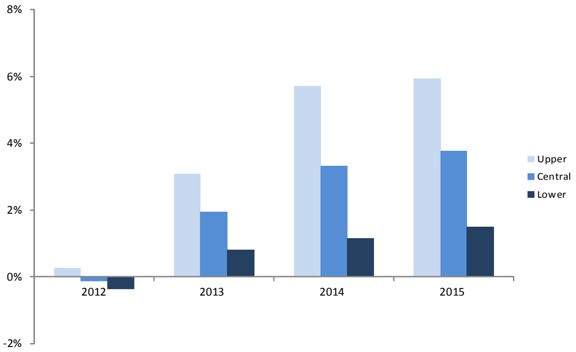
Figure 5: GVA growth for Scotland, 2012 to 2014, possible range of outturn growth



Source: Fraser of Allander Institute forecasts

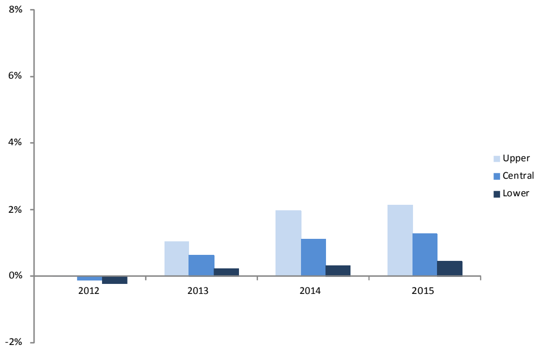
Figure 6, **Figure 7** and **Figure 8** show the forecasts of GVA growth in each of the aggregated sectors ("production", "services" and "construction" in each year under the central and the lower and upper forecasts.

Figure 6:
GVA growth forecasts for "Production" sector in central, upper and lower cases, 2012 to 2015



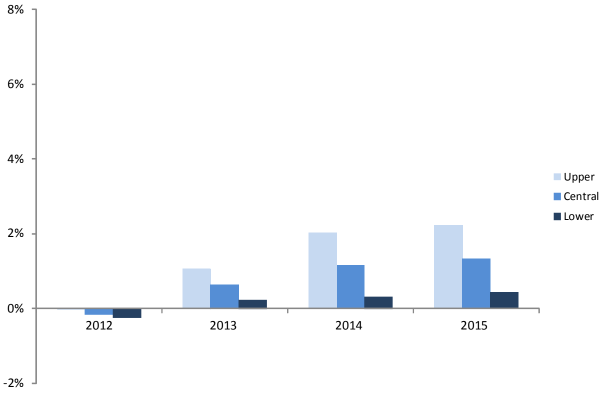
Source: Fraser of Allander Institute forecasts

Figure 7:
GVA growth forecasts for "Construction" sector in central, upper and lower cases, 2012 to 2015



Source: Fraser of Allander Institute forecasts

Figure 8:
GVA growth forecasts for "Services" sector in central, upper and lower cases, 2012 to 2015



Source: Fraser of Allander Institute forecasts

Employment

The most recent data for employment indicate that the Scottish labour market has weakened since improving during the first half of 2012. Employment of people of working age fell by 6000 in the most recent three month period, while the unemployment rate rose above 8 per cent and there was a 7000 increase in the numbers in the labour market but out of work. Detailed commentary on recent developments in the Scottish labour market is available in the *Labour market* section.

The most recent data on the number of (employee) jobs in the Scottish economy are available to the end of the third quarter of 2012. These currently indicate that the number of employee jobs in Scotland has increased during the first nine months of 2012 by just under 50,000. The majority of this increase was in the first half of 2012, with employee job numbers increasing only by 3000 between the second and third quarter. We forecast – and this is supported by more recent data on changes in employment, which is a measure of people rather than jobs – that there will be a 15500 fall in the number of jobs in the final quarter of 2012. Our 2012 employee jobs forecast is for the number of jobs at the end of 2012 to be up by 32,600 from the end of 2011.

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	2015
Total employee jobs (000s), Dec	2,294	2,303	2,322	2,354
Net annual change (jobs)	32,650	9,400	19,200	31,800
% change from previous year	1.4%	0.4%	0.8%	1.4%
Agriculture (jobs, 000s)	27	27	29	30
Annual change	-5,200	450	1,250	1,300
Production (jobs, 000s)	245	253	264	278
Annual change	7,350	7,800	10,850	14,050
Services (jobs, 000s)	1,903	1,902	1,907	1,920
Annual change	37,250	-850	4,250	13,600
Construction (jobs, 000s)	118	120	123	126
Annual change	-6,800	1,950	2,850	2,850

Note: Absolute numbers are rounded to the nearest 50.
Source: Fraser of Allander Institute forecasts

Our forecasts for employee jobs in 2013, 2014 and 2015, including a breakdown by broad sectoral groups, are shown in Table 3. The number of employee jobs in 2013 is forecast to increase slightly, largely due to a rise in the number of jobs in Production, although we have revised down the number of jobs added in 2013 from 16,950 to just over 9,000. Through 2014 and 2015 we expect the number of jobs to increase each year (by 0.8% and 1.4% respectively), with most of the job gains seen in the "Production" sector as the domestic-facing services sector to struggle to create employment opportunities in the face of slow or zero household spending growth. Service employment is forecast to grow more strongly in 2015, rising by almost 20,000 from the end of 2012. The employee jobs forecasts consistent with our upper and lower forecasts for GVA growth are given in Table 4.

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

	2012	2013	2014	2015
Upper	36,850	21,400	44,950	59,100
Central	32,650	9,400	19,150	31,800
Lower	29,950	-3,100	-5,750	5,150

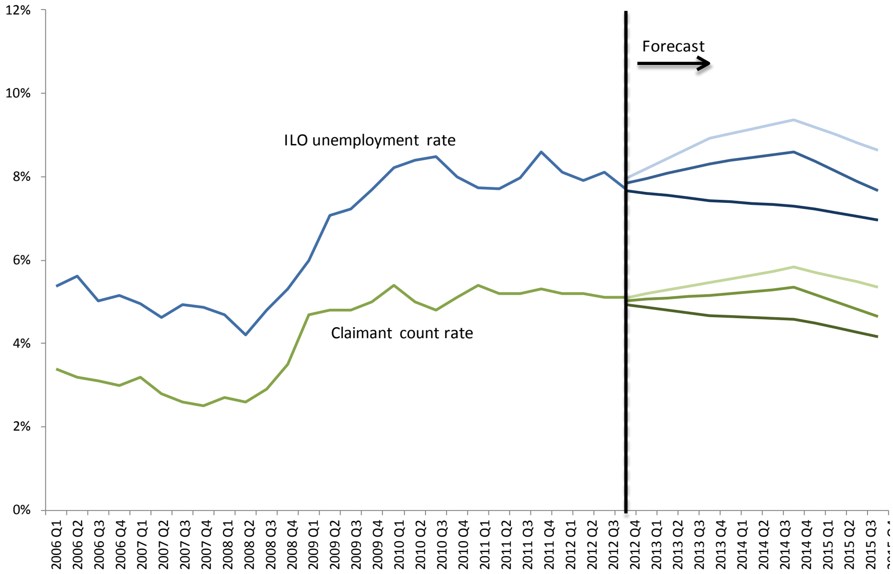
Note: Absolute numbers are rounded to the nearest 50.
Source: Fraser of Allander Institute forecasts

Unemployment

We present the outturn data on unemployment at the end of 2012 and our forecasts for unemployment at the end of 2013, 2014 and 2015 in our central forecast in Table 5. As with previous forecasts we report the ILO unemployment measure and the number forecast to receive unemployment benefits ("claimant count"). The ILO measure is preferred as it gives a more complete indication of the extent of labour resources available for work but unable to find work, and so is a better measure of the level of spare capacity in the labour market.

As is discussed elsewhere in the *Commentary* in the most recent quarter the level of unemployment has fallen on the ILO measure for both working age and all population, while the claimant count measure continues to record declines in the numbers receiving unemployment benefits.

Figure 9: Scottish ILO and claimant count unemployment rate, history and forecast: 2006 to 2015



Source: Fraser of Allander Institute forecasts

Our forecasted levels and rates of unemployment in Scotland at the end of 2012, 2013, 2014 and 2015 are given in Table 5. We have again revised these down – both in levels and rates – as the Scottish labour market continues to display unusual (low) productivity changes – e.g. more robust employment measures while output has been declining over recent quarters. We show the history of both ILO and

Claimant count unemployment rates, and our forecasts for these variables, between 2006 and 2015 in **Figure 9**.

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

	2012	2013	2014	2015
ILO unemployment	204,050	218,300	228,500	204,100
Rate[1]	7.8%	8.3%	8.6%	7.7%
Claimant count	137,650	141,900	148,511	130,192
Rate[2]	5.0%	5.2%	5.3%	4.7%

Notes: Absolute numbers are rounded to the nearest 50. [1] = rate calculated as total ILO unemployment divided by total of economically active population aged 16 and over. [2] = rate calculated as claimant count divided by 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
28th February 2013