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The editors welcome contributions to the Economic Perspectives section. Material submitted should be of interest to a predominately Scottish readership and written in a style intelligible to a non-specialist audience. Contributions should be submitted to Cliff Lockyer c.j.lockyer@strath.ac.uk

Articles accepted for publication should be supplied electronically and conform to the guidelines available from Isobel Sheppard fraser@strath.ac.uk

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Outlook and appraisal

Overview

The Scottish economy may be continuing to recover from recession but the rate of recovery appears to be slowing even when allowance is made for the difficult weather this winter. In the latest quarter – 2010q3 – for which there is official data Scottish GDP grew by 0.5% compared to an increase of 0.7% in UK. But with UK GDP contracting by -0.6% in the fourth quarter and the ONS estimating that only -0.5% could be attributed to the bad weather, it is clear that the UK economy was stagnating at the end of the year. In the absence of Scottish outturn data for the fourth quarter, survey data indicate a weakening of Scottish growth in that quarter and suggests that Scottish GDP performance may have been weaker than the rest of the UK. The service sector is especially weaker in Scotland, the manufacturing sector less so, but construction activity is much stronger here, at least in the third quarter.

There is a new puzzle in the labour market as unemployment falls in Scotland while it continues to rise in the UK. Employment growth also appears to be stronger in Scotland. Yet, the growth of output, from the GVA/GDP data, suggests a weaker Scottish recovery than in the UK. One possible explanation is that the situation is the consequence of the Scottish job loss being proportionately much greater in the recession than in the UK despite a slightly smaller output loss. It may follow that as the recovery began UK firms on average had plenty of spare labour resource due to labour hoarding and so did not need to hire additional workers compared to their Scottish counterparts. So, for this reason, employment could be rising in Scotland while remaining static or falling, due to the weak recovery, in the UK. Other things equal, this would be associated with falling unemployment in Scotland and static or rising unemployment in UK. A second possibility is due to the greater apparent shift to part-time working in Scotland, which opens up the possibility that while the number of jobs could be rising faster in Scotland than the UK, the provision of labour services may not be, and may be more in line with output change. Moreover, if to the end of 2010 the number of new part-time jobs offered was greater than the number of full time jobs lost then

unemployment would fall and vary differently from the UK.

Future economic conditions appear even more clouded by uncertainty than is usual. The most obvious example is the uncertainty surrounding the impact of the political upheaval in the middle-east and Libya in particular. The price of oil is rising and is now in the $110 to $120 range. Such high levels will continue as long as the Libyan crisis is unresolved and the extent to which Saudi Arabia acts as a 'swing' producer seeking to meet some or all of any shortfall following a partial or complete shutdown of Libyan oil supply. Of course if the political upheaval spreads significantly to Saudi Arabia then the implications for the world economy will be enormous. Significant oil price hikes have in the past preceded a recession as in 2008 and occasionally are associated also with rising inflation as in the 1970s.

Other uncertainties concern:

- The growing threat of inflation, but core inflation especially earnings growth is largely stable.
- Continuing weak bank lending as the banks continue to de-leverage, have significant amounts of debt to re-finance and face the prospect of further losses due to the risk of sovereign debt default especially, for British and Scottish banks, in Ireland.
- The impact of fiscal consolidation.
- Continuing weakness of household demand as households continuing to run down debt and as real household incomes are wealth fall.
- Business investment and export growth, which are the hoped-for mainstay of recovery but both remain stubbornly weak.

Against this background we are forecasting that GDP will grow by 1% this year, 1.6% in 2012 and 1.9% in 2013. We have shaded down our forecasts for 2011 - by 0.1% points - and 2012 - by 0.3% points - compared to our November release. The lowering of the forecast is in part due to the worsening outlook for consumer confidence in both Scotland and the UK, while the much greater weakness relative to UK in 2011, with UK forecasts around 2%, is very largely due to the stronger public spending cuts in Scotland this year. But while the recovery is weak, jobs are being created in the Scottish economy. Net jobs grow by 0.9% in 2010, 0.9% in 2011, 1.4% in 2012 and 1.7% in 2010. By 2013 total employee jobs are forecast to be around 60,000 fewer than in 2007 and broadly the same as at the end of 2004. With the recovery in both output and employment comparatively weak, we predict the recovery this year will be insufficient to lower or even stabilise unemployment. Accordingly, unemployment is expected to rise in Scotland again during this year reaching 8.8%, or 234,000 by the end of the year. After that, though, the recovery should be sufficiently strong to make a more sustained dent in the rate and so we are forecasting lower rates of 8.4% and 7.9% in 2012 and 2013 respectively.

In this Outlook & Appraisal we also look more closely at the growth issues confronting the Scottish economy over the longer term, beyond our forecasting horizon. This is done in the light of Scotland's past growth performance, shown to be a little weaker than the UK, identified problems, weaker productivity growth, and a failure to sustain and grow a vibrant export base.

Recent GDP performance

The Scottish economy continues to recover from recession to the latest data point in 2010q3. In the latest quarter – 2010q3 – GDP grew by 0.5% compared to an increase of 0.7% in UK - see Figure 1. Both the production (17% of total GVA) and service (74% of GVA) sectors were both weaker in Scotland than in the UK as a whole in the third quarter. Production GVA contracted by -0.3% in Scotland while increasing by 0.5% in the UK. Services grew slightly, by 0.1%, in Scotland but grew by 0.5% in the UK. In contrast, construction (8% of GVA) grew more quickly in Scotland, at 6.2%, compared to growth of the sector in the UK of 3.9%, and so made a considerable contribution to the overall growth of Scottish GVA in the quarter amounting to 0.5%. The agriculture, forestry and fishing sector (2% of GVA) also grew more quickly here, with growth of 1.3% in the quarter, while the sector in the UK contracted by -0.3%.

Despite stronger Scottish growth in the previous quarter, 2010q2, of 1.3% compared to UK growth of 1.0%, the recovery is weaker in Scotland. Scottish GDP has grown by 1.9% from the trough of the recession while UK GDP has recovered by 2.7%. In consequence, Scottish GDP is still -3.9% below pre-recession peak whereas UK GDP is -3.8% below and it should be remembered that the recession was greater in UK (-6.3% fall in GDP) than in Scotland (-5.7%).

The service sector (74% of Scottish GDP) grew by 0.1% in 2010q3 compared to growth in UK services of 0.5%, see Figure 2. The weakness in the Scottish service sector is

Figure 1: Scottish and UK quarterly GDP growth, 1998q2 to 2010q3

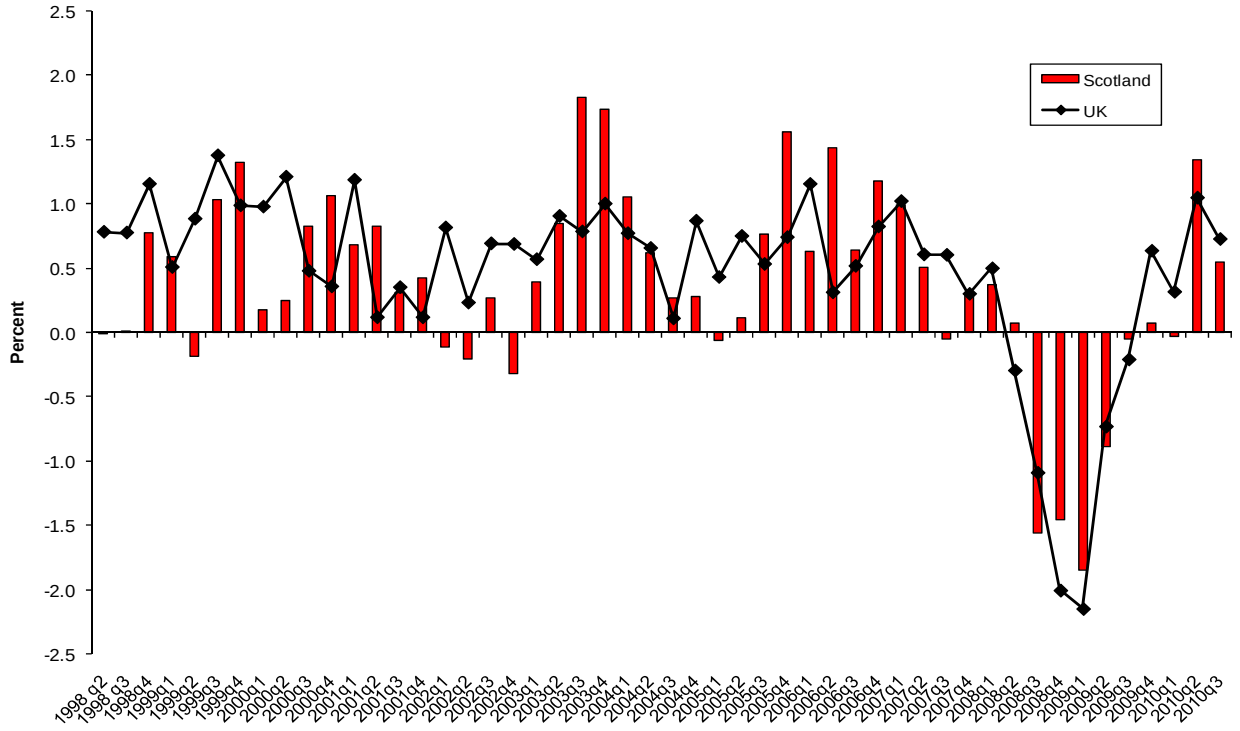


Figure 2: Scottish and UK Services GVA growth at constant basic prices 1998q2 to 2010q3

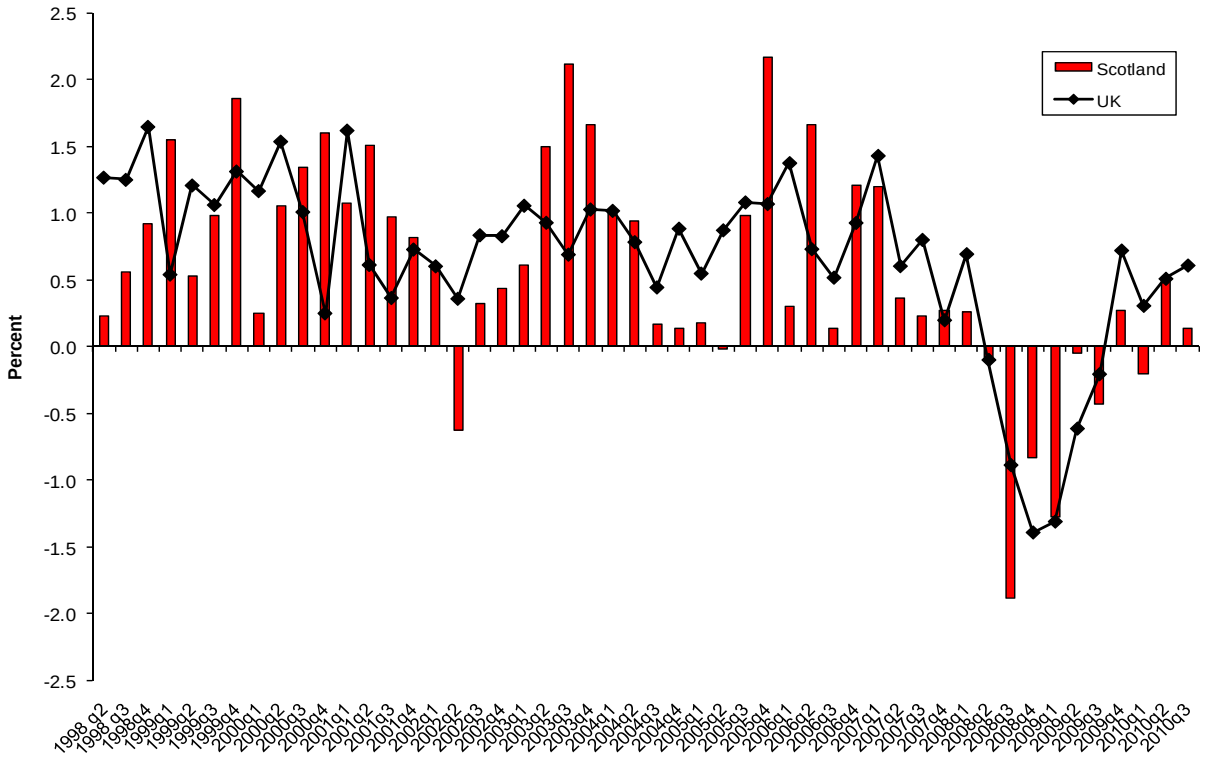


Figure 3: Scottish and UK manufacturing GVA growth at constant basic prices 1998q2 to 2010q3

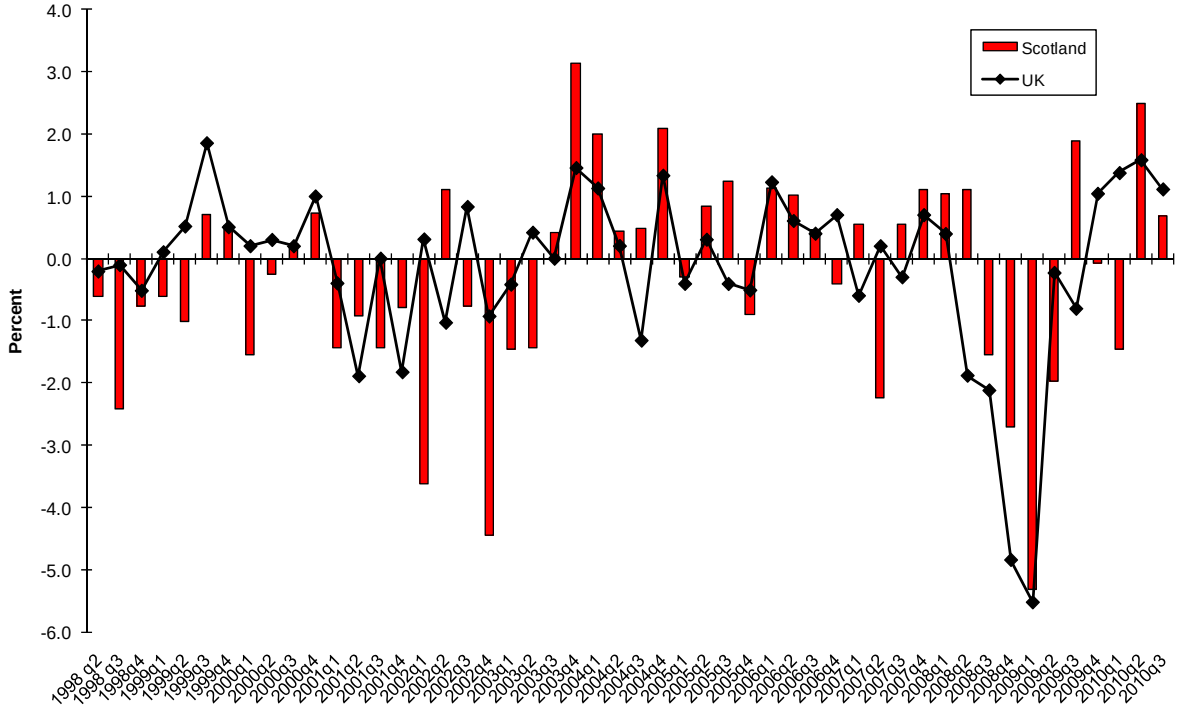
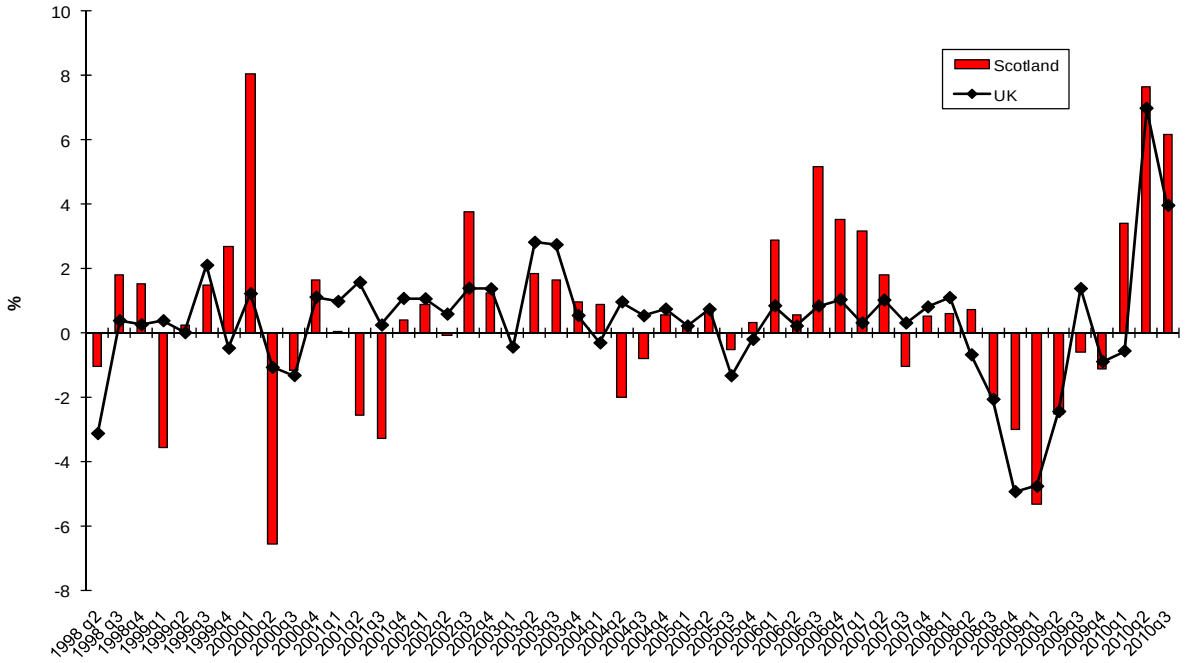


Figure 4: Scottish and UK construction GVA volume growth 1998q2-2010q3



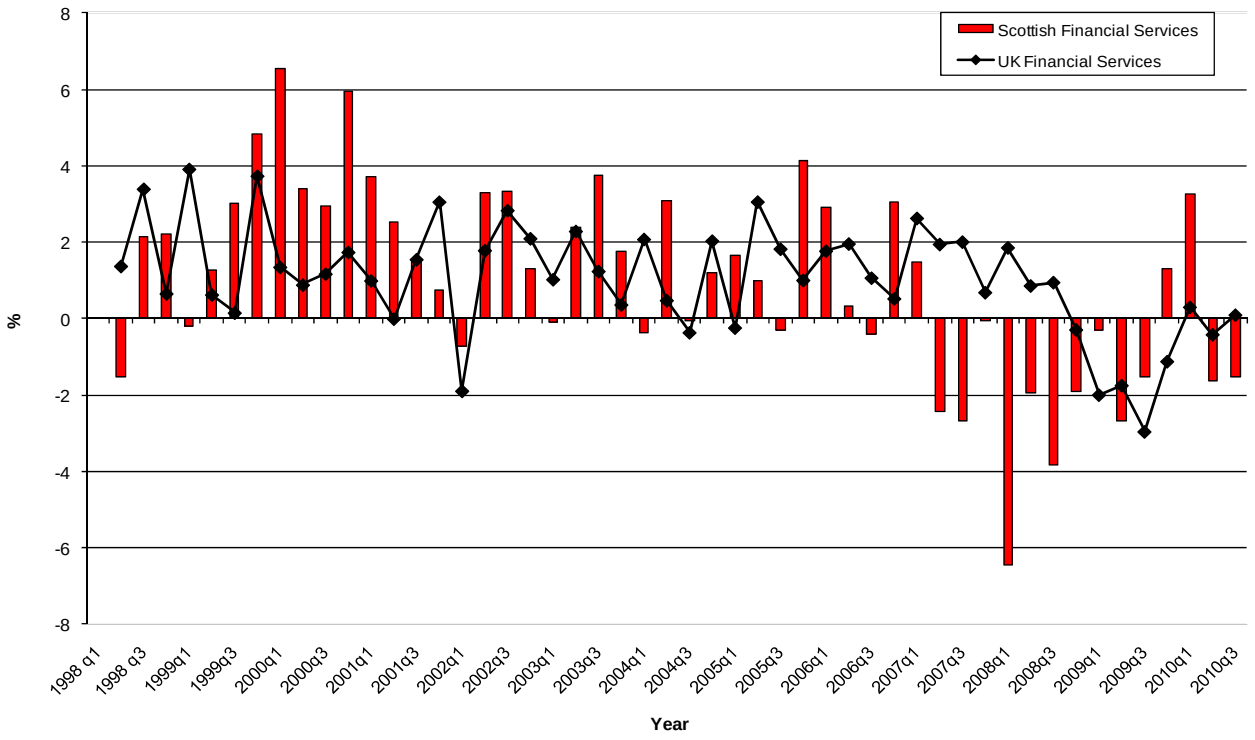
clearly a cause for concern. The sector has hardly begun to recover from recession with growth of 0.7%, while UK services has grown by 2.2% from its recession trough. In consequence, Scottish service sector GVA is -3.8% below its pre-recession peak whereas UK services GVA is -2.4% below.

In 3rd quarter 2010 Manufacturing GVA rose by 0.7% in Scotland against a rise of 1.1% in manufacturing in the UK. Figure 3 makes clear that there has been much variability in the recent performance of the sector and recovery from its recession trough has been slower here, with growth from the bottom of recession of 3.6% compared to UK manufacturing which has recovered by 5.2%. It is also worth noting that the recession in manufacturing was much greater in the UK with output falling by -14.6% whereas Scottish manufacturing output fell by -11.1%.

Both Scottish and UK construction GVA are recovering strongly, with growth averaging more than 5% per quarter in Scotland over last the three quarters and 3.5% in UK, see Figure 4. Construction is the only principal sector in Scotland to have grown past its pre-recession peak with GVA 1.8% above the peak in Scotland but still -4.6% below peak in UK, at 2010q3.

At the sub principal sector level, the main service sectors contributing to growth were retail & wholesale, other services, transport, storage & communication and the public sector. Retail & wholesale grew by 0.7% in the third quarter, which was slightly weaker than the growth of 0.9% in the sector in the UK. Transport, storage & communication grew by 0.4%, which was much slower than the 2% growth achieved by its UK counterpart. Other services grew strongly by 1.9%, somewhat faster than the 1.2% achieved by other services in the UK. Finally, growth in public sector GVA was weaker in Scotland during the quarter than in the UK with output rising by 0.1% compared to 0.5% in the UK. Both hotels & catering and financial services contracted in the third quarter with GVA falling by -0.2% in the former compared to a rise of 0.8% in hotels & catering in the UK. Financial services suffered a sharp contraction with GVA falling by -1.5% while the financial sector in the UK grew by 0.2% - see Figure 5. These data suggest that the effects of the credit crunch and recession are still being felt in the sector.

Figure 5: Scottish and UK financial services GVA growth at constant basic prices 1998q2 2010q3



In manufacturing, the main sectoral drivers of growth were the chemicals & man-made fibre, food & drink, and paper, printing & publishing industries. Chemicals grew strongly by 3.7% in the quarter, double the growth rate of the sector in the UK which grew by 1.8%. Of course, chemicals suffered very badly in the recession and now appears to be recovering strongly. Paper, printing & publishing also grew by 3.7% in the quarter, while output in the sector in the UK remained stagnant. Food & drink grew by 1.3% in Scotland but with growth of 2.1% performed more strongly in the UK. Within the sector, the drinks industry grew slightly in Scotland, by 0.3%, but contracted markedly in the UK, by

-4.6%. Finally, the engineering sector grew weakly and at the same rate, 0.2%, during the quarter in the UK. The electronics sector after recovering strongly in the second quarter slipped back somewhat in the third quarter with GVA falling by -0.3% in Scotland while rising by 2% in the UK. Transport equipment GVA fell in both Scotland and the UK, by -0.2% and -4% respectively. But mechanical engineering did display positive growth in the quarter with the Scottish sector growing by 1.4%, quite a bit less than the growth of 3.3% in UK mechanical engineering.

Recent labour market performance

In the previous *Commentary*, we sought to explain the apparent puzzle over the recession of Scottish unemployment rising more quickly than the UK, and so rising above the UK, at a time of comparable GDP change.

We explained this as follows.

First, a comparable GDP fall, other things equal, might have been expected to push up the Scottish unemployment rate by more than the UK for simple arithmetic reasons since the Scottish rate was initially appreciably below the UK rate.

Secondly, unemployment rose more quickly than the UK after 2009Q2 because inactivity rose more quickly in the UK.

Thirdly, there was significant measured job loss in Scotland in 2010Q1. Inactivity rose strongly in Scotland dampening the rise in unemployment but suggesting that Scottish unemployment may continue to rise relative to the UK if some or all of the increased numbers of inactive workers decide to return to the labour market.

Finally, we noted the possibility that measurement error between periods might be clouding the outcome. Taking the recession period as a whole, by 2010q1 the contraction in Scottish jobs was, at -4.47%, a lot greater than the UK contraction of -2.54%. Total Scottish employment had fallen by -114,000, Scottish unemployment had risen by 112,000 and Scottish and UK inactivity had moved to comparable levels.

Now we appear to be faced with a new puzzle.

The new puzzle is that unemployment is falling in Scotland while it continues to rise in the UK. And, employment growth also appears to be stronger in Scotland. Yet, the growth of output, from the GVA/GDP data, suggests a weaker Scottish recovery than in the UK.

We can only speculate as to the reasons for this apparent discrepancy. There are several possibilities.

First, we have noted that the Scottish job loss was proportionately much greater in the recession than in the UK despite a slightly smaller output loss. It may follow that as the recovery began UK firms on average had plenty of spare labour resource due to labour hoarding and so did not need to hire additional workers compared to their Scottish counterparts who having shed proportionately more workers were hoarding much less labour. So, for this reason, employment could be rising in Scotland while remaining static or falling, due to the weak recovery, in the UK. Other things equal, this would be associated with falling unemployment in Scotland and static or rising unemployment in UK. It is also compatible with rising activity/falling inactivity in Scotland and falling activity/ rising inactivity in the UK, providing that the change in activity/inactivity is due to the change in employment.

A second possible explanation may be due to differential changes in the balance of part-time and full-time employment between Scotland and the UK. The *Overview of the labour market* below notes that over the year to June 2010 there was a decline in the number of full time workers by -4.1% and a rise in the number of part-time workers by 3.9%. It appears that the shift to part-time workers is greater in Scotland than the UK. If so, this opens up the possibility that while the number of jobs could be rising faster in Scotland than the UK, the provision of labour services may not be, and may be more in line with output change. Moreover, if to the end of 2010 the number of new part-time jobs offered was greater than the number of full time jobs lost then unemployment would fall and vary differently from the UK.

We favour the first explanation but do not rule out the possibility that variations in the balance of full time to part-time work may in part contribute to the puzzle. What can be said though is that the relatively strong output bounce-back in the first two quarters of recovery is unlikely to be sustained. If the subsequent recovery of output is weak and remains below trend then there is a strong likelihood that unemployment in Scotland will begin to rise again.

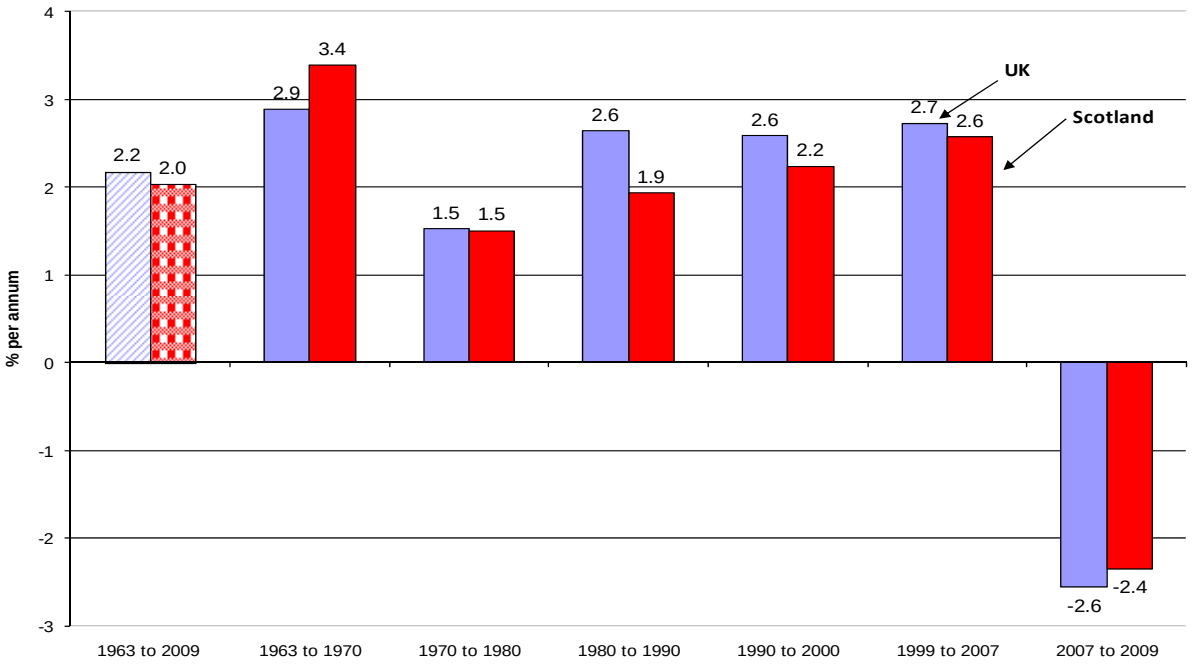
Scottish Growth: past, present and future

As the Scottish economy pulls slowly out of recession, with its banks badly shaken, financial service, housing and property market activity curtailed and the public sector set for contraction, it is reasonable to consider the prospects for future growth beyond the three-year focus of the latest forecast projections presented below. We do this by examining Scotland's growth performance over the last 46 years to get some sense of the nature of the problems and what needs to be addressed.

What are the stylised facts about Scotland's growth? First, and perhaps surprisingly for some, the growth of GDP has on average been little different from UK GDP growth. Figures 6 and 7 illustrate.

Figure 6 shows that annual average growth of GVA/GDP was 2% in Scotland and 2.2% in the UK between 1963 and 1999. This is a small difference. At Scottish average growth, the level of GDP should have doubled by 1998 - 35 years -

Figure 6: UK and Scottish GVA per head growth 1963-2009, by sub period, percent per annum



whereas at UK average growth, UK GDP should have doubled by 1995 - 32 years. Figure 6 also indicates that the growth rates have varied over the period. The Scottish economy enjoyed strong absolute and relative growth in the 1960s due mainly to the impact of regional policy on inward and domestic investment, the growth of financial services and the development of North Sea oil. In no other period was Scottish growth stronger than the UK. It is clear that growth in both the Scottish and UK economies has been affected by wider global influences such as the oil price hikes and stagflation in the 1970s. It is also clear that Scottish growth strengthened over the 1990s and 2000s until the most recent recession but with growth still slower than the UK. In the post devolution period Scottish growth was a strong as it had been since the 1960s and broadly the same as the UK. Of course, this is not to attribute the outcome to devolution, one cannot be certain, especially since there was a boom in the UK economy prior to the credit crunch and recession at the end of the decade. We look at the sectoral composition of growth in this period below. But it is worth noting that the Scottish growth performance during this period was quite remarkable given the loss of around 50% of the output of the electronics industry in Scotland following the worldwide recession in the ICT industries, which began to hit Scottish electronics output from the third quarter of 2000.

In Figure 7 we display the growth of GVA/GDP per head in Scotland and the UK over the same time periods. GDP per head is generally considered by economists to provide a better indication of prosperity than GDP alone because it allows for population size.

The weaker growth of Scotland's population results in the growth of GDP per head in Scotland being slightly larger than the growth of GDP per head in the UK. The average growth rates are essentially the same but Scotland is just ahead with an average rate of 2% per annum compared to 1.9% in the UK over the 46 year period. The relative strengthening of Scotland's growth during the 1990s and 2000s is also evident with growth now comparable to the UK in the 1990s and slightly above the UK between 1999 and 2007. And as with GDP in the recent recession the drop in Scottish GDP and GDP per head was less than in the UK. The stronger growth of GDP/GVA per head in Scotland in the 2000s is probably one reason why Scotland's unemployment rate fell below the UK. We noted in the previous *Commentary* that estimates of Okun's relationship suggest that a GDP growth rate of around 2% per annum is necessary to stabilise both the UK and Scotland's unemployment rate. Further work on this relationship is reported in the main *Forecasts of the Scottish economy* section below. Clearly, with a GDP growth rate of 2.6% and GDP per head growth rate of 2.4% the unemployment rate in Scotland would have been expected to fall.

So what were the main industrial drivers of Scotland's GDP growth?

We do not have consistent data for the past 46 years and so

Figure 7: UK and Scottish GVA per head growth 1963-2009

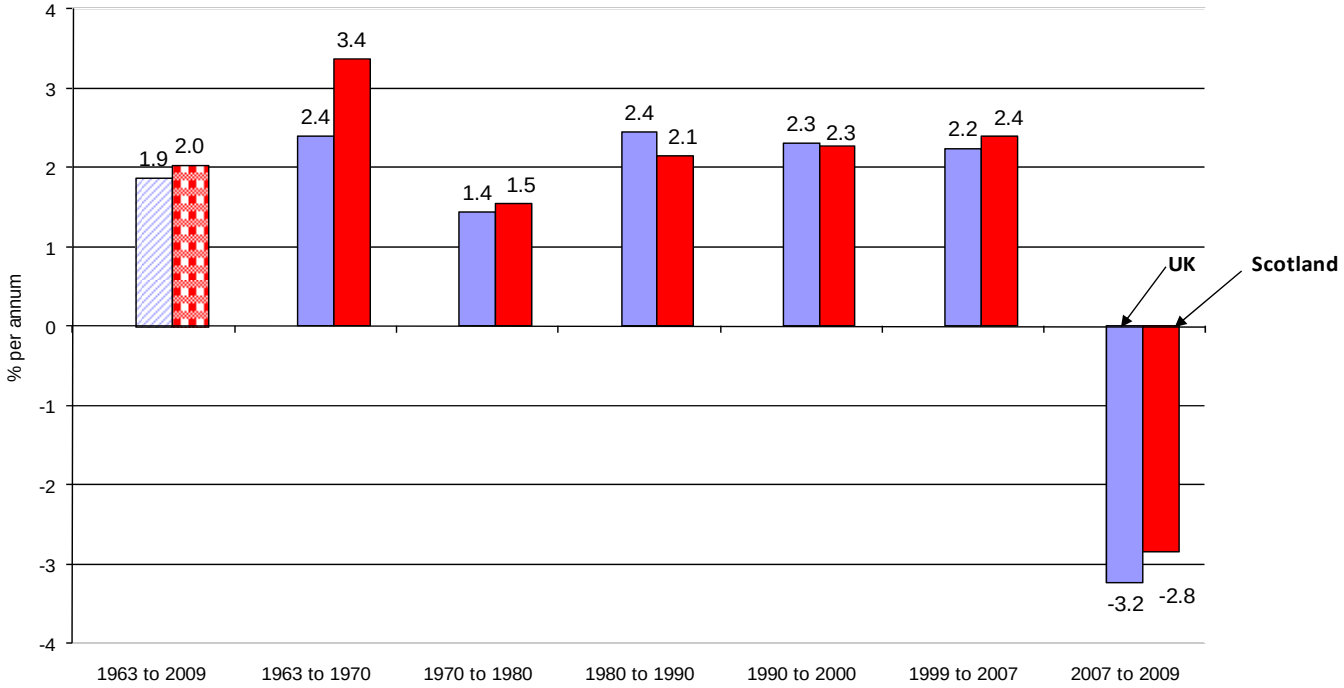
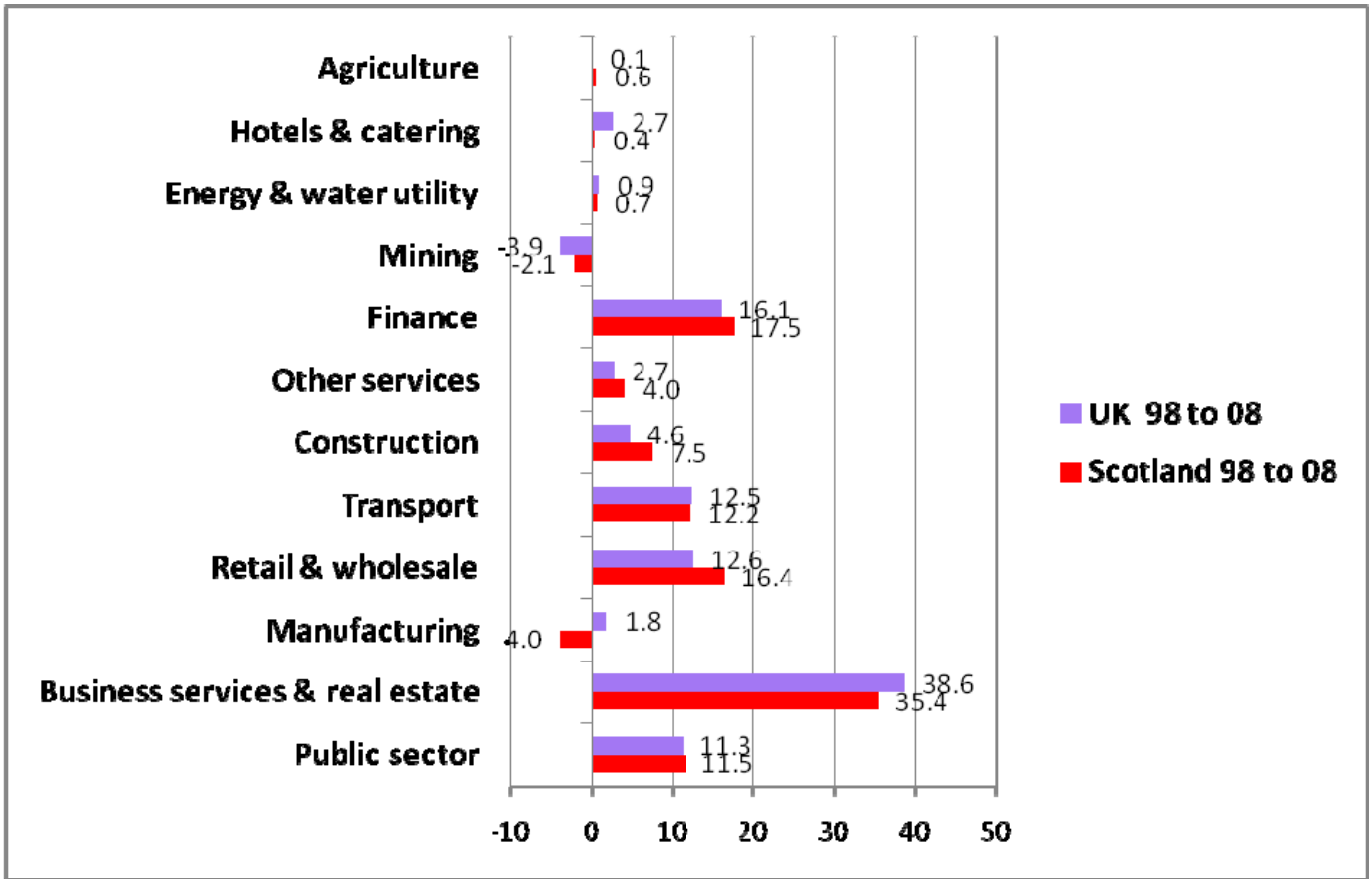


Figure 8: Industry shares in UK and Scottish growth: 1981q1 to 20089



must rely on more recent data from 1998. Figure 8 charts the industry shares in Scottish and UK GDP growth between 1998Q1 and 2008Q1, the latter being peak output before the economy went into recession.

The figure highlights the importance of *real estate and business services (REBS)* to growth in both Scotland and the UK. About half of this sector is property and housing market related, so some of this growth clearly reflects the boom in property and housing markets in the 2000s. But the contribution of this sector to growth was somewhat stronger in the UK than in Scotland with a contribution of almost 39% in the UK and just above 35% in Scotland. *Financial services* was the second most important sectoral driver of growth and was a little more important in Scotland, with a contribution of almost 18% to Scotland's growth whereas the sector's contribution to UK growth was just above 16%. *Retail & wholesale* was the third most important sectoral contributor to growth in both Scotland and the UK. But it was significantly more important in Scotland accounting for just over 16% of overall growth compared to a contribution of less than 13% in the UK. This probably just as much represents structural changes on the supply-side of retailing in Scotland, with the main multiples raising their relative presence in Scotland towards UK levels, as to any differences in household demand for retail products between Scotland and the UK. *Transport services* was the fourth most important sector to growth in both Scotland and UK with the contribution much the same to both at just above 12% here and just below 13% in the UK. With similar contributions to UK and Scottish growth of just above 11% and below 12%, respectively, the *public sector* was much less important to growth than has often been suggested and no more important in Scotland than in the UK. Finally, the *construction sector* in Scotland contributed more to growth than its UK counterpart accounting for more than a 7% share whereas in the UK the contribution was less than 5%.

The negative contribution of manufacturing to Scottish growth compares to the small positive contribution made by the sector in the UK. There is no doubt that the contraction from 2000 of the electronics industry, disproportionately located in Scotland, contributed to this outcome but it does raise questions about the sector's contribution to future growth.

A question not answered by the previous discussion is the extent to which differences in the contribution of sectors to Scottish and UK growth reflects variation in the relative importance of the sectors to the Scottish and UK economies, or whether the same sectors have performed differently. Figure 9 helps us answer this question, for the same period to 2008 before the start of the recession.

Figure 9 reveals that over the period from 1998 to 2008 quarterly growth in Scotland averaged 91% of UK growth. However, if we apply the UK industrial structure weighting to the actual Scottish sectoral growth rates there is some improvement in Scottish growth to 95% of the UK average. But by applying the UK growth rates of each sector to the Scottish industrial structure, Scotland's growth performance rises to 98% of the UK average. What this simple analysis suggests is that if Scotland could move closer to the UK industrial structure it would get a growth dividend, because Scotland is somewhat less specialised in fast growing sectors such as business services & real estate, retail & wholesale and transport & communication. But more significantly, the figure indicates that if Scottish industry had grown at the same rates as its UK counterparts then Scottish growth would have risen to 98% of the average quarterly rate. In other words, the performance of Scottish industry has been generally weaker and that suggests an intrinsic competitiveness problem.[1]

This analysis mirrors that of the Scottish Council of Economic Advisers (SCEA) who found in their 2009 report that improved labour force utilisation had made a bigger contribution to Scottish GDP growth between 1997 and 2007 than labour productivity growth, when compared to the UK.[2] Moreover, the SCEA also found that Scottish labour productivity was 3 percent lower than the UK average, while wages were 6 percent lower (using 2004-06 data). This implies that average labour costs per unit of output were about 3 percent lower in Scotland. But the Scottish economy was not more competitive over 1997-2007 than the rest of the UK otherwise growth should have been faster here.[3] What this analysis suggests is that capital, and therefore total factor, productivity must be lower in Scotland by an amount sufficient to more than offset the advantage from lower average unit labour costs.

We suggest that lower total factor productivity and competitiveness may be due to key weaknesses of the Scottish economy, which are likely to limit the future growth of productivity, exports and the output of the Scottish economy.

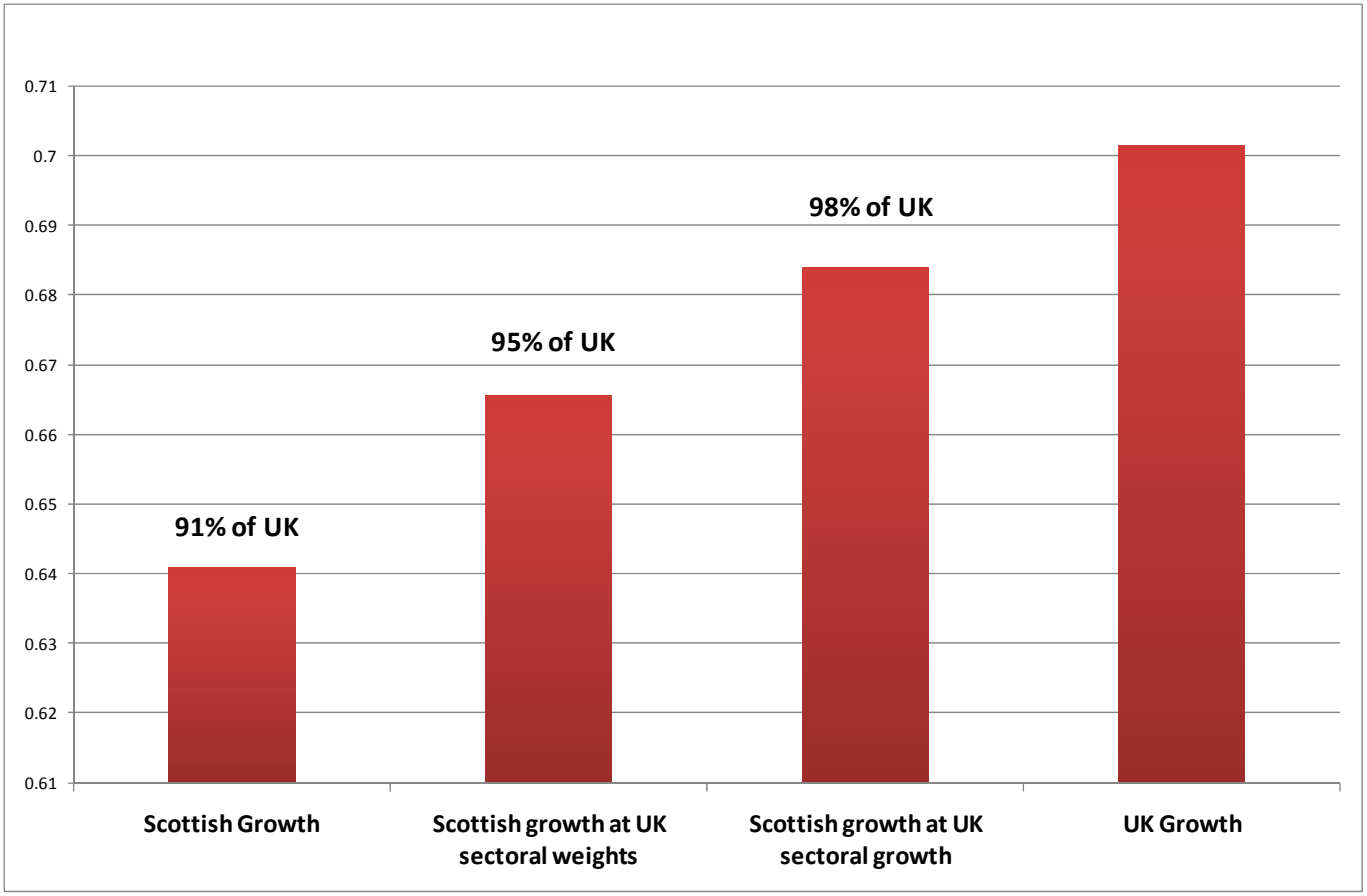
There is developing evidence-based consensus that the promotion of growth in small open economies requires focus on:

- growing the export base by developing companies of scale and attracting inward investment;
- enhancing competitiveness of the export base through innovation, R&D and improved business sophistication, including promoting leadership and enterprise;
- raising economy-wide value added by encouraging new and small firms to link into the supply-chains of the export base.[4]

Export Base

Scotland's export base is in decline. The recent Economy, Energy and Tourism Committee's "*Report on the public sector's support for exporters, international trade and the attraction of inward investment*"[5] noted the decline over the past 10 years. This is indicated by a fall in the volume of

Figure 9: Shift-share analysis of Scottish growth: 1998q1-2008q1

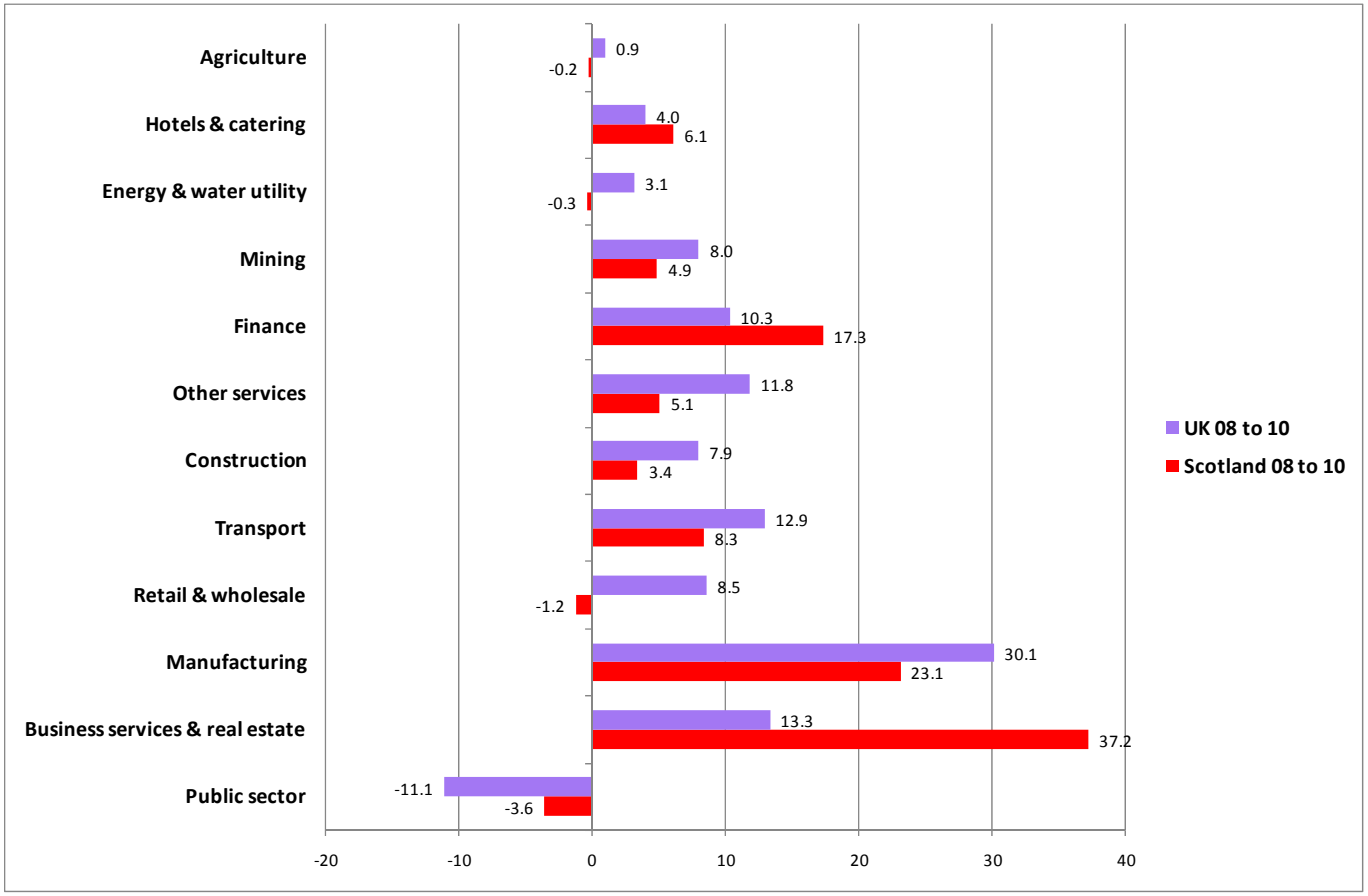


manufactured exports abroad following the contraction of the electronics sector which began in 2000, and a fall in the share of the value of UK goods exports from 9% in 2001 to 6% in 2007, the year before the recession commenced. During the recession the share rose to 7% in 2009. The Committee Report notes that " ..... almost all other nations and regions have – over the same period – seen the value of their exports rise during the same period." Data presented to the Committee by Scottish Development International (SDI) indicate only 5% of all UK exporting companies are based in Scotland.[6] The Committee notes that "this compares poorly to the fact that around 8% of all VAT registered firms in the UK are located in Scotland."

Scotland's export base is also narrowly focused. The Scottish Enterprise paper on exporting and economic growth notes the following: "The top five overseas exporting industries in 2008 were chemicals (including refined petroleum products) (£3.5billion), food & beverages (£3.4bn), business services (£2.3bn), the wholesale, retail & accommodation sector (£1.4bn) and manufacture machinery and equipment (£1.4bn). Together these industries accounted for well over half of total exports from Scotland." (page 7). Moreover, the paper also notes that exports are concentrated amongst few companies, with " the largest 60 exporting companies account(ing) for 50% of Scotland's exports with the top 400 companies accounting for 80% of exports. This concentration highlights a risk of sudden structural change having a significant impact on export performance. An example of this is with the electronics industry since 2000." (page 6). In addition, Scotland's main export markets: the US, Netherlands, France, Germany and Belgium, are not the main growth markets, which are in Asia such as China and India - see discussion of Scottish exports in *Forecasts of the Scottish economy* section below. Scottish exporters will need to diversify considerably if they are to benefit significantly from the main sources of future global growth.

The Scottish Parliament Committee also provides evidence of Scotland's declining share of inward investment attracted to the UK, which is so crucial to building and maintaining the export base. It is true, as the Committee notes, that Scotland remains the second most attractive destination for inward investment in the UK, after the South East of England. But the number of new projects attracted to Scotland between 2000 and 2009 fell, while eight out of the other ten countries or regions across the UK witnessed net growth. There is a contrary view that the number and scale of projects is less important than their value and increasingly SDI has been concentrating on attracting fewer projects of higher value. While such projects may add more value to the economy and leverage more growth than lower value projects, if the scale of the export base is declining then this is most quickly addressed by attracting more inward investment projects to Scotland. Such projects inevitably

Figure 10: Industry shares in recession output loss: 2008q2 to 2010q2



have a high export orientation much higher than the domestically owned average.

A final point to note is that the recession may have served to erode Scotland's export base. Figure 10 charts the share across industries of the average quarterly loss of output during the recession. The loss of output during the recession was largely concentrated in three sectors, which accounted for 78% of the output loss in Scotland: real estate & business services (REBS) (37%), manufacturing (23%), and finance (17%). This was less so in the UK where the output loss in these sectors accounted for only 51% of the overall loss, although manufacturing contributed more to the output loss (30%) in the UK than it did in Scotland. With losses of such scale in REBS, manufacturing and financial services there is a real risk that some of that capacity may not be replaced. Financial services is a key exporter from Scotland to other parts of the UK - see discussion of Scottish exports in *Forecasts of the Scottish economy* section below - and it seems likely that the restructuring of the banking industry after the credit crunch and recession could diminish the significance of that role. The same situation may apply in manufacturing, the principal source of goods exports. With a loss in manufacturing output of nearly one quarter there is the risk that some of the capacity used to produce that output will disappear from Scotland so eroding the export base.

Drivers of productivity and competitiveness

The evidence suggests that small open economies can best enhance competitiveness of their export base through innovation, R&D and improved business sophistication, including promoting leadership and enterprise. This is a big challenge for the Scottish economy, the government and its enterprise agencies because of the following weaknesses:

- Very low business R&D (0.46% of GDP, 3.2% of UK BERD) and weak innovation.
- Weak entrepreneurship, especially new firm formation. (GEM 2009: Scotland's rate of total early stage entrepreneurial activity among lowest in 20 developed countries).
- Lack companies of scale and anchor institutions[7].
- Skill impacts of ageing and declining population[8].
- Lack of competition in transport, utilities, catering, leisure and business banking[9].
- Public services in Scotland are less efficient: monopolistic, top-down and target driven (Crafts, 2005)[10]

Scotland's poor position, relative to OECD countries and other small nations, on some of these drivers of competitiveness is shown clearly in Table 1 recently published by Scottish Enterprise:

But we should not ignore the Scottish economy's strengths in some drivers of competitiveness that can help build a competitive export base:

- Graduates account for slightly more than 20% of the working age population placing Scotland ahead of most UK regions apart from London and the South East.

- The science base represented by the research strengths of Scotland's universities is a major asset for growth, which has yet to be fully exploited.

- Scotland has high levels of social capital -" features of social life – networks, norms, and trust – that enable participants to act together more effectively to pursue shared objectives" reinforced by mature institutions. "Social capital increases productivity by reducing transaction costs and disseminating technical and organizational knowledge."[11] Evidence is accumulating that 'social capital' has a role to play in growth.[12]

- Scotland also is perceived as having high levels of amenity with, for example, Edinburgh frequently ranked high in surveys as a ‘good place to live and work’.[13]

Small firms

It is easy to underestimate the potential role of small firms in economic development. However, small firms are less likely to export than larger firms. Scottish Enterprise cite a recent UK government study[14] which demonstrates that exporting increases with firm size. The survey found that 46.1% of firms with at least 250 employees were exporters compared to 32.9% of those with 10-49 employees. The propensity to export also rises if establishments are part of a multi-region, multi-plant firm operating in more than one industry, or if the establishment is foreign owned. While policy efforts to assist SMEs to export should be encouraged it may also make sense for policy to recognise the lower export propensity of SMEs and seek in addition to encourage and assist them to seek to supply the key 400 firms in the Scottish export base. Any success here would not raise the volume of exports but would raise the value added to the economy of exports.

Key conclusions on Scottish growth and prospects

- Scottish growth over almost 50 years is comparable to UK growth – a little lower in absolute terms – but middling by international standards. Trend growth in GDP per head is slightly higher in Scotland but largely due to weaker population growth.

- Yet, mature economies tend to display similar trend growth close to 2%[15]. Although, small open economies have scope for faster growth and decline due to significance of resource mobility e.g. capital and labour, into and out of the economy[16].

- Until the recent recession, the most important sectors for Scottish growth were real estate & business services, financial services, retailing & wholesaling, and transport & communication, much the same as in the UK.

- Ranking fifth in importance the public sector was much less important to growth than has often been suggested and no more important in Scotland than in the UK.

- The analysis suggests is that if Scotland could move closer to the UK industrial structure it would get a growth dividend, because Scotland is somewhat less specialised in fast growing sectors such as business services & real estate, retail & wholesale and transport & communication.

- But the analysis also suggests that the performance of Scottish industry has been generally weaker than UK industrial counterparts and that suggests an intrinsic competitiveness problem.

- This is supported by evidence that Scottish labour productivity growth is weaker than UK. But unit labour costs are, on average, about 3% lower here, which suggests that we have a problem of lower total factor productivity: it is not simply low investment and low capital per worker that is the problem.

- Scotland's export base is narrowly focused, is declining, and may have been eroded further in the recession.

- To raise Scotland's growth rate there is a need to grow the export base by developing companies of scale and attracting inward investment, and enhancing its competitiveness through innovation, R&D and improved business sophistication, including promoting leadership and enterprise.

- Scotland's strong university research base, technological and sectoral know-how, graduate supply, high social capital and amenity, are strengths that offer a basis for future growth in key sectors.

- Small firms have a low export propensity but policy can raise economy-wide value added both by seeking raise the exports of SMEs and by

Table 1: Current OECD quartile rankings overview for Scotland, Arc of Prosperity Countries and other small EU countries

Indicator	Year	Scotland	Austria	Denmark	Finland	Iceland	Ireland	Lux	Norway	Portugal	Sweden
Ave GDP growth	1998 -2008	3	3	4	2	1	1	1	3	4	2
GDP per head	2008	3	1	2	2	2	1	1	1	4	1
Employment rate (15-64 yr olds)	2008	2	2	1	2	1	3	3	1	3	1
Productivity	2008	3	2	2	2	3	1	1	1	4	2
Entrepreneurial activity	2007 -2009	4	-	3	2	1	2	-	1	-	-
Total R&D as % GDP	2008	3	1	1	1	2	3	3	3	3	1
Business R&D as % total R&D	2008	4	1	2	1	3	2	1	3	4	1
Business R&D as % GDP	2008	4	1	1	1	2	3	2	3	3	1
Graduates as % of the pop. (aged 25-64)	2008	2	4	1	3	1	2	3	1	4	2
Population growth (1999-2008)	1999 -2008	4	3	3	4	1	1	1	2	3	3
Net migration as % of the population	2008	2	2	2	3	3	1	1	1	3	2
Export sales growth -3 yr annual ave	2006 - 2008	4	2	3	1	2	3	1	4	2	3

Source: Scottish Enterprise "Economic Performance Indicators(November 2010 Update)"

- encouraging new and small firms to seek to link into the supply-chains of the key 400 firms in the Scottish export base.

Forecasts

Data on GDP growth for the fourth quarter 2010 for Scotland will not be available until April. To assess the fourth quarter performance we have the UK outturn data for GDP and survey information. The UK GDP data showed initially a -0.5% fall in GDP and this has today been revised further downwards to -0.6%. The ONS continue to attribute 0.5% of the fall wholly to the bad weather in December. So this suggests that UK growth was stagnant in Q4, indeed falling slightly, after the 'strong' recovery evident in the data for the second and third quarters of 1.1% and 0.7% respectively. The fourth quarter UK GDP data may be revised upwards because they are based on only partial information for the quarter but the data imply that the UK recovery from recession is clearly slowing down. This of course was to be expected to some degree since the stronger growth in the earlier part of 2010 represented a form of 'bounce back' as companies sought to rebuild stocks to more acceptable levels and as postponed construction projects were restarted and completed.

Nevertheless, the manufacturing sector in the UK continues to display steady and improving growth at 1.1% in the quarter, even though the figure was revised down by 0.3% points. This is the counterpart of the strengthening growth in export volumes, which rose by 2.3% in Q4 and 1.7% in Q3. But note the growth of imports was 3% so the net contribution of trade to growth was negative. Despite the rise in imports household consumption fell by 0.1% in Q4, which may be weather affected and there was no obvious sign of a pick-up in demand to beat the VAT rise in January. Nevertheless, the relatively flat growth of household demand is in line with expectations as households continue to adjust their household balance sheets and debt position. But investment volumes - gross fixed capital formation - also contracted in Q4 and fell markedly by -2.5% compared to a rise of 3.7% in Q3. This is a cause for concern since most forecasters, including the OBR, are assuming that it will be the growth in investment and exports that will be the main drivers of recovery.

It seems reasonable to assume that Scottish GDP growth will be similar to the UK in the fourth quarter. Indeed, there is a risk that the outturn could be worse here than the UK because it is arguable that the weather was worse here in December and there is evidence that the Scottish recovery is slowing and is weaker than rest of UK - see Review of Scottish Business Surveys section below. That section also notes the difficulty in disentangling short-term from long-term influences on future Scottish growth. While weather effects can clearly be assigned to the short-term category it is more difficult with other issues currently confronting the economy. The most obvious example is the impact of the political upheaval in the middle-east and Libya in particular. The price of oil is rising and is now in the $110 to $120.

Such high levels will continue as long as the Libyan crisis is unresolved and the extent to which Saudi Arabia acts as a 'swing' producer seeking to meet some or all of any shortfall following partial or complete shut down of Libyan oil supply. Of course if the political upheaval spread significantly to Saudi Arabia then the implications for the world economy will be enormous. Significant oil price hikes have in the past preceded a recession as in 2008 and occasionally are associated also with rising inflation as in the 1970s. Which takes us to the first major uncertainty affecting the future growth of the Scottish and UK economies:

- Growing threat of inflation
  The CPI is currently at 4% driven by rising prices of food, commodities – oil – and the VAT rise. The Bank of England View is that inflation will continue to rise through the year to nearly 5% but then the effect of these temporary drivers of inflation will subside and inflation will move back down. The MPC appears to be split on the issue with at least 3 members now fearing that a rising CPI is feeding into inflationary expectations. Real incomes are falling as the CPI outstrips earnings growth and this may lead to a potential wage-price spiral. But for that to occur, the labour market needs to be tighter than it is currently, with earnings - a key ingredient of core inflation - rising by less than 2%. The tightness of the labour market is a reflection of the output gap in the economy and estimates differ as to its size. The larger the output gap the less likely will inflationary expectations transfer into core inflation pressures. But the IFS in its recent Green Budget is more pessimistic about the size of the output gap than the OBR, putting it close to 2% of potential output in 2010Q3 compared to an estimate of 3% by the OBR. Further, there is some evidence of core inflation starting to rise when housing costs are included in the measure. So, while we support the Bank's view that the inflationary push is temporary there must be some concern that this will begin to translate into more sustained price rises, and so we can expect the MPC to start to slowly raise base rates before the middle of the year.

Other issues and 'known unknowns' affecting the recovery are

- Financial-based recessions have a slow recovery
  - Banks continue to de-leverage to improve balance sheets, so lending at reduced availability and higher price.
  - Significant debt re-financing in prospect, both may hamper the bank's ability to finance a strong recovery.
- Sovereign debt problems in the EURO area

Table 2: Forecast Scottish GVA Growth in Three Scenarios, 2010-2013

GVA Growth (% per annum)		2010	2011	2012	2013
High growth		1.1	2.1	2.4	2.6
	November forecast	*1.3*	*2.1*	*2.4*	*n.a.*
Central		**1.0**	**1.0**	**1.6**	**1.9**
	November forecast	*1.0*	*1.1*	*1.9*	*n.a.*
Low growth		0.9	0.3	0.6	0.9
	November forecast	*0.5*	*0.3*	*1.0*	*n.a.*

- Sovereign debt defaults and or 'haircuts' for creditors will damage Scottish, British and Euro banks, their lending and hence their ability to finance the recovery.

- Impact of fiscal consolidation
  - Net reduction of demand in economy via spending cuts and tax rises
  - While resources will be freed up, fiscal consolidation will not, of itself, generate offsetting private sector growth.
- Household demand growth is weak:
  - Households appear to be continuing to run down debt - de-leveraging.
  - Real household incomes are falling as inflation runs ahead of wage and earnings growth.
  - House prices are on downward trend and falling more rapidly in Scotland, Northern Ireland and the North of England
- Business investment and export growth are the hoped-for mainstay of recovery but
  - the former is weak in UK and probably Scotland and
  - the latter may be affected by currency 'wars' between China and US, which may threaten the growth of world trade.

It is against this background that we have prepared our forecasts, which are fully discussed in Forecasts of the Scottish Economy below. Only the main points are presented here.

GVA Forecasts

Table 2 presents our forecasts for Scottish GVA - GDP at basic prices - for 2010 to 2013. As before we present a central forecast, which we hold to be most probable and high growth and low growth forecasts which define the range of outcomes in which Scottish growth is likely to fall. In the subsequent discussion we concentrate mainly on the central forecast.

Clearly, since we do not yet - until April - have the 2010Q4 Scottish GDP data, we still have to forecast the outturn for 2010. Positive growth continues to be forecast in all years and on all 3 scenarios. GVA growth of 1% in 2010 is the same as our November forecast. This remains below the OBR and consensus forecasts for the UK in 2010, which largely reflects the weaker growth of household spending in Scotland. This year, we are forecasting growth of 1%, a little less than our November forecast. The lowering of the forecast is in part due to the worsening outlook for consumer confidence in both Scotland and the UK, while the greater weakness relative to UK, with UK forecasts around 2% for 2011, is very largely due to the stronger public spending cuts in Scotland this year - noted in the previous Commentary. Household spending in 2011 is squeezed by the VAT rise and falling real household incomes. In 2012, our forecast of 1.6% growth is again lower than November's forecast of 1.9%. While production and manufacturing output is starting to pick up reasonably strongly, growing at 4% for production in 2012, the service sector displays insipid growth of 1.2% as household demand remains weak. Construction also exhibits weak growth of 1% in 2012, reflecting cut backs in government capital spending and weak private sector investment. Finally, our new forecast for 2013 predicts growth of 1.9%, just below trend - see Figure 6. Over the whole period recovery continues to be weaker in Scotland than the UK.

Employment Forecasts

Table 3 presents our forecasts for net employee jobs for the 4 years 2010 to 2013 on the 3 scenarios.

Table 3 indicates that our year-end employee jobs forecast for 2010 has again been significantly revised. As noted above there was a considerable shake-out of jobs at the end of 2009 and so this appears to have resulted in firms moving more quickly to hire new workers as the economy started to recover, with attendant effects on unemployment than was the case in the UK. Net jobs grow by 0.9% in 2010, 0.9% in 2011, 1.4% in 2012 and 1.7% in 2010. By 2013 total employee jobs are forecast to be around 60,000 fewer than

Table 3: Forecast Scottish Net Jobs Growth in Three Scenarios, 2010-2013

		2010	2011	2012	2013
High growth		22,267	42,626	51,025	
	November forecast	*-7,000*	*42,300*	*50,404*	*n.a.*
Central		**20,113**	**19,780**	**31,741**	**39,808**
	November forecast	*-12,794*	*21,224*	*39,124*	*n.a.*
Low growth		18,357	5,895	11,586	19,256
	November forecast	*-22,700*	*4,400*	*21,100*	*n.a*

Table 4: ILO unemployment rate and claimant count rate measures of unemployment under each of the three forecast scenarios

		2010	2011	2012	2013
ILO unemployment rate					
High growth		7.9%	7.8%	6.6%	5.4%
Central		**8.0%**	**8.8%**	**8.4%**	**7.9%**
	Numbers	**215,000**	**234,072**	**224,945**	**212,657**
Low growth		8.1%	9.4%	9.8%	10.1%
Claimant count rate					
High growth		4.8%	4.7%	4.0%	3.2%
Central		**4.9%**	**5.3%**	**5.0%**	**4.7%**
	Numbers	138,300	150,849	144,967	137,048
Low growth		4.9%	5.7%	5.9%	6.1%

in 2007 and broadly the same as at the end of 2004. By sector, the main source of job creation is in the service sector from 2011 with net job gains between 2010 and 2013 of 75,000 on 2009 levels. The production sector loses 23,000 jobs in 2010 but gains more than 26,000 jobs between 2011 and 2013. Jobs are also created in construction, nearly 24,000 in 2010 and then a slower rate of increase between 2011 and 2013 as nearly 4,000 further jobs are added.

Unemployment Forecasts

The key unemployment forecasts are summarised in Table 4.

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 noted in the discussion above of labour market performance during the recession and recently that output change will only pass through to unemployment and activity rate change if firms are not labour hoarding. The degree of labour hoarding may be less in Scottish firms for the reasons noted above and so the recovery to date has had a bigger effect on unemployment in Scotland than in the UK. But the Scottish GDP recovery will continue to be weaker and at a rate below that which is required - from the estimated Okun relationship - to stabilise unemployment. We therefore expect that unemployment will start to pick up again in Scotland this year reaching 8.8%, or 234,000 by the end of the year. After that, though, the recovery should be sufficiently strong to make some dent in the rate and so we are forecasting lower rates of 8.4% and 7.9% in 2012 and 2013 respectively.

Brian Ashcroft
25 February 2011

References

[1] Shift-share analysis, on which the above discussion is based, is sensitive to the degree of industrial disaggregation. It is possible that a more fine industrial disaggregation than was able to be used here might raise the structural explanation and lower the performance differential explanation for the growth difference between Scotland and the UK.

[2]Scottish Council of Economic Advisers: Second Annual Report, 2009, Table 3.1

[3]Structural differences due to a shortfall in the share of fast growth industries might also be reflected in lower average productivity and competitiveness since fast growth sectors grow because of their competitiveness.

[4] See the evidence and argument contained in the Independent Review of Economic Policy (DETI and Invest NI) submitted to the Northern Ireland government in September 2009 at http://www.irep.org.uk/Docs/report.pdf

[5]At http://www.scottish.parliament.uk/s3/committees/eet/reports-10/eer10-08-vol01.htm

[6]See also the paper "Exporting and economic growth" Scottish Enterprise, Nov 2010 http://www.scottish-enterprise.com/about-us/how-we-work/resources/reports/economy-reports.aspx

[7]Scottish Enterprise Business Plan 2010-13 http://www.scottish-enterprise.com/about-us/what-we-do/our-business-plan.aspx

[8]Scotland the grey: a linked demographic-computable general equilibrium (CGE) analysis of the impact of population ageing and decline McGregor P.G., Lisenkova K., Pappas N., Turner K., Wright R.E., Regional Studies (2008)

[9]ONS, Regional Price Indices, November 2003.

[10]http://www.strath.ac.uk/media/departments/economics/fairse/media_140855_en.pdf

[11]T. Casey (2004) "Social Capital and Regional Economies in Britain", Political Studies: VOL 52, 96–117

[12]For an early example see: Knack, S. and Keefer, P. (1997) Does Social Capital have an Economic Payoff? A Cross-Country Investigation', Quarterly Journal of Economics, 112 (4), 1251–88.

[13]See for example http://www.independent.co.uk/news/uk/this-britain/edinburgh-proves-capital-choice-for-lifestyle-418163.html

[14]http://www.bis.gov.uk/assets/biscore/economics-and-statistics/docs/10-804-bis-economics-paper-05

[15]See Adair Turner (2005) http://www.strath.ac.uk/media/departments/economics/fairse/media_140857_en.pdf

[16]See Paul Krugman (2005) http://www.strath.ac.uk/media/departments/economics/fairse/media_140850_en.pdf

The Scottish economy

Forecasts of the Scottish economy

As the winter weather caught shoppers by surprise before Christmas, it also appeared to have an impact on the UK growth figures. While the Scottish economy had seen growth through Q1, Q2 and Q3 2010, preliminary UK GDP figures for Q4 showed a -0.5% contraction, and that the "thaw" in the UK growth position remains weak. While much of the Q4 figures were linked to the bad weather conditions through December, we had anticipated that, among other things, the run up to Christmas and the announced VAT increase starting in January 2011 would have brought some consumer expenditure forward into Q4 2010. Commentators were typically expecting this single quarters figure to be revised upwards but it would be a significant revision for this preliminary estimate to become a positive growth figure. In fact, the most recent Q4 estimate is a contraction of 0.6%. This serves to indicate that – as anticipated – the return to growth after the recession of 2008-9 will continue to be choppy and weak. The National Institute's latest Economic Review (from January 2011) predicts that "the majority of the temporary loss" due to the weather from Q4 2010 will be regained in Q1 2011. In line with convention, we will have Scotland's Q4 2010 GDP estimate in April 2011, which will give us our first indication for the rate of growth in the Scottish economy in 2010. We continue to forecast growth in Scotland for 2010 of 1.0% in our central scenario, unchanged from November's publication. We do however "narrow" the range in our alternative scenarios around the central scenario, with between the high and low growth cases, as would be anticipated with the release of more data covering to the end of 2010. Since our last forecast the recent slight improvement in labour market figures means that we have revised down (up) our estimates of unemployment (and employment) at the end of 2010. Growth in 2011, 2012 and 2013 continues to be uncertain as the global economic situation remains weak, with Scottish exports, for example, typically disconnected from the major growth economies, public sector fiscal consolidation most significant in 2011, and welfare spending reductions directly hitting household finances towards the end of our forecast period.

Monetary and fiscal policy climate

The UK monetary policy environment continues to be supportive, despite high profile debates in the media and within the MPC itself, about the appropriateness of its monetary policy stance. CPI inflation stood at 4% in January 2011, well above its 2% inflation target, in part due to increases in energy and food prices, rising import prices, and the VAT increase starting in January 2011, however, core inflation remaining sluggishly around 1%, and there is unprecedented policy tension within the MPC. The Bank's

Governor, Mervyn King, noted in February's Inflation report that there is a downside risk to impacting on growth prospects from increasing interest rates, but that market expectations were for increases of one quarter percent from early summer 2011, and perhaps a further rise before the end of the year. The Governor has noted that a period of above-target inflation will continue over much of the first half of 2011. In the opinion of the MPC, the "Committee judges that a reasonable central view is that measured inflation will begin to fall back next year". The Bank's (nine-member) MPC appears to be more split than ever, with growing fears of losing credibility over inflation, but concerns of interest rate increases – the major instrument in the Bank's control – at a time when the growth of the UK economy is not assured. It appears that the Q4 2010 GDP figures for the UK, combined with relatively weak survey data – although typically, the evidence is mixed – on industrial production in the start of 2011 could delay until later in the year any increases in interest rates. Interest rates remain at 0.5%, where they have been kept since March 2009. Concern about the true size of excess capacity in the economy will continue to be seen as a technical exercise, but is crucial for the MPC's decisions about the timing of anticipated future interest rate rises.

On the fiscal side in Scotland, on the 9th of February 2011 the Scottish Parliament approved its one year Budget for 2011-12. The total size of the budget for the year is £33,620 million (Total Managed Expenditure), split between Resource Departmental Expenditure Limits (DEL) of £25,400 million, Capital DEL of £2,607 million and Annually Managed Expenditure of £5,612 million. Capital spending has borne the brunt of planned expenditure reductions. A real terms decline of the order of 22% in this year from 2010-11 levels will see project spending being reduced across a number of high-profile areas. Most of the reduction in Capital DEL spending projected over the UK Government's spending review period (i.e. to 2014-15) takes place in this first year.

As we discussed in November's *Commentary*, the corollary of slightly smaller than expected reductions in the public sector budget available following the CSR was for a greater share of the UK's fiscal consolidation to come from reductions in the welfare spend, which will directly impact on household incomes and expenditures. These are forecast to fall more heavily on the later years of the UK parliamentary cycle, up to 2014/15. The continued forecasted decline in government budgets over the next three years however, will continue to impact on the levels of activity in the Scottish economy, not only in the public service sectors, but in all sectors which rely on the public sector as the destination of goods and services. Further, it is anticipated that the public sector will continue to seek to reduce headline employment numbers as budgets are reduced. The extent to which these workers feed into unemployment will have an important consequence for our short- and medium-term forecasts of the labour market in Scotland, and we continue to monitor this situation closely (as is documented in the *Overview of the Labour Market* section of this *Commentary*.

The Scottish economy

The last quarter for which data are available is Q3 2010, released on 19th January 2011. Gross Value Added (GVA) in Scotland rose by 0.5% during Q3, following Q2's significant increase of 1.3%. The revising down of Q3 2009 to -0.1% from zero growth increases the length of the recession in Scotland from four to five quarters.
The broad sectoral composition of the recent quarter's growth, however, remains unbalanced. The production sector, covering 17.1% of the Scottish economy, registered a contraction of 0.3%, while the Services sector (producing 73.7%) increased by 0.1%. The standout sector – for the second quarter in succession – was the Construction sector. This sector is only responsible for just under 8% of the economy, but its rise of 6.2% in Q3 was enough to contribute 0.5% to Q3 GVA. Growth in the public sectors of 0.4% on the quarter made a contribution to growth; however a contraction in "Business services and finance" more than offset this. What was particularly striking from the preliminary UK GDP figures for Q4 2010 was the return of small decline in the UK construction sector, with little activity elsewhere to stimulate growth.

Across the production sectors – which in aggregate contracted by 0.3% - most of the economic good news came from the manufacturing sector growing by 0.7%. This was led by strong performance in the "Chemicals and man-made fibres" (+3.7%) and "Food and tobacco" (+2.6%) sectors. Weak performances in "Electricity gas and water supply" (-4.1%), "Metals and non-metal products" (-2.8%) and "Mining and quarrying" (-2.3%) were largely responsible for the decline in the GVA contribution of production in the Scottish economy. Labour market developments in Scotland to the end of December 2010, published in February are reviewed in the Labour Market section of this *Commentary*.

Growth in the UK regions in 2009

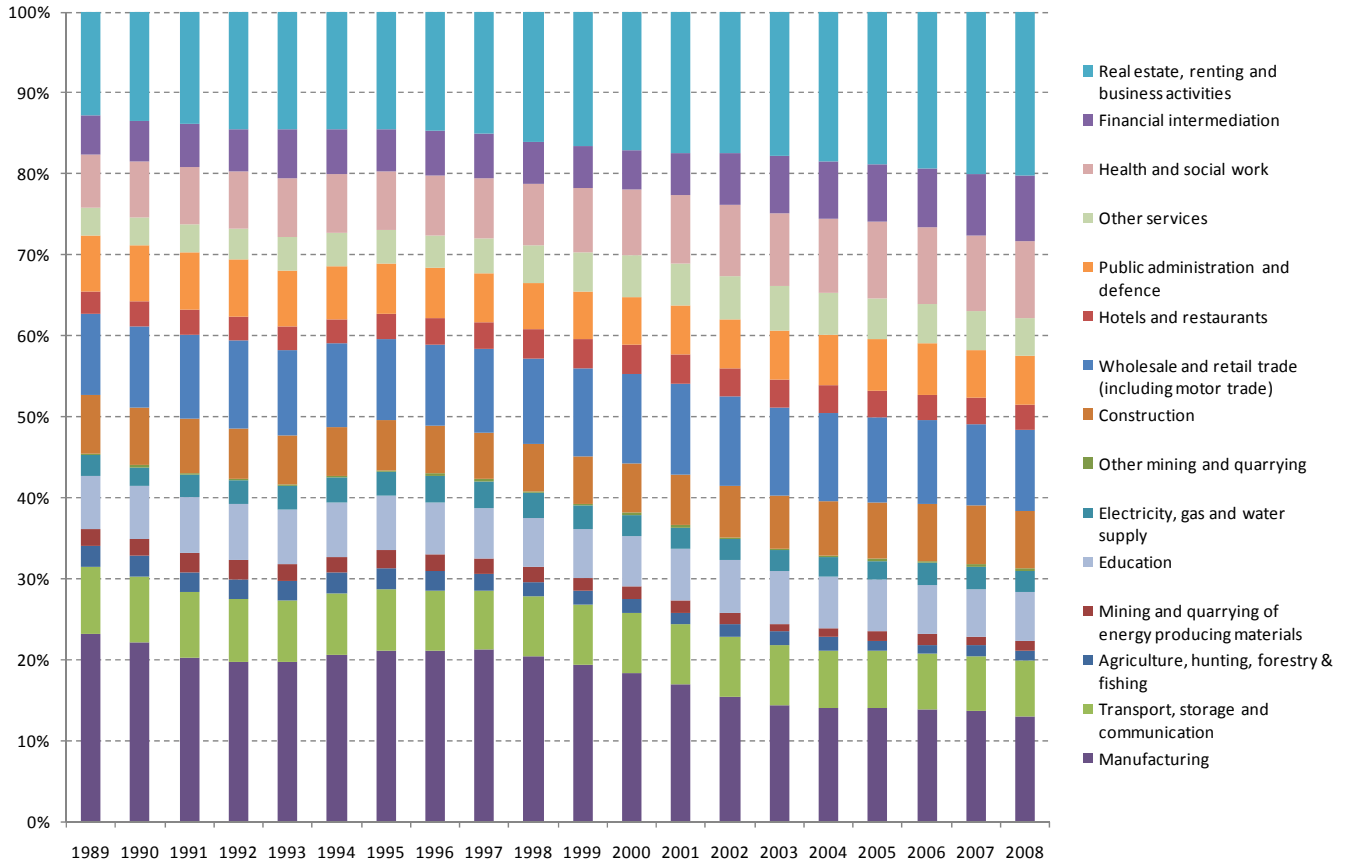
With the publication of UK Regional Accounts in December 2010, relating to the calendar year 2009, we have been able to examine the performance of the Scottish economy in this year compared to other UK regions. Often this is more illuminating than comparing Scotland to the UK as a whole, since industrial structures across the regions will vary in interesting ways, which might be masked at the national level. Here we examine some of the recent evidence for questions linking regional growth performance to industrial structure. Much of the public discourse has argued that the industrial structure of the UK economy, and its regions, had become too "unbalanced", relying heavily, the argument goes, on the financial services sector as the driver of growth.

We therefore have undertaken a modest initial attempt to consider three points, which we list below:

- How has the industrial structure of the Scottish economy (and its diversity) varied over the last decade?
- Was there any relationship between the level of diversity of a regions industrial structure and that regions growth performance during 2009, or over the last decade?
- Was there any relationship between the size of the financial services sector in a region and that regions growth performance during 2009, or over the last decade?

Firstly, we note that economic diversity is difficult to measure in practice. Most would agree that the concept of diversity can be nebulous. Stirling (1994) raises three

Figure 1: Industrial structure of GVA in Scotland, 1989-2008



Note: for this the data used are the UK Regional Accounts, rather than the accounts for Scotland published by the Scottish Government.

aspects of diversity which, taken together, serve to illustrate the most pertinent issues around this term (although in his example, he is interested in the diversity of the electricity generation mix). Stirling's work illustrates neatly how diversity is a property of the whole system, rather than anything which an individual element can confer. This is a simple point, but crucial for the discussion which follows. We shall use the example of industrial structure to illustrate the three dimensions of diversity raised by Stirling (1994). The first point simply refers to the number of alternative items – in this case, economic sectors – which exist in the region. Other things being equal a higher number of sectors would be expected to indicate greater regional industrial diversity. Secondly, the similarity of the sectors is crucial. If, for example, there are a multitude of sectors in the region selling goods to household consumption (for example) then regional activity is more heavily exposed to variations in household income/expenditures. Finally, the notion of "balance" indicates whether each of the different sectors enjoy equal weights in activity. With exactly equal weights for sectors which were sufficiently different, in an extreme case, regional economic activity could be considered diverse. A dominant sector in a region, however, would not typically indicate a diverse mix of industries.

There exists an array of measures which we could use for diversity. For the purposes of this note, we use one of the simplest measures,

$$D_t = 1 - \sum_{i=1}^{N} p_{it}^2$$

Figure 2: Diversity of the Scottish industrial structure, 1989-2008

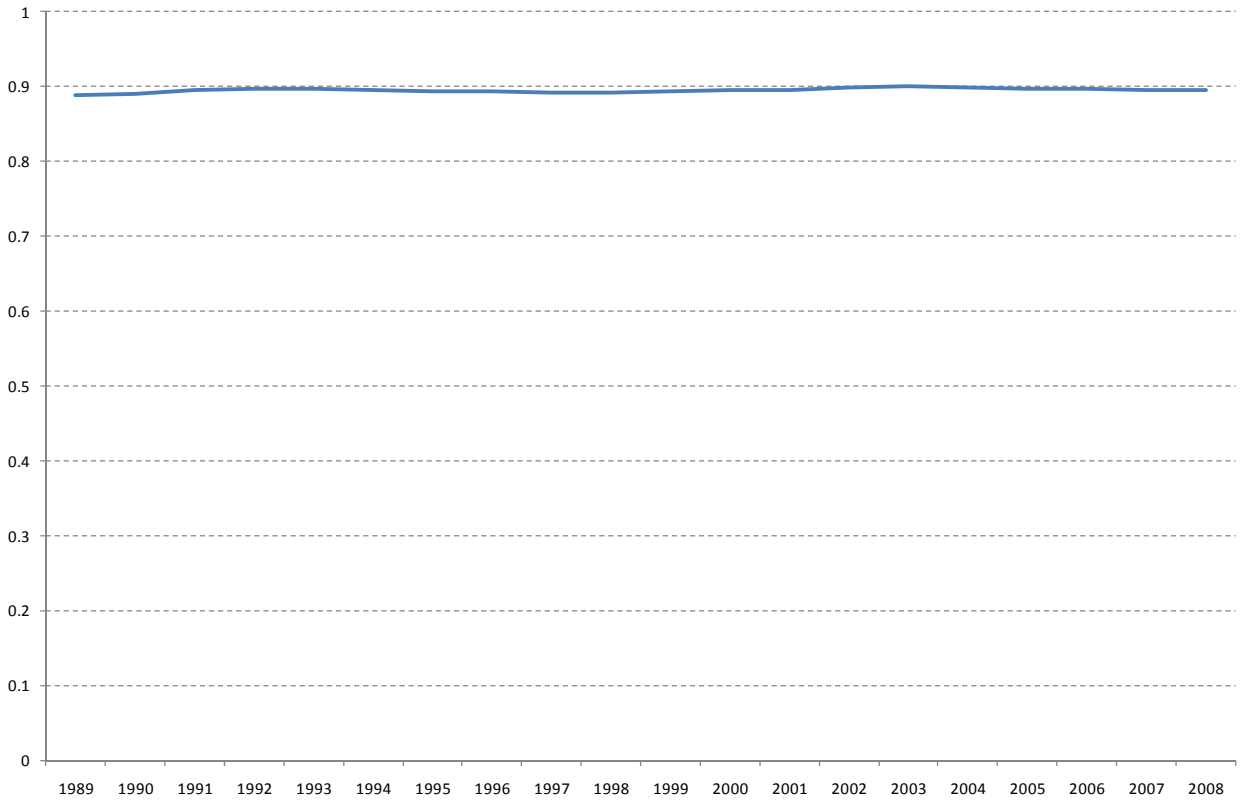
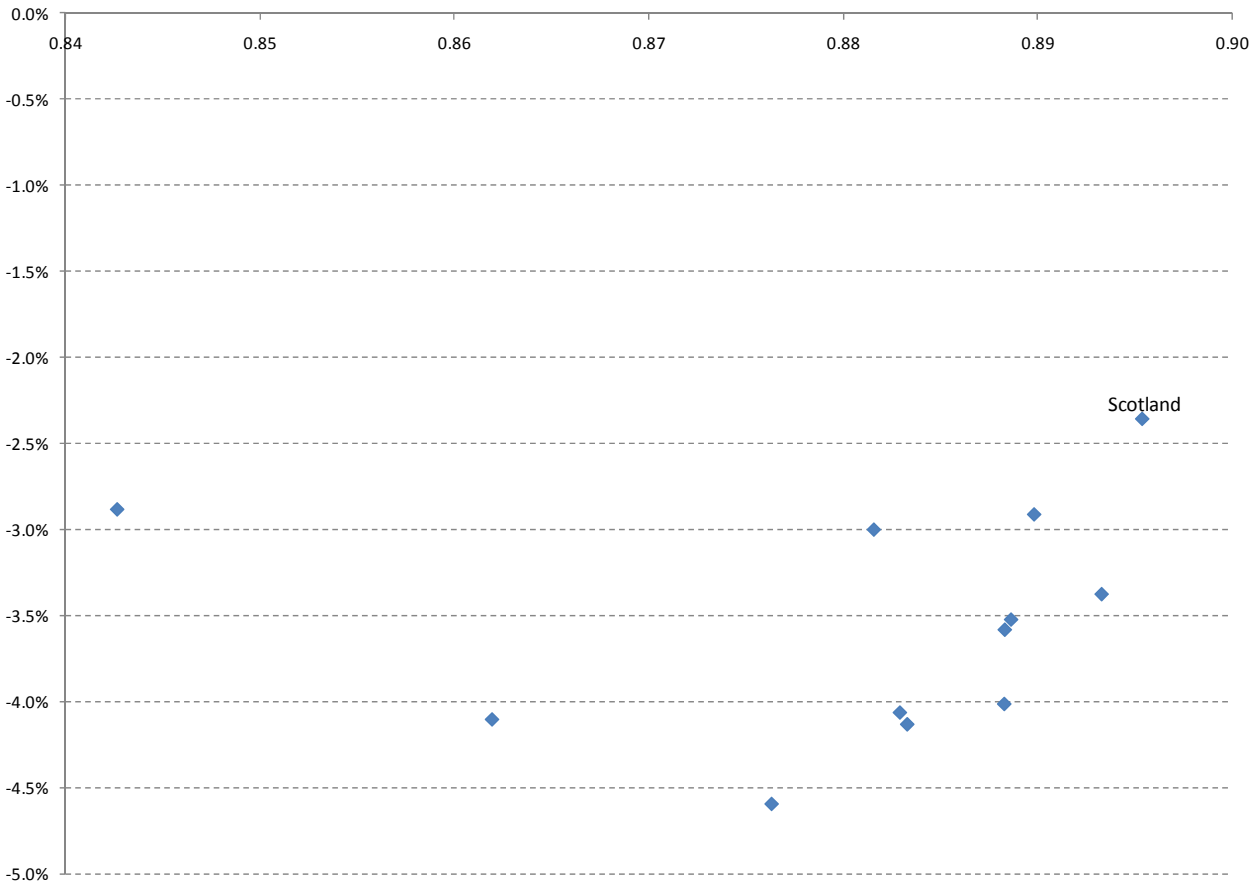


Figure 3: 2008 regional industrial diversity and real 2009 GVA growth, UK regions



where N is the number of different categories (i.e. sectors) and p_{it} is the share of total GVA in sector i in year t.

Under this measure, a region with a perfectly concentrated industrial structure (i.e. a single industry producing all GVA), the index returns a value of 0. The maximum value for diversity increases with the number of sectors being considered: for fifteen sectors the maximum value of the index is 0.93.

Addressing the questions we set above, we can see the following. Firstly, we see from Figure 1 that between 1989 and 2008 the industrial structure of the Scottish economy in aggregate remained relatively stable – for the sectors identified in the regional accounts publication. This does not play down the variation in growth rates within individual sectors over the period, but acknowledges that the economy as a whole – and for the sectors identified by the Regional Accounts publication – structure has not evolved perhaps as greatly as discourse would suggest. We do note however that in this short time period, and by these figures, the share of GVA in Scotland produced in the Manufacturing sector shrank from 23% to 13%.At the other end of Figure 1, the share of Scottish GVA produced in the "Financial intermediation" and "Real estate, renting and business activities" increased from 18% to 28% of GVA (largely driven by an increase from 13% to 20% in the "Real estate, renting and business activities" sector. The diversity index (shown in Figure 2) shows that on this measure (and for this sectoral aggregation) regional diversity was also relatively stable over these twenty years. Alternative aggregations of the Regional Accounts data for Scotland confirm the stability of regional industrial diversity over this period.

Figure 3 indicates that greater regional industrial diversity was not associated with a shallower decline in regional GVA during 2009. London (the least diverse of the 12 regions considered here) had broadly the same decline in real GVA as the North East (-2.9%), but this latter region had significantly greater diversity in 2008. If anything, the observations in Figure 4 indicate that greater regional industrial diversity could be linked with lower average regional growth (over the period 1998-2009), however removing the data for London from this sample removes this negative relationship, and illustrates the weakness of this relationship. If one impact of increased economic diversity was decreased average growth rates then this could be an important counterargument to proponents of economic diversity. Aggregating the Regional Accounts to fewer industrial sectors, while changing the specific of the diversity measure, does not change the relationship described above.

Figure 5 and Figure 6 consider the link between the size of the financial services sector in the regional economy and its growth performance during 2009 and over the decade from 1998 to 2009.

Again, as with diversity, the results suggest that there was no link between the share of financial services in the regional economy and the decline seen in 2009. Once again, the potential for the share of financial services to be related to higher average regional growth rates is largely due to the data for London. Remove this single observation and there appears to be little to suggest a relationship between financial services and regional growth.

Update on Okun's Law

In our last *Commentary*, we discussed the empirical relationship between the rate of growth of GVA and the change in the unemployment rate. This relationship – known as Okun's Law (Okun, 1962) – posits that such an empirical relationship exists and can be used to suggest both the rate of growth which would be consistent with a stable unemployment rate, and the rate of change in the unemployment rate for a given growth rate. This relationship typically shows increases (decreases) in the growth rate being associated with a falling (rising) unemployment rate.

The initial results we reported in the last *Commentary* suggested that for both Scotland and the UK such a relationship could be estimated – albeit using Scottish quarterly GVA data only available back to 1998. Those results indicated that for Scotland an annual growth rate of 2.04% would be required for employment to be stable, while the figure was very slightly lower for the UK at 2.02%. Our initial results last time suggested that there had been a break in this relationship since 2008, with unemployment rate changes being larger than would be suggested by a stable line of best fit. As we now have Q3 2010 data, we can estimate this relationship again and see if these conclusions appear to hold. We are particularly interested in this, since recent positive labour market developments, specifically a declining unemployment rate, together with a quarterly growth of 0.5% in Q3 could indicate that this relationship is changing. The Okun's Law relationship between (percentage point) changes in the quarterly Scottish unemployment rate and Scottish GVA growth rate between Q1 1998 and Q3 2010 are shown in Figure 6, along with the line of best fit through these points (Okun's Law is typically estimated with a straight line in this way).

These data continues to suggest that the variables estimated last time apply over the sample. The level of annual growth consistent with a stable unemployment rate is 2.00% (0.497% growth in a quarter), marginally lower than the 2.02% reported in the last commentary.

Note firstly that in all the last nine quarters (i.e. since the start of the 2008-9 recession) the unemployment rate has been increasing (i.e. we have no points below the horizontal axis) and the increases have been greater than those which would be suggested by the simple Okun's relationship (i.e. all these points are above the line of best fit over the whole sample).

Figure 4: 2008 regional industrial diversity and average regional GVA growth (1998-2009)

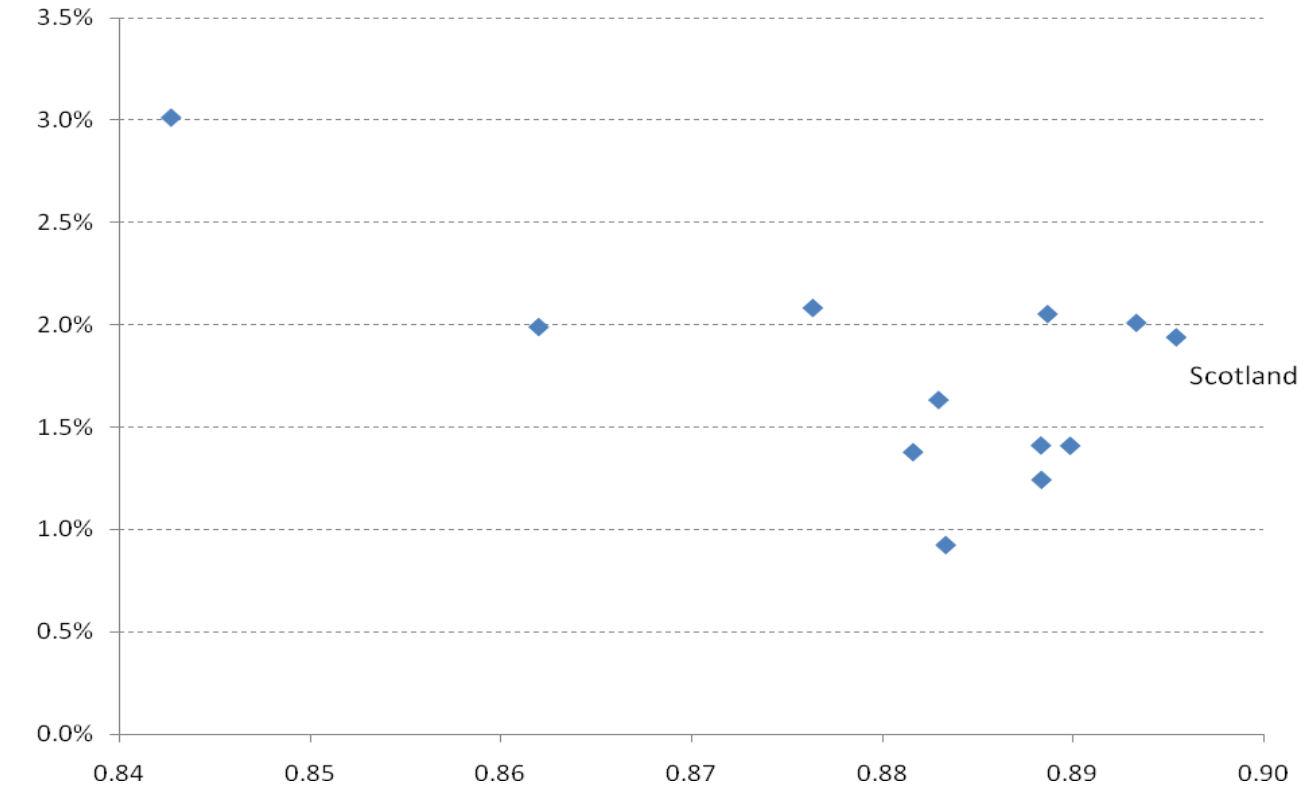
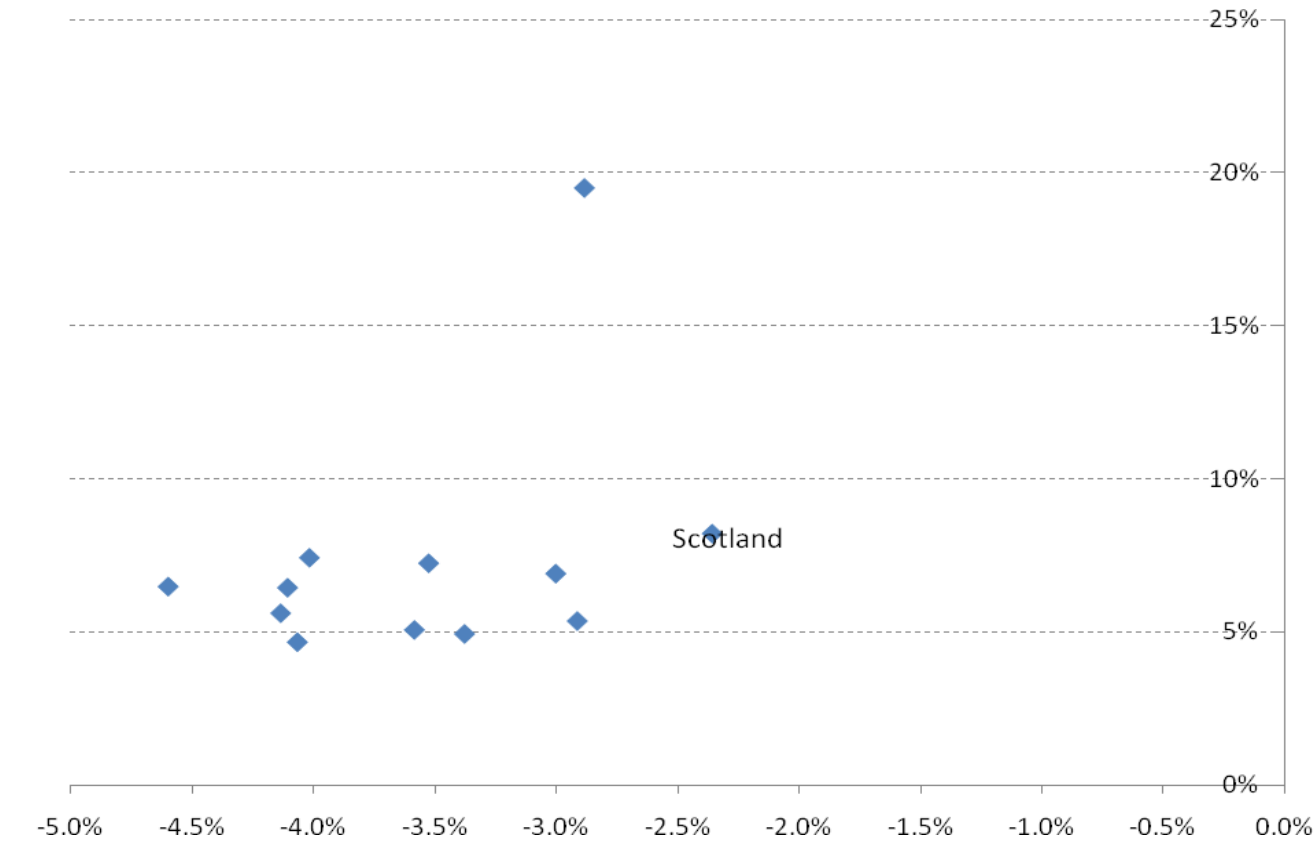


Figure 5: Share of financial services sector in GVA in 2008 and 2009 GVA growth, UK regions



Looking at the path that these variables have taken during the period since Q3 2008, also marked on Figure 7, we can break the nine quarters of activity into three stages.

From Q3 2008 we observe a clockwise movement of negative growth and increasing unemployment rates for three quarters to Q2 2009. From Q3 2009 we see three periods of broadly flat growth (climbing up the y-axis), combined with increases in the unemployment rate of up to 0.5% to Q1 2010. The last two quarters we see positive growth however with no reductions in the unemployment rate in that quarter. The rate of increase in the unemployment rate in these last two quarters is lower however than those seen in either of the previous two stages.

A paper published in February's "Economic and Labour Market Review" (Chamberlin, 2011) examined – for the UK – the empirical basis and estimates of Okun's Law over the most recent recession and previous recessions. This paper acknowledged that the unemployment rate – as used in Okun's measure – is an imperfect estimate of the summary of the amount of labour being used in the economy, and that changes in output "can result from a number of sources and not just limited to the degree of idle labour in the economy" (Chamberlin, 2011, p. 125). Their "production function" approach decomposes changes in output to changes not only in the unemployment rate, but also labour productivity, average hours worked, the activity rate and the available population. We intend to examine the implications of this work for Scotland in the next few months and report the findings in later Commentaries.

Chamberlin's (2011) results over the period of the 2008-9 recession indicates that, compared to earlier UK recessions in 1979-1981 and 1990-1991, output per hour has made a greater contribution to the peak-to-trough decline in GDP than in earlier recessions. This work also supports a "labour hoarding" argument to explain the relatively muted unemployment rate increase in the face of the decline in GVA. Compared to the recession of the early 1990s, for instance, UK GDP fell by 6.5% between 2008Q1 and 2009Q3 with an increase of 2.7 points in the unemployment rate. In the early 1990s the unemployment rate increased by 2.9 points for a fall in output of only 2.5%.

Final demands and recent trends

The Fraser of Allander Institute forecasting model acknowledges the drivers of economic activity in the Scottish economy to be (household) consumption, (central and local) government spending, investment, tourism and exports (to the rest of the UK and the rest of the World). For all three scenarios considered – High, Central and Low - recent movements in each of these measures, and most up-to-date survey evidence for future trends, are discussed below.

As we noted in the last Commentary, the data produced by the Scottish Government as part of the Scottish National Accounts Project (SNAP) have provided a vast amount of information about the dynamics of the Scottish economy since the first quarter of 1998. We have updated our forecasting model to reflect the values in this publication, taking account of other data sources and publications where these data are more detailed, or have greater coverage. Our primary new use of the SNAP data in this issue concerns the dynamics of the household expenditure and income variables, a real Investment series and exports to the rest of the world. The new (partial and experimental) Quarterly National Accounts for Scotland publication makes the direct comparison between Scotland and UK figures possible. We look forward to continued examination of all those data in the Quarterly National Accounts for Scotland over the coming months and future Commentaries.

Consumption

With the continued publication Scottish Quarterly National Accounts as part of the Scottish National Accounts Project (SNAP), we are able to identify changes in household expenditure in Scotland and the UK. Figure 8 shows how total household expenditure has changed in real terms (using the UK deflator) over the years 1998 to 2009. We can see that, while Scotland has broadly tracked the UK as a whole, between 2005 and 2007 Scottish household expenditure growth was greater than in the UK as a whole. The decline in household expenditure from these data was greater in Scotland than in the UK – falling by 4.4% in Scotland but only 3.4% in the UK. Nominal data for Q1 to Q3 of 2010 from SNAP suggest that Scottish household expenditure growth has typically been lower than for the UK as whole.

Having data such as these allows us to much better understand the history and model the future of the Scottish economy and will have wide applications across policy and academic spheres. We can only use and report on some of these data in the Commentary for reasons of space, but interested readers are directed to the SNAP data on the Scottish Government website.

Clearly as the largest net component of final demand for Scottish goods and services, the future behaviour of the households sector will be crucial for the next phase of the recovery in the Scottish economy. As the OECD notes in its November 2010 Economic Outlook, "private consumption will play a crucial role for the overall recovery in OECD economies as temporary cyclical factors and fiscal support measures are fading" (p. 22). One important dimension of this is the household savings rates, which reflect the differences between total household incomes and total expenditures. Broadly speaking, this will include moneys going to savings accounts or other investment vehicles or for the repayment of capital on credit cards. The extent to which households have retained their expenditures on an annual basis is clear from Figure 8 above. As household incomes have also suffered during the recession through increasing unemployment, reduced working hours and declining salaries (including bonuses), the behaviour of the

Figure 6: Share of regional GVA in financial services sector in 2008 and average regional GVA growth (1998-2009)

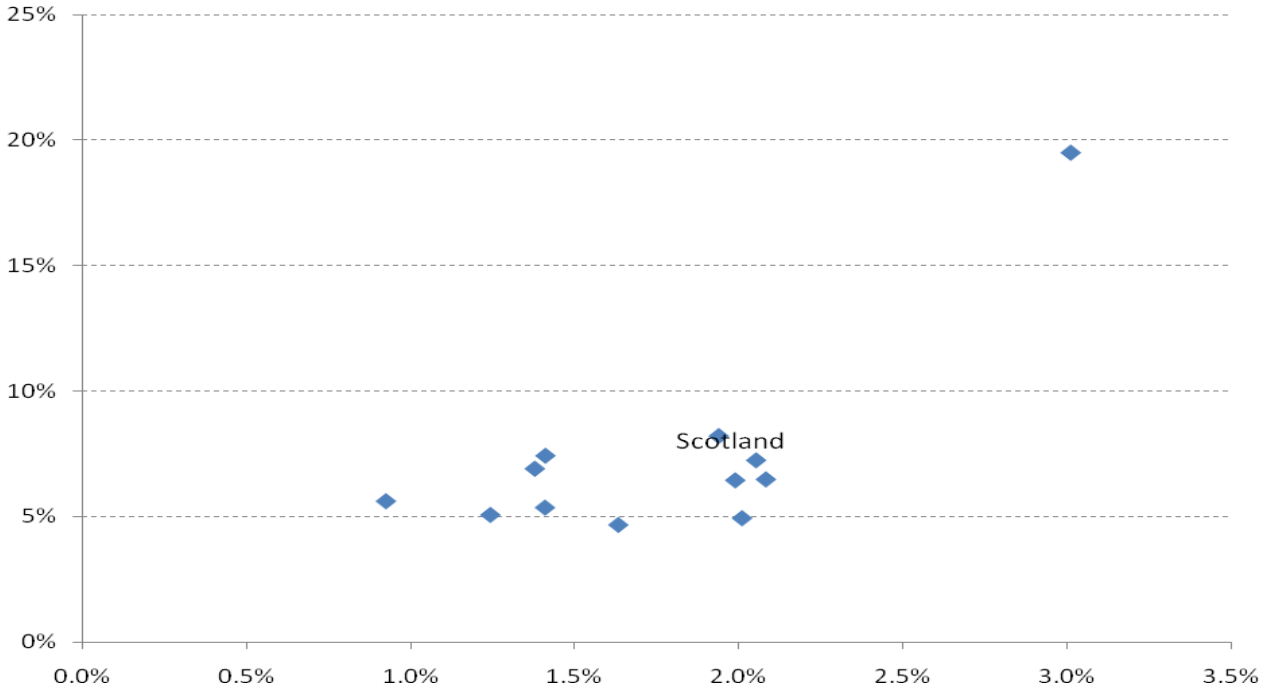


Figure 7: Relationship between unemployment rate change (in percentage points) and GVA growth in Scotland, 1998Q1 to 2010Q3

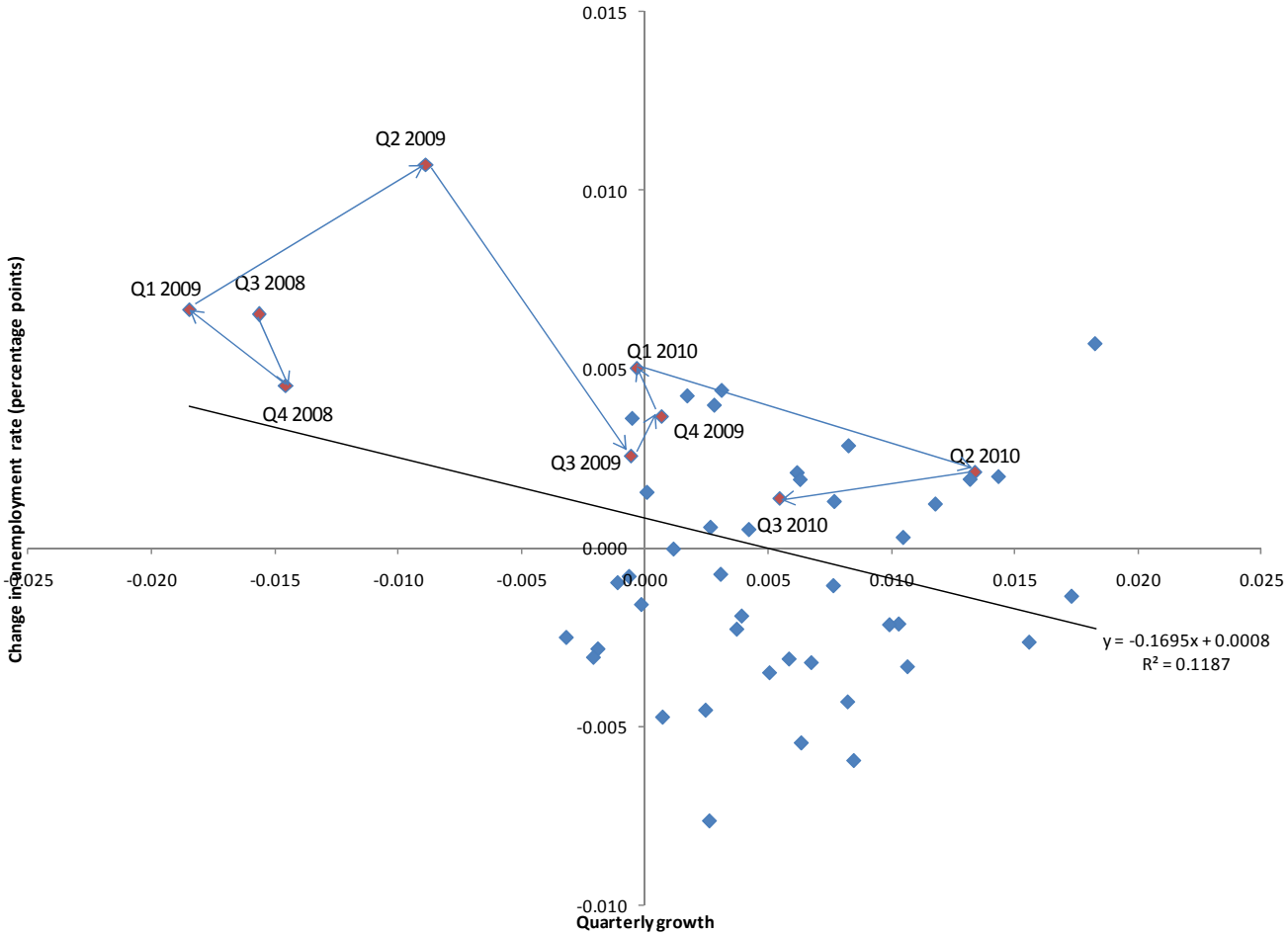
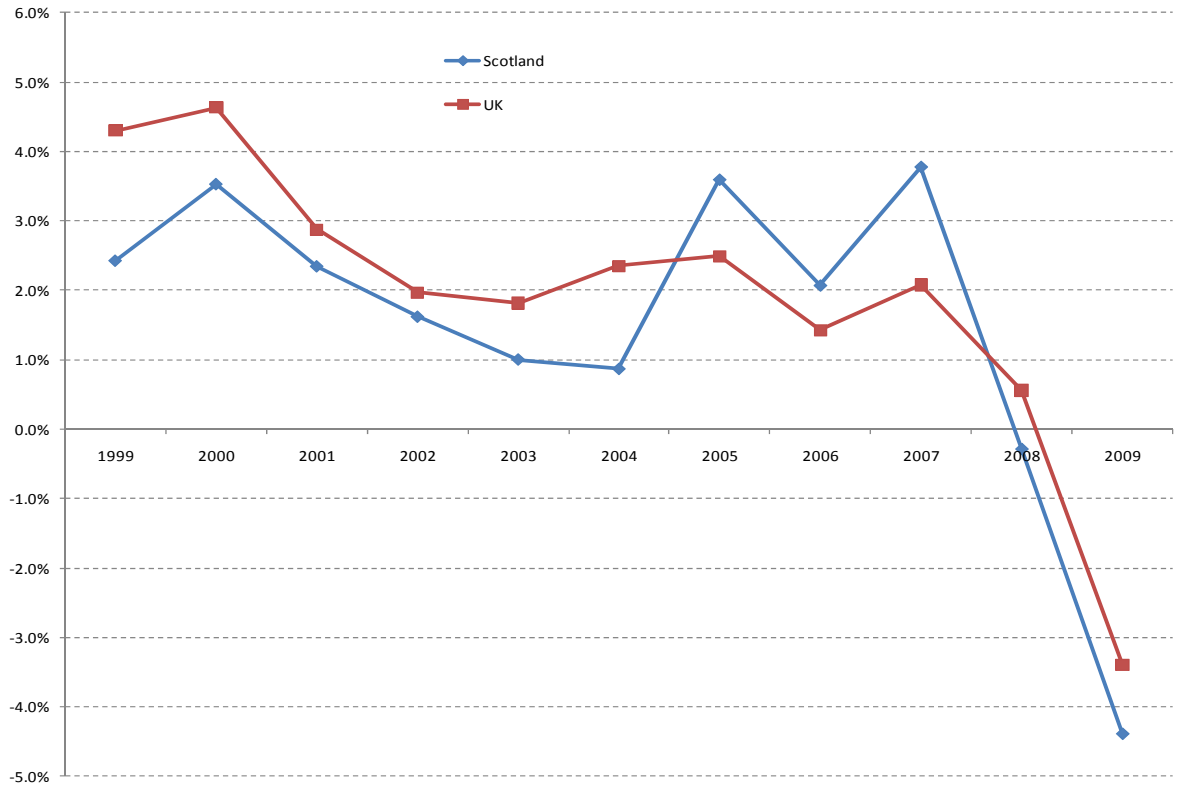
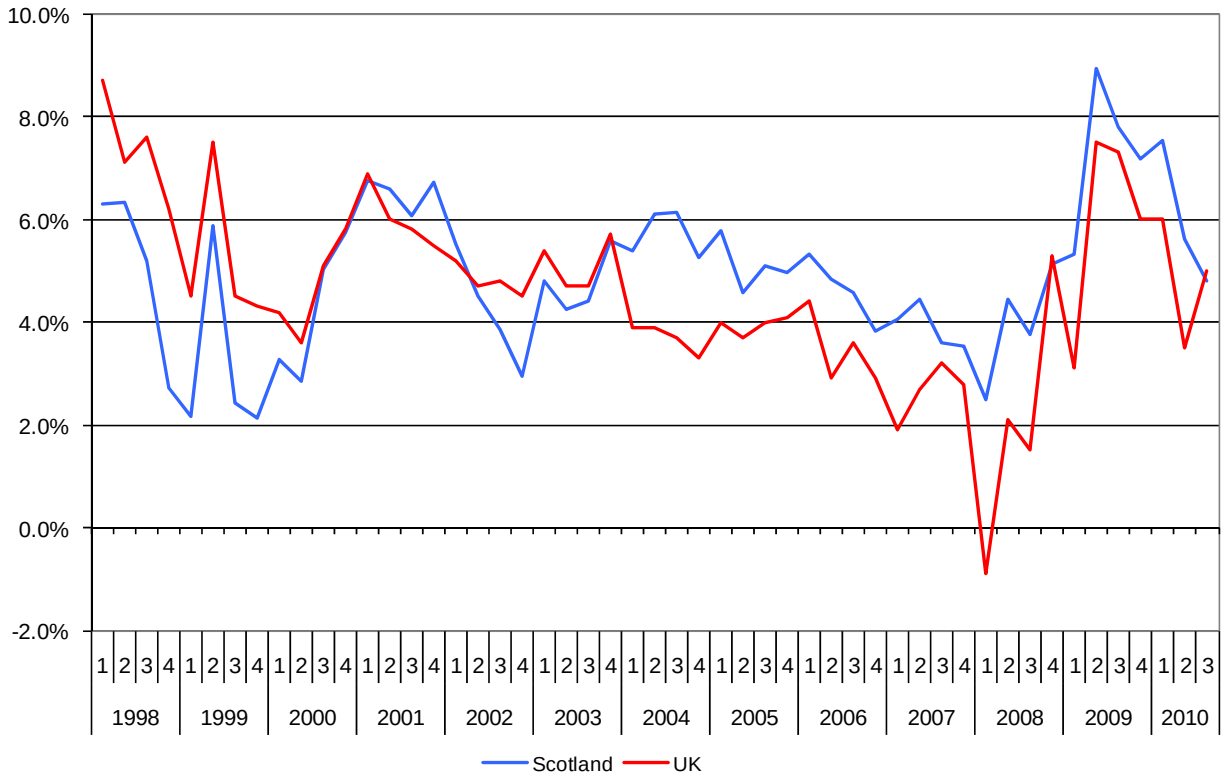


Figure 8: Growth in annual household expenditure p.a. Scotland and UK, 1998 to 2009



Source: Scottish National Accounts Project and National Statistics.

Figure 9: Household savings ratios for Scotland and the UK, Q1 1998 to Q3 2010



Source: Scottish National Accounts Project and National Statistics.

household savings rate will be crucial for household expenditures. The major question is whether or not savings rates have peaked or if further reconciliations to households "balance sheets" are needed. As a fraction of household gross incomes, the (seasonally adjusted) gross savings ratios for Scotland and the UK between Q1 1998 and Q3 2010 are shown in Figure 9.

One crucial point from Figure 10 is that the Scottish savings rate has (since 2004) been above that for the UK as a whole. The height of the pre-crises consumer spending bubble is evidenced for the UK by a slightly negative gross saving rate in Q1 2008, although in that same quarter the savings rate in Scotland was 2.5%. The surge in savings rates as households curtailed spending meant that the savings rate increased and peaked at 8.9% and 7.5% in Q2 2009 for Scotland and the UK respectively. Since then, the savings rates have typically fallen, but there is evidence of a recent increase for the UK so that in Q3 2010 the data suggests broadly comparable values of 4.8% in Scotland and 5.0% in the UK: broadly comparable to a crude average over the last twelve years of 5.0% and 4.6% respectively.

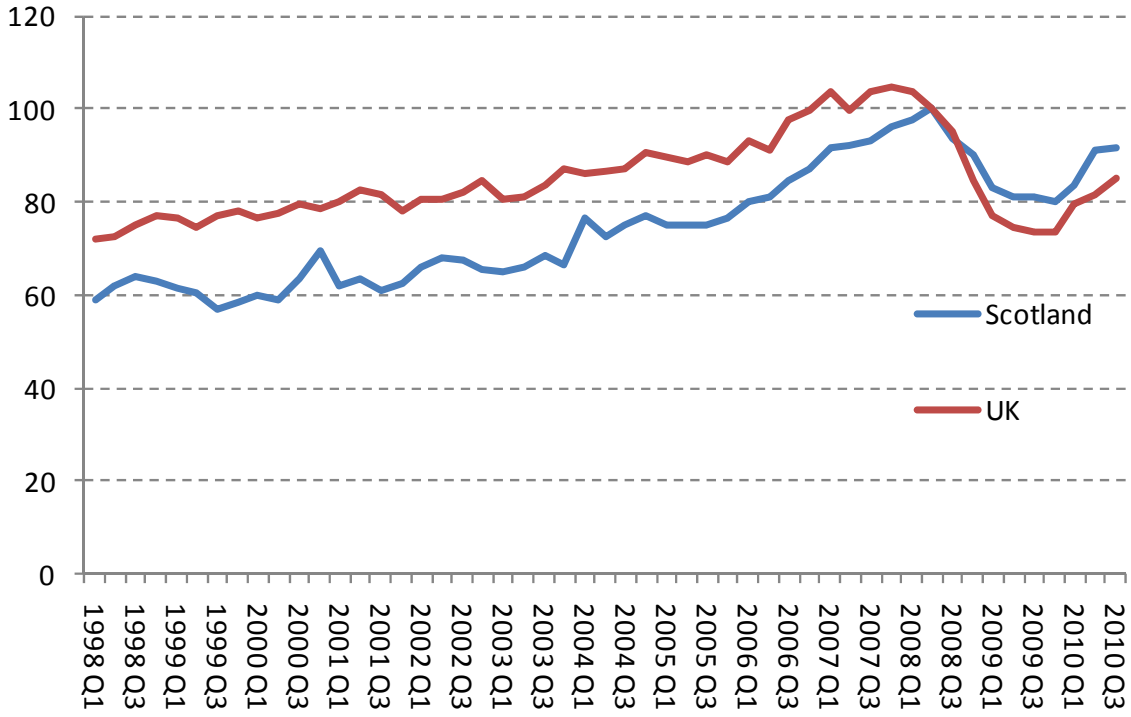
Between Q2 2009 and Q2 2010, we can see clearly the effect that increased savings rate has had on the level of consumption expenditure. If the household saving rate had been 5.0% rather than the higher values over this period, a total of £2.3 billion worth of expenditure would have been made in the Scottish economy. We should allow for some portion of these expenditures – a high amount of household expenditures (around 60%) are typically spent on imports – not being made directly on Scottish goods and services.

These simple calculations would therefore suggest that around £1.4 billion worth of demand for Scottish goods and services was removed from the Scottish economy during this period as a result of households reining in their expenditures. This is the equivalent of 1% of GDP in 2009. The most recent survey evidence suggests that weak consumer confidence and demand, as well as the VAT increase introduced in January 2011, and rising costs have been major themes affecting the retail sector, as well as more temporary phenomenon such as the bad weather before Christmas. Lower consumer confidence in Scotland than the UK will contribute to make 2011 a difficult year for retail in Scotland.

Government spending

We noted the significant declines in Resource and Capital DEL outlined in October's Comprehensive Spending Review in November's commentary to which readers are referred for further information. The large reduction in Capital DEL in 2011-2, with more than half of the reduction over the whole Spending Review period in this year, will lead to significant reductions in the demand for construction activities in the Scottish economy. Further, reductions in government spending will impact across the whole economy – not only in the public sectors – as sectors respond to the lower expenditures, for instance, lower incomes and expenditures by workers in the public sector as the public sector pay freeze erodes real incomes. We will examine the time path of government spending, and its role in the wider economy, further in later Commentaries. As alluded to in the introduction, it is anticipated that employment in the public

Figure 10: Investment expenditures in Scotland and the UK, 1998Q1 to 2010Q3 (2008Q2=100)



sector will reduce as budgets for the financial year 2011-12 are introduced across the devolved and reserved areas of competence.

Investment

Taking figures for Gross Fixed Capital Formation (GFCF) from the SNAP QNAS data, we can calculate (using UK investment deflator series) a series of real GFCF in Scotland and the UK between 1998 and 2010Q3. Rebasing this to have the peak of investment activity as 100 we can see the effect of the credit crunch on investment in Scotland and the UK. Scottish investment in Q3 2010 was around 10% below its pre-recession peak, while in the UK as a whole investment spending in the same quarter was just less than 20% below its peak. At its credit-crunch worst, investment spending in Scotland was 20% below peak, while the UK figure was almost 30% down at its lowest point. Interestingly both these lowest quarters were in 2009Q4. Taken together, these data appear to suggest that the downturn in investment spending in the Scottish economy began later, was not as deep, and did not decline as fast as investment spending in the UK as a whole.

Tourism

Data from the International Passengers Survey – published on the 10th of February 2011 – revealed that for the UK as a whole the tourist market remained challenging. The spending in the UK by overseas tourists in the twelve months to December 2010 was flat in nominal terms, while UK residents spending abroad fell by 4% over the same period. These data do not cover domestic (i.e. UK) tourism expenditures in the UK, however the overseas tourism market is an important one for the Scottish tourist industry.

VisitScotland's figures for the UK tourist spending in Scotland between January and September indicate that it has seen a reduction in visits of 5% on the year earlier, with expenditure falling by 9%. The average length of stay was down 5.3%, with the average spend per night remaining broadly flat due to the reduction both in spend and the number of nights. Occupancy figures across most types of accommodation remained broadly flat compared to 2009, driven partly by discounting in the sector.

Looking forward, the surveys of firms involved in Scotland's tourism provision appears weak, both for accommodation and bar/restaurant trades. Discounting continues for a third of hotels in the first quarter of 2011, with the primary business constraint the lower numbers of tourists demanding accommodation and services. Lower occupancy figures continues to be an experience across all types of accommodation also, with self-catering properties particularly hurt towards the end of 2010.

Exports to the rest of the UK

The UK economy as a whole remains Scotland's largest trading partner, providing the demand for over 60% of Scottish exports. Interestingly, as the SNAP data suggests, this share has declined over the last eight years, as exports to the rest of the world have strengthened following the collapse in exports to the rest of the world between 2001 and 2002. Preliminary data for 2010 Q4 suggested that the UK economy shrank by 0.5% in this quarter, well below predictions of growth of around 0.2-0.4%. The ONS noted that this was particularly affected by the wintry weather conditions and would have been anticipated to be "flat" (i.e. 0% growth) without the adverse weather. What would appear to be clear however, when the preliminary data is such a substantial fall, is that the level of growth seen in Q2 and Q3 – largely driven by investment and construction dynamics – was not maintained into the end of 2010.

Recent forecasts for the UK economy continue to predict a strong rebound, although most forecasters are appearing to emphasise the potential downside risks to their scenarios for growth. The Office for Budgetary Responsibility's November 2010 forecast was for growth of 1.8% in 2010, and 2.1% in 2011. This is around the upper end of non-city forecasts for available in February 2011. The median new (i.e. in the last three months) forecast from HM Treasury's collection of city and non-city forecasting organisations is for 1.9% growth in the UK in 2011, largely driven by a growth in investment (median growth forecast = 3.9%), and strong (ROW) export growth (median = 6.6%). Domestic (i.e. UK) demand growth is forecast to be sluggish at 1.3% in the median forecast. The median of new growth forecasts for 2012 is 2.0%, some way below the OBR's forecast of 2.6%. The range of forecasts for 2012 – covering 1.4% to 3.0% at the UK level – shows that the OBR's forecast is towards the top of this range. Compared to the median new forecasts the OBR's 2012 growth figures predict higher investment spending (6.6% growth in the OBR against a median growth of 4.3%) and higher export growth (7.1% against 6.1%). Interestingly, the OBR's figure for household expenditure growth in 2012 is slightly below median new forecasts.

The Global Connections Survey data reveals the cash values of the products exported to the rest of the UK by Scottish companies, by product. For instance this estimates that £10.2billion of the £45.2billion of exports sold to the rest of the UK in 2009 by Scottish firms, was provided by the "Financial intermediation" sector. While this is useful information – and trends can be identified from this, albeit current price, series – these data do not identify the destination of these products by activity. It would be incredibly useful, for instance, to know how Scottish goods and services are used in the rest of the UK, i.e. for investment spending, for household consumption, as intermediate inputs to production, and so on. Without this, we can only speculate about how the different drivers of growth in the rest of the UK might impact on the demand for goods and services produced in Scotland.

Table 1: GDP growth forecasts for 2011 and 2012 for top five export markets for Scottish products in 2009, % year on year change, plus United Kingdom and Euro Area

		2011		2012	
	Share of Scottish exports to rest of the world in 2009	**IMF (January 2011)**	**OECD (November 2010)**	**IMF (January 2011)**	**OECD (November 2010)**
USA	15.5%	3.0%	2.2%	2.7%	3.1%
Netherlands	9.6%	n/a	1.7%	n/a	1.8%
France	7.5%	1.6%	1.6%	1.8%	2.0%
Germany	6.1%	2.2%	2.5%	2.0%	2.2%
Belgium	4.0%	n/a	1.8%	n/a	1.8%
Others Asia	9.8%	8.4%[1]	n/a	8.4%[1]	n/a
European Union	n/a	1.7%	n/a	2.0%	n/a
United Kingdom	n/a	2.0%	1.7%	2.3%	2.0%

Sources: International Monetary Fund, World Economic Outlook Update (25th January 2011), OECD Economic Outlook No. 88 (November 2010) and Global Connections Survey (21st January 2011).
Notes: [1] The growth forecasts for "Developing Asia" is used for Asia here. The IMF forecasts stronger growth in China in both 2011 and 2012.

Exports to the rest of the world

The only exhaustive survey of Scottish exports to the rest of the world is the Global Connections Survey (GCS), which reported figures for 2009 on the 21st of January 2011. This publication sets out the total (cash) value of Scottish exports to overseas (i.e. non-UK) markets, and the sectoral distribution of these. A total of £21.1 billion of Scottish goods were exported in 2009, split 45:55 between exports to the twenty-seven countries of the EU and exports to non-EU countries. The single largest destination market for Scottish exports was the USA, as it has been back to 2005. Exports to the rest of the world were up by £530 million in cash terms, an increase of 0.9% in real terms. This real terms increase is only slightly above the 0.8% average real growth in the value of exports to the UK for the period since 2005.

Real exports between 2005 and 2009 by industry are given in Figure 11. For each manufacturing industry, the current price values from the Global Connections Survey have been deflated by a implied deflator index for each manufacturing sector based on published real value for sectoral exports and a constant price series for that sector. Non-manufacturing exports are deflated using the same procedure but for a UK service export series.

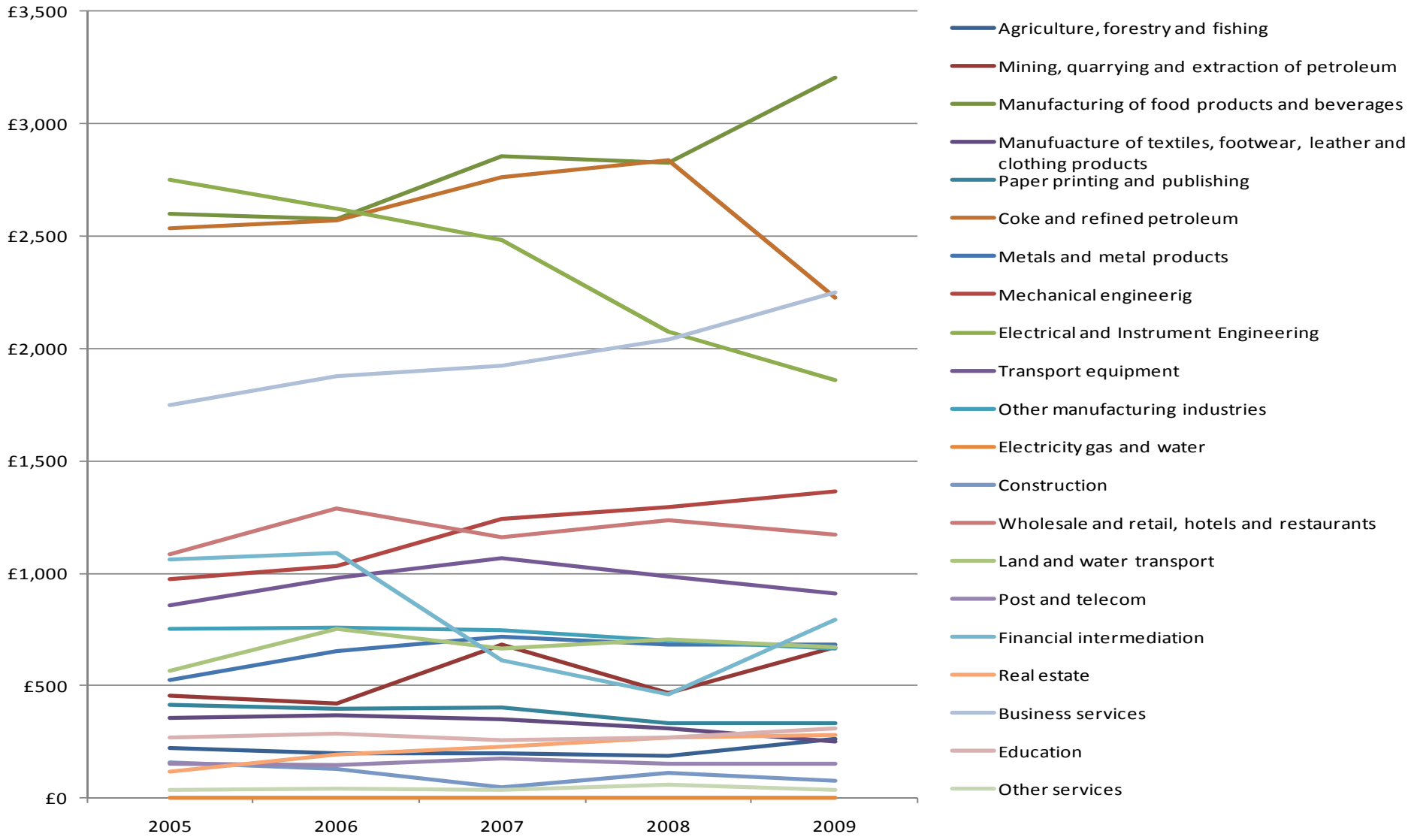
We can see from this that exports by the "Manufacturing of food drink and beverages" sector are the largest in real terms (at £3.2 billion in 2005 prices) and increased by 13% in the year to 2009. In the same year, exports by the "Coke and refined petroleum" sector fell by 21% in real terms, perhaps reflecting declining energy demands through the recession. Exports of "Business services" have risen over the last four years to now be the second highest value of exports in 2009, while exports by the "Electrical and instrumental engineering" sector have fallen from top position down to the fourth highest category of exports.

Looking at the individual markets served by Scottish producers, it is clear that Scotland's exports are however – as was discussed by commentators around the release of the UK trade figures in February 2011 – largely detached from the main areas of growth around the world.

Several caveats should be noted however. Firstly, several of the companies surveyed by the GCS indicate that the immediate destination of the goods leaving Scotland might not be the final destination of the products. The GCS gives no indication of which of the export destinations could be an en-route destination for Scottish goods. Our instinct would suggest that the position of the Netherlands as the second largest destination for exports could be consistent with its position as a major international transport and freight hub. Secondly, exports in five sectors (including financial intermediate and pension funds) are not allocated to a specific region due to lack of reliable company information. These "unallocable" exports have increased significantly in 2009 (up 58%) so could offset much of the decline in exports to particular regions observed.

With the above caveats in mind, the growth forecasts for 2011 and 2012 in the top five destination markets for Scottish exports during 2009 are given in Table 1.
The more regular survey of Scottish exports to the rest of the world is the Index of Manufactured Exports (IME) and the most recent results were released on 12th January 2011. These cover only the manufacturing sectors, which are estimated to produce almost two-thirds of (non-UK) Scottish exports. This reported a real terms decrease in the value of total exports of 0.7% in the third quarter of 2010, an increase of 0.7% over the year to September 2010. The strongest increases over the year were in the "Food drink and tobacco" sector where both the "Food" and "Drink" sectors exports increased, by 8.8% and 10.8% respectively.

Figure 11: Real exports by industry to the rest of the world, (2005 prices, £million)



"Metals and metal products" also saw a greater than 10% increase in its exports over the year. Scottish engineering sectors continue to struggle for export growth, with exports down by 0.5% in the quarter and down 9.4% over the year. Since this category of exports accounts (in 2007 weights) for over 45% of Scottish manufacturing exports, this shows the difficulties continuing to experience by the Manufacturing sector, and stresses the potential difficulties in export led growth providing a stimulus to the Scottish economy in the short-term.

Forecasts of the Scottish economy

As with the forecasts published in the last seven *Commentaries*, we give three alternative scenarios for growth, employment and unemployment in the Scottish economy and in this Commentary we now forecast from 2010 and 2013. We give a "Central" case, with "High growth" and "Low growth" as two respectively upper and lower growth alternatives. We intend these to capture the range of outcomes that are possible, given that there are considerable uncertainties surrounding any specific single or point estimates. While we do not give explicit probabilities for each of these outcomes, we see the "Central" scenario as being that which is most likely, while "High growth" and "Low growth" reveal the possible range of outcomes for the Scottish economy from 2010 to 2013. As we have noted in previous Spring *Commentaries*, we will know the outcome for Scottish GVA growth in 2010 with the publication of Q4 2010 figures in April 2011.

The forecasts: Detail

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

Households

In the Central scenario, we forecast that the significant contraction seen in household spending in 2009 does not repeat itself in 2010 and the years to 2013. However, household savings continue to be above average as fears over job security continue. Further, household income growth is forecast to remain slow as public-sector workers see real-terms income reductions as nominal incomes remain flat for two years and inflation damages purchasing power. Household expenditure growth on non-discretionary items remains limp as increases in the prices of energy, food and transport costs, continue to squeeze household budgets, along with the VAT increase to 20% introduced in January 2011. The reductions in welfare spending outlined in the October 2010 Comprehensive Spending Review are predicted to significantly affect household incomes through 2012 and 2013, denting household expenditure growth.

Government

In the "Central" scenario, the increase in Government spending in Scotland seen in 2010 (on 2009 levels) expires and we predict annual falls in Government expenditures on goods and services for each of the next three years. These are "front-loaded" in that the major reduction is seen in 2011, but there are further reductions in spending in 2012 and 2013. It continues to be the case that the likelihood of the Government sector providing a stimulus to demand and therefore output growth over the next three years remains unlikely.

Exports

In the "Central" scenario, we predict a slow return to recovery in the UK, with household consumption and government expenditure remaining weak. Continued demand for Scottish manufacturing goods for capital replacement and investment expenditures in the UK keep demand for these products strong. Further, the use of Scottish-produced goods in output produced in the "rest of the UK" will cause the Scottish economy to benefit from a UK-wide export recovery to the rest of the world. In the "high" scenario, the recovery of investment and exports growth is faster than anticipated in our "Central" case, and close to the rate predicted by the OBR.

Tourism

Tourism spending, comprising around 2% of Scottish GDP (by expenditure) is predicted to remain flat as UK (including Scottish) households' demands for travel is flat in 2011 and recovers through 2012 and 2013, driven in part by the continued weak value of the pound making overseas travel expensive. Discounting on the part of the industry continues to maintain, and perhaps grow, occupancy, particularly in the low and medium ends of the market. The high-end tourism market, led by business and discretionary spending, is slower to recover, but from 2012 and 2013 sees market share recovering as confidence returns to the business sector by the end of the forecast period.

Investment and stocks

Recent survey evidence indicates that the market for new investment projects remains weak, and will be largely driven by private sector investment programmes. New investment is mainly directed towards replacement, rather than new process/products, reducing potential investments. The most recent survey evidence confirms a weakening of investment confidence compared to the last quarter, and would indicate that the strength of an investment-led recovery remain weak. Construction firms, heavily involved in new investment projects typically, also reveal an overwhelming majority of firms predicting a fall in their activity in 2011 compared to 2010.

Results

Gross Value Added

All three scenarios forecast Scottish GVA growth for the calendar years 2010 to 2013. As noted in previous

Figure 12: GVA growth 2009 and forecasts for 2010 to 2013, annual real

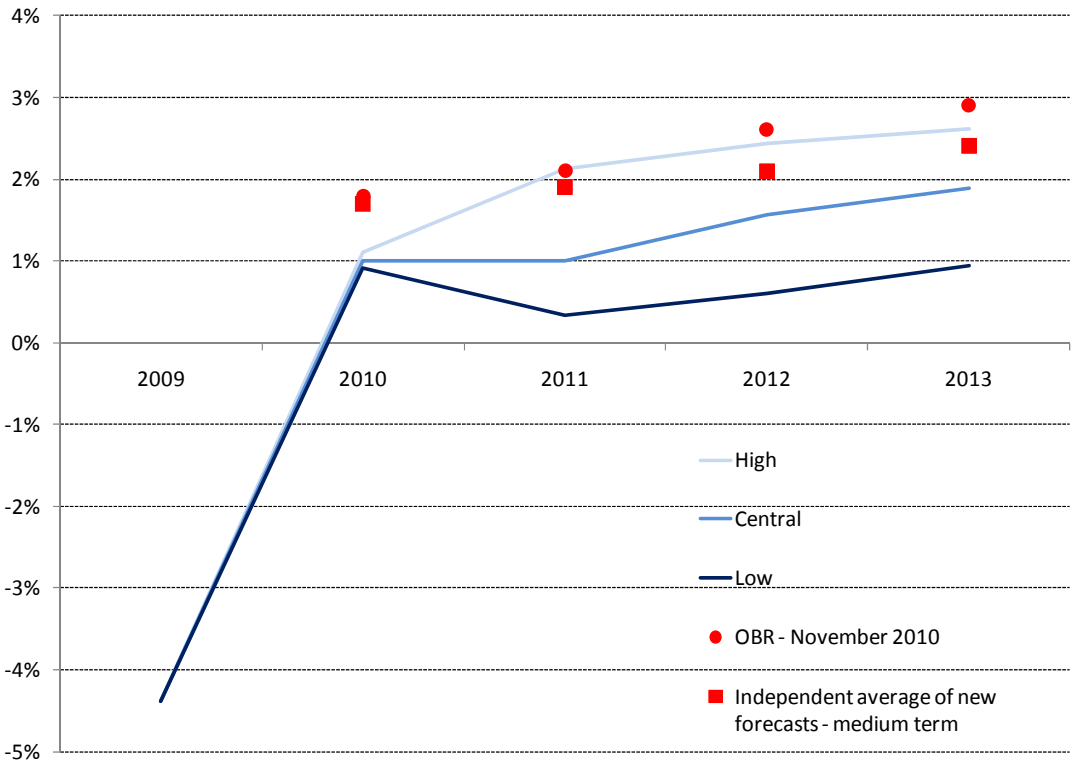
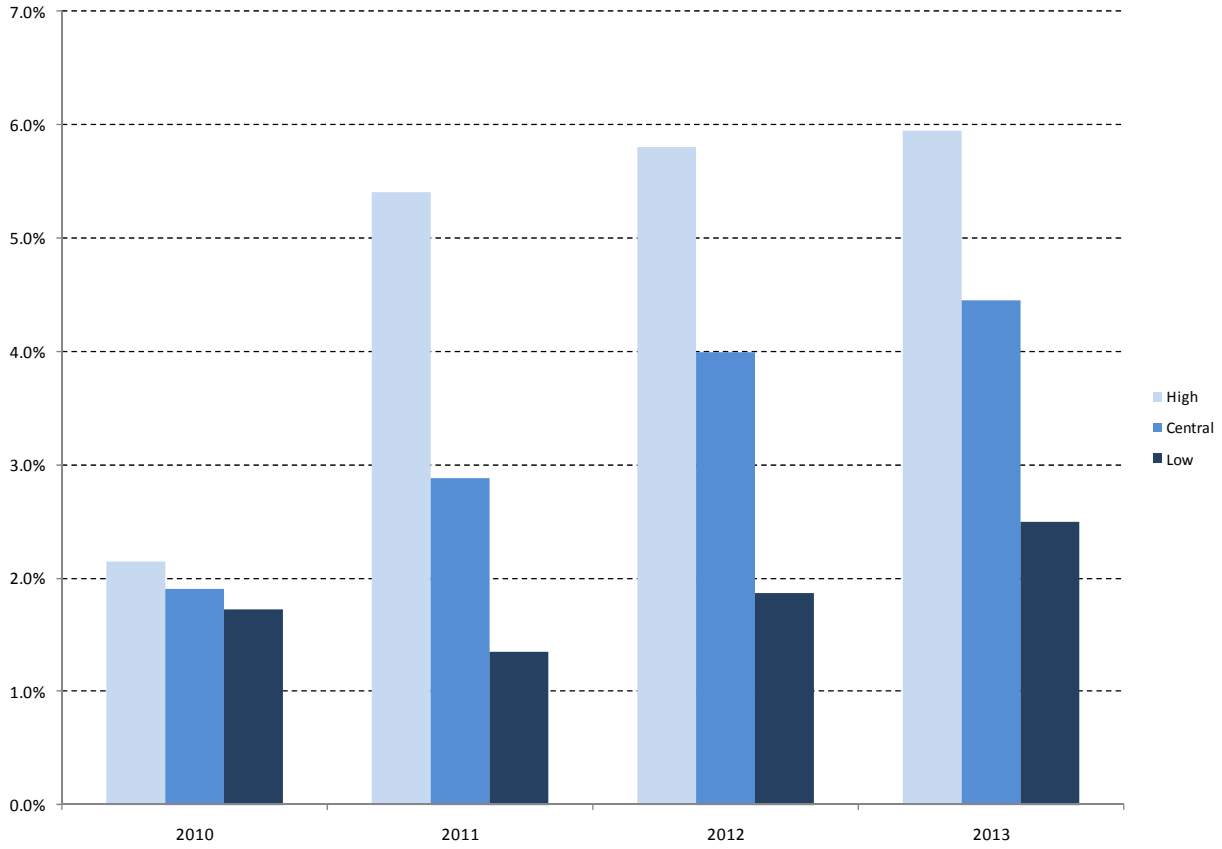


Figure 13: Forecasts of GVA growth in Production, 2010 to 2013



commentaries, we are predicting year-on-year figures so, despite 2010 having ended, we will not know the figures for GVA growth in Scotland until the publication of Q4 2010 GVA growth in April 2011. The significant growth seen in Q2 and Q3 2010 are likely to dominate the annual 2010 growth figures, so we can considerably narrow the prediction for 2010 growth from that published in November 2010's commentary. Having predicted 1.0% growth in 2010 back in November, we retain this as our central growth forecast for 2010. The high and low growth forecasts for GVA growth in 2010 now range from 1.1% to 0.9%.

These three scenarios are presented in Figure 12, alongside (for comparison) the forecasts for the UK between 2010 and 2013 made by the Office for Budget Responsibility. Forecasts for UK growth in 2010, 2011 and 2012 were collected by HM Treasury in February 2011 and the median of the forecasts in the last three months is also shown in Figure 12.

Our forecasts for growth in 2010 are all now lower than the OBR and consensus forecasts for the UK for the same period, in part driven by the slower return to growth in household expenditures in Scotland than the UK and also, the marginally greater reduction in Government spending in Scotland compared to the UK as a whole in this year. We are now forecasting that the Scottish economy will see growth of 1.0% in both 2010 and 2011 in the central scenario, slower than the UK as a whole is forecast to grow in the median and OBR's forecasts. The growth forecast of 1.0% in 2011 is 0.1% lower than we forecast in November, in part due to the worsening outlook for consumer confidence in Scotland and the UK. While these UK forecasts are single point estimates, our forecast for Scotland is within the range of forecasts for the UK economy.

Under the Central scenario, GVA growth in 2012 is forecast at 1.6% - slightly lower than the 1.9% forecast in November – and below the long-run average growth rate of the Scottish economy, while in 2013 we are forecasting growth of 1.9%. Our headline GVA forecast in the "Central" scenario, and the forecasts for the broad industrial sectors under this scenario, are given in Table 2. Table 3 shows the headline GVA growth forecasts under each of the three scenarios. We present forecasts for GVA change in Scotland at broad industrial groupings under each of our three scenarios. The sectors highlighted are "Production", "Services" and "Construction". Figure 13 shows the GVA changes in Production under the three scenarios in each year to 2013, while Figure 14 and Figure 15 show the GVA changes in each year in "Services" and "Construction" in each scenario respectively.

Across production sectors (shown in Figure 13), we are forecasting relatively robust recovery in 2010 in our three scenarios of around 2% in each scenario. Going forward, the assumed growth in world trade – albeit not recovering to levels seen before the 2008-9 recession – mean that we are now forecasting growth of between 3% and 4% in our central scenario in 2011 and 2012. The importance of the UK market for Scottish goods and services, and the relatively weak recovery in 2011 and 2012 forecast, mean that it is largely exports to the rest of the world which are assumed to drive this strong growth over the three years from 2011.

The services sector, on the other hand (shown in Figure 14), we are forecasting to be damaged by the continued slow increase in domestic demand (households and government) over the next three years. Services GVA growth reaches 1.2% in 2012 and 1.5% in 2013 in our "Central" scenario, with growth ranging from 0.4% to 1.9 and 0.7% to 2.1% in our "Low" and "High" scenarios in each of these years respectively.

We forecast in our central scenario that the number of jobs in Scotland at the end of 2010 will be 2,242,000, up slightly from the September 2010 figures, as the most recent employment series indicates a rise over the final quarter of 2010. Total job numbers at the end of 2010 are now forecast to be 20,000 higher than at the end of December 2010, well above even our high growth forecasts for 2010 published in November. It is a surprising feature of the labour market response over the recession and recovery that the "jobless recovery" seen through 2010 are perhaps now operating to increase job numbers and decrease unemployment. This lag between output growth and jobs growth would be consistent with a labour hoarding argument where unemployment rates would increase less than would be expected for a given contraction in output – as hours worked reduced, rather than employee numbers – which has been observed for the UK (Bell and Blanchflower, 2011). Using this argument, we would anticipate that growth therefore in the early stages would not lead to reductions in the unemployment rate, as firms would utilize existing labour stocks rather than hiring workers. The recent decline in the unemployment rate has arguably arisen from increased hiring – following GVA growth with a lag – but of non full-time workers, as is argued elsewhere in this *Commentary*.

This will clearly have implications in the extent to which growth in employee job numbers (which are forecast here) differ from measures of the number of people in work.

In "Central" the number of jobs is forecast to grow in 2011 by around the same number of jobs in 2010, up around 20,000. In 2012 and 2013, our central scenario forecasts jobs growth of 31,700 and 39,800 respectively. Total jobs at the end of 2013 are forecast to be 2,333,000, broadly comparable to the number of employee jobs in the Scottish economy at the end of 2004, and around 60,000 fewer than jobs at the end of 2007. Table 5 shows the net jobs growth forecast between 2010 and 2013 across our three scenarios.

Table 2: Forecasts of GVA growth in the Scottish economy, Central scenario, 2010-2013

	2010	2011	2012	2013
Gross Value Added	1.0%	1.0%	1.6%	1.9%
Production	1.9%	2.9%	4.0%	4.5%
Services	0.7%	0.7%	1.2%	1.5%
Construction	2.2%	0.6%	1.0%	1.3%

Table 3: Forecasts for headline GVA growth in the Scottish economy, three scenarios, 2010-2013

	2010	2011	2012	2013
High	1.1%	2.1%	2.4%	2.6%
Central	1.0%	1.0%	1.6%	1.9%
Low	0.9%	0.3%	0.6%	0.9%

Table 4: Forecasts of Scottish employee jobs (000s) and net employee jobs change in central scenario, 2010 to 2013

	2010	2011	2012	2013
Total jobs (000s), Dec	2,242	2,261	2,293	2,333
Net annual change (jobs)	20,013	19,780	31,741	39,808
% change from previous year	0.9%	0.9%	1.4%	1.7%
Agriculture (jobs, 000s)	32	33	34	35
Annual change	2,800	685	1,120	1,409
Production (jobs, 000s)	214	221	230	241
Annual change	- 23,011	6,434	9,237	10,781
Services (jobs, 000s)	1,858	1,870	1,890	1,916
Annual change	16,650	11,827	20,018	25,864
Construction (jobs, 000s)	137	138	139	141
Annual change	23,673	834	1,366	1,754

Table 5: Forecast Scottish net jobs growth in three scenarios, 2010 to 2013

	2010	2011	2012	2013
High	22,267	42,626	51,025	57,262
Central	20,113	19,780	31,741	39,808
Low	18,357	5,895	11,586	19,256

Figure 14: Forecasts of GVA growth in Services, 2010 to 2013

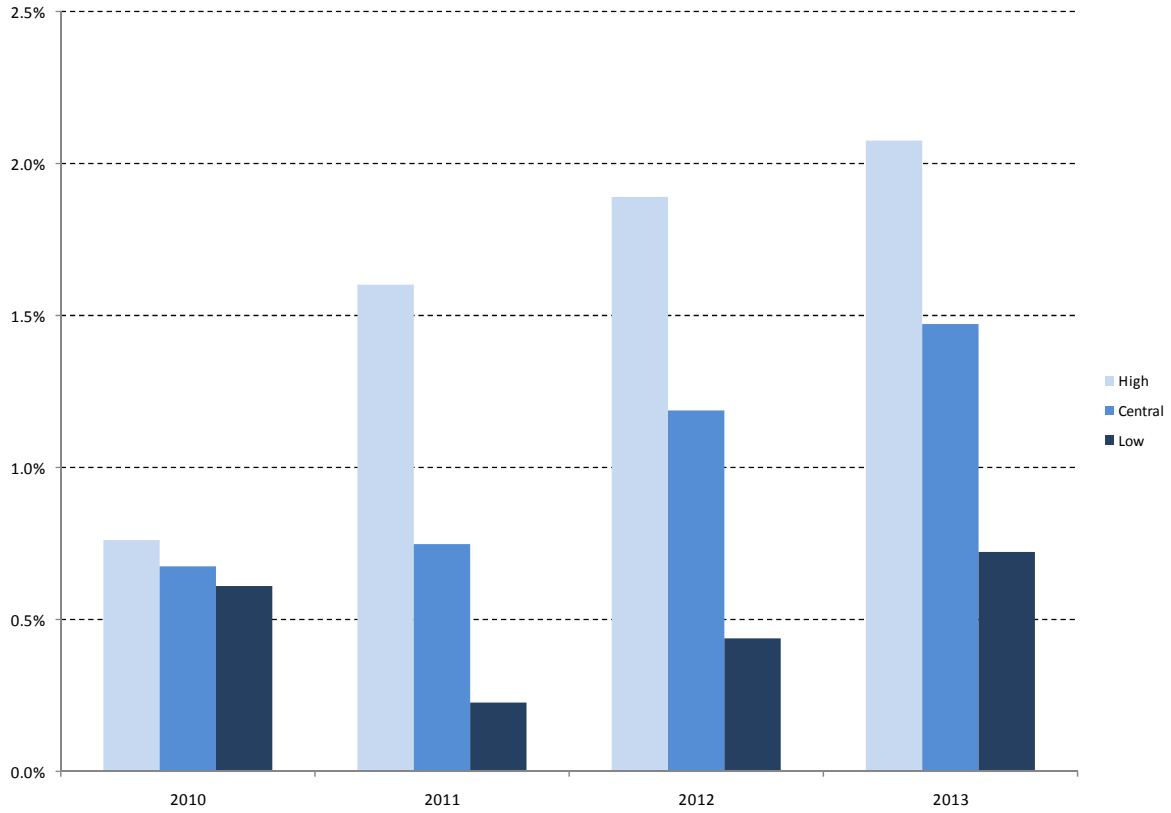
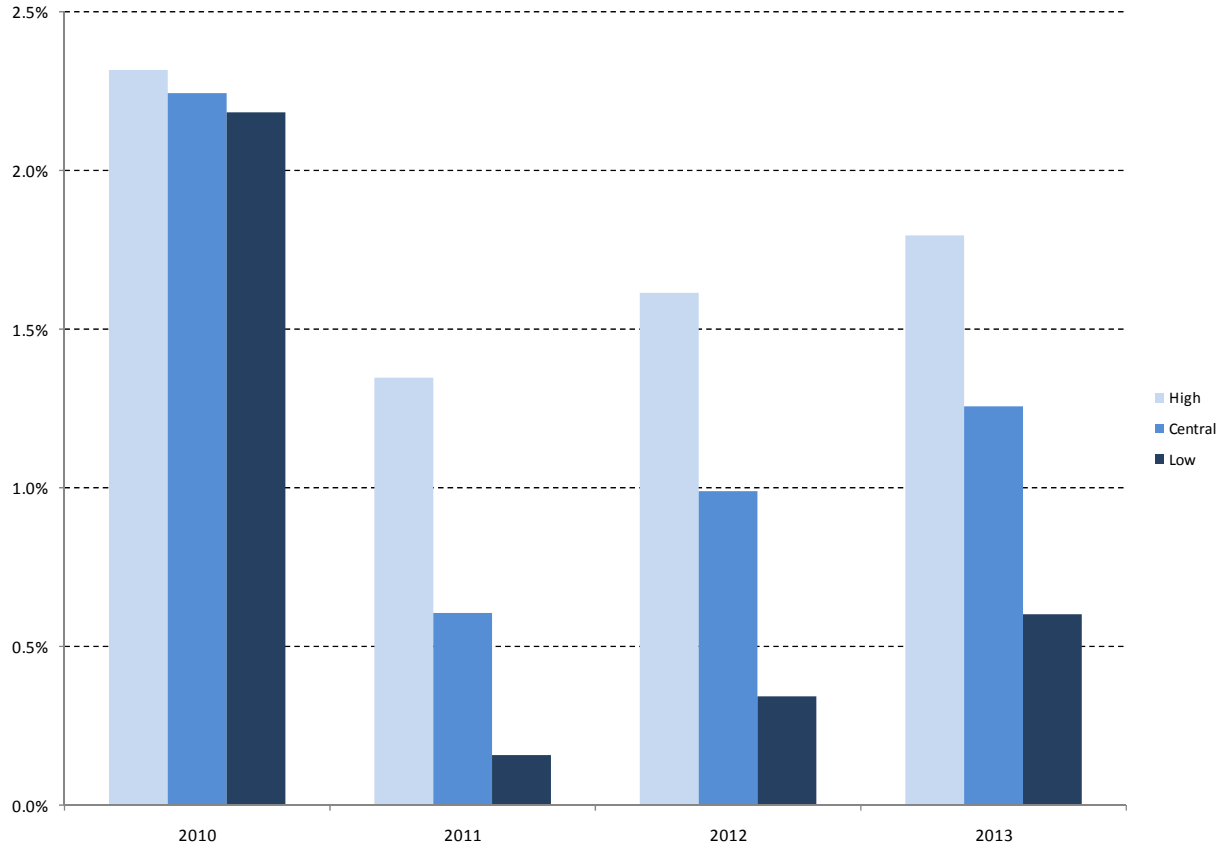


Figure 15: Forecasts of GVA growth in Construction, 2010 to 2013



Looking at the sectoral breakdown of these jobs, the Construction sector is forecast to see an increase through 2010 of around 24,000, largely offsetting the decline of 23,000 in the Production sectors. Services job numbers are forecast to increase from 2009 levels by around 17,000 in the Central scenario. In the years from 2011 onwards, with muted job creation, jobs growth is forecast to focus in the "Production" sectors and "Services" sectors.

Unemployment

We present our 2010 to 2013 forecasts for unemployment, as measured by the ILO definition, as well as those receiving unemployment benefits, in Table 6. The preferred measure of unemployment is the ILO definition, as given by the Labour Force Survey, as it reveals the extent of labour which is unemployed and

Table 6: Forecasts of Scottish unemployment in "Central" scenario, 2010 to 2013

	2010	2011	2012	2013
ILO unemployment	215,000	234,072	224,945	212,657
Rate[1]	8.0%	8.8%	8.4%	7.9%
Claimant count	138,300	150,849	144,967	137,048
Rate[2]	5.0%	5.3%	5.0%	4.7%

Notes: [1] = rate calculated as total ILO unemployed divided by total of economically active population aged 16+. 2 = rate calculated as claimant count recipients divided by sum of claimant count and total jobs. The latest estimates of the figures published in Table 6 were published in February 2011 in the Labour market statistics for Scotland. These estimated the ILO unemployment rate at the end of 2010 and the claimant count rate in December as 8.0% and 5.0% respectively. November's Commentary had forecast these values at the end of the year as 9.3% and 5.2%, meaning that our forecast errors were 1.3% and 0.2% respectively.

Figure 16: Scottish ILO unemployment rate and claimant count unemployment rate, 1992-2010 and forecasts to 2013 under three scenarios

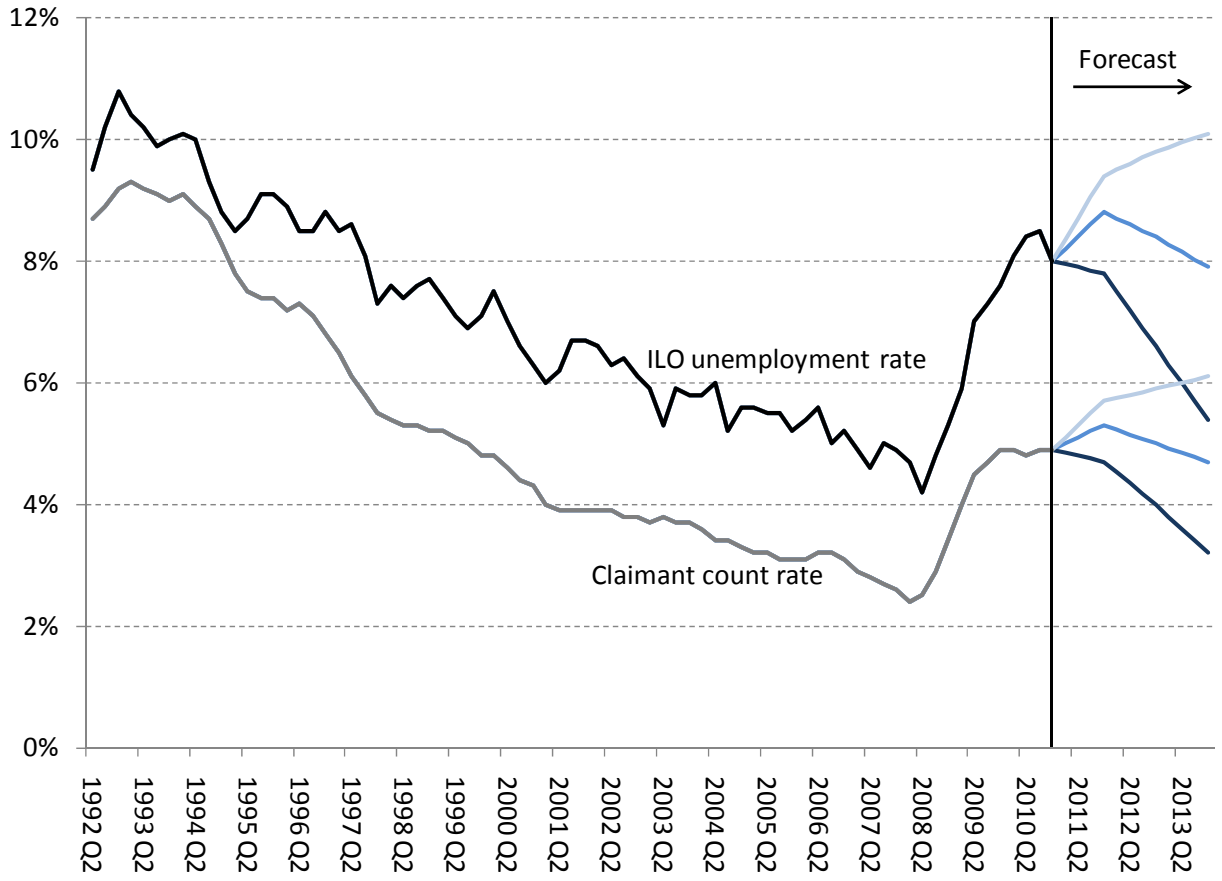


Table 7: ILO unemployment rate and claimant count measures of unemployment under three scenarios, 2010 to 2013

	2010	2011	2012	2013
ILO unemployment rate				
High	7.9%	7.8%	6.6%	5.4%
Central	8.0%	8.8%	8.4%	7.9%
Low	8.1%	9.4%	9.8%	10.1%
Claimant count				
High	4.8%	4.7%	4.0%	3.2%
Central	4.9%	5.3%	5.0%	4.7%
Low	4.9%	5.7%	5.9%	6.1%

available for work, rather than that portion of the available labour force in receipt of unemployment benefit. As such, it is a better measure of the extent to which labour resources are not currently employed in productive activity in Scotland. Table 7 shows the ILO and claimant count measures of unemployment over the period 2010 to 2013 in each of the three forecast scenarios.

We diagrammatically show the forecasted path of ILO and claimant count unemployment under each of the three scenarios in Figure 16.

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Review of Scottish Business Surveys

Overall

A common theme in quarterly business surveys covering the final quarter of 2010 and first quarter of 2011 has been the slowing of the economic recovery in the final quarter and relatively weak trends in the first quarter of 2011. As the Bank of Scotland Index of Leading Indicators noted 'Scotland's economic recovery is set to peak in Q3…. (with) a slowing of growth in Q4, continuing into the start of 2011'. Scottish Engineering's Quarterly Review and Oil & Gas UK's Quarterly Index largely followed this interpretation, albeit with more optimism and rising trends in orders and output. The latest Oil & Gas UK's Activity Survey for Q4 2010 (published 23rd Feb 2011) was more positive as to rising investment, activity and employment than other surveys.

Monthly surveys encountered more problems in interpreting the underlying trends. The exceptionally long spell of bad weather, continuing consumer uncertainty and weak consumer confidence, the increase in VAT to 20% in January and rising prices combined to increase the difficulties of disentangling short term effects from longer term trends in the Scottish economy and contributed to heighten interpretations as to the rate of recovery or slow down in the Scottish economy, especially in terms of the performance of the service sector. Nevertheless, evidence from the monthly Scottish Retail Monitor and Visit Scotland's Occupancy Survey and the quarterly SCBS retail sector results point to the continuing underlying weakness in consumer demand and confidence.

The overall weakness in demand was well captured in a number of surveys. The SCBS Q4 data for manufacturing noted that 65% of manufacturing and 83% of construction respondents reported working below optimum levels. In tourism occupancy levels fell and discounting of room rates was widespread, Visit Scotland data for December suggests occupancy rates at their lowest for five years, although the adverse weather was a clearly a contributing factor.

Rising cost pressures were widely cited in a number of surveys – the SRC – KPMG Retails Sales Monitor, Bank of Scotland PMI and Scottish Chambers Business Survey. The latest Bank of Scotland PMI noted a 'strong acceleration of average cost inflation…. Both Scottish manufacturers and service providers registered a considerable acceleration of cost inflation during the month with higher fuel, energy and food prices widely commented on'. This had been noted in the SCBS Q4 2010 survey which reported that more than three quarters of manufacturing, 92% of wholesale and 67% of retail respondents reported pressures to raise prices due to rising raw material/suppliers' prices. 92% of wholesale, 42% of manufacturing and 38% of retail respondents reported rising transport costs.

Once again the contrasts between official and survey data for the Scottish construction sector were the most pronounced. There is now more evidence that cuts in public sector expenditure are beginning to affect the private sector. The SCBS noted expectations for the first quarter remain very weak, generally weaker than a year ago, and there is more evidence, in both manufacturing and construction, that those firms with more exposure to public sector orders are less optimistic as to 2011 than those with lower exposure.

Oil and Gas services

Data from Oil & Gas UK Index (Q3 and Q4 2010) and Aberdeen & Grampian Oil and Gas survey (Autumn 2010) suggested continuing rising confidence across the sector, although the rate of increased eased amongst supply chain companies in the third quarter before rising strongly in the fourth quarter. The Aberdeen & Grampian Chamber Oil and Gas Survey (no 13 autumn 2010) likewise reported rising confidence and activity, noting that in a climate of global economic recovery, rising oil prices the global oil sector and the UKCS has returned to growth with signs of increasing investment, consolidation and acquisitions by both suppliers and countries to secure longer term supplies. Significantly the independent E & P companies registered the strongest increase in business confidence with expectations of increased activity investment being reported in the Oil & Gas UK's 2011 Activity Survey.

Drilling activity in the UKCS had eased in 2009, and whilst there were some signs of a pick up in the first half of 2010, this was less evident later in the year and this was reflected in the slight easing in the rate of increase in business confidence reported by operators, but not by contractors in the Oil & Gas UK index Q2 2010). The lingering impact of the recent financial crisis is still evident in terms of some limits in the access to capital and a more cautious approach to drilling schedules. Latest international data from IHS CERA's Downstream capital costs index (November 2010) suggests the costs for designing and constructing downstream refining and petrochemical projects rose 3 percent from Q1 2010 to Q3 2010. The index noted that costs are now just 4 percent below their 2008 peak with higher commodity prices and a weakening U.S. dollar again the driving force behind the steady rise of costs in the downstream sector.

Oil prices remained relatively stable and on a slight upward trend averaging with more widespread predictions that these prices will remain and increase slightly in 2011 and 2012, assuming a relatively stable continuation of the world economic recovery. As the industry notes the price for oil and gas is critical for long term investment, development and production. By autumn oil prices were in the range $74–$76 per barrel, but had risen to over $100 per barrel by January 2011.

The Aberdeen & Grampian survey noted signs of increasing demand for staff in terms of increased recruitment activity, demand for additional staffs, and in the rising trends in working hours being above planned levels. Recruitment and retention problems increased in 2010 and shortages of experienced engineering and specialist skills were reported by both the Aberdeen & Grampian Oil & Gas survey and by the Bank of Scotland Report on Jobs (December 2010). Further indications of continued growth in the sector were evident in the Oil and Gas UK and the recent Douglas Westwood UKCS Offshore Decommissioning Market Report 2010 – 2040 which highlighted the infrastructure development and work volumes over the next thirty years associated with decommissioning and considerable potential and value of such work for contractors.

Production

The latest issue of the Lloyds TSB Scotland Business Monitor covering the three months to the end of November noted that the production sector showed a robust recovery compared to the three months to the end of August. The overall net balance for turnover for firms in the production sector was -1% - a significant improvement from the -14% of the previous quarter and very similar to the -2% of the same quarter one year ago. Respondents reported an overall net balance for turnover in the next six months of -2%. Although this was worse than the +6% of the previous quarter and the +7% of the same quarter one year ago, production firms remain more optimistic for the next six months than their service counterparts. Expectations for export activity continued to be positive, 33% of firms expect export activity to increase in the next six months compared to only 11% who expect a decrease. This overall net balance of +22% was the most positive in two and a half years.

Manufacturing

A common theme in the surveys covering Scottish manufacturing was one of export led growth cushioning the sector as the domestic economy remained weak.

Once again the most optimistic views were those in Scottish Engineering's Quarterly Review. Their Quarterly Review (Q3 2010) reported rising optimism, orders, output, investment and employment, with the total order intake the highest for 12 years. This eased in Q4 and the index noted 'The Scottish manufacturing sector has managed to maintain a lot of positive features in this final Review of 2010. While order intake, staffing levels and output have slipped slightly, they remain positive'.

The Scottish Chambers' Business Survey (SCBS) for quarter 4 2010 found that respondents continued to report a downward trend in business confidence, but noted firms reported a resumption in rising trends in orders and sales in quarter four following a temporary decline in quarter three. Average capacity utilisation declined by one percentage point, although was up by 5 percentage points on the year. Respondents anticipate some further weakening in these trends in the first three months of 2011, with the net trends in total orders and sales expected to be negative. Cost pressures, especially raw material and to a lesser extent transport costs, continued to cause most concern to firms during quarter four. Nevertheless, the net trend in turnover is expected to remain positive over the coming twelve months and a small net balance of firms expect profitability to increase (1.8%).

The CBI Industrial Trends Survey reported that the volume of total new orders contracted in the three months to January, despite expectations that it would grow strongly. As anticipated new domestic orders fell sharply. Meanwhile, export order growth continued, albeit at a slower pace. It was the third consecutive quarter in which export orders have risen while domestic orders have fallen. Expectations for the three months to April 2011 are that export orders are expected to grow again, while domestic orders are expected to be broadly flat.

The Bank of Scotland PMI for November highlighted the first monthly rise in new order levels received by Scottish manufacturers since August. The New Orders Index indicated a marginal expansion mainly due to new business wins from export markets. However the December PMI noted that new orders and output contracted as the adverse weather dampened domestic demand although further export growth lessened the blow for manufacturers. The headline Bank of Scotland PMI index indicated a contraction of Scotland's manufacturing sector in the final month of 2010.

SCBS firms reported that the downward trends in investment of equipment eased with new investment mainly directed towards replacement. Investment for R & D and expansion remained low. Scottish Engineering Quarterly Survey firms reported that capital investment plans in general remained unchanged. Respondents from the CBI Industrial Trends Survey claimed that investment intentions for the next twelve months compared to the last twelve had generally fallen compared to the previous quarter.

Construction

According to the Scottish Building Federation a majority of Scottish construction firms expect their workloads to decline during 2011. The Scottish Construction Monitor, for the three months to the end of December showed overall confidence within the sector declining for the fifth consecutive quarter. More than 60% of firms responding to the survey report a reduced order book compared to the same time last year, while 80% predict that industry activity will decline in the course of 2011.

Business confidence amongst SCBS firms continued on its downward trend in the three months to the end of December (the lowest net balance since Q4 2008). Almost two thirds reported a decline in business confidence. Average capacity declined from 75% to 72%, an improvement over levels one year ago (66%), and similar to the level of the same quarter two years ago. Once again the trends in

demand weakened among construction firms with orders from all areas declining further during the fourth quarter. 88% of firms reported working below optimum levels.

The service sector

Service businesses in the latest issue of the Lloyds TSB Scotland Business Monitor showed an improvement in turnover with an overall net balance rising to +2% in the three months to the end of November 2010 compared to -4% in the preceding quarter and showing a significant improvement on the -11% of the same quarter one year ago.

The Bank of Scotland PMI for November noted that Scottish service providers recorded a third straight monthly decline in activity levels at their business units during November. Respondents noted that lower new order volumes was the key reason for reduced activity levels. Output was reported to have fallen by 31% of survey respondents. In December it noted the impact of harsh weather conditions and a weak final quarter to 2010. However in January it reported rising activity for both manufacturing and service providers.

Logistics and Wholesale

Data from the SCBS for the fourth quarter of 2010 indicated a levelling off in business confidence amongst logistics respondents with a net of respondents reporting no net change in activity. Over the next year pressures on margins are expected to ease with turnover and profitability set to improve. In contrast, business confidence amongst SCBS wholesale respondents remained weak, with few respondents reporting a rise in business confidence. Sales trends weakened during the three months to December although more than half of firms reported increasing or level sales; however fewer respondents are now forecasting a decline in sales in the coming quarter. Almost all firms reported pressures to raise prices, as respondents report rising transport costs and supplier prices. Wholesalers are no longer revising their expectations downwards for both turnover and profitability over the coming year though are not yet forecasting a rise. Once again most firms reported that their investment intentions remained unchanged; nevertheless there was a net decline. A quarter of wholesale firms sought to recruit staff, mainly for replacement as no firms reported that actual total employment levels had increased.

Retail distribution

A common theme in the surveys covering the Scottish retail sector has been the adverse impact of the harsh weather conditions, weak consumer confidence and demand, the impact of the VAT increase in January on sales in both December and January, rising costs, price pressures and increased competition amongst the major multiple retailers and the continued drift to on line sales. Not unsurprisingly the net trends in retail confidence among SCBS firms in the fourth quarter remained and weak and also remained weaker than during the same quarter one year ago. The trend in sales remained weak with almost 60% of SCBS firms reporting and more than 60% expecting a decline in the total value of sales, notwithstanding extensive price cutting. Only 11% reported increased sales during the final quarter of 2010, and once again continued concerns over consumer confidence are moderating sales expectations for the coming quarter.

The Scottish Retail Sales Monitor, published by the Scottish Retail Consortium reported that like-for-like sales in November were unchanged from a year ago; in December like for like figures were 0.7% better than a year ago and the comparable figures for January 2011 were 0.9% lower than in January 2010. Over the three months non food sales fell in each month and the increase in food sales in November and December was driven mainly by inflation in prices. Footfall was reported as being below average in January 2011 and 2011 is forecast to be a challenging year for the sector, with Scottish consumer confidence being weaker than in the UK.

Tourism

SCBS firms noted that overall business confidence and occupancy weakened, whilst visitor numbers and demand remained flat. The trend in visitors from Scotland improved for a small net balance of hotels during quarter four 2010. Demand from the rest of the UK, abroad and business trade all continued to decline. Demand from all areas is expected to decline during the first quarter of 2011. Trends in bar/restaurant trade and in conference/function facilities remained weak, and weaker than a year ago. Overall local and business demand accounted for 54% of total demand and tourist demand accounted for 46% of total demand in the fourth quarter. More than a third reported reducing average room rates and the discounting of rates is set to continue for a third of hotels in the three months to the end of March 2011. 70%, compared to more than 80% in the previous quarter, reported that the lack of tourist demand remained the primary business constraint but once again around a third felt that their area had suffered due to poor marketing.

Both the SCBS Q4 2010 and Visit Scotland surveys for November and December suggested a weakening in demand in tourism and demand for bar/restaurant and conference facilities in the final quarter of 2010. Average occupancy among SCBS hotels over the three months to December 2010 declined from 70.3% to 56.4%, slightly lower than a year ago (61.7%). The Scottish Hotel Occupancy Survey reported that room occupancy in November was 58% but fell in December to 32% (five percentage points lower than a year ago), moreover in December average length of stay (nights) and bed occupancy were lower than a year earlier. The average bed occupancy in December was the lowest average bed occupancy rate recorded in December over the five previous years.

The Scottish Self-Catering Occupancy Survey reported an average unit occupancy rate for self-catering properties

throughout Scotland of 27% in November and 28% in December 2010 (the lowest average unit occupancy rates recorded for these two months over the past five years). The Scottish Guest House and Bed & Breakfast Occupancy Survey reported an average unit occupancy rate 20% in November and 15% in December. Again the figures for these two months were lower than for previous years.

Cost pressures

A common theme across most business surveys was rising cost pressures For SCBS construction firms tender margins and profitability over coming year weakened further during the final quarter of 2010. Cost pressures, especially suppliers' prices, remain significant for SCBS retail respondents and pressures to increase prices remain high. More than half of firms reported that utility costs were also putting pressure on prices. Pressures on margins look set to continue (though ease marginally) with almost two-thirds of firms anticipating weakening trends in both turnover and profitability over the next year.

Pay and Employment

According to the latest Bank of Scotland Report on Jobs (January 2011) the Scottish labour market improved further in December, led by faster vacancy growth, although this was strongest in the North East and the oil and related sectors. The number of people placed in both permanent and temporary job roles increased during the latest survey period, whilst candidate availability tightened since November. The report noted that permanent staff placements increased for the third month and the number of people placed into temporary or contract jobs rose at a strong rate in December. However, in the Bank of Scotland PMI report covering January job losses in the Scottish private economy extended to a third straight month.

SCBS manufacturing firms found that declining trends in employment eased, and expenditure on training continued to ease, nevertheless recruitment activity increased with manufacturing firms reporting difficulties in attracting suitable technical staff. In contrast Scottish Engineering respondents reported positive trends in staffing levels across all size bands.

More than 60% of firms surveyed in the Scottish Building Federation Survey expect that they will have to reduce the size of their workforce next year, with only 5% of respondents expecting to be in a position to take on additional workers. The latest survey suggests that the construction industry's reported recovery is at risk of faltering or that output and employment could slip back into decline.

Similarly amongst SCBS construction firms employment levels continued to decline and further declines are anticipated during the first quarter of 2011. Recruitment activity and average pay increases remain at historically low levels, few recruitment difficulties are reported.

Labour market activity remains at low levels in the retail sector with almost 70% of SCBS retailers reporting and expecting no change to overall employment levels. Recruitment activity in the third quarter, whilst just as strong as a year ago, remains at historically low levels. More than 20% reported increasing pay, and the average increase in for quarter 4 2010 was 2.3%.

SCBS hotel respondents noted that 54% (compared to 45% in quarter three) sought to recruit staff, mainly for replacement. Net declining trends in employment continued and are expected to accelerate in quarter one. Once again, notwithstanding the weak demand for staff difficulties in recruiting suitable chefs were evident.

Outlook

The trends for 2011 will reflect adjustments to higher levels of VAT, increased fuel and utility charges and continuing weak consumer confidence. Over the year the pace and scale of public sector job cuts and reductions in expenditure will contribute to weak levels of demand coupled with increased cost pressures. Recruitment activity, apart from the oil and gas sector is likely to remain at historically low levels and signs of rising private sector employment remain elusive.

Cliff Lockyer/Eleanor Malloy
February 2011

Current trends in Scottish Business are regularly reported by a number of business surveys. This report draws on:

1. The Confederation of British Industries Scottish Industrial Trends Survey for the fourth quarter 2010;
2. Lloyds TSB Business Monitor 53 for the quarter September - November 2010 and expectations to May 2011;
3. Scottish Engineering's Quarterly Reviews for the third and fourth quarters of 2010;
4. The Bank of Scotland Markit Economics Regional Monthly Purchasing Managers' Index for November and December 2010 and January 2011;
5. The Scottish Retail Consortium's KPMG Monthly Scottish Retail Sales Monitor for November and December 2010 and January 2011;
6. The Scottish Chambers of Commerce Quarterly Business Survey, reports for the fourth quarter of 2010;
7. Oil & Gas UK quarterly Index quarters 3 and 4 2010;
8. Visit Scotland Occupancy Survey for November and December 2010;
9. The Scottish Construction Monitor quarter 4 2010.

Overview of the labour market

Inevitably current interest in the Scottish labour market continues to focus on the trends in both employment and unemployment figures and the emerging differences in the patterns of full and part time employment, a theme developed in other sections of this edition. Public interest continues to focus on public sector employment trends and pay and for a further issue we return to these themes. Over the past months there have been a number of developments, most notably a focus on training issues and possible changes to employment tribunals.

Recent trends and statistics

Comparable figures on the labour market between Scotland and the United Kingdom in the quarter October – December 2010 are summarised in Table 1. Labour Force Survey (LFS) data show that in the quarter to December 2010 the level of employment in Scotland rose by 23 thousand, to 2,488 thousand. Over the year to December 2010, employment in Scotland fell by 2 thousand. For the same period, UK employment rose by 218 thousand. The Scottish employment rate – those in employment as a percentage of the working age population – was 71.1 per cent, down -0.4 per cent compared to one year earlier. For the same period the UK employment rate was 70.5 per cent, down -0.1 per cent compared to one year earlier.

In considering employment, activity and unemployment rates it is important to remember the bases and relationships of these figures. LFS data is provided for: (1) all aged 16 and over and (2) for all aged 59/64. The first measure (all aged 16 and over) leads to higher numbers in employment, in the total economically active and economically inactive – but reduces the economic activity rates and unemployment rates, but at the same time increases the economically inactive rate. Conversely the second measure (all aged 16 to 59/64) leads to lower numbers economically active, in employment and economically inactive – but leads to a higher economically active, employment and unemployment rates but lower economically inactive rates. Figures derived from the Labour Force Survey differ slightly from those derived from the Annual Population Survey.

Table 1: Headline indicators of Scottish and UK labour market, October - December 2010

October - December 2010		Scotland	Change on quarter	Change on year	United Kingdom	Change on quarter	Change on year
Employment*	Level (000s)	2,488	23	-2	29,121	-68	218
	Rate (%)	71.1	0.4	-0.4	70.5	-0.3	-0.1
Unemployment**	Level (000s)	216	-13	10	2,492	44	40
	Rate (%)	8.0	-0.5	0.3	7.9	0.1	0.1
Activity*	Level (000s)	2,704	10	6	31,613	-24	258
	Rate (%)	77.4	0.0	0.1	76.6	-0.2	0.0
Inactivity***	Level (000s)	769	-1	6	9,361	93	36
	Rate (%)	22.6	0.0	0.1	23.4	0.2	0.0

Source: Labour Market Statistics (First Release), Scotland and UK, February 2011

* Levels are for those aged 16+, while rates are for those of working age (16-59/64)

** Levels and rates are for those aged 16+, rates are proportion of economically active.

*** Levels and rates for those of working age (16-59/64)

The relationships between employment, unemployment, totally economically active and inactive are important in appreciating changing levels of employment and unemployment, and changes in the employment rates should be seen in conjunction with changes in the activity rates. If people leave employment and become unemployed (but are still economically active) the unemployment rate increases, but the economically active rate remains unchanged. However, if people leave employment and do not seek employment, as seems to be a continuing pattern, they are categorised as economically inactive, as such the unemployment rate remains unchanged whilst the activity and inactivity rates change. This is clearly shown in Table 1. Over the year to December 2010, the numbers employed fell by 2 thousand, whilst unemployment rose by 10 thousand – however, the numbers of those aged 16-59/64 who are economically inactive rose by 6 thousand and the numbers economically active rose by 8 thousand.

Table 2: Employment rates thousands (%) People by age July 2007 – June 2008 and July 2009 – June 2010

	16+	16 - 64	16 - 17	18 - 24	25 - 34	35 - 49	50 - 64	65+
July 2007 – June 2008	60.6	74.2	39.5	68.5	81.7	83.9	65.4	5.6
July 2009 – June 2010	58.0	71.0	30.3	62.1	78.3	81.1	64.4	6.3

Source: Labour Market Statistics (First Release), Scotland and UK, February 2011

Table 3: Employment, unemployment and inactivity rates by Local Authority Area 2007 – 2009

Geography (Residence Based)	Employment rates			Unemployment rates 16+*			Economic inactivity rates		
	2007	2008	Jul2009/ Jun2010	2007	2008	Jul2009/ Jun2010	2007	2008	Jul2009/ Jun2010
	%			%			%		
Scotland	76.0	75.6	71.0	4.7	4.9	7.5	20.1	20.3	23.1
Local Authority Area									
Aberdeen City	79.1	79.4	78.5	3.7	3.6	4.7	17.3	17.6	18.5
Aberdeenshire	82.6	82.2	80.7	2.5	2.6	3.4	15.6	15.5	16.4
Angus	79.1	80.0	73.0	4.5	4.6	6.0	16.2	15.6	22.6
Argyll & Bute	80.0	77.6	73.0	4.0	4.3	6.0	16.3	18.4	22.0
Clackmannanshire	69.4	70.9	72.7	5.5	5.4	8.0	25.3	25.4	23.7
Dumfries and Galloway	77.4	76.2	71.6	4.2	4.5	6.0	19.1	19.5	24.2
Dundee City	72.1	71.5	68.9	6.6	6.3	9.1	22.4	23.9	24.8
East Ayrshire	73.1	74.6	68.3	6.3	6.1	9.7	21.5	20.4	24.0
East Dunbartonshire	78.9	77.6	75.7	3.1	3.9	6.2	19.0	18.7	19.4
East Lothian	79.2	77.9	72.5	3.5	3.5	6.3	18.0	19.4	22.0
East Renfrewshire	77.2	76.5	72.4	3.4	3.6	6.2	19.1	20.5	21.9
Edinburgh, City of	77.4	76.6	68.9	4.3	4.5	6.8	19.5	19.8	26.1
Eilean Siar	79.4	78.7	69.5	4.2	4.6	6.4	17.7	16.3	26.1
Falkirk	78.1	78.9	72.5	4.6	4.4	7.5	18.5	18.3	21.9
Fife	75.9	76.5	71.1	5.6	5.8	8.3	18.8	17.7	21.6
Glasgow City	66.9	66.6	61.8	6.8	6.9	11.1	28.2	28.8	30.7
Highland	82.0	81.7	80.2	3.2	3.5	4.7	16.0	16.3	17.6
Inverclyde	68.4	72.5	68.5	7.1	6.4	9.1	24.8	23.0	24.6
Midlothian	80.7	79.9	74.7	4.2	4.2	7.0	15.1	16.2	18.7
Moray	80.4	81.8	78.8	3.5	3.8	4.9	17.2	15.0	17.6
North Ayrshire	71.5	71.8	64.4	6.4	7.4	11.3	23.5	22.0	26.9
North Lanarkshire	73.2	71.0	70.4	5.4	5.9	9.8	22.6	23.8	20.7
Orkney Islands	86.4	83.9	83.4	2.7	2.9	2.9	11.2	14.2	13.5
Perth and Kinross	78.1	78.7	72.0	3.5	3.7	5.2	18.8	17.9	23.1
Renfrewshire	75.0	76.0	68.9	5.1	5.5	8.8	20.9	18.9	24.2
Scottish Borders	81.4	80.6	71.9	3.1	3.6	5.9	16.2	15.8	22.3
Shetland Islands	88.1	88.0	86.0	2.6	2.8	3.4	10.4	10.8	11.0
South Ayrshire	77.2	75.4	69.6	5.0	5.4	8.4	18.9	20.5	23.1
South Lanarkshire	78.9	76.7	71.2	4.2	4.4	8.0	18.5	20.6	22.7
Stirling	76.8	75.2	72.1	3.9	4.5	7.2	19.2	20.2	21.6
West Dunbartonshire	73.9	71.2	66.6	6.3	6.9	10.2	20.8	23.3	25.7
West Lothian	77.8	79.1	71.9	4.8	4.6	7.7	17.7	17.4	22.6

Source: 2007 and 2008 data from Annual Population Survey (Jan to Dec)
July 2009/June 2010 data from Labour Market Statistics (First Release), Scotland and UK, February 2011

Notes: See sources for definitions and original sources

Table 1 shows that for Scotland the preferred International Labour Organisation (ILO) measure of unemployment eased to 216 thousand, between October - December 2010, but rose by 10 thousand over the year2. The ILO unemployment rate eased in the three months to December 2010 and now stands at 8.0 per cent. This represents a 0.5 per cent fall over the last quarter but a 0.3 per cent rise relative to the same period a year earlier. The comparable ILO unemployment rate for the UK stands at 7.9 per cent, and is up 0.1 per cent over the most recent quarter and up 0.1 per cent over the year.

Table 4: Total workforce jobs* by industry, Scotland, September 2010 (thousands)

Industry	June 2005	June 2006	June 2007	June 2008	June 2009	June 2010	Sept 2010
A : Agriculture, forestry and fishing	51	54	60	60	51	62	61
B : Mining and quarrying	25	28	30	30	28	25	29
C : Manufacturing	233	226	228	212	202	180	176
D : Electricity, gas, steam and air conditioning supply	10	10	13	12	11	13	12
E : Water supply; sewerage, waste management etc	16	18	17	19	22	15	15
F : Construction	181	194	203	199	166	180	187
G : Wholesale & retail trade; repair of motor vehicles etc	382	384	380	396	390	359	355
H : Transportation and storage	125	118	123	123	106	137	137
I : Accommodation and food service activities	189	190	188	191	165	196	217
J : Information and communication	72	73	79	69	73	74	68
K : Financial and insurance activities	114	107	91	98	92	91	95
L : Real estate activities	25	29	30	32	34	23	23
M : Professional, scientific and technical activities	145	154	161	176	174	153	144
N : Administrative and support service activities	174	180	192	200	184	178	170
O : Public administration & defence; social security	180	177	181	177	129	129	129
P : Education	199	200	192	208	220	210	213
Q : Human health and social work activities	384	399	383	398	387	370	379
R : Arts, entertainment and recreation	75	81	75	84	64	75	73
S : Other service activities	63	65	63	58	48	68	69
Column Total	2,644	2,685	2,690	2,740	2,546	2,539	2,553

Source: Labour Market Statistics (First Release), Scotland, February 2011

***** Workforce jobs are a measure of jobs rather than people

The economically active workforce includes those individuals actively seeking employment and those currently in employment (i.e. self-employed, government employed, unpaid family workers and those on training programmes). Table 1 shows that the rate of the economically active remained unchanged between October - December 2010. There were 2,704 thousand economically active people in Scotland during October - December 2010. This comprised 2,488 thousand in employment and 216 thousand ILO unemployed. The level for those of working age but economically inactive remained unchanged in the last quarter, and the total fell by 1 thousand to 769 thousand people; this indicates an increase of 0.1 per cent in the number of people of working age economically inactive over the last year.

Data on employment by age, see Table 2, derived from the Annual Population Survey, is available up to June 2010. In the year to June 2010 employment rates fell for all age groups, except those aged 50 – 64 with the employment rate for those aged 16 – 64 falling by 2.1 percentage points and with the largest percentage point falls being recorded for those aged 16 – 17 and 18 – 24. Employment rates for men under 50 fell more than those for women, whereas employment rates for women aged 50 and above fell more than for the equivalent male age groups. Table 2 illustrates the changing employment rates by age group between July 2007/June 2008 and July 2009/June 2010, and the significant declines for the 16 – 17 and 18 – 24 age groups.

In the year to June 2010 (the latest available data) inactivity rose by 9.6% for men and by 2.6% for women aged 16 – 17. Over the year inactivity rose by 10.4% (to 55,000) for men aged 18-24 and by 7.0% (to 73,000) for women aged 18 – 24.

The most recent (seasonally adjusted) figure for Jobseekers allowance claimants in Scotland stood at 139.7 thousand in January 2011, up 0.7 thousand or 0.5% over the year. The claimant count rate at January 2011 stood at 5 per cent. This is up 1.7 per cent over the year (note these figures are taken from table 7 in the Labour Market Statistics [First

Table 5: Trends in total employment July 2007/June 2008 to July 2009/June 2010 (change in numbers and %)

All people	2007/08	2009/10	change 2 yrs	% change
Corporate Managers : All	259,200	245,100	-14,100	-5.4
Corporate Managers : Part-time	18,600	22,800	4,200	22.6
Managers and Proprietors in Agriculture and Services : All	76,500	83,200	6,700	8.8
Managers and Proprietors in Agriculture and Services : Part-time	11,600	12,400	800	6.9
Science and Technology Professionals : All	91,200	81,900	-9,300	-10.2
Science and Technology Professionals : Part-time	7,500	5,200	-2,300	-30.7
Health Professionals : All	35,600	34,400	-1,200	-3.4
Health Professionals : Part-time	9,200	7,900	-1,300	-14.1
Teaching and Research Professionals : All	121,600	119,900	-1,700	-1.4
Teaching and Research Professionals : Part-time	24,700	29,000	4,300	17.4
Business and Public Service Professionals : All	80,800	81,300	500	0.6
Business and Public Service Professionals : Part-time	12,200	12,500	300	2.5
Science and Technology Associate Professionals : All	51,100	46,700	-4,400	-8.6
Science and Technology Associate Professionals : Part-time	3,000	4,000	1,000	33.3
Health and Social Welfare Associate Professionals : All	120,500	122,300	1,800	1.5
Health and Social Welfare Associate Professionals : Part-time	38,500	43,800	5,300	13.8
Protective Service Occupations : All	30,900	32,700	1,800	5.8
Protective Service Occupations : Part-time	600	1,900	1,300	216.7
Culture, Media and Sports Occupations : All	45,800	47,500	1,700	3.7
Culture, Media and Sports Occupations : Part-time	12,700	15,300	2,600	20.5
Business and Public Service Associate Professionals : All	127,900	115,600	-12,300	-9.6
Business and Public Service Associate Professionals : Part-time	18,600	20,900	2,300	12.4
Administrative Occupations : All	225,300	223,400	-1,900	-0.8
Administrative Occupations : Part-time	68,500	68,600	100	0.1
Secretarial and Related Occupations : All	64,000	54,300	-9,700	-15.2
Secretarial and Related Occupations : Part-time	28,400	24,200	-4,200	-14.8
Skilled Agricultural Trades : All	32,900	35,600	2,700	8.2
Skilled Agricultural Trades : Part-time	3,600	3,000	-600	-16.7
Skilled Metal and Electronic Trades : All	106,100	101,600	-4,500	-4.2
Skilled Metal and Electronic Trades : Part-time	1,500	1,800	300	20.0
Skilled Construction and Building Trades : All	106,200	82,600	-23,600	-22.2
Skilled Construction and Building Trades : Part-time	2,000	2,200	200	10.0
Textiles, Printing and Other Skilled Trades : All	46,700	56,000	9,300	19.9
Textiles, Printing and Other Skilled Trades : Part-time	9,700	11,000	1,300	13.4
Caring Personal Service Occupations : All	181,100	181,400	300	0.2
Caring Personal Service Occupations : Part-time	75,100	75,300	200	0.3
Leisure and Other Personal Service Occupations : All	50,600	47,500	-3,100	-6.1
Leisure and Other Personal Service Occupations : Part-time	18,400	20,000	1,600	8.7
Sales Occupations : All	164,600	160,600	-4,000	-2.4
Sales Occupations : Part-time	101,800	104,600	2,800	2.8
Customer Service Occupations : All	42,600	45,700	3,100	7.3
Customer Service Occupations : Part-time	12,800	16,400	3,600	28.1
Process, Plant and Machine Operatives : All	86,800	69,100	-17,700	-20.4
Process, Plant and Machine Operatives : Part-time	6,100	4,200	-1,900	-31.1
Transport and Mobile Machine Drivers and Operatives : All	99,300	97,000	-2,300	-2.3
Transport and Mobile Machine Drivers and Operatives : Part-time	11,900	12,800	900	7.6
Elementary Trades, Plant and Storage Related Occupations : All	81,700	72,400	-9,300	-11.4

Table 5 (contd/): Trends in total employment July 2007/June 2008 to July 2009/June 2010 (change in numbers and %)

All people	2007/08	2009/10	change 2 yrs	% change
Elementary Trades, Plant and Storage Related Occupations :	11,200	9,900	-1,300	-11.6
Elementary Administration and Service Occupations : All	214,400	222,000	7,600	3.5
Elementary Administration and Service Occupations : Part-time	117,300	127,800	10,500	9.0

Source: Annual Population Survey – workplace analysis

Release] February 2011 figures and measures the number of claimants on the second Thursday of each month). Unemployment data at the Scottish constituency level for January 2011 is available in a SPICe Briefing.

Statistics from the Annual Population Survey (2009) provide some indications of the impact of the recession at local area levels, by occupation and by sector (the APS combines results from the Labour Force Survey and the Scottish Labour Force Survey. Thus these figures differ slightly from those produced from the Labour Force Survey and the Annual Business Inquiry and from those published in Labour Market Statistics (First Release), Scotland and UK, February 2011). Table 3 indicates significant differences in employment, unemployment and inactivity rates before the onset of the recession, however, between 2008 and 2009 the gap between the areas with the highest and lowest employment rates widened by 5.8 percentage points. In the year July 2009 – June 2010 employment rates varied from over 80% in Aberdeenshire, Orkney and Shetland to under 70% in Edinburgh, Eilean Siar, North and South Ayrshire, and West Dunbartonshire. Likewise unemployment rates were lowest in Aberdeenshire, Orkney and Shetland and highest in Glasgow and North Ayrshire.

Table 6: Total claimant count and computerised claims by age and duration (numbers and percentage change over year to January 2011)

	All claims	All computerised claims up to 6 months	All computerised claims over 6 and up to 12 months	All computerised claims over 12 months
All 16+ numbers	146,200	98,400	25,900	20,800
All 16+ % change over year	0.9	0.7	-7.5	12.0
All 18 – 24 over year	-1,000	200	-1,200	100
All 25- 49 over year	2,300	1,000	-400	1,700
All 50 and above over year	300	400	-500	400

The most recent figures for the number of workforce jobs by industrial activity are detailed in Table 4. Total workforce job figures are a measure of jobs rather than people. Total seasonally adjusted employee jobs for the quarter ending September 2010 (the latest available figures) stood at 2,553 thousand, up 214 thousand on the quarter but down some 3 thousand over the year. Table 4 provides some indication of the impact of the recession on sectors, with the numbers of total workforce jobs declining significantly in manufacturing, construction, wholesale/retail and financial services.

A feature of the past two years has been the increase in the numbers of part time workers in Scotland, the latest data (to June 2010), indicates that over the past year the numbers of full time workers in Scotland declined by 78 thousand (-4.1%) whereas the numbers of part time workers rose by 25 thousand (3.9%). The majority of those working part time choose to do so, however between July 2007/June 2008 and July 2009/June 2010 the numbers reporting working part time because they could not find a full time job rose by 35 thousand, whereas those who did not want a full time job fell 14 thousand, suggesting that increasing numbers of workers were taking part time employment in the absence of full time work.

As Table 5 indicates the trend towards part time employment between July 2007/June 2008 and July 2009/June 2010 was evident across a range of occupations but not all occupations. Relative to full time employment, part time employment declined for: science and technology professionals; health professionals; and process, plant and machine operatives. However, part time employment rose relative to full time employment for: teaching and research professionals; business and public service professionals; science and technology associate professionals; business and public service associate professionals; sales occupations; customer service occupations and elementary administration and service occupations. As yet is unclear as to whether the rise of part time employment will be

Table 7: Total public sector employment in Scotland (headcount) Q1 to Q3 2010

Broad category	Area	Q1 2010	Q2 2010	Q3 2010
Civil Service	Scottish Govt Depts.	5700	5700	5600
	Crown Office	1900	1800	1800
	Scottish Govt Agencies	8300	6800	6900
	Non ministerial Depts.	1800	3400	3400
Local Government	Teachers	62700	61100	na
	Other education	51600	51000	na
	Social work	54700	54000	na
	Police & Related services	24900	24800	24700
	Fire & related services	5800	5700	5700
	Other	104700	105200	na
Total Local Government		304300	301900	297800
NHS		163000	162200	161300
Public Corporations		4600	4600	4600
Other public bodies		16100	15400	15400
Total devolved sector		506000	502200	496600
Armed forces		12100	12200	12300
Civil Service	Min of Defence	5900	5900	5800
	HM Revenue & Customs	10000	9800	9700
	DWP	12200	12000	11600
	Dept for International Dev.	500	500	500
	Scotland Office	70	70	70
	Other Civil service	3900	3900	3900
Civil service		34300	35500	34800
Public corporations		4600	4600	4500
Public bodies		15400	15400	15400
Public sector financial		36300	36700	36700
Total reserved sector		104300	104300	103800
Total Scottish employment		610,200	606400	600400

Source: Quarterly Public Sector Employment series, Scottish Government

Note: Figures may not total due to rounding

sustained through 2011, especially in the public sector as public agencies respond to the reductions in budgets.Table 6 provides some limited indications of the experience of unemployment in terms of claimant count by age and duration. The latest figures suggest that 20,800 have been claiming benefit for more than a year, up 2,200 over the year (up 12% on the year).

Data from the Annual Population Survey provides some indications of youth unemployment, in 2009 it is ‘estimated that there were 36,000 young people aged 16 to 19 not in education, employment or training (NEET), representing 13.8% of all 16 to 19 year olds’ (Local Labour Markets in Scotland 2010:40). This figure has increased by 5000 between 2008 and 2009 and if this trend increases poses more strongly issues of social inclusion and raises significant questions for policy makers.

Public sector employment in Scotland

As we noted in our last two Commentaries there has been much evidence to suggest that most Scottish public sector organisations have been planning considerable budget reductions in recent months, given that staff costs account for around 52% or £18.8 billion of Scottish public spending (Audit Scotland). Audit Scotland noted ‘the Scottish public sector is facing the biggest squeeze on budgets since devolution’ (2009:8).

Once again since the last Commentary there have further announcements as to planned cuts across the public sector as well as proposals for re organisation (merging services across authorities and services, and the merger of all or a number of police, fire and rescue services). However, to date these cuts have still to work though to actual reductions in public sector employment.

Table 8: Local Government employment by local authority (headcount) Q1, Q2 and Q3 2010 (Not seasonally adjusted)

Local Authority/Joint Boards	Q1 2010 Total all staff	Q2 2010 Total all staff	Q3 2010 Total all staff
Aberdeen City	9,500	9,400	8,900
Aberdeenshire	15,000	14,900	14,500
Angus	5,700	5,600	5,600
Argyll & Bute	5,300	5,200	5,200
Clackmannanshire	2,800	2,800	2,800
Dumfries & Galloway	8,300	8,300	8,200
Dundee City	8,200	8,100	8,000
East Ayrshire	6,700	6,600	6,600
East Dunbartonshire	5,000	5,000	4,900
East Lothian	4,900	4,800	4,800
East Renfrewshire	4,700	4,500	4,600
Edinburgh, City of	19,100	18,800	18,500
Eilean Siar	2,600	2,500	2,500
Falkirk	8,000	7,800	7,900
Fife	23,200	23,100	22,400
Glasgow City	23,500	23,100	22,300
Highland	12,900	13,000	12,700
Inverclyde	4,700	4,700	4,600
Midlothian	4,800	4,800	4,800
Moray	5,100	5,100	5,100
North Ayrshire	7,200	7,200	7,100
North Lanarkshire	17,700	17,500	17,200
Orkney Islands	2,800	2,400	2,400
Perth & Kinross	6,200	6,100	6,000
Renfrewshire	8,600	8,400	8,300
Scottish Borders	5,700	5,700	5,700
Shetland Islands	4,100	4,100	4,100
South Ayrshire	5,500	5,600	5,600
South Lanarkshire	15,500	15,800	15,500
Stirling	4,500	4,400	4,500
West Dunbartonshire	6,700	6,300	6,200
West Lothian	8,500	8,500	8,400
Total Bridge Joint Boards	100	100	100
Total Fire Joint Boards	5,800	5,700	5,700
Total Police Joint Boards	24,900	24,800	24,700
Total Valuation Joint Boards	600	600	600
Total Regional Transport (SPT)		700	700
Scotland	**304,300**	**301,900**	**297,800**

Source: Joint Staffing Watch Survey, Scottish Government

Notes:

Figures are rounded to nearest hundred.

Totals may not add to the sum of the parts due to rounding.

Figures for Fire Service staff exclude volunteer and retained fire-fighters.

Table 7 indicates the changing pattern of public sector public sector employment (headcount) for the first three quarters of 2010, total public sector employment has declined by 9800 over the first nine months of 2010 and table 8 the changes in headcount by local authority.

Table 7 drawing on the latest available data, Q3 2010, indicates 563,800 (22.7% of the headcount numbers employed in Scotland) are employed in the Scottish public sector (excluding those employed by RBS and Lloyds who have been reclassified as UK wide public corporations), and Tble 8 outlines headcount employment at the local authority level.

Police and Fire Service staffs in Dumfries and Galloway and Fife, who are not covered by Joint Boards, are included within the figures for Joint Boards for consistency.

As we noted in the last Overview there has been increased focus on public sector pay, especially at senior levels and a perception of excessively higher rates of public sector pay. The publication of the Interim Report of the Hutton Review of Fair Pay (December 2010), provides some evidence as to two of the three questions we posed in the last Overview, Namely:

What has been the relative escalation of these pay rates in recent years and to what extent are they dependent on performance criteria?

How do these rates compare to the private sector?

The Hutton Report notes that 'pay in the UK is unevenly distributed, and the gap between the top one per cent and the rest of the population has been widening over the past decade' (2010:7) and in the public sector 'median top salaries have been growing at faster rates than entry level salaries' (2010:9). Moreover the report concludes that 'the public sector has not been strong enough on managing pay and rewarding performance' (2010:11).

Outlook

In the year to December 2010 the total number in employment fell by 2,000 and unemployment rose by 10,000 to 216,000 and the numbers economically inactive rose by 6,000. The pattern of employment continues to change with rising numbers of part time (up 25,000 in the year to June 2010), temporary employees (up 3,000 over the same period) and workers with a second job (down 4,000 over the same period and declining numbers of full-time workers (down 78,000 in the year to June 2010). Over the same period the numbers of part time workers who could not find a full time job rose by 22,000 (30.6%).

Changes to the public sector employment landscape will be the main feature in 2011 with many sectors seeking to reduce staff numbers; offers for early retirement in a number of sectors are likely to be less than successful given the succession of such schemes over recent years.

Looking forward a number of employment issues have re emerged. Changes to Employment Tribunals have been proposed by a number of business groups, most notably the introduction of a charge to use employment tribunals (proposals range from £30 to £500). The Government is considering a wider range of options including: fees, more emphasis on consultation or longer qualifying periods. The main complaints to Employment Tribunals in 2009 – 2010 included: Working Time Directive (92,500) unauthorised deductions (75,500) unfair dismissals (57,400) and 42,400 breach of contract.

The Skills Strategy (November 2011) mentions the possibility of statutory or voluntary training levies or other collective arrangements where there is a need for collective action on skills and consent within the industry can be secured – the clash between statutory and or voluntary measures has a long history in debates over skill shortages in 1964 Industrial Training Act introduced a levy to pay for training.

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February 2011

Economic perspectives

The effect of PFI commitments on local authority finances

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Introduction

This article looks at the question of how the unitary charge payments of PFI contracts are indexed to allow for inflation over the 25 to 30 year life of the contract. This follows a number of articles and reports in which we have considered other aspects of PFI: among these, for example, were analyses of financial projections, where it was shown that there were high returns to consortia (2008): analyses of PFI contracts, showing inadequacies in the public sector approach, (2010a): and a study of the bidding process, indicating restricted competition, (2010b).

How PFI payments are indexed is a topic is of particular importance, given current financial cutbacks. PFI unitary charge payments are long term contractual commitments, which constitute one of the first claims on local authority budgets. The existence of such ring fenced claims means that it is other parts of local authority services which have to bear the brunt of budget cuts.

What our analysis indicates is that, in Scotland, a large number of local authorities have entered into arrangements which will commit them to increases significantly above the rate of inflation in the contributions that they will need to make to fund their contractual commitments to pay PFI unitary charges. Moreover, although complete information on authorities' affordability assessments is not in the public domain, the information which is available indicates that a number of authorities in effect have cut corners in their affordability assessments, making assumptions which were unduly optimistic, or failing to assess fully the availability of funding over the whole life of the PFI contract. This means that many authorities will experience considerable difficulty in making their PFI contractual commitments, particularly since central government support to local authorities is likely to be progressively cut in real terms over the foreseeable future. The consequences, both in terms of an increasing squeeze on other local authority services, and in terms of pressure for steep council tax increases, are likely to be severe.

The size of Scotland's schools PFI commitment

To set the material in this paper in context, we examine first the size of the overall commitment which local authorities in

Scotland have undertaken with regard to future unitary charge payments for schools' PFI projects. To date there have been 37 schools PFI contracts in Scotland, involving the new build or refurbishment of over 275 schools. (To avoid confusion, we should make it clear that for present purposes we include in this total the three projects which have been undertaken under the non-profit distributing variant of PFI). The resulting annual unitary charge payments to the consortia running the PFI schools are expected to rise from around £360 million in 2009-10 to around £430 million in 2011-12, when all existing PFI schools projects are in operation: (HM Treasury, 2010). These payments cover the ongoing cost of operating and maintaining the schools, the debt service and dividend payments to the financial providers, as well as any tax arising.

Scottish local authorities have in fact embraced PFI much more enthusiastically than local authorities in England. According to Partnerships UK, of the 10 UK PFI schools schemes with a capital value of over £150 million, 6 are in Scotland, (Partnerships UK, 2010). Scotland, with just 8.5% of the UK's population, has 40% of the UK's PFI schools projects, as measured by capital value. This point is important, because it means that more of the local authority budget is ring-fenced for PFI in Scotland than is the case in England, so any associated financing problems in the era of coming overall budget austerity will be liable to be more pronounced in Scotland.

Background on indexation and the affordability process

Our primary concern is the handling of inflation over the life of a PFI contract, which typically lasts 25 to 30 years: that is, the question of how unitary charges are indexed to allow for future inflation. But this aspect is closely bound up with the authority's initial assessment of the affordability of the project. In this section, we give some necessary background on both of these aspects of the PFI process.

Background on indexation for inflation:

The first aspect we look at is that of the provision for inflation in PFI contracts: that is, how the unitary charge payments made by the authority are indexed to compensate the consortium running the project for its exposure to inflation during the concession period of the project.
To set this in context, in non-PFI capital procurement schemes the cost of the buildings etc. are paid directly by the public body, and the finance for the scheme is usually obtained from the National Loan Fund at a fixed rate of interest: the principal of the debt, and interest on the debt, are then repaid through time. So, if contributions are paid regularly to reduce the outstanding capital, the annual repayment will be made up of a part which falls through time, (namely, the interest payment), and a part which goes to the repayment of principal. If there is inflation, then through time, both the interest payments and the principal will tend to become relatively less of a burden on the Council's finances.

Now consider a PFI scheme for capital procurement. The most recent Treasury guidance on the handling of inflation in PFI contracts was given in May 2006. (HM Treasury, 2006) The Treasury strongly recommend that there should be a matching of the indexation of the unitary charge to the underlying inflation exposure of the contractor's costs during the service delivery period of the PFI contract, on the assumption that the contractor's debt-servicing costs are fixed. So, if 40% of the initial unitary charge relates to capital costs and 60% relates to running costs, then that part of the unitary charge which is indexed is only 60%. The Treasury also pointed out that "over-indexing of the Unitary Charge can erode value for money": by which they mean, naturally enough, that indexing part of the unitary charge which is not subject to inflation is liable to hand a windfall to the private sector consortium.

Background on affordability:

Before signing a PFI contract, the local authority has to assure itself and the Scottish Executive, not just that the contract represents good value for money, but also that the authority can afford the project: that is, that it has the financial resources to cover the payments which it has contracted to make over the lifetime of the project. (HM Treasury, 1997).

Level playing field support:

The Scottish Executive provides revenue support for PFI projects through the General Revenue Grant to local authorities to assist them in the payment of the unitary charge. This was formerly referred to as level playing field support. The exact amount of support is calculated as part of the PFI submission process: it is fixed and does not go up with inflation. The rest of the funds needed to cover the unitary charge payment have to be found from other council resources.

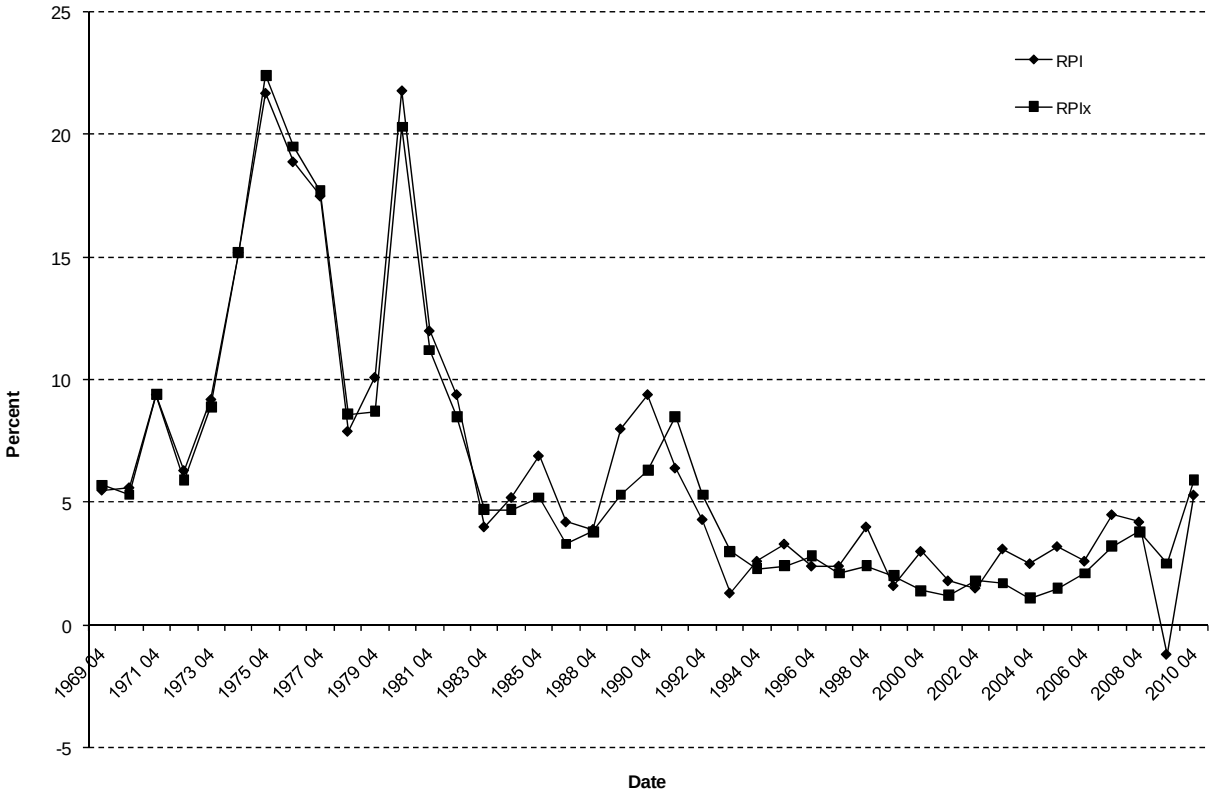
The data

The data we have studied consist of the final business cases, some contracts, and background documentation, including local authority audits, for all 37 Scottish local authority schools PFI projects signed in Scotland between 1998 and 2009. Most PFI contracts were unavailable for scrutiny by the public until Freedom of Information: and indeed, only a very limited number have since been released. As regards the Final Business Cases, despite a Scottish Executive requirement that Final Business Cases be placed in the public domain, the amount of financial information redacted or removed before publication makes a large number of the publicly available documents almost worthless. Freedom of Information has, however, allowed the authors to access many unredacted final business cases. Finally, the Treasury provides annual information on actual and expected unitary charges for each project.

Indexation in practice

Examination of the detail in the final business cases and contracts indicates that the approach to future inflation

Annual percentage change in RPI and RPIx - Sh



adopted by local authorities basically follows one of two main routes. Some authorities indexed a percentage of the initial unitary charge in line with an index such as RPI or RPIx, leaving the remainder fixed. Other authorities indexed the whole unitary charge, but at some percentage of RPI or RPIx. In both cases, we refer to the percentage chosen as the indexation percentage used by the authority. In 12 of the 37 projects, the indexation percentage was 100%: (obviously, when the indexation percentage is 100%, the two approaches, of indexing a percentage of the unitary charge or indexing the whole unitary charge at a percentage of RPI, are the same.) The large number of projects which are fully indexed is surprising, since this runs counter to the Treasury view that "Under PFI an RPI escalator typically applies to only part of the unitary charge (not including the element relating to initial capex)": (HM Treasury, 2007).

Of the remaining 27 projects, 10 used the first approach, that is, indexing a percentage of the initial unitary charge: 15 used the second approach, that is, of indexing at a percentage of the chosen inflation index. As we will show later, the distinction between these two different approaches to indexation is important as regards the trajectory of future payments which the authority will have to make.

In a small number of projects, further variations to these two broad approaches were incorporated. For example, in one case a ceiling was put on the rate of increase of the unitary charge. In two cases, an efficiency reduction was explicitly introduced: this took the form of an annual reduction, by a fixed amount, in the relevant index. In the discussion below, we have adjusted our results where appropriate to allow for these cases.

The following table shows the number of projects by indexation percentage used under the two broad indexation approaches.

Table 1: Number of projects by indexation type and percentage indexed

Indexation Percentage	Projects where percentage of unitary charge indexed	Projects where whole unitary charge indexed at percentage of inflation
100%	12	
80% to 99%	0	1
60% to 79%	6	8
40% to 59%	2	5
Less than 40%	2	1

The percentage increase in the amount that a local authority will have to pay to meet the unitary charge in any given year of the contract will, in general, depend on the particular indexation method used, on the indexation percentage, on the percentage of the unitary charge covered by level playing field support, and on how many years of the project have gone by since the first unitary charge payment.

At the very start of the contract period, however, the annual percentage increase does not depend on the indexation approach used. Specifically, let us define the parameter λ to be the ratio of the indexation percentage to the percentage of the initial unitary charge which the council has to find from its own resources. Then, if inflation is 100 r%, the initial percentage increase in the council's payments is given by the following formula:

Initial percentage increase in council payment = $100\lambda r$.

The derivation of this formula is given in the Annex. Note that, the parameter λ has a value greater than 1 when the indexation percentage of the unitary charge is greater than the percentage of the charge which the council has to fund from its own resources.

The following table shows the values of λ for the 37 projects.

Table 2: Values of λ

λ	**Number of projects**
>3	1
2.5 to 2.99	3
2 to 2.49	4
1.5 to 1.99	10
1 to 1.49	16
0.5 to 0.99	3

Intuitively, what one might expect is that government funding support would be some fraction of the capital cost of the project: in other words, that the portion of the unitary charge which is fixed, (reflecting payments for capital), would be larger than the portion covered by level playing field support. But this is just another way of saying that we would expect the portion which is subject to inflation would be smaller than the portion which the local authority has to find from its own resources. If the local authority is following Treasury guidance, then the indexation percentage should reflect the portion of the charge which is subject to inflation. So we would expect λ to be less than 1. But what is striking about the table is the number of projects where λ is greater than 1: this occurs in 34 of the 37 projects. This therefore raises questions about local authority procedures, and how well they followed Treasury guidance on indexation.

The consequence of the fact that λ is greater than 1 for the vast majority of projects is that most authorities will be paying an above inflation increase in their own contribution during the early years of the project. Indeed, since 18 projects have a λ value which is greater than 1.5, in these 18 projects the authorities will be paying a contribution which increases initially by over 1.5 times the rate of inflation. Of these 18, eight will be paying at more than twice the rate of inflation, and 1 will be paying at more than three times the rate of inflation. Once the project is past the initial unitary charge payments, the two different indexation schemes produce different trajectories:

Schemes where a percentage of the unitary charge is indexed: For such schemes, the percentage increase in the local authority contribution will converge through time to the limiting value of the inflation index used. So, if the initial λ is greater than 1, this means that the percentage increase paid by the authority will decline each year, but will always be greater than the inflation rate. The rate of convergence in these cases is, however, very slow. For example, the time it will take to half the gap between the initial increase in the authority's contribution and the rate of inflation is over 15 years for 15 of these 17 authorities, assuming inflation continues at 2.5%. If inflation increases, then convergence is somewhat faster.

Nevertheless it is clear that, for authorities where a percentage of the unitary charge is indexed, and for which λ is materially greater than 1, then they can expect to make contributions which increase at a rate well above the rate of inflation for many years.

Schemes where the unitary charge is indexed at a percentage of inflation: these schemes behave differently. Expressing the indexation percentage as a fraction, then the percentage increase in the local authority contribution will converge to that fraction of the rate of inflation. So, if the λ for such a scheme is greater than 1, then after a number of years, the percentage increase in the local authority's payment will drop below the rate of inflation. The Annex gives the formula for the number of years until this will happen, (and also gives the algebra justifying the other statements in this and the preceding paragraph). The following table shows the number of years it will take, for the fourteen projects in this indexation category, and with a λ greater than1, to reach the point where the percentage increase in the local authority's payment drops to the rate of inflation. Table 3 shows this for two inflation assumptions: 2.5% and 5%.

Table 3: For fourteen projects Indexed at a percentage of inflation, number of years until increase in local authority's payment drops to the rate of inflation

Number of years	**Inflation at 2.5% per annum**	**Inflation at 5% per annum**
0 to 5		1
6 to 10	1	5
11 to 15	3	5
16 to 20	2	
21 to 25		1
26 to 30	5	1
Over 30	3	1

The contract periods for the projects are mainly thirty years with some at twenty five years. Therefore, it can be seen that, at 2.5% inflation, (which was, in the main, that expected when the contracts were signed), then at least three projects would have had an above inflation increase in the local authority payment throughout the life of the project. Only four out of the fourteen would have reached a below inflation increase during the first half of the project life. Interestingly, this particular aspect improves if inflation increases: with inflation at 5%, eleven projects would reach a below inflation increase in their first half of the life of the project.

In summary, what we have shown in this section is that most local authority schools PFI projects in Scotland can look forward to above inflation increases in the contributions which local authorities will have to make for that part not funded by the level playing field support provided by the Scottish government. And in some cases, particularly in the early years of the project, the increases will be very much more than the rate of inflation. This in itself is not worrying: a local authority may have budgeted for this, and the stream of payments may represent good value for money. But the situation is potentially worrying where the authority has effectively cut corners in its original assessment of affordability: or, of course, if the financial situation facing authorities dramatically alters for the worse.

Affordability assessments in practice: were corners cut?

In this section we consider the evidence from Final Business Cases on the methods and assumptions used by local authorities in assessing the affordability of PFI projects. As central government guidance makes clear, projects should not proceed if affordability is not fully tested. It is to be expected therefore that Final Business Cases should contain a full and thorough assessment of affordability issues. In fact, in many of the business cases, the detail contained in the affordability assessment is disappointing. This lack of detail is, in itself, a matter of some concern. But from what detail is available, a number of specific issues and problems can be identified. In particular:

Issues in final years of project not adequately addressed

In a number of the projects, the level playing field support provided by the Scottish government terminates a year or more before the end of the concession period of the project, leaving a substantial funding gap at the end of the project life. Out of the 28 PFI projects for which we have information on this aspect, there were two cases in which level playing field support terminated two years before the end and two cases in which it terminated two and a half to three years before the end – but in none of these is the issue addressed of how this gap is to be filled. For example, in one project the resulting gap amounted to £130 million in nominal terms in total over the last two and a half years of the project, (equivalent to over £60 million in today's prices).

Savings assumed from demographic change

In three cases, future savings from demographic change were expected to contribute towards the affordability gap. Given that demographic factors form a significant part of the formula for the allocation of central government revenue support to local authorities, it is difficult to see how authorities can expect to profit significantly from the effect of a falling schools' population.

Use of schools fund

Eleven authorities stated that they planned to use part of their Schools Fund allocation to help achieve affordability. The Schools Fund was introduced by the previous Labour/LibDem government as a capital grant to local authorities for the purpose of making improvements to the school estate. It was open to local authorities to use fund monies for the capital investment part of the revenue costs of supporting approved school PPP projects. However, building the assumption of continuing Schools Fund availability into an affordability assessment which extends over twenty-five to thirty years appears optimistic, given that Schools Fund grants were only ever available on a three year rolling basis. As one council put it "the main area of potential risk being in relation to the use of Schools Fund monies which cannot at this stage be predicted to be available for the full thirty years of the contract".

Using the proceeds of the sales of surplus land

In eleven projects, part of the funding was assumed to come from the sale of land surplus to requirements. This in itself is entirely legitimate. However, in two cases, the assumptions made by authorities about the proceeds from land sales proved to be unduly optimistic. In both cases, by the time the authority attempted to sell the land, they were caught by the decline in land values caused by the credit crunch. As a result, one of these authorities has had to resort to short term borrowing. (In fact, at least one of these authorities was caught by the tightening of the rules on land sales by the Scottish Executive in 2006. Prior to that date, some authorities had been allowed to use land sale proceeds to make a capital injection to project costs before the end of the construction phase. This ran counter to the philosophy of PFI, that, to avoid risk, payments to the PFI consortium should only start on completion of construction. This illustrates how, paradoxically, a rule designed to avoid one kind of risk had the effect of exposing this particular council to another type of risk.)

In each case where councils have planned to use land sales income, the benefit from those land sales has been spread over the lifetime of the project, either through a reduction in the unitary charge or through the setting up of some form of sinking fund arrangement. Where councils have invested land sales proceeds at a variable rate of interest, this does expose them to future interest rate risk.

Use of temporary funding source without addressing longer term implications

In one case, the council built up a savings fund of £3.5 million in the five years preceding the start of the project, which it then used up completely in order to meet the first year affordability target. No explanation was given in the Final Business Case as to where the corresponding funds would come from for the remaining years of the project. This £3.5 million gap as from year 2 of the project is particularly worrying as in this case the whole of the unitary charge is indexed at RPI.

Rises in council tax

Five authorities were planning on specific increases in council tax, with a further two considering increases. Again, in itself, this is perfectly legitimate. But in one case, the rises being planned for by the authority, specifically because of their PFI project, were very significant – namely, an extra 1% on council tax each year between 2006/07 and 2017/18, followed by a further 0.7% in 2018/19. By 2018/19, therefore, council tax was projected to be 13.5% higher than it would otherwise have been without the PFI project: this higher level would then continue. While this is a local democratic issue, nevertheless, there must be a risk that this particular council is placing itself at the margin of what its local electorate is likely to tolerate, and has therefore placed itself in a position where it has little or no room for manoeuvre if unexpected contingencies were to arise. The current moratorium on council tax rises must mean that these authorities are having to find other means of funding their affordability gap.

Use of planned refinancing gains

In the case of one project, the Council built into its affordability assessment the potential use of refinancing gains which it was hoped would accrue to the Council from the very project in question. This means that the Council's affordability assessment is dependent on the project outperforming its own value for money model. The Council is therefore exposed to risk if the project fails to outperform – in other words project risk is being transferred back to the Council. This runs counter to the whole idea of risk transfer in PFI. Indeed, if the Council was so confident that the project was going to outperform on its original cost projections, then the question arises as to why it did not press the consortium for a better deal in the first place.

Use of other non-indexed funds

In a number of projects, authorities brought in to their affordability calculations other funding streams which they specifically noted were non-indexed. These included fixed sums from the schools fund, contributions from central property maintenance, and annual fixed sum capital contributions. While it is perfectly appropriate for councils to use whatever finance is available, difficulties could arise if inflation is higher than that assumed at the time of the affordability assessment. The greater the amount of finance which comes from non-indexed sources, the greater must be the rate of increase of the residual revenues which the council has to find. Effectively, going back to the discussion above surrounding the λ values derived in table 2, use of additional non-indexed sources of finance over and above level playing field support will have the effect of increasing the λ terms as regards the council's non-indexed contribution.

Sculpting of unitary charge to ease affordability, but leading to mistaken indexation

In at least one project, the council chose a profile of unitary charge payments which had been sculpted to increase in line with the initially assumed rate of inflation. This approach led to lower payments in the first few years and so gave a more convenient payment profile for the council. This in itself is not necessarily wrong. But the council then appears to have made a mistake in indexing the whole unitary charge at 100% of RPI. A more appropriate approach would have been to convert that part of the unitary charge which was covering loan charges into a profile increasing in line with the original inflation assumption, (say, 2.5%): and then to specify that this part of the unitary charge would be indexed at a fixed rate of 2.5%, come what may, with the rest indexed at inflation. If inflation increases above 2.5%, then indexing the whole unitary charge at inflation, as the council did, will be more expensive than this approach.

It is clear from the above examples that there are a number of problems with the affordability assessments carried out by councils. But these are just examples. Because of the amount of information either not supplied in the Final Business Cases, or redacted in those versions released to us under Freedom of Information, it is not possible to achieve a comprehensive overview of the quality of affordability assessments carried out. Nevertheless, there is sufficient information in the above examples to indicate that problems are considerable and widespread.

What Went Wrong?

As noted above, Treasury guidance is clear on the approach authorities are expected to adopt towards indexation: and the guidance also warns about the danger of over-indexation. On the other hand, there is strong evidence from our analysis of indexation in practice that many authorities have failed to follow this guidance. In particular, the number of λ terms in table 2 which are materially greater than 1 indicates that over-indexation is widespread.

Similarly, despite the requirement on authorities to carry out careful assessments of affordability, the evidence in the preceding section indicates that many authorities have cut corners in these assessments.

It is quite clear, therefore, that in this aspect of PFI things have gone quite badly wrong. This points to failure, not just on the part of the local authorities responsible for negotiating PFI contracts, but also on the part of those central bodies, like the Treasury, the Scottish government,

and Partnerships UK, responsible for general oversight of the process. The data on which we have based the research reported here does not provide any evidence as to why these failures occurred. But there is reason to believe that the following may have been among the contributory factors:

a) there appears to have been a generally accepted view at the time that PFI was "the only game in town". This meant that, if capital investment did not take place through the mechanism of PFI, it was unlikely to take place at all – which would have put the public sector side in negotiations under extreme pressure to secure a deal.

b) it also appears that there was a fairly widely held view that continued economic growth would lead to a benign public expenditure climate in the long term. This is likely to have meant that potential affordability problems, and the overall burden of unitary charge payments in the longer term, would be largely discounted.

One area where Treasury oversight appears to have been particularly deficient is in relation to future variations in inflation. It seems reasonable that authorities should take as their central planning assumption the government's target inflation forecast, or something close to it. Historically, however, inflation in the UK has been extremely variable, as is illustrated by the chart, which shows RPI and RPIx inflation since 1969. As the chart shows, in the thirty years, (that is the life of a typical PFI project), before the start of the first Scottish schools PFI scheme, inflation was at times as high as 20 odd percent per annum. Against this historical background, it seems optimistic, to say the least, to assume that the UK has now entered into a new paradigm of economic management and performance, and that inflation will not depart materially from 2.5% over the next 25 to 30 years. Despite this, in modelling the effects of variant inflation assumptions on their financial projections, authorities typically considered possible variations in inflation which were very small, (often less than 1%). With RPI inflation currently running at almost 5%, and with a real risk that it could go higher, authorities now appear unduly exposed to possible levels of inflation which they have not considered as variants in their PFI modelling. We would regard it as a fundamental responsibility of the Treasury to issue appropriate advice to authorities to ensure that they consider a sufficiently wider range of variant assumptions in their financial modelling. The Treasury has clearly not issued adequate advice on this point: this indicates a significant failure, either of undue optimism, or to adequately monitor what authorities were doing, or both.

Conclusion

As we have seen, councils' own contributions to PFI projects, (to which they are of course contractually committed), are in many cases projected to increase at a rate which is above inflation: in several cases, the increases will be very significantly greater than inflation for most of the life of the project. This in itself is not necessarily problematic: it is entirely legitimate that councils should budget like this if this reflects their priorities. However, the situation is potentially of concern if either or both of the following hold:

a. if councils' original affordability assessments were not soundly based

b. if the overall general revenue support that councils get from central government does not rise broadly in line with inflation.

As we have seen in a preceding section, there is considerable evidence that there were considerable problems with the affordability assessments undertaken by authorities. Moreover, given the current financial cutbacks, there appears little prospect, even in the medium term, of central government support to local authorities rising in line with inflation.

In other words, both of the above conditions hold: this implies that many local authorities are likely to experience difficulty in meeting their contractual obligations under PFI contracts. The consequences in terms of cutbacks on other services, increases in fees and charges, and/or increases in council tax, are likely to be severe.

This serious situation appears to have arisen because Treasury guidance, both on the way the unitary charge should be indexed, and on affordability assessment, has been widely breached. There is a clear need for better training for those involved in negotiating on the public sector side of any future PFI or similar contract: and also for much closer scrutiny of contracts and of final business cases by the responsible central departments.

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Annex: Indexation formulae

a) Where proportion of unitary charge is indexed.

Suppose the initial unitary charge payment in year 0 is 1: suppose a proportion θ of the unitary charge is indexed in relation to some suitable index, which increases at 100r% per annum: and suppose that level playing field support from the government represents a proportion p of the initial unitary charge.

Then, unitary charge payment in year j = $\theta(1+\mathrm{r})^{\mathrm{j}} + (1-\theta)$,

and, payment made by council in year j = $\theta(1+\mathrm{r})^{\mathrm{j}} + (1-\theta-\mathrm{p})$.

Therefore,

council payment in year (j+1)/council payment in year j

$$= [\theta(1+\mathrm{r})^{\mathrm{j+1}} + (1-\theta-\mathrm{p})]/[\theta(1+\mathrm{r})^{\mathrm{j}} + (1-\theta-\mathrm{p})] \qquad (1)$$

When j=0, the value of expression (1) is $1+\frac{\theta\,\mathrm{r}}{(1-\mathrm{p})}$:

therefore, the initial percentage increase in the council's payment is $\frac{\theta}{(1-\mathrm{p})}$ times the rate of inflation.

As $\mathrm{j}\to\infty$, the value of expression (1) tends to (1+r).

So the council payment under this type of indexation starts by increasing at $\frac{100\,\theta\,\mathrm{r}}{(1-\mathrm{p})}\%$ per annum: if the factor $\frac{\theta}{(1-\mathrm{p})}$ is greater than 1, the percentage increase then decreases through time, but will always be above 100 r%: that is, will always be above the rate of inflation.

b) Where unitary charge is indexed at a proportion of inflation.

The notation is the same as in case a), except that θ now represents the proportion of inflation at which the whole unitary charge is indexed.

Then, unitary charge payment in year j = $(1+\theta\,\mathrm{r})^{\mathrm{j}}$,

and, payment made by council in year j = $(1+\theta\,\mathrm{r})^{\mathrm{j}} - \mathrm{p}$.

Therefore,

council payment in year (j+1)/council payment in year j

$$= [(1+\theta\,\mathrm{r})^{\mathrm{j+1}} - \mathrm{p}] / [(1+\theta\,\mathrm{r})^{\mathrm{j}} - \mathrm{p}] \qquad (2)$$

When j=0, the value of expression (2) is $1+\frac{\theta\,\mathrm{r}}{(1-\mathrm{p})}$:

therefore, the initial percentage increase in the council's payment is $\frac{\theta}{(1-\mathrm{p})}$ times the rate of inflation. (Note that this is the same as case a)).

As $\mathrm{j}\to\infty$, the value of expression (2) tends to $(1+\theta\,\mathrm{r})$.

So the council payment under this type of indexation starts by increasing at $\frac{100\,\theta\,\mathrm{r}}{(1-\mathrm{p})}\%$ per annum: the percentage increase then decreases each year, approaching a limiting value of $100\theta\,\mathrm{r}\%$ per annum. Assuming $\frac{\theta}{(1-\mathrm{p})}$ > 1, this implies that, after a certain number of years, x say, the percentage increase in the council's payment will drop below 100r% per annum: that is, it will drop below the rate of inflation.

The value of x for which this will happen is the value for which expression (2) = (1+r).

That is, the value of x such that $(1+\theta\,\mathrm{r})^{\mathrm{x+1}} - (1+\mathrm{r})(1+\theta\,\mathrm{r})^{\mathrm{x}}$ = p – p(1+r):

That is, such that $(1+\theta\,\mathrm{r})^{\mathrm{x}} = \frac{\mathrm{pr}}{(\mathrm{r}-\theta\,\mathrm{r})} = \frac{\mathrm{p}}{(1-\theta)}$:

That is, $x = \dfrac{\log\left(\dfrac{p}{(1-\theta)}\right)}{\log(1+\theta r)}$. (3)

This is the expression used to derive the results in Table 3. Note that the value of x given by expression (3) decreases as r increases. In other words, when the unitary charge is indexed at a percentage of inflation, then the higher inflation is, the sooner the council will experience a below inflation increase in its required contribution.

The development, rationale, organisation and future management of public sector tourism in Scotland

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Introduction

Scotland is a small country, part of a small island on the edge of Western Europe, yet it has a very large tourist organisation (with about 750 staff) relative to other countries - how can this be? Scotland is different from the rest of the UK; it has its own education system, separate judicial and legal systems, and these, along with the Church, have helped to mould Scotland's identity. Scotland is not an independent state so does not have direct membership of the United Nation nor its affiliated organisations, such as the UN World Tourism Organisation (UNWTO), which has a membership of over 150 countries. In 1999, the UK government devolved limited authority and power to the new Scottish Parliament, including judicial authority, education, health and industrial development – including tourism. Scotland, with a population of just over five million, has always looked outwards and innovation has long been part of Scottish culture. It is often forgotten that Scots have been at the forefront of some of the world's leading inventions, such as logarithms, decimal points, telephone, television, trains, photocopier, video, bicycle, fax machine, radar and dolly the sheep, the world's first cloned animal and even the ATM. So can Scotland also take a lead in developing a new management structure for delivering tourism in Scotland in the 21st century?

The main public sector body with responsibility for tourism in Scotland is VisitScotland (VS), previously the Scottish Tourist Board, but it is by no means the only organisation trying to manage tourism. In total, there are 286 organisations with an interest in tourism in Scotland in some form or another (Cantlay, 2010). They range from small, local marketing groups such as Scotland's Heartland, regional destination marketing organisations (DMOs) such as the Aviemore & Cairngorms DMO, niche marketing groups such as Scottish Snowsport, through to national organisations such as Scottish Enterprise and Historic Scotland and even UK-wide organisations, such as VisitBritain and the Forestry Commission.

Statistical background data on the growth of tourism

Since the 1950s international tourism trips have grown every year almost without interruption (Table 1) and in the last decade since 2000 growth has averaged 2.9% per year; and the number of trips is expected to grow between 5 and 6% in 2010, and about 4% in 2011 (UNWTO, 2010a, UNWTO 2010b). This growth is linked not only to individuals' greater wealth, but also to other factors such as improving international transport, decreasing travel costs, increasing holiday entitlement, and new and easier methods of booking. Although Europe, with its high population density, open borders and wealth, is by far the largest world region in terms of the volume of international tourism trips, the largest rate of growth has been in the Middle East, albeit with one eighth of the number of trips in Europe. Middle Eastern countries have recently invested heavily in transport infrastructure, including new airlines and aircraft, and in tourism marketing promotions focusing on guaranteed sunshine and activities, such as eco tourism in the UAE and adventure tourism in Kuwait.

Despite much huffing and puffing by VisitScotland and the Scottish Government, about the importance of tourism in Scotland, the rise of low-cost carriers and a new direct ferry

Table 1: World international tourism arrivals (million)

	1990	1995	2000	2005	2006	2007	2008	2009	Average annual growth 00-09
Europe	265	309	392	441	468	485	487	460	1.8%
Asia/Pacific	56	82	110	154	166	182	184	181	5.7%
Americas	93	109	129	134	136	144	148	141	1.0%
Africa	15	19	27	35	42	43	44	46	6.2%
Middle East	10	14	25	38	41	47	56	53	8.8%
World	438	533	683	802	883	901	919	880	2.9%

Source: UNWTO Tourism Highlights 2010

Table 2a: Volume and value of tourism in Scotland

	UK trips (million)	Overseas trips (million)	Total trips (million)	UK Spend (£ million)	Overseas Spend (£ million)	Total spend (£ million)
2006	13.28	2.73	16.01	2,720	1,439	4,159
2007	13.12	2.79	15.91	2,836	1,367	4,203
2008	12.15	2.48	14.63	2,812	1,235	4,047
2009	12.47	2.56	15.03	2,736	1,359	4,095
2010 (Jan-Sept)	-4.6%	-0.7%	n/a	-9.0%	+10.3%	n/a

Source: VisitScotland, Office of National Statistics MQ6. Note: Spend in cash prices

route development, the market can, over recent years, be described as flat, or even in a steady decline, with trips declining by about one million over the past five years, and spending declining by £60m (Table 2a).

Despite the popular stereotype of tourists in Scotland as being Americans touring around the country, tourism is, in fact, dominated by UK visitors (Table 2b) who account for 83% of all trips and 67% of spend. In fact, Scots themselves account for 39% of all tourism trips in Scotland, 47% of all UK residents' trips, 22% of all tourism spend, and 32% of UK tourism spend (Tables 2a and b). That is, the largest segment of tourism spend is not new money brought into either the UK or the Scottish economy, but is displaced from one part of the UK/Scotland to other parts of Scotland. In a review of Scottish tourism in 2006, the Scottish Government (2006) set a target for the industry of a 50% increase in tourism spend in real terms by 2015. However, as shown in Tables 2a and 2b, in the past five years there has not been much change in either the volume i.e. numbers of tourists or the value of tourism in Scotland, and this 'target', which was changed to an 'ambition', rather than a target, seems increasingly unlikely to be achieved. The Scots are also keen on travelling overseas and even although they take about 2 million fewer overseas trips than trips in Scotland (Table 2c) they spend over 2.5 times as much on overseas trips than on trips in Scotland. Although since the recession started to hit discretionary spend in 2009 there has been

Table 2b: Volume and value of UK tourism in Scotland

	Scots trips (million)	English trips (million)	UK trips (million)	Scots spend (£ million)	English spend (£ million)	UK spend (£ million)
2006	6.35	6.40	13.28	830	1,710	2,720
2007	6.23	6.29	13.12	815	1,807	2,836
2008	5.84	5.74	12.15	927	1,682	2,812
2009	5.85	6.01	12.47	886	1,613	2,736

Source: UKTS Note: Spend in cash prices

Table 2c: Volume and value of Scots' tourism trips to overseas destinations

	Scots tourism trips overseas (million)	Scots tourism spend overseas (£ million)
2005	4.26	2,268
2006	4.76	2,517
2007	4.70	2,758
2008	4.71	2,710
2009	3.85	2,332

Source: Office of National Statistics, MQ6

much talk about the importance of 'staycations', the recent decline in the number of Scots taking overseas trips from 4.71 million to 3.85 million has not been substituted by an increase in the number of trips taken by them in Scotland. However, even agreement by researchers on basic tourism data is difficult to achieve while the official government definition is expressed in terms of specific Standard Industrial Classification (SIC) codes. A recent report by

Deloitte's (2008), commissioned by VisitBritain, estimated that the total contribution of tourism to the Scottish economy is £11.1b, compared to an estimate of £4.1b by VisitScotland, and Deloitte's estimates that it will grow to £14.8b by 2020. This figure includes both direct and indirect spend. The Deloitte report also suggests that the direct tourism spend, which includes day trips, was £9.2b. Such significant differences in estimates in the value of tourism are not new, but they do make it difficult for policy-makers to formulate decisions on investment.

It is interesting to note that there appears to be a steady increase in the number of tourism businesses in Scotland, in their turnover, their GVA and the number of their employees (Table 3) while the market has remained flat, in terms of value for a number of years. Does this suggest that businesses are becoming less productive? Not necessarily so, because caution must be exercised when looking at this data, as the definition of tourism used in measuring these variables is very wide. For example, the figures include everyone who works in every pub, library and café in Scotland, irrespective of the level of income generated from tourism. This difficulty in establishing a robust, working and statistically sound definition of the number of tourism businesses, as well as a true estimate of the number of their employees, makes it hard to establish sound comparisons with other industrial sectors, and may either undervalue or overvalue the importance of Scottish tourism.

In most businesses the utilisation of stock is a key indicator of profitability, yet, as Table 4 illustrates, the level of stock

Table 3: Tourism-related businesses, gross value added (GVA) and employment in Scotland

	No of tourism business units	Total turnover (£million)	Gross value added (GVA) (£million)	Total tourism-related employees
2004	17,500	10,800	3,480	194,500
2005	17,900	11,400	3,670	199,700
2006	18,000	12,600	4,020	206,700
2007	18,400	13,300	4,020	208,700
2008	18,500	13,500	4,120	203,700

Source: Scottish Annual Business Statistics

utilisation (i.e. percentage of bed-nights used) across most accommodation sectors has been remarkably constant and any variation is businesses and is not a full census of utilisation, there are four possible explanations for this static picture. Firstly, there has been an increase in the number of businesses and this has resulted in a spreading of the market demand across a larger number of businesses and thereby resulting in lower stock utilisation. Secondly, there has been an increase in pricing which may have driven down demand. Thirdly, it could also mean that the data are not robust or fourthly, it could be argued that the evidence from other surveys suggests that room discounting is widespread, especially out of the main, short season and so with price it is the price/quality offer in Scotland relative to the alternatives. **This raises two questions: the first being what other industry could survive when some 40% of its capacity is underutilised all year round; and the second being is there just too much accommodation stock to make the sector profitable?** In order to answer this second question we need to look at the accommodation stock, but even such a basic question is difficult to answer, because there is no compulsory registration of tourism accommodation. Just as with the data on the value of tourism, the number of tourism businesses and the number of employees we have a 'sort of estimate' derived from membership of the VisitScotland's Quality Assurance (QA) Schemes (Table 5). Although membership of the scheme is voluntary, businesses are required to join in order for them to participate in VisitScotland's marketing activities and this stipulation suggests that it is a fair surrogate measure of the level of accommodation stock.

Table 4: Accommodation occupancy annual averages

	Hotels (% room occupancy)	Self catering (% unit occupancy)	Hostels (% bed occupancy)	B&B/Guest houses (% room ccupancy)	Touring caravans (% pitch occupancy)
2004	61	52	42	46	36
2005	63	55	44	47	40
2006	63	55	44	46	45
2007	65	54	44	47	46
2008	64	52	45	46	45
2009	64	52	45	48	45

Source: VisitScotland Occupancy Surveys

Care should be exercised in interpreting the above table, especially when trying to draw conclusions about increases or decreases in the accommodation stock. Businesses will make a judgement on their membership the QA scheme; on the perceived value provided (will it generate extra bed-nights?). The numbers in the scheme will also depend on the date of establishment of the scheme, and changes in property ownership. For example, the growth in hostel membership is linked not only to the growing popularity of hostels, but also because it is a relatively new scheme, and as with most new schemes, there is an initial enthusiasm for participation, as it may give a business an edge in marketing. The decline in the number of participating B&Bs could be linked to changing family ownership patterns, and the decline in hotels in membership could be linked to the decline in independently owned hotels and the associated growth of budget hotels, which tend to have a group policy on membership of QA schemes. It could also be that hotel groups brand themselves by providing the same facilities and services in all their hotels and see, therefore, no need to take part in QA schemes.

Table 5: Participation in VisitScotland accommodation quality assurance schemes

	Number of hotels	Number of self catering properties	Number of hostels	Number of B&B/ guest houses	Number of touring caravans parks
2004	1,024	3,035	127	2,909	282
2005	1,044	3,383	137	3,053	293
2006	1,063	3,560	165	3,130	289
2007	1,026	3,508	210	3,005	285
2008	972	3,513	199	2,837	276
2009	954	3,258	211	2,604	281
2010	908	3,054	216	2,433	274

Source: VisitScotland QA Scheme

From Table 6 it is clear that hotel and restaurant businesses in Scotland are dominated by small and medium enterprises (SMEs); only four hundred of almost 17,000 such business have fifty or more employees, but these businesses account for almost 50% of the turnover in this sector. Almost two-thirds (67%) of tourism enterprises have between 1 and 49 employees. The table also shows that over 5,000 hotels and restaurants have no paid employees, but that is not to say that such enterprises run themselves; they are family or individually owned business with no paid employees, but may rely on various forms of family support, not classified as wages. This lack of paid employees has been one of the strengths and the weaknesses of tourism businesses: a strength in that it affords a relatively easy access point for new entrants into tourism, and a weakness in that this makes it difficult to raise standards and to work in co-ordination with others in the sector. **The third question that needs to be raised is the quality of statistical data about the tourism sector in Scotland – it is just not good enough, when we cannot be sure of its volume, the number of businesses or the number of employees. Does this also suggest there needs to be some form of compulsory registration of tourism businesses in Scotland?**

Table 6: Scottish hotels and restaurant: turnover and enterprises by number of employees

Hotels & Restaurants	0 Employees	1-49 Employees	50-249 employees	250+ Employees	Total
Turnover (£ millions)	251	3,116	875	2,046	6,288
Number of Enterprises	5,210	11,220	270	130	16,825

Source: Scottish Economic Statistics 2008

Background to the establishment of the Scottish Tourist Board/VisitScotland

Government intervention in public sector tourism is nothing new and can be traced back to 1929 when the UK Department for Overseas Trade first made a grant to the then Come to Britain tourism organisation. This was soon followed with the establishment, by the Scottish Office, of a Scottish Tourist Development Association (STDA) – a case of 'if you have one, we want one'. The Scottish organisation was first grant-aided in 1930 through the old Goschen proportion (eleven ninety-firsts) of the Treasury grant to UK organisations; but there was a condition attached to this

grant – the STDA had to hand back to the British tourism organisation some 25% of the funds it raised from subscriptions and donations within Scotland (Johnson, 1952). This was seen as Scotland's contribution to the general British overseas marketing activity, even though Scotland was already paying taxes to the UK Treasury! By 1939, the grant was only £250. In May 1945, as part the post-war planning activities, the Scottish Council on Industry established a Committee of Enquiry on Tourism (the first of over fifteen such enquiries/committees/reviews over the next sixty years). They recommended the establishment of an autonomous Scottish Tourist Board (STB).

In terms of national tourism policy issues, government intervention in tourism and the establishment of an independent tourism organisation have dominated the management focus of public sector tourism for the last sixty years. The management of the STB/VS has always been difficult; on its foundation there were clear calls for its board members to be representative of the various sectors (hotels, transport, catering, etc.), i.e. making it a trade association. Given the wide nature of tourism, it would not have been possible for one body to represent fully all the different sectors. It is interesting that, rather than representing the various sectors, the STB management board first saw itself predominantly as a consumer association, not a trade association. **So the fourth question that needs to be asked: is VisitScotland a trade representative body or a consumer association?** The early activities of the STB were very wide-ranging, and focussed on much more than marketing. For example, it lobbied for direct shipping between New York and Scotland, established direct contacts with overseas tour operators, and undertook the training of guides. In terms of marketing, the STB regarded Scotland as 'a place for the proletariat, the bourgeois and the plutocrats'! (Johnston, 1952) – i.e. the working, middle and upper classes.

Following strong public support for the collectivisation of public services during the Second World War, in the 1950s/60s a number of industry sectors were brought into government control through a process of nationalisation. These included car manufacturing, shipbuilding, steelmaking, coal mining and, in one of the last acts of partial nationalisation by the Labour Government in the late 1960s, tourism. The principal UK legislation that governs state involvement in tourism stems from the 1969 Development of Tourism Act (DTA). The DTA also created the British Tourism Authority (BTA), which had sole responsibility for overseas marketing, and the three Home Country Tourist Boards, for Scotland, England and Wales. Northern Ireland was covered by separate legislation.

In the 1960s there were real concerns about the balance of payments deficits, as we 'were not earning our way', so one of the original purposes of the DTA was to increase earnings from overseas tourism. It also recognised there were real concerns about the quality of the tourism infrastructure in the UK, and so the DTA provided for a three-year injection of capital through the Hotel Development Incentive Scheme (HDIS), which was designed to raise the standards of tourist accommodation across the UK. The Act also provided for public investment in both public and privately owned tourism facilities, through Section 4 funding, to develop and improve the tourism infrastructure in the UK. Over the years, the balance of STB/VS activity has shifted between tourism marketing and development, and this raises the sixth question, is VisitScotland a tourism marketing or a tourism development agency?

The functions of the STB as defined in the 1969 Act were:

- to encourage people to visit Scotland and people living in Scotland to take holidays there;
- to encourage the provision and improvement of tourism facilities in Scotland; and
- to give advice to Ministers and public bodies on tourism matters.

Table 7: VisitScotland staffing and budget

	Grant in aid to VisitScotland (cash prices)	VisitScotland net expenditure	VisitScotland staff numbers (FTE)	Staff costs (staff costs as % of grant in aid)
2005/06	£49.8m	£51.6m	810	£21.8m (44%)
2006/07	£45.2m	£46.1m	798	£20.7m (46%)
2007/08	£48.4m	£52.0m	767	£24.4m (50%)
2008/09	£47.8m	£49.5m	758	£20.8m (44%)
2009/10	£47.8m	£49.2m	753	£21.9m (46%)
2010/11	£40.6m (core grant)	n/a	n/a	n/a
2011/12* (Draft budget)	£41.0m	n/a	n/a	n/a

Sources: VisitScotland Annual Reports/Corporate Plans, *Scottish Government Tourism Budget, which includes VisitScotland spend and other tourism spend. Note staff includes permanent, temporary, contract and agency staff, along with staff from subsidiary companies. Staff costs include salaries, pensions, social security and severance. Grant in aid also includes ring-fenced funds such as Homecoming.

In today's terminology, these can be summed-up as: tourism marketing, tourism development and policy advice.

The Act also conferred a number of general powers, such as:

- to promote or undertake publicity in any form;
- to provide advisory and information services;
- to promote or undertake research; and
- to establish committees to advise them on the performance of their functions.

These functions were expanded by the Tourism (Overseas Promotion) (Scotland) Act in 1984, which enabled the STB to conduct marketing actives outside the UK, with the approval of the BTA. Although such approval was not always easy to obtain, and sometimes initially required direct intervention from the then Scottish Office.

Following a review of the role of the Scottish Tourist Board in 1993, there was another reorganisation of tourism structures through a reallocation of responsibilities among the various public sector organisations involved with Scottish tourism. This review removed from the STB its grant-aiding powers to assist in the development of tourism facilities (Section 4 funding) and transferred this responsibility to the various national and local enterprises agencies, whilst they conceded their marketing functions to STB. Up to this point, the STB did not have responsibility for marketing all of Scotland, because Highlands & Islands Enterprise (HIE) had sole responsibility for tourism marketing of their area. The STB were also given responsibility for co-ordinating the 30+ local Area Tourist Boards (ATBs) which were funded by a tripartite formula of local authorities, subscription membership and the STB. In 1994, the number of ATBs was reduced to fourteen under the Local Government (Scotland) Act 1994, and after another review and following the establishment of the Scottish Parliament in 1999, it was decided to merge the fourteen ATBs with the STB to form a new organisation, VisitScotland; this established a fully integrated VisitScotland network of local offices and tourist information centres. In April 2005, the new network came into being, although it was not legally set up until the passing of the Tourist Boards (Scotland) Act in October 2006, which formally established the new organisation in April 2007. VisitScotland was reorganised again in September 2008 to focus their activities on six regions aligned with the national Enterprise agencies' regions and the three island authorities. By November 2008, VisitScotland.com (the consumer website which until then, had been operated by a stand-alone company, although VisitScotland held a major share) was transferred to become the sole responsibility of VisitScotland (Adams & Hay, 1995, Middleton, 2007).

Today VisitScotland is now the key public sector tourism marketing agency in Scotland, with a remit to promote Scotland as a leisure and a business tourism destination, both domestically and overseas. VisitScotland has three core activities (VisitScotland, 2010c):

- market Scotland to all parts of the world to attract visitors;
- provide information and inspiration to visitors and potential visitors so they get the best out of a visit to Scotland;
- provide quality assurance (QA) to visitors and quality advice to industry partners to help the industry meet - and strive to exceed - visitors' expectations.

There is now no mention of tourism development or policy advice; although through the operation of the QA scheme, it could be argued that VisitScotland has reverted to one of its original functions – as a consumer-focused organisation. Its key function is now 'to maximise the economic benefit of tourism to Scotland'.

VisitScotland has one of the largest national tourism organisations (NTO) in the world, with some 750 staff and a net spend of about £50 million (Table 7). Technically, VisitScotland is an executive non-departmental public body (NDPB), which means that it has a national remit to carry out administrative, commercial, executive and regulatory functions. About two-thirds of its funding comes from the Scottish Government and one-third from a mixture of local authorities, the European Union, and its own retail and commercial activities. A net spend of about £50m may sound large, but with so many staff, about half its budget is spent on staffing costs. In 2010, VisitScotland indicated that they were planning for efficiency savings of about £10m over the following few years (VisitScotland, 2010b).

In support of these high staffing costs, (as illustrated in the table above) it could be argued that VisitScotland is a knowledge organisation and that their staff share their expertise and knowledge with the tourism industry and so provide a benefit to all tourism businesses. However, the dead hand of the public sector may be at work here, and VisitScotland staff may end up working for their colleagues within the organisation, by developing a corporate protection strategy to show how well it is performing. This has been a lesson learnt by universities, which, after much transformation, have re-engineered themselves, are now more customer-driven, and are now seen as knowledge-exchange institutions. **So the fifth question that must be raised, is what organisation could thrive with such high staffing costs, because this leaves so little for their core activity, which is tourism marketing?**

Rationale for government intervention in tourism

At the broadest level, there are four main roles for government intervention namely; allocative, distributive, regulatory and stabilisation of activities – with stabilisation and income distribution, as Bailey (1995) suggests, best left

to national governments and its agencies. The normal government justification for intervention in economic affairs is dominated by the concept of market failure i.e., even when working in conditions of perfect competition, there may be a divergence between optimal private returns and optimal social returns. This happens when the competitive price system is said to be optimal, if businesses, whilst promoting their own interests, also promote the interests of the wider social community.

A key theorem of welfare economics is that allocation of resources will be optimal if (1) there are enough exchanges of goods and services to produce fair prices for all such goods and services, (2) all consumers and producers behave competitively, and (3) an equilibrium exists so that monopolistic activity is neither possible nor feasible. However, there are some industries where free competition by itself does not lead to an increase in general welfare and tourism may be one of those industries, with market failure in tourism closely related to the concept of externalities. This is when the benefits of a tourism activity, for example overseas marketing, accrue to more businesses than those making the original investment, such as an NTO using public funds to market the destination, but others such as hotels, attractions, etc., also benefit as a result of this marketing. Public sector intervention in tourism in Scotland is usually justified in terms of a number of issues, which are intertwined with each other, and include:

- a low level of knowledge by the purchasers of services, in this case tourists, of the range of available products, particularly those which lie outside the main tourism destinations in the country;
- because tourism is a fragmented industry with many players, there is a need for somebody or organisation to take an overview of the marketing and development opportunities, of which few individual businesses could be fully aware;
- there is a real need to counteract the seasonality peaks and troughs of capacity under-utilisation of the tourism stock, if businesses are to not only survive, but to thrive;
- there is a poor geographical spread of the benefits of tourism, resulting in some regions not obtaining their fair share of the tourism cake;
- quality is now seen as a 'hygiene issue' i.e. it is a given factor, but there is a real need for tourism businesses in Scotland to drive up their quality, because standards in other countries continue to improve. It could be argued that public sector intervention is needed when the private sector fails to drive up quality across all the different components of the tourism experience. Otherwise this results in 'nice holiday, but the public toilets were dirty' experience?
- as access to and within Scotland improves, sometimes through public funding such as the Route Development Fund (Christodoulou, et al. 2009), but this might have an unintended consequence of increasing competition from newer destinations, as Scots look outside Scotland for their holidays as a result of these improved transport links?

The normal guiding principle for government intervention in economic activities is that the economic costs of market failure are high and that there can be a good chance of correcting any failures at reasonable costs to the public purse. This argument was used as justification for the recent support for the renewable energy and the banking sectors. In terms of rationale for government funding of tourism in Scotland, impacts need to be assessed at both the UK and Scottish levels.

At the UK level, the arguments for state intervention focus on:

- In the long run, interventions which do no more than induce extra demand in a economy like Scotland's will likely lead to higher inflation, rather than result in a net increase in real output at the UK level. In principle, markets should be allowed to allocate resources (land, labour and capital) from their perspectives to their most efficient use but sometimes they fail to act for the overall benefit of the sector.
- However, under certain circumstances, markets may fail, and public sector intervention may be able to improve the situation. Interventions which increase efficiency, may increase the productive potential of the UK economy, and could therefore lead to a net increase in output and employment in the UK, which could be seen as helpful and therefore provide the justification of public funding.
- However, interventions which do not necessarily increase efficiency may still be justified in terms of other criteria, such as when they are part of programmes with a clear social objective – the idea behind the recent proposal of the 'Big Society' by the UK Coalition Government.
- At the Scottish level, the main arguments for state intervention focus on:
- The concept that redistributing aggregate demand to areas where inflationary pressures are weak may help to improve the output/inflation trade-off. In some geographical areas, i.e. those requiring special assistance, this may be true, but clearly not all areas in Scotland could be described as requiring special assistance to develop their tourism. In addition, despite VisitScotland's best intentions, it has to be recognised that not all parts of Scotland are equally attractive to tourists; there are some areas that simply do not appeal to them, while others could, with some support, attract more visitors. However, direct state support to develop tourism in areas such as Edinburgh must be questionable because these areas are already

tourism honey-pots, with a well-developed tourism infrastructure, high accommodation occupancy levels and a substantial number of visitors. Therefore any marginal benefit to the tourism sector in such areas through additional public spend, may be better spent in other regions with more growth potential, which could also support the argument to spread tourism to other areas to support the costs of sustaining local infrastructure..

- Boosting tourism demand through public sector support in areas which already have a large number of tourists will only increase the price of local labour through higher wage demands, compared to labour costs in non-assisted areas.
- This may in turn induce local firms to move or, at least, not to expand. However, unlike other industries, many tourism businesses and assets are not moveable – there is only one Burrell Collection and one Edinburgh Castle. However, tourism-dependent companies such as those making tourism products for sale, or which provide services, such as laundry, could move, but relocation could add to their costs, as they move further from their client base. One solution may be to encourage 'new tourism activities' in other parts of Scotland e.g. activity holidays.

Characteristics of the Scottish tourism industry

Although tourism is one of the main drivers of the Scottish economy, it is not easy to define it, because it is not classified as an industry in terms of the Standard Industrial Classifications (SICs). The SIC attempts to define industries based upon their economic activity, by considering the principal activity of the business, but the tourism industry is comprised of firms with varying principal activities, and the relationship between such activities may change over the year, as the number of tourists fluctuates. Tourism businesses therefore fall into a large number of SIC classes.

Tourists are people (including Scots themselves) who spend nights away from their home, either on holiday or on business and spend money in a wide variety of sectors. Traditionally, the accommodation sector has been seen as the core product of the tourism industry (and this has resulted in this sector being overly influential in the formulation of tourism policy), but it accounts for only some 32% of UK tourism spend in Scotland (VisitScotland, 2010a). In fact, the tourism industry consists of all the sectors in which tourists spend money either directly or indirectly, such as transport, attractions, shopping, entertainment, eating and drinking, banking, etc. So the careers of a banker in Dundee, a green-keeper in St Andrews, a laundry worker in Edinburgh and a piper on the streets of Inverness are tied to the fortunes of the tourism industry, just as much as a chef in Glasgow, a guesthouse owner in Orkney and a cycle tour operator in Galloway. **This is the sixth issue that needs to be addressed – the development of a statistically robust, working definition of the tourism industry.**

Tourism in Scotland has two distinctive characteristics, namely:

1. Domination by small businesses

In Scotland the accommodation, attraction, entertainment and cafe/restaurant sectors are dominated by small businesses (Table 6) and there are very few entry requirements to establishing a tourism business such as a cafe or a bed and breakfast, as the existing legislation tends to be regulatory, rather than skills/knowledge-based. This is not to belittle the sector, because a key benefit of small businesses is that economic leakages from their expenditure can be very low, i.e. the income generated by small businesses tends to stay in the local economy. However, a disadvantage of these businesses is the difficulty of ensuring consistency in standards across the full spectrum of facilities and services. Therefore, collaboration between the many small companies in Scottish tourism is hard to achieve. Scottish hotels tend to be small (the average size is 20 bedrooms), but for international companies the smallest size of their new-builds (150-200 bedrooms) are at the top of the range of hotel stock in Scotland.

2. Vertical integration in the industry

Tourists do not come to Scotland just to sample the accommodation; they come because of the environment, heritage, activities, etc (VisitScotland, 2008). But they need good-quality accommodation if they are to enjoy their holiday. Tourists now regard the quality of facilities such as accommodation as a hygiene factor, i.e. high standards are now demanded as the norm. Scotland now has five-star backpacker hostels and with the expansion of the QA scheme, will soon have quality assured bars. However, the basic attractions of Scotland are not managed solely for the benefit of the tourist, because mountains and wilderness areas, castles and historic houses, museums and art galleries are preserved and managed for non-tourism reasons, such as for the common good of the nation. Organisations such as Historic Scotland, Scottish Natural Heritage and the National Trust for Scotland also benefit from tourism and are, to some extent, dependent on income from tourism, but their business goals are not simply to maximise profit; they undertake activities which the private sector could not justify on commercial grounds. However, the owners and managers of Scotland's natural environment, in both the public and private sectors on the whole, get little financial return from their tourism assets, such as scenery, because the benefits accrue to others more directly involved in tourism.

Tourism in Scotland has not benefited from the expansion of the wider UK tourism industry, which has seen an increasing number of Scottish residents taking trips outside the UK (Table 2c). The reasons for this are not always clear, but probably relate to the British people's demand for sunshine

holidays, the growth of budget airlines and hotels, and the ease of booking through the internet. In addition, in Scotland, there has not been the same degree of vertical integration of the tourism product (transport, accommodation, eating out, visitor attractions, etc), as has occurred, for example, in the skiing and Mediterranean holiday sectors. What we may be seeing instead is horizontal integration – with expansion, for example, in the growth of the budget hotel chains through the acquisition of existing stock, or in the number of historic buildings open to the public through ownership by the National Trust for Scotland; this is sector consolidation/horizontal integration, rather than sector/vertical integration. This makes it more difficult for tourists or, at least, restricts their choices in what they are seeking, namely a seamless experience and a one-stop shop to buy their holiday.

Functions of national tourism organisations (NTOs)

It is difficult to discuss the functions of NTOs in isolation from their organisational context and relationships with national governments, regional tourist organisations and tourism lobbying and representative groups. In international terms, marketing and promotion tend to be the dominant functions of NTOs. This usually reflects their objectives, which are based on a recognised need to promote destinations and regions/places. The diversity and interdependence that characterises the tourism industry, suggests that there is a need for co-ordination of the different sectors and promotion of the country as a whole. As well as destination promotion, NTOs marketing activities usually include:

- Dissemination of research/marketing intelligence/insights;
- Placement of representatives in originating markets – usually through a network of overseas tourist offices;
- Organisation of trade workshops and trade shows;
- Familiarisation/information trips for tour operators and travel writers;
- Support with the dissemination of tourist information ;
- Provision of information to the consumer and availability of booking systems;
- Development of new products;
- Consumer assistance and protection (including quality-grading schemes and the handling and resolution of complaints);
- Provision of local visitor information services and centres;
- General advisory services for the industry

Other functions undertaken to various degrees by NTOs include:

- Research and compilation of statistics;
- Tourism planning ;
- Human resource development;
- Staff training;
- Regulation of tourism enterprises;
- International co-operation.

As a general assumption, marketing is the primary function and raison d'être for most NTOs, with few undertaking domestic marketing activities; instead, they tend to be solely involved with marketing overseas. The impact of the NTOs to influence the private sector varies across the NTOs; as many of their functions are indirect, contributing to a facilitating rather than a controlling role. Increasingly, economic development and the creation and preservation of jobs are taking on a much more important function in the tourism industry than in the past. There is an implicit assumption that if an NTO is functionally successfully in its marketing, then indirect economic and employment benefits will accrue as a result.

Key questions on the future development of public sector tourism in Scotland

Of all the questions that could be asked, perhaps the most important is do we need VisitScotland at all? Would the Scottish tourism industry be better without VS, and is it not time – after over sixty years of support from public funds – for the industry to take charge of its own future? Almost every country has a national tourism agency, but why? The establishment of an NTO seems to go with the trappings of nationhood, along with a national airline and a national army; these functions are often associated with newly formed countries, as recently seen with the break-up of the USSR. In looking at the current issues and main functions of VisitScotland, the question that must be asked is; could the private sector and/or a not-for-profit organisation do a better job?

1. Marketing

Many of the recent VisitScotland marketing campaigns have relied on either public and/or private sector partners, with VS acting as a catalyst, co-ordinator and provider of public funds thus enable the private sector to benefit from its activities; but would it not be better for the private sector to take the lead? The main argument against such a role is that tourism businesses are in competition with each other and that competition does not encourage co-operation, but there is little evidence that they need to co-operate to be successful businesses. We often read about rates of return on investment of 1 to 7 or 10 or 20 or even 40 as a result of VS marketing activities, but what does this mean? That for every one pound spent by the public sector, a greater number of pounds accrue to the private sector? But trying to trace this additional expenditure by visitors is very difficult. Is, therefore, VS just providing a subsidy for the private sector, rather than a public benefit? Of course, the counterfactual argument is strong; could a better rate of return be achieved by spending the money in a different way, or even by not spending it at all? Would not these campaigns still take place (albeit, perhaps, in a different form) even if public funds were withdrawn; and would not the withdrawal of funds encourage the private sector to work

together, as mutual survival is a strong driver for growth? However, the tourism industry is composed of so many small businesses and is increasingly fragmented because of the proliferation of DMOs, so the degree of co-operation necessary would be difficult to achieve. Withdrawal of public funding might lead to better vertical integration of the industry, which is one of the major criticisms of tourism in Scotland. It might encourage all sectors to work better together to offer the seamless experiences that today's tourists are seeking, but integrated campaigns may be difficult to achieve because different sectors have differing objectives and priorities. This trend of vertical integration can be seen in an increasing number of airline and hotel websites, because they offer add-ons to basic flight or accommodation bookings: book a flight and you are offered hotels, transfers and passes to visitor attractions.

This perhaps raises a bigger question, that about the effectiveness of national marketing in a world in which the formulation and sources of information are rapidly changing, and might it be the case that the private sector is best placed to respond more quickly to these changes? There is also the issue of the freeloader problem, those who do not participate in joint marketing campaigns could also benefit from their outputs? Perhaps the main criticism of the use of public funds for what is essentially a private sector activity, is that VS, through the use of public funds, is competing with the private sector (for example, retail activities in Visitor Information Centres (VICs), or booking products and services through the VisitScotland website). VS is also in competition with other parts of the public sector by its use of increasingly scarce public funds (taxation). This is not only unfair to other industries, but is also difficult to justify when, as a result of the cutback on expenditure by both the UK and Scottish Governments, there is so much pressure on public funds for more essential services.

2. Business tourism

Although important to Scotland, business tourism is not as easily influenced through marketing as the holiday market, because most of this kind of travel is non-discretionary. The section of the business tourism market that is most likely to be influenced by marketing is the meetings, incentives conventions, exhibitions markets (so- called MICE markets). However, there are only a few serious players in Scotland, e.g. major internationally known hotels such as Gleneagles and Turnberry, and exhibition and conference centres, such as the Scottish Exhibition and Conference Centre in Glasgow. It has been suggested that the operators of these facilities really understand their markets and their competition, both in Scotland and in the rest of world, much better than VS staff, so subsidising their activities by public funds is wasteful. Let them work by themselves and for themselves and they will co-operate when required.

3. Tourist Information Centres (TICs)

Because the methods that tourists use to obtain information are changing, so the number of TICs has been declining for much of the last decade, from a peak of about 160 in 2000, to about 100 today. They were originally developed and managed in Scotland by the local authorities and local voluntary organisations, then by the Area Tourist Boards and now, most are by default, managed by VS, although a few are run by local groups, with some support from VisitScotland. In 2009/10 they were rebranded as VisitScotland Information Centres (VICs), but are they needed at all and, if so, are so many required? In reality, they are a legacy left over from the old ATB network, when their locations were determined by a local rather than a national perspective. They provide local and sometimes national information (but only about Scotland, not about other parts of the UK); book accommodation in the area or elsewhere for visitors and sell tourism--related goods and souvenirs. Tourists, however (or are they now visitors?) seek information in many new ways, such as via the internet and social media, and most accommodation can now be booked direct through the providers' own website or third-party sites. As for selling goods and services, are TICs not putting themselves into direct competition with local retailers? In fact, sales of goods and gifts in TICs have been declining and even VS is now questioning if this is a proper use of public funds, (VisitScotland, 2010b). Apart from a few key city, road and airports access points, it would be difficult to justify more than twenty TICs in Scotland. In addition, there is no reason why their services should be free and, therefore, fully subsidised by the taxpayer; after all, the tourist is already in Scotland – a £1 Tourist User Fee for their services could be charged. This would have the effect of ensuring that users are serious about seeking information and so make better use of trained staff. It would also act as a disincentive for TICs to compete with other local and commercial retail outlets. As for the rest of the TICs, if there is a perceived need for them, do they need professional trained staff and do they need to be in prime locations in the high street. Why not let them be managed by 'Big Society' volunteers and why not locate them in central facilities like supermarkets, just like other services such as postal or banking services.

4. Quality assurance

This has been one of the main successes of STB/VS. Over the years, the scheme has been expanded from hotel accommodation, into other serviced and self-catering accommodation, as well as other aspects of the tourism experience, such as Green Tourism, visitor attractions, bus tours, chip shops and even bars! VisitScotland also introduced the Green Tourism Business Scheme so that businesses can assess how environmentally friendly they are. The degree of public investment in the quality assurance schemes has been substantial, but over the last few years the degree of public subsidy has been decreasing. Although a privatisation/management buy-out has been considered before, given the constraints on public funds perhaps now is the right time for this to be re-considered. It is difficult to understand why the public purse should support the scheme financially; although it could be argued that public sector input was necessary at the start of the scheme, but it has now reached the stage where further

growth is difficult; indeed accommodation membership of the scheme has recently declined (Table 5). Perhaps for the quality assurance schemes to reach their next stage of development, such as a not for profit public company, the strings of the public purse need to be cut and for it to go alone. As with many public bodies, expansion is the name of the game, but they often fail to develop an exit strategy, i.e. identifying a point when it is best to leave the future development of a project to the private sector. It is interesting to note that the QA scheme is marketed and branded as the Scottish Tourist Board grading scheme – not the VisitScotland grading scheme. There may be an argument, that it should continue to brand itself with the STB name, but it is now time for the scheme to be set up as a stand-alone organisation and to develop without public funding.

5. Business advice

VisitScotland staff do have extensive knowledge of overseas markets and their recent in-depth studies of the UK market has led to excellent and extensive information on segments of interest to the industry. But given the lack of experience of VS staff in running businesses, it is understandable why some in the private sector do not take their advice seriously. There are other much more credible sources of tourism advice, such as local authorities, the Scottish Enterprise network and indeed their own sector professional organisations, which are much more knowledgeable than VS. It is a sad fact that, with the centralisation of functions in VS resulting in just six mainland area offices, often with a national remit, this has resulted in a decline in the quality of business advice because their staff now lack local product knowledge. This was one of the great strengths of the old ATB network, along with being a local membership organisation. The recent growth in the number of Destination Management Organisations (DMOs), which some in the industry see as a replacement for the ATBs, has only strengthened the feeling that tourism product can best be delivered at this level by local organisations with local knowledge, and not by national organisations, and this has sapped the quality of VS advisory services. The question that must be asked is why there has been a growth in DMOs and other local tourism organisations; is it because VS has failed to deliver effective marketing and develop product knowledge at the local level?

6. Policy and research advice

It is very difficult to find a policy statement from VS that contradicts the policy of the Scottish Government, so what policy advice does it provide to the Government? It could be argued that VS policy advice is much more influential at the drafting stages of Scottish Government policy, but evidence for this is weak. Indeed, there is evidence that VS is already moving away from a policy function (VisitScotland, 2010d). The refocusing of VS research towards internal VS measurements and marketing-effectiveness studies must raise questions about its external policy and wider industry research role. The recent lack of industry-focussed research, raises questions about their understanding of the wider tourism impacts in Scotland. However, to be fair they are trying to disseminate information in a much more user-friendly format.

7. Minister of Tourism

There have been repeated calls for a Tourism Minister, but why, and what difference would this make? Since the re-establishment of the Scottish Parliament in 1999, we have had six ministers from four departments given responsibility for tourism. Tourism is at present just part of a portfolio of responsibilities along with enterprise and energy, so would a Tourism Minister with sole responsibility make a difference? The argument often put forward, is what other sectors need a Minister to look after their interests – a Minister of Shopping, of Ship-building, of Electronics, of Manufacturing? Also the Ministers to date, have not been especially dynamic, so the argument for a separate Tourism Minister is just not sustained

8. Tourism representative organisations

Probably more than any other sector, tourism seems to generate a proliferation of sectoral and regional organisations, almost 300 in total; to name a few: the Scottish Association of Visitor Attractions, Edinburgh Principal Hotels Association, Scottish Tourism Forum, Tourism Intelligence Scotland, with Destination Marketing Organisations being the newest set of organisations, at the last count fourteen in all. In addition, there are also a number of agencies, which rely on tourism for at least part of their markets, such as Historic Scotland, National Trust for Scotland, Scottish Natural Heritage. What do they all do and why do they exist? Indeed, in the last review of Scottish tourism some lobbied for their sector (Cruise Scotland), some lobbied for their area (Aviemore DMO), some attempted to co-ordinate the industry (Scottish Tourism Forum), some see tourism as generating useful income (Historic Scotland), some see it as providing local information (Scotland's Heartland). The problem is that all of them have different priorities and perhaps it is best to leave them to develop their own priorities and not pretend that they can all agree on one overall tourism policy for Scotland .

9. Tourism representative membership organisation

If VisitScotland has had its day, is there a need for a replacement organisation, and if so, what would it look like? Is there a need for someone to represent and speak on behalf of all the tourism industry in Scotland and is this possible? Looking at other industry organisations, some call themselves organisations (Federation of Small Businesses), some represent major industry sectors (British Beer & Pub Association), some are lobbying organisations (British Bankers Association), while some are policy think tanks (Adam Smith Institute). If there were no VisitScotland, some kind of tourism organisation would develop, but the crucial question is what credibility would it have? What form could a private sector tourism organisation have? It really depends

on whether it is set up as a lobbying and policy-forming organisation that may also facilitate co-operation within the industry, or would it be a fully fledged marketing consortium? Funds could come from membership fees for the basic lobbying and policy work, whilst marketing activity could be funded by tourism businesses participating in marketing campaigns or tendering to manage marketing campaigns using funds provided from other sources.

10. Public Sector Tourism Organisational Options

There are four possible options for funding public sector tourism in Scotland:

- Option 1 A 100% public sector managed model (this is what we have at present);
- Option 2 A public-private sector model, with the majority control being in the public sector;
- Option 3 A private-public sector model, with the majority control in the private sector, with the public sector playing no more than a regulatory or policing function, such as issuing fire and hygiene certificates; and
- Option 4 A wholly managed 100% private model.

Options 2 and 3 could be seen as a halfway house from weaning the sector from direct government control and funding.

Option 1, which is the current model of funding public sector tourism, is just not sustainable. With over sixty-five years of increasing support from public funds, an exit strategy from the current funding model is not only required, but is long overdue. This, along with an increasing number of calls on public funds and the demand from the public for protection of core services, suggests that for the tourism sector to grow, an alternative funding model is required.

Options 3 and 4 would only work if you accept that the private sector, from the smallest to largest operator can see the benefits of working together for the greater good of the sector. The development of an industry-wide acceptable and agreed delivery framework and organisational structure will be essential for either option to work. Given the highly competitive nature of tourism in Scotland, its highly seasonal operations, its financial fragility and its silo mentality with a strong sector focus, neither of these options may be feasible.

Option 4, a wholly managed private sector, privately funded and privately managed tourism organisation, whilst perhaps a desirable goal, is unlikely to be acceptable in Scotland, because the industry has so many small businesses, which would find it difficult to compete and develop reasonably priced marketing opportunities. There may be a fear, whether perceived or not, that the major businesses will seek to control this organisation for their individual benefit and not for the overall benefit of the sector. Also, these businesses may look for short-term business benefits to assist their organisation, rather than long-term sustainable growth of the sector as a whole.

Option 2, a public-private tourism partnership body operating as a not-for-profit organisation, is probably the best long-term, feasible and viable option, with public funds generated perhaps through a tourism tax, rather than from general taxation. In this option, the various component parts of the private sector (accommodation, transport, attractions, retail, etc.) are more likely to work together and outside their inward looking silos, and reverse the fragmentation of management of the tourism industry, as this type of organisation will have real control over the allocation of the organisation's resources, and will be using their skills to help develop tourism marketing and development. The public sector element of this model would focus on their strengths, by developing tourism policy and strategy. This model is popular in the USA, where it is recognised as a 'third way' between government and private sector ownership. The legislation is already in place, because the 2006 Companies Act allows for the formulation of non-profit, community interest companies/organisations, and is intended to ensure that a company's profits and assets are used for the public good, even when run for a limited profit. Thus option 2, that of creating a public-private sector partnership organisation for the delivery of tourism in Scotland, should be given serious consideration. The concept of private-public partnership model has been discussed within VisitScotland (VisitScotland, 2010d).

11. Web 2.0

There is no doubt that the way tourists obtain information is not only changing, but changing at an increasing pace, and that the adoption phase of new technology is being dramatically reduced – think how long the telephone, television, fax machine and pagers took before they became commonplace in daily life, compared to the internet, mobile phones and plasma televisions. The future of tourism marketing does not lie in the continued production of generic glossy, expensively produced brochures, physical buildings, trade and consumer shows and exhibitions, nor even, it could be argued, through television, radio and cinema advertisements from NTOs. The future lies in targeted promotions, geared towards 'me' as an individual, promotions that meet my aspirations, my requirements, my desires and maybe even my fantasies! The solution to 21st century tourism marketing lies in IT-focussed marketing. The way in which the wider society obtains its information and knowledge is changing and it could be argued that the future NTO will be developed around a flexible IT-driven organisation, rather than one with a physical presence. This raises the interesting question, as to whether any future adaptation of VisitScotland, needs to be based in Scotland at all?

12. Tourism knowledge and expertise centre

There is a real need for the industry to focus on the important issues surrounding the development of the sector, and to move away from futile discussions about its size, importance and policy. Whatever form any new independent

organisation takes, the imperative is to focus on long-term issues and options for future growth, and to separate itself from the short-term tactical marketing issues. Strategic thinking is very difficult within an organisation that focuses on tactical marketing; it needs to work outside, but in parallel with the national marketing organisation. One option would be to develop a tourism knowledge centre within a university that would not only act as an advocate, collector, provider and manager of robust statistical information about tourism in Scotland, but also as a source of independent policy advice for the NTO, the Scottish Government and the private sector. Over the past few years universities have changed from being institutions of learning, into knowledge-exchange centres, and for a Tourism Knowledge & Expertise Centre to exist and to be accepted as the source of independent knowledge, its location within a university seems logical.

13. Tourism tax

Irrespective of the demise, or not of VS and the creation of public-private sector replacement organisation, there is need for such a body to be funded. It could be argued that such an organisation should be funded by membership fees to support marketing campaigns, but, as discussed above, tourism benefits many more businesses than those who fund any marketing promotion. If the industry is unable or unwilling to fund tourism marketing campaigns, and the benefits are wide-ranging, this raises the question of the elephant in the room i.e. the need for a tourism/bed tax. The Calman Commission (2009) suggested that the Scottish Parliament should be given additional tax-raising powers, and the legislation for Parliament to introduce such new taxes (subject to the approval of Westminster) has been incorporated into the proposed Scotland Act (2011). As with any tax, a tourism/bed tax needs to be easily collected, difficult to avoid and be readily set up, which is why many destinations have opted for a bed tax, usually paid each night, based on either a fixed fee or as a percentage of the accommodation price. Sometimes these taxes vary by grade and/or type of establishment, by location (with city locations paying a higher tax than rural locations) or even by season. This tax works best when called by some other name such as a Tourism Development/Marketing/Green tax, which tends to make it more acceptable, as its purpose is clear. Also if such a tax were to be hypothecated so that it could be used only for tourism purposes, it is likely to be more acceptable, especially if it were to be paid only by non-Scottish residents, and thus may also encourage Scots to holiday more at home. As to the argument that it would have a detrimental impact on tourism, given how common such a tax is in other parts of the world, the evidence of any detrimental impact is very limited.

Conclusions

VisitScotland spends almost half of its grant-in-aid on staffing costs and this goes to support activities, which are internally focussed such as facilities management, IT, HR, finance, all of which have little to do with the delivery of tourism. One of the conclusions from this review is to question the need for a publicly funded and publicly managed VisitScotland, and suggests that there is real and pressing need to explore other options to deliver public sector tourism in Scotland, such as a public-private partnership.

Once the current economic difficulties facing the UK and Scotland have been overcome and the May 2011 Scottish election, how can the Scottish Parliament ensure that tourism remains a viable industry? The key to the future of any industry lies in strong competition amongst its providers. Competition is driven by minimising barriers, opening markets to trade freely, reducing subsidies, minimising regulations and breaking up monopolies (Manyika, et al. 2010). This, along with an educated workforce and the fostering of individual talent that wants to generate success, will make a positive difference in the development of a stronger and stable tourism industry in Scotland.

However, perhaps the best indicator of success is that tourism no longer needs a public sector leader, that it, the tourism industry, is strong enough and confident enough in its own abilities, and that VisitScotland as a publicly funded marketing organisation, no longer needs to exist. When the industry reaches such a degree of maturity, this means it can manage itself without direct public funding. Surely, the success of tourism in Scotland will be when, during the period of the next Scottish Parliament, VisitScotland develops an exit strategy that results in the closure of the existing organisation. The organisation would then be replaced by a vibrant, consumer-focussed, membership-managed and membership-funded/tourism tax funded private/not-for-profit sector organisation, which will deliver a service to the tourist that they are willing to purchase.

Both authors hope that this paper will stimulate, both in the private and public sectors, debate and a discussion about the future of tourism in Scotland. It does not matter if you agree or disagree with the seven issues and the thirteen questions raised, or, having considered these, reach the same conclusions as the authors. Our views about the future of tourism are not fixed and we do not pretend to have definitive answers, but if you are passionate about the future of tourism in Scotland and have a viewpoint, we would like to hear from you. We would also be happy to present our thoughts to any group or organisation

Appendix 1:

Scottish Tourism Ministerial Departments, Titles & Ministers

Date	Political Party	Ministerial Title	Minister
1999/00	Scottish Labour Party	Minister for Enterprise and Lifelong Learning	Henry McLeish
2000/01	Scottish Labour Party	Minister for Enterprise and Lifelong Learning	Wendy Alexander
2001/03	Scottish Labour Party	Minister for Tourism, Culture and Sport	Mike Watson
2003/04	Scottish Labour Party	Minister for Tourism, Culture and Sport	Frank McAveety
2004/07	Scottish Labour Party	Minister for Tourism, Culture and Sport	Patricia Fergusson
2007-	Scottish National Party	Minister for Enterprise, Energy and Tourism	Jim Mather

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Under-employment and migration*

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Abstract
This paper examines empirically the relationship between under-employment and migration amongst graduates of Scottish higher education institutions with micro-data collected by the Higher Education Statistical Agency. The analysis suggests that there is a positive relationship between migration and graduate-job employment. This relationship is particularly strong for Scotland-domiciled graduates who studied in Scotland. This positive relationship is consistent with the view that there is in over-education/under-employment problem in Scotland. However, other explanations are possible.

Under-employment and migration

1. Introduction

In a paper published in the *Commentary* (Vol 34, No 2), Mosca and Wright (2010a) presented empirical evidence in support of the hypothesis that there is a significant amount of under-employment amongst graduates of Scottish higher education institutions. It was argued that the extent of under-employment can be measured as the proportion of graduates who are employed in so-called "non-graduate jobs". Such jobs do not require the skills obtained through higher education in order to carry out the required work.

In their analysis, micro-data for five cohorts of graduates, covering the years 2002/03 to 2006/07, collected by the *Higher Education Statistical Agency* (HESA, 2007, 2010a,b) was used. A definition of what constitutes a "non-graduate job", developed by Elias and Purcell (2004), was adopted. With this definition and data, rates of employment in non-graduate jobs six months after graduation were calculated. It was found that for individuals who graduated with an under-graduate qualification (mainly first degrees), around one-third of those in employment six months after graduation were working in non-graduate jobs. For the 2002/03 graduate cohort, it was also possible to examine the employment situation 3½ years later (i.e. 42 months after graduation). It was found that about 20% of those employed were still in non-graduate jobs, suggesting that the rate of non-graduate employment is still quite high well into the employment life-cycle.

One interpretation of high rates of non-graduate-job employment amongst Scottish "under-graduate graduates" is that there is an "over-education" problem, with the higher education sector generating too many graduates for the economy to absorb. That is, there is disequilibrium in the labour market, with the supply of graduate labour exceeding the demand for graduate labour by a considerable margin. If this interpretation is correct, one would might expect to find that Scottish graduates who migrate to other regions of the UK or abroad have (on average) lower rates of non-graduate employment compared to those who remain in Scotland.

With this background in mind, this paper examines empirically the relationship between under-employment and migration amongst graduates of Scottish higher education institutions with micro-data collected by the *Higher Education Statistical Agency*. The analysis suggests that there is a positive relationship between migration and graduate-job employment. This relationship is particularly strong for Scotland-domiciled graduates who studied in Scotland. This positive relationship is consistent with the view that there is in over-education/under-employment problem in Scotland. However, there are other reasons for why such a positive relationship might exist.

2. Data

The analysis is based on micro-data collected by *Higher Education Statistical Agency*, which is the same data used by Mosca and Wright (2010a). Information is merged from two data-sets for five cohorts of graduates from higher education institutions, covering the academic years 2002/03 to 2006/07. The first data-set is the *Students in Higher Education Institutions*. This primarily consists of information provided by the institution the graduate attended. The second data-set is the *Destinations of Leavers from Higher Education Institutions (DLHE).* This data is collected through a questionnaire administered approximately six months after the student has graduated, with detailed information about employment being collected.

In this merged data-set, there are three post codes of interest. The first is the post code corresponding the individual's so-called "place of domicile". This is the postcode of the student's permanent or home address prior to entry to the programme of study. Although imperfect, for the vast majority of graduates this will also be the place where they completed at least some of their secondary schooling. The second post code is "place of study". This is simply the address of the institution attended. The third is the post code that corresponds to "place of employment six months after graduation".

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With these three post codes it is possible to identify if individuals have moved from their place of domicile to their place of study and from their place of study to their place of employment. For those in employment six months after graduation it is possible to calculate migration rates once the level of geographic aggregation has been decided. The DLHE survey also interviews graduates who have moved abroad. Therefore, it is not only possible to identify graduates who have migrated to other parts of the UK but also graduates who have emigrated abroad (for a description of these migration flows see Faggian, Li and Wright, 2009; and Mosca and Wright, 2010b).

As mentioned above, the definition of what constitutes a non-graduate job is from Elias and Purcell (2004, p.4). This definition is: "occupations for which a graduate level education is inappropriate (e.g. school secretaries and bar staff)." It must be stressed that this is a strict definition since there is no doubt that these occupations do not require the skills obtained through higher education and are "dead end" in terms of career prospects. Mosca and Wright (2010a) show that the rate of non-graduate job employment is much lower for graduates with post-graduate qualifications ("post-graduate graduates"), compared to graduates with under-graduate qualifications ("under-graduates graduates"). Therefore the analysis carried out below is restricted to under-graduate graduates. Restricting the analysis in this manner still leaves a sample of over one million observations. Finally the DLHE survey is only administered to so-called "UK-domiciled graduates", who are basically graduates who completed their secondary education in the UK. Therefore, all estimates presented below exclude European Union or overseas graduates even if they stayed in the UK to work after graduation.

3. Findings

Table 1 reports the migration status six months after graduating for graduates of Scottish higher education institutions along with the estimate for graduates of all UK higher education institutions. The migration rate of Scottish graduates is 18.3%, which is over double the rate of 8.7% for all UK graduates. Of those Scottish graduates who migrated, about 75% (13.2% of 18.3%) moved to England, Northern Ireland or Wales and around 25% (5.1% of 18.3%) moved abroad. When UK graduates as a group are considered, the split is around 60% (5.1% of 8.7%) migrating to other countries of the UK and 40% (3.6% of 8.7%) migrating abroad. It is clear that Scottish graduates, compared to UK graduates as a group, are a much more mobile population.

Table 2 shows the percentage of graduates employed in a graduate job six months after graduating. The rate for Scottish graduates is 68.3%, which is slightly higher than the rate of 65.4% for all UK graduates. Graduate-job employment is higher for those who migrated. 75.2% of Scottish graduates who migrated are in graduate-job employment compared to 66.7% for those who remained in Scotland. For all UK graduates, the difference is much

Table 1: Migration status six months after graduating %) 2002/03-2006/07 HEI under-graduate cohorts

Place of Study:	Scotland	UK
Stayer	81.7%	91.3%
Mover	18.3%	8.7%
Total	100%	100%
National mover	13.2%	5.1%
International mover	5.1%	3.6%
Total	18.3%	8.7%

Notes: Authors' calculations (see text)

smaller—66.6% for those who migrated compared to 65.3% for those who remained in their country of study. It is also interesting to note that for Scottish graduates, the rate of graduate-job employment for those who migrated abroad is 77.1% which is higher than the rate of 74.4% for those who migrated to other countries of the UK, 74.4%. When all UK graduates are considered, those who migrated abroad have a higher rate of graduate-job employment (71.7%) compared those who stayed in the country where they studied (65.3%). However, for all UK graduates, the rate for those who migrated to other countries of the UK is lower than the rate of those who stayed (63.1% and 65.3%, respectively).

Table 2: Employed in a graduate job six months after graduating (%) 2002/03-2006/07 HEI under-graduate cohorts

Place of Study:	Scotland	UK
Stayer	66.7%	65.3%
Mover	75.2%	66.6%
Total	68.3%	65.4%
National mover	74.4%	63.1%
International mover	77.1%	71.7%
Both	75.2%	66.6%

Notes: Authors' calculations (see text)

Table 3 reports migration status broken down by place of domicile. As was discussed above, place of domicile for the vast majority of graduates is the country where they completed their secondary schooling. What is clear from Table 3 is that the migration rate varies considerably by place of domicile. For Scotland-domiciled graduates who studied in Scotland the migration rate is 8.3%. About two-thirds (5.6% of 8.3%) of those who migrated moved to England, Northern Ireland or Wales. For rest-of-the-UK-domiciled graduates who studied in Scotland, the migration rate is 64.0%, with almost 75% being movement back to other countries of the UK. Much of this flow is most certainly students "returning home". Over half of the rest-of-the-UK-

domiciled graduates who studied in Scotland returned to their country of domicile.

Table 3: Migration status six months after graduating by place of domicile (%) 2002/03-2006/07 HEI under-graduate cohorts

Place of Study:	Scotland		UK	
Place of domicile:	Scotland	RUK	Own	Not-own
Stayer	91.7%	36.0%	96.1%	41.2%
Mover	8.3%	64.0%	3.9%	58.8%
Total	100%	100%	100%	100%
National Mover	5.6%	47.7%	1.5%	42.9%
International mover	2.7%	16.3%	2.4%	15.9%
Total	8.3%	64.0%	3.9%	58.8%

Notes: Authors' calculations (see text)

Table 3 also suggests that the migration rate of "own-domiciled" graduates for the UK as a whole is much lower (3.9%) than for Scotland-domiciled graduates who studied in Scotland (8.3%). In this comparison, "own-domiciled" refers to England-domiciled graduates who studied in England; Northern Ireland-domiciled graduates who studied in Northern Ireland; Scotland-domiciled students who studied in Scotland; and Wales-domiciled graduates who studied in Wales. Likewise for "not-own-domiciled students (e.g. Scotland-domiciled students who studied in England), the migration rate is much higher, with 58.8% of graduates not staying in their country of study. It is interesting to note over 60% (2.4% of 3.9%) of "own-domiciled" graduates who migrated moved abroad.

Table 4: Employed in a graduate job six months after graduating by place of domicile (%) 2002/03-2006/07 HEI under-graduate cohorts

Place of Study:	Scotland		UK	
Place of domicile:	Scotland	RUK	Own	Not-own
Stayer	66.4%	69.5%	65.2%	67.6%
Mover	81.1%	71.6%	73.1%	62.0%
Total				
National mover	84.4%	69.1%	76.6%	58.0%
International mover	74.3%	79.1%	71.0%	72.9%
Total	81.1%	71.6%	73.1%	62.0%

Notes: Authors' calculations (see text)

Table 4 shows the rates of graduate-job employment broken down by place of domicile and place of study. For Scotland-domiciled graduates who studied in Scotland, the rate of graduate-job employment for those who stayed in Scotland is 66.4% compared to 81.1% for those who migrated. This is a sizeable differential. The rate for those who migrated to other countries of the UK is 84.4%, which is higher than for those who moved abroad of 74.3%. For rest-of-the-UK-domiciled graduates who studied in Scotland, there is little difference in the rates of graduate-job employment—69.5% for those who stayed in Scotland and 71.6% for those who did not. However, for the group of graduates who did migrate, the rate of graduate-job employment is much higher for those who migrated abroad at 79.1%, compared to 69.1% for those who migrated to other countries of the UK.

Table 4 also shows the rates of graduate-job employment for UK graduates as a group. For "own-domiciled" graduates, the rate of graduate-job employment for those who migrated is 73.1%, compared to 65.2% for those who remained in their country of study. For the group of graduates who did migrate, the rate of graduate-job employment for those who migrated to other countries of the UK is 76.6%, which is higher that the rate of 71.0% for those who migrated abroad. However, the situation is different for "not-own-domiciled" graduates. The rate of graduate job employment for those who did not study in their country of domicile and migrated is 62.0%. This rate is in fact lower that the rate of 67.6% for those who did not migrate. For this group of graduates, those who migrated abroad had a considerably higher rate of graduate-job employment, 72.9%, compared to those who migrated to other countries of the UK, 58.0%

4. Concluding comments

The analysis carried out for this paper suggests that graduates whom have gained undergraduate qualifications at Scottish higher education institutions have a migration rate that is double the UK average. The migration rate for Scotland-domiciled graduates who studied in Scotland is also double the UK average. Compared to the UK graduates as a whole, graduates of Scottish higher education institutions are a much more mobile population. Graduates of Scottish higher institutions also have a slighter higher rate of graduate-job employment compared to the UK average. However, the rate of graduate-job employment for graduates of Scottish higher institutions is much higher for those who migrate either to somewhere else in the UK or abroad. The rate of graduate-job employment for Scotland-domiciled graduates who studied in Scotland **and** migrated is even higher.

The estimates suggest that there is a sizeable positive relationship between the probability of migrating and probability of being in graduate-job employment. A positive relationship of this type is consistent with the view that over-education is a problem leading to under-employment in Scotland. However, such a "conclusion", which has clear policy implications, is both premature and dangerous. There are other reasons why a graduate might be in non-graduate employment six months after graduation beyond the simple reason of not being able to find a graduate-job. For

example, individuals who intend to study for post-graduate qualifications, often take time out before starting. For such individuals, a graduate-job with a career path may be undesirable simply because it would be short-lived. In addition, an individual who has migrated, and found graduate-job employment, may have also found graduate-job employment if they had not migrated. It may be case that such individuals migrated because they found a better job-match and/or they had a desire to work outside their country of study. The relative importance of these alternative explanations needs to be established. However, the failure to do so will almost certainly lead to the exaggeration of the seriousness of the perceived over-education/under-employment "problem" in Scotland.

More generally, being in a non-graduate job does not necessarily mean wanting a graduate-job and being unable to find one (i.e. under-employment). Although not reported here, a series of regression equations have been estimated with the data aimed at trying to quantity what are the factors that influence the probability that a graduate migrates and the probability that a graduate is employed in a graduate-job. It was found that there are a set of mostly "human capital" variables that raise both probabilities in the same direction. For example, graduates who have "done well" (e.g. awarded a first-class science degree from a Russell Group university) have a much higher probability of both migrating and being in graduate-job employment. This points to the possibility that the observed positive correlation may be spurious—and not casual—in nature. Future research will need to focus on trying to examine the casual/non-casual nature of this relationship, which will raise some difficult econometric issues.

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