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 middleeast 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 -2010g3 - 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 guickly 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

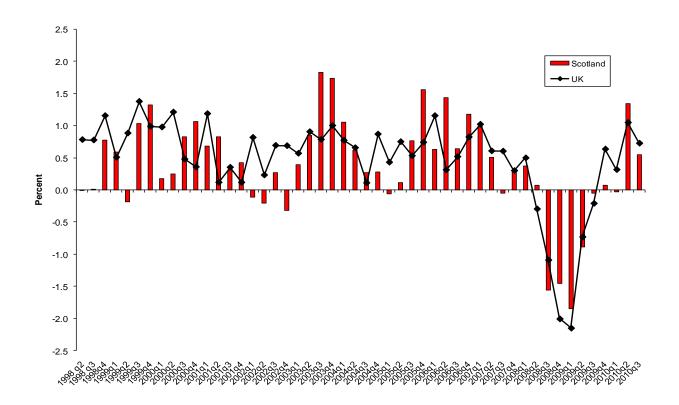
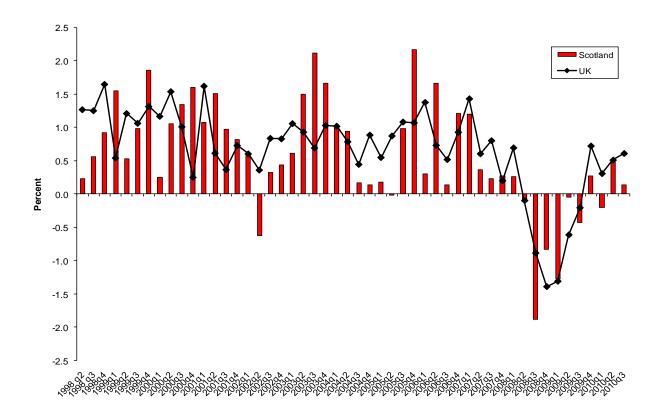


Figure 2: Scottish and UK Services GVA growth at constant basic prices 1998q2 to 2010q3



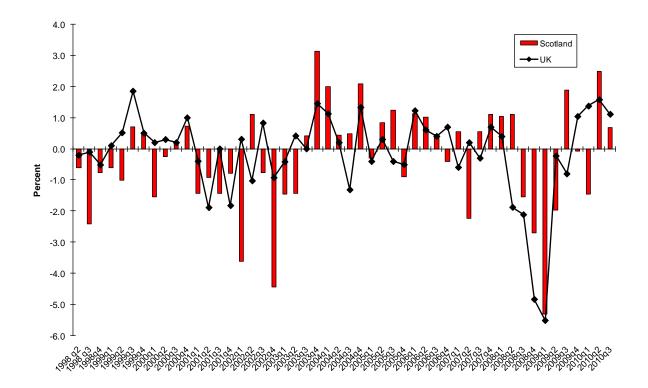
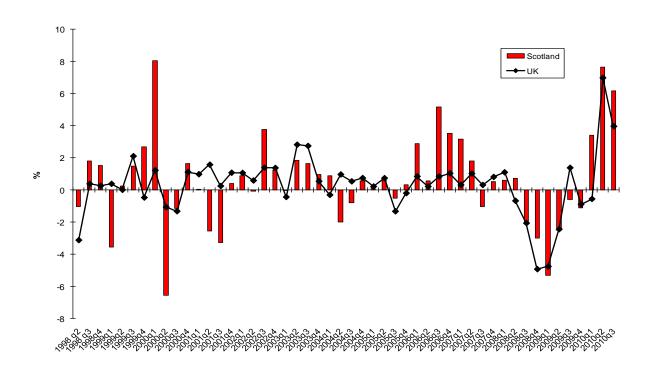


Figure 4: Scottish and UK construction GVA volume growth 1998q2-2010q3



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.

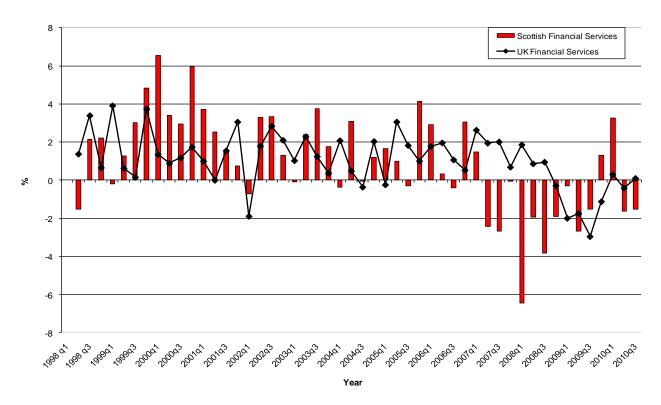
In 3rd quarter 2010 Manufacturing GVA rose by 0.7% in Scotland against a rise of 1.1% in manufacturing in the UK. Figure 3 makes clear that there has been much variability in the recent performance of the sector and recovery from its recession trough has been slower here, with growth from the bottom 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

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 Scotlish 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.

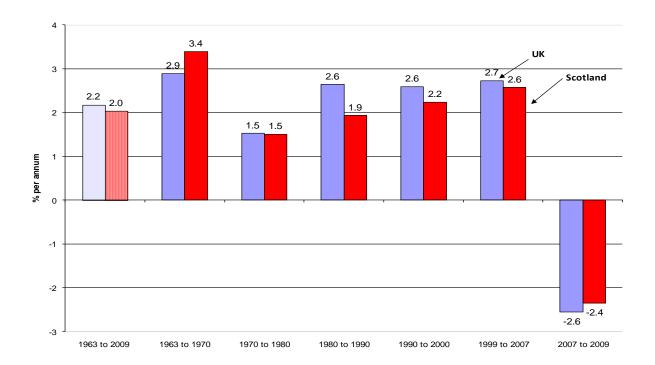
Scottish Growth: past, present and future

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

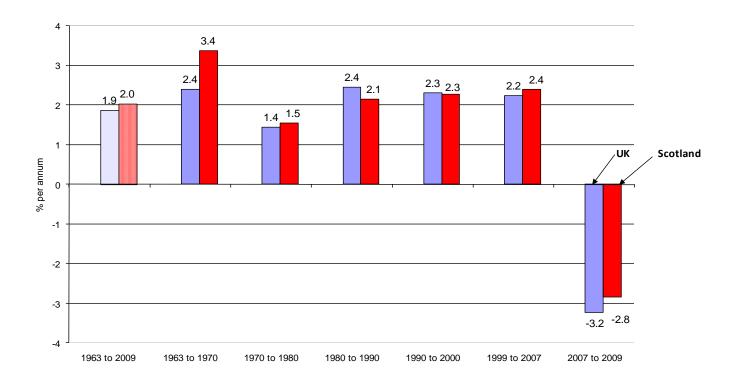
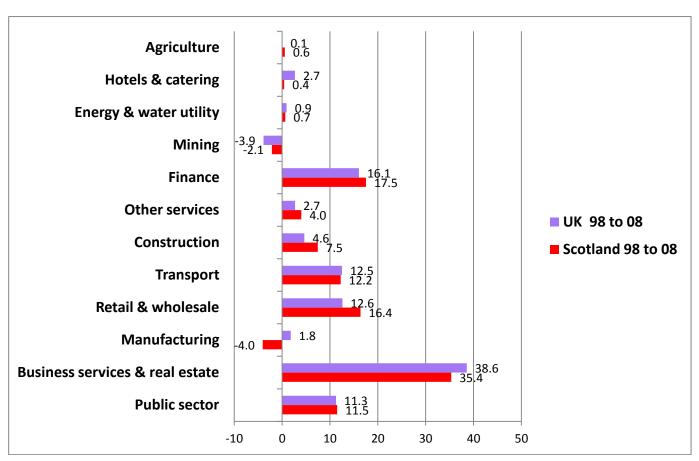


Figure 8: Industry shares in UK and Scottish growth: 1981q1 to 20089



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 Scotlish sectoral growth rates there is some improvement in Scotlish 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.

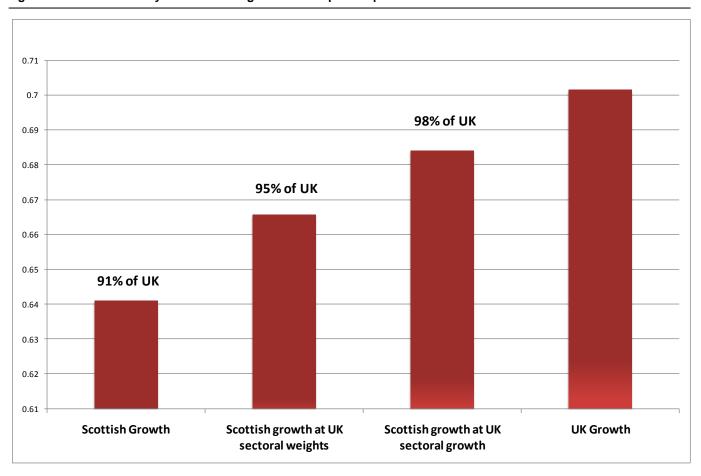
There is developing evidence-based consensus that the promotion of growth in small open economies requires focus on:

- 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". 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



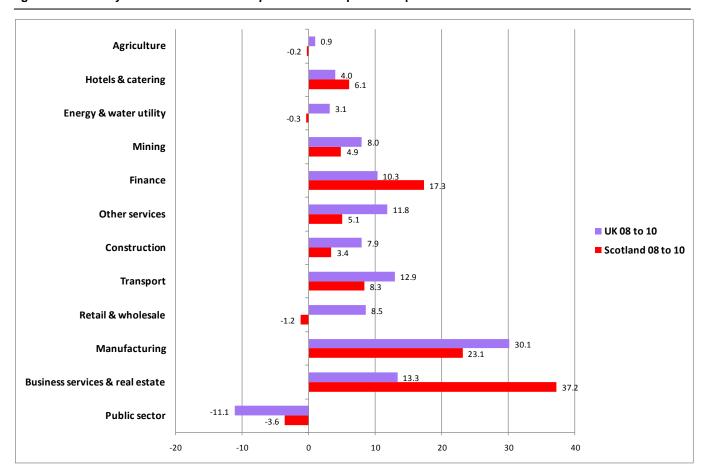
manufactured exports abroad following the contraction of the electronics sector which began in 2000, and a fall in the share of the value of UK goods exports from 9% in 2001 to 6% in 2007, the year before the recession commenced. During the recession the share rose to 7% in 2009. The Committee Report 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. 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 institutions⁷.
- Skill impacts of ageing and declining population⁸.
- Lack of competition in transport, utilities, catering, leisure and business banking⁹.
- 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."

 Evidence is accumulating that 'social capital' has a role to play in growth.
- 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'.

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 study¹⁴ 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 economy¹⁶.
- 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)	20	11	2	2012		2013
High growth		1.1		2.1		2.4		2.6	
Central	November forecast	1.0	1.3	1.0	2.1	1.6	2.4	1.9	n.a.
	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	
Central	November forecast	-7,000 20,113	<i>4</i> 2,300 19,780	<i>50,404</i> 31,741	n.a. 39,808
Low growth	November forecast	<i>-12,794</i> 18,357	21,224 5,895	39, <i>124</i> 11,586	<i>n.a.</i> 19,256
J	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.

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.

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

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.

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

³Structural 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

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

⁶See 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

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

⁸Scotland 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)

⁹ONS, Regional Price Indices, November 2003.

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

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

¹²For 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.

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

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

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

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