

The Scottish Economy

Forecasts of the Scottish economy

Economic background

Despite a slowing in the US, growth in the world economy remains relatively strong with the Euro Area performance strengthening. China continues to be a major driver of world growth and trade is forecast to drive growth up. Asian markets in particular are forecast to have robust growth. Japan continues to recover steadily and survey evidence for the world economy points to a further strengthening of growth in 2007Q2. Inflationary pressures remain a risk as oil prices increased in April and May. Central banks will respond by increasing base rates steadily in order to choke off significant inflation in the future, therefore inflation is expected to be close to target across the main economies. Despite some turbulence in financial markets recently and some risk aversion, the world economy remains in good shape and markets are expected to stabilise over the near-term. Indeed, the expectation is for long-term interest rates to recover after a period of very low rates as risk is reassessed.

UK real GDP growth for the first quarter was unrevised at 0.7 per cent (same as 2006Q4 and 2006Q3) following annual growth of 2.8 per cent in 2006. Services continue to be the key driver of growth in the UK. Consumption and investment remain important to overall domestic demand. Interest rates have remained at 5.5 per cent but this is unlikely to hold and an increase in July or August is widely expected. A further increase in November could bring rates to 6 per cent. These increases are expected to combat rising energy prices and to squash any further move in pay growth where the median pay settlement has increased to 3.5 per cent in January from the 3 per cent seen last year. Given that inflation has been above target to 3.1 per cent then the mpc will not want to repeat that and will be more likely to tighten policy quickly rather than leave it loose for too long. The expectation for CPI inflation is that it will fall back to target by the end of the year.

The Scottish economy

In Scotland GVA growth was 2.6 per cent for 2006 compared to 2.1 per cent in 2005. The economy is now growing above trend. Fourth quarter growth for 2006 was 0.6 per cent compared to 0.4 per cent in the third quarter. Both construction (6.4 per cent) and services (2.9 per cent) were the main drivers of growth in Scotland in 2006. Comparing Scotland to the UK in 2006, Scotland had a worse performance in agriculture, forestry and fishing with a contraction of 2.4 per cent compared to a decline of only 1.8 per cent in the UK. Construction growth was much faster however as the UK only grew by 1.1 per cent. UK services outpaced their Scottish counterparts by growing

Figure 1: Cumulative and annual average growth in Scottish and UK services, 1998-2006

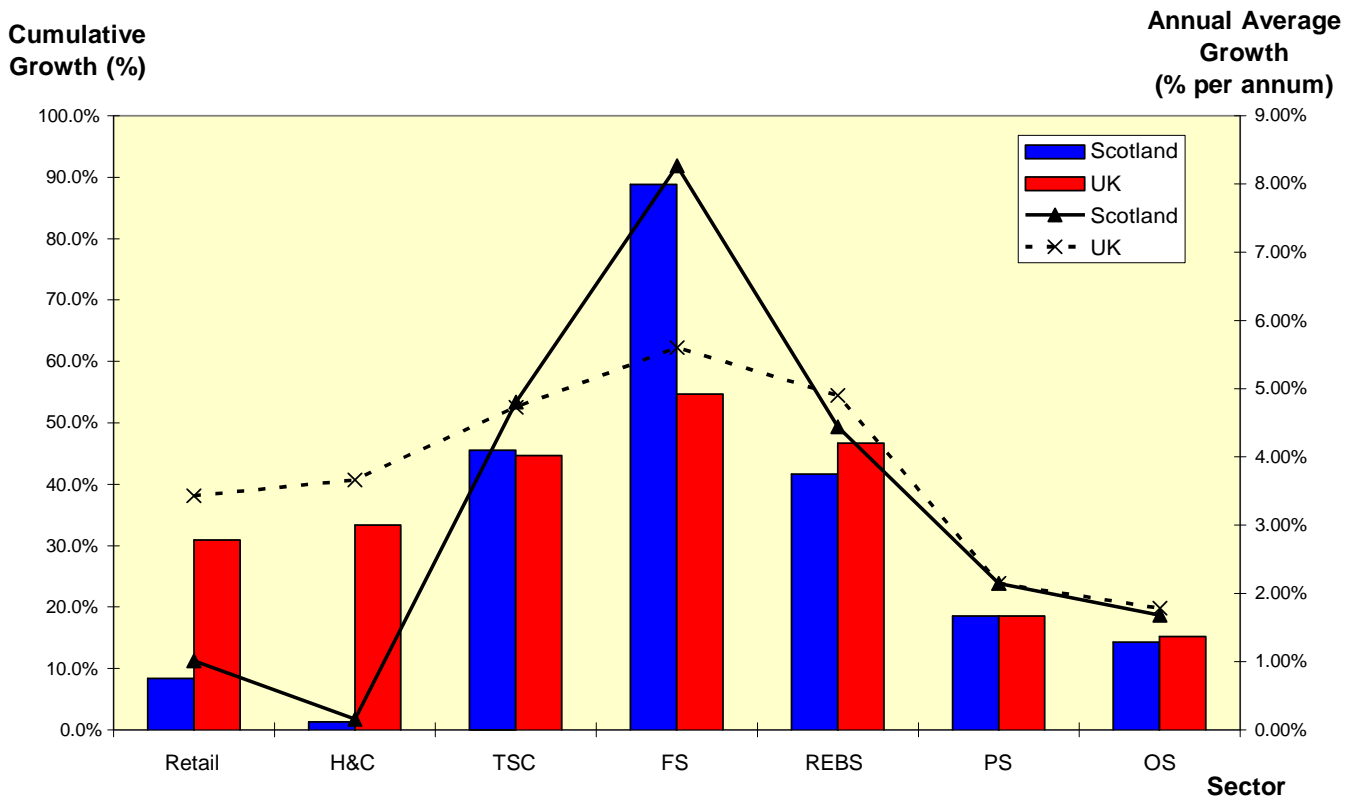


Table 1: High and Low Growth in Scottish and UK Services, 1998-2006

Growth	Retail	H&C	TSC	FS	REBS	OS
Scotland						
2003 weight	115	38	77	70	187	58
>10%	-	-	01	00, 01	-	-
>5%	-	-	04, 05, 06	99, 04, 05, 06	01, 02, 05, 06	03
Neg. periods	3	4	0	0	1	2
UK						
2003 weight	122	31	78	79	244	53
>10%	-	-	00	-	-	-
>5%	04	03, 06	-	00, 03, 04, 05, 06	99, 00, 04, 06	-
Neg. periods	0	0	0	0	0	2

Note: Public services are excluded here but Scotland has two periods of negative growth compared to non for the UK

by 3.7 cent. Manufacturing in the UK grew by 1.5 per cent whereas Scottish manufacturing output decreased by 0.1 per cent.

Looking at the service sector in more detail demonstrates that the UK has strong growth in virtually all sectors over 2006. Scottish retail (3.7 per cent vs 2.5 per cent in the UK) and transport, storage and communications services (5.4 per cent vs 3.1 per cent) are the only sectors that outperform their UK counterparts. The weights of these sectors in both Scotland and the UK are relatively similar. When financial services and real estate and business services (REBS) are considered there is a striking difference. The weight of REBS in the UK is 24.4 per cent whereas it is only 18.7 per cent in Scotland (Scottish Executive, 2003 weights). As growth is stronger here with a higher weight then this sector contributes more to UK GDP relative to the Scottish sector contribution to GVA. Financial services do not have such a significant gap in weighting but UK growth was 8.5 per cent although Scottish growth was 8.1 per cent in 2006. Other services grew by 2.7 per cent in 2006 in the UK but contracted by 4.0 per cent in Scotland.

Figure 1 demonstrates growth in Scottish services over the period 1998 to 2006 for cumulative growth and for annual average growth per annum. Table 1 then presents data for these sectors for the years where growth was above 10 per cent and 5 per cent but also indicates the number of years where growth was negative.

Scottish financial services significantly outpaced growth in the UK due to the very strong growth in 2000 and 2001. In other periods they generally keep pace with UK growth. With public services; transport, communication and storage services and in other services, Scotland and the UK demonstrate a similar pattern over 1998 to 2006. However, the two sectors that considerably lag their UK counterparts are retail & wholesale and hotels & catering. Cumulative growth (see Figure 1) is 30.1 per cent in the UK compared to 8.4 per cent for retail and the figures are 33.4 per cent and 1.3 per cent respectively for hotels & catering. These sectors also have more periods of negative growth compared to other Scottish services and none in their UK counterparts. As the weights of these sectors are similar then the discrepancy in growth contributes significantly to slower Scottish GVA growth compared to UK growth. The fact that UK cumulative and annual average growth is slightly faster than Scottish growth for REBS and the fact the sector is significantly bigger in the UK is another important factor in why growth in Scottish services tends to lag that of the UK. It should be noted that Scottish services have had 12 periods of negative growth compared to 2 in the UK over the period 1998 to 2006. It is only financial services and transport, communications & storage services in Scotland that have no negative growth¹ over this period whereas in the UK it is only other services (weight of 53 – small in relation to most of the other service sectors) that have suffered negative growth over 1998 to 2006.

The increasing importance of the Scottish service sector coupled to the decline in manufacturing makes services a key area for focussing economic policy and increasingly more attention is devoted to forecasting the service sector in order to obtain a better understanding of what are the key drivers of the Scottish economy.

In Scotland the labour market remains buoyant with the employment trend increasing and the unemployment trend broadly flat for the period Feb-Apr 2007. Total employment increased by 60,000 on a year ago to 2,530,000 giving an employment rate of 76.5 per cent. This compares to an employment rate of 74.3 per cent in the UK. UK employment dropped by 10,000 (rate declined by 0.1 percentage point) whereas the Scottish employment rate increased by 1.0 percentage point. ILO unemployment in the UK fell by 15,000 to 1,677,000 or to 5.5 per cent (no change in the UK ILO unemployment rate) while Scottish unemployment decreased by 3,000 to 134,000 or 5.0 per cent (a rate change of -0.2 percentage points). The Scottish employment rate is higher than that of the UK and the unemployment rate is lower than that of the UK. In May 2007 claimant count in Scotland fell by 10,500 over the year to 78,300 or to 2.8 per cent (a rate change of -0.4 percentage points). UK claimant count fell by 9,300 to 880,400, a rate of 2.7 per cent, for the same month. Scottish employees increased by 61,000 over the year to Jan-Mar 2007 to 2,242,000, a change of 2.4 per cent. Self-employment, for the same period, rose to 258,000 from 247,000 in Oct-Dec 2006. Over the year full-time workers increased by 34,000 and part-time workers rose by 38,000. Government supported training posts remained static at 12,000 over the period Jan-Mar 2006 to 2007.

Scottish manufactured exports increased by 2.2 per cent in 2006Q4 on 2006Q3 and by 3.2 per cent over the year. On an annual basis the main increases in Scottish manufactured exports came from: electronics (2.7 per cent) and metals (27.8 per cent). Drink grew by 2.3 per cent; transport equipment by 9.6 per cent and mechanical engineering, up 9.1 per cent. The largest decline came from wood, paper & publishing (-16.9 per cent) although food decreased by 9.4 per cent over the year. On a quarterly basis drink; metals and electronics, all increased but chemicals; textiles; transport equipment and wood, paper & publishing all recorded a decline. When electronics are excluded from the data, Scottish manufactured exports increased by 3.4 per cent on an annual basis to 2006Q4. Given that the Euro Area is strengthening and survey evidence is more optimistic about manufacturing then we expect manufactured exports to pick up steadily through to 2008.

The Scottish Chambers of Commerce Business Survey (SCBS) reports rising confidence in all sectors except wholesale. In manufacturing, construction, wholesale and retail distribution net confidence in 2006Q4 was higher than a year ago. Demand and sales are also rising more strongly than they were one year ago. Most respondents in

construction, manufacturing and tourism reported rising investment plans. Most firms reported increased cost pressures and pay increases ranged from 3.8 per cent to 5.35 per cent. Clearly, with increased energy and transport costs firms will need to focus on keeping wage increases within non-inflationary bounds.

The Scottish economy is growing at above trend with growth for 2006 at 2.6 per cent. The labour market is performing strongly with an increasing trend in employment and a broadly flat unemployment trend. It is on many measures outperforming the UK economy. Agriculture, forestry and fishing and manufacturing remain areas of concern but construction and services have strong growth. With a more focussed effort on services the Scottish growth rate could be lifted slightly. Recent survey data is promising and our forecasts indicate that optimism. There are increasing signs of an expected and sustained upturn in manufacturing in 2008, while construction growth is expected to remain strong. The outlook for the Scottish economy is good in the medium-term.

The forecast in detail

GVA

The forecast for Scottish GVA for 2006 was 2.3 per cent and the outturn data demonstrate it is 2.6 per cent. With this in mind we have altered our profile of final demand to account for this change and we are now forecasting GVA growth of 2.5 per cent in 2007 and 2.3 per cent in 2008. Services and construction drove growth in 2006 with growth of 6.5 per cent and 3.3 per cent respectively. However our model indicates that service sector growth may be above 3 per cent in 2006 while the Scottish Executive data only indicate growth of 2.9 per cent. These data may be revised and we await the next quarter data with interest.

Table 2: Main Forecasts of the Scottish Economy, 2006-2008

	2005	2006	2007	2008
GVA	2.1	2.6	2.5	2.3
Agriculture	-1.4	-2.3	-0.6	-0.2
Manufacturing	-0.6	-0.2	0.8	1.2
Construction	2.6	6.5	6.7	5.0
Services	3.3	3.2	2.8	2.6

Source: Fraser of Allander Institute, June 2007

In our last forecast we forecast growth of above 2 per cent and indeed the Scottish economy is growing at above trend. However, agriculture is forecast to decline over the period and indeed the Scottish Executive data has indicated that the contraction in agriculture was greater than we forecast (forecast -1.9 per cent and outturn of -2.4

per cent). Consumption, government spending and investment remain important drivers of demand. We are also expecting a greater contribution from exports in the next two years.

Final demand

The main change to final demand is to increase the growth of exports particularly in 2008 when we expect stronger demand from the Euro Area. We have made no change to the path of consumption as Scotland has a relatively small change to interest rate increases. Similarly, it is less responsive to a cut in interest rates therefore exhibits more stability compared to the UK. Retail sales growth remains strong and business survey evidence is promising. Tourism is still disappointing and the hotel & catering industry has declined over 2006 on both an annual and quarterly basis.

Output

Scottish growth is forecast to be strongest in financial services; REBS; construction; transport equipment and other manufacturing in 2007. In the medium-term annual average growth for 2006-10 is strongest in these sectors with the exception of other manufacturing. The public sector while not having particularly strong growth remains vital to the Scottish economy. The forecast for services is to grow by 2.8 per cent in 2007 and by 2.6 per cent in 2008.

There are signs of manufacturing recovery and the forecast is for a decline of 0.2 per cent in 2006 but for growth of 0.8 per cent in 2007 and 1.2 per cent in 2008. In 2007 the main sectors driving manufacturing growth are likely to be: metals; transport equipment and other manufacturing. There are few signs of any turnaround in either wood, paper and publishing or in textiles; both of which, are forecast to decline significantly in 2007 and in 2008. It is unlikely that electronics will recover quickly and we expect that to take place in 2008 or later. When a sustained increase in the data for this sector is seen then the forecast will be lifted. We remain downbeat about the sector because many of the firms are still downsizing, there is an increasing focus on raising productivity and the sector does need increased external demand because it remains the largest export sector in Scottish manufacturing.

The forecast for agriculture remains weak with a contraction of 0.6 per cent forecast for 2007 but towards the end of the forecast horizon there is likely to be some slight growth. In electricity, gas and water supply, the main stimuli to increased output here will be an increase in electricity demand from the manufacturing sector. That is likely to take place from 2008 onwards (perhaps even in late 2007). Opinion and data regarding construction remains upbeat. The previous forecast was for 5.7 per cent and the outturn was 6.4 per cent. The forecast has been revised up to 6.7 per cent in 2007 and 5.0 per cent in 2008. There is still strong private residential demand for housing; there are a significant number of PPP projects (particularly schools but also in health and transport). The outcome of the Edinburgh trams project and Edinburgh Airport Rail

Table 3: Forecasts of Scottish Employment (000s) and Net Employment Change, 2005-2008

	2005	2006	2007	2008
Total Employment	2,362.1 (57,800)	2,386.7 (24,600)	2,421.1 (34,400)	2,450.8 (29,700)
Agriculture	31.0 (700)	31.3 (400)	30.6 (-700)	30.3 (-400)
Manufacturing	232.5 (-5,300)	226.3 (-6,200)	225.8 (-600)	226.4 (700)
Construction	126.6 (4,700)	140.6 (14,000)	149.9 (9,300)	156.9 (7,000)
Services	1,936.2 (59,300)	1,952.4 (16,200)	1,978.4 (26,100)	2,001.9 (23,400)

Source: Fraser of Allander Institute, June 2007

Link (EARL) could have a substantial impact on this sector if these projects are cancelled. Even now, but announced after the forecast was finalised, there are concerns over one year delays to major transport infrastructure projects. These in aggregate are likely to slow jobs growth in the construction sector.

Overall, the forecast for the Scottish economy is optimistic but that is primarily because these data prove that the economy is on an upward trend and has been for some time. The forecasts of GVA and output are consistent with the supporting data and feed into our employment forecasts.

Table 4: Forecasts of Scottish Unemployment, 2005-2008

	2006	2007	2008
ILO Unemployment	135,800	134,600	134,200
Rate	5.3%	5.1%	5.0%
Claimant Count	87,300	80,300	79,500
Rate	3.3%	2.9%	2.9%

Source: Fraser of Allander Institute, June 2007.

Employment

Our forecasts of employment are presented in Table 3 with the net employment change figure in brackets. The employment figures are calibrated on the employers' quarterly survey series as given in Table 6.06 in Economic and Labour Market Review, National Statistics.

Employment is forecast to rise to 2,421,100 in 2007 from 2,386,700 in 2006. This is a net job gain of 34,400. In the

following year the forecast is for a gain of 29,700 jobs taking employment to 2,450,800. The previous jobs forecast for 2006 was definitely low and the forecast and productivity data have been revised to take account of this. At the moment the QEJS still indicates a considerable loss of jobs in retail; hotels & catering; transport services and financial services but as stated in the last QEC these data may be revised. The forecast for the service sector is for a net job gain of 16,200 jobs in 2006 and for 26,100 in 2007. This will mean that the number of jobs will rise from 1,936,200 in 2005 to 2,001,900 in 2008. It is still difficult to quantify the effect of migrant workers while those with second jobs have increased by 9,000 over the year to the period Jan-Mar 2007. Within services the forecast suggest that the strongest job creation will come in REBS; public services; financial services and retail.

In manufacturing there has been a steady decline in employment over recent years. The forecast is for that to continue with a net job loss of 6,200 in 2006 and of 600 in 2007. Manufacturing jobs are forecast to fall from 232,500 in 2005 to 226,400 in 2008 (a decline of 6,100 over the period). Textiles; wood, paper & publishing; electronics and mechanical engineering continue to appear to have the largest job losses. This is exacerbated by increasing productivity within manufacturing coupled with weak growth therefore leading to significant job losses. Over the period 2006-10 the outlook is much more promising with greater growth from 2008 onwards. Job creation is forecast to be positive in 2008 and 2009. The forecast is also predicated on previous performance and data so if the expected upturn materialises by 2008 and is sustained it is likely that the forecast for manufacturing employment will be upgraded accordingly.

Agriculture is forecast to gain 400 jobs in 2006 even though the sector has contracted in terms of output. Through 2007 and 2008 however the sector is forecast to lose about 500

Figure 2: FAI Forecast Error and Actual GVA, 1986-2006

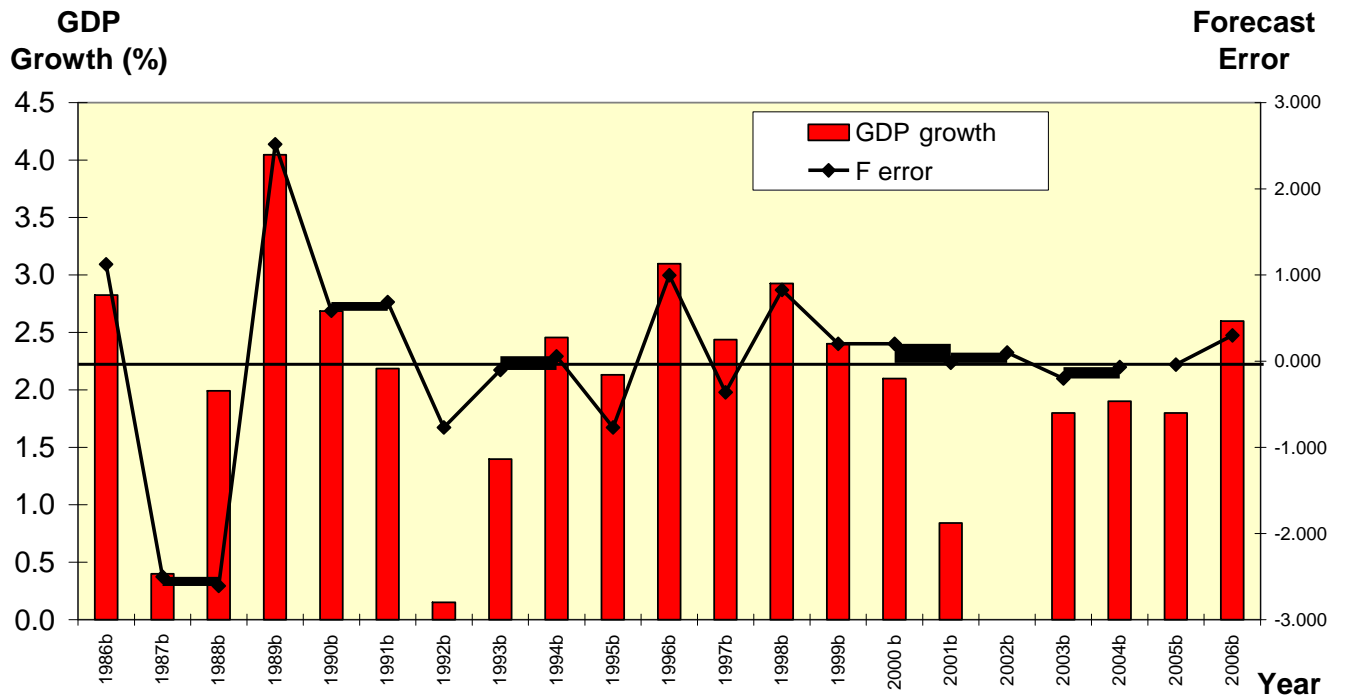
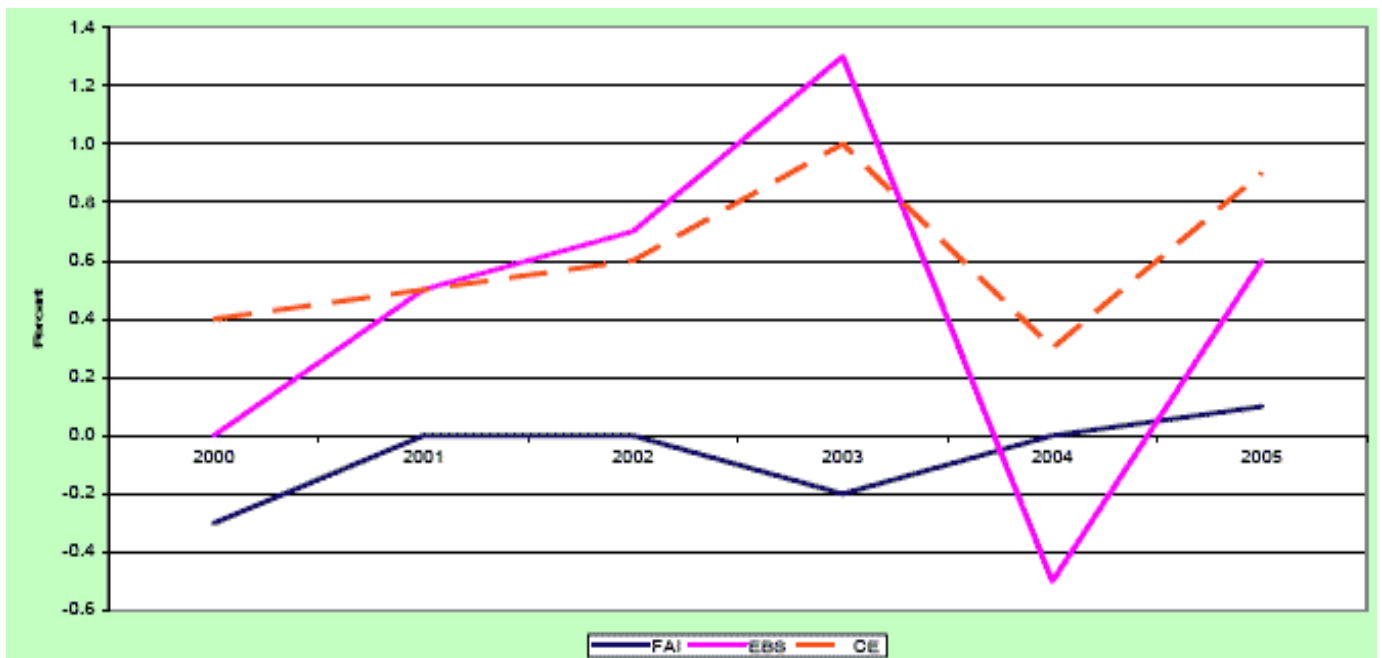


Figure 3: Forecast error of the three main forecasters in Scotland, 2000-2005



jobs per year. In electricity, gas and water supply there is evidence of strong productivity growth and the employment forecast there is for the sector to shed 1,400 jobs in 2006 but to increase employment by 400 in 2007. If productivity continues at its current pace then it is likely that the jobs forecast will become negative again in 2008. If manufacturing picks up more strongly however then this is less likely to happen.

Construction has been responsible for strong net job gains in 2005 (4,700) and in 2006 (14,000). The forecast is for this to continue with 9,300 jobs created in 2007 and 7,000 gained in 2008. Construction employment is forecast to rise from 126,600 in 2005 to 156,900 in 2008.

Unemployment

We present our forecasts of unemployment in Table 4. Both the ILO measure and claimant count measure are given. The preferred measure of unemployment however is ILO unemployment as given by the LFS.

There is little change to the forecasts of unemployment. As previously mentioned the unemployment trend is relatively flat. ILO unemployment forecasts that were presented in the last quarter were for 5.3 per cent in 2006 and 5.2 per cent in 2007. The outturn for 2006 is 5.3 per cent and for 2007 the forecast is 5.1 per cent in this quarter, similar to the last forecast. There is a general trend of more people entering the labour market in Scotland but as performance is good there is no evidence or signs of a significant pressure on unemployment rates. ILO unemployment in 2006 was recorded at 135,800 and is forecast to fall to 134,600 in 2007. Claimant count is forecast to fall from 87,300 in 2006 to 80,300 in 2007 (2.9 per cent). There is no evidence to suggest that unemployment will not remain at low and stable levels.

Forecast accuracy

Figure 2 below, presents GVA forecast error (actual minus the forecast) and actual outturn data for Scotland for a one year hence forecast. The outturn data is taken as the growth rate that was first made available for that year. The period is for 1986 to 2006 and the forecasts are bi-annual (spring and autumn). The accuracy is calculated as; 'actual value minus forecast value'. The graph demonstrates this for the period 1986 to 2006. GDP growth is on the left axis and forecast error on the right axis. The straight line indicates an error of zero so the closer the black line follows it then the smaller the error is. The graph demonstrates that since 1999 to 2006 the forecast error is close to zero.

Figure 3 depicts data gathered from the three main forecasting bodies in Scotland (Scottish Executive, *Scottish Economic Report*, June, 2006) and demonstrated that the FAI forecasting error is considerably less than that of our competitors. Previous evidence has shown that the FAI forecast is robust, consistent, unbiased and relatively accurate. Forecasts should be assessed on these properties as well as how informative they are and do they meet the direction and magnitude of change criteria. There is little point in having a small margin of error if the direction of the change forecast is consistently wrong. For the period 2000-06 the FAI forecast Mean Absolute Error (MAE) is 0.155 and Root Mean Square Error (RMSE) is 0.176.

Kenneth Low
25 June 2007

Endnote:

¹ This is calculated on an annual basis only and does not apply to quarterly data