

Quarterly Economic Commentary

**we gratefully acknowledge the contribution of the
Buchanan and Ewing Bequest
towards publication costs**

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The Quarterly Economic Commentary is published in March, June, September and December. Annual subscription rates are £50.00, or £15.00 per single issue. Queries should be addressed to the Secretary, Fraser of Allander Institute.

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QUARTERLY ECONOMIC COMMENTARY

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OUTLOOK AND APPRAISAL

The latest output data from the Scottish Office for the first quarter 1996 indicate that while the manufacturing sector performed better than its UK counterpart, the overall performance of the production and construction sectors was appreciably worse. The output of the production and construction industries (excluding oil and gas) fell by 0.8% in the first quarter, compared with no change in the UK. The Scottish production sector (including oil and gas) grew by 0.2%, slightly less than the 0.3% outturn for UK production. What principally accounts for the significant difference overall is the performance of construction in the two countries. Scottish construction output fell markedly, by 3.9%, while its UK counterpart contracted by only 0.5%. Manufacturing, on the other hand, grew by 0.2% in Scotland, which contrasts with a 0.3% fall in manufacturing in the UK as a whole. Within manufacturing, the electrical and instrument engineering sector (electronics) grew by 2% in the quarter compared with no change in the output level of its UK counterpart. This represents a deterioration on performance in the previous quarter where the growth of Scottish electronics output has now been revised up from 2% to 3.8%.

The data for the most recent quarter display the usual variability, with manufacturing now performing better while construction is performing worse than in the UK; a complete reversal of the relative position in the fourth quarter 1995. Given this variability and the tendency for the Scottish data to be revised more frequently than the UK data, it has been the practice of recent Commentaries to consider the quarterly growth figures in the context of a longer time period. Figure 1, focuses on the growth of manufacturing output by principal sector during the recovery phase: Q1 1992, to the latest data point Q1 1996. The chart confirms the finding of recent quarters that Scottish manufacturing (15.7%) has outperformed UK manufacturing (8.3%) during the recovery. But this is exclusively due to the superior performance of the Scottish electronics industry.

With every other principal manufacturing sector performing less well in Scotland, the growth of Scottish manufacturing excluding electronics (-6.6%) compares very unfavourably with the UK (+5.2%).

Is Scotland developing a dual manufacturing economy?

The poor performance during the recovery of the non-electronics manufacturing sector in Scotland has led some to ask whether Scotland is developing a dual manufacturing economy. And, if so, whether the poor performance of the rest of manufacturing is a consequence of the rapid growth of the electronics sector. Before these questions can be considered, however, it is important to establish whether the recent short-fall in the performance of the non-electronics manufacturing sector is more than a mere cyclical phenomenon. The Scottish economy has tended to perform better in recessions and worse in recovery relative to the UK. It is, therefore, possible that many Scottish sectors have performed worse than their UK counterparts in the recovery phase and yet still be growing at much the same trend rate. We can call this the "bounce-back" effect for UK manufacturing.

Neutralisation of the effects of "bounce-back" requires an examination and comparison of UK and Scottish sectoral growth between one peak in the economic cycle and the next. In Figure 2, the growth of each UK manufacturing sector between its last peak and the latest data point (Q1 1996) is subtracted from the growth of its Scottish counterpart calculated on the same basis. The figure appears to establish the structural nature of the duality: Scottish manufacturing overall has grown 8.4% points faster, while the removal of electronics produces a growth rate which is 12.5% points lower! We say "appears" because the latest data point (Q1 1996) almost certainly does not represent the peak of the current cycle. There is, therefore, a (remote) possibility that faster Scottish non-electronics growth to the next peak will remove much of the differential. Nevertheless, on the evidence to date it would appear that non-electronics manufacturing growth is appreciably below its UK counterpart for non-cyclical reasons.

Recent research in the Institute using the AMOS¹ computable general equilibrium (CGE) model has explored the potential Scottish displacement effects of inward investment.² The research indicates that if inward investment puts upward pressure on Scottish wages significant displacement effects will occur via the labour-market in the rest of manufacturing. This is shown to be the case even when the incoming investment displays high levels of export intensity (which is the case in electronics). An examination of the growth of real average earnings between 1990 and 1995, which roughly corresponds to the period of the current cycle, indicates that while the *level* of earnings remained below the UK level in production, manufacturing and services, the *rate of growth* of earnings was generally faster in Scotland. Moreover, the fastest rate of earnings growth was in non-electronics manufacturing: 1.3% p.a. in Scotland compared with 0.3% in the UK. And it was in this broad sector where the gap in earnings growth between Scotland and the UK was the largest. However, these data are not sufficient to show whether there has been a deterioration in the labour cost competitiveness of Scottish industry compared to the UK. For that, we also need to consider the change in labour productivity.

The Institute estimates that the rate of growth of labour productivity was generally faster in Scotland than in the UK between 1990 and 1995. The overall rate of growth of productivity was 2.7% p.a. in Scotland compared with 0.7% p.a. in the UK. The superior Scottish performance applies both to manufacturing (6% p.a. in Scotland against 2.8% p.a. in UK) and to services (2.2% p.a. in Scotland against 0.4% p.a. in UK). However, when the electronics sector is removed from manufacturing the relative Scottish superiority vanishes. Productivity growth in non-electronics manufacturing between 1990 and 1995 amounts to 2.1% p.a. in Scotland compared to 2.3% p.a. in the UK. Figure 3 brings the earnings and productivity data together by subtracting estimated productivity growth from real earnings growth. These data suggest that Scotland's unit labour costs, or cost competitiveness, improved both absolutely and relative to the UK during the 1990 to 1995 period in all major sectors, including production, manufacturing and services. This appears to be a considerable achievement and we propose to undertake further research both to check these preliminary findings and to explore the underlying reasons. Nevertheless, the extent to which the superior performance of production and

manufacturing has depended on the electronics sector is revealed by focusing on non-electronics manufacturing alone. When the electronics sector is removed, the data indicate a small improvement in absolute competitiveness but a significant relative deterioration in unit labour costs and cost competitiveness relative to the UK.

The evidence discussed so far is, therefore, not inconsistent with the view that a dual economy has emerged within Scottish manufacturing. Although, there is at present *no* evidence to support the view that this has been the *consequence* of the growth of the Scottish electronics. Moreover, we must be careful about drawing firm conclusions from these aggregate data. First, an improvement or deterioration in unit labour costs may not represent a parallel change in cost competitiveness if structural change has occurred within sectors leading to substitution between capital and labour: the change in overall unit costs may therefore differ appreciably from the change in unit labour costs. So, for example, Scottish industry and services may have experienced a relative improvement in unit labour costs because of a move to better practice techniques employed elsewhere which involve greater capital intensity. Secondly, changes in cost competitiveness may not be reflected in price competitiveness, at least in the short run. Nevertheless, the relative and absolute fall in non-electronics manufacturing output does seem to suggest that if structural change has occurred within the sub-sector it was of a type and sufficient scale to affect output performance.

During the last five years the Scottish economy has been affected by significant restructuring and closures in several sectors. An examination of the decline in non-electronics manufacturing output from each sub-sectors previous peak to the latest data point reveals that 61% of the decline is accounted for by 3 of the 10 sectors: Metals & Metal Products; Transport Equipment; and Other Manufacturing. Moreover, a further 19% is accounted for by two other sectors: Food & Tobacco; and Textiles, Footwear, Leather & Clothing. Figures 4 to 11 present the differential quarterly growth performance (in terms of three quarter moving averages) between Scotland and the UK during the past five years in each of these and other key sectors. Metals & Metal Products (Figure 4) accounts for 32% of the decline and the timing of the poor differential growth performance clearly reflects the closure of Ravenscraig and retrenchment in the Scottish steel industry. The other selected sectors all display a more fluctuating pattern in their

differential growth. But at least three of the sectors have been subject to marked structural change in recent years. Transport equipment (Figure 5) has suffered from the downturn in the demand for civil aircraft, the further run-down of the shipbuilding industry and the scaling down of the Rosyth naval dockyard. Food & Tobacco (Figure 7) has been hit by specific closures e.g. Nestle in Paisley; and the Textile industry (Figure 8) has undergone significant corporate restructuring in, for example, carpets and has been subject to closures e.g. jute production in Dundee. Other sectors, such as chemicals (Figure 10, accounting for 4% of the decline), have also experienced major restructuring.

It therefore appears that a substantial proportion of the decline in non-electronics manufacturing output has been due to structural change reflecting the differential nature of Scottish industry compared with its sectoral counterparts elsewhere in the UK. The extensive nature of this change will clearly have affected aggregate earnings and productivity growth, with the result that it becomes difficult to generalise about the change in competitiveness in surviving industry because one is not comparing like with like. For example, the closure of Ravenscraig which had high labour productivity and was not a marginal plant in terms of Scottish metals & metal products, may have served to reduce average productivity in the sector even though no change had occurred in other parts of the industry in Scotland.

From our researches so far it is not therefore possible to conclude that a dual manufacturing economy has emerged in Scotland. If the significantly poorer performance of non-electronics manufacturing is the consequence of structural change peculiar to Scotland then this will be something of a one-off effect and growth might be expected soon to move back into line with UK sectoral performance. However, poor output performance and the decline in labour cost competitiveness in non-electronics manufacturing during the recent cycle appears to be pervasive and is a cause for concern. Further research is required to establish whether this does or does not indicate the emergence of a dual manufacturing economy in Scotland.

Outlook

Growth in the UK and Scottish economies is expected to be weak in 1996 overall but is should pick up in the final quarter of the year as the

growth of consumer spending more and more compensates for the weakness of net trade (see **Economic Background** section). The Institute's short-term forecasting model is predicting a slight decline in manufacturing production in the second quarter of this year, followed by no change in the third quarter. In the fourth quarter, however, we expect to see stronger growth emerge producing a predicted outturn of 1.7% growth over the third quarter. The prospects for 1997 depend on the upturn in consumer demand being sustained and the realisation of the forecast expansion of net trade with the growth of exports rising and growth of imports falling.

ENDNOTES

1. AMOS is an acronym for "a micro-macro model of Scotland".
2. Gillespie G, McGregor P, Swales JK and Yin YP, **The Regional Impact of Inward Investment: Product Market Displacement, Labour Market Effects and Efficiency Spillovers**, Paper prepared for the Scottish Economist's Conference, The Burn, Edzell, September 1996.

13 September 1996

Figure 1: Manufacturing Output in Scotland and the UK during the Recovery: Q1 1992 to Q2 1996 (Percentage Change)

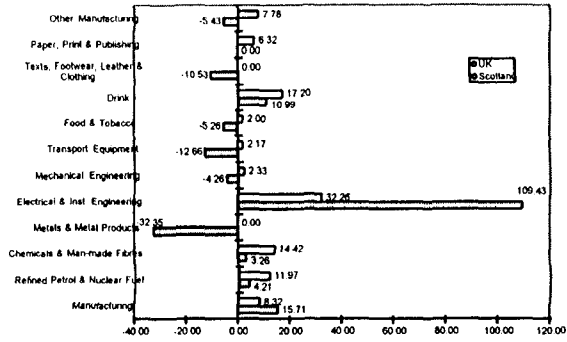


Figure 2: Scottish:UK Differential Trend Output Performance: Manufacturing Sectors Previous Peak to 1996q1

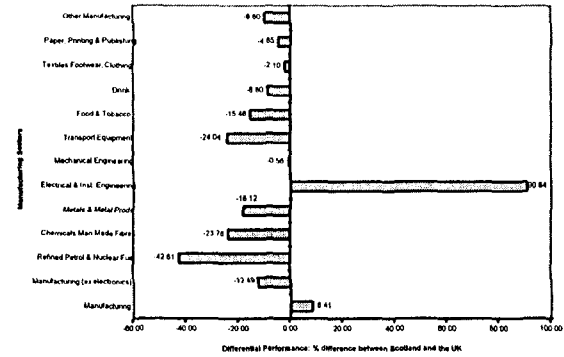
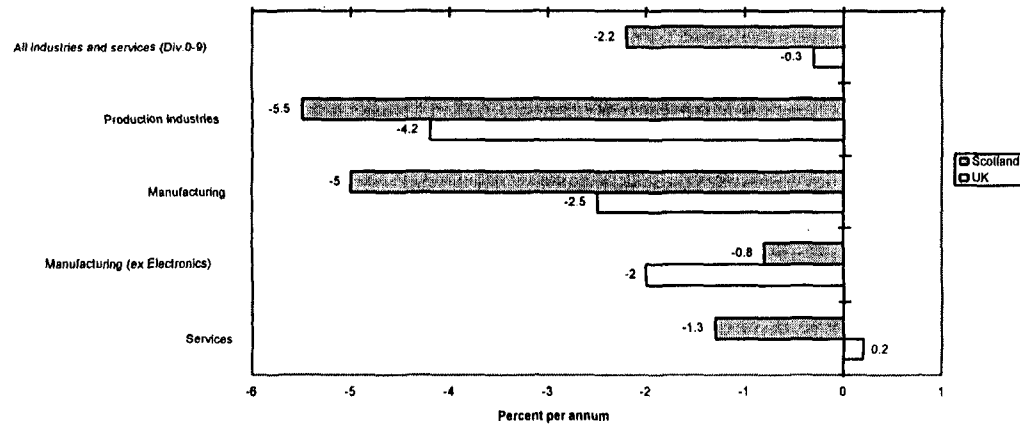


Figure 3: Real Earnings Growth minus Productivity Growth in Scotland and UK, 1990 to 1995



Source: Scottish Office and FAI

Figure 4: Differential Quarterly Growth in Metals & Metal Products between Scotland and UK, 1990q4 to 1996q1

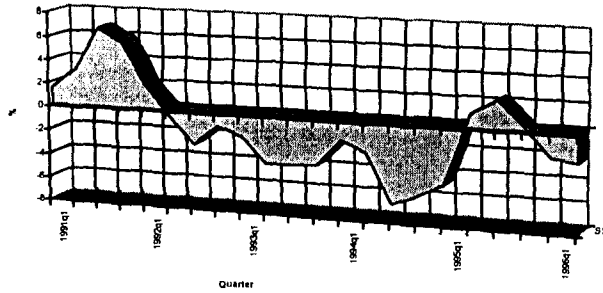


Figure 5: Differential Quarterly Growth in Transport Equipment between Scotland and UK, 1990q4 to 1996q1

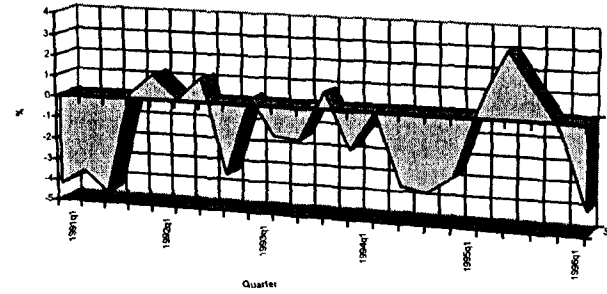


Figure 6: Differential Quarterly Growth in Other Manufacturing between Scotland and UK, 1990q4 to 1996q1

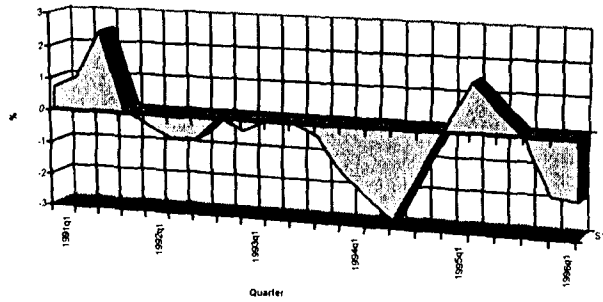
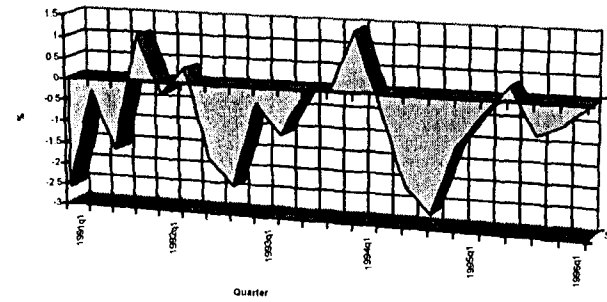


Figure 7: Differential Quarterly Growth in Food & Tobacco between Scotland and UK 1990q4 to 1996q1



Source: Scottish Office and FAI

Note: Data are presented in terms of three-quarter moving averages.

Figure 8: Differential Quarterly Growth in Textiles, Clothing & Footwear between Scotland and UK, 1990q4 to 1996q1

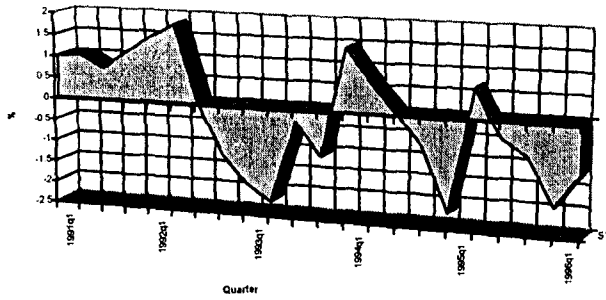


Figure 9: Differential Quarterly Growth in Mechanical Engineering between Scotland and UK, 1990q4 to 1996q1

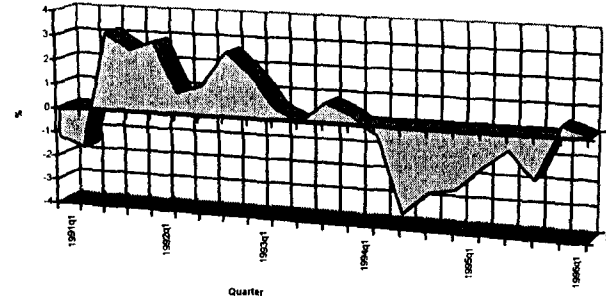


Figure 10: Differential Quarterly Growth in Chemicals between Scotland and UK, 1990q4 to 1996q1

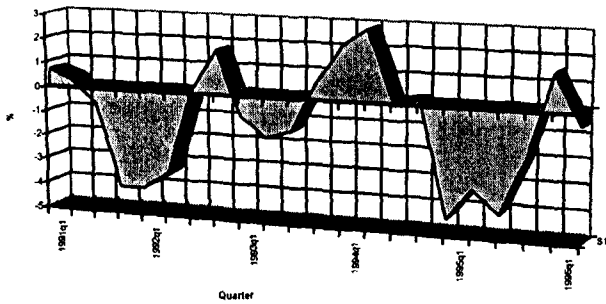
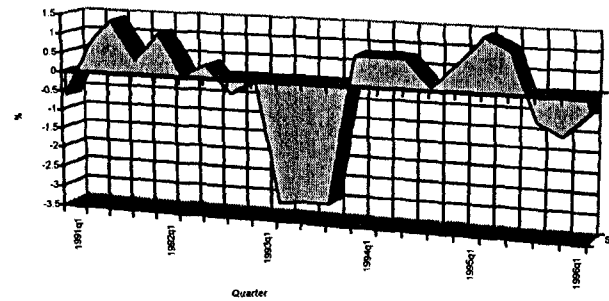


Figure 11: Differential Quarterly Growth in Paper, Printing & Publishing between Scotland and UK, 1990q4 to 1996q1



Source: Scottish Office and FAI

Note: Data are presented in terms of three-quarter moving averages.