MORE OR LESS COMPETITIVE?
A CASE STUDY OF THE SCOTTISH ECONOMY

Professor Sir Donald MacKay

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FOREWORD

In this paper, Professor Sir Donald MacKay examines the question of the competitiveness of the Scottish economy. In so doing, he revisits one of his earlier reports, 'Performance of the Scottish Economy 1955-88', and brings the story up to date. While the earlier report had arrived at a generally gloomy conclusion, there is much in the 1989-95 period that allows Sir Donald to reach a much cheerier position in the present work.

The marked improvement in the performance of the Scottish economy since 1988 is traced to a range of factors, including fiscal transfers, inward investment and the impact of North Sea Oil. There is also evidence of the effect of the UK wide economic reforms that characterised the 1980s.

An important point in Sir Donald’s argument is that a sensible measurement of Scotland’s or the UK’s economic progress since 1988 can only be made relative to other advanced economies. By this standard the UK is shown to have done well and to have improved its competitive position. When judged against the overall UK pattern, Scotland can be said to have gained ground since 1988, particularly in terms of GDP per capita. A strong driving force in this shift seems to be the improved employment situation in Scotland relative to the UK. There is clear evidence that Scotland has shared the general UK improvement in its competitive position.

When he turns to the causes of this enhancement in relative economic performance, Sir Donald examines labour, capital and enterprise. While the first two are found to have played no special role, it is suggested that the impact of enterprise, particularly coming through the ancillary effect of foreign direct investment (FDI) and privatisation, have been highly beneficial.

In terms of the Scottish economy, North Sea Oil is identified as an important underlying influence. Foreign direct investment is accorded a more dominant role through what Sir Donald labels the ‘loudhailer’ effects of demonstrating good practice and setting standards. The importance of government policy in encouraging this FDI is also emphasised here, as is the continuing net fiscal injection into Scotland from the rest of the UK.
These sources of Scotland's improved economic performance are all demonstrated by way of a careful and informative use of statistics. The picture is a positive one, but Sir Donald ends on a note of caution. There is an existing base of successful large Scottish companies, and there is a healthy level of FDI, but the future is seen as relying on the successful implementation of policies to encourage the development and growth of indigenous businesses.

The David Hume Institute is grateful to Sir Donald MacKay for producing such a highly readable and informed discussion on a topic of great significance to the prosperity of Scotland. As always it is appropriate to point out that the Institute itself holds no collective opinion on the issues raised here. That said, however, we feel certain that we can express our satisfaction at being able to publish this important contribution to public knowledge and discussion on what is a most important issue.

Hector L MacQueen and Brian G M Main
Directors
The David Hume Institute
December 1996
MORE OR LESS COMPETITIVE?
A CASE STUDY OF THE SCOTTISH ECONOMY

by Professor Sir Donald MacKay

Introduction

The proximate origin of this paper was an approach from The David Hume Institute asking whether I had thoughts on any topic worth committing to paper. Some may consider the answer must be self-evidently in the negative, but they need not read on. For those who might, the former academic in me seldom fails to rise to a challenge. In any event, the approach offered an opportunity to try to rationalise a train of only loosely connected thoughts. This is what I attempt below. The views and opinions I offer are my own and should not be attributed to any other persons or organisations with whom I have a connection.

The topic I have chosen has both historic and contemporary roots. In 1989 I was the author of a report ("Performance of the Scottish Economy, 1955-88") published for the (then) Scottish Development Agency. This reached rather gloomy conclusions about the competitiveness of the Scottish economy as demonstrated by its performance up to that date. Rather to my surprise, a subsequent version of that report was thrown down like a gauntlet in one of those lively debates which sometimes characterise our House of Commons. These often generate more heat than light—and this occasion obeyed the general rule!

The reason for this inter-party rivalry quite escaped me. The burden of the report was that over the long period 1955-88 the Scottish economy had underperformed in most economic circumstances, over the cycle of economic events and under the management of different governments. The first sentence of the Executive Summary read:

"The rate of growth of Scottish GDP has been less than that for the UK over most of the period since 1955."

In short, the analysis suggested that an improvement in the performance of the Scottish economy relative to the UK would be
highly desirable, especially given the fact that successive administrations had favoured Scotland in terms of public expenditure and regional policy. Needless to say the moral I drew from this was that we Scots had more responsibility for the 'problem' than anyone else—a thought which appears to have escaped the political combatants and, indeed, the media.

The contemporary root to the title has three branches. The first is the improved performance of the UK economy viewed in an international context. The second is an increasing interest in the concept of the competitiveness of economies and the factors which underpin it. The most evident manifestation of this interest is the amount of wordage recently devoted to the competitiveness of the UK in the form of the three white papers on the subject. Of necessity, I promise to be more brief!

The third is a growing realisation that in the period from 1988, there is an accumulation of evidence that the performance of the Scottish economy has, at last, shown a marked improvement within the UK context. I will argue that the improved performance depends on a number of factors, including fiscal transfers to Scotland, a framework of support to inward investment dating back over three decades, and the impact of North Sea oil and gas which represents a geological accident rather than policy design. However, Scotland has also benefited from the broader UK policies and economic reforms of the 1980s, which have produced such a spectacular increase in manufacturing productivity.

What Is Competitiveness?

In the sense in which the word is used in the white papers, competitiveness is taken as the ability to provide the citizens of a country with living standards comparable with other advanced economies. More precisely, competitiveness is:

"the degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term"

(Competitiveness white papers, 1994 and 1995).
The approach adopted for measuring competitiveness is a form of 'benchmarking', similar to the technique used in assessing relative corporate performance. One strength of this technique is that it provides a cross-sectional, peer group comparison in a given period and not a time-series analysis of the performance of the same economy over different periods. In the latter case, outcomes are likely to be heavily influenced by changes in the world economic environment between different periods. Hence, if the UK economy in a given period grows more slowly than in a previous period, this may simply be because all economies tended to grow more slowly. A cross-sectional analysis has particular relevance in the increasingly open world economy, as most economies are subject to the same general influences in a given period.

The analysis below considers how the UK economy has performed relative to its peers (other G7 and OECD countries) in the period since 1979. Competitiveness is evaluated in a particular fashion. That is, the fundamental test is the ability of the economy to match the living standards offered by other comparable countries. In terms of what we can measure, the acid test is GDP per capita. The virtue of this approach is that it concentrates on long-term fundamentals, not short-term considerations (eg. the impact on, say, the growth of exports of so-called 'competitive' devaluation); that is, outcomes depend on the level of productivity at a given moment in time, and improvements in living standards depend on the rate of change of productivity over time.

**UK Performance**

The concept of competitiveness is highly germane to any discussion of the 1980s 'reforms' and the subsequent performance of the UK economy in the 1980s and 1990s. It is easy to demonstrate that the UK economy grew more slowly in the 1980s and 1990s than in the 1960s and 1970s, but this was also true of the G7 and OECD economies as a whole. The more interesting policy question is whether the reforms were associated with a deterioration or an improvement in the performance of the UK relative to other advanced economies in the 1980s and 1990s.

For the UK the most relevant peer group is the G7 or the OECD countries, comprising the advanced industrialised economies. At
first blush, the outcome is not very encouraging. The third white
paper estimates that, in terms of real output per head on a
purchasing power parity basis, the UK ranked 16th out of 25 OECD
economies in 1994; much the same position that it occupied at the
outset of the 1980s (the UK ranked 14th in 1979 and 17th in 1980).

While the above comparison demonstrates that there has been no
revolution since 1979 in our 'league position' measured by per capita
income, viewed from other angles, new and valid perspectives also
emerge. For example, in 1970 (the earliest year for which a precisely
similar comparison can be made) the UK had been ranked 12th and
this itself was a lower position than the UK would have occupied in,
say, the 1950s when the UK would certainly have ranked in the ‘top
ten’ OECD economies. In short, the 1950s, 1960s and 1970s saw a
continued slide in UK GDP per capita relative to other advanced
economies. That slide did not continue in the 1980s and 1990s. Our
‘league position’ did not improve, but we did halt the slide down the
rankings.

Again, if one reviews the relative positions of the OECD economies
in terms of GDP per capita, it is immediately evident that the UK
economy presently enjoys a standard of living very close to that of
the most advanced economies, with the exception of Luxembourg,
the USA, Switzerland and Norway which are ‘out on their own’. In
short, excepting these four, differences in per capita income amongst
the advanced economies are relatively small. Moreover, a
comparison of 1979 and 1995 outcomes would demonstrate that in
terms of income per capita the gap between the UK and other major
and richer economies (particularly France and Germany) narrowed
appreciably. The change does not appear to be short-term and
cyclical, but rather long-term and secular.
The level and growth rate of GDP per capita depend on the level and growth rate of productivity. However, international cross-country comparisons of productivity levels and changes are extremely difficult and the results of such comparisons are always unsatisfactory. This is because it is extremely difficult to measure outputs in the service sector, which now accounts for more than 50% of employment in most advanced economies.

For this reason, international comparisons rest on the measurement of manufacturing productivity, which only accounts in the UK for one-fifth of all employment. While we have to restrict measurement to manufacturing, there are good reasons for supposing that the comparison of manufacturing output per capita is highly relevant to our present exercise.

First, “the overall gap in GDP per head between the UK and France and Germany is roughly the same as the productivity gap in manufacturing”, this suggesting that the productivity gap for services is similar to that in manufacturing (Eltis and Higham (1995)). Indeed many of the factors underlying technological change...
in the 1980s and the 1990s, especially the ‘information revolution’, seem as applicable to services as to manufacturing. Second, international trade accounts for a much higher proportion of manufacturing than service output, so that manufacturing is much more exposed to international competition and its competitiveness is, therefore, of particular importance. Third, the UK clearly enjoys a comparative advantage in important tradable services, especially financial services, and this appears to have increased and not diminished in the period since 1979.

The evidence on manufacturing productivity is very encouraging. As of 1994, manufacturing output per capita remains behind that for France, Germany and the USA but this gap has narrowed very appreciably since 1979. The only G7 country which matches the growth in UK manufacturing productivity is Japan. Figure 2 illustrates productivity levels in 1979, 1989 and 1994.

Figure 2: Manufacturing Productivity (per hour)

![Graph showing manufacturing productivity levels in 1979, 1989 and 1994.]

Source: “Competitiveness: Creating the Enterprise Centre of Europe” DTI (1996), p4

It might be argued that the above figure is taken from the third Competitiveness white paper and that the white paper may have had an interest in presenting the outcomes in a favourable light.
However, detached observers have reached a similar conclusion. Nicholas Oulton (1994a, p51) concluded that:

- "compared to Japan, France, Germany and the US, "the UK had the fastest growth rate of productivity whether measured on a per person or a per hour basis, and whether measured peak-to-peak or trough-to-trough";

and

- "The relatively rapid productivity growth in the UK has led to a substantial narrowing of the productivity gap over the last 13 years." (i.e. 1979–92).

All the evidence supports the view that post-1992, the UK continues to enjoy relatively rapid manufacturing productivity growth compared to other G7 and OECD countries.

The evidence is, then, consistent with the view that over the 1980s and the 1990s to date there has been, compared to previous periods, an improvement in the UK's relative performance:

- in terms of GDP per capita and over the period as a whole, there has been little change in the UK's relative position compared to all OECD countries after a long post-war period of relative decline;

- the UK has enjoyed over the period since 1979 a significantly higher rate of growth in manufacturing productivity than other major advanced economies; and

- current trends in income growth, productivity improvement and unemployment are favourable, at least compared to most other EU member states.

The Scottish Economy

I now turn to the Scottish experience, primarily viewed as a region within the context of the UK economy. Given the pessimism which attached to my review of performance over 1955-88 (in the 1989 Report) it is worth beginning with a quick look at whether anything appears to have changed.
That analysis took 1955 as its starting point, this being regarded as marking a watershed between the period of ‘post-war reconstruction and controls’, and the operation of a ‘peacetime economy’. It distinguished 4 major phases:

- 1955 - 1966
- 1967 - 1972
- 1972 - 1979
- 1980 - 1988

and concluded that “over almost all the period from 1955 the rate of growth of Scottish GDP has been lower than that for the UK” and that “the Scottish economy has been a poor generator of employment”, viewed against the UK taken as the pattern economy.

I update below the analysis on employment and GDP changes contained in that report, including the data for the period from 1988.

Table 1

<table>
<thead>
<tr>
<th>Period</th>
<th>Scotland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955-66</td>
<td>1.7</td>
<td>7.2</td>
</tr>
<tr>
<td>1967-72</td>
<td>(4.4)</td>
<td>(3.0)</td>
</tr>
<tr>
<td>1973-79</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>1980-88</td>
<td>(7.3)</td>
<td>(3.9)</td>
</tr>
<tr>
<td>1989-95</td>
<td>0.7</td>
<td>(1.8)</td>
</tr>
</tbody>
</table>

() indicates falling employment

Source: Office for National Statistics
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Table 2
Change in GDP, Scotland and UK (at factor cost; 1990 prices)

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Percentage Increase</th>
<th>Average Annual Change (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scotland</td>
<td>UK</td>
</tr>
<tr>
<td>1955-66</td>
<td>35.8</td>
<td>34.9</td>
</tr>
<tr>
<td>1967-72</td>
<td>17.9</td>
<td>14.3</td>
</tr>
<tr>
<td>1973-79</td>
<td>3.3</td>
<td>8.0</td>
</tr>
<tr>
<td>1980-88</td>
<td>3.3</td>
<td>21.0</td>
</tr>
<tr>
<td>1989-94</td>
<td>5.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: Office for National Statistics
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Both tables indicate that relative to the UK pattern economy, the Scottish economy has improved since 1988 having performed more poorly in the early periods, particularly over 1973-88. Since 1988 GDP has risen more quickly than that for the UK and the number of employees in employment has risen by 0.7% against a 1.8% fall in the UK. Of course, persons who are self-employed are excluded from the latter series but here, too, there is a distinction between the 1979-88 and post-1988 period. Over 1979-88 the number self-employed in Scotland rose more slowly than in the UK and Scotland’s percentage share of total UK self-employed fell from 8.4% to 6.0%. Over 1988-95, self-employment grew in Scotland by 20% and in the UK by only 4%.

What this suggests is that the period from 1988 marks a clear break in Scotland’s poor relative performance in the UK context, not only compared with 1979-88 but also (at least in employment terms) with the much longer period dating back to 1955. Now let us look at the post-1979 performance in greater detail by charting the following Scottish to UK ‘relatives’:

- GDP per employee and per capita;
- personal disposable income per capita; and
- percentage unemployed.
together with indices (1988=100) of employees in employment and production and construction, for Scotland and the UK.

These provide a remarkably consistent picture. Taking Scottish GDP per capita as a percentage of the UK average (Figure 3), this was 94.4% in 1979, fell to a low of 93.5% in 1989 and then rose to reach 99.7% by 1994. GDP per employee showed no trend relative to the UK average over the period, being some 97% of the UK average in both 1979 and 1994. In short, the improvement in GDP per capita was due not to an improvement in GDP per employee relative to the UK, but to an improvement in the underlying employment situation relative to the UK as a whole.

Figure 3: GDP Per Capita and Per Employee

(Scotland as a % of UK)

Source: Office for National Statistics

The improvement in GDP per capita is reflected in the chart of Scottish disposable income per capita as a percentage of the UK average (Figure 4). The relative improved over 1979-84, fell back by 1988 and then rose sharply. The transfer of fiscal resources from England to Scotland results in an even more remarkable position as regards disposable income. Over 1991-94 (the latest available data) disposable income per capita has been above the UK average for the first time since the data series became available. In both 1992 and 1994, the Scottish average was slightly above the English average—
another first—and it has always been above the average for Wales and Northern Ireland (see Economic Trends, May 1996, p23).

**Figure 4: Personal Disposable Income Per Capita**

Scotland as a % of UK

Source: Office for National Statistics

Within the hierarchy of UK regions, Scotland was ranked 3rd highest in 1979 by GDP per capita, fell back to 5th position in 1988 and was ranked 2nd in 1994. The comparable rankings for Scottish average income from employment are 4th (1979), 3rd (1988) and 2nd (1994). In UK terms, Scotland must be considered a ‘well-off’ region.

The improvement in the unemployment relative (Figure 5) is more prolonged and marked than that for any other economic indicator. The unemployment relative (the unemployed percentage in Scotland as a ratio of the UK percentage) fell from 1979-83, rose back to its 1979 level in 1988/89 and then fell appreciably. Over 1992-96 there has been virtually no difference between the unemployment rate in Scotland and the UK, this being a record unequalled since systematic unemployment data first became available in the 1920s.
The employment, production and construction indices (Figures 6 and 7) confirm the broad story. Over 1979-88 trends in Scotland were less favourable than in the UK. In the subsequent period up to the present, they have been more favourable. Not surprisingly these trends find an echo in population changes. Over 1979-88 Scotland’s population fell year by year with only one exception; from 1988 population has increased on a year by year basis.
The evidence demonstrates that within the UK context the Scottish economy lost ground over the period 1979-88 (as it had done in earlier periods) but regained the ground lost in the subsequent period. Indeed, in terms of GDP per capita, disposable income and...
employment, the performance of the Scottish economy in the most recent period (and its current position) is a marked improvement on the historical record. As the UK has improved its competitive position internationally, the same conclusion must apply to Scotland.

As with the UK, a key feature has been the improvement in manufacturing productivity. Productivity in Scottish manufacturing industry was slightly above the UK average in 1979 and retained much the same margin through the early 1990s. Oulton (1994b) has concluded that, in 1990, Scottish labour productivity was 6% above the UK average and, as wage levels in Scotland are similar to the UK average, unit labour costs in Scotland were 7% lower than the UK average. On the available evidence this position has not altered materially in the most recent period.

Causes of Enhanced Productivity

I turn now to considering the causes of enhanced productivity, before returning to a more detailed consideration of the performance of the Scottish economy. As the increase in productivity in the UK and in Scotland has been much the same over the period since 1979, I look at the 'macro' UK picture first but where appropriate, refer to any characteristics which are particular to Scotland.

I take as a point of reference the analysis of UK competitiveness developed by Eltis and Higham (1995). The approach is a necessarily descriptive form of 'growth accounting' in which differences in performance are analysed in terms of changes in the quantity and quality of factor inputs—as the quantity/quality of land can be taken as fixed, this leaves labour, capital and enterprise inputs as the sources of growth.

Labour: The UK has experienced nothing short of a revolution in participation in higher education (HE) and, in this respect, enjoys a substantial advantage over all other countries with the possible exceptions of the US and Japan.

Higher education (HE) participation in the UK (for those aged 18–21) has increased from 12% in 1979 to 32% at present and through this period has always been higher in Scotland (presently it is 35%). However, HE participation is essentially a measure of inputs—more
important is the percentage of the cohort which graduates. Here, the UK advantage is even more marked. The UK higher education institutions (HEIs) are much less 'wasteful' than the HEIs in many EU countries, which typically have a high wastage rate. Given the rapid increase in HE participation in the UK in the 1980s and the low UK wastage rate, the advantage enjoyed by the UK over the other EU countries will have increased further by the end of this decade.

By way of contrast, the provision of vocational training remains unsatisfactory. Although a new vocational qualifications structure has been established (where Scotland has slightly outperformed the UK as a whole—see Figure 8) and the proportion of those aged 16-17 receiving job related training has risen over time, a series of National Institute of Economic and Social Research studies over 1985-94 suggest that the quality of UK vocational training provided lags significantly behind other countries, especially Germany.

Figure 8: 19 Year Olds attaining SVQ
Level II or equivalent

<table>
<thead>
<tr>
<th>Year</th>
<th>Scotland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
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<td></td>
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<tr>
<td>1994</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Labour Force Survey; Scottish Office Education & Industry Department

In short, the UK remains a world leader in academically based learning and a laggard in terms of vocationally based skills. The latter is an important weakness when the application of new technology requires a broader base of vocational training, allied to basic literacy, numeracy and interpersonal skills. The Scottish
situation is not significantly different from the UK situation in either regard and to the extent that Scotland may enjoy some slight advantage in terms of investment in education and training, this does not appear to have changed appreciably over the period. It appears unlikely that changes in the quality of the labour supply have been a major factor in explaining the increased competitiveness of the UK economy, or the relative improvement in the Scottish performance since 1988.

Capital: Here the evidence is rather more ambiguous. The Competitiveness white papers challenge the ‘conventional wisdom’ that the rate of investment in the UK is low relative to its peer group countries. It is argued that UK business sector investment as a share of GDP since 1980 has compared favourably both with the G7 countries (with the sole exception of Japan) and with the historic record. Figure 9 provides the details.

![Figure 9: Business Sector Investment as % of 1990 GDP](image)


While the comparisons of Figure 9 are relevant to a consideration of manufacturing productivity, it is arguable that restricting comparisons to business sector investment provides too narrow a focus for the economy as a whole. For example, it excludes...
investment in the public infrastructure (for example, in transport and communications) which is likely to be important for business efficiency. When the comparison relates to all investment as a share of GDP, then the UK has consistently invested a low proportion of GDP compared to the US, Japan, France and Germany (see Rickard (1996)).

It is sometimes argued that the ‘quality’ of capital investment in the UK is deficient, particularly with regard to expenditure on Research and Development (R&D) but, again, the evidence is more ambiguous. In terms of R&D expenditure as a percentage of GDP the UK’s relative standing compares favourably with most EU member states and is not noticeably behind France and Germany. Nor is it evident that high relative expenditure on R&D is associated with a dynamic economy. For example, Sweden has a very high R&D to GDP spend figure but a poor growth performance in the 1980s and 1990s. Again, the evidence suggests that while R&D as a percentage GDP is high for Germany, it is relatively weak in the fastest growing areas of technological development—information technology, genetics and microelectronics (see Norman).

We might sum up this evidence as follows. Business investment as a percentage of UK GDP has compared favourably with the G7 countries, but any advantage the UK has enjoyed in this respect has not been very substantial. A wider definition of investment, to include public sector infrastructure, suggests that the UK has invested a relatively low proportion of national income. As far as investment in R&D is concerned, the UK is not as much a laggard as the ‘conventional opinion’ would suggest but then it has hardly been a leader in this field either. All in all, it is difficult to make the argument that the rapid increase in UK manufacturing productivity was due to a higher input of capital investment. So, to the extent that the factor capital is an important part of the explanation, this explanation must be an improvement in the manner in which the stock of capital assets has been applied.

Enterprise: Changes in the quantity and quality of labour and capital inputs are not sufficient to explain the rapid improvement (both absolutely and relatively in UK productivity in the 1980s and 1990s). We must seek the major motor of change in the remaining factor of production, ‘enterprise’, which is interpreted broadly to embrace
'management', which might otherwise be taken to be included under labour inputs. Effectively the structural reforms of the 1980s 'empowered' enterprise and management. This has many different facets, but the most important have been privatisation and deregulation, the increased importance of small businesses, labour market reforms and inward investment.

The success of privatisation and deregulation, in terms of realising substantial improvements in productivity, is not in serious doubt. Across the public utilities and the manufacturing companies returned to private ownership (eg. British Steel), the productivity gains have been much greater than most economists expected. Eltis and Higham (1995) provide the following estimates of productivity growth in the privatised utilities. These show large productivity gains post-privatisation. The only public sector utility which matched this performance was Nuclear Electric, which was being prepared for privatisation in the period covered.

Table 3

Productivity Growth in the Privatised Utilities

<table>
<thead>
<tr>
<th>Privatised Utilities</th>
<th>Year in which privatised</th>
<th>Average annual increase in labour productivity since privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Telecom</td>
<td>1984-85</td>
<td>7.0</td>
</tr>
<tr>
<td>British Gas</td>
<td>1986-87</td>
<td>3.7</td>
</tr>
<tr>
<td>Water</td>
<td>1989-90</td>
<td>1.7</td>
</tr>
<tr>
<td>National Power</td>
<td>1990-91</td>
<td>20.7</td>
</tr>
<tr>
<td>PowerGen</td>
<td>1990-91</td>
<td>15.5</td>
</tr>
<tr>
<td>Regional Electricity</td>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>Companies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Privatised Utilities</th>
<th>Reference Year</th>
<th>Average annual increase in labour productivity since reference year</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Rail</td>
<td>1984-85</td>
<td>0.7</td>
</tr>
<tr>
<td>Royal Mail</td>
<td>1984-85</td>
<td>3.3</td>
</tr>
<tr>
<td>Nuclear Electric</td>
<td>1990-91</td>
<td>24.7</td>
</tr>
</tbody>
</table>

Once famously depicted by the late Lord Macmillan as “selling the family silver” a more accurate description for the process of privatisation would be that public sector liabilities have been transformed into private sector assets. This outcome stands as a reproach to professional economists who have tended to believe that industrial structure (by which is meant the degree of competition provided within the sector) is the only relevant consideration. On the evidence ownership is also extremely important, once again underlining the central importance of private property rights in the economic development process.

It is less clear what role, if any, public policy has played in the increased importance of small businesses. The fiscal environment has certainly been more favourable to small businesses, particularly the low top rate of income tax and the low rate of corporation tax in the UK. Also important has been the shift in the pattern of economic activity from manufacturing to services, increased outsourcing by large businesses and technological developments, particularly IT, which have benefited small businesses. All these processes have been little affected by public policy. It has been argued that deregulation initiatives have also helped smaller businesses, but this view does not appear to be widely shared amongst small businesses! Nor do small businesses account for a large proportion of output in manufacturing industry, where the increase in productivity is most evident.

Outside of the privatised utilities and small businesses, economists have suggested a range of factors to be important. These have included greater product market competition (Brown and Wadhwani (1990)); job insecurity and the threat of bankruptcy which have ‘compelled’ efficiency gains (Nickell et al. (1992)), and the successive legislative reforms which reduced the powers of trades unions, reduced the days lost through strikes and the inefficiencies inherent in restrictive and ‘Spanish’ practices, which were such a feature of the 1970s. The importance of the latter is possibly best summarised in the studies by Purcell (1991) and Gregg et al. (1993). As the latter put it:

“... these gains are the cumulative result of a regained managerial right-to-manage (bolstered by union weakening.
and increased competition) that recurred through the decade” (p895).

Foreign direct investment (FDI) has been another major engine of improved growth and higher factor productivity. In UK manufacturing in 1992 such investment accounted for 18% of employment, 23% of value added and 32% of total investment.

In the UK, both the inward flow of FDI and the outward flow of FDI account for a much higher proportion of national income than for any other G7 country (see Figure 10). The UK is much more closely integrated into the global economy than any other major, advanced economy and, in this sense at least, can fairly claim to be “the enterprise centre of Europe”. As such it attracts a very high share of inward investment to the European Union (around 40%) from the two major sources of such investment—the US and Japan.

Figure 10: FDI flows as % of GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Average annual per cent (1981-94)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
</tr>
<tr>
<td>US</td>
<td>0.5</td>
</tr>
<tr>
<td>Japan</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: "Competitiveness: Creating the Enterprise Centre of Europe" DTI (1996, p12)

Inward investment has been more important than even data on employment, output and value added imply. Quite simply, such investment typically 'embodies' new technology and good management practice. The former results in a situation where the share of high technology products in domestic output is greater than
would be implied by the R&D/GDP ratio, and the latter has "loudhailer" effects on management practice in domestic businesses. For example, multinationals in the UK have pioneered major changes in the industrial relations environment, industrial training, the adoption of 'Just-in-Time' manufacturing and improved supply chain management techniques. As Eltis and Higham (1995, p80) have put it:

"Some of the most productive companies in the world have been attracted to the UK introducing techniques of quality control and a managerial 'style' which have spread very widely to UK owned Companies".

The Scottish Dimension

The period from the 1970s onwards is often referred to as the period of 'de-industrialisation', this involving a marked shift in employment from the primary (farming, fishery and forestry) and secondary sectors (extraction and manufacturing industry) to the tertiary sector (services). While most advanced economies have experienced a similar phenomenon, the UK entered this phase early and through to the mid-1980s, the pace of de-industrialisation was the most marked in the UK.

De-industrialisation was more rapid in Scotland than in the UK in the 1980s. The main feature was the rapid decline of employment in the 'traditional' industries of coal, steel production, shipbuilding and textiles. Together these four sectors employed 119,000 persons in 1981, but only 55,000 persons in 1989. The process of de-industrialisation also claimed many of the activities which had been the centre of previous attempts to diversify the economy—vehicle assembly plants, aluminium smelters and pulp mills are the obvious examples.

The demise of much of the traditional industrial base and of some newly relocated plants was famously described by the Scottish pop group, The Proclaimers, in their "Letter from America":

"Bathgate no more, Linwood no more, Methil no more, Lochaber no more".
Yet, while this refrain echoed the mood of the time, it was a lament to an industrial structure which was past its 'sell by date'. Beyond a handful of specialist producers in shipbuilding and a rather larger number in textiles, Scotland's traditional industries were at a serious disadvantage against low cost producers in developing countries. Coal was a high cost product and uncompetitive with natural gas from the North Sea. Ravenscraig, the last of the major dominoes which survived to the early 1990s, was a victim of an earlier political decision and its distance from its customers. Nor, by that date, did it have important forward linkages to any major Scottish producers.

By the late 1980s these sectors were so reduced in scale terms that further employment losses had much less impact on the economy. Moreover, two major new activities had emerged—North Sea oil and gas related activities, and a new manufacturing base mainly serving fast growing consumer markets outside of Scotland—in a phrase, "Silicon Glen".

Figure 11 charts North Sea oil and gas related employment over 1973-94. Employment rose continuously until it peaked in the mid 1980s at 98,000. Since then the trend has been downward and, indeed, the latest estimate for 1994 suggests that such employment is back down around the 1979 level. Even if this is taken at face value, it would still be true that such employment is no less important today than at the beginning of the period under discussion—whereas in the primary and secondary sector as a whole, employment was falling rapidly. Moreover, the 1994 estimate in Figure 11, is, almost certainly, misleadingly low as it appears that the employment count fails to pick up the trend in the industry toward subcontracting and selfemployment. Making allowance for this, oil and gas related employment was, probably, still around 70,000 in 1994.
Figure 11: Scotland: Total Oil Related Employment, 1973-94

Even such an adjusted employment count does not provide a true measure of the sector’s economic importance. It is a high value added, high wage sector and its concentration in the Grampian region is the sole reason for the region’s transformation from a low income region in the 1960s, to the highest income region in Scotland and one of the highest in the UK (in 1991 Grampian GDP per capita was 40.7% above the Scottish average and 34.8% above the UK average; see Scottish Economic Bulletin, No 52, March 1996, Table 9.5). Whereas North Sea oil and gas related activities cannot be responsible for the improvement in the performance of the Scottish economy from 1988, they did provide an important source of employment over 1979-94 at the end of which period the employment supported by offshore activities was still greater than at the outset.

Over the period from 1979 manufacturing employment has fallen very substantially in Scotland, as in the UK; but, like the UK, productivity gains have been large, and in line with those for UK manufacturing. Across the manufacturing industry as a whole, output per person was higher than the UK average in 1979 and remains higher today. For some sectors, noticeably in Office Machinery, Chemicals and Mechanical Engineering—the higher
productivity of Scottish industry is particularly marked (see Oulton (1994b)).

However, in a period in which the government has played a smaller role in economic development, it is two features of such intervention which have been of particular importance to the improved relative performance of the Scottish economy. The first is that, as with the north and the west of the UK more generally, Scotland has benefited from the consistent application of a policy which has steered FDI and particularly, FDI in manufacturing, toward areas of the country which, historically, have had relatively high levels of unemployment. The second is that Scotland has enjoyed an annual fiscal transfer of resources and, in consequence, a continuing high level of investment in the public infrastructure.

There has been a huge shift over time in the regional distribution of foreign-owned manufacturing employment, all regions except the North West benefiting at the expense of the South East of England over the period 1963–92. (See Table 4).

If we look at the Scottish situation in more detail (Figure 12) it can be seen that employment in overseas units peaked in 1974, before the commencement of the period under discussion, at almost 120,000. Employment had fallen to some 108,000 by 1979 and continued to fall through to 1986.
### Table 4

Employment in Overseas Owned Manufacturing Establishments by Region; No (000s) and Percentage Distribution

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<tr>
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<tr>
<td>Northern England</td>
<td>8.5</td>
<td>1.6</td>
<td>24.4</td>
<td>3.3</td>
<td>48.5</td>
<td>5.0</td>
<td>49.4</td>
<td>6.3</td>
</tr>
<tr>
<td>Yorkshire &amp; Humberside</td>
<td>20.6</td>
<td>3.8</td>
<td>24.6</td>
<td>3.3</td>
<td>63.3</td>
<td>6.5</td>
<td>53.3</td>
<td>6.8</td>
</tr>
<tr>
<td>East Midlands</td>
<td>18.3</td>
<td>3.4</td>
<td>26.4</td>
<td>3.5</td>
<td>43.3</td>
<td>4.4</td>
<td>49.6</td>
<td>6.3</td>
</tr>
<tr>
<td>East Anglia</td>
<td>17.3</td>
<td>3.2</td>
<td>30.4</td>
<td>4.1</td>
<td>42.1</td>
<td>4.3</td>
<td>31.6</td>
<td>4.0</td>
</tr>
<tr>
<td>South East</td>
<td>277.9</td>
<td>51.4</td>
<td>305.2</td>
<td>41.1</td>
<td>344.3</td>
<td>35.3</td>
<td>211.0</td>
<td>26.9</td>
</tr>
<tr>
<td>South West</td>
<td>4.1</td>
<td>0.8</td>
<td>19.4</td>
<td>2.6</td>
<td>42.2</td>
<td>4.3</td>
<td>42.3</td>
<td>5.4</td>
</tr>
<tr>
<td>West Midlands</td>
<td>46.1</td>
<td>8.5</td>
<td>67.0</td>
<td>9.0</td>
<td>77.8</td>
<td>8.0</td>
<td>94.6</td>
<td>12.1</td>
</tr>
<tr>
<td>North West</td>
<td>70.5</td>
<td>13.1</td>
<td>97.9</td>
<td>13.2</td>
<td>134.0</td>
<td>13.8</td>
<td>98.2</td>
<td>12.5</td>
</tr>
<tr>
<td>Wales</td>
<td>24.0</td>
<td>4.4</td>
<td>35.5</td>
<td>4.8</td>
<td>53.2</td>
<td>5.5</td>
<td>50.9</td>
<td>6.5</td>
</tr>
<tr>
<td>Scotland</td>
<td>45.7</td>
<td>8.5</td>
<td>82.4</td>
<td>11.1</td>
<td>95.7</td>
<td>9.8</td>
<td>79.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>7.3</td>
<td>1.3</td>
<td>29.4</td>
<td>4.0</td>
<td>29.7</td>
<td>3.0</td>
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<td>540.3</td>
<td>100.0</td>
<td>742.7</td>
<td>100.0</td>
<td>974.2</td>
<td>100.0</td>
<td>784.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Census of Production © Crown Copyright.*
The 1989 Report, noting this trend, concluded that Scotland would "have to run hard to stay in the same place" in terms of employment in overseas owned plants. This turned out to be too gloomy. Employment in overseas owned plants recovered from a low of 69,000 in 1986 and was 83,000 in 1994. Since that date employment levels are likely to have risen further as (see Figure 13) each of the last three years, 1993/94 - 1995/96 has seen a high gross flow of additional employment for new inward investment projects. The Locate in Scotland Annual Report for 1995/96 suggests that total employment in overseas owned plants may be in the region of 100,000. This increase in employment from 1986 is a key feature, especially given the continued decline in employment in the manufacturing sector as a whole.
While it is sometimes alleged that employment provided through inward investment projects is inherently unstable, it would seem that such a comment has more force with respect to indigenous manufacturing industry. Over the period 1979-94, employment in overseas owned plants has been much more stable than employment in indigenous plants, the percentage of falls in employment being 23% and 47% respectively. In consequence, the share of total Scottish manufacturing employment accounted for by overseas owned plants rose from 20.8% in 1979 to 27.8% in 1994 (calculated from the Scottish Office Statistical Bulletin, November 1995, pl7). Taking a longer perspective, employment in overseas owned manufacturing plants tripled over 1950-1994, while employment in indigenous manufacturing plants fell by two-thirds. Over this period the share of manufacturing employment in overseas plants rose from 4.3% to 27.8%.

Moreover, employment data understate the importance of FDI to economic activity in Scotland. The 1992 Census of Production shows that overseas owned establishments accounted for 22.7% of total manufacturing employment, but for 26.2% of net capital expenditure and 28.3% of net output in Scottish manufacturing.
The scale of such activity within Scottish manufacturing and the concentration of such activity in high-valued activities (above all in electronics) has had particular significance for productivity. The differential between productivity in foreign owned and domestically owned plants is particularly high in Scotland (see Oulton (1994b, p36)) and the 'loudhailer' effects of this activity, on indigenous management behaviour, appear likely to be greater. In Scotland, Northern England and Wales, this is an industrial relocation policy which has worked, in the sense that the new activities established operate efficiently, often in open and competitive international markets. Moreover, the experience has been consistent with the UK attracting a higher share of EU inward investment projects over time. The regional distribution of inward investment in manufacturing has been the major factor in the reduced 'North-South divide', which has been a feature of the UK economy in the late 1980s and 1990s. Scotland has been a major beneficiary of this process.

The redistribution of FDI in manufacturing, from the South East to other UK regions including Scotland, could not have happened on the scale demonstrated in Table 4, except through the continued application of Regional Selective Assistance which provides capital grants based on the amount of employment created in Assisted Areas. There are two types of Assisted Areas Development Areas and Intermediate Areas. The former attracts a high share of all manufacturing FDI and designated Development Areas contain a much higher share of Scotland's working population than is the case in England or Wales (see Table 5).

<table>
<thead>
<tr>
<th></th>
<th>Development Areas</th>
<th>Intermediate Areas</th>
<th>Non-Assisted Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>45.4</td>
<td>13.8</td>
<td>40.7</td>
</tr>
<tr>
<td>Wales</td>
<td>13.2</td>
<td>57.5</td>
<td>29.3</td>
</tr>
<tr>
<td>England</td>
<td>12.2</td>
<td>15.7</td>
<td>72.0</td>
</tr>
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</table>

Source: Census of Employment, 1993 (NOMIS).
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The ability to offer incentives to firms locating in Assisted Areas, above all Development Areas, backed by the existence of development agencies with property, investment and training powers, has been a powerful factor in influencing the geographical distribution of manufacturing FDI in favour of Scotland. Such a process can be claimed to have had UK-wide benefits by narrowing the 'North-South divide', and the operating efficiency of foreign based firms may even have been enhanced as a result. However, it has to be conceded that without such financial incentives the level of FDI in Scotland would have been much lower.

The policy of encouraging inward investment in manufacturing to locate in the Assisted Areas dates back to the 1950s and, to this extent, the increase in employment from 1986 was materially assisted by having an existing base of inward investors. However, the UK (and Scotland) have become more attractive as a location for inward investment to the EU in the 1980s and 1990s, because of the UK's vastly improved productivity performance and because the UK labour market is noticeably more efficient than that in most EU member states. So long as these conditions hold and UK regional policy favours Scotland, we can expect to see a continued flow of manufacturing inward investment which is high relative to Scotland's share of UK and EU employment.

Moreover, the scope for attracting mobile investment projects has widened in recent years to include service sector activity, particularly in the form of call-centres. These have been important in employment terms (as these projects are labour intensive) and include financial service activities for a number of UK businesses headquartered outside of Scotland. In 1994/95 and 1995/96, Locate in Scotland reported more than 4,000 jobs created in Scotland as a result of software and call-centre projects. The UK (and Scotland) enjoys a significant competitive advantage over other EU countries in its telecommunications infrastructure, itself a product of privatisation and deregulation. For many tradeable services this abolishes 'the tyranny of distance' and this has created new employment opportunities for regions like Scotland in back office functions, educational services, financial services and software development.
The second long-term public policy influence has been the transfer of fiscal resources to Scotland, as total government expenditure on Scotland has consistently exceeded taxation revenue raised in Scotland (the only exception being in the early 1980s when North Sea oil and gas tax revenue was particularly high). The precise scale of the transfer has been a matter of heated debate, but all the serious studies confirm that the transfer is substantial and a significant proportion of Scottish GDP (see, for example, the earliest study by Gavin McCrone (1969), and the recent Scottish Office (1995) study).

Such a transfer of incomes has both short and long-term consequences which are favourable to Scotland. In the short-term, the transfer increases disposable income in Scotland, raises consumption expenditure and, consequently, has a 'multiplier' effect on income and employment. This multiplier impact would have increased in the period 1988-94 as government expenditure, and hence the scale of fiscal transfers, rose relative to GDP.

In the long-term, the transfer allows a higher level of public expenditure in Scotland which, to the extent that it results in improved education, roads and other public infrastructure, can be expected to have a favourable impact on productivity. The consequence of the rise in Scottish GDP per capita (as a result of an improved unemployment relative) and transfer of fiscal resources to Scotland, has resulted in an outcome where disposable income in Scotland is above the UK average and matches the English average.

Whether such a favourable outcome to Scotland could withstand detailed scrutiny must be a matter of some doubt. The only detailed 'needs' assessment, carried out by the Treasury for 1976-77, concluded that Scottish needs per capita were 16% higher and expenditure per capita 22% higher than the rest of the UK. Since that date there has been a noticeable improvement in many of the factors which might be expected to denote greater Scottish need, especially unemployment, income, social deprivation and health indicators.

Implications

While the improved performance of the Scottish economy since 1988 is not in serious doubt, the underlying causes leave some concern about its long-term competitiveness. Scotland has benefited
considerably from North Sea oil and gas activity, from FDI in manufacturing (and lately in tradable services), and from a net inward transfer of fiscal resources. The former is a depletable resource and the other outcomes reflect a favourable policy environment under which successive governments have consciously tilted the playing field to Scotland’s advantage. The results, particularly the productivity levels achieved in foreign owned firms and the increase in manufacturing productivity in general, have been encouraging, but one suspects the policy environment needs to remain in place for some time before one would be confident that the Scottish economy would perform creditably on a level playing field.

There are other encouraging signs. For example, the financial sector in Scotland remains a sector of considerable strength, with a significant number of businesses headquartered in Scotland. In banking and insurance, employment in Scotland continued to increase through 1987-93, while it fell in the rest of the UK. Outside of the financial sector there are a number of companies which are capable of competing successfully in national and international markets (e.g. Scottish & Newcastle, ScottishPower, Scottish Hydro Electric, Forth Ports, First Bus, Stagecoach, British Energy). It is interesting to note that six of these names are the result of privatisation and deregulation. It might be said that regulation and nationalisation removed much of the commercial heart of Scotland, which has been returned by deregulation and privatisation.

While the larger corporate bodies provide evidence of more professional management applied to ‘traditional’ activities, the major remaining problem lies in the low business birth rate (and subsequent low growth rate) in Scotland. This was a major weakness, particularly in the early 1980s when the bulk of new employment creation in the UK (and in other advanced economies) was in the small business sector. The extent of that weakness was clearly identified in the seminal work undertaken by Scottish Enterprise in the early 1990s, this leading directly to the adoption of its “Business Birth Rate Strategy”.

A twin track approach of continuing to attract FDI and encouraging indigenous business development seems the appropriate policy response. There are encouraging signs of greater dynamism in the small business sector (noticeably, an increasing number of
hardly match Germany's Mittelstand or, for that matter, the
dynamism of SMEs in South East England, there is certainly a much
stronger base to build upon than that in regions like Northern
England and Wales. Nonetheless, it will require a contribution of a
higher business birth rate (and growth rate) over a substantial period
to demonstrate finally that the Scottish economy has attained a
competitive position that does not require continued underpinning
by favourable financial incentives and fiscal transfers from the rest of
the UK.

However, it would be churlish and myopic not to recognise that
successive governments have attached a considerably priority to
restructuring the Scottish economy and that this process was
materially assisted by the reforms of the 1980s. A more dynamic
small business sector remains a requirement for the future but the
conditions are in place to encourage such an outcome. A successful
outcome depends, as ever, on the domestic spirit of enterprise, for
which there is no known substitute.

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