THE SCOTTISH ECONOMY

Trends in Gross Domestic Product

Official estimates of Scottish GDP in 1974 have recently been published (Table 4). These are expressed in current prices. The constant (1970) price estimates shown in Table 4 have been calculated by deflating the current price data by the implicit UK GDP price index. As we pointed out last year, this is a fairly crude procedure, but it is plausible to argue that price changes in Scotland follow closely the UK pattern, so that the deflated estimates reflect reasonably accurately the rate of change of Scottish GDP.

TABLE 4 Estimates of Gross Domestic Product for Scotland 1970-74

Year	GDP at Factor Cost (£m)	GDP at constant (1970) prices	Annual % change in real GDP
1970	3689	3689	
1971	4069	3688	0.0
1972	4592	3774	2.3
1973	5345	4019	6.5
1974	6192	4074	1.4

Sources: *Scottish Economic Bulletin No.9, 1976*
Economic Trends

Note: The 1974 figure is provisional, and all data are liable to revision

Following the record growth rate of 6.5% in 1972-73, in 1973-74 growth fell back sharply to an estimated 1.4%. (In July last year we predicted a rate of 0.8%, which we raised in October to about 1%). Nevertheless, this compares with virtually zero growth for the UK as a whole in 1974, and reflected the continuing stimulus of North Sea Oil expenditure on the Scottish economy. Net outward migration fell to what appears to be its lowest level this century, and in fact there was a net inward migration from the rest of the UK. The number of employees in employment rose by over 30,000 between June 1973 and June 1974. (See the April 1976 Commentary, pp 17-18).

These favourable population and employment trends, however, represented the lagged effects of the 1973 boom, superimposed on the localised effects of North Sea Oil. Although estimates of Scottish GDP in 1975 are not yet available, there is no doubt that GDP declined between 1974 and 1975. The number of employees in employment rose continuously from the third quarter of 1974. Net outward migration is estimated at 19,000 for 1974-75.

The magnitude of the fall in Scottish GDP is less certain. For the UK as a whole, the income estimate of GDP gives a year-on-year fall of 2.0% in real terms, though these estimates are subject to revision. In our view, the fall in Scottish GDP was less than 2.0%. Analyses of current business trends in Scotland, reported in previous issues of this Commentary, have suggested that the recession was less marked in Scotland, especially during the first half of 1975, and a number of economic time series provide support for this view. The most important is the Scotland/Great Britain unemployment relative, which continued to decline through 1975, falling from 1.43 in January 1975 to 1.20 in December 1975. Data on bank advances also suggest that Scottish industry was less adversely affected by the recession in output, at least during the first half of 1975. To what extent this was due to the effect of North Sea Oil on the Scottish economy or to lags in the business cycle in Scotland vis-a-vis the rest of the UK, will not be clear until later this year, but for whatever reason, both judgment and statistical evidence suggest that Scotland fared comparatively better than the UK as a whole. Our central estimate for real GDP in Scotland in 1975 is £4017m, at 1970 prices, which represents a year-on-year fall of 1.4%.

Initially, any prediction for the current year is much more tentative. The expected rate of growth in UK GDP, which is the most important determinant of Scottish GDP , is uncertain. So is the length of the lag - if any - between recovery in England and recovery in Scotland. For various reasons, however, including the expected export-led character of the recovery, we do not expect any significant lag in the recovery of the Scottish economy, compared with the rest of the UK.

Paradoxically - because of their importance in cushioning the Scottish economy from the worst effects of the recession in 1974-75 - it is the locally-based oil development and construction industries which are likely to dampen the pace of recovery this year. Platform construction work is at a low level and likely to remain so throughout the year, while the squeeze on public sector expenditure offers little prospect of an early recovery in building and construction work.

The volume of oil produced in 1975 was of slight importance, but in 1976, and in future years, oil will make a significant contribution to measured GDP. We estimate that in 1976 the net output of oil will be in the region of £130 million,* a figure which is approximately half as large again as the increase in non-oil GDP. Assuming a growth rate of 3% for the UK as a whole in 1976, we estimate real non-oil GDP in 1976 to be £4101 million, an increase of 2.1% over 1975. Adding the contribution of oil to GDP makes an estimate of total Scottish GDP for 1976 of £4234 million (in 1970 prices), representing an increase of roughly 5.4% in real terms over 1975.

Current Trends in the Economy

The available indicators suggest a generally improving trend in economic activity in Scotland in the second quarter of 1976. It seems probable that output has passed its nadir, even although unemployment continues to rise. The major disturbing note is the recent increase in the cost of raw materials used by manufacturing industry, which foreshadows upwards pressure on unit costs and on prices later in the year.

Since the beginning of the year, there have been changes in the prospects of particular sectors of the economy: the position of the capital goods industries has been relatively stronger, while the position of intermediate goods and some consumer goods industries has weakened. These trends seem to be at variance with the outlook in the UK as a whole, and may perhaps be explained by shifts in the composition of demand.

Undoubtedly, the major stimulus to demand, and thus to confidence, is coming from exports. In manufacturing industry the trend in new export orders and in the value of export deliveries is strongly upwards, as the latest CBI Survey shows.

The recent sharp upturn in industrial porduction in the rest of the UK may also be expected to act as a stimulus to Scottish industry, and perhaps reverse the recent weakness in the intermediate goods sector.

* Measured in 1970 prices. In current prices, the value is more than £800 million. In the preparation of this estimate we should like to acknowledge the information furnished by M A G Kemp of the University of Aberdeen.

There is also some evidence of stockbuilding, and government current expenditure in Scotland may be assumed still to be running at a high level. But consumer expenditure can be expected to contribute less and less to domestic demand as times go by, and the squeeze on real disposible personal income imposed by inflation, taxes, and wage restraint bites deeper. The only event which could prove this forecast wrong would be if consumers decided suddenly to reduce their high level of personal savings.

By far the weakest element in domestic demand is the demand for new construction work, plant, machinery and other capital goods. The new series of quarterly estimates issued by the Department of Industry, (see Figure 1), suggests that manufacturing investment in Scotland, while faring better than the UK as a whole in the first half of 1975, did not do quite as well as the North of England. It is also significant that investment in Scotland turned down in the third quarter while in the North and UK it turned up, indicating that a recession probably hit Scotland hardest in the second half of 1975. A more up-to-date, though less satisfactory, investment indicator is the number of applications for regional selective assistance, shown in Figure 2 clearly, the end of 1975 reflected a very low level of investment intentions. However, the first two months of this year has seen some recovery in applications which bears out the CBI view that investment intentions are less pessimistic now than at the beginning of the year.

FIGURE 1 Manufacturing investment

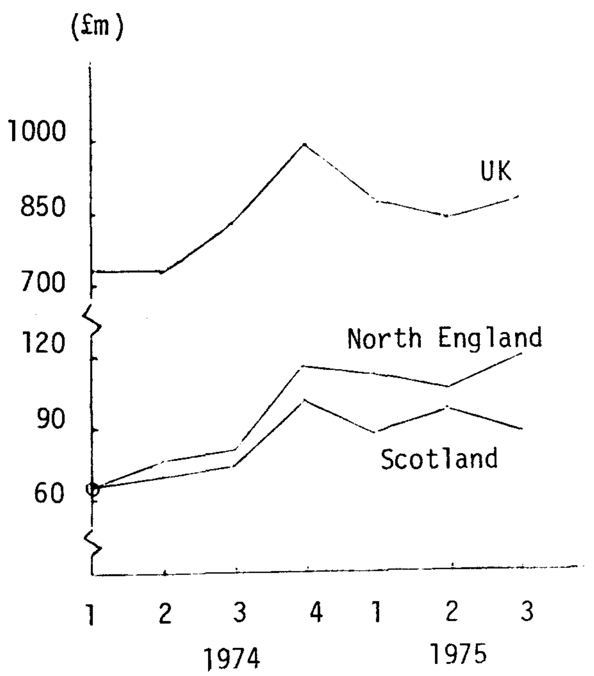
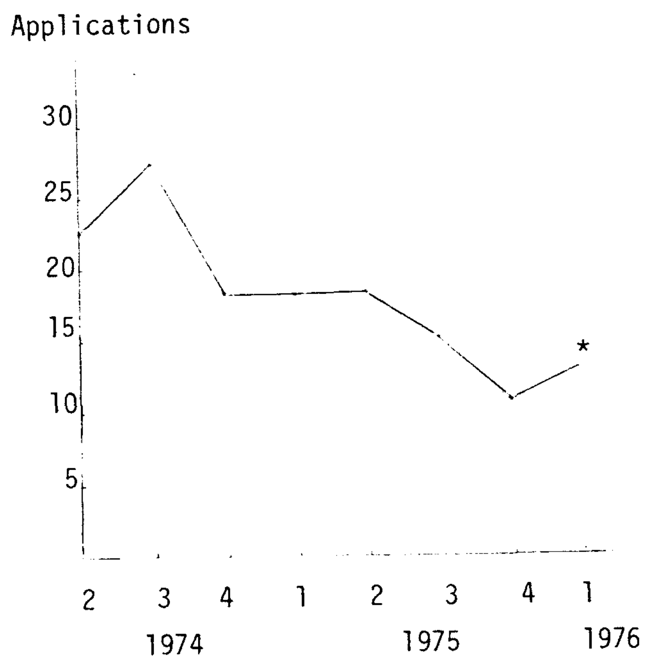


FIGURE 2 Regional Selective Assistance



* Based on January & February only

Source: *Trade & Industry*

According to the CBI Survey, foreseeable industrial demand for new construction is even weaker than demand for new plant. The total value of orders for new construction received by contractors in Scotland fell sharply in the last quarter of 1975. There was a slight recovery in the first three months of 1976, but in real terms total new orders remain about 10% below the level of the same quarter in 1975.

This statistic conceals a shift in the composition of the new work ordered. A significant decline in new construction orders placed by private industry can be traced from mid-year 1975, and the figures for the first quarter of this year show only one third of the value of orders placed in the same quarter of 1975. On the other hand, orders for private sector housing in the first quarter of 1976 were standing at twice the level of a year previously. Whether this demand will be sustained throughout the year depends on the response of would-be buyers to a contraction of their real income. The NEDC forecast for the UK is that the recovery in private sector housebuilding will be short lived.

One can be more confident in forecasting that public sector housebuilding will not expand during the year, while other public works, though well up on the comparable 12 months previously, can scarcely escape the cutbacks in public expenditure which are intended for 1977 and 1978.

In agriculture, the continuing depreciation of sterling is having an unfavourable effect on costs, while at the same time providing a stimulus to home production by increasing the price of imported food. The surplus milk problem is causing concern, but many Scottish crop farmers may be expected to benefit once again from the drought affecting other parts of the UK. In forestry, private planting has fallen off considerably, which will jeopardise a significant number of rural jobs.

Prices and earnings have improved lately in the fishing industry, but there is considerable concern about inshore fishing limits and about herring stocks. On both of these issues, government policy will determine the future of the industry.

The coal industry has recovered a little from its poor 1975 performance with an increase in output in the first quarter of 1976 compared to the same period in 1975; however, productivity is still falling.

Since April there have been discoveries of five further fields in the UK sector of the North Sea. At Block 14/20 by Texaco; Block 3/28 - a field of heavy crude which is unlikely to be exploited; 9/19 by Conoco, which is a mixture of oil and gas; 2/11/16 by Shell, which is oil; and 3/7 by Chevron, also oil.

In the Beryl field the loading tower is now on location after repairs at Stavanger and it is possible that production may begin by the end of this month. In the Brent field the Spar Storage System has now been installed and a second platform for the field, Brent A, is being piled. The application made by Shell-Esso for a NGL plant at Peterhead has been deferred for the public enquiry to consider the company's proposals for spending some £25 million on harbour improvements. The application to build a pipeline from Brent to Fergus has now been published and the Company proposes to start work on the Fergus side in late July.

In the Comorant field another discovery is still in the process of evaluation. The TCP 1 platform is now installed in the Frigg field and work is now being carried out on finishing and laying two pipelines. The Ninian pipeline has now been completed and trenching under way. The Brent trunk line is nearing completion, but the Frigg No 2 will not be ready until next year. While there is thus considerable activity in the North Sea, firms supplying rigs and platforms are in a difficult transition period resulting in part from worldwide over-capacity.

In March of this year the Department of Employment estimated that some 24,800 people were employed in projects directly related to North Sea Oil development. This was an increase of 1,100 on December 1975. Figures for June indicate an increase of 1000 on the March figures, distributed by region.

TABLE 4 Numbers employed in Oil-related Work

Region	March 1976	June 1976
Highland	6300	6800
Shetland/Orkney & Western Isles	400	400
Grampian	9700	10300
Tayside	1400	1400
Fife/Central & Lothian	2600	2700
Strathclyde	4400	4200

Source: *Department of Employment*

Performance of individual manufacturing industries in Scotland has been subject to some changes since our last issue of the Commentary. In many sectors, both domestic and export, orders books improved in the first quarter of 1976 over the final quarter of 1975. The two diagrams below show the percentage of respondents to the CBI Survey in Scotland and in the UK respectively reporting an increase in their new orders. Figure 3 brings out the distinct improvement in Scottish export orders, and to a lesser extent total new orders, from the fourth quarter of 1975. As total new orders include export orders, it would appear that domestic demand is still sluggish. Comparison of Figure 3 with Figure 4 indicates that although Scotland's level of capacity utilisation has continued to improve relative to the UK, her total order position has worsened in relative terms. This may indicate that Scotland's recovery still lags behind the rest of the UK.

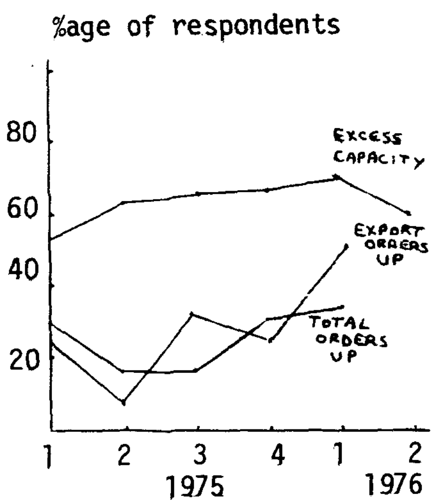


FIGURE 3 Scotland

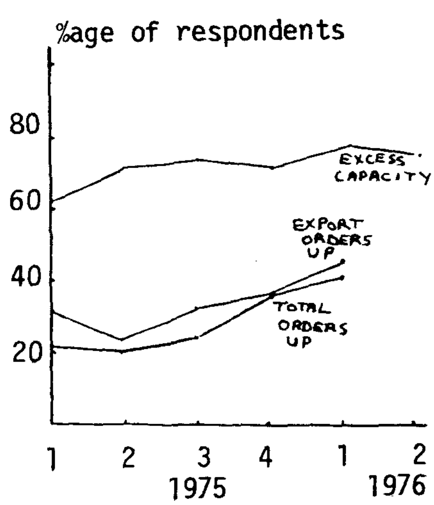


FIGURE 4 UK

Source: *CBI Industrial Trends*

The food, drink, and tobacco industries are experiencing a difficult period, through lack of domestic orders. Light engineering is continuing to fulfil all our previous expectations in leading the way out of the present recession. All indicators continue to improve. It is perhaps unfortunate that this sector is not more heavily represented in the Scottish economy.

Metal manufacturing, while still very much in the grip of the current recession, has improved its order books. This is leading to increased output levels, with BSC expecting to produce an additional half a million tonnes in 1976/77, even though the work-force has fallen by some 1500 this year. This is indicative of some of the long term structural problems of the steel industry, with outdated equipment and over-manning leading to low productivity.

The motor vehicle industry can also be subjected to the above criticisms, although the last few months have seen some improvement in output and orders from a very low level. Foreign competition is also posing a threat. On a more optimistic note, British Leyland are expanding their tractor and truck plants in Bathgate and Glasgow respectively, which promises a better future for commercial vehicles.

Heavy engineering prospects have improved remarkably since the beginning of the year with new export orders leading the way. However, firms in this industry supplying plant and equipment for off-shore oil work are anxiously awaiting new orders if redundancies are to be avoided in 1977.

A shortage of orders continues to haunt the shipbuilding industry, a reflection of world over-capacity and intense cost competition from overseas yards. The recent order won by Govan Shipbuilders, (by contracting at a loss), will only keep redundancies at bay for a further six months. Even if the larger yards are nationalised in October, as planned, there seems little scope for job protection.

As we pointed out above, the construction industry is faring badly. In the first three months of the year, public and private housing starts were down by 1282 and 200 respectively on the previous quarter. This weak position is also reflected in the building materials industries. It does not look as if the construction industry will make much contribution to the recovery of the Scottish economy this year; and it seems likely to act as a depressing factor throughout 1977

Electricity sales in the three months to the end of May were marginally higher than in the corresponding period a year previously, after correcting for the effects of the weather on demand. Sales of domestic electrical appliances remain depressed, and suggest that the VAT reductions in the April budget have not boosted consumer spending on these products.

In Figure 5 we present a comparison of bank advances between the London and Scottish Clearing Banks, from the second quarter of 1975, when a break in the series occurred. One interesting feature is the much slower downward trend in advances to Scottish manufacturing industry, perhaps further evidence that Scottish industry fared somewhat better than UK industry over this period. There are also some signs of recovery in borrowing in the first half of 1976, indicative perhaps of some re-stocking, although one must remember that these figures reflect very high inflation rates and so conceal the extent of the recession and the very low level from which recovery is taking place.

The above arguments are also backed up by the increasing rate of bankruptcies (see Figure 6) in the first half of this year, emphasising the extent of the corporate liquidity problem. The number of UK bankruptcies increased by 27% in 1975 over 1974, whereas in Scotland the increase was only 7%. This is further evidence of Scotland's better relative performance in the recession, providing some prospects of Scotland recovering along with, rather than far behind, the UK.

Indicators of Economic Activity in Scotland

Between March and June 1976 total unemployment (which no longer includes adult students) fell from 145,100 to 144,100. This reduction, however, was less than one would expect given the usual expansion of employment in Spring and early Summer. As a result the seasonally adjusted level of unemployment (excluding school leavers and adult students) continued to rise, and reached a level of 143,900 in June. There is no sign, as yet, of a downturn in this statistic, nor even of a substantial reduction in the rate of increase. (See Figure 12).

Total vacancies rose from 15,700 in March to 18,000 in June. Not only did actual vacancies rise, but also seasonally adjusted vacancies increased from 14,400 to 15,200. Of course, this rise in vacancies contradicts the evidence from the unemployment statistics. One would generally expect a rise in vacancies to coincide with a fall in unemployment. Two possible explanations of this phenomenon are:-

(a) The Department of Employment can only record those vacancies which are notified to it. Recently, the Department has managed to increase the proportion of the total number of vacancies which it records through its 'jobcentre' network. Thus trends in the level of notofied vacancies need not reflect changes in the underlying level.

(b) Over the past 25 years migration has constantly drained Scotland's labour force. In general it has been the young, highly skilled workers who have tended to leave. This has had the effect of reducing the average skill level of those remaining in Scotland and so vacancies for skilled workers tend to take longer on average to fill - thus increasing the average number of vacancies on the Department of Employment's book at any one time.

In our last issue we argued that the somewhat neglected CBI index of capacity utilisation might provide a useful indicator of movements in the level of aggregate demand in Scotland. Between January and April the number of firms operating below full capacity fell from 70% to 61%. Although to some extent this improvement may have been due to seasonal factors the change over the first quarter of 1976 was certainly more hopeful than that recorded over the corresponding period of 1975, when the index rose from 54% to 63%.

The Department of Employment have recently begun to issue monthly statistics on overtime working in the standard regions of the United Kingdom. As yet an insufficient number of observations are available to enable one to distinguish seasonal fluctuations from fluctuations in the underlying level of economic activity. However, overtime statistics may in the future prove useful leading indicators of changes in the level of unemployment since one can expect employers to vary overtime hours prior to making changes in the number of men employed (given no drastic changes in the relative rate of remuneration for normal and overtime hours).

Unemployment in the Regions

Between March and June 1976 the majority of the Scottish regions experienced a decline in unemployment (see Figures 7-11). This decline was particularly marked in the Highlands and Islands where, as is usual at this time of year, expansion in the primary, construction and tourist sectors contributed to a reduction in the level of unemployment.

Unemployment in the Grampian region also fell substantially. At 3.3% the unemployment rate in this region was lower than that in any other Scottish region, or standard region of the UK. As the oil industry moves from the exploration to the production phase one can expect oil-related activity to be localised round the North East coast and the Northern Isles. This will maintain the disparity in unemployment rates which currently exists between these regions and the rest of Scotland. One should also note that the unemployment rates currently being released may be substantially overestimating the true unemployment rate in Grampian, Highland, Orkney and Shetland. This is because the rates are still calculated using as the denominator 1973 figures of employees in employment. These are likely to considerably underestimate true levels of employment in those areas where large numbers of oil-related jobs have been generated in the last two years.

In the central belt shifts in unemployment were less significant, Tayside, Lothians and Central experiencing a slight drop while small rises occurred in Lothian and Strathclyde. Only one of these regions, Lothian, has an unemployment rate lower than the Great Britain rate. In the business trends section we noted that recovery from this recession may well be export-led rather than resulting from an expansion in consumer demand. This form of recovery is likely to result in expansion in the capital goods sector prior to expansion in consumer goods - the reverse of the traditional sequence. Should this occur, Strathclyde, with a large capital goods sector may be able, if it can catch a sufficient share of the export market, to effect a recovery and so a reduction in unemployment simultaneously with the rest of the country instead of lagging behind as usual.

In the Border areas, unemployment fell slightly between March and June. However, the unemployment rate in Dumfries and Galloway at 7.4% is still very high and is exactly double that of the neighbouring Borders region. Particularly high rates of unemployment in the Sanquar area (16.9%) reflect the problems being experience in the South Ayrshire coalfield.

Wages

The New Earnings Survey (Part E) published by the Department of Employment in March 1976 contains a large amount of detailed and interesting information on the distribution of earnings by region in Great Britain. Some of the results of particular interest in a Scottish context are set out in Table 3 . The figures all relate to April 1975.

Although in many instances the sample size was too small to permit accurate estimation of average weekly earnings for all groups; male and female, manual and non-manual, the information in Table 3 does give some indication of the spatial distribution of earnings within Scotland. Perhaps the most surprising result is the high level of earnings in the Highland region relative to those in the rest of Scotland and, indeed, to those in Great Britain as a whole.

The estimate of average gross weekly earnings for male employees in the Highlands, at £65.3, must be interpreted with some caution because of the associated 2.5% standard error. Nevertheless the figures do suggest, with a fair degree of certainty, that earnings in the Highlands were higher in April 1975 than elsewhere in Scotland. The principal reason for this was the high level of overtime working in the Highlands (7.1 hours) relative to Scotland (4.7 hours). Overtime working contributed £10.8 towards the weekly wage packet in the Highlands compared with £6.7 in Scotland as a whole.

One might surmise that the high level of oil related activity and shortage of extra manpower caused heavy utilisation of the existing labour force. One cannot foresee this high level of utilisation and consequent high earnings being maintained when oil-related activity in the Highlands tapers off.

In other regions which have been affected by the oil boom there has been no discernible impact on average wages. In those areas, workers directly concerned with the oil industry make up a much lower proportion of the total workforce. Thus the effect on average earnings is likely to be much less pronounced.

Though we have argued in the past that the focus of the Scottish economy is moving north, and each, average male earnings in the Strathclyde region continue to lead those in Grampian and Lothian. In previous Commentaries attention has been drawn to the relatively high level of vacancies in Strathclyde, given its high rate of unemployment. It has been argued that this phenomenon is a result of segmentation in the Strathclyde labour market, whether by geographical area or by occupation. The relatively high level of wages in Strathclyde may suggest a further explanation.

Persons made redundant in Strathclyde, because of the relatively high wages paid, may have higher wage aspirations for future employment, than workers elsewhere. Given a situation where firms are moving out of the area or are prepared to shift production to another locality this would suggest the existence of a greater gap than in other regions between the workers aspired wage and the employers offer. The larger the gap the longer is the average time for a worker to search through available job opportunities and find an acceptable offer. Not only is the average duration of unemployment longer in this situation but also vacancies take longer, on average, to clear. So it is quite conceivable that a high level of unemployment can co-exist with a relatively high level of vacancies.

Job Re-Design

Scotland does not have a good industrial relations record. Its share of total working days lost through strikes has tended to be considerably higher than the 9.3% share one would expect from the employment relative. In fact, the average share over the last 10 years has been 13.6%.

Other countries with industrial relations problems have been experimenting with job re-design - the re-evaluation of work schedules in order to reduce the repetitiveness and tedium of jobs on the factory floor - as a means of reducing industrial conflicts. Imaginative schemes to increase job-satisfaction have been implemented in the USA and Scandinavia.

A recent report* of the Work Research Unit which was set up within the Department of Employment in 1974 discusses some of the experiments in job re-design which are taking place in Scotland.

A high proportion of firms engaged in these experiments are subsidiaries of foreign companies. As yet few native Scottish firms have shown much interest. Of course, the activities carried out by many firms, especially smaller ones, are not amenable to re-design. Nevertheless, many opportunities to increase worker satisfaction, without necessarily reducing profit levels, must currently exist, unrealised, in Scotland.

A long-run improvement in Scottish industrial performance is contigent not only on increased investment in new plant and machinery, but also on an improved relationship between manager and workforce. Such improvement can be considerably accelerated if workers feel that their job is meaningful and creative.

* *Redesigning Jobs in Scotland.* A Survey by Mary Weir for the Work Research Unit. Work Research Unit. Report No 5.

Outlook for the Future

It seems that the level of economic activity in Scotland has passed its nadir, and that a slow recovery is under way. Among the forces stimulating recovery are overseas exports, stockbuilding, and the acceleration of manufacturing production in the rest of the UK.

As the recovery gains force one can expect the underlying upward trend in unemployment to level off. Two factors will constrain any reduction in unemployment, however. Firstly, there is the problem, obvious from the July unemployment figures, of the absorption of school leavers into the workforce. There is now a strong case for an extension of the job creation programme to continue to act as a 'buffer' between full-time education and full-time employment. Secondly, further cuts in public expenditure, especially if they occur in housing or construction will to some extent counterbalance any reduction in unemployment through expansion in the private sector.

Earlier this year we forecast that tht level of unemployment in October would be around 153,000 (seasonally adjusted). We expect to see little change on this figure by January 1977, though of course, there will be the usual seasonal rise in the unadjusted figure to around 160,000 in that month.

However, there are grounds for concern that the recovery may begin to fade early next year. This concern is based on the possibility that some of the expansion forces may weaken in the second half of 1976, while influences depressing demand seem likely to grow stronger as time goes by.

The advantage to exporters of the depreciated pound may be short-lived as higher raw material costs pass into higher cost of production. On the other hand, consumer spending which has been very quiet this year, is likely to fall in real terms as real incomes continue to fall, (unless there is a sudden burst of dis-saving). And the limitations on local authority expenditure are bound to make themselves increasingly felt in 1977. It is too early to say to what extent the forthcoming cuts in public expenditure will affect aggregate demand in Scotland, but their effects must be negative.

The only element of domestic demand to which one can look for any stimulus in 1977 is investment in stocks, in plant and equipment, and just possibly in private house building. Unfortunately, there is no evidence that a high level of demand for capital goods by private industry will be forthcoming. The low level of industrial investment by private industry is a problem of longstanding in Scotland, but the Government must face up to it now if unemployment levels in excess of 120,000 are not to continue throughout 1977 and 1978, as well as throughout 1976.

In the private sector, the remedy must be to reward efficient investments with appropriate monetary and fiscal incentives. In the public sector, new forces of organisation as well as new systems of incentives must be developed to make public enterprise a success. Present circumstances pose a challenge for the Scottish Development Agency: it is the only instrument available with which the government can bring about a sustained increase in the level of productive investment in Scotland. If it suceeds, it will make possible higher levels of employment in the future, if it fails, the outlook for the next two or three years is bleak. Prior to its establishment, it was widely believed that the Agency could become a catalyst for growth in the Scottish economy. The next two years will show whether these expectations are to be fulfilled or disappointed.