

THE SCOTTISH ECONOMYIndicators of Economic Activity

An index of industrial production for Scotland has recently been published by the Scottish Office. This index, constructed mainly from the data supplied by the Business Statistics Office, Newport, shows how the volume of output in different sectors of Scottish manufacturing industry has varied since 1970. Quarterly data are available from the beginning of 1973, observations prior to that date being annual. The most recent observation is for the firstquarter of 1977.

Only establishments with 80% or more of their employment in Scotland are used in the compilation of the index. This poses some difficulties, especially when firms, through their changing employment pattern, are included in the index for some period of time and excluded during another period.

Movements in the index since 1970 generally follow those of the UK index of industrial production - rising between 1970 and 1973 and falling thereafter. However, there are some significant differences. Over the whole period the Scottish index fell slightly less than did the UK index, reflecting the relative strength of the Scottish economy in the recent past. This improvement was not uniform across industries. In fact, a wide variation in industrial performance is evident: mining and quarrying, food, drink and tobacco and electrical engineering performing rather better in Scotland than in the UK, while bricks, pottery, glass and cement, and printing, paper and publishing fared considerably worse in Scotland.

The effect of North Sea Oil on the Scottish economy is perhaps not fully taken into account by movements in the index. There are two main reasons for this. Firstly, the somewhat puzzling use of employment as an indicator of the output of petroleum and natural gas (MLH 104) will vastly understate the output of the North Sea oilfields when fully operative. Only 'Other manufacturing industry' (MLH 499) uses employment as an output proxy rather than a production or sales series. Secondly, the weights allocated to each industry are derived from 1970 census of production figures. Since the effect of North Sea oil at that time was negligible it is perhaps not surprising that the weight per thousand for petroleum and natural gas is 0.2 per 1000 as against 2.9 for soft drinks.

It has been argued elsewhere^{*} that Scotland is a 'cyclically sensitive' region. That is, due to its industrial structure, unemployment in Scotland tends to rise faster during a recession and fall more quickly during a boom, than in the country as a whole. Such sensitivity need not be reflected in the index of production, since it may merely reflect differences in regional propensities to hoard labour. Further, where industrial structure is changing through time the cyclical sensitivity of a region may itself fluctuate. Recent experience would suggest that unemployment in Scotland is less responsive to UK fluctuations than it was in the past. This may be due to a shift towards employment in industries with a higher propensity to hoard labour or to industries whose output is not currently responsive to the general business cycle.

Regression analysis^{**} for the 1972-1974 period suggests that the response of the Scottish index of industrial production to movements in the UK index does not differ significantly from the response of Scottish unemployment to variations in UK unemployment. Further, over this period, the results confirm that Scottish variables have fluctuated less than their UK counterparts (the regression coefficients on UI and UU are significantly less than one).

* See for instance *F Brechling, Trends and Cycles in British Regional Unemployment. Oxford Economic Papers 1966.*

** The estimated equations were:

$$SI = 45.3 + 0.61 UI + \text{seasonal dummies} \\ (5.1) (7.4)$$

$$SU = 2.4 + 0.64 UU + \text{seasonal dummies} \\ (2.2) (2.06)$$

where SI = Scottish Index of Industrial Production
 UI = United Kingdom Index of Industrial Production
 SU = Scottish unemployment rate
 UU = United Kingdom unemployment rate

and the t statistics are given in brackets

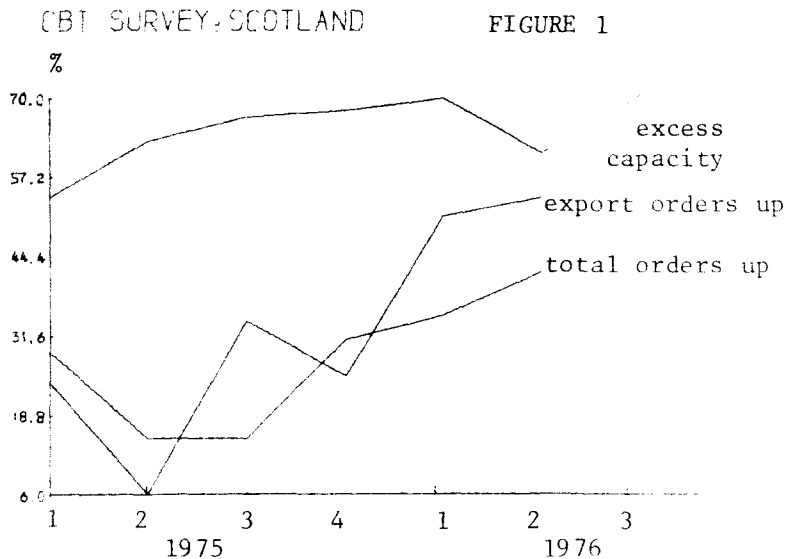
All observations are quarterly and instrumental variables were used for estimation.

Analysis of the CBI capacity utilisation index also suggests a close correlation with the index of industrial production - again confirming the view that the CBI index is a useful guide to movements in aggregate output.

The other indicators at our disposal do not give a clear view of the underlying trends in the economy at present. Any picture of economic activity in Scotland can only be highly tentative as the UK economy enters a period of further decline. Much depends on what other economic measures may be forced on the government in return for yet another IMF loan.

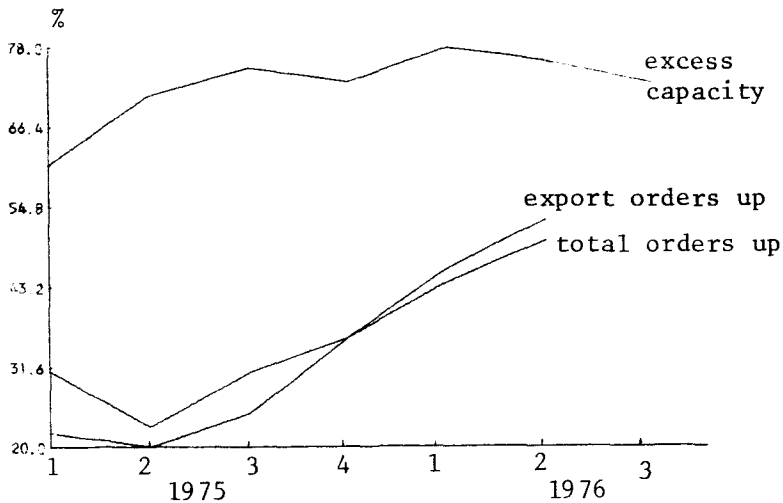
Depreciation has helped to maintain export price competitiveness, but the detrimental effect of this exchange rate adjustment is being seen in rising raw material import costs which can do little to enhance industrial profitability and ultimately investment. Unemployment is still rising, albeit at a slower rate than in the first and second quarters of 1976. Output has probably not made any substantial recovery in view of the UK and world slowdown. This reduction in economic activity in our principal markets will not help improve our export performance, which is the main inducement to economic recovery at the present time.

The July CBI Survey of Scottish industry was fairly optimistic, but the course of events since then may have outdated its conclusions. In Figures 1 and 2 we compare the Scottish and UK order book trends and capacity utilisation trends. It seems clear that Scotland's export



Source: *CBI Industrial Trends*

CBI SURVEY - UK FIGURE 2



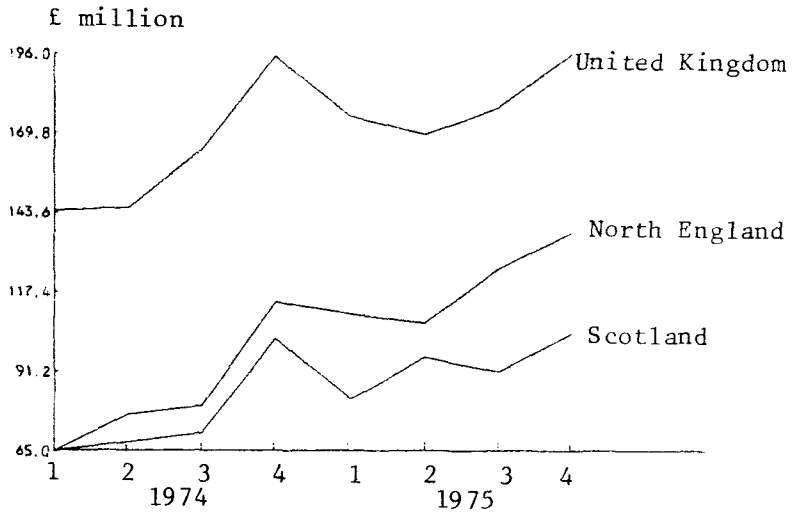
Source: *CBI Industrial Trends*

orders have tailed off slightly and the capacity utilisation position has worsened up to the beginning of the third quarter of this year. This may possibly be a seasonal effect over the holiday period rather than a downturn in aggregate demand. But Scotland is probably now beginning to feel the effects of public expenditure cutbacks while consumer expenditure continues to experience the effects of inflation, wage restraint and taxes.

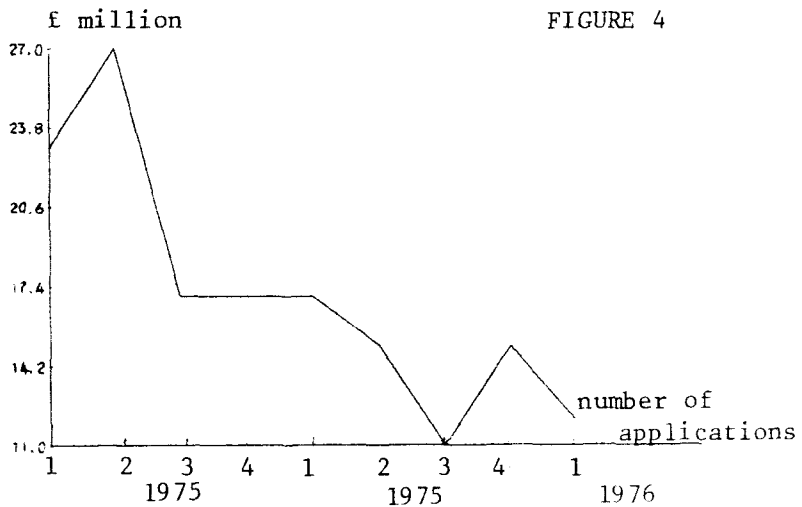
Some recovery in manufacturing industry was indicated by the CBI. To some extent this is borne out by a comparison of bank advances between London and Scotland illustrated in Figures 5 and 6 (at back of Commentary), where total and manufacturing advances increased significantly. This may be indicative of restocking. However the sterling crisis has precipitated a very close regulation of the money supply with calls for further special deposits, and rising interest rates. This can only dampen borrowing and postpone investment.

The CBI also suggest that investment intentions have improved. In Figures 3 and 4 we present our two investment indicators. The most recent observation on manufacturing investment in the final quarter of 1975 pointed to an improvement in Scottish investment compared to the

CAPITAL EXPENDITURE BY REGIONS FIGURE 3



SCOTTISH REGIONAL SELECTIVE ASSISTANCE



Source: *Trade & Industry*

previous quarter and more in line with the rest of the UK. Our more up to date, but perhaps less reliable, indicator of investment intentions is the number of applications for regional selective assistance. This series turned down in the second quarter after a first quarter improvement this year and recent events can have done little to enhance investment intentions.

One mildly encouraging indicator was the reduced number of bankruptcies in the third quarter of this year, shown in Figure 7, which probably does reflect an improved industrial cash flow. But it must be noted that company formations also fell over this period.

It is with considerable trepidation that any forecasts of Scottish prospects may be made at the present time. Any marked recovery must be unlikely in the circumstances facing the UK, together with the general slowdown in the world economic recovery.

Current Trends in the Economy

The construction industry continues to be depressed and the latest increase in the cost of borrowing is bound to have a further adverse effect. The value of new orders received by contractors in the second quarter of 1976 was slightly higher than for the same quarter of 1975, but this probably represents a fall in real terms.

There has been a discernible reduction in public sector orders, notably in housing, over the last year. Housing statistics show an overall decline in the number of new public sector houses and flats being constructed and also indicate that future public housing programmes, as measured by 'houses approved and awaiting starts', have been curtailed to an even greater extent.

In the private sector, housing orders have risen over the past year. Industrial orders have been rather erratic but have begun to show an upward trend. A regional analysis of new orders for the second quarter of 1976 compared to 1975 points to an increase in Grampian Region orders and a slight decline in Strathclyde.

Oil production from the five operating fields in the North Sea, Argyll, Auk, Forties, Montrose and Beryl, is now running at over 1m tonnes a month. The first oil from the latest operational field, Mobil's Beryl, was discharged to a tanker from the concrete storage cells in September.

According to the Department of Energy, there was a 'very satisfactory response' from oil companies applying for drilling rights in blocks on offer for the fifth round of exploration licences. Licences will be

Lloyds see no sign of recovery in the immediate future. World over-capacity has meant 30% to 60% cutbacks in many countries' yards, and total domination of the industry by the Japanese is still a possibility.

The UK industry is in a critical and uncertain period. The larger firms are about to be nationalised. Unless new orders are obtained either yards will have to be further subsidised or they will have to be closed down.

The Scottish shipbuilding industry directly employs 23,000 with an estimated 30,000 indirectly dependent on the industry. A survey by The Scotsman in September indicated that unless orders are confirmed within the next few months further redundancies are inevitable.

The modern naval yard at Yarrow is still profitable but orders are needed at Robb Caledon in Leith and at Hall Russell in Aberdeen before Christmas. Scott Lithgow, Govan and Robb Caledon at Dundee have orders to keep them busy only until the Spring. Extensive modernisation has been carried out at Govan and modernisation plans, which were put aside by Robb Caledon when nationalisation was announced, could be used in the future. Some opinion feels that concentrating on smaller highly specialised ships might be a better strategy than competing with the large 'ship factories' of Japan, Korea and the United States. Two ship repair yards in Glasgow and Leith were forced to close down in September due to the dearth of orders.

A further factor affecting the future of smaller vessels is the future profitability of inshore fishing.

Considerably more optimism about the future of heavy engineering, notably in export potential, was reflected in the CBI Survey in July. Expectations of orders and output appear to have increased. In mechanical engineering 93% said, in April, that lack of orders was the chief limiting factor to increased production, while only 57% cited lack of orders in July. Mentions of other options like lack of skilled labour and components increased. However 79% of firms were working below capacity.

The increase in orders in heavy engineering is crucial to the machine tool industry, for example, where orders are still slow. Optimism has to be translated into definite orders and here firms in different subsections of the industry are meeting with mixed success. John

Brown Engineering have announced a series of large export orders for gas turbines and predict that the value of orders on hand will break the £100m mark by the end of the year. This would mean increases in employment and guaranteed work for 1,500 employees until 1978. A £2.4m investment programme has been started to carry out retooling. Babcock and Wilcox, operating in a depressed market, face large scale redundancies. They hope for an order at a generating station that they admit, due to the Central Electricity Generating Board's overordering in the 1960's, is not required.

After a disastrous year the demand for cars has increased, but foreign cars now account for over 40% of the UK market. Imports of cars and components continue to rise at a faster rate than exports.

In whatever way the overall picture evolves, it seems that car manufacturers in Scotland are making concentrated efforts to revitalise their plants. Chrysler have two shifts working at Linwood and anticipate an increase in sales with the new Avenger. Recently the export of kits to Iran has been a little disappointing. Leyland are planning to expand their profitable truck and bus division. At present only 10% of components used by Leyland in Scotland are made in Scotland. They are currently converting their Glasgow plant into a machining sub-assembly unit and appear to be considering turning this into a major component supply centre.

The CBI in July reported less optimism in the food, drink, and tobacco sector. However, in the last few weeks food firms, like United Biscuits, with a significant manufacturing capacity in Scotland, have been publishing better financial results.

There are signs of recovery in the whisky industry with output looking up from the 1975 low. Exports in August in volume terms were 5.9% up on the previous year's figures and the eight month running total of exports is up 7% in volume and 18% in value. A study carried out in June for a firm of stockbrokers projects that consumption will rise by a slower rate annually - 8% - for the next few years and may fall off further during the 1980's. This study suggested that the industry had been over-optimistic about prospects in the past. The slower future growth rate would be due to lack of demand in the two main markets, the UK and US, where home duties could affect sales in the former and a shift in demand in lighter flavoured drinks in the latter.

Another study, by a firm of economic consultants, stated that the pressure by the industry and some trade unions to prohibit the export of bulk whisky to preserve bottling jobs in Scotland would be detrimental to overall export sales.

The modest improvement in the textile industry is continuing after an exceptionally bad period. The CBI survey in Scotland in April indicated that output, notably exports, was up and this has held during the July survey. There does appear to be less optimism about domestic sales than about exports.

Scottish producers are thought to export a higher proportion of their output than the UK average, and UK clothing exports rose by 50% for the first seven months of 1976 over the same period in 1975. In both the woollen and knitwear industries there appears to be a trend towards producing the higher quality goods often demanded in the export trade. Capacity in Scotland will rise with the reopening of Paton's Alloa plant and with the SDA recently announcing investment plans for the defunct knitwear factory at Shotts.

While there are signs of a slow recovery in the printing industry, publishing is still depressed. The continuing devaluation of the pound has attracted enquiries from overseas publishers about printing contracts.

Many producers' returns in agriculture have been helped by the higher prices of drought-affected crops. Livestock prices have also been rising, mainly due to a reduced supply in the UK, as have cereal prices, possibly in anticipation of a green pound devaluation. While the present position has improved little, a continuing sterling depreciation together with the Government's resistance to the devaluation of the green pound must be causing some concern as to future prospects.

The major fishing nations are taking steps to extend their national fishing limits to 200 miles. The EEC policy is to treat the fishing grounds of member nations as a common resource, and the long-awaited policy statement refused the British request for exclusive fishing rights in coastal zones up to 50 miles. This decision presumably reflects the weak bargaining position of the British Government, and puts in doubt the future of the Scottish fishing industry. However, recent increases in prices, due to the scarcity of landings at other UK ports has brought a considerable short-term improvement in the income of the

Scottish fishermen. Gross returns for the first eight months of 1976, at £53m, are up £16m.

Employment and Unemployment

Recently released 1975 Census of Employment statistics show that total employment in Scotland declined marginally between 1974 and 1975. The fall in total employment from 2084 thousand to 2076 thousand brought to a halt the upward trend which had begun in 1972. Preliminary estimates for March 1976 show the downward slide continuing.

Overall changes of course mask inter-industry differences. A fall of 29 thousand in manufacturing employment between 1974 and 1975 was offset by a rise of 30 thousand in service employment. Employment in non-manufacturing production industries fell by around 8 thousand.

Amongst manufacturing industries particularly large falls occurred in electrical engineering, food, drink and tobacco, and textiles. The overall reduction of 26 thousand employees in these industries was, to some extent, balanced by increases in employment in metal manufacture and mechanical engineering.

Employment in agriculture continued its long-term decline - in 1965 there were 78 thousand agricultural workers as against 49 thousand in 1975. However, farm output continued to expand. Reduced output of coal during 1975 was accompanied by a reduction in the number of miners by over 1000.

During 1975 employment in the construction industry actually increased from 160 to 162 thousand - a sharp contrast to the experience of the 1971/72 recession when employment fell by 15 thousand between 1970 and 1971. However, the reduction of public investment in housing etc., coupled with the squeeze on private building through credit restrictions would suggest that a substantial fall in construction employment has occurred between 1975 and 1976, and may be expected to continue.

In the service sector there was a large increase in employment in public administration and defence. The reorganisation of local government resulted in an approximate 10% increase in staff between 1974 and 1975. Though this may have kept the level of unemployment below what it might otherwise have been the increase has had the effect of increasing the public sector deficit by £100m - simply to meet the extra wage costs.

Since June, unemployment in Scotland has risen sharply from 144.1 thousand to 161.4 thousand in September. The August figure of 170.1 thousand was a post-war peak. The main impetus for this increase has come from a rise in the number of unemployed school leavers. Peak unemployment amongst school leavers occurred in July when 22.7 thousand were registered at employment exchanges. Since then approximately 7.4 thousand of these have found employment. Much of this employment will be temporary. A proportion of those who have had short-term employment will return to the unemployment register over the winter. A new scheme designed to reduce the level of long-term unemployment among young people was introduced on 1 October, i.e. The Youth Employment Subsidy of £10 per week payable to employers who take on a young person under 20 who has been unemployed for six months or more. In July, there were approximately 3000 Scots in this category out of a total 27000 in the UK. The subsidy, payable for the first six months of employment, is unlikely to cost the exchequer more than £5m between October and March, when the scheme ends.

Unemployment is now more concentrated amongst young people than it used to be (see p 19). The introduction of schemes such as the above will assist temporarily those young people worst affected by this shift. However, even in time of financial stringency, the government might consider extending the schemes and making them permanent in order to reduce the discouragement felt by young people unable to find employment.

Excluding school leavers, the seasonally adjusted level of unemployment in September was 149.4 thousand. Our April forecast of 153 thousand unemployed (seasonally adjusted) by October seems likely to be quite accurate.

A comparison of the unemployment figures for Scotland with those of the rest of Great Britain shows that, though Scotland's relative improvement may have halted, there is no evidence as yet of a return to the poor performance of the 60's and early 70's. The seasonally adjusted unemployment relative (see Figure 8) has increased slightly from an all time low in the first quarter of 119 to 124 in the third quarter.

At 7.4%, the unemployment rate in Scotland in September was lower than the rates in the other traditionally 'depressed' regions of the UK - Wales, North of England and North-West of England (see Table 1). Further, the 6% rate of unemployment in Scotland excluding Strathclyde was lower than the 6.2% overall figure for the UK.

In comparison with the rest of the UK, the number of vacancies in Scotland still remains high, given its unemployment rate. The U/V ratio has risen in the last quarter (see Figure 9), but is low in comparison with previous, less severe, recessions. The U/V ratio in Strathclyde is lower than that in Wales, the North, the North-West and the West Midlands of England, though its unemployment rate is substantially higher. As we have argued in previous Commentaries this indicates some deficiency in the operation of the labour market in Strathclyde - probably a low level of occupational mobility.

Regional Unemployment in Scotland

During the last quarter unemployment in Scotland has risen by 12 thousand. The increases were remarkably similar in some of the large regions even though their unemployment rates differed markedly: the June-September increases for Highland, Grampian, Lothian and Strathclyde all lay between 13% and 17%. This similarity is due to some extent to common supply side factors - such as the entrance of large numbers of school leavers to the labour market - rather than to synchronous demand movements.

However, against the general upward trend in the Scottish regions (see Figures 11-15) during the last quarter both the Borders and Western Isles have experienced a reduction in their unemployment rates: the recent recovery in the textile trade will have had a favourable effect on employment in these areas.

Unemployment by Age Group

A feature of the recent increase in the level of unemployment in Scotland has been the way in which the brunt of the increase has been borne by those in the younger age groups. Figure 10 shows clearly that the age distribution of unemployed males has changed significantly since 1961. At that time 52.8% of the unemployed were aged 40 or over. By July 1976 this proportion had fallen to 35.0% whereas the proportion aged under 20 had risen from 15.9% to 21.2% over the same period. The proportion aged between 20 and 40 has also risen - by 12.5% between 1961 and 1976.

Explanations for this changing structure can be found on both the demand and supply sides of the labour market. On the supply side the changing age structure of the working population, due to the post-war "baby boom" has resulted in a lowering of the average age of workers and consequent increase in the proportion of younger persons unemployed. On the demand side it is noticeable that the sharpest falls in the proportion of males unemployed aged over 40 occurred over the periods 61/62, 66/67, 70/71 and 74/75 when the Scottish economy was going into recession and total unemployment rising fast. This suggests that when demand falls employers tend to shed younger, less experienced workers first. One can suggest three possible explanations of this phenomenon.

1. Employer contributions to redundancy payments which were introduced in 1967 increase both with age and with length of service of employee. Given the close correlation between length of service and age the cost to the employer of making an older employee redundant is now considerably greater than it was in the early sixties.
2. More firms are adopting a last in, first out, policy to determine the allocation of redundancies - so discriminating against younger workers.
3. The increasing cost of hiring and training new workers gives employers an incentive to retain experienced workers, even though they are not being fully utilised, during a recession.

Outlook and Appraisal

In the July Commentary we suggested that the slow recovery in Scottish economic activity then under way would begin to fade early in 1977. Among the forces we saw to be stimulating that recovery were overseas exports, stock building, and the acceleration of manufacturing production in the rest of the UK. Factors working against recovery included public expenditure cuts, and stagnating consumer spending as real incomes fell. Events since July have suggested a dramatic weakening of the positive factors, and a strengthening of the influences depressing both demand and supply. We now think that aggregate output will at best show no more than a modest increase in the next six months.

The stockbuilding boom seems to have stopped, industrial production in the UK has fallen for three consecutive months to August, and export prospects are overshadowed by the slowing down in the rate of growth of the world economy, and by the apparently disappointing performance of UK exports since the depreciation of the external value of the £ from \$2.30 in July 1975. We do not know whether Scottish industry has expanded its export trade faster than industry in the rest of the UK, but it does remain true that overseas exports offer the only prospect of buoyant

markets for the output of Scottish industry in the next twelve months. In this connection, we welcome the joint STUC-CBI initiative to improve Scottish export performance.

On the negative side, public expenditure limits have become a reality for local authorities. Real personal disposable income is thought to have fallen by around 5% in 1976, and is expected to fall by a roughly similar amount in 1977, as a result of taxation and inflation. So far from the government having reached their target of a 9% annual rate of inflation in the last quarter of this year, it now appears unlikely that they will achieve this target by the last quarter of 1977. The rise in consumer prices mid-year 1976 to mid-year 1977 may be of the order of 15%. Given the nature of the measures which have been taken since July, we can no longer expect unemployment to fall in the first quarter of 1977. In fact we expect that seasonally adjusted unemployment will rise to 156,000 in April 1977 from the level of 153,000 which we forecast for January.

In our last Commentary, we observed that there was no evidence that a high level of demand for capital goods by private industry would be forthcoming in 1977. The increased National Insurance contribution, together with other fixed costs of employing labour, higher interest rates, and accelerating raw material costs all must act as further disincentives to productive investment. The effect of the rise in the mortgage interest rate must be to discourage private housebuilding, but it may have a less severe effect on disposable income of Scotland than elsewhere in the UK. Because of the high level of council housing in Scotland, a smaller proportion of the Scottish population are repaying mortgages.

The public expenditure changes introduced at the end of July amended rates of payment of regional employment premiums. The amount paid to employers per week for male employees engaged in manufacturing was reduced from £3 to £2, while the payment for females was raised from £1.50 to £2. These changes are likely to reduce the total expenditure on REP in Scotland by about £10 million annually. The real value of the subsidy will have declined by about 40% since 1974. Although the short term effect of these measures will be detrimental to employment and investment, the government has introduced new subsidies to service industry employment in assisted regions. For example, £1500 is payable for each job created in special development areas, provided projects have a genuine choice of location between the assisted areas and elsewhere. This change of heart presumably reflects the belated realisation that there is scope for productive investment in services as well as in manufacturing.

Despite a fall in living standards unparalleled in the post-war western world, the government continues to act as if the problems of the economy were those of financial management, and not productivity, savings and the allocation of resources. The official attitude seems to be that, if ignored, these underlying problems of the economy will disappear. We have pointed in earlier Commentaries to some of the objectives which must be realised if a sustained improvement in the economy is to be achieved. Unfortunately, the financial measures taken by the government since July 1975 have made it more difficult rather than easier for these objectives to be attained, since they have imposed additional constraints upon productive activity, without providing commensurate incentives.

In our last Commentary we said "Unless there is a major initiative in government economic policy, leading to a substantial and permanent increase in the level of productive investment in both the public and the private sectors, the outlook for the Scottish economy in 1977 and 1978 is a bleak one." Events since July of this year have only served to underline this statement. Indeed, it now seems as if, in the absence of any such policy changes, unemployment in Scotland will remain above the 120,000 mark even in 1978.

A special article in this issue of the Commentary shows that cutting public expenditure "across-the-board", as is happening in response to the imposition of cash limits, will only increase unemployment and reduce the level of provision of public services. Experience has shown that in these circumstances it is the lowest-paid workers, (e.g. school cleaners) whose earnings are curtailed. There is, however, one way of increasing employment, while maintaining the real level of public services, and keeping public expenditure within agreed limits. This could be brought about if all those earning a salary of £4000 per year, and above, in central and local government took a cut in their salaries. The money thus released would then be used to re-employ unemployed workers in the public sector. Alternatively, by increasing REP or lowering the National Insurance contribution it could be used to re-employ unemployed workers in manufacturing or productive services. Either way, the total expenditure would remain constant. This measure would mean an explicit redistribution of income in favour of the lower paid and the unemployed: such a redistribution would partly offset the recent tendency of high salaried public officials increasing substantially their incomes through such devices as indexed pensions and regional government reorganisation, while lower paid workers are made redundant.