



Strathprints Institutional Repository

Bell, David N. F. and McGilvray, James W. and Oswald, Andrew J. and Simpson, David R. F. (1975) The Scottish economy [July 1975]. Quarterly Economic Commentary, 1 (1). pp. 14-28. ISSN 0306-7866 ,

This version is available at <http://strathprints.strath.ac.uk/50190/>

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Unless otherwise explicitly stated on the manuscript, Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Please check the manuscript for details of any other licences that may have been applied. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (<http://strathprints.strath.ac.uk/>) and the content of this paper for research or private study, educational, or not-for-profit purposes without prior permission or charge.

Any correspondence concerning this service should be sent to Strathprints administrator: strathprints@strath.ac.uk

4. The Scottish Economy

Main trends 1964-73

Between 1964 and 1973 Scottish GDP, valued at current prices, is estimated to have increased by a little less than 120%. Constant price estimates of Scottish GDP are not available, but by applying to current price data the implicit deflator for UK GDP, we can indicate approximate trends in real Scottish GDP during this period.

These estimates, which must be emphasised as highly tentative, are shown in Table 1. They indicate that between 1964 and 1973 GDP at constant prices increased by 28.7%, while over the same period UK GDP (including Scotland) increased by 26.2% in real terms. Expressed in annual terms these yield compound growth rates of about 2.8% and 2.5% respectively, though both rates are boosted by the inclusion of 1973 as terminal year, since real growth in 1973 was substantially higher than in any other year during the decade. (for 1964-72, compound growth rates were 2.4% for Scotland and 2.2% for the UK). Both rates are markedly lower than those recorded for other OECD countries over comparable periods.

Inasfar as the Scottish and UK figures can be regarded as independent estimates, Table 1 and Figure 1 show the close correspondence in annual changes in GDP (deducting the Scottish GDP estimates from the UK and comparing Scotland with the Rest of the UK produces an almost identical effect). Apart from the highly erratic course of year to year changes, a general feature of these data is to show that Scotland fares better in an upswing and worse in a downswing than the UK generally, a result consistent with the view that weaker regions are more markedly affected by cyclical fluctuations and centralised stabilisation policies.

Whatever encouragement may be derived from the marginally better performance of the Scottish economy vis-a-vis the rest of the UK must be tempered by the low level and erratic nature of growth during this period, as well as by realisation of the substantial volume of regional assistance allocated to Scotland since the mid-1960's. For some years, estimates of Regional Policy Expenditure in Scotland exceeded our estimates of year to year changes in GDP. Given the relatively favourable allocation of regional aid

to Scotland, and the very small differential growth rate, there is little evidence to suggest that the end of this decade marked any real shift in the region's relative growth potential. In fact from 1969/70 the growth rate differential between Scotland and the rest of the UK actually declined, coinciding with a decline in the real value of regional aid expenditure in Scotland from 1970.

However interpreted, the growth rate differential between Scotland and the rest of the UK was paralleled by favourable movements in a number of other indicators. The unemployment percentage in Scotland fell from an average of more than twice the UK rate in 1964 to a ratio of 1.7 in 1973 and Scottish GDP per capita rose from approximately 88% to 94% of UK GDP per capita over the same period. From these and other indicators it is clear that the Scotland-rest of UK differential narrowed, though whether this reflects a permanent shift or a temporary one dependent on continuing regional aid is not yet certain.

Changes in definition and classification mean that it is difficult to make exact comparisons of employment at different points in time, but from the mid-sixties up to 1972 the picture is one of steady decline. Employment in primary industries (agriculture, mining) fell by an estimated 60,000 or so and employment in manufacturing by over 50,000 between 1964 and 1972.

Despite lack of comparability in the employment statistics, and hence some uncertainty over the exact net changes in employment between 1964 and 1972, it is clear that the rate of growth during this period was insufficient to maintain the existing labour force, let alone absorb additions to it. Emigration, the traditional means of effecting some kind of equilibrium in Scotland's labour market, continued at a rate of between 20 and 40 thousand per year throughout the period. In 1973, however, both employment and migration were dramatically affected by the unprecedented rate of growth in the economy; emigration fell to an estimated 10.7 thousand in 1972/73 and in 1973/74 there was an estimated net inward migration of 7.8 thousand. Employment increased by more than 60,000 over 1972, a figure equivalent to approximately 3% of the total number of employees. We comment further on these changes below.

These overall trends in employment mask notable differences in the experience of different sub-regions of Scotland. Dominating the general picture is Strathclyde, with at present around 50% of employment in Scotland and accounting for nearly 90% of the estimated net decline in employment since 1964. In contrast, the smaller regions of Highlands, Grampian and Fife recorded increases in employment over this period, albeit at a modest rate. Employment in the second largest region, Lothian, is also estimated to have declined, though by a much lower rate than Strathclyde, and a marked decline is also recorded for Tayside.* While to some extent, particularly in the latter part of the period under review, these patterns have reflected the developments associated with North Sea Oil, over the period as a whole they suggest a gradual shift in the axis of economic activity from the West of Scotland to the East and North East. The degree to which these tendencies should be restrained or encouraged remains an important policy issue and involves difficult political choices.

The pattern of unemployment experience in Scotland has in general reflected these implied trends in the pattern of economic activity, though exact comparisons are not possible because time series of unemployment statistics and percentages relate to the former planning regions, while the employment statistics quoted above relate to the new regions. The distribution of unemployment in Scotland has mirrored employment experience; the North-East and Highlands, which together accounted for 16% of recorded Scottish unemployment in 1965, accounted for 9% in 1973, while Glasgow's share rose from 54% in 1965 to 59% in 1973. The share of Edinburgh and Tayside rose from 22% in 1965 to 25% in 1973 (Table 2)

Changes in unemployment rates over time within planning regions are less readily analysed because of changes in the classification of employment and

* Data for regional employment are taken from the Scottish Economic Bulletin, Number 7, February 1975 and must be interpreted with considerable caution, for reasons of comparability noted in the Bulletin.

unemployment statistics, and fluctuations in the overall rate of unemployment throughout the period further complicate comparisons. However, the general picture complements the employment and unemployment shares pattern described above (for further details of changes in unemployment percentages, see the Scottish Economic Bulletin, February 1975.)

In summary, while growth in Scotland during the period 1964-73 exceeded that for the rest of the UK, with consequential effect upon relative unemployment levels and other indicators, the differential was marginal and the absolute rate of growth low; moreover, viewed in the context of a continuing level of regional aid highly favourable to Scotland in comparative terms, there is no real evidence of an improvement in growth potential. More significant perhaps has been the gradual shift in the location and pattern of economic activity within Scotland and the social and economic consequences which may stem from this.

The economy in 1974-75

Viewed in retrospect, it is sometimes alleged that the upsurge in output and employment generated in Scotland in 1973 can in large part be attributed to the regional demand impact of North Sea Oil development and to the indirect effect of this development on business confidence in Scotland. However, there is little evidence to support this, at least in 1973. Direct employment on oil-related activity was estimated at about 6,000 in mid-1973, and even making generous allowance for indirect and anticipatory expenditures generated the total effect on growth in 1973 must be judged small. As shown above, annual changes in Scottish GDP are closely correlated with changes in UK GDP, and statistical estimates of Scottish GDP in 1973, based on actual UK GDP for that year, yield estimates of Scottish GDP growth which are very close to the actual.

Much more important as a clue to possible change in the relation between regional and national growth is the performance of the Scottish economy in 1974, and subsequently. Unfortunately, estimates of Scottish GDP in 1974 are not yet available and we have perforce to fall back on indirect

measures of the level of activity in 1974.

In general, this can be approached either by identifying a series of leading indicators and using these to "forecast" GDP in the recent past - a process which we are currently engaged upon as a means of predicting future activity levels - or by identifying one or more variables which are available for the recent past and which are known to be closely associated with GDP. The latter are known as proxy variables.

Unfortunately, while there is a continuing improvement in the range of economic statistics published, information on a number of potentially important proxy variables is either not available at all or is subject to the same lag in publication as the GDP estimates. These include data on employment, industrial production and energy consumption, which in conjunction appear to yield fairly good estimates for past years.

In the absence of recent values for these series, and as yet of a tested model based on leading indicators, we have instead postulated a series of single-equation models in which Scottish output is estimated as a function of UK demand. The simplest version of these asserts that Scottish GDP is determined by changes in aggregate UK demand and in effect assumes that the observed relationship between Scottish GDP and UK GDP continued through 1974 and early 1975. This of course begs the question which we are trying to answer, whether indigenous factors in the Scottish economy lead to a divergence between Scottish and UK economic performance in 1974 and softened the impact of the downturn in the UK economy. Subsequently, however, we have modified the statistical basis of the forecasts in the light of available evidence for 1974, in particular unemployment data (and including oil-related activity).

There was no real growth in the UK economy during 1974, indeed on the compromise estimate of GDP, a fractional fall over 1973. On historical evidence of past trends, using UK GDP as a proxy variable would lead us to expect a growth rate for Scotland in 1974 of between - 0.2% and 0.1%, depending on the particular form of forecasting equation used.

However, several indicators point to a better economic performance in Scotland than suggested by these forecasts. The most important quantitative indicator is the behaviour of unemployment in Scotland and the Scotland-GB unemployment ratio. After being relatively static since 1971, this ratio fell sharply through 1974; while the trend in unemployment was upwards, the percentage unemployed rose more slowly in Scotland than in Great Britain as a whole. By November 1974 the Scotland/GB ratio had fallen to 1.48, the lowest figure recorded since 1954, and except for one month the decline was continuous throughout the year. As a corollary, it may be inferred that employment and output fared comparatively better in Scotland than in the rest of Great Britain.

Some further evidence lends support to this thesis. The CBI Industrial Trends Surveys for Scotland indicate that during 1974 employment and output held up better in Scotland than in the rest of the UK, at least during the first three quarters of the year, and that industrial activity was less adversely affected by the three day week. Moreover, official quarterly estimates show that UK GDP was lowest in the first two quarters of 1974, recovering slightly in the second part of the year. Taken together it is reasonable to conclude that Scotland performed relatively better than the UK during the first part of 1974 and at least performed no worse during the second part of the year - indeed the evidence on unemployment suggests that employment and output in Scotland may have been sustained at a comparatively higher level throughout the whole of 1974.

Our conclusion is that Scottish GDP in real terms increased in 1974, and our central estimate for this increase is £4106m at constant prices; this represents an increase of 0.8% over 1973. Modest though this is, in a year in which UK GDP as a whole actually declined it can be regarded with some satisfaction. Indeed our qualitative judgement is that the statistical forecast is, if anything on the conservative side, though as yet our forecasting methods are insufficiently developed to include these additional indicators of activity levels.

Trends in GDP during the first quarter of 1975 are more difficult to predict. Estimates of UK GDP for the first quarter of 1975 show virtually no change

over the last quarter of 1974, while unemployment (GB) rose from 2.8% in December 1974 to 3.2% in March 1975, and has continued to rise in subsequent months. Industrial production also declined over the previous quarter. In Scotland, unemployment also rose through the first quarter, from 4.0% in November 1974 to 4.6% in March 1975, but the rate of increase in unemployment in Scotland continued to be lower than for Great Britain as a whole and the ratio of Scotland/GB unemployment rates fell to 1.39. This evidence would tend to suggest that Scotland continued to experience a comparatively higher level of economic activity through the first part of 1975. On the other hand the relatively greater optimism (or lesser pessimism) reported in the previous year's CBI Surveys was less evident by the end of 1974 and the beginning of this year; Food, Textiles, Vehicles and Paper & Printing were experiencing severe problems and planned investment expenditures showed a marked decline.

Our forecasts, which in any case are ill-equipped to handle quarterly changes, produce divergent results for the trend rate of GDP in the first quarter of 1975. Our view is that the trend rate of GDP was maintained at a rate of approximately $\frac{1}{2}\%$ over 1974, but this prediction is highly tentative and also dependent upon the validity of our estimates for 1974.

Outlook for 1975-76

In predicting trends in output and employment in Scotland a variety of sources and methods have been used (with inevitable inconsistencies in the results). First, the various forecasts of trends in the UK economy for this period, particularly the Treasury and NIESR forecasts; in the present state of play, UK aggregate demand is the major explanatory variable determining regional output. In general, we have taken these national forecast variables (or some compromise of alternative forecasts) as given, subject to certain qualitative modifications in the light of events since these forecasts were made, and the estimated impact of the measures proposed by the Chancellor at the time of writing.

Secondly, on the regional supply side the CBI Industrial Trends Survey for Scotland, supplemented by our own inquiries of trends in actual and expected

output in certain sectors - such as construction and agriculture - have provided the main sources of information on which to base estimates of expected changes in regional output. By comparing demand based estimates generated through national forecast variables with supply-based estimates derived from output information we have the rudiments of a regional model.

Thirdly, the search for possible leading indicators includes examining cyclical variations in dependent variables and their turning points, and the behaviour of these indicators and variables over successive cycles provides a further basis for prediction. The main series so far analysed include UK and Scottish unemployment statistics.

The most recent National Institute Economic Review forecast (May 1975) estimates a rise of about $1\frac{1}{2}\%$ in real GDP in 1975 over 1974; other forecasts (OECD, the Treasury and the London Business School) predict rises of between 1 and $1\frac{1}{4}\%$. However, a postscript to the Institute's May Review suggests that its forecast may be on the high side, and statistics of output and demand published since the Review support the belief that - ignoring for the moment the implications of the Government's pending anti-inflation measures - output is unlikely to rise by more than 1.0 - $1\frac{1}{4}\%$ this year. Whether the lower or upper limit of this range is achieved depends in part on the volume of personal consumption for the remainder of this year (which in turn depends on the savings ratio) and in part on trends in the volume of exports, prospects for which during the next half-year are uncertain. However, the prospects for gross fixed capital formation now look worse than expected and revisions of GDP must almost certainly be in a downwards direction.

In 1976 GDP is forecast to increase by approximately $2\frac{1}{2}\%$ over 1975, generated by a substantial rise in export volume and a modest revival in investment (including stocks). Since rates of growth in the volume of personal and public current expenditure are expected to decline, the predicted upturn in 1976 is almost exclusively dependent on the long-awaited revival in world trade. Current indications are, however, that growth in world trade will pick up more slowly than expected (expected, that is, by governments). In this case, the possibility of achieving a growth rate of around $2\frac{1}{2}\%$ in 1976 rests on the reflation of domestic demand. It is in

this context that we briefly review the Chancellor's measures to cut the rate of domestic inflation, by imposing an upper limit of 10% or £6 per week on wage settlements.

Assuming these limits are enforced (with occasional lapses) the measures will have little real impact on inflation, domestic demand or output during the remainder of this year, since most wage contracts do not come up for re-negotiation until next year. Real disposable incomes, which in any case will fall through the second half of the year through the effects of price rises in the pipeline and fiscal drag, will be only marginally affected. However, the measures should begin to bite early next year, reducing real incomes and the rate of price inflation. Combined with cuts in the public expenditure programme, the volume of domestic demand will fall sharply in the first half of next year. The purpose of the Chancellor's measures must be seen as aiming to provide greater scope for expansion in the second half of 1976, by maintaining export price competitiveness at the approximate level of the current exchange rate, by shifting resources into exports and investment during the first half of 1976, and by providing elbow room for domestic expansion later in the year on the basis of substantial reductions in the public sector borrowing requirement and the external deficit.

The implications of these measures for employment are uncertain. The National Institute forecast a million unemployed "this winter", revised upwards "by as much as 50,000" in its postscript. We would put this higher, certainly to 1.1 million on the revised forecast, and possibly higher still. However, while the anti-inflation measures will certainly improve employment prospects in the second half of 1976, their short-term effects depend on contradictory tendencies. On the one hand, greater business confidence and the prospect of a lower rate of increase in unit wage costs may induce firms to hold on to labour in anticipation of rising demand next year, or at least shed labour more slowly. On the other hand the additional fall in real consumption will tend to increase unemployment. On balance the net effect may well be a small increase in unemployment this winter, in expectation of a much lower level of unemployment next winter. (An increase, that is, over the level already expected prior to the Chancellor's new measures).

The general outlook predicted for the UK applies in like measure to Scotland. It was suggested in an earlier part of this survey that while there was little evidence of any autonomous growth potential in the Scottish economy up to 1973, in 1974 there were signs of comparatively greater business confidence in Scotland and that output and employment had been sustained at a higher level than in the rest of the UK. Nevertheless the base for regionally-generated growth is slight and national demand and policy variables exert the dominant influence on regional output.

Leaving aside for the moment the predicted impact of national forecast variables on regional output, business expectations in Scotland are mixed, but, as in 1974, there is a comparatively greater degree of optimism than in the rest of the UK. The key sectors here are oil and construction (other than oil-related construction); investment spending by oil companies is expected to be double the 1974 level, while there are signs of revival in private housebuilding. If these expectations are realised, output in sections of electrical and mechanical engineering, and building materials can also be expected to increase, and in general the CBI Industrial Trends Survey confirms these expectations.

In coal mining, output and employment increased between 1974 and 1975 and are expected to increase slightly through 1975-76, but forthcoming price increases and demand conditions may counteract these trends. Rising costs and serious liquidity problems are also important in the shipbuilding industry, currently with full order books but in a deteriorating competitive position.

Major sectors in difficulty, with falling demand and expectations of lay-offs, include food, chemicals, metals, textiles and paper and printing; given the fall in the volume of personal consumption expenditure predicted for the remainder of this year and the beginning of the next, these pessimistic expectations are likely to be filled. Those industries in which current expectations are comparatively optimistic include those connected with oil, and/or which are linked to other regionally-generated demand such as construction activity or, as in the case of the shipbuilding industry on

orders placed during an earlier period of buoyant economic activity. Other industries are much more dependent on national demand and respond in a predictable manner to changes in national variables. For regional forecasting it is very useful to be able to distinguish between "regional", "national" and "international" sectors, though few sectors exist in pure form.

Combining the forecasts for national variables with expectation of output trends in different groups of sectors in Scotland, our central forecast for Scottish GDP in 1975 is a rise of just over 1% in real terms over 1974, assuming a 1% rise in UK GDP. As comment on this forecast it is worth pointing out that (a) this is superimposed on an estimated growth rate of 0.8% in Scottish GDP in 1974, and the predicted growth rate for 1975 is dependent on this estimate, and (b) in previous periods of downturn in the UK economy, Scotland has tended to fare worse than the UK; the predicted 1% growth rate in fact reflects a continuing improvement in the relative performance of the Scottish economy. Over the two year period 1974-75, this represents a predicted growth of 1.8% in Scottish GDP compared with a predicted growth of 0.7% in UK GDP.

Unemployment will continue to rise this year and early next year, and is expected to reach 127,000 (seasonally unadjusted) by the end of the year, or the beginning of 1976. This would represent an unemployment rate of 5.8% on the currently-used employment base. We see little prospect of an improvement in the unemployment situation through the first half of 1976.

TABLE 1

Estimates of Gross Domestic Product for Scotland
and the UK 1964 - 74

Year	UK GDP [*]	Scottish ^{**}	Scottish GDP	UK	Scottish
	(average estimate)		UK GDP		
	£M	£M	%	%	%
1964	37459	3163	8.4	2.9	3.7
1965	38533	3280	8.5	1.8	1.8
1966	39230	3340	8.5	2.3	1.9
1967	40119	3402	8.5	3.9	4.3
1968	41675	3548	8.5	1.8	1.9
1969	42408	3616	8.5	1.7	2.0
1970	43123	3688	8.6	1.4	0.7
1971	43708	3712	8.5	2.7	2.7
1972	44870	3813	8.5	5.4	6.8
1973	47269	4071 ⁺	8.6	-0.1	
1974	47243				

+ Based on provisional estimate of GDP at current prices

* Constant (1970) prices at factor cost, calculated from the three sets of data: expenditure, income and output.

** Constant (1970) prices based on a conversion using the implicit UK GDP deflator. While the use of a UK price deflator for Scottish GDP is hazardous, it seems plausible to argue that price changes in Scotland follow closely the UK pattern, so that the deflated estimates approximate fairly well the rate of growth of real GDP.

Sources: Economic Trends, May 1975
Scottish Economic Bulletin, February 1975

TABLE 2

Shares of Total Scottish Unemployment by Planning Region¹

Year	Glasgow	Falkirk/ Stirling	Edinburgh	Tayside	Borders	S.West	N.East.	High- lands	Total unemploy- ment in Scotland ('000)
1965	54%	4%	16%	6%	1%	4%	7%	9%	65.5
1969	55%	3%	16%	6%	1%	4%	7%	8%	81.2
1973	59%	4%	17%	8%	1%	3%	4%	5%	98.9

Unemployment Rates for the Planning Regions of Scotland²

Year	Glasgow	Falkirk/ Stirling	Edinburgh	Tayside	Borders	S.West	N.East	High- lands	Scotland
1965	3.4%	2.9%	2.5%	2.2%	1.6%	4.6%	3.0%	6.6%	3.0%
1969	4.2%	2.5%	3.2%	2.8%	2.0%	6.1%	3.3%	7.0%	3.7%
1973	5.5%	3.9%	3.8%	4.1%	1.7%	4.6%	2.7%	5.0%	6.0%

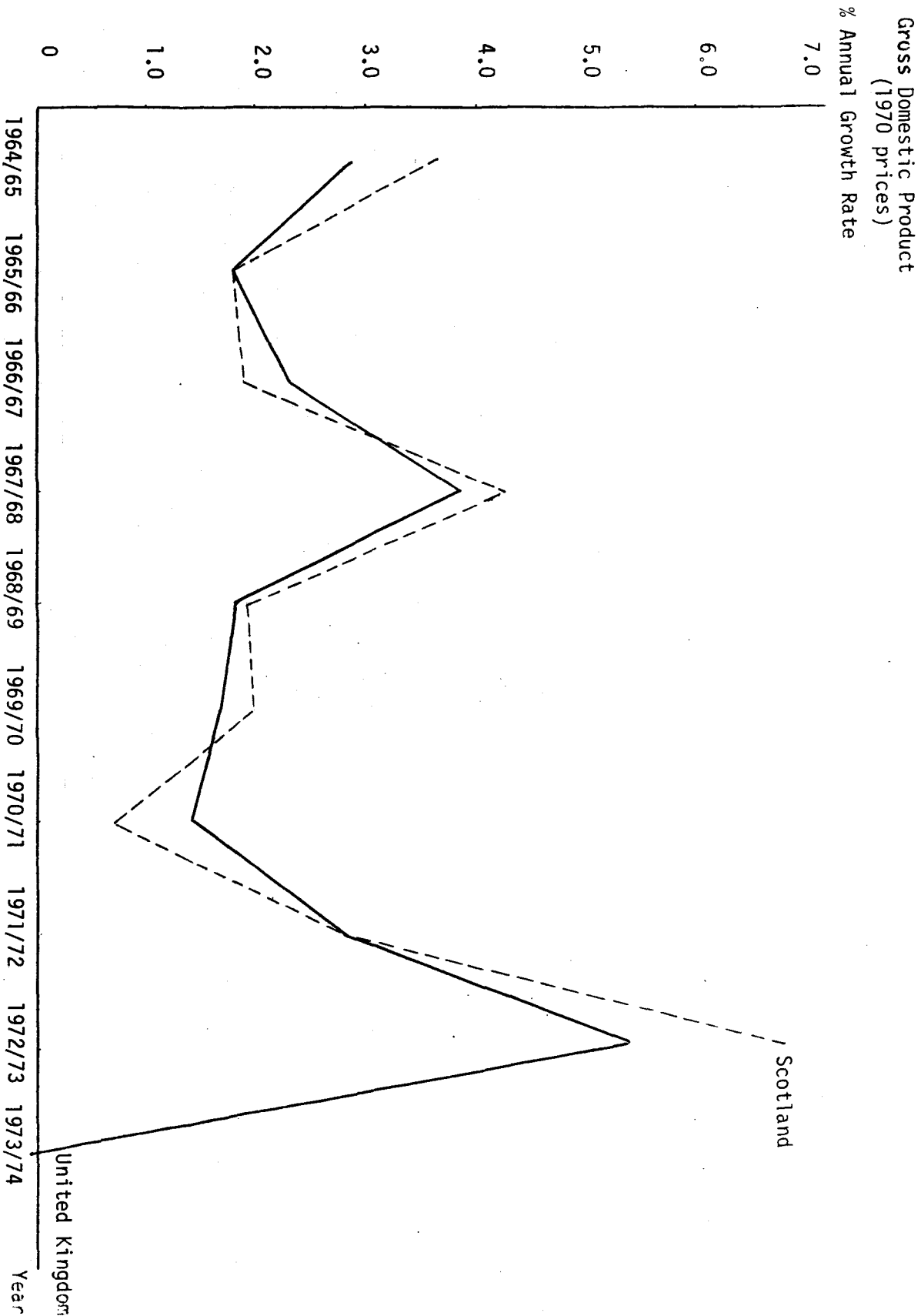
1 Before 1970, Figures include the temporarily stopped.

2 The years 1969 and 1973 exclude the temporarily stopped.

Sources: Scottish Economic Bulletin, February 1975
 Scottish Abstract of Statistics, 1974

FIGURE 1

Growth Rates in Scotland and the United Kingdom 1964 - 1974



The Fraser of Allander Institute - Publications

Speculative Papers

1. Alec Nove : Planning - What, How and Why
SBN 7073 0113 0 24 pages May 1975 75p
2. A A Tait : The Economics of Devolution - A Knife Edge Problem
SBN 7073 0114 9 12 pages June 1975 60p

Research Monographs

1. Alan Harrison : The Distribution of Personal Wealth in Scotland
ISBN 0 904865 00 2 20p

Council of the Institute

The following are members of the Council of the Institute:

Professor K J W Alexander*
Principal Sir Samuel Curran
Lady Fraser of Allander
Professor T L Johnston* (Chairman)
Professor Wassily Leontief
Professor J W McGilvray*
Professor Donald Mackay
Mr Eric Mackay
Mr James Milne
Professor D R F Simpson*
Professor I G Stewart
Professor A A Tait*
Sir William McEwan Younger, Bt

* Denotes a member of the Executive Committee