REGIONAL DEVELOPMENT GRANTS: THE SCOTTISH EXPERIENCE 1975-1979

N A FRASER & I ORTON

In recent months regional policy has once more come under scrutiny. The recently established Select Committee for Scottish Affairs took regional policy as its first major topic for investigation. In particular it was concerned with the potency of the existing institutional arrangements in attracting mobile investment to Scotland. In similar vein this article is concerned with regional policy in Scotland and the role that it plays in determing investment. Specifically our main aims are to show that the present system, irrespective of the institutional arrangements, is not likely to produce spatial equality of economic opportunity; nor in the last analysis is it necessarily compatible with any efficiency criteria.

At this point however it would be appropriate to make a number of general points concerning regional policy. In the first instance we are basically concerned with the payment of Regional Development Grants, aimed at encouraging mobile capital to locate in particular areas, the Development and Special Development Areas, and assisting indigenous firms to undertake marginal investments. As such we are only concerned with the locational aspects of regional policy; not with other government spending programmes aimed at improving regional performance. Second, while we are critical of the system as it stands we are not critical of regional policy per se. The various reasons for advocating a more balanced distribution of the nation's population and economic resources seem to be fundamentally sound. And the present system has not been unsuccessful in procuring such an arrangement. Within the Scottish context there has been some narrowing of the unemployment differential. Further the majority, if not all, of the attempts to evaluate regional policy have concluded that it does have a beneficial potency. Accordingly, given that a regional balance has, nonetheless, still not occurred a strong regional policy should continue. However we contend that there are grounds for changing the rules. In summary by making regional policy more discretionary its potency and effectiveness can be improved.

According to the government the primary aim of regional policy is,

> "to bring supply and demand for labour in the assisted areas more closely into balance by safeguarding existing employment and creating new jobs in those areas.[1]

A broader aim which to some extent may encapsulate this aim is to provide self sustaining regional growth. Indeed given the nature of regional subsidies which

> "have been associated directly with investment, only indirectly with employment, and still more indirectly with unemployment"[2]

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this maybe in practice prove to be the more realistic view. Nonetheless employment creation would appear to be the main aim of regional policy, and accordingly the main criterion upon which regional policy should be based. Indeed despite the dichotomy between aims and policies employment creation has usually been the criterion used by policy evaluations.

However this is only one side of the equation. Regional policy has a cost, both in real and monetary terms. The resources used in implementing a locational policy could be used in potentially more productive projects: the result of having a more decentralised distribution of industry may not for example be compatible with securing positive economic growth. As such it can be argued that some cost criteria should be applied to regional policy. And at present, it can be argued albeit on an impressionistic basis that the present system is not resource effective.

Consider the rationale behind the present policy of investment subsidies. This seems to be an explicit recognition of the fact that the marginal efficiency of capital varies between different locations. In assisted areas, it is low relative to the remainder of the economy. Accordingly, in the absence of subsidies, investment and job creation would be relatively low, and unemployment would occur. Usually the marginal efficiency of capital differential is explained in terms of economic structure between struggling and prosperous regions or, more importantly given the cumulative nature of regional development, because of the emergence of agglomeration economies in the latter areas. As such the investment subsidy could be considered as a substitute for agglomeration economies in the struggling regions. The aim of regional policy would accordingly be to equalise the location incentives over the whole space economy.

In practice however regional policy is not applied in such a manner. Any assessment of individual firm or sectoral marginal return on capital or appraisal of locational advantage implies a fine grain approach to policy implementation. A further necessary corollary is that net investment will produce more jobs. In both instances this is not the case in Britain. Despite the pleas first heard in the Hunt Committee Report[3] on Intermediate Areas for a series of indicators the sole requirement for designation as a Development or Special Development Area, the spatial unit of regional policy, is that unemployment is reaching a critical level. As such once designated, investment subsidies paid within these areas can go to any firm or industry irrespective of the marginal rate of return, or, of the likelihood of additional employment being created.

Consider the case of an industry situated in a Development Area which is enjoying district locational advantages. Clearly it is of no consequence if it receives investment subsidies or not. Its locational advantage, accessibility to a raw material or market; a local agglomeration economy will, we can assume, compensate for this. Similarly in contemplating the investment decision a firm enjoying bumper profits will probably not be adversely influenced by the availability of investment subsidies. In both instances therefore, it can be concluded that investment subsidies may be automatically hived off as surplus profit, a straight transfer from taxpayer to shareholder. Further, as we have already noted, given the fact that it is investment rather than labour that is being subsidised there is no guarantee that, in the event of net investment taking place that extra employment will accrue.

TABLE 1 REGIONAL DEVELOPMENT GRANTS (OVER £25,000) PAID IN SCOTLAND 1975-1979 (£'000s 1975 PRICES)

DISTRICT	1975	1976	1977	1978	1979	TOTAL	RANK
1. Caithness	0	0	0	85	0	85	52
2. Sutherland	0	22	0	0	0	22	55
3. Ross & Cromarty	1,509	807	1,079	357	142	3,893	13
4. Skye & Lochalsh	118	0	0	0	0	118	50
5. Lochaber	31	102	75	43	22	272	42
6. Inverness	504	666	237	285	168	1,860	28
7. Badenoch & Speyside	0	0	0	31	0	31	54
8. Nairn	32	126	0	0	0	158	49
9. Orkney	0	3,701	0	0	0	3,701	15
10. Shetland	0	153	0	54	0	207	45
11. Western Isles	161	589	282	0	62	1,095	34
12. Moray	740	1,184	102	184	182	2,392	19
13. Banff & Buchan	259	805	164	717	3,258	5,204	11
14. Gordon	133	102	75	0	31	340	40
15. Aberdeen City	1,339	1,672	788	1,591	1,404	6,795	8
16. Kincardine & Deeside	0	0	165	48	0	213	44
17. Angus	928	1,570	998	733	310	4,539	12
18. Dundee City	703	645	315	657	743	3,063	17
19. Perth & Kinross	589	477	78	38	152	1,334	31
20. Kircaldy	2,377	2,086	1,383	1,397	1,523	8,766	5
21. North East Fife	27	23	172	254	43	519	38
22. Dunfermline	295	660	468	289	229	1,941	26
23. West Lothian	735	813	896	1,908	918	5,270	10
24. Edinburgh City	984	1,189	747	3,072	2,337	8,329	6
25. Midlothian	338	244	605	155	185	1,528	30
26. East Lothian	23	23	131	806	16	999	35
27. Clackmannan	1,370	657	108	317	652	3,104	16
28. Stirling	191	0	323	18	193	725	37
29. Falkirk	1,594	3,113	6,387	9,153	2,998	23,246	3
30. Tweeddale	34	25	24	26	0	108	51
31. Ettrick & Lauderdale	60	132	88	41	46	367	39
32. Roxburgh	112	29	0	17	25	184	47
33. Berwickshire	214	31	36	0	0	281	41
34. Argyll & Bute	1,295	369	23	293	0	1,980	25
35. Dumbarton	574	1,263	701	393	38	2,969	18
36. Glasgow City	6,371	6,955	4,425	6,222	3,570	27,542	2
37. Clydebank	780	277	213	112	188	1,589	29
38. Bearsden & Milngavie	48	0	25	0	0	73	53
39. Strathkelvin	733	736	142	262	158	2,031	23
40. Cumbernauld & Kilsyth	26	106	178	222	259	791	36
41. Monklands	1,600	1,716	2,092	1,492	679	7,579	7
42. Motherwell	6,296	11,692	6,868	10,707	3,687	39,250	1
43. Hamilton	288	447	576	675	30	2,016	24
44. East Kilbride	613	295	147	552	299	1,907	27
45. Eastwood	0	0	0	0	0	0	56
46. Lanark	0	54	145	0	0	199	46
47. Renfrew	1,177	1,473	1,576	1,621	857	6,703	9
48. Inverclyde	409	807	991	1,157	491	3,855	14
49. Cunninghame	3,991	4,762	3,264	2,044	785	14,846	4
50. Kilmarnock & Loudon	120	81	306	190	490	1,188	32
51. Kyle & Carrick	372	546	511	496	198	2,123	22
52. Cumnock & Doon Valley	286	390	176	279	55	1,186	33
53. Wigtown	39	84	0	27	77	227	43
54. Stewarty	0	0	162	0	0	162	48
55. Nithsdale	314	530	199	295	864	2,203	21
56. Annandale & Eskdale	533	37	262	780	737	2,349	20
TOTAL	41,284	54,266	38,712	50,097	29,104	213,463	

Source: British Business (Trade and Industry)

THE GEOGRAPHIC DISTRIBUTION OF REGIONAL DEVELOPMENT GRANTS

The geographic distribution of regional development grants with Scotland is of considerable importance to those concerned with regional industrial policy and in assisting those parts of the country with the most intractable problems of unemployment. This section examines the payment of grants to firms in the 56 administrative districts of Scotland.

Table 1 presents the amount paid to each district over the period 1975 to 1979 in contant 1975 prices. The total paid each year varies considerably with the total paid in 1979 representing only 38% of that paid in 1976. It is however the payments to individual districts that is our principal concern.

Four districts have done appreciably better than others in attracting grants. Motherwell, Glasgow, Falkirk and Cunninghame attracted 49% of the money paid out between 1975 and 1979. As can be seen from Table 2 this has had little impact on unemployment.

TABLE 2

DISTRICT	UNEMPLOYMENT RATE	
	11.12.75	6.12.79
Motherwell Area	7.9	11.3
Glasgow City	6.7	8.9
Falkirk & Grangemouth	5.4	6.8
Cunninghame (Irvine) (Kilwinning) (Saltcoats)	8.2	13.8
Scotland	6.1	7.9

Source: Department of Employment

These areas with the exception of Falkirk and parts of Cunninghame are Special Development Areas and as such one would expect them to attract the bulk of the funds. With regard to Motherwell and Falkirk one does not have to look far to see where the funds are going, a point which will be dealt with in the next section.

Not all the SDA's, however, have received large sums of money in regional development grants. For example Dundee, Cumnock, Inverclyde, Strathkelvin all come behind a number of less favoured areas in amount of funds granted. Of course areas with large populations would be expected to attract a substantial proportion of money paid so Table 3 presents the amount paid to each district at 1975 prices on a per capita basis.

TABLE 3 REGIONAL DEVELOPMENT GRANTS - PER CAPITA TOTALS 1975-1979 (£'000s 1975 PRICES

DISTRICT	TOTAL (1975-79)	RANK
1. Caithness	2.9	53
2. Sutherland	1.9	54
3. Ross & Cromarty	99.3	5
4. Skye & Lochalsh	12.3	39
5. Lochaber	13.7	37
6. Inverness	35.0	17
7. Badenoch & Strathspey	3.3	52
8. Nairn	16.9	31
9. Orkney	209.1	2
10. Shetland	11.2	42
11. Western Isles	37.0	15
12. Moray	29.7	22
13. Banff & Buchan	69.1	7
14. Gorden	7.1	48
15. Aberdeen City	32.3	18
16. Kincardine & Deeside	6.2	49
17. Angus	51.5	11
18. Dundee City	15.7	33
19. Perth & Kinross	11.2	41
20. Kircaldy	59.3	10
21. North East Fife	8.0	44
22. Dumfermline	15.7	33
23. West Lothian	43.5	12
24. Edinburgh City	17.7	30
25. Midlothian	18.2	29
26. East Lothian	12.7	38
27. Clackmannan	65.2	9
28. Stirling	9.2	43
29. Falkirk	162.8	3
30. Tweeddale	7.8	45
31. Ettrick & Lauderdale	11.4	40
32. Roxburgh	5.1	50
33. Berwickshire	16.1	32
34. Argyll & Bute	30.6	21
35. Dumbarton	37.1	14
36. Glasgow City	31.3	20
37. Clydebank	28.1	23
38. Bearsden & Milngavie	1.9	54
39. Strathkelvin	25.3	24
40. Cumbernauld & Kilsyth	14.6	35
41. Monklands	69.7	6
42. Motherwell	245.9	1
43. Hamilton	18.9	28
44. East Kilbride	23.5	26
45. Eastwood	0	56
46. Lanark	3.6	51
47. Renfrew	32.1	19
48. Inverclyde	36.4	16
49. Cunninghame	113.0	4
50. Kilmarnock & Loudon	14.3	36
51. Kyle & Carrick	19.1	27
52. Cumnock & Doon Valley	24.4	25
53. Wigtown	7.6	46
54. Stewartry	7.2	47
55. Nithsdale	39.3	13
56. Annandale & Eskdale	66.7	8
TOTAL	2,008.7	

A number of districts can be seen to fall away badly on a per capita basis. In absolute terms Glasgow City received the second largest sum but was only ranked twenty in Table 3. Dundee City fares badly as well, falling down to thirty three in the per capita ranking. Both of these SDA's receive a lot less on this basis than many areas with less intractable problems of unemployment. One unemployment balckspot which fares better on a per capita basis is the Western Isles.

Overall the rankings do, however, show marked similarities between the tables. The Spearman's coefficient of rank correlation is equal to 0.88, indicating a close association between the two rankings. This ordinal measure nevertheless, fails to highlight the fact that a number of areas appear to benefit more than others on a per capita basis despite differences in development status.

Geographically, this may be emphasised by considering two districts which have enjoyed the fruits of oil-related developments. Banff and Buchan has a high ranking in both Tables 1 and 2 despite having only development area status during the study period. Likewise Aberdeen City ranks highly despite being downgraded to Intermediate Area status in April 1977.

With regard to Aberdeen, the changes in status has had little influence on the amount of money received in grants. It would appear that a greater level of investments at the lower rate of grant have attracted as much money as a lower level of investments at the higher rate of grant. Presumably investment in this area is not determined by the level of regional development grant paid.

Such a situation is hardly surprising, nor is Banff and Buchan's high ranking, given the level of North Sea oil activity in these districts. Consequently, the present government has, downgraded these areas (along with a number of others) to non-assisted areas. It is by no means certain that the financial resources freed by these measures will be taken up by firms in the assisted areas. The assisted areas may now appear relatively more attractive to mobile capital but as much of this is North Sea related on can not hold much hope.

The status an area enjoys does not have an overriding influence on the amount of grant received. Indeed the geographic necessity to be in certain areas appears to have a stronger influence. However, as the following section highlights it appears to be the type of industry which is located in a district which is of principal importance.

THE SECTORAL DISTRIBUTION OF REGIONAL DEVELOPMENT GRANTS

The payment of regional development grants by the British government to firms in the various categories of assisted areas takes no account of the industrial sector in which those firms operate. This section examines the amount of grant paid to each of 20 industrial sectors over the past five years. This breakdown is important as different sectors have different investment patterns, profit levels and expectations regarding future development. Further the impact of different firms investment expenditures on Scottish output varies considerably.

Table 4 presents the percentage of total grants paid to each industrial sector over the period 1975-1979.

Three sectors clearly attract a greater percentage of the grants available. Between them, Food, Drink & Tobacco, Oil & Chemicals and Metal Manufacture account for 53.4% of grants paid in Scotland. In current prices this represents a total of over £144 million. Shipbuilding and Vehicles receive a sizeable 9.2% while payments to most other sectors are more evenly distributed. Consequently, our attention shall centre on those three sectors in receipt of the largest payments.

Given the large amount of money awarded to the largest three sectors and following on from contentions made so far, it seems appropriate to ask whether or not regional investment grants influence their investment decision or simply provide a welcome boost to their cash flow.

Oil and chemicals received more than £58m in regional investment grants over the period 1975 to 1979. This industry is dominated by giant multinationals which year in year out show vast profits. Their own resources coupled with their standing with the financial institutions is such that they should have little difficulty in attracting new investment funds. As such the only reason one could envisage for the payment of such monies is to attract investments which otherwise would be situated elsewhere. However, the situation in Scotland is such that the geographical need to be near the North Sea suggests that the bulk of these investments would have been undertaken regardless of the payment of regional incentives. Developments at St Fergus, Sullom Voe, Nigg and Grangemouth together with the new developments at Moss Moran in Fife are obvious examples.

The payment of £49m to the metal manufacture industry between 1975 and 1979 must also be questioned. The bulk of this money has gone to the British Steel Corporation, a nationalised industry. In this instance the payment of regional incentives represents no more than an internal transfer of resources from one arm of government to another. It would seem more appropriate for government to develop and fund an investment strategy for the steel industry without absorbing resources earmarked to provide regional incentives.

The food, drink and tobacco industry is made up of firms which vary in size considerably from small privately owned companies to large multi-national groups. Between 1975 and 1979 firms in this sector received over £36.5m in regional development grants. Unlike the other two groups it is far harder to generalise about the effect these grants have on investment decisions.

While the structure and profitability of industrial sectors is important, further measures to assess the impact of investment spending are necessary.

TABLE 4 REGIONAL DEVELOPMENT FUNDS - SCOTLAND %

SECTOR

	1975	1976	1977	1978	1979	TOTAL
1. Mining & Quarrying	5.0	4.0	5.9	2.2	0.5	3.4
2. Food, Drink & Tobacco	18.0	16.5	7.0	11.3	16.0	13.6
3. Oil and Chemicals	9.3	19.6	21.0	24.6	31.0	21.6
4. Textiles	1.7	1.2	1.7	2.4	3.7	2.1
5. Construction	4.1	2.4	4.1	3.5	1.2	3.0
6. Other Manufacturing	2.5	0.4	1.0	2.1	4.6	2.0
7. Paper & Printing	6.9	4.7	3.2	3.4	6.4	4.7
8. Mechanical Engineering	7.4	7.3	5.7	4.2	5.8	6.0
9. Electrical Engineering	3.7	3.1	4.5	5.2	5.9	4.5
10. Ships and Vehicles	12.5	8.0	12.8	8.2	5.8	9.2
11. Metal Good nes	0.3	0.9	1.7	0.7	3.0	1.3
12. Finance	1.8	1.8	2.1	1.7	1.0	1.7
13. Transport	0	1.4	0.8	0.1	0	0.5
14. Metal Manufacture	17.2	20.2	19.0	21.6	10.5	18.2
15. Property & Leasing	1.1	1.3	2.4	6.2	3.8	3.2
16. Bricks & Pottery	4.9	2.7	1.6	0.8	0.1	1.9
17. Development Corporations	0.2	0.1	0.2	0.1	0.4	0.2
18. Councils	0.4	0	0.1	0.1	0	0.1
19. Distribution	2.5	3.4	4.2	1.4	0.2	2.3
20. Timber & Furniture	0.5	0.9	0.9	0.4	0.2	0.6
TOTAL	100	100	100	100	100	100

One widely used method is through the use of output multipliers derived from an input/output table. These measure the effect in total output resulting from an increase in demand for the products of a particular industry. These must, however, be adjusted as our interest lies in the impact of an increase in investment spending.

In order to assess the impact of new investment attention must be given to the capital/output ratio of the industry under consideration. The capital/output ratio can be said to show the investment required to produce one unit of direct output. This, however, does not measure fully the complete impact of capital expenditure. Clearly, such spending has repurcussions on other sectors of the economy and one must take into acount these indirect and induced effects. Multiplying the inverse of the capital/output ratio (ie the direct output created by one unit of investment) by an output multiplier derived from an input/output table, an estimate can be made of the increase in total Scottish output created by one unit of investment. Table 5 shows the estimates obtained for the three sectors which receive the bulk of regional development grants.

TABLE 5 IMPACT OF INVESTMENT SPENDING ON THE SCOTTISH ECONOMY BY CERTAIN INDUSTRIAL SECTORS

	FOOD, DRINK & TOBACCO	METAL MANUFACTURE	OIL AND CHEMICALS
1. Investment required to produce one unit direct output	0.638	1.35	2.02
2. Direct output created by one unit of investment	1.567	0.741	0.495
3. Total output created by one unit of investment (Total = direct + indirect + induced)	3.87	1.66	0.837
4. Investment required to produce one unit of total output	0.258	0.60	1.19

The data used to construct this table is based on work by J J Jones[4] and by H M Al-Ali and R Burdekin[5]. The capital output ratios in the Jones article are rather dated but are the only available published figures to the best of our knowledge. As such one must not attach great importance to the absolute values presented. The point of the exercise is, however, to emphasise that the impact investment spending has on Scottish output varies between industrial sectors. This is a matter of significance in providing funds for regional development.

With regard to employment in Scotland, these three sectors accounted for only 7.45% of total employment in Scotland.

TABLE 6

EMPLOYMENT BY INDUSTRY FOR SCOTLAND 1974 AND 1979

	1974 THOUSANDS	%	1979 THOUSANDS	%
Food, Drink & Tobacco	99	4.75	90	4.3
Coal, Oil & Chemicals	31	1.49	31	1.48
Metal Manufacture	43	2.06	35	1.67
Total	2,084	100	2,093	100

Source: Scottish Economic Bulletin Spring 1980

As can be seen from Table 6 the absolute number employed in these sectors has fallen since 1974 as has the relative importance of these sectors for total employment. The payment of regional development grants may have slowed down the decline but they have not increased total employment in these sectors.

The emphasis of this section has been to highlight the differences between the investment decisions of industries and the impact their investment spending has on the Scottish economy. These undoubtedly vary considerably. It is our contention that in periods of financial stringency a more efficient allocation of regional development grants should be devised. The payment of large sums of money to highly profitable firms who have access to investment funds is clearly a waste of resources.

Attention must come to focus on those investments which are marginal, on investments which might go elsewhere and on those which have greatest impact on the Scottish economy. In conclusion, we offer some suggestions for alternatives to the present blanket system.

CONCLUSIONS

In summary, it can be seen that the current system of paying regional development grants is not working to full advantage. The level of investment has not been distributed over space according to need; unemployment has not necessarily been reduced in the troubled areas; wealthy, profitable companies receive vast investment subsidies; sectors which receive the most aid often tend to be very capital intensive. More efficient measures must evolve to assist both mobile and indigenous firms to create employment and generate a greater level of economic activity.

While it must be admitted that there are no easy answers to these conundra a first step may be to make regional policy more discretionary.* Investment subsidies could be related to the expected return on investment (ie profits), the degree of risk, the employment likely to be generated, or the location of the investment. The more 'deserving' the case the higher the subsidy; and vice-versa. If an improvement in economic structure is required then the rules can be changed accordingly. Desirable industries would attract a higher rate of subsidy. Further the government could extend the range of activities over which it is prepared to subsidise. One such area could be the encouragement of research and development activity. Research in any sphere is usually expensive and often unprofitable yet there seems to be evidence to suggest a high level of association between the presence of research facilities and spin off employment creation within the vacinity of the facility.

Another alternative which has recently attracted influential support is the reintroduction of a regional employment premium. This represents a direct subsidy related to the numbers employed by a firm. As such it has obvious attractions. However, if such payments were paid on a blanket basis many of the criticisms aimed at investment subsidies could be levied at employment subsidies.

It is inappropriate to provide assistance on any one single criterea, be it investment subsidy or employment subsidy. Policy should be more discretionary, taking into account a wide range of factors. This may result in increased administrative costs but at the end of the day should increase the overall effectiveness of regional policy.

*Some discretionary payments are made, but represent only a small proportion of regional development payments.

APPENDIX

The data used in this study has been compiled from information published by the Department of Industry. Each quarter the Department's magazine British Business (formerly Trade and Industry) lists payments of regional development grants over £25,000. As such there may be some bias to industrial sectors with large investment programmes. Grants over £25,000 have, however, accounted for the bulk of regional development fund payments.

This information has been converted to constant 1975 prices. The deflators used were calculated from a quarterly series of Gross Domestic Fixed Capital Formation presented in Economic Trends.

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