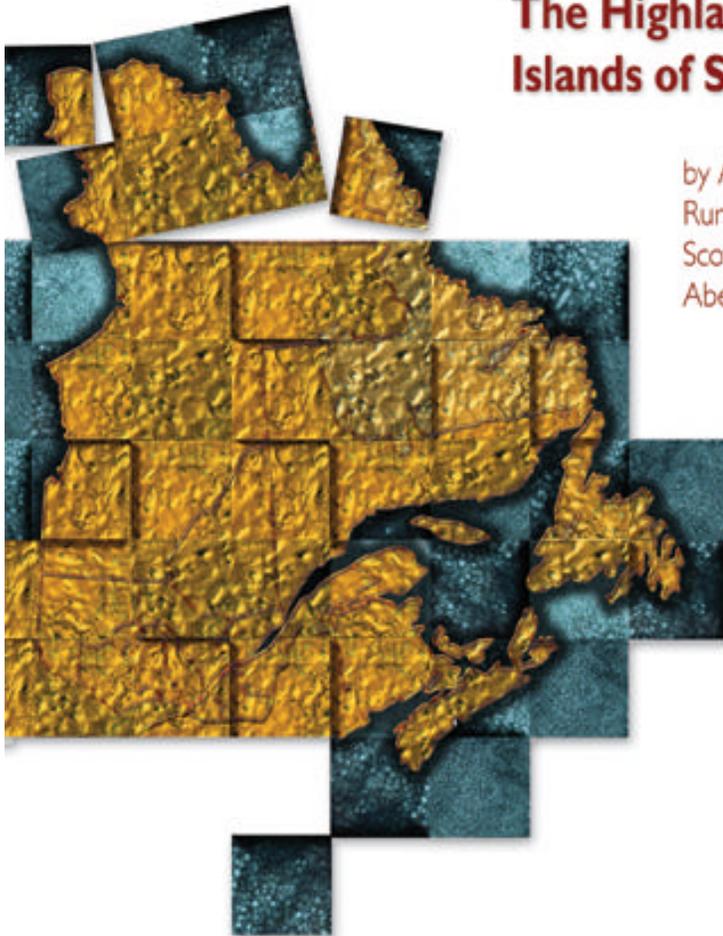


Regions in the Knowledge Economy

The Highlands and Islands of Scotland

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THE HIGHLANDS AND ISLANDS OF SCOTLAND

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INTRODUCTION

The Highlands and Islands as a Distinctive Region

Before embarking on a discussion of the characteristics of the Highlands and Islands it may be helpful to explain why this area was chosen to illustrate the issues associated with peripherality within the UK. A cursory examination of a map of Britain makes it clear that the North of Scotland is by far the most remote from the main centres of economic activity both in national and European terms. The only question is how exactly to delimit the area to form the basis of the discussion and the statistical presentation. The Highlands and Islands (as shown in Figure 1) is the obvious choice, mainly because it has a long standing integrity in relation to economic development policy, and for this reason is also a recognised statistical entity. It is perhaps worth pointing out that despite its name, it is not strictly speaking a distinct natural physiographic area, since although it contains the majority of the mountains, moorlands and islands of Scotland, it also includes some relatively productive lowlands (Easter Ross and Orkney), and excludes the eastern flanks of the Grampian mountains, Upland Perthshire, and the Southern Uplands.

In relation to INRS Peripherality Criteria

The definition of a peripheral region provide by the Workshop organisers is as follows *"...any region further than 150km from a metropolitan area of over 500,000 people, and which does not contain an urban agglomeration of over 150,000"*. The largest town in the Highlands and Islands of Scotland is Inverness, with a population of just 44,000, so there can be no doubt that the region qualifies on this score. However, as Figure 1 shows, approximately one third of the area in the south is within 150km (as the crow flies) of Glasgow, the only city in Scotland to exceed 500,000. However "airline" distance is not always a good indicator of peripherality, since the difficulty of the terrain and quality of transport infrastructure need also to be taken into account. One hundred and fifty kilometres is roughly equivalent to 2½ hours driving time on good roads. Thus Figure 1 shows the 2½ hour travel time limit is roughly equivalent to 150km on the East coast of Scotland, with its relatively fast motorway connections between the Central Belt, Dundee and Aberdeen. On the West coast however, the presence of narrow and very indirect roads, together with ferry cross-

ings, means that, of the HIE area, only mainland Argyll and the southern part of Lochaber is within 2½ hours of Glasgow.

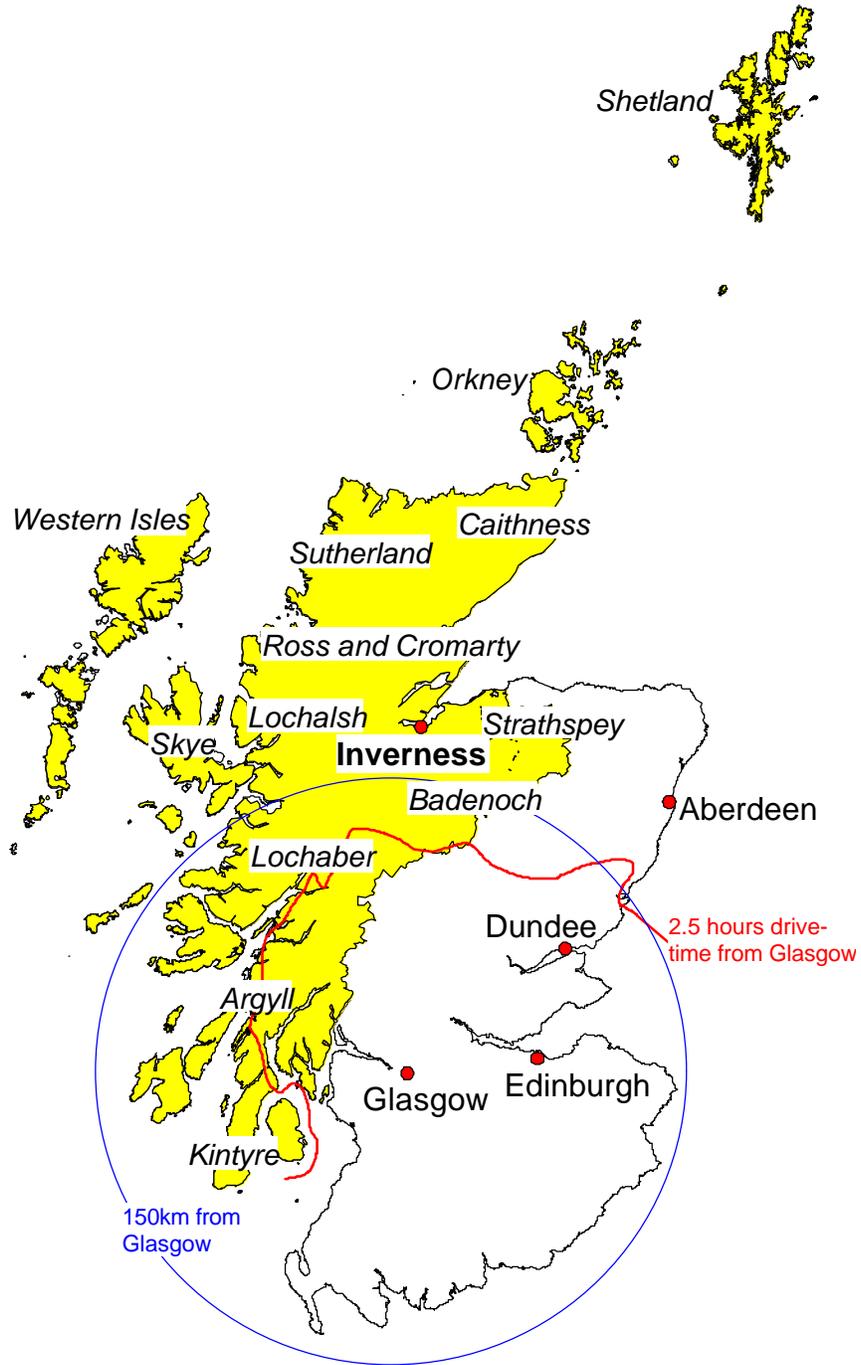


FIGURE 1 - THE HIGHLANDS AND ISLANDS

Some basic facts

Comparative work of the kind associated with this workshop should ideally take account of “local” context, whether in terms of physical geography and climate, national macro-economic conditions, constitutional and policy issues, or local culture. Much of the contextual information will either remain implicit, or will be highlighted by the “benchmarking” of statistics in the discussion which follows. This section has the limited objective of allowing some simple comparisons of the Highlands and Islands with the other regions described by other workshop participants.

The Highlands and Islands stretch for approximately 700km from the Mull of Kintyre in the South (lat 55° N) to Shetland in the North (60° N). The region is rather narrower than it is “long”, the maximum E-W extent being 250 km (and much of this distance is actually sea separating the Western Isles from mainland Highland). It has 8,000 km of coastline, and a total area of 39 thousand square kilometres. In common with other recently glaciated regions, the western coastline is very indented, and surrounded by numerous islands. The Western seaboard is generally of low agricultural value, mostly comprising rough mountain and hill grazing, bog, small areas of natural pine forest, and larger areas of coniferous plantations. The NE coast is rather “simpler”, and around the various “firths” of Easter Ross and Inverness-shire the landscape is generally more subdued and fertile.

The Highlands and Islands currently have a population of approximately 370 thousand, and a population density of 9.5 persons per square kilometre. The region as a whole has seen modest population growth over the past four decades. This represents a reversal of a long-established downward trend, the population in the early 19th century having been around 500 thousand. Within the region there are two distinct cultural heritages, the Celtic or Gaelic in the west and south, and the Norse tradition of the Northern Isles and east coastal lowlands.

The main traditional industries of the region were agriculture, fishing and whisky distilling. “Pluriactivity” has a long history among the small farmer/fishermen (crofters), and the importance of this way of life to social sustainability of the region was recognised by legislation to give them security of tenure over a century ago. In more recent times agricultural activities have only been sustained in many parts of the region by heavy production subsidisation through the EU Common Agricultural Pol-

icy. Agricultural employment has, like everywhere else, dwindled. Fishing, too has passed through difficult times, partly as a result of pressure on stocks, but also as a result of the inability of the EU's Common Fisheries Policy to reduce or divert the spare capacity of the ageing fleet. The distilling industry continues to hold its own in the face of global competition. Its position is intimately associated with a more recent addition to the economy, tourism, which although currently passing through difficult times is nevertheless a very important activity in the Highlands and Islands. Other activities which have arrived in the region in recent times are those associated with oil and gas production in the North Sea and North Atlantic, call centres, and a wide range of light manufacturing and service industries. Recent growth is very unevenly spread throughout the region, much of it being located within a few miles of Inverness.

During the 1960's and 1970's, unemployment rates were relatively high in the Highlands and Islands; more recently, the rate for the region has generally been lower than that of Scotland as a whole (though not that of the UK). However the region has a particular problem of seasonal unemployment and under-employment, associated with both primary activities and tourism. Both personal incomes and regional GDP per head are relatively low in national and EU terms. At the same time, many aspects of the cost of living (particularly fresh food and petrol) are relatively expensive within the region. In the face of this combination of low incomes and high living costs continued in-migration can only really be explained in terms of perceived "quality of life" benefits, associated with a rich environment and a more traditional culture (slow pace of life, low crime rates, etc.).

Since 1996, the Highlands and Islands have been administered by six "Unitary Authorities" or "Councils" (Figure 2). Most of the mainland, and the Inner Hebrides is the domain of "Highland Council". Argyll and Bute Council is responsible for the extreme SW mainland, and the Argyll Islands. A small part of the Highlands and Islands in the east is within the Moray Council area. The three island groups of Shetland, Orkney and the Western Isles each have their own Council. Each council has responsibilities for local services (education, social services, waste disposal, transport, road maintenance, etc.) but they also engage, to varying degrees, in economic development activity. Perhaps the most active in this respect are the two island councils in the north, Orkney and Shetland, where revenues from the oil terminals at Flotta and Sullom Voe provide additional funds for this purpose.

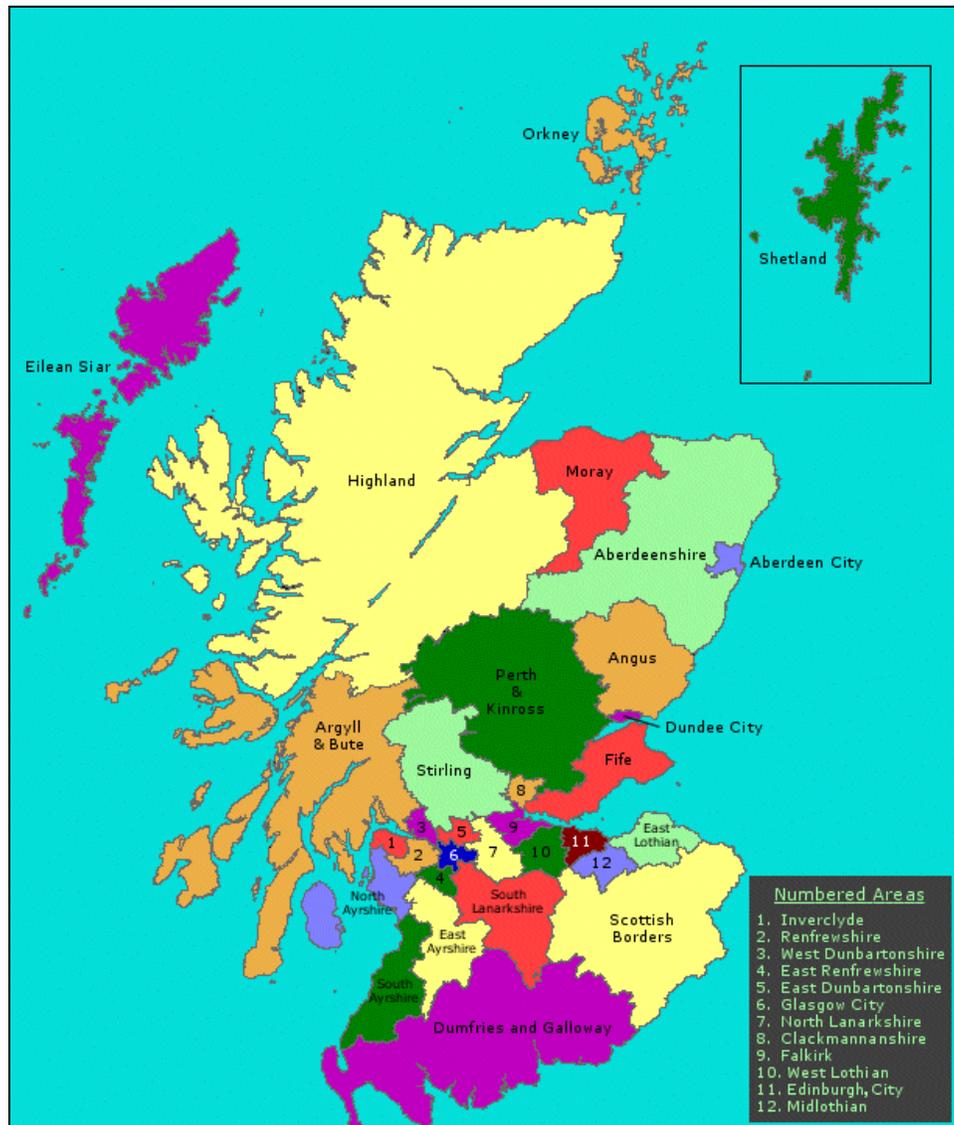


FIGURE 2 - THE LOCAL GOVERNMENT GEOGRAPHY OF SCOTLAND

The other key organisation involved in the development of the region is Highlands and Islands Enterprise (HIE), together with its 10 “Local Enterprise Companies” (LECs Figure 3). HIE was created in 1991 by the amalgamation of the Highlands and Islands Development Board (HIDB) and the regional offices of the Training Agency. As this implies, the new body had responsibilities both for regional economic development and for developing the “human capital” of the region, mainly through implementing national schemes.

In addition to these two main “layers” of economic development governance, the region has over the years played host to a variety of pilot projects and initiatives, some originating with the national government, some with the EU, and a few being more genuinely endogenous. It is thus a very rich (and confusing) policy context.

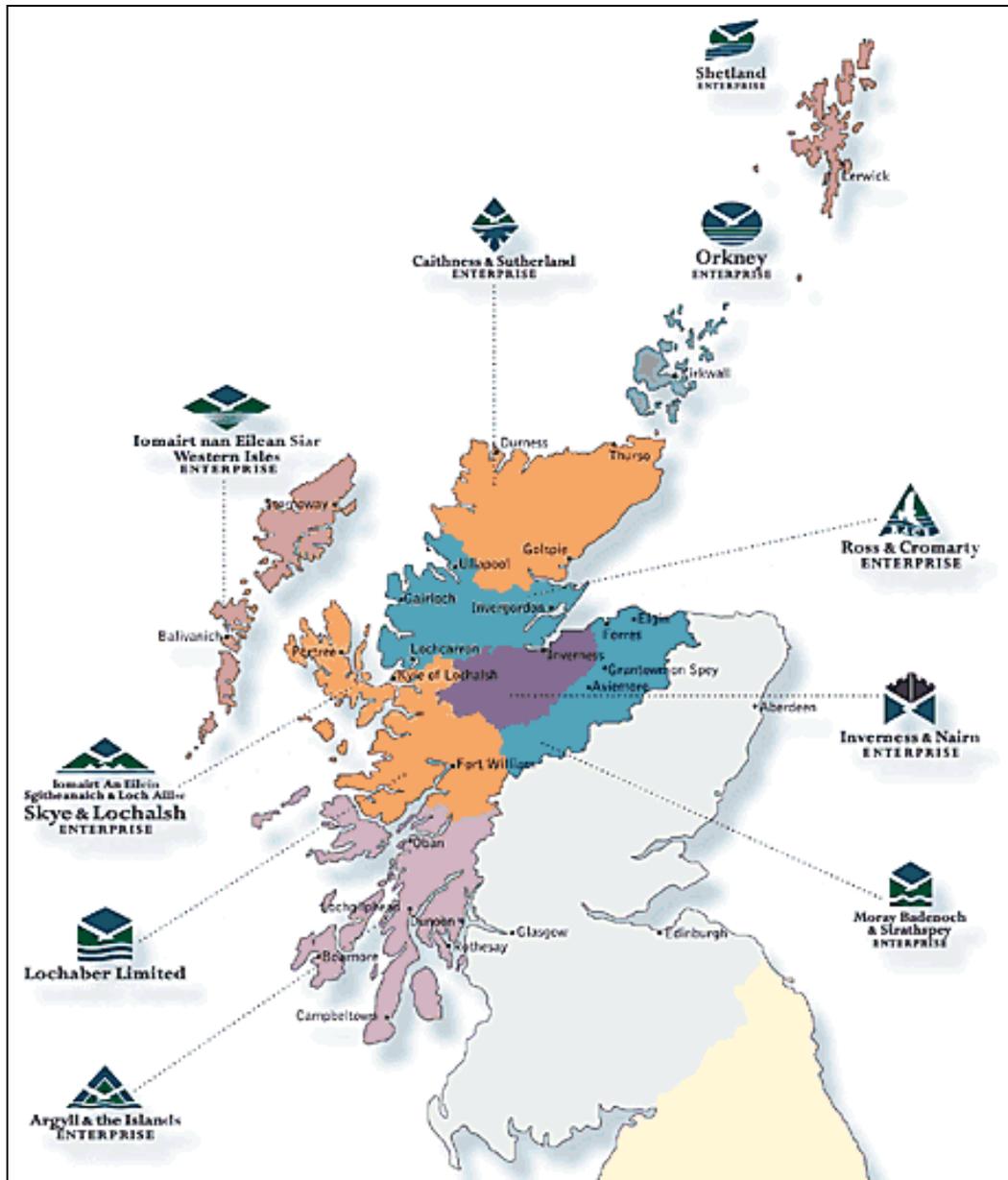


FIGURE 3 - THE HIGHLANDS AND ISLANDS "ENTERPRISE NETWORK"

STATISTICAL TRENDS

Population distribution

Although the average population density for the region is 9.5 per km² there are considerable variations around this average (Figure 4). A large part of the area is virtually empty, population either being clustered around the Moray and Dornoch Firths or in a few small coastal and island towns such as Fort William, Ullapool, Thurso, Wick, Stornoway, Kirkwall and Lerwick.

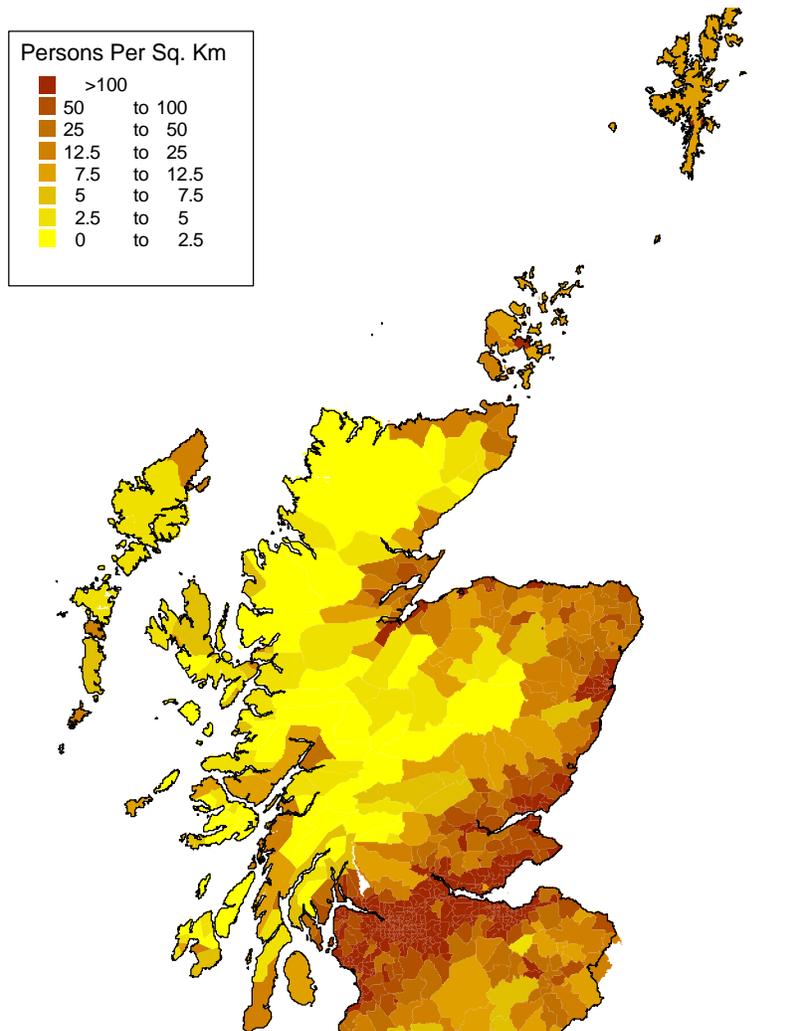


FIGURE 4 - POPULATION DENSITY BY POSTCODE SECTOR 1999

Population trends

As noted above, the population of the Highlands and Islands continued to grow (although at a reduced rate) during the 1990's. Between 1991 and 1998 the rate of change for the region (+0.3%) matched that of Scotland as a whole. This increase was entirely attributable to net inward migration, since natural increase was slightly negative.

Within the region three LEC areas, Argyll and the Islands, Caithness and Sutherland, and the Western Isles, continued to see a decline in population in the 1990's. The negative trend in Argyll is largely explained by the closure of the US Navy submarine base at Holy Loch. The losses in Caithness and Sutherland and the Western Isles reflect a pattern evident in the 1980's, with depopulation concentrated in the most remote parts of these areas. At the other extreme sustained population growth has characterised the Inner Moray Firth area, around Inverness. The Inverness and Nairn and Ross and Cromarty LEC areas contain more than one-third of the region's population, and during the 1990's saw an average growth rate of 3%.

TABLE 1 - POPULATION 1998 BY LEC AREA

LEC Area	Population 1998	% Change since 1991	Proportion of HIE Total
Argyll and the Islands	69,015	-3.5	18.6
Caithness and Sutherland	38,810	-2.7	10.5
Inverness and Nairn	75,940	3.9	20.5
Lochaber	19,620	1.6	5.3
Moray, Badenoch and Strathspey	33,971	2.3	9.2
Orkney	19,550	-0.1	5.3
Ross and Cromarty	50,640	3.1	13.7
Shetland	22,910	1.6	6.2
Skye and Lochalsh	11,980	2.0	3.2
Western Isles	27,940	-5.0	7.5
HIE Area	370376	0.3	100.0

Recent population projections suggest that whilst the Scottish population will decline by about 1% in the first decade of the new century, that of the Highlands and Islands will grow by a roughly equivalent proportion.

Age Structure

The age structure of the Highlands and Islands population as a whole seems to reflect a tendency towards “life cycle migration”, which tends to deplete the young adult age group, (many young highlanders take a first job in the Central Belt or further afield) and inflates the middle age and retirement groups (Table 2).

The percentage of population in the 0-19 age group in the Highlands and Islands is roughly the same as for Scotland as a whole. The only local variation is in Shetland, where the percentage is higher due to the effects of in-migration related to the oil industry during the 1980's and 1990's.

TABLE 2 - AGE STRUCTURE OF THE COUNCIL AREAS OF THE HIGHLANDS AND ISLANDS, 2000

	Percentage of Population			
	0-19 yrs	20-39 yrs	40-59 yrs	>60 yrs
Highland	25.06	24.95	28.35	21.63
Argyll and Bute	22.50	25.20	27.65	24.65
Moray	25.95	27.41	25.28	21.36
Shetland	27.44	27.31	27.29	17.96
Orkney	24.96	24.14	28.61	22.29
W Isles	24.38	23.43	27.38	24.81
HIE Councils	24.80	25.45	27.54	22.21
Scotland	24.60	28.97	25.97	20.46

Source: GRO Mid Year Estimates 2000.

The region has a significantly lower proportion in the next age group (20-39), than in Scotland as a whole. The greatest disparity is in the Western Isles and Orkney, suggesting that opportunities for school leavers and newly qualified young people are most restricted here. The slightly higher proportion of the Highlands and Island population in the upper working age group (40-59) suggests possible return migration of locals who have established careers elsewhere, or perhaps in-migration of people

from further south, attracted by lifestyle and environmental benefits. The proportion of population in the over 60s group varies considerably across the region. The overall percentage is slightly higher than the Scottish average. In certain areas, such as the Western Isles and Argyll the percentage is significantly higher. In the former this is almost certainly a reflection of the absence of young adults, whilst in Argyll it probably reflects retirement migration, which is also a feature on the island of Skye.

Employment and Unemployment

Economic activity rates are slightly higher in the Highlands and Islands area than in Scotland as a whole (Table 3). This is not an indication of greater productivity, but rather of the fact that scarcity of full time waged employment has tended to result in economic activity being more “thinly spread” across the population, involving more people in relatively poorly paid work, and many perhaps for a smaller proportion of their time. Thus 28% of the workforce is over 50 (Scottish average 21%, Table 4), 28% are part time (Scottish average 24% Table 5), and 13% are self-employed (Scottish average 10%).

TABLE 3 - ECONOMIC ACTIVITY RATES IN THE HIGHLANDS AND ISLANDS

Regions	Economically Active	Economically Active (Males)	Economically Active (Fem.)
	% 1998	% 1998	% 1998
HIE Area	81.5	86.3	76.0
SCOTLAND	77.4	82.2	72.2
UK	78.4	84.4	71.8

Source: Labour Force Survey (NOMIS).

Notes: Rates expressed as a percentage of population of working age (16-retirement).

TABLE 4 - AGE STRUCTURE OF ECONOMIC ACTIVITY IN THE HIGHLANDS AND ISLANDS

	16-19 years	20-24 years	25-34 years	35-49 years	50+
	% of Total Economically Active				
HIE Area	6.0	8.2	23.5	35.0	27.9
SCOTLAND	6.8	9.8	26.6	36.1	20.8
UK	6.4	9.2	26.4	35.6	22.4

Source: Labour Force Survey (NOMIS).

TABLE 5 - STRUCTURE OF EMPLOYMENT IN THE HIGHLANDS AND ISLANDS

	Employees	Self Employed	Full Time	Part Time
	% of Employment			
HIE Area	84.3	13.5	72.3	27.7
SCOTLAND	89.2	9.6	76.4	23.6
UK	87.1	11.9	75.4	24.6

Source: Labour Force Survey (NOMIS).

Note: Employees and self employed do not sum to 100% due to Labour Force Survey sample raising and rounding procedures

Unemployment in the Highlands and Islands is more difficult to monitor than elsewhere. Claimant rates have been discredited by political manipulation, and the more popular alternative, the Labour Force Survey suffers from small sample problems in the region. Furthermore the traditions of part time employment, self employment, and pluriactivity mean that unrecorded underemployment is likely to be substantial. Thus unemployment data for the Highlands should be treated with a degree of caution.

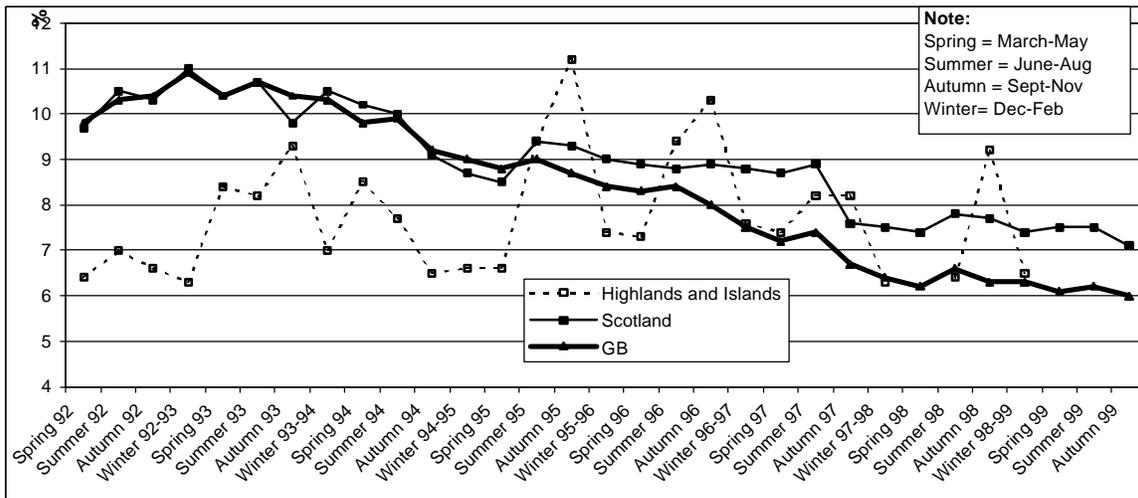


FIGURE 5 - UNEMPLOYMENT IN THE HIGHLANDS AND ISLANDS, 1992-99

Having said this, it is possible to make the following generalisations about unemployment in the Highlands and Islands:

- During the first half of the 1990's unemployment in the Highlands and Islands was generally below both the Scottish and GB averages (Figure 5).
- After 1995 it has fluctuated around a level roughly equivalent to that of Scotland as a whole, and above that of GB (Figure 5).
- There is considerable variation within the area, the lowest rates being in Inverness-shire, Lochaber, around Thurso, and in the Northern Isles, the highest being in Argyll, and the Western Isles (Figure 6).
- Unemployment in the Highlands and Islands is characterised by substantial seasonality, due to the importance of casual employment in agriculture and tourism (Figure 7 and Figure 8).
- Long term unemployment characterises the Western Isles, Argyll, Caithness and Sutherland and Orkney.

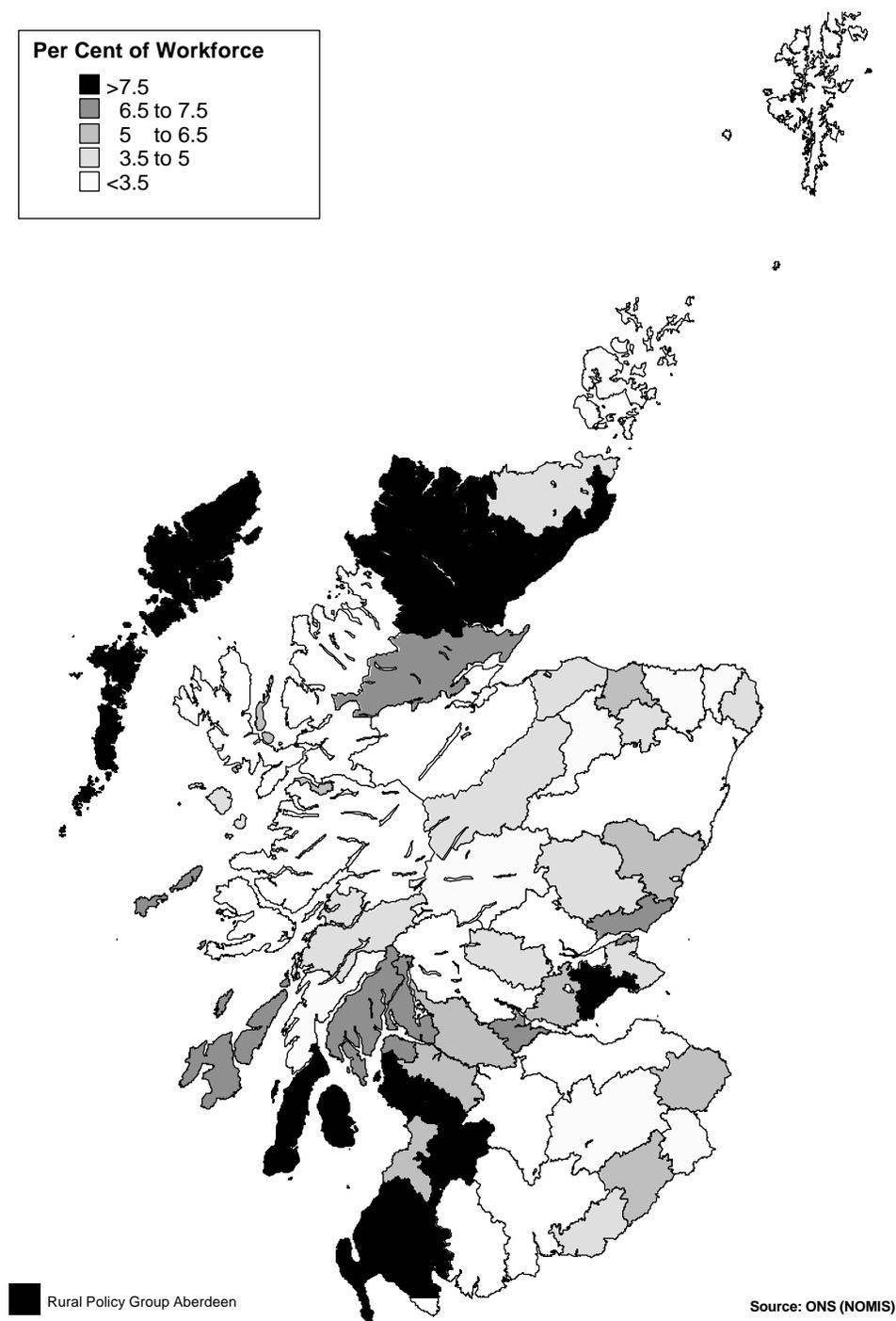
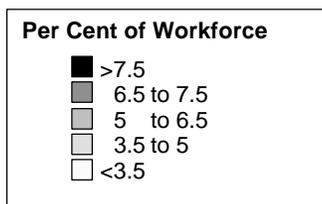


FIGURE 6 - CLAIMANT UNEMPLOYMENT RATE 1999 BY TTWA

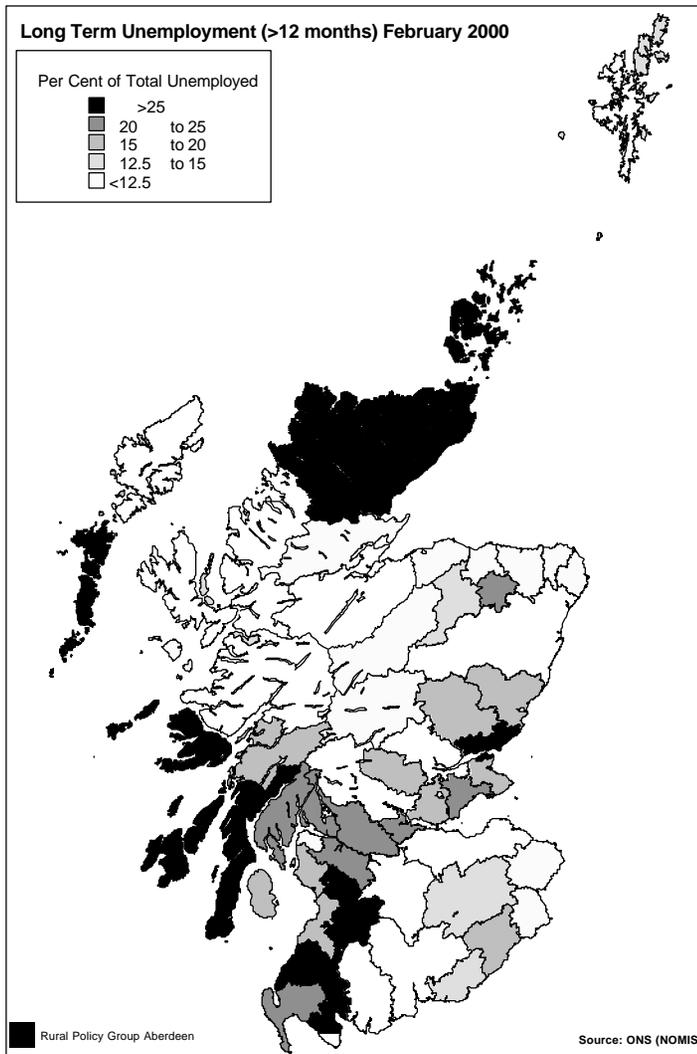


FIGURE 7 - LONG TERM UNEMPLOYMENT FEBRUARY 2000 BY TTWA

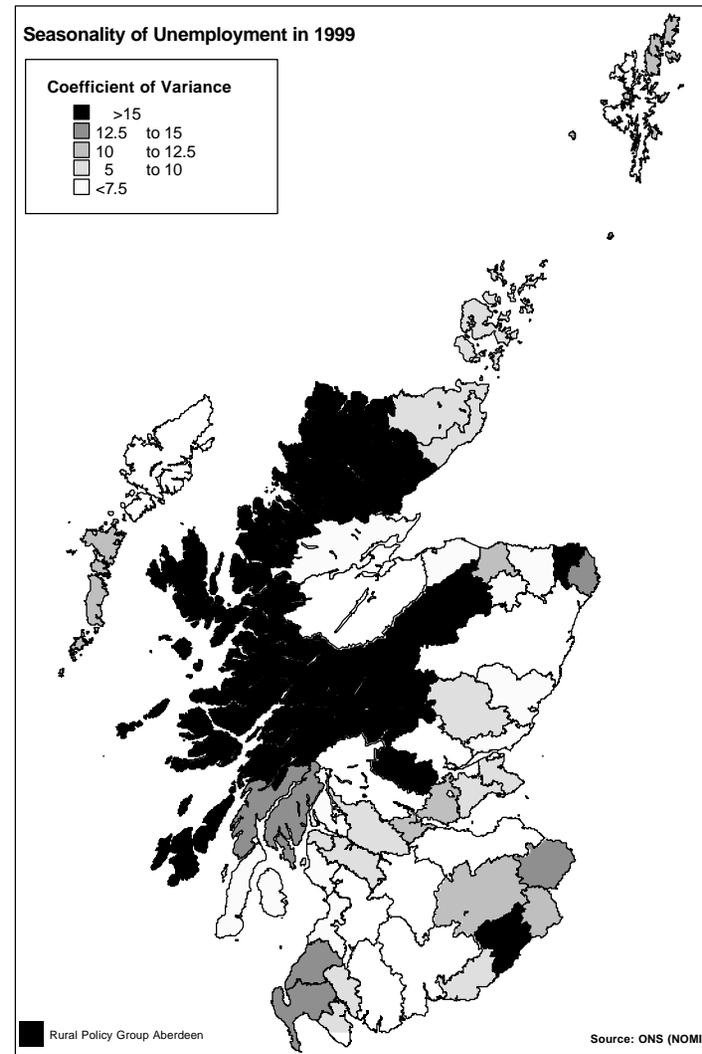


FIGURE 8 - SEASONALITY OF UNEMPLOYMENT IN 1999 BY TTWA

Occupational and Sectoral Structures/Trends

The main characteristics of the occupational structure of employment in the Highlands and Islands are the relatively high proportion of managers and administrators (associated with high levels of self employment), and low percentage of “associated professional and technical”, “clerical” and “selling” occupations. The small proportion of plant and machinery operators reflects the lack of engineering industry (Table 6).

TABLE 6 - OCUPATIONAL STRUCTURE OF THE HIGHLANDS AND ISLANDS 1998

	HIE	Scotland	GB
	% of Employment 1998		
Managers and Administrators	17.7	14.3	15.8
Professional Occupations	10.4	10.6	10.6
Associated Professional and Technical Occupations	8.1	9.7	10.1
Clerical Occupations	11.9	14.5	15.0
Craft and Related Occupations	12.7	12.0	12.2
Selling Occupations	7.1	7.9	8.0
Plant and Machinery Operators	7.7	10.1	9.4
Other Occupations	11.3	9.3	7.9
Unskilled Occupations	5.9	5.5	4.7

Source: Labour Force Survey (ONS, NOMIS).

AGRICULTURE AND CROFTING

The Highlands and Islands contains more than half the agricultural land in Scotland, but since much of it is very extensively managed rough grazing it accounts for only about 15% of the country’s agricultural output. Farming employs around 23,000 people in the region, roughly 13% of employment. However since the majority of these are part time, the number of full time equivalents is approximately half this figure, and this percentage therefore substantially overstates the role of agriculture in the labour market. In recent years the region, in common with the rest of Scotland, has seen a decline in agricultural employment of around 2-3% per year, largely achieved through a gradual shift from full time to part time, and from hired to family labour.

Agriculture in the Highlands and Islands is, as one might expect from the landscape mainly concerned with livestock production (over 85% of output), and particularly the breeding and rearing of cattle and sheep. Arable farming is restricted to the Black Isle (Easter Ross), lowland Caithness, and Orkney.

Agriculture in the region has in recent years been very heavily dependent upon direct subsidies (indirect market support has become very much less important since the 1992 CAP Reform). In 1997 it was estimated that 36% of the value of the regions agricultural output took the form of headage or arable area payments. This compares with a Scottish average of 25%. In some parts of the region dependence on subsidies rises even higher, for instance to almost 50% of output in the Western Isles, and around 40% in Shetland and Skye and Lochalsh. It is perhaps worth stressing that all the above figures on subsidy dependence are expressed as a percentage of the value of output. Net Farm Income is of course rather smaller, and depending on farm type, subsidies have on average accounted for between 100% and 200% of this figure.

A specific form of agricultural activity which is common in parts of the Highlands and Islands is known as "Crofting". Strictly speaking the word describes a particularly secure form of land tenure, introduced by legislation to try to prevent further depopulation through eviction by large (often absentee) landlords during the eighteenth and nineteenth centuries (the Highland clearances). However it also conveys a traditional pluriactive lifestyle, in which animal husbandry on a very small holding (but usually with access to shared grazing land or "common") forms only one of a range of part time activities. Other employment traditionally included fishing or weaving, or farm labouring on larger holdings. In recent years it is more likely to be bus or van driving, postal delivery, providing bed and breakfast, crafts (for sale to tourists) or a full time job as a school teacher, etc. One of the major benefits of being officially registered as a crofter is access to grants to improve or rebuild the croft house. Access to crofting status is carefully regulated. Until recently it was common for crofts (or their tenancy) to be inherited, but transfer to new tenants or owners is now more common.

An impression of the economic fragility of the crofting system has emerged from a recent (as yet unpublished) survey.¹ In 42 crofts surveyed in 2000 it was found that the average total income per adult croft resident was less than £8,500 per annum. Of this two-thirds was earned through employment off the croft, a quarter was “unearned income” (pensions, investments, etc.), 13% was income from non-farming activities on the croft, whilst income from farming itself was negligible.

FISHERIES AND AQUACULTURE

The Highlands and Islands account for about 40% of Scottish fishing employment (3,300 in 1996), but due to the high proportion of small boats (70% under 10m), only about 30% of value-added by fishing. Aquaculture (mainly salmon) provides a further 2,200 jobs. This represents more than 90% of the Scottish total, and is mirrored in terms of value-added (in terms of raw fish production). However, much of the unprocessed fish (both caught and farmed) leaves the region for processing further south. Thus fish processing occupies only 1,700 people within the region, only 18% of the Scottish total.

Both the fish catching and aquaculture industries operate in a difficult economic environment, the former due to the Common Fisheries Policy, and its landing quota system, the latter due to import competition from Norway and elsewhere. A recent expansion in shellfish catching around the region’s coastline has been checked by the occurrence of toxic algal blooms.

THE SECONDARY AND TERTIARY SECTORS

Outside the primary sector the Highlands and Islands have a fairly typical sectoral employment structure for a remote rural region, with a relatively small manufacturing sector, and few jobs in banking and finance but a relatively high proportion in tourism related activities (Table 7).

¹ I am very grateful to Roy Sutherland of SAC Aberdeen for permission to quote some key results in this paper.

TABLE 7 - BROAD SECTORAL EMPLOYMENT DISTRIBUTION, HIGHLANDS AND ISLANDS, 1998

	HIE	Scotland	GB
	% of Employment 1998		
Manufacturing	10.9	16.4	18.5
Construction	8.5	7.8	7.1
Distribution, Hotels etc.	23.7	19.5	19.9
Transport and Communication	6.5	6.6	6.7
Banking, Finance	9.3	12.9	15.1
Public Administration	26.9	26.3	24
Other Services	5.7	5.6	5.9
Service industries	72.1	71.0	71.6

Source: Labour Force Survey (ONS, NOMIS).

Two sectors which have shown relatively high growth in rural Scotland in recent years are food processing and hotels and restaurants (Table 7). As we have already seen in relation to fish, the first of these is relatively under-represented in the Highlands and Islands. The importance of tourism to this area is highlighted by the fact that it has almost twice the Scottish percentage employed in hotels and restaurants. Overall (including visitor attractions, tourism related retailers and transport) the industry is estimated to employ around 17,000 people. In 1997 tourism expenditure within the region was equivalent to 8% of regional GDP. One fifth of this spending was associated with overseas tourists, making the industry the region's third largest export earner. One of the main constraints to further growth is the brevity of the season, 84% of overseas tourists, and 66% of domestic visitors come between April and September.

TABLE 8 - SOME KEY EMPLOYMENT GROWTH SECTORS

Regions	Food Processing	Hotels and Restaurants	High Tech. Manufacturing	IT Services	Research and Development
	Percent of Total Employees 1997				
HIE Area	2.82	9.30	0.64	0.45	0.09
SCOTLAND	2.95	5.41	3.41	0.89	0.30
GB	2.14	4.72	2.58	1.75	0.45

High technology manufacturing, IT services and research and development are often cited as important sectors for growth in modern economies. According to the Labour Force Survey data the Highlands and Islands are very weak in all three of these areas (Table 8). Call or “contact” centres have been a focus for HIE’s efforts to attract inward investment in recent years. The region is said to possess certain advantages in terms of a highly skilled non-unionised workforce and a relatively uncompetitive job market, resulting in greater loyalty. The region currently has 17 call centres employing 3,300 people, - approximately 7.5% of the Scottish call centre workforce², and almost exactly matching the region’s share of the Scottish population. Thurso and Dingwall are the two towns with the largest dependence upon call centre employment, and here the percentage so employed exceeds that in any other locality in Scotland (including Glasgow). It is important, however, to remember that large parts of the region remain virtually untouched by this development. The envisaged shift to “distributed” call centres may allow the benefits to be dispersed, although it is dependent upon the availability of modern broadband communications (see below). It will also have to find an appropriate response to the anticipated threat of cheap competition from Asia and elsewhere.

Income

At £319.40 per week, average gross weekly earnings in the Highlands and Islands in 1998 was 10% lower than the Scottish average, and 17% lower than the average for GB. The disparity was greater for women (21% of GB average) than men (15%). However, it is possible that these figures, derived by the Office for National Statistics from a sample survey of persons in full time employment, overestimate real average incomes in the Highlands, due to the large proportion of the population who earn their living from a variety of part time sources, which are generally less remunerative than full time employment. For instance, the average gross weekly wage quoted above equates to twice the average income per adult in the crofting households who participated in Roy Sutherland’s survey (see above).

In aggregate terms the region’s Gross Domestic Product per capita is 76% of the EU average. Of the six constituent European statistical (NUTS) regions, two, (Lochaber,

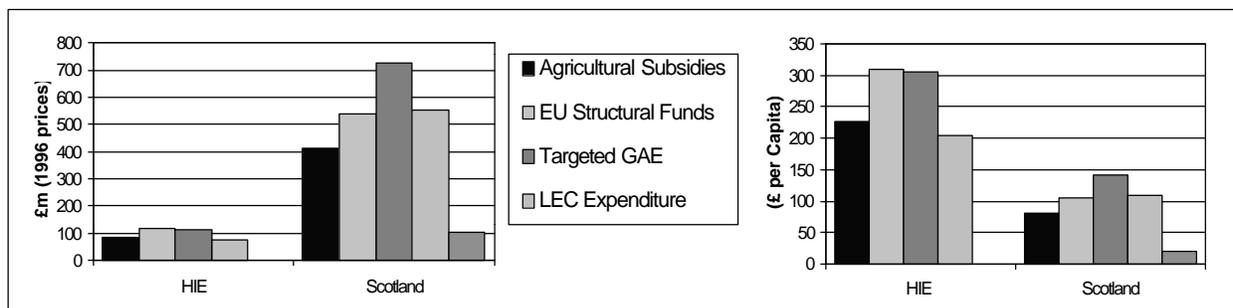
² HIE Network Economic Information, Call Centres in the HIE Area June 2000 (<http://www.hie.co.uk/welcome.asp.locID-hieecorep.htm>)

Argyll, Skye and Lochalsh and the Islands, and the Western Isles) are reported to have a lower per capita GDP, at 70% and 74% of the EU average, and one (Orkney Islands) performs better, at 80% of the average.

Transfer Payments

There are essentially two ways to attempt to measure the degree of dependency on public support in a region. The first is to collect from disparate information sources on gross transfers associated with various “spatially targeted” policies, and then to express these in relation to some baseline measure of the wealth of the region (such as GDP). The second is to map the incidence of households receiving various forms of social security payments. These are of course indicative of slightly different kinds of dependency, and examples of both will be presented here.

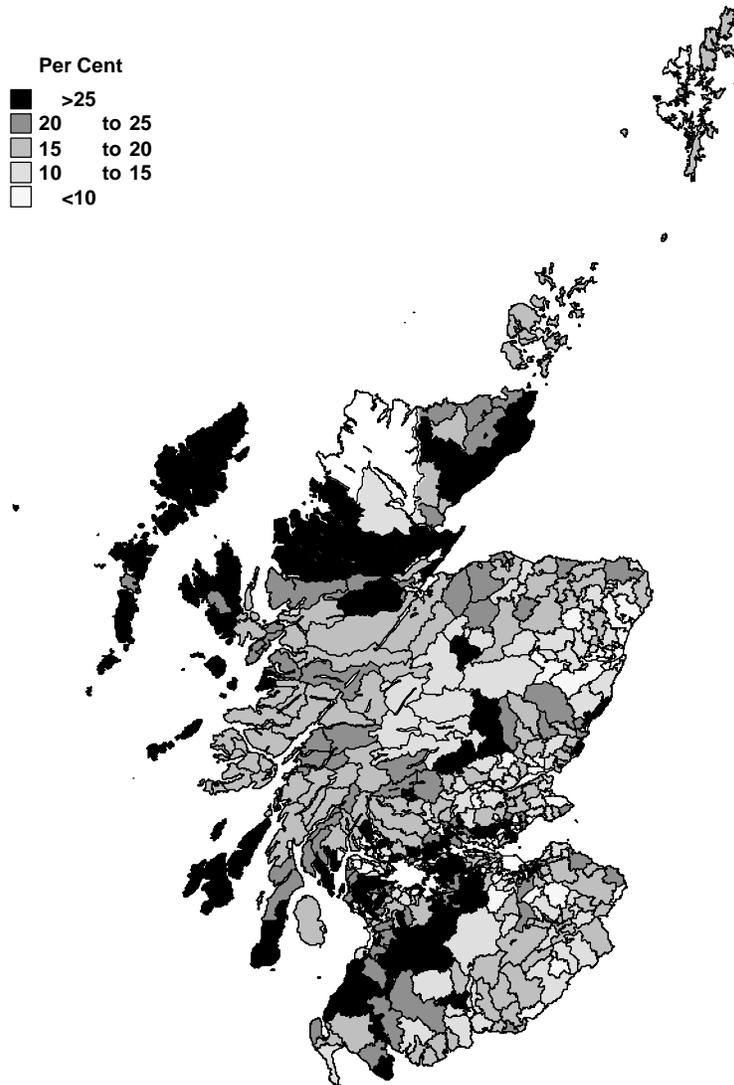
Figure 9 shows the distribution of various forms of spatially targeted expenditure in the Highlands and Islands and in Scotland as a whole during the mid 1990's³. Clearly, although the sums entering the Highlands and Islands do not seem large in absolute terms, they are proportionately large in relation to the size of the region's population.



**FIGURE 9 - DISTRIBUTION OF MAIN FORMS OF SPATIALLY TARGETED PUBLIC EXPENDITURE
HIGHLANDS AND ISLAND AND SCOTLAND, MID 1990'S**

³ The dates for the different data sources ranged from 1994-96 for agricultural subsidies and EU Structural Funds, 1997-98 for GAE allocations, 1995/6-97/8 for LEC expenditure, and 1996 for UK regional expenditure. All expenditures were expressed in 1996 prices.

Figure 10 shows that on an individual level the Highlands and Islands receive a relatively high level of social security payments. The Western Isles, Skye, East Caithness, Wester Ross, the Argyll Islands and Kintyre, all have postcode sectors in which at least a quarter of all households are claiming some form of means-tested income support.



Rural Policy Group Aberdeen

FIGURE 10 - INCOME SUPPORT CLAIMANTS BY POSTCODE SECTOR 1998

TRANSPORT AND COMMUNICATIONS

Road Transport and the Road Network

Road transport accounts for the majority of freight movements in the Highlands and Islands as in other UK regions. Although significant improvements have been made to some main arterial routes, (notably the A9 connecting Inverness with Glasgow and Edinburgh), the quality of the network remains generally poor. Routes are circuitous and many routes require upgrading because they are narrow (there are still many examples of major routes which are “single track with passing places”), or because their foundations are too weak for modern heavy goods vehicles. There is a broad east-west split in terms of road quality, the west having a generally sparser network, with a higher proportion of sub-standard routes.

Ferries

There are around 90 inhabited islands within the region, and ferries are therefore a very important feature of the transport network. These are operated by two major companies, Caledonian MacBrayne and P and O Scottish Ferries, two public sector fleets (owned by Orkney and Shetland Councils), and by several local private operators. There are at least two other ferry companies working the Northern Isles routes which carry freight only. So-called “lifeline” passenger services are subsidised, but freight ferries receive no assistance.

There are at present no modern “fast ferries” operating within the region, and many of the vessels currently in use are relatively slow, small and old fashioned. The routes currently operated by P and O are due to be taken over next year by a joint venture by Caledonian MacBrayne and a Scottish bank. New, faster and larger ferries are to be introduced, cutting passage times and facilitating a more frequent service. This will include the route from Aberdeen to Shetland which is the longest in the UK, currently taking approximately 15 hours (including check-in and disembarkation time). On many shorter crossings the main constraint is the inadequacy of the terminal facilities.

Rail Transport

The rail network of the Highlands and Islands is simple. Three lines connect it with the Central Belt, one from Glasgow to Oban, Fort William and Mallaig, one from Edinburgh to Inverness, and one from Aberdeen to Inverness. From Inverness the West Highland line connects to Kyle of Lochalsh, and the North Highland to Thurso and Wick. Of these only the Edinburgh to Inverness line is dual track. The others are single track, circuitous routes, and have numerous speed restrictions. As a result, the timetable is minimal (two or three trains a day north of Inverness, no trains at all on Sunday), and the number of passengers carried relatively low. In recent years, some progress has been made in transferring freight from road to rail as a result of initiatives by the Highland Rail Network Development Partnership, which seeks to find innovative ways to meet the needs of local businesses.

Air Transport

There are 23 airports within the Highlands and Islands. Inverness provides links to Glasgow, London Gatwick, Stansted and (in recent weeks) London City airport. However, business travel from the Highlands has been made more difficult by the loss of services to Heathrow, with its better connections for onward international flights. The remaining 22 airports form the basis of a local network, mainly provided by subsidiaries of British Airways. Many of the links are operated by small unpressurised aircraft. Ticket prices are relatively high, and air travel is not an option for the majority of domestic trip purposes. A few routes are predominantly used by tourists; for instance Barra attracts visitors simply because the runway is the beach, whilst Westray to Papa Westray boasts the shortest scheduled flight in the world (3 minutes).

Telecommunications

The Highlands and Islands benefited from an early investment in an ISDN network (jointly funded by British Telecom and European Structural Funds). However, take-up was low, and many firms located away from the “backbone” network were not able to connect. Other, larger firms continued to use rented dedicated lines. This network is now somewhat dated, and attention is turning towards the next generation of broadband technology. It is recognised, however, that due to the low density of the “market”, the network will not be updated by commercial providers without some

form of public assistance, probably from the Special Transitional Programme. Thus the technologies widely heralded as the solution to peripherality, are under free market conditions likely to reinforce the advantages of core areas, where commercial providers will find it profitable to provide them. In this sense the effects of agglomerative economies have the potential to override the potential benefits of new communication technologies.

A recent survey commissioned by HIE⁴ presented a sobering picture of the development of “e-business” in the Highlands and Islands. Using a questionnaire designed by the UK Department of Trade and Industry, (allowing the results to be benchmarked against the latter’s Scottish survey), the report shows that businesses in the region use email less frequently, are less likely to have a website, and are less likely to make sophisticated use of internet technology either in dealing with suppliers or with customers. Where results are presented by business size it appears that very small Highland firms lag behind more than medium or large firms. Furthermore, such firms also showed a lower awareness of the competitive benefits to be gained from exploiting new technologies. This would seem to suggest that micro-businesses in the region suffer from poverty of informal face-to-face linkages with similar firms and that information diffusion is slower as a result. Medium sized and larger firms are more likely to have formalised channels which enable them to keep abreast of opportunities.

It is perhaps important to stress that many businesses in the Highlands and Islands already enjoy the benefits of the “level playing field” provided by the Post Office’s universal service obligation. Jewellers, other craft workers, and niche market food processors, even in the remotest parts of the region are able to dispatch their products by post with no distance related additional cost. They will be hoping that this situation will not be threatened by the progressive privatisation of the mail service (under the name “Consignia”).

⁴ E-Business Benchmarking Survey 2001, Comparison with Scottish Enterprise/DTI results for Scotland, <http://www.hie.co.uk/ebusrpt>

POLICIES TO AMELIORATE REGIONAL DISPARITIES

Regional Development Agencies

The Highlands and Islands Development Board, when it was set up in 1965, was given wide-ranging powers relating to economic and social development. It is perhaps best remembered for assisting large-scale (but unfortunately short-lived) inward investments such as the Invergordon aluminium smelter. However later in its life it actively encouraged endogenous development through community co-operatives. Before its replacement by HIE in 1991, the HIDB also sponsored a number of development programmes focussing on particular areas (such as Mull and NW Sutherland).

HIE, the HIDB's successor has as its stated aim "to enable the people of the Highlands and Islands to realise their full potential". In pursuit of this three "strategic objectives" are pursued:

- Strengthening Communities
- Developing Skills
- Growing Businesses

The first two thus relate to community development and training. The third is perhaps of greater interest in the current context. This relates to improving business competitiveness, assisting new business starts, attracting inward investment and improving the competitiveness of business locations. All these are supported by a broad range of activities, provision of capital grants, advice, research, marketing and so on. Resources are targeted by HIE to the various constituent Local Enterprise Companies according to a "formula share", based on a combination of population share and indicators of long-term economic fragility or shorter term need for regeneration following specific local unemployment problems.

European Structural Funds

The Highlands and Islands have had a chequered history in respect to Structural Funds. It was designated under Objective 5b (rural areas in need of adjustment) from 1989-93. This programme included an Agricultural Development Programme for the Scottish Islands, A Rural Enterprise Programme, and a European Social Fund Operational Programme. In 1994 the Highlands and Islands were awarded Objective 1

Status. This again was a broad-based programme, involving all three Structural Funds (EAGGF, ERDF and ESF) and including investments in communications and basic infrastructure, training and education, business support, community development, environmental projects and agricultural and fisheries development. It was estimated by the European Partnership that the final outcome was the creation/safeguarding of approximately 12,000 jobs (9% of the total employment in the region).

In 2000 the region lost its Objective 1 status due to the strict enforcement of the 75% of EU GDP per capita eligibility criterion. However a “Special Transitional Programme” covering the years to 2006, with equivalent funding to Objective 1, was negotiated. This programme has the following priorities:

- Increasing Business Competitiveness, Creating Employment and Increasing Incomes (Estimated total cost 187.677m)
- Improving Regional Competitiveness through developing the Information Society (315.806m)
- Human Resource Development (120.152)
- Assisting Rural Communities (220.129)

EU Community Initiatives

The main “community initiatives” to benefit the Highlands and Islands have been the LEADER I and II community development programmes, and PESCA (to assist the restructuring of fisheries dependent areas).

Other National Policies affecting the Development of the Highlands and Islands.

There is no UK regional assistance expenditure within the Highlands and Islands, since this function is taken by the Structural Funds Programme. However, two forms of intervention by the devolved Scottish Parliament are worth mentioning at this point. The first is “The Initiative at the Edge”, a pilot programme set up in 1997, targeted on the most peripheral communities within the region. The funding associated with this initiative is minimal, and designed to pay for project officers and support only. The aim is to stimulate community development in such a way as to co-ordinate and thus maximise the benefit of available funding from a variety of existing sources.

The second form of intervention is very much implicit, and involves the annual distribution of local authority funding (derived from national tax revenues). The allocation is built up from estimates of required expenditure for each function (roads, care of the elderly, schools, etc.) derived from complex targeting formulae. As Figure 9 shows this allocation mechanism brings roughly equivalent sums to the Highlands and Islands as the Structural Funds do.

OUTLOOK FOR THE HIGHLANDS AND ISLANDS

This concluding section attempts to draw together the preceding discussion and to focus on the key issues (both positive and negative) which will influence future economic trends in the Highlands and Islands. It will do this from three distinct but complementary starting points:

- The results of a shift-share analysis of employment trends in the region.
- A SWOT analysis presented as part of the Single Programming Document for the Special Transitional Programme
- The concepts of “innovation systems”, “innovative milieu”, and “Aspatial Peripherality”

Shift Share Analysis

The objective of shift-share analysis is to obtain a better understanding of local employment trends by seeking to identify the different components of change. More specifically, total employment change is disaggregated into a *national component*, (which is simply the average percentage change shown by the country over a period), a *structural component* (which is the estimated change in the region attributable to national trends in each sector), and a *differential component*, (reflecting local factors and defined as the difference between the sum of the national and structural components and the actual local change). This analysis enables broad conclusions to be drawn about the relative strength and direction of local structural influences and the degree to which other local characteristics can help to explain regional trends.

An analysis of Annual Employment Survey data for the period 1991-98 shows that employment in the Highlands and Islands declined by 2.9% (Scottish average -0.7%). The predicted change for the area (based upon both the average Scottish trend and

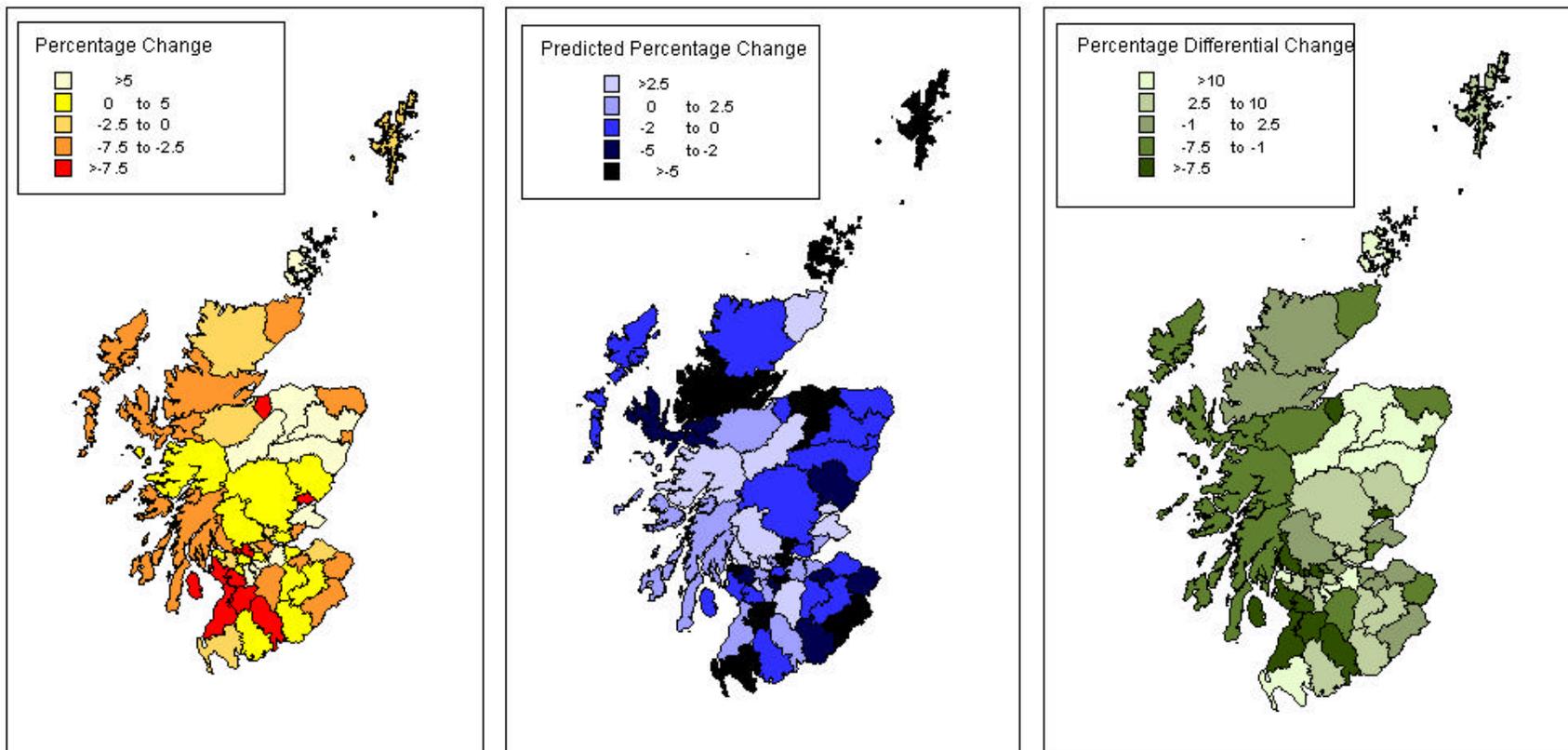
taking account its particular sectoral structure) was a loss of only 1.6%. This leaves a further decline of 1.3% of employment to be explained by other (ie non-structural) regional factors. The analysis may also be carried out at a sub-regional level. Figure 11 shows the results of the same shift-share analysis carried out for the 56 local authority Districts which existed prior to the reorganisation of local government in 1996.

The Western Isles, Argyll, Skye and Lochalsh, Cathness, and even Nairn and Inverness-shire are shown to have performed substantially worse than their structural characteristics might lead us to expect. At the other extreme Orkney, Shetland and Badenoch and Strathspey showed more positive employment trends than their structural characteristics would lead us to expect. Sutherland, and Ross and Cromarty occupied an intermediate position.

The significance of these results is two-fold:

- *They show that the decline in employment in the Highlands and Islands over the 1991-98 period was greater than might be expected on the basis of either national trends or of the local industrial structure. In other words there must be some significant (negative) regional effects which are independent of sectoral structure.*
- *The District level results suggest that these local effects are not directly related to distance from economic core areas, since two of the best performing areas were also the most remote.*

These results are of course only based upon the comparison of data for two dates, and further analysis would be needed to establish whether they have a more general validity. However it is important to acknowledge that they do tend to reinforce the conclusions of other more qualitative research focussing on the role of “soft factors” in the development of peripheral areas (see below).



Source: Annual Employment Survey (at 3 digit SIC level), National Statistics, (NOMIS)

**FIGURE 11 – SHIFT-SHARE ANALYSIS OF EMPLOYEES IN EMPLOYMENT 1991-1998
BENCHMARK = SCOTLAND**

SWOT Analysis

The SPD's SWOT analysis is prefaced by a discussion of key drivers in the economic environment. These are:

- *Globalisation and increased competition*
- *The impact of ICT*
- *The growth of the knowledge-based economy*
- *The increasing importance of education and life-long learning*
- *Trends towards centralisation of service provision*
- *Quality of life as a key feature in place competition*
- *Increasing awareness of the environment*

The list of strengths of the Highlands and Islands contains broadly two types of item, those relating to qualitative aspects of the business environment (natural and man-made heritage, well educated and adaptable workforce, strong local culture and sense of community) and those relating to the presence of activities with potential for growth (presence of major oil-related activities, high quality manufacturing industries, tele service centres and IT-based activities, and a long established tourism sector). In addition the SPD mentions the modern telecommunications structure, and the availability of high quality primary products.

Several of the opportunities envisaged are directly related to the attractiveness of the environment noted under "strengths". This applies, for instance, to the attraction of ICT companies, and the development of environment and culture based tourism. Environmental resources are also seen as an opportunity in terms of renewable energy developments, and marine bio-technology. Quality primary produce is seen as the basis for an opportunity to add value by local processing. In relation to the knowledge economy the opportunities for "spill-over" effects from the decommissioning of Dounreay nuclear facility, and the University of the Highlands and Islands are mentioned, together with potential development of telemedicine expertise.

The weaknesses mainly relate to the inhospitable environment, inaccessibility, and to the general fragility of local economies. Threats mainly relate to the effects of continued structural adjustment (decline of primary sector, loss of employment in oil or

gas), the loss of competitiveness in certain sectors (tourism, ICT), increased cost of road fuel, and its effects on private mobility and freight transport cost, and the continued drain of population from the least accessible parts of the region.

The concepts of “innovation systems”, “innovative milieu”, and “Aspatial Peripherality”

There is now a large and rapidly expanding literature on "regional milieux", crossing a number of disciplinary divides between planners, regional scientists, sociologists, economists and geographers. This literature emphasises the importance of “soft factors”, sometimes collectively described as “milieux innovateurs” or “innovation systems”. Other studies have sought to isolate different facets of the milieu, including:

- "social capital", and "local capacity", (stressing the educational, cultural and attitudinal characteristics of a region's population);
- the role of “institutional thickness” and the “associational economy”, - both concepts stressing the importance of the quality of agencies and organisations involved in regional development, and the interaction between them - and;
- "untraded interdependencies”, (the network of links between firms, development agencies, educational institutions and research establishments, which if well developed facilitate the rapid diffusion of information), in “learning regions”.

Several recent research projects by SAC and the Arkleton Centre have sought to identify the key elements of “innovation systems” in peripheral areas through case study work. Many aspects of the local “milieu” are intangible, and it is very difficult to quantify the key differences between a relatively dynamic area such as Orkney, and the adjoining lagging area of Caithness. However it is possible to confirm that the role of “soft factors” is clearly recognised by local economic development staff. Indeed social capital is a well enough established concept for an EU Community Initiative (LEADER+ and its antecedents) to be based upon it. Time and space will not permit a detailed discussion of the characteristics of a dynamic milieu or innovation system in the periphery, but it is important to note that due to the relative sparsity of the distribution of firms, it is distinctive from a dynamic milieu in a densely populated economic core area. To look at it another way it will of necessity have developed adaptations to the difficulties associated with geographical remoteness.

To develop this concept a little further, and to tie it back to the question of the future prospects of the Highlands and Islands, it may be helpful to introduce the concept of

“aspatial peripherality”. In a sense this term is an “oxymoron”, but it is perhaps nevertheless a helpful shorthand. It simply refers to the fact that due to differences in the local combination of “soft factors”, sometimes positive in net effect, sometimes negative, some regions will perform better than their geographical position would lead us to expect and vice versa. Thus the local milieu (positive or negative) has similar effects on a local economy as peripherality or accessibility. It follows – too – that the future development of the Highlands and Islands, (and any other peripheral region) depends not only upon policies to address transport and communication problems (indeed, on their own these can lead to negative impacts through the so-called “pump effect”) but also, and increasingly, upon the more difficult policy objective of enhancing the local milieu.