Briefing Paper

CENSUS OF EMPLOYMENT 1984: AN ASSESSMENT

Stephen Boyle and Iain Jenkins Fraser of Allander Institute, University of Strathclyde

The Census of Employment is generally regarded as the most reliable source of information on employment trends in the UK. Since 1978 it has been conducted at three-yearly intervals and the first results of the 1984 Census have recently been published.* This paper describes the major developments in Scottish employment since 1981 and compares Scotland's performance with the rest of Great Britain. The outcome is depressing if not unexpected: Scotland has lost jobs in all sectors and generally at a faster rate than the rest of Britain. Following the discussion of the main results, the respective roles of services and electronics as potential sources of future employment growth are considered and it is concluded that neither offers the prospect of satisfactorily reversing the trends of recent years.

Summary figures by broad industrial sector are reported in Table 1. Overall, total Scottish employment in 1984 was 4.4% below the level recorded in 1981. However, even at this broad sectoral level some marked differences in employment performance are apparent. Although employment has fallen in each sector the decline has been much more dramatic in the primary and manufacturing sectors. As a consequence the importance of these sectors in terms of their share of total employment has fallen. By 1984, almost two out of every three Scots in employment worked in the service sector and services account for a greater proportion of Scottish employment than ever before.

In the rest of Great Britain (RGB) employment in manufacturing and the

primary sector has declined less rapidly, while in services it has actually grown. Only in construction has employment declined more rapidly in RGB than in Scotland. These figures again combine to produce an overall picture in which service sector employment is becoming more important.

Table 1 Sumary figures by broad industrial sector

	Scottland							
	Hisployees in esp 1984 (000s)		Prop. of of total	Change in prop. of total cap. since 1981				
Primary Manufacturin Construction Services		-13.9 -13.6 -0.6 -0.1	5.4 22.8 7.3 64.6	-0.59 -2.44 -0.28 +2.75				
Total	1,903.9	-H.Jt	100,0					
	Great Britain							
	Employees in emp 1984 (000s)	Charge since 1981 \$	Prop. of of total emp.	Charge in prop. of total cup. since 1981				
Primary Manufact. Contruction Services	849.7 4,892.9 886.9 12,312.4	-10.4 -11.9 -6.6 +3.7	4.5 25.8 4.7 65.0	-0.42 -2.92 -0.23 +3.57				
Total	18,941.9	-2.0	100.0					

Source: Department of Employment

The information presented thus far gives a flavour of the general pattern of employment change in Scotland and RGB in the early eighties but at this level of disaggregation the heterogeneous and changing nature of the economy is Whether it be for reasons of obscured. international competition, new technology, changing consumer tastes or any of a host of causes, there are likely to be some industries in which employment is expanding while in others it is in In Table 2 various statistics decline. are reported which facilitate a more detailed description of differences in industry performance.

Services

Service sector employment in Scotland fell between 1981 and 1984 by only 0.1%. However, the composition of this decline is interesting because it is far from the case that employment in all industries in this sector contracted by the same Of the 26 service industries proportion. employment grew in 9, fell in 15 and remained constant in 2. In the expanding sectors, the average rate (where each expanding sector was weighted by share of employment in 1981) was 14.6% ranging from 5.4% in Banking and Finance to 29.6% in Repair of Consumer Goods and Vehicles.

Among the contracting industries the weighted average growth rate was -3.7%, a figure considerably lower in absolute terms than for the growth sectors. The rates of decline varied from -0.5% in Other Inland Transport to -18.1% in Miscellaneous Transport Services and Storage. Whilst the average rates of growth and decline in themselves imply an overall increase in employment, the fact that service sector employment has fallen is indicative of the relative importance of expanding and contracting industries. On closer inspection, the figures reveal that of the 10 service industries which employed most people in 1981, employment has fallen in eight. More strikingly each of the five biggest sectors recorded net job losses over these 3 years. a major explanation of the slight decline in service sector employment lies in the

distribution of employment change.

Whilst there was overall growth in service sector employment of 3.7% in RGB again this figure is the combination of widely differing experience across industries. Of the 26 service industries identified 15 experienced employment growth and employment fell in the other 11. Employment change among the growing industries ranged from 0.2% for Medical and Other Health Services to 55.4% in Commission Agents with a weighted average of 9.8%. The corresponding range for the contracting industries was from -0.4% in Education to -45.4% in Sea Transport with a weighted average of -4%. In RGB overall service sector growth appears to have occurred due to a significant contribution from industries at both ends of the employment size spectrum. instance, of the 10 largest employing industries in 1981, employment increased in 6.

Comparison of the Scottish and RGB figures sheds some light on the extent of Scotland's relative decline. In 15 industries employment in Scotland either fell by more or increased by less than in RGB. Also, the sectors in which Scotland increased its share of total GB employment tended to be the minor industries in terms of employment.

It is also of interest to examine the relative employment changes in the relatively 'Scottish' industries. Ιn 1981 Scotland accounted for 9.4% of total GB service sector employment and therefore a "Scottish" industry is taken as one in which Scotland's proportion of total GB employment in the industry exceeded 9.4%. On this basis 10 industries could be regarded as "Scottish" in 1981 and of these, only one (Other Services) recorded an increase in employment over the period. Moreover, 8 of the 10 industries saw reductions in their share of GB By 1984 Scotland's share of employment. GB service sector employment had fallen to 9.1% and on the basis of this figure 12 industries were 'Scottish'.

Table 2 Exployment, exployment charge and exployment share by industry

	Scotland		Rest of Great Britain		Scottish em.	Change in prop. of CB cmp. accounted for
	Employees in emp. 1984 (000s)	Change in emp. since 1981, 1		Change in emp. since 1981	asa 1sof	by Scottish
Primary		***************************************	······································			
Agriculture & horti- culture Forestry Fishing Coal extraction & solid fuels	30.5 4.2 2.0 -16.9	-18.4 -14.3 -4.8	300.5 7.0 4.0 215.3	-12.5 -7.0	9-2 37-5 33-3	~1.4 ~0.5 +0.5 -1.1
Coke ovens Extraction of oil & gas Mineral oil processing Nuclear fuel production Eleo. gas & other energy Water supply	3.0 0.0	-100.0 +12.0 -11.8 -6.0 -45.2	3.7 11.7 16.6 14.8 221.0 55.1	-14.3 +36.0 -37.1 -6.3 -10.8 -11.0	0.0 62.6 15.3 0.0 9.6 4.0	-2.3 -4.4 +3.9 0.0 +0.5 -2.3
Manufacturing						
Extraction & preparation of ores Metal manufacturing Extraction of mineral no Manuf. of non-met. min	0.0 16.1 es 3.2	-100.0 -37.1 -8.6	2.9 176.4 29.3	+170.6 -27.0 -18.2	0.0 8.4 9.8	-10.5 -1.2 +0.9
products Chemical industry Production of men-made	12.9 20.1	-1.5 -15.2	208.8 315.8	-1.8 -6.0	5.8 6.0	0.0 -0.6
fibres Manuf. of metal goods no Mechanical engineering Manuf. of office & data	69.2	-100.0 -23.7 -3.8	11.2 316.0 681.2	-34.9 -19.3 -16.6	0.0 4.6 9.2	-1.7 -0.2 +1.0
proc. equipment Electrical & elec. eng. Manuf. of motor vehicles		+23.6 +9.8	74.7 554.7	+12.0 -10.9	12.8 7.5	+1.0 +1.3
å parts Manuf. of other transpor equipment	6.8 t 34.1	-39.7 -24.7	266.4 255.1	20,2 19,2	2.5 11.8	-0.8 -0.7
Instrument engineering Food, drink & tob. manuf Textile industry Manuf. of leather &	6.5		97.7 514.7 211.0	-2.7 -11.6 -10.7	6.2 12.4 14.0	-4.2 -0.6 0.0
leather goods Footwear & clothing ind Timber & wood furniture		-33.3 -16.1	20.9 268.4	-19.6 -3.9	5.4 8.2	1 ₊ 1 1 ₊ 1
ind. Paper, paper products, printing, & publishing	15.8 34.3	-7.6 -12.5	187.0 447.3	-5.4 -4.9	7.8 7.1	-0,2 -0,6
Processing of rubber & plastice Other manuf. industries	8.6	+6.2 -16.3	185.6 76.9	-1. 2 -7. 9	4.4 4.5	+0.3 -0.4
Construction	138.9	-0.6	886.9	-6.6	13.5	+0.7

	Scotland		Rest of Great Britain		Caretai di a	Change in prop. of GB emp. accounted for
	Employees in emp. 1984 (000s)	Change in emp. since 1981, %	Employees in emp. 1984 (000s)	Change in emp. since 1981	Scottish emp. as a % of total British emp. 1984	by Scottish
Services						
Wholesale distribution	64.7	-0.6	827.6	+2.5	7.3	-0.3
Dealing in scrap & waste	1.3	+8 ₊ 3	19.8	+16.5	6.2	-0.2
Commission agents	0.4		27.1	+55.4	1.5	-0.4
Retail distribution	183.3	-3.2	1,838.2	-1.0	9,2	-0.7
Hotels and catering	103.7	-3.3	898.5	+7.8	10.3	-0.2
Repair of consumer						
goods & vehicles	23.2	+29.6	204.5	+12.3	10.2	-1.1
Railways	17.1	<u>-9.0</u>	136.5	-12.2	11.1	+1.2
Other inland transport	39.0	-0.5	382.4	+3.8	9.2	+0.3
Sea transport	6.0	-16.7	31.6	-45.4	16.0	+4.9
Air transport	2.8	-12.5	43.4	-20.8	6.1	-0.4
Supporting services to			-		***	
transcort	11.2	+11.0	83.8	-15.5	11.9	+0.3
Misc. transport services		,,,,,	-54-			
& storage nes	9.5	-18.1	139.8	4.7	6.4	+2.7
Post & telecommunication		-17.8	395.9	+0.4	6.9	-0.9
Banking & firance	38.9	+5.4	467.8	+8.6	7.7	-1.4
Insurance	19.4	3D+"	203.6	-0.8	8.7	-0.2
Business services	68.8	+22.0	968.5	+21.7	6.6	+0.1
Renting of movables	8.6	-3.4	95.6	+19.4	8.3	0.0
Owning & dealing in real		m;)•m	33.0	₹1,76**	0+3	0.0
estate	10.5	+22.1	106.4	+19.6	9.0	+0-2
	10.0	TCC+1	1027+44	717+U	7+0	₩.
Public admin, defence &	141.5	-5.7	1,413.8	-7.3	9.1	+0.3
social security				-/•3 +41•3	9.1 8.4	-0.3
Sanitary services	28.6	+17.2	360.3	-0.4	9 . 0	-0.3 -0.1
Education	133.4	-1.8	1,346.0	-6.9		
Research & development	8.1	-2,4	104.7	O•À	7.2	+0.3
Medical & other health	alim m	4.0	+ +14 0	.0.0	11 1	^ ^
services	143.5	-1.2	1,111.9	+0.2	11.4	-0.2
Other services	73.0	+7.5	591.6	+19.3	11.0	-1.0
Recreation & cultural			nom c	2 5	2.2	0.0
services	43.3	1.1	395.6	-3.7	9.9	-0.4
Personal services	17.7	+18.8	168.2	+4. 5	9.5	+1. 0

Source: Department of Employment

Manufacturing

In the three years to September 1981 the Scottish economy lost 68,300 manufacturing jobs leaving 433,700 employees, 22.8% of total employment. Employment declined in all but 3 of the 21 industries. These growth industries were the much publicised Electrical and Electronic Engineering (+9.8%), Manufacture of Office and Data Processing Equipment (+23.6%) and Processing of Rubber and Plastics (+6.2%). In the 18 industries where employment fell the rate of decline varied from -1.5% in the Manufacture of Non Metalic Mineral Products to -44.4% in Instrument Engineering. These figures ignore the fact that in two industries, Extraction and Preparation of Ores and Production of Man-made Fibres, Scottish employment fell to zero. The weighted average for the declining industries of -16.7%, when compared to the overall sectoral figure of -13.6% reveals how little the growth sectors have compensated for job loss elsewhere.

Employment changed by more than 10% in 15 manufacturing industries with 14 falls and Only 4 of these - Other one rise. Transport Equipment, Food, Drink and Tobacco, Textiles and Paper, Printing and Publishing, accounted for more than 1.5% of Scottish employees in 1981, and thus, as in Services it is apparent that the larger changes in employment have occurred However, mostly in smaller industries. this does not detract from the fact that employment fell in 9 of the 10 largest manufacturing industries. Out of a total of 21 industries in RGB, 19 experienced falls in employment ranging from -1.2% in Processing of Rubber and Plastics to -34.9% in Production of Man-Made Fibres with a corresponding weighted average of Employment rose in the two remaining sectors, Manufacture of Office and Data Processing Equipment and Extraction of Ores.

The summary measures again imply that Scotland fared relatively worse vis-a-vis RGB and indeed this was true in 15 out of 21 industries. It is also reflected in the performance of "Scottish" industries

of which there were 9 in 1981. Eight of these industries saw employment decline during the period and in 6 their share of total GB employment declined. noticeable among these is the Scottish Instrument Engineering industry which in 1981 accounted for 10.5% of GB employment. By 1984 its share had fallen to 6.2% as a result of substantial job losses in Scotland. Two industries ceased to be "Scottish" between 1981 and 1984 and one, Mechanical Engineering, became "Scottish" not because its employment rose but because its rate of decline was considerably less than that in RGB.

Primary sector

The primary sector is more diverse than the others - fishing to nuclear fuel production - and hence it is unwise to make too many generalisations about it. Of the 9 industries which employed people in Scotland in 1981 all but one recorded net job losses to 1984. The rates of decline vary markedly ranging from -4.8% in Fishing to -45.2% in Water Supply with a weighted average of -18.3%. The only industry in which employment increased was Extraction of Oil and Gas but this increase fell far short of compensating for jobs lost elsewhere in this sector.

For RGB 9 out of 10 industries experienced falls in employment ranging from -4.4% in Agriculture to -37.1% in Mineral Oil Processing with a corresponding weighted average of -10.8%. Again the healthy growth in Extraction of Oil and Gas did little to compensate for job loss elsewhere in this sector.

Of the 9 industries for which a comparison is possible, Scotland's relative performance was poorer in 6. Despite this, Scotland remained relatively more heavily dependent on primary sector employment in 1984 which is mainly a reflection of relative resource endowment.

Some issues

There is a substantial body of opinion, especially in government circles, that service sector employment will grow sufficiently to replace jobs lost elsewhere in the economy, especially in manufacturing. Proponents of this argument can point to the fact that service industries have for many years been the cornerstone of the Scottish economy in terms of employment provision. However, the results of the Census provide no support for this contention. Instead they suggest that policies directed only at the stimulation of services while manufacturing continues to decline are wholly inadequate.

during the period under First. consideration, service sector employment in Scotland actually fell. Even if moderate growth in service employment has resumed since 1984, not only is there lost ground to be regained but, given the evidence between 1981 and 1984, there cannot be the expectation that growth in the sector is inevitable. Secondly, the distribution of growth and decline is uneven among industries. Whereas employment contraction has occurred mainly in the larger service industries, growth has been in the smaller ones. trend were to continue in these sectors there would have to be substantially higher employment growth even to compensate for the job losses in the larger service industries. As a result, net growth would continue to be slow. Furthermore, this trend is more pronounced in Scotland than in the rest of Great Britain and Scotland's relative position can thus be expected to worsen. Thirdly, it is highly misleading to equate a job lost in manufacturing with one gained in services.

Details from the Census are not yet available for Scotland, but the results for Great Britain indicate that, in the service industries, part-time employment has accounted for most of the employment growth. In marked contrast, the jobs lost in manufacturing have been predominantly full-time. This final point is crucial. If service industries

are to provide employment to replace that lost in manufacturing the enormity of the task must be acknowledged. There is little prospect of the trend of job loss in manufacturing being arrested, hence the rate of growth of service employment required even to maintain the overall 1984 Scottish employment total is substantial.

A second issue concerns two related pieces of contemporary conventional wisdom: namely, that Scotland's "traditional" (manufacturing) sectors are in terminal. irretrievable decline and that electronics is the herald of manufacturing's bright new dawn. This is a rather brief, though accurate, summary of government policy but the assumptions which underlie these viewpoints are seriously flawed. The key assumptions appear to be, first, that electronics is an industry with considerable employment growth potential. Secondly, in general, future employment growth will be found in "high technology" sectors of which electronics is a leading example. Thirdly, it is inevitable that the "old" manufacturing industries will wither, if not die, not least because they are "low-tech".

The first assumption is that the electronics industry has considerable employment growth potential. However, the importance of the sector and its potential role in the future development of manufacturing depends crucially upon the context within which it is considered. If Scottish electronics is compared either with electronics in the UK or with other manufacturing sectors it has undeniably performed well. Between 1981 and 1984 employment in Electronics and Electrical Engineering in Scotland grew by 4,000 to While most of the traditional 44.900. manufacturing industries contracted as did the industry in the rest of Great Britain. At this level electronics has been a success for Scotland.

However, if it is recognised that in each of nine manufacturing industries (Metal Manufacture, Manufacture of Metal Goods, Manufacture of Motor Vehicles, Manufacture of Other Transport Equipment, Instrument Engineering, Food etc, Textiles, Footwear

and Clothing and Paper etc) the number of jobs lost exceeded the number gained in electronics, the persective changes radically. Furthermore, if the productivity trends of the last few years are continued the prospect for electronics is one of relatively 'jobless growth' ie output will increase much faster than any Thus, in expansion of employment. isolation electronics may have some growth potential but between 1981 and 1984 it was an inadequate substitute for jobs lost elsewhere in manufacturing and there is no reason to believe that the future will be different. The second assumption, that growth will stem mainly from the high technology sectors such as electronics is dubious, for the reasons already given, and also misleading. It is misleading because it ignores the fact that in Scotland, metal manufacture, textiles and large tracts of mechanical engineering. are all industries which employ "high technology" processes. Yet these "hitech" sectors haemorrhaged jobs in the early eighties. Thus, the provision of a high technology base neither guarantees employment growth (never mind job retention) nor requires a dependence on electronics. Criticism of the third assumption is related to this. traditional manufacturing industries may have shed jobs in recent years but many remain vitally important to the Scottish economy. Not only because of their contributions to current employment and output but because they produce goods which both Scotland and the rest of the world will require for the foreseeable future.

On the basis of these conclusions therefore it is reasonable to assert that Scotland's employment prospects are rather bleak. Furthermore, any public policy which concentrates on the few comparatively successful industries is unlikely to deal adequately with the more widespread employment problems that Scotland faces.

Department of Employment, "1984 Census of Employment, and Revised Employment Estimates", Employment Gazette January 1987, Volume 95 No.1.