

OCCUPATIONAL CHANGE IN MODERN SCOTLAND.<sup>(1)</sup>

STEVE KENDRICK

## Introduction

The last twenty five years have witnessed an unprecedented transformation of the Scottish occupational structure. This chapter aims to give a fairly detailed account of the form this transformation has taken – which occupations have contracted and which have expanded. It will also attempt to pinpoint some of the social and economic processes which have generated these patterns of change in the occupational structure.

In the knowledge that the subsequent discussion will provide a more nuanced account, we can sketch in some of the main occupational trends of the last twenty five years to give a general bearing.

Most central has been the continuing swing from manual to non-manual occupations. Within the non-manual group, the numbers of routine non-manual workers – mainly clerical and sales staff – have stagnated. Expansion has been fastest among the professional, managerial and intermediate non-manual (groups such as teachers and nurses) occupations. So as well as a swing towards non-manual work, there has been a shift in the balance within the non-manual group as a whole.

Apart from the general and dramatic decline in employment among manual groups there has been no such clear cut shift in the balance within manual employment. Skilled groups have been hit hardest by patterns of industrial change whereas unskilled manual workers have been hit in the last fifteen years by the disproportionate shedding of unskilled workers within industries. Other important trends include a rise in the number of personal service workers and the reversing in the last few years of a long downwards trend in the numbers of employers and self-employed workers.

Other chapters have dealt with aspects of change in Scotland's industrial or sectoral structure. Such shifts – especially when they involve the collapse of whole industries – have a higher public profile than the rhythms of occupational change. The massive shifts in the industrial structure of Scotland in the last quarter century have been matched by equally pervasive occupational changes. And of course much occupational change is a by-product of the changing industrial structure. In this sense the occupational structure can be seen as a transmission belt between the economic and political forces which determine the pattern of industrial change and their impact on peoples lives, on the changing pattern of

opportunity for employment. When employment in a particular industry contracts, this involves a contraction in the jobs available in the occupations associated with that industry. This can be seen most straightforwardly in cases like the steel industry where many of the occupations such as furnacemen and forgemen are industry specific. If the industry shrinks, so do those occupations. The association between industrial change (or to use a more general term, sectoral change) is more general however. Almost every change in the sectoral structure of employment – the expansion of banking employment, the decline of shipbuilding, more fast-food outlets for example – has implications for the occupational structure to the extent that each sector or industry has a different occupational structure.

This – sectoral change producing occupational change – is only one way in which the occupational structure changes. Occupational structures within the sectors themselves can also change. As we saw earlier, the last twenty five years have seen a massive expansion in the number of managers. This has had very little to do with the pattern of sectoral change itself – with the swing from manufacturing to services for example. Instead the proportion of managers *within* the workforces of just about every sector of employment has risen. A thread running through this account then will be an attempt to separate out these two strands or components of occupational change – that which is due to change in the sectoral structure of employment and that which reflects occupational change within sectors.<sup>(2)</sup>

This gives us a first element of leverage on working out what factors have produced occupational change and gives us an indication of their specific implications for the future.

Much recent public discussion of prospects for occupational change has been in the vein of 'you ain't seen nothing yet'. There is an implication that the real impact of such factors as automation and information technology is just over the horizon and that this will bring about a transformation of the occupational structure to dwarf any that has already occurred. Long-term projections of the impact of new technologies on the occupational structure are a form of crystal ball gazing, the twenty first century as a sci-fi automated world. In the more immediate future however, say the next five to ten years, it is more likely that we will see a period of *relative* stability in the distribution of occupations. If the future is seen as the aftermath of massive occupational transformation then the future is here. This is it.

There are no easy generalizations about the processes which produce occupational change. As we have seen industrial change is important – as old industries collapse and new ones emerge the occupations associated with them dwindle and grow. This is the most spectacular aspect of occupational change – occupational change taking the form of Linwoods

and Bathgates or new electronics plants. Equally important however are the more gradual aspects of occupational change which take the form of unheralded decisions not to replace a worker when he or she retires, to open a new pub or to send an employee on a computing course.

This chapter looks at the aggregate pattern of occupational change at a national level. This viewpoint can foster the image of a pre-determined system governed purely and simply by changing patterns of demand for goods and changing methods of production – a faceless logic quite outside the control of human agency which governs the type of slots available for human occupants. There is a good deal of truth in this image. In an economy so precariously enmeshed in the world capitalist economy as is that of Scotland, such an impersonal logic is the determining framework.

However more is involved. The occupational structure is also the outcome of political struggle and of class struggle at all levels. The miners' strike gave us perhaps the most explicit example in our history of the occupational structure as a direct stake of class struggle. More pervasive has been the impact of state policy, itself the outcome of political conflict, on the industrial and thus the occupational structure of employment. This impact can be direct, as in the form, for example, of a decision about Ravenscraig, or indirect in the form of the effect of exchange rate policy on the fortunes of manufacturing industry. The political factors involved in occupational change range from such highly visible sequences to the myriad day-to-day conflicts in the work place over staff levels or new technology. The aggregate statistics to be presented may give the impression of smooth and systematic processes at work. Indeed some of the trends involved have been highly consistent over long periods. This should not hide the fact that these long term trends are the combined effects of countless day to day conflicts and decisions, start-ups and bankruptcies.

### Socio-economic groups

In order to describe the pattern of occupational change we need a consistent set of occupational categories. In this chapter we will use the Socio-economic Groups defined by the Office of Population Census and Surveys. This is a pragmatic choice. The socio-economic groups are widely used in the dissemination of Census results, they offer the possibility of some degree of continuity from 1961 to 1981 and they give more discrimination than the cruder categories of the Registrar General's Social Class groupings.

The socio-economic groups however are not based solely upon occupations, upon the type of work performed (as are the Social Classes for example) but are based on a combination of occupation and employment status. Employment status is a measure of a person's position in the system of ownership and control. The main division is between employees and the

self-employed. The latter are divided into those with and without employees. Employees are divided into managers, foremen and supervisors, and other employees. It is the cross-cutting of these employment status categories with occupations to produce the socio-economic groups which gives them an additional level of discrimination compared with purely occupationally based categories. The standard definitions of the socio-economic groups are given in Appendix 1. A real understanding of what the socio-economic groups represent can only be gained from looking at the specific occupational and employment status groups assigned to them. This will emerge in the subsequent more detailed discussion. However at this stage we need some idea of how the socio-economic group classification hangs together as a whole.

Although the socio-economic groups are numbered from 1 to 17, they *do not* form a hierarchy. There are however what could be called sub-hierarchies within the classification. There is first of all a division between agricultural (13 to 15) and non-agricultural groups. The non-agricultural groups can be broadly divided into manual and non-manual although three of the groups in particular pose problems in terms of this division. The position of employers (socio-economic group 1.1, 2.1) in the numbering might suggest non-manual status but in fact the group contains a number of manual occupations such as craftsmen with employees. On the other hand socio-economic group 12, own account workers, has a non-manual component. Even more ambiguous is socio-economic group 7, personal service workers. Should bar staff or hairdressers be regarded as manual or non-manual when shop-assistants are classified as non-manual?

The rest of the non-agricultural groups however can be assigned fairly safely to one side or the other of the manual/non-manual divide.

Within these core manual and non-manual groupings there are clear hierarchies. Within the non-manual group it would be difficult to rank managers (s.e.g. 1.2, 2.2) as against professionals (s.e.g 3 and 4) although these two certainly rank higher than intermediate (s.e.g 5) and junior non-manual workers (s.e.g 6). As far as manual workers are concerned, socio-economic groups 8 to 11 run down from foremen and supervisors (8) through skilled (9) and semi-skilled (10) workers to unskilled manual workers (11).

Table 1 gives the socio-economic group structure of Scottish employment in 1961, 1971 and 1981 for men, women and total employment.<sup>(3)</sup> This chapter can be seen as an attempt to describe the origins, meaning and implications of the trends mapped in this one table.

### Context

Although the more detailed discussion will focus on the period since

1961, we need to place these patterns of change in the last twenty five years at least briefly in a broader context.

One major trend applied equally to the period before 1961. This was the long-term expansion in the share of non-manual occupations. Before 1961 the group which made the running in this expansion were the routine non-manual workers of socio-economic group 6 – primarily clerical and sales workers – which expanded from 13% of total employment in 1921 to 20% in 1961,<sup>(4)</sup> Since 1961, this group has stagnated and the pace of expansion has been maintained by ‘the higher echelons’ of the non-manual workforce – managers, professionals and intermediate non-manual workers.

The core manual groups – socio-economic groups 8 to 11, foremen and supervisors and skilled, semi-skilled and unskilled workers – declined fairly slowly in comparison. Their aggregate share was 55.3% in 1921 and was still 52.5% in 1961. The skilled manual group was the only one to decline significantly in this period from 31.2% to 26.3%.

This was primarily a reflection of the fact that in the same period, manufacturing employment as a share of total employment in Scotland remained remarkably stable. Only since the 1960s has the swing from manufacturing to service employment gathered momentum to become the major driving force of occupational change.<sup>(5)</sup>

Most other socio-economic groups declined more rapidly. The virtual disappearance of private domestic service reduced the share of socio-economic group 7, personal service workers from 6.9% in 1921 to 4.4% in 1961. Own account workers shrank from 3.5% to 1.7% while the agricultural occupations contracted from 8.7% in 1921 to 3.3% in 1961.

Since the second world war the most important single shift in the labour market has been the entry of married women into paid employment outside the home. As a very crude summary, the expansion of employment in the service sector together with declining numbers of single women, as more women married and married younger, pulled married women into the labour market in ever increasing numbers. This happened even more rapidly in Scotland than the rest of Britain because historically there had been many more single women as a proportion of the population in Scotland than in the rest of Britain and this had served to keep married women out of the labour market. Until well after World War II the economic activity rate for married women in Scotland was only two thirds that in the rest of Britain. By the 1970s however Scotland had caught up.<sup>(6)</sup> This entry of married women into the labour market has largely taken the form of part-time working. By 1981, 57% of married women in Scotland up to the age of sixty were ‘economically active’ (working or looking for work and it is likely that this understates the number of married women who

TABLE 1

Socio-economic groups as percentage of total employment.  
Scotland 1961, 1971, 1981.

	TOTAL		1981 adjusted	1981* published
	1961	1971		
1.2,2.1 Employers	2.6	2.2	2.3	2.2
1.2,2.2 Managers and administrators	3.9	5.6	7.0	7.4
3. Self-employed professionals	0.7	0.7	0.8	0.6
4. Professional employees	1.7	2.7	3.8	3.2
5. Intermediate non-manual	5.8	8.1	10.8	11.3
6. Junior non-manual	20.8	21.1	21.9	20.9
7. Personal service	4.4	5.5	6.4	6.4
8. Foremen and supervisors(manual)	2.4	2.5	2.7	2.7
9. Skilled manual	27.6	22.8	19.8	19.2
10. Semi-skilled manual	13.4	12.9	10.8	12.1
11. Unskilled manual	8.3	8.9	7.0	7.0
12. Own account workers	1.7	2.0	2.4	2.4
13. Farmers – employers and managers	1.4	0.8	0.7	0.7
14. Farmers – own account	0.8	0.8	0.7	0.7
15. Agricultural workers	3.0	2.0	1.2	1.4
16. Armed forces	1.0	1.0	1.0	1.0
17. Inadequately described, not stated	0.4	0.5	0.7	0.7
Total (thousands)	2216	2164	2104	2104

\* See note 3

	MALES			
	1961	1971	1981 adjusted	1981 published
1.2,2.1 Employers	3.1	2.8	3.0	3.0
1.2,2.2 Managers and administrators	4.7	7.3	9.2	9.6
3. Self-employed professionals	1.0	1.0	1.3	1.0
4. Professional employees	2.3	3.9	5.3	4.8
5. Intermediate non-manual	3.5	5.3	7.0	7.7
6. Junior non-manual	12.3	11.3	10.4	9.4
7. Personal service	0.9	1.0	1.4	1.3
8. Foremen and supervisors(manual)	3.4	3.6	4.1	4.2
9. Skilled manual	36.2	33.0	30.6	29.7
10. Semi-skilled manual	12.8	12.8	12.3	13.9
11. Unskilled manual	8.8	8.7	5.9	6.0
12. Own account workers	2.0	2.5	3.4	3.3
13. Farmers-employers and managers	1.9	1.1	1.1	1.1
14. Farmers-own account	1.1	1.1	1.1	1.0
15. Agricultural workers	4.0	2.8	1.8	2.1
16. Armed forces	1.4	1.5	1.6	1.6
17. Inadequately described, not stated	0.4	0.3	0.6	0.6
Total (thousands)	1504	1350	1242	1242

	FEMALES			
	1961	1971	1981 adjusted	1981 published
1.2,2.1 Employers	1.5	1.2	1.2	1.2
1.2,2.2 Managers and administrators	2.1	2.9	3.8	4.2
3. Self-employed professionals	0.1	0.1	0.2	0.1
4. Professional employees	0.6	0.7	1.9	1.0
5. Intermediate non-manual	10.7	12.7	16.6	16.4
6. Junior non-manual	38.7	37.3	38.2	37.5
7. Personal service	11.7	12.8	13.7	13.9
8. Foremen and supervisors(manual)	0.4	0.6	0.7	0.7
9. Skilled manual	9.4	6.0	4.3	4.1
10. Semi-skilled manual	14.6	13.1	8.6	9.6
11. Unskilled manual	7.3	9.3	8.9	8.5
12. Own account workers	1.2	1.1	1.1	1.1
13. Farmers-employers and managers	0.3	0.2	0.2	0.1
14. Farmers-own account	0.2	0.3	0.3	0.1
15. Agricultural workers	0.9	0.7	0.3	0.4
16. Armed forces	0.1	0.1	0.1	0.1
17. Inadequately described, not stated	0.3	0.8	0.8	0.8
Total (thousands)	712	814	862	862

would be looking for work if they saw work as being available).<sup>(7)</sup> 53% were actually in employment. 47% of those in employment worked part-time. Certain low-paid occupations have become virtual ghettos for part-time married women. For example 96% of cleaners in 1981 were married, widowed or divorced and 81% worked part-time.<sup>(8)</sup>

The next few sections deal with patterns of change in most of the more important socio-economic groups. Then follows a discussion of the most salient differences between the occupational structures of Scotland and the rest of Britain. Next is a discussion of trends in self-employment in Scotland and finally a more general account of processes which have underlain patterns of occupational change in Scotland.

### **The socio-economic groups in detail**

At the beginning of the chapter a very brief summary of the main trends in socio-economic group structure was given. This section looks at the socio-economic groups in more detail in terms of their occupational composition, the balance of male and female occupations and the sources of change in terms of sectoral structure and occupational change within sectors.

#### **Managers – socio-economic group 1.2,2.2**

Managers and administrators (the term managers conveys rather too narrow a scope for the members of this group) increased steadily between 1961 and 1981 from 4.7% to 9.2% of male employment and from 2.1% to 3.8% of female employment. This sustained increase was highly consistent across all sectors of employment and owed relatively little to shifts in the sectoral structure. The number of women managers grew fastest, more than doubling in the two decades compared with a growth of just over 60% for men.

In 1981 however women were still heavily concentrated into the health, education and welfare occupations (17% of women managers and administrators – mostly in nursing and teaching – as compared with 4% of male managers), distribution (25% versus 14%) and hotels and catering (13% versus 5%). Male managers were concentrated into production and works management (18% of male as opposed to 4% of female managers) and site, transport and utilities management (16% against 3%).<sup>(9)</sup>

This increase in the number of managers and administrators across all sectors of employment has been one of the most consistent and significant trends in socio-economic group structure and its broad base is the best reason for believing that it is likely to continue.

#### **Professionals – socio-economic groups 3 and 4**

Changes in the official occupational classification between 1971 and 1981 affected the professional groups more than any other making it especially difficult to come to terms with precise patterns of change. However an underlying spectacular rate of increase among professionals, and in particular, the professional employees of socio-economic group 4 is not in doubt. In contrast to managers and administrators, the pattern of sectoral change has been an important factor boosting professional employment. Two trends have been especially important here. Firstly the expansion of employment in 'producer services' – banking, insurance and business services and secondly the expansion of the state sector. These patterns of sectoral change have overlain a general expansion of professional employment within sectors to produce almost a doubling in professionals as a share of total employment. Within the professions, there has been an acceleration of the long-standing shift<sup>(10)</sup> in the relative balance between older professions such as the clergy and medicine (which showed relatively little growth) and the newer and more technological specialisms.

Although men and women were differentially distributed within the professions – a quarter of women professionals were doctors in 1981 compared with 9% of men; 1% of women professionals were engineers compared with 32% of men – the most important aspect of occupational gender segregation is the relative exclusion of women from the professions as a whole. As we see from Table 1, in 1981 professionals made up 1.1% of female employment as opposed to 5.8% of male – the greatest female shortfall of any of the non-agricultural groups.

#### **Intermediate non-manual workers – socio-economic group 5.**

As the name suggests 'intermediate non-manual workers' are something of a residual group – 'non-routine', 'non-managerial', 'non-professional' non-manual workers. In the 1960s, their numbers rose by around a third – growth rates for men and women being roughly the same. In the 1970s however expansion was much faster for women at 38% compared with 28% for men.

To understand these trends we need to look at the differing occupational structures of the group for men and women. Over three quarters of women in the group are teachers and nurses. The men are much more occupationally varied – teachers being the largest occupation closely followed by technical workers, with a range of other groups from computer programmers to welfare workers to civil service executive officers.

The expansion of employment for women in the group then has been particularly dependent upon the growth of the state sector, particularly education and health. This sectoral expansion accounted for almost all of the growth of female intermediate non-manual employment in the 1960s

and around half of the growth in the 1970s. The single most important element was nursing – the numbers of women nurses in Scotland increasing from 34,000 in 1961 to 68,000 in 1981 with the numbers of women teachers growing at a rather more sedate pace. In addition there was probably a trebling or quadrupling of the number of welfare workers in the 1970s.

For men on the other hand occupational shifts within sectors were just as important. In the 1960s the most dynamic element was an increase in the number of technical workers. This growth petered out in the 1970s when continued growth of 25% per decade in the number of male teachers was the major element of expansion. The faster expansion of women in the group then was primarily a reflection of their greater concentration in the faster growing state sector.

In comparison with managerial and professional groups this intermediate white collar section of the workforce has been particularly dependent upon the expansion of the state sector. It does not share their broad cross-sectoral basis for continued growth.

#### **Junior non-manual workers – socio-economic group 6.**

In 1981 around 45% both of the men and women in this group were clerical workers. Another 20% of the women were typists, secretaries and receptionists along with 30% who were sales workers. 20% of men in the group were sales representatives, 15% policemen and firemen and 10% sales assistants.

As Table 1 shows, junior non-manual workers remained fairly stable at around 21% of total employment in the twenty years from 1961 to 1981 – a relative plateau after the previous long sustained growth. Another long established trend has continued however – the substitution of female for male labour in the core clerical and sales occupations of the group. In 1961 there were 87,000 male clerical workers in Scotland, in 1971 69,000 and in 1981, 60,000. In contrast the number of women clerical workers rose from 121,000 in 1961 to 148,000 in 1971 to 181,000 in 1981. The indications are that the relative stability in the number of junior non-manual jobs has been maintained since 1981 with perhaps a marginal drifting down to be expected in the rest of the decade.<sup>(11)</sup> In terms of clerical work, there would appear to have been a rough equilibrium in the last twenty five years. On the one hand there has been a rapid increase in the amount of information to be handled. On the other technological and organizational change has served to reduce the amount of labour needed to handle each unit of information. This has tended to keep the number of clerical jobs relatively stable. Future trends will depend on this same equation with information technology serving to push down the labour needed per unit of information at an even faster rate.

#### **The non-manual workforce as a whole**

The non-manual socio-economic groups can be seen in terms of three levels forming an imperfect but nonetheless meaningful hierarchy. At the top are the managers and administrators (s.e.g 1.2,2.2) along with the professionals (s.e.g 3 and 4). Next comes the intermediate tier (s.e.g 5) with junior non-manual workers at the bottom. The top level is heavily male dominated with disproportionate numbers of women in the second and (particularly) the third level.

We have seen that it is the top level – managers, administrators and professionals – which has shown the most broadly based pattern of growth and has the most stable basis for future expansion. The intermediate non-manual group has grown at a similar rate in the past but the dependence of much of this growth on state sector employment makes future trends more uncertain. Finally the junior non-manual level has barely held its own up to 1981 and is more likely than not to fall as a share of total employment.

Combining these two sets of observations gives us a very simple context for future non-manual employment prospects for women – the fastest growing groups at the top of the spectrum are the ones in which women are heavily underrepresented while the groups in which women are concentrated have the most uncertain prospects.

#### **Personal service workers – socio-economic group 7**

Although strictly they cannot be regarded as non-manual workers, personal service workers can be seen as being a further extension, in terms of pay and conditions, down the non-manual hierarchy just discussed and of all the socio-economic groups, socio-economic group 7 has the highest preponderance of women. In 1981 s.e.g 7 accounted for 13.7% of all female employment and only 1.3% of male. The relatively few men in the group are almost entirely confined to catering occupations. 32% are cooks, 20% bar staff, 17% catering supervisors and 13% waiters. Although 44% of women in the group are in similar catering occupations – albeit more likely to be counterhands than supervisors – the largest single occupation is ‘other domestic and school helpers’ consisting largely of domestic and institutional cleaning staff.

The group has grown steadily in size over the last twenty years. There has also been a relative shift from private to state sector employment. In 1961, almost three quarters of personal service workers were in the private sector, in services such as hotels, catering, bars and clubs. By 1981 only 50% were in this sector with 42% in the state services sector. In the 1960s it was the growth of personal service employment in the state sector which dominated whereas in the 1970s the expansion of both private and state sectors was important – the fastest growing element being bar staff whose

numbers doubled in the 1970s. Future prospects depend on a number of factors. State sector prospects are obviously uncertain and while one should be sceptical of extravagant claims for the private personal services sector, areas such as fast-food and tourism have weathered the storm better than most.

#### Skilled manual workers – socio-economic group 9.

The largest single occupational shift in Scotland between 1961 and 1981 was the collapse in the number of skilled manual workers. Adjusted to the 1980 definition numbers fell by 114,000 between 1961 and 1971 and by a further 74,000 between 1971 and 1981 – a contraction of over one third in two decades with the continuing impact of the recession on manufacturing taking a further toll since 1981.

Socio-economic group 9 embodies a rather wide definition of 'skilled manual worker' and it is worth looking more closely at the occupational composition of the group in 1981. Table 2 gives the numbers of men in the main occupational groups, as well as in some of the 'traditional' skilled manual occupations. The table makes clear how small a proportion – 5.5% – of socio-economic group 9 was made up of four of the archetypal skilled manual groups – textile workers, miners, steelworkers and printers.

The much smaller number of women classified as skilled manual are more heavily concentrated into manufacturing occupations – the main groups being textile workers (24%), food production workers (16%), paper and book production workers (15%) and clothing workers (10%).

The collapse in skilled manual employment since 1961 is generally associated with a decline in manufacturing employment. This is not the whole story however. In the 1960s manufacturing employment was relatively stable and the main factor involved in displacing male skilled manual workers was the rapid run down of the coal mining industry in Scotland – accounting for around half of the decline in skilled manual employment attributable to industrial change. Also important was a fall in employment in transport – particularly the railways. Occupational change within sectors – the general shift from manual to non-manual employment – accounted for almost as much of the overall decline as did sectoral change itself.

Between 1971 and 1981 however the collapse of manufacturing employment was the dominant factor, along with a continuing drift down in the proportion of male skilled manual employment within sectors.

The collapse in skilled manual employment for women has been dominated by the decline of the Scottish textile industry. Between 1961 and 1971 in addition there was a falling proportion of women skilled workers

TABLE 2

#### Males in Socio-economic group 9 – skilled manual workers. Main occupations.

	Number	Per cent of s.e.g total
Textile workers	3,800	1.0%
Face-trained miners	5,200	1.4%
Furnacemen, forgemen, etc.	5,200	1.4%
Printers	6,300	1.7%
Woodworkers	31,000	8.2%
Fitters, mechanics, etc.	73,000	19.9%
Sheet metal workers, welders	29,000	8.0%
Electrical, electronic	44,600	12.1%
Plumbers, painters, bricklayers	43,400	11.8%
Railway workers, lorry drivers, other drivers, materials handling	90,000	24.4%
All listed above	332,400	90%
All in s.e.g. 9	369,200	100%

Source: Calculated from Census of Scotland, 1981. Economic Activity (10% Sample) Table 3 and 18B.

within the textile and clothing and footwear industries.

Since 1981, the continued shrinkage of manufacturing employment has continued to hit skilled manual workers. It seems likely however that the rate of decline for the group as a whole is slowing down – if only because there are so few of the most vulnerable skilled workers in traditional industries left. Some of the largest groups in 1981 in socio-economic group 9 had relatively stable numbers between 1961 and 1981 – electrical workers, welders, plumbers and lorry drivers. Other occupations declined more slowly than the group as a whole. For example there were 76,000 mechanics and fitters employed in 1961 with 67,000 remaining in 1981. The changed occupational classification makes it impossible to assess the rate of decline in some of the hardest hit occupations – miners, textile workers and steelworkers.

#### Semi-skilled manual workers – socio-economic group 10

The occupations assigned to socio-economic group 10 vary from postal workers and caretakers through gardeners and groundsmen to construction

workers and fishermen. The 'stereotypical' semi-skilled worker in manufacturing, the worker standing at a production line, involved in processing, assembly or packaging accounts for only 40% of the men in socio-economic group 9 although 69% of the women in the group are in such production line occupations.

Semi-skilled manual employees have remained fairly stable as a share of male employment but have declined sharply for women particularly from 1971 to 1981 (13.1% to 8.6%). This shift is primarily a reflection of the decline in total manufacturing employment.

#### **Unskilled manual workers – socio-economic group 11.**

In looking at socio-economic group 11, we are looking at quite different occupations for men and women. Men in this group are predominantly manual labourers while women are predominantly cleaners. These different jobs are reflected in the quite different trends and components of change in unskilled manual work for men and women.

In the 1960s, male unskilled employment held up fairly well, what losses there were consisting of jobs in transport (porters, dock labourers etc.). In the 1970s however it was the dominant general labouring group which was hit hard – a decline of around 50% in the employment of labourers. By the time of the 1981 Census, 30% of men returning themselves as general labourers were out of employment, unemployment being even higher for building and civil engineering labourers at 40%.<sup>(12)</sup> The Census it must be remembered was taken at a point only half-way down the slope of the collapse of employment of the early 1980s.

The intercensal collapse in unskilled manual employment was not primarily the result of declining manufacturing employment although this made some contribution. The main factor was a disproportionate shedding of unskilled male manual labour which within sectors amounted to 30%.

For women, trends in unskilled employment have been quite different. The increase in the 1960s was primarily a matter of growing numbers of part-time cleaners in the expanding public sector. The 1970s saw a stabilization in which the effect of the still expanding state sector was counteracted by a general decline in the proportion of unskilled women workers within sectors.

#### **The manual workforce as a whole**

The manual group to have declined fastest of all has been socio-economic group 15, agricultural workers – from 3% of total employment in 1961 to 1.2% in 1981. In the 1960s the decline was primarily a reflection of the continuing fall in total agricultural employment. In the 1970s however it

was more a matter of a shift in the balance of the workforce within agriculture – from employed agricultural workers towards farmers and farm managers.

If we combine socio-economic group 15 with socio-economic groups 8 to 11 we get a fairly restricted definition of the manual working class – this grouping excludes personal service workers and self-employed manual workers. The proportion of total employment in the grouping declined from 55% of total employment in 1961 to 42% in 1981.

In the context of this overall decline in the manual workforce there have been significant shifts in the internal balance of the group. Among women there was a massive shift in the balance from skilled and semi-skilled workers primarily in manufacturing to unskilled manual workers primarily in the service sector. Among men, the semi-skilled group was left in 1981 as a higher proportion of manual employment with the proportional decline in unskilled employment being especially dramatic in the 1970s.

On the basis of the components of change analysis (see note 2), the underlying change in the balance of employment in the male manual workforce can be seen even more clearly. If we look only at the occupational component of change in the structure of the manual workforce – i.e. that component of change which cannot be explained in terms of change in the industrial structure and thus reflects occupational change within industries – the pattern is as follows. The occupational component of change for foremen and manual supervisors was +15%, for skilled manual workers –4%, for semi-skilled workers it was zero and for unskilled manual workers it was –31%. The gradient is not perfect but illustrates the much greater vulnerability of unskilled workers in a period of employment decline.

#### **Scotland and the rest of Great Britain.**

So far the discussion has been restricted to occupational developments within Scotland. Analysis of Scotland's occupational structure has often been couched in terms of a comparison between Scotland and the rest of Britain. The most significant difference has tended to be seen in terms of the manual/non-manual divide with Scotland having a higher share of manual employment, being seen as 'more working class'.<sup>(13)</sup> This difference does exist. Taking, as was done above, socio-economic groups 8 to 11 and 15 as a fairly restrictive definition of the manual workforce, their share of total employment in Scotland in 1981 was 42.4% and in England and Wales 38.5% – a difference of four percentage points.

In terms of British regions, Scotland is by no means extreme in its share of manual employment. Reflecting a much more general division in economic structure, the widest gap is between the South-East of England,



and to a lesser degree the South-West and the rest. Scotland lies in a middling band of regions along with Wales and the North West of England.<sup>(14)</sup> In historical terms trends in the industrial structure of employment and in the occupational structure of employment have been remarkably parallel in Scotland on the one hand and England and Wales on the other.<sup>(15)</sup>

Table 3 gives a more precise picture of the differences in socio-economic group structure between Scotland and the rest of Britain. For only four socio-economic groups is the difference in the share of total employment greater than one percentage point. There is a relative Scottish surplus in skilled manual employees, socio-economic group 9, and socio-economic group 11, unskilled manual workers. There is a Scottish deficit in socio-economic group 1.2,2.2, managers and administrators and socio-economic group 12, own account workers. Focussing on these differences will allow us to identify some of the main factors underlying the overall divergence.

Scotland's overall shortfall in non-manual workers can in the most part be attributed to a shortfall in one socio-economic group – managers and administrators (s.e.g. 1.2,2.2.). In 1981 they made up 10.0% of total employment in England and Wales and only 7.4% in Scotland. By standardising for industrial structure<sup>(16)</sup>, we can calculate that this difference owes nothing to differences in industrial structure between Scotland and England and Wales. If we look at the differences in the proportion of managers industry by industry, the shortfall in managers in Scotland is spread consistently across the *private* sector. To take some of the more important private sector industries the Scotland/England and Wales ratio in the proportion of managers is: mechanical engineering, 0.71; electrical engineering, 0.71; food, drink and tobacco, 0.79; textiles, 0.72; construction, 0.64; distribution, 0.78; hotels and catering, 0.68; banking and finance, 0.81. Only in certain public sector industries is there an approach to parity or a higher Scottish proportion of managers: coal, 1.36; gas and electricity, 1.04; post and telecommunications, 1.07; public administration, 0.91.

The explanation which springs to mind is of course that so much private sector economic activity in Scotland is undertaken by British companies, with a concentration of headquarters activity in London and the South-East. We would be seeing Scotland's shortfall in managers as another symptom of the branch-plant economy. Looking at the ten British regions, Scotland is well down the bottom of the scale, along with Wales and the North of England, in terms of managers as a proportion of the economically active population. The relative difference in the proportion of managers in 1961 and 1971 was much the same as in 1981 – in 1961 managers (s.e.g. 1.2, 2.2) made up 5.6% of total employment in Scotland as opposed to 7.2% in England and Wales.

Socio-economic groups as percentage of total employment. England and Wales, Scotland, 1981

TABLE 3

	Males		Females		Total	
	E&W	Scot	E&W	Scot	E&W	Scot
1,1,2,1 Employers	2.7	3.0	1.4	1.2	2.2	2.2
1,2,2,2 Managers and administrators	13.0	9.6	5.4	4.2	10.0	7.4
3. Self-employed professionals	1.0	1.0	0.1	0.1	0.7	0.6
4. Professional employees	5.0	4.8	0.9	1.0	3.4	3.2
5. Intermediate non-manual	8.0	7.7	15.0	16.4	10.8	11.3
6. Junior non-manual	10.2	9.4	38.8	37.4	21.6	20.9
7. Personal service	1.1	1.3	12.4	13.9	5.6	6.4
8. Foremen and supervisors (manual)	3.8	4.2	0.7	0.7	2.5	2.7
9. Skilled manual	26.1	29.7	3.9	4.1	17.3	19.2
10. Semi-skilled manual	13.3	13.9	10.3	9.6	12.1	12.1
11. Unskilled manual	4.9	6.0	6.9	8.5	5.7	7.0
12. Own account workers	5.8	3.3	2.0	1.1	4.3	2.4
13. Farmers – employers and managers	0.7	1.1	0.1	0.1	0.5	0.7
14. Farmers – own account	0.7	1.0	0.1	0.1	0.5	0.6
15. Agricultural workers	1.2	2.1	0.5	0.4	0.9	1.4
16. Armed forces	1.7	1.6	0.2	0.1	1.1	1.0
17. Inadequately described, not stated	0.8	0.7	1.1	0.8	0.9	0.7

Source: Census 1981 Scotland and Great Britain. Economic Activity (10% Sample) Table 18B.

Even more striking is Scotland's proportional shortfall in own account workers (s.e.g. 12) – the non-professional self-employed without employees. 2.4% of Scotland's employed population were in this group compared with 4.3% in England and Wales as a whole. In terms of British regions, a strange sort of geographical banding can be seen at work. The only two regions in which s.e.g 12 comprises less than 3% of employment are Scotland and the North (which means the far North – Cumbria, Northumberland and Durham) of England while the only regions with more than 4% are the South East (at 4.6%), the South West (at 5.7%) and East Anglia (at 4.9%). The other five regions have between 3 and 4% self-employed without employees. Again, as we saw with managers, Scotland's industrial structure does nothing to account for the shortfall in own account workers compared with England and Wales. Over the period 1961 to 1981 it should have worked to favour own account working. In 1981, the difference held across all the industries with a significant self-employed presence – construction, retail distribution, hotels and catering, repair of consumer goods and vehicles, transport. Numerically and proportionally the greatest deficit was in the construction industry. In 1981, 19.1% of the workforce in the construction industry in England and Wales were self-employed without employees compared with only 5.0% in Scotland. This difference in the construction industry alone accounted for half the overall shortfall in socio-economic group 12 in 1981. Scotland's lower proportion of self-employment in the construction industry dates back at least to 1961 (1.5% against 6.4%) but the main factor in the 1981 disparity was Scotland's failure to match the massive expansion in self-employment in the construction industry in the 1960s and 1970s which took place south of the border.

In fact this relative deficit of own account workers in the Scottish construction industry helps account for at least some of the surplus of skilled manual employees in Scotland. Whereas in 1981, 33% of the construction workforce in England and Wales were classified to socio-economic group 9, skilled manual employees, in Scotland the figure was 44%. Many more skilled manual workers in the construction industry in England and Wales are self-employed than is the case in Scotland. In 1981, this employment status differential in the construction industry accounted for around one half of Scotland's apparent surplus of skilled manual workers.

Finally there is Scotland's relative surplus of unskilled manual employees. As usual this has nothing to do with differences in industrial structure between the two areas. Again the different employment structure in the construction industry plays some part but that leaves at least a percentage point of difference without explanation.

One further difference in socio-economic group structure should be

mentioned. Although socio-economic group 5, intermediate non-manual workers, makes up a lower proportion of male employment in Scotland it makes up a higher proportion of female. This is primarily an industrial effect, reflecting the impact of higher proportions employed in education and health and thus in the predominantly female teaching and nursing professions – in Scotland.

This is in contrast to the four main divergences in socio-economic group structure we have already looked at, none of which can be attributed to differences in industrial structure. However an overall pattern can be assigned to the main differences in socio-economic group structure.

The Scottish 'middle class' can be said to be 'state biased' in two ways. First a greater proportion of employment in health and education has worked to boost intermediate non-manual 'state employment' – primarily in the form of teachers and nurses – relative to England and Wales. Secondly, the shortfall of managers and administrators in Scotland is concentrated in the private sector – implying that a higher proportion of Scottish managers and administrators are in the State sector. Taking a crude definition of the 'state' sector<sup>(17)</sup> only 14% of managers and administrators in England and Wales were 'state sector' in 1981 compared with 21% in Scotland.

To sum up the main difference between the occupational structures of Scotland and the rest of Britain:

*Scotland has a higher proportion in manual jobs.*

*The shortfall of non-manual workers in Scotland consists in the main of a relative shortage of managers. This shortage is concentrated into the private sector, leaving what managers there are concentrated in the state sector.*

*Scotland has a much lower level of non-agricultural own-account working.*

It could be said then that in addition to the obviously politically relevant manual/non-manual divergence Scotland's occupational structure has what could be called a collectivist bias relative to England and Wales – away from own account working and management in the private sector and towards employment in a state sector widely defined to include central government, local government and the nationalised industries.<sup>(18)</sup>

### **The Self-Employed**

We have seen that Scotland has over a long period had far fewer own account workers than the rest of Britain. Together with a rough parity in the

proportion of employers this implies a general deficit in self-employment. However *trends* in the proportion of the self-employed have been largely parallel.

The last few years have seen a reversal of a long-term historical decline in the proportion of the working population who are in one way or another self-employed.

The number of self-employed in Scotland would appear to have bottomed out at around just over 140,000 in the early 1970s or just over 6% of the working population. By 1984 the total was up to 180,000.<sup>(19)</sup>

The category 'self-employed' encompasses a wide range of economic and social positions. At one extreme are the 'large employers' – defined in the form of socio-economic group 1.1 as 'persons who employ others in non-agricultural enterprises employing 25 or more persons'. By 1981, this was a tiny group. The 10% census sample picked up 108 people in Scotland as belonging to s.e.g. 1.1 giving a total of around 1000.<sup>(20)</sup> At the other extreme, come groups as disadvantaged as the building labourer working on the 'lump' or the small shopkeeper barely making a living out of long hours and a low turnover. In between come the self-employed professional, the farmer working his own farm, the self-employed plumber or car mechanic.

Given this heterogeneity, it is worth staying with the socio-economic groups we have been using so far to structure a discussion of patterns of change in the occupational nature of self-employment.

Despite the rapid expansion of the professional group as a whole (socio-economic groups 3 and 4), self-employed professionals (socio-economic group 3) have tended to remain fairly static as a proportion of the working population. The period 1961 to 1971 saw a fall of around 8% in their numbers while from 1971 to 1981, as far as can be judged given the changed occupational classification, there was renewed growth of over 20%. In the 1960s, sectoral shifts favourable to professional self-employment – the expansion of health services and business services – were insufficient to outweigh a marked decline in professional self-employment within these sectors. In the 1970s, continued favourable sectoral trends were only slightly counteracted by a 4% shift down in professional self-employment within sectors. This downward occupational drift within sectors is undoubtedly not unconnected with the fact that self-employed professionals have tended to belong to the more traditional professions – doctors account for 21%, lawyers for 21%, chartered accountants for 11%, dentists and clergy for 9% each. All the engineers put together account only for 8% of self-employed professionals.

Non-professional, non-agricultural employers are classified as socio-

economic group 1.1.2.1. As we have seen, only a tiny proportion – 2% – employ more than 25 people. The bulk of non-agricultural employers are in the service sector. In 1981, 37% were shopkeepers with 6% running hotels, 6% restaurants and 5% pubs. Women employers (22% of the total) were even more concentrated into these four trades – almost half running shops, 13% hotels, 5% pubs and 6% restaurants. The other main employer occupations for women were hairdressing (10% of women employers) and bakery (11%). The latter was the only 'materially productive' employer occupation in which there was any appreciable female presence.

Among males in the group 17% were in construction and only 9% in manufacturing – the dominant occupational groups being builders, woodworkers, mechanics, electricians and painters and decorators. The number of men in this non-agricultural, non-professional group of employers fell from 46,000 to 38,000 between 1961 and 1971 and to 37,000 by 1981. The number of women in the group remained very steady at just over 10,000 in this period. The indications at a British level are that the number of employers has been increasing along with self-employment as a whole since 1981.<sup>(21)</sup>

The earlier fall in the number of employers was entirely due to a fall in the number of owner-shopkeepers. In the 1970s, the most dynamic element was the hotels, catering and licensed trade sector.

The upturn in the number in socio-economic group 12, own account workers – non-professional, non-agricultural self-employed without employees – occurred much earlier and more strongly than was the case for employers. Numbers in the group increased by 10% from 1961 to 1971 and a further 20% in the 1970s. The increase over the two decades was much faster for men than for women – 40% as against 10%. This was primarily due to the sectoral composition of the increase. The growth in own account working was concentrated in two sectors – construction and transport. Although Scotland in no way matched the massive increase in self-employment in the construction sector south of the border, some did take place. Both construction and transport exemplify the situation whereby the distinction between employment and self-employment is tending to become more of a legal nicety rather than implying real differences in degrees of independence and control over the work situation.<sup>(22)</sup> By 1981, construction accounted for 18% of own account workers and transport 13%. Distribution on the other hand declined from 54% of the own account total in 1961 to 35% in 1981 – again the decline of the small shopkeeper.

By 1981, small shopkeepers made up 16% of male own account workers, with sales representatives and agents at 8% and roundsmen at 3%. Drivers accounted for 15% and building workers for 7%. Among other manual own account workers, the main group were joiners at 8%, painters and decorators at 5% and motor mechanics at 3%.

Among women own account workers, shopkeepers accounted for 38% and hotel proprietors for 8%. Hairdressers accounted for 6%. Other important groups of women self-employed included clerical workers and sales agents.

Data from the 1983 Labour Force Survey at a British level showed that whereas self-employment among men had risen by only 2% between 1981 and 1983, the number of women self-employed rose by 24%.<sup>(23)</sup> The data is very sketchy and is insufficient to establish whether this growth in self-employment is a matter of genuine one-person enterprise or is rather a concomitant of the growing casualisation of employment relationships together with a desperation to find alternatives, however unsatisfactory, to receding employment opportunities. As exemplified by the lump in the building trade, self-employment can be used as a means to avoid the statutory responsibilities inherent in the contract of employment – and this is especially likely to be the case lower down the occupational hierarchy. Whether what we are seeing at present is a permanent up turn in self-employment depends up the extent to which it is in fact a response to the current level of employment, whether or not this level of employment persists and upon the nature of the legal and tax framework within which the choice between employment and self-employment is made.

### Overview

In contrast to the earlier group by group approach, in this section the approach will be to identify the major employment trends which have underlain the pattern of occupational change.

### The impact of industrial change

In terms of determining the pattern of occupational change in Scotland the dominant shift in industrial structure in the past twenty five years in Scotland, as in the rest of the industrialised world, has been the decline of manufacturing employment and the complementary rise of service employment. Whether the sheer generality of this shift should lead us to look for a general and uniformly applicable set of factors behind it is a moot point. Early accounts stressed the changing pattern of demand whereby as societies become more affluent demand for services rises faster than for material products. More recent analysis has concentrated on the 'productivity gap' between the manufacturing and service sectors.<sup>(24)</sup>

Such general factors leading to a decline in manufacturing employment have been augmented in Scotland's case by the peculiar nature of Scotland's insertion in the world economy. Long-term shifts in the international division of labour have involved long-term decline in the industries on which Scotland's prosperity was based such as textiles and

shipbuilding. The final turn of the screw has been applied in the last five years. North Sea oil allowed the maintenance of an extremely high exchange rate in the early years of the Thatcher government, (a remarkable parallel to the effects of the maintenance of the Gold Standard in the 1920s) increasing the uncompetitiveness of Scottish manufacturing industry and leading to a rapid collapse of Scottish manufacturing employment – so that by 1984 it constituted less than 23% of total employment. The period up to 1984 then can be seen as an accelerating cumulation of long-term and short-term pressures on manufacturing employment. The ensuing decline affected all the occupational groups with a presence in manufacturing. The non-manual groups however had some compensation either in terms of increasing their share within manufacturing or in the still expanding (at least until 1980) service sector. The main brunt was borne, as we have seen, by the manual groups.

Although the general decline in manufacturing employment has had the major impact on the occupational structure, shifts in the balance of industries within manufacturing have also had their effect. The most spectacular and best documented<sup>(25)</sup> of these shifts has been the rise of the electronics industry in Scotland. It has been difficult enough simply to chart the growth in employment in the industry and reliable figures on the occupational nature of this growth are even more elusive. Hood and Roberts estimate employment in electronics to have risen from 3,000 after World War II, to 7,000 in 1959 and to 37,000 in 1971 with a temporary dip to 34,000 in 1978. The latest wave of investment took the figure to 42,500 in 1983 – or, in an often cited figure, around 10% of manufacturing employment in Scotland.<sup>(26)</sup> In comparison with the older electrical engineering industry in Scotland – more akin to mechanical engineering in its emphasis on male skilled manual labour – the newer electronic industry's main demand is for female semi-skilled labour. Elements of this swing can be picked up from the 1981 Census of Scotland which gives the proportion of the workforce which was female in the industrial activity groups which make up Industrial Class 34, Electrical and Electronic Engineering. In the basic electrical equipment sector, including generators and motors, 23.3% of employment was female; in industrial equipment, 32.7% and in domestic electrical goods, 38.2%. As we move over to the electronics sector, the female proportion rises: 40.6% in the manufacture of telecommunications equipment; 42.6% in electronic consumer goods and finally, in the electronics heartland, electronic sub-components, which includes chip manufacture, 58.5% of the workforce was female.<sup>(27)</sup> The socio-economic group structure of the Class as a whole gives us an idea of the occupational implications of this trend. Of men employed in electrical and electronic engineering, 10% were managerial; 13% professional; 8% junior nonmanual; 33% skilled manual and 21% semi-skilled manual. Of women employed in the industry, 1.7% were managerial; 0.6% professional; 22% junior nonmanual; 9% skilled manual and 55% semiskilled manual.<sup>(28)</sup> The industry would seem to be moving in a direction which provides jobs for

women but reinforces the levels of occupational gender segregation already present in manufacturing.

To return to the quantitatively more significant trends at broad sectoral level, for purposes of assessing trends in the complementary service sector, the most useful split is between the state and the private sector. Employment in the state service sector – the civil service, local government, education, health and welfare rose steadily throughout the 1960s and 1970s. Since then there has been a slowing down of expansion or even a reversal in some areas as public spending cuts have begun to bite.<sup>(29)</sup>

In the 1970s, the rapid expansion of the state service sector accounted for the vast bulk of the increase in intermediate non-manual workers, was the largest single factor in the expansion of professional employment and made a major contribution to managerial increases. It was also the most important factor maintaining the relative stability in the share of junior non-manual workers. Finally it was the single most important site of increased employment for women at the bottom of the occupational hierarchy – whether as cleaners in socio-economic group 11 or domestic workers in socio-economic group 7. It can be seen then that the expansion of employment in the state sector was a dominant factor in accounting for the pattern of occupational change up to 1980. The cessation of this expansion has been a major factor in making occupational trends in the 1980s quite different from the earlier pattern.

The 'private' service sector can itself be divided into two. On the one hand are what can be called 'producer services' – banking, insurance, business services, and legal services. The sustained growth of this sector throughout the period had its major impact on a more restricted occupational spectrum – managers, professionals and the clerical workers of socio-economic group 6. On the other hand are what could be called the private personal services – hotels, bars, restaurants, fast food, entertainment etc. The expansion of this sector took off in the 1970s with its main impact on socio-economic group 7, personal service workers, together with some effect on junior non-manual and unskilled manual workers. In general the expansion of this sector has had relatively little impact on the higher non-manual groups. This is in part because so much of the expansion took a small business form – the expansion of the sector up to 1981 being by far the largest single factor underlying the renewed expansion in the number of employers.

Although weakened by recession both these 'private' service sectors have perhaps the best employment prospects of all, with the occupational trends they involve likely to continue at a reduced rate.<sup>(30)</sup>

In general however the impact of sectoral employment change on occupational change is likely to be less powerful in the near future than in

the recent past as manufacturing employment stabilizes and state employment stagnates – thus weakening the effects of the two main motors of occupational transformation in the recent past.

### Occupational change within sectors

Although these sectoral shifts have dominated the pattern of occupational change in the last twenty five years, there have been consistent trends *within* sectors and indeed within organizations. In terms of the overall shift from manual to non-manual employment, changes within sectors have not contributed as much as the sectoral shifts themselves but they are perhaps less dependent on short-term factors. Perhaps the most consistent of all has been the trend towards a larger share of jobs being management jobs. Abstracting from sectoral shifts this occurred in all sectors in both decades from 1961 to 1971 and 1971 to 1981. The tendency for junior non-manual workers on the other hand was to decline as a share of employment within sectors. Within the manual groups we have already seen that the pattern was for most rapid decline among the unskilled groups with supervisory workers holding onto their share of total employment and increasing their share of manual employment. At its very simplest the overall logic of these occupational shifts within sectors appears to be this:

– there is a consistent shift from manual to non-manual jobs. Within the non-manual sector there is a shift in the balance from routine clerical to managerial jobs and within the manual sector there is a shift in the balance from unskilled to supervisory jobs.

### Implications

So far very little has been said about the social implications of these patterns of occupational change – a vast topic. A few remarks can be made however on one aspect of social reality which has been largely dependent upon the pattern of occupational change. One of the defining features of post-war Scotland and Britain as a whole was a high level of upward occupational mobility across the manual/non-manual line.<sup>(31)</sup> This high level of mobility was primarily fuelled by the dominant pattern of occupational change as the number of non-manual jobs expanded – pulling in of necessity a fairly high proportion of recruits from manual backgrounds. As we have seen this pattern of expansion in non-manual jobs has continued in the ten years since the last study of social mobility was undertaken in Scotland<sup>(32)</sup> – albeit in a much more unfavourable jobs market. However a feature of the pattern of social mobility in those happier days was that the higher up the spectrum was a non-manual job, the lower a proportion of recruits to it came from working class backgrounds. The kinds of white collar jobs which offered the best routes out of the working class – and in particular teaching and other intermediate non-manual jobs –

are the ones which have been squeezed hardest by recent sectoral trends. On the contrary it is managerial and professional occupations which have the strongest underlying momentum – precisely the kind of jobs which it has proved most difficult for those with manual backgrounds to enter. In the post-war years, a relatively high level of upward social mobility was one of the factors which help foster the illusion that the British (and Scottish) class structure was breaking down – that society was becoming more open, even though the mechanisms generating the transmission of social disadvantage were no less powerful. The nature of current occupational trends, despite the fact that they favour high status, high skill job categories, could well be helping to reimpose class closure.

Throughout this chapter, an eye has been kept cocked on the future. It is difficult enough to find information which will shed light on occupational trends in the mid-1980s never mind to extrapolate these to the late 1980s or the early 1990s.<sup>(33)</sup> For the next few years however the prospect appears to be that of a *relative* stability in the occupational structure.

In that sense, technologically induced apocalypse is not near at hand – although a few years ago we would have said that present levels of unemployment were apocalyptic enough. The best hope for employment in the future is that a high proportion of jobs are relatively impervious to the impact of automation for the foreseeable future – managers, nurses, teachers, drivers, secretaries, receptionists, car mechanics, electricians, building workers, cleaners, bar staff ... a much longer list than those threatened with technologically induced redundancy.<sup>(34)</sup>

In the future, as in the past, technology will be only one of the shapers of the occupational structure. In Scotland's highly vulnerable position in a world economy where rhythms of change are ever more frantic, it will be political decisions which will determine precisely what that impact is.

Steve Kendrick, Research Centre for Social Sciences, University of Edinburgh.

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1. This chapter is based on analyses undertaken as part of the project "Social Change and the 1981 Census of Scotland" at the Research Centre for Social Sciences, 56 George Square, Edinburgh funded by the Nuffield Foundation, directors David McCrone and Frank Bechhofer. Fuller accounts of the analyses reported here are contained in the project working papers "Details of Occupational Change in Scotland, 1961 to 1981", "Components of Dissimilarity in the Socio-Economic Group Structure of Scotland and England and Wales" and "The Scottish Socio-economic Group Structure: a

components of change analysis". The chapter also draws on material produced under the auspices of the E.S.R.C. funded project "A Socio-graphic Account of the Scottish Social Structure".

2. Comments on the underlying sectoral dynamic of change in the occupational structure are based on the analysis contained in the Social Change and the 1981 Census of Scotland project working paper "The Scottish socio-economic group structure: a components of change analysis, 1961, 1971 and 1981".
3. In Table 1, figures for 1961 and 1971 are given as published in the relevant Censuses with minor adjustments to the 1981 figures to ensure continuity, i.e. they employ socio-economic groups as defined in the 1970 Classification of Occupations. Considerable changes were made to the allocation of occupations to socio-economic groups as well as to the definition of the occupations themselves by the time of the 1981 Census. The totals in the column "1981 published" give totals as they appeared in the 1981 Census of Scotland i.e. using socio-economic groups as defined in the 1980 Classification of Occupations. The figures in the column "1981 adjusted" were obtained by applying an adjustment factor to the published figures, to compensate for the effects of the changed classification. The adjustment factors were derived from Tables published by O.P.C.S. which cross-classified a 1% sample of the 1971 Census returns for England and Wales according to the old 1970 socio-economic groups and the new 1980 socio-economic groups. This is obviously not a perfect procedure for Scotland, but the general similarities between the occupational structure of the two areas and careful inspection of the detailed classificatory changes involved suggest that no major distortions are involved. The figures for 1961, 1971 and 1981 adjusted then give us a good an idea of the trends as we are likely to get.

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  21. *MSC Labour Market Quarterly Report, G.B.*, February 1985, p.5.
  22. See Patricia Leighton, 'Employment and self-employment: some problems of law and practice', *Employment Gazette*, May 1983; also 'Employment contracts: a choice of relationships', *Employment Gazette*, October 1982.
  23. *MSC Labour Market Quarterly Report, G.B.*, February 1985, p.5.
  24. See the discussion in Chapter 3 of J. Gershuny and I. Miles *The New Service Economy*, Praeger Publishers, New York, 1983.
  25. See especially Andrew Hargrave, *Silicon Glen: Reality or Illusion, a global view of high technology in Scotland*, Mainstream Publishing, 1985; John Firn and David Roberts 'High Technology Industries' in *Industry, Policy and the Scottish Economy*, Neil Hood and Stephen Young, editors, Edinburgh University Press, 1984.
  26. Hood and Roberts, *op.cit.*, pp.297-298.
  27. Census 1981 Scotland. Economic Activity (10% sample) Table 9.
  28. Census 1981 Scotland. Economic Activity (10% sample) Table 18B.
  29. For example the *Scottish Abstract of Statistics* 1984 Table 9.6 shows the beginning of the decline in local authority manpower from 1981.
  30. See the Institute for Employment Research, University of Warwick

projections in their Review of the Economy and Employment, 1983, p.48.

31. See Kendrick, S., Bechhofer, F. and McCrone, D. 'Social Structure of Scotland' project, Working Paper 3 'Education and Social Mobility'.
32. The Scottish Social Mobility survey was carried out in 1974/75 by a team from Aberdeen University. See for example Payne, G; Ford, G. and Robertson, C., 'Changes in Occupational Mobility in Scotland', *Scottish Journal of Sociology*, Volume 1, No. 1.
33. A survey of projections of the future impact of micro-electronics on the employment structure included the telling comment that the field consisted of 'a plurality of guestimates'. Sophisticated macro-economic modelling coupled with informed extrapolation give a good idea of trends in the next five to ten years but thereafter the picture gets distinctly hazy.
34. The sophisticated occupational projections produced by the U.S. Government present what might be seen as a surprising list of the occupations likely to expand in the next ten years in America. As well as those occupations directly concerned with the design and implementation of information technology, among the occupations forecast as expanding are truck-drivers, cleaners, health personnel, police, maintenance workers. See George T. Silvestri, John M. Lukasiewicz and M.E. Einstein, 'Occupational Employment Projections through 1995' *Monthly Labour Review* November 1983.

## APPENDIX

### Socio-Economic Groups Definitions

Source: Classification of Occupations, 1980, pp. xi, xii.

- 1.1,2.1 *Employers in central and local government, industry, commerce, etc.* Non-professional, non-agricultural managers.
- 1.2,2.2 *Managers in central and local government, industry, commerce, etc.* Non-professional, non-agricultural employers.
3. *Professional workers – self employed.* Self-employed persons engaged in work normally requiring qualifications of university degree standard.
4. *Professional workers – employees.* Employees engaged in work normally requiring qualifications of university degree standard.

### 5. *Intermediate non-manual workers*

- 5.1 *Ancillary workers and artists.* Employees engaged in non-manual occupations ancillary to the professions, not normally requiring qualifications of university degree standard; persons engaged in artistic work and not employing others therein. Self-employed nurses, medical auxiliaries, teachers, work study engineers and technicians are included.
- 5.2 *Foremen and supervisors non-manual.* Employees (other than managers) engaged in occupations included in group 6, who formally and immediately supervise others engaged in such occupations.
6. *Junior non-manual workers.* Employees, not exercising general planning or supervisory powers, engaged in clerical, sales and non-manual communications occupations, excluding those who have additional and formal supervisory functions (these are included in group 5.2).
7. *Personal service workers.* Employees engaged in service occupations caring for food, drink, clothing and other personal needs.
8. *Foremen and supervisors – manual.* Employees (other than managers) who formally and immediately supervise others engaged in manual occupations, whether or not themselves engaged in such occupations.
9. *Skilled manual workers.* Employees engaged in manual occupations which require considerable and specific skills.
10. *Semi-skilled manual workers.* Employees engaged in manual occupations which require slight but specific skills.
11. *Unskilled manual workers.* Other employees engaged in manual occupations.
12. *Own account workers (other than professional).* Self-employed persons engaged in any trade, personal service or manual occupation not normally requiring training of university degree standard and having no employees other than family workers.
13. *Farmers – employers and managers.* Persons who own, rent or manage farms, market gardens or forests, employing people other than family workers in the work of the enterprise.



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14. *Farmers – own account.* Persons who own or rent farms, market gardens or forests and having no employees other than family workers.
15. *Agricultural workers.* Persons engaged in tending crops, animals, game or forests, or operating agricultural or forestry machinery.
16. *Members of armed forces.*
17. *Inadequately described and not stated occupations.*