Scottish International Skilled Labour Mobility

One volume

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Abstract

The topic of international skilled labour mobility has received growing attention within the field of population geography and other disciplines. This interest reflects the large growth of international skilled labour mobility, especially during the 1980s. Attention of prior research has focused on the migratory movement of managers and professionals as they radiate across the globe, recording and representing the dispersal of international investment and the overseas expansion of producers of goods and services. The research examines Scotland's participation in the international exchange of skilled labour.

The research undertaken addresses the varying theoretical, conceptual and methodological approaches of prior research on international skilled labour mobility in geography, as well as in other disciplines, such as management studies and occupational psychology. In doing so, the interplay between work and non-work spheres in shaping Scottish international skilled labour mobility is highlighted, as is the differing temporal and spatial focus of existing studies.

The author's research thus investigates both the economic and social contexts of Scottish international skilled labour mobility, these contexts being characterised at macro, meso and micro level. In addition, the research adopts a broader definition of skilled labour movements than prior research, and so the study discusses the place of short term business travel as well as longer term migratory movements and the relationships between them.

In illustrating the economic context of Scottish international skilled labour mobility, the research outlines macro level changes in the Scottish economy and the role of foreign direct investment as a source and channel of Scottish skill exchange. In turn, the specific institutional characteristics of activities generating these labour flows are examined and related to the occupational status of mobile persons.

Individual career status and motivations are important influences upon mobility patterns. In turn, the relationship between mobility and the career is affected by the wider family and social circumstances of individuals. Thus, the research illustrates varying career, family, housing and quality of life issues influencing Scottish international skilled labour mobility, as perceived by the individuals involved and in the context of broader societal changes. Subsequently, the role of employers in addressing the sometimes conflicting processes of Scottish international skilled labour mobility is indicated.

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Chapter 1

Introduction

1.1 The field of research

"Industry has transcended geography." (Barnett and Müller 1975 p26). This quotation from a 1970s study of the global corporation may be overstating the case. Nonetheless, from the perspective of the 1990s, the role of international business has increasingly shaped the economies of individual regions and countries. For many, it has also extended the workplace from a local one to a global one.

The research described in this thesis examines the international mobility of highly skilled labour to and from Scotland. In doing so, the influence of foreign direct investment is examined as a growing and important governor of skilled mobility flows (for example, as indicated in the works of Gould 1987; Gould 1988b; Findlay and Gould 1989; Findlay 1991; Beaverstock 1992a; Beaverstock 1992b; Salt and Kitching 1992; Salt and Ford 1993; Boyle, Findlay, Leliévre, et al. 1994; Cormode 1994; Findlay, Leliévre, Paddison, et al. 1994; Gould and Findlay 1994b). The economic context of Scottish skill movements is complemented by a consideration of social, non-work determinants of Scottish skill mobility. The research describes work carried out between Autumn 1991 and Autumn 1994 and examines Scottish skill mobility during the 1980s and early 1990s.

The topic of research has received growing attention within the field of population geography and other disciplines. This interest reflects the spectacular growth of international skill mobility in recent times and particularly from the mid 1980s onwards. The attention of prior research has focused particularly on the *migratory* movements of managers and professionals as they fan out across the globe, tracing and embodying the dispersal of international investment and the overseas expansion of producers of goods and services. These are movements that are relatively transient and temporary in nature, but no less significant for that.

The growing mobility of managers and professionals takes place amongst a wider range of mobility. Much of this is related to changes in the balance of world economic and political power since 1989 and requires "a careful re-thinking of the geography of international migration" (Gould 1994; Gould and Findlay 1994a p275). For instance this research was

carried out while new freedoms of movement in Eastern Europe resulted in significant population movements, particularly in and to Germany, with consequent effects on the social fabric of the countries involved (Jones 1994).

Elsewhere, massive refugee movements arise as areas of the world adjust to the new political landscape of the post cold war era. The dramatic human migrations that have taken place in, for example, Rwanda, the Sudan and Cuba, have justly captured much attention. Yet changes in the mobility patterns of highly skilled labour, while less conspicuous, have also been momentous.

Much work within British population geography has attempted to reach beyond an imprecise recognition of growth in skill mobility. Geographers have sought to chart the exact contours of these flows as they course in and out of the UK. Geographers have also sought to reconcile existing theoretical and conceptual accounts of mobility processes with emerging forms. In so doing, geographers have aimed to modify old conceptions and create new explanations for the factors underlying "the international transfer of scarce human resources from one state to another" (Findlay and Gould 1989 p3).

Prior research acknowledges skilled international migration as an increasingly significant type of migration but one that is relatively poorly understood and accounted for (Gould 1988b; Findlay and Gould 1989). As has been more recently stated, "Despite the obvious importance of migration by the highly skilled to the development and management of the international economy, knowledge of the patterns and processes of their movement is poor" (Salt and Ford 1993 p293). The emergence of skilled migration as a topic for research is underlain by a lack of knowledge in terms of the patterns and processes involved. This is as a result of constraints on the availability and quality of data.

Thus it has been noted that the absolute and relative significance of skill mobility is hard to estimate in an exact way. This is due to the "limited academic attention devoted to the phenomenon, and the absence of adequate statistics" (Miles and Salzewich 1989 p10). Garrick indicates a paucity of information on what constitutes a fundamental change in international migration flows (Garrick 1991).

In terms of approach to studying *international skilled labour mobility* (ISLM), Gould denotes influences from different spheres (institutionalist, behavioural and Marxist), encouraging the adoption and adaptation of different methodological and theoretical approaches (Gould 1988b). In addition, debates on theory and methodology in ISLM study,

and geography generally, have been conducted against a backdrop of pervasive economic change. This change revolves around processes of restructuring in the global-economy, entailing new processes of production and with consequent influences on existing movements of labour. As Findlay and Gould state in their blueprint for the topic, research...

> "can be associated at a macro-level with the much broader thrust being made in human geography to understand the importance of international processes in influencing localities and regions...At a micro-scale it links with behavioural research seeking to extend an understanding of how individual, group and corporate decision-making processes are inter-related" (Findlay and Gould 1989 p3).

Work in other domains has approached ISLM with different intentions and techniques. Management studies have attempted to come to terms with the operational requirements of new, globalised, patterns of work, while occupational psychologists have increasingly addressed the demands placed upon the participants in the trans-national, multi-locational workplace. This thesis seeks to engage with both geographical works, which have attempted to delimit and explain ISLM, and those contributions from cognate disciplines that have widened the debate within population geography.

In developing an understanding of the processes of ISLM the research is concerned with the Scottish experience. Prior research has suggested that Scotland experiences a particularly high degree of involvement in skilled migration (Findlay and Garrick 1990). This has been accompanied by a high level of foreign direct investment (Industry Department Scotland 1990; Industry Department Scotland 1991).

Yet, the specific relationship between these developments has received little attention. The need to define this relationship is increasingly apparent as the influence of international economic systems on population movements becomes clear. Within population geography, the role of ..."geoeconomics as a base starting point of an exploration of international mobility in the 1990s."...is an increasingly relevant requirement (Gould 1994 p10).

However, the international movement of skilled labour to or from Scotland is nothing new. "Throughout the Middle Ages and beyond, Scottish soldiers, students, scholars and traders had tramped the roads of Europe and left their mark" (Lynch 1992 p.xxi). In the medieval period the majority of Scotland's exports were routed through the ports of Bruges,

Middelburg and Veere on the Scheldt estuary. It is likely that colonies of Scottish merchants were present in Dutch and Flemish towns.

In turn, Flemish and German merchants were based in Berwick. This was Scotland's main port in the early medieval period. Trade with the eastern Baltic, from the thirteenth century onwards, saw settlers follow in the trader's wake. One visitor to Poland in 1616 claimed 30,000 Scottish families had settled there. Scots also settled in the western Baltic, amongst them the equivalent of today's managers and professionals. The names of enterprises established in Gothenburg in the first half of the 19th century testify to this: D. Carnegie & Co. (established 1803), William Gibson & Sons (established 1848) and Chalmers Technological University (established 1829) (Lynch 1992).

The relationship between the church and learning also produced a stream of scholars to the universities of continental Europe, Cologne and Louvain for example. Some returned, (Andrew Melville attended institutions in Paris, Poitiers and Geneva before returning to become the principal of Glasgow University in 1574), while others remained on the continent, constituting what could be termed "a notable sixteenth century 'brain drain'" (Lynch 1992 p.xxi).

Indeed, the movement of 'highly skilled' people on an international basis can be charted through the ages. In other words, there is nothing new in the movement of skilled people per se. These movements have varied in nature, from mass movements of people in war or flight, to other forms of movement taking place within more stable, established economic structures. For example, the international trading cultures of the Hellenistic era where flows of knowledge and skills passed freely across diverse areas and cultures (Boardman 1981). Later imperial cultures of Europe also saw the wider establishment of flows of personnel and material across the continent and later, the globe.

> "The Greeks had transported their civilisation around the shores of the Mediterranean through trade and settlement, bestowing their accomplishments in pottery, architecture and bronze, as well as their language and religion; so now the British were to carry the gospel of steam from Gibraltar to the Urals. It is an extraordinary fact that there was not one major industry in any of the greater European powers that was not set in motion by British pioneers, engineers, iron and steel masters, machine builders, skilled craftsmen or providers of capital.

> They promoted what was to become a world system of industry based on the British model" (Andrews 1991 p200).

The examples above illustrate the role of skill mobility in the economies of different times and places. What the preceding statement also reveals is how a brew of industrialisation and imperialism propelled the pace and scale of international skill transfer forward. This is a movement in which British and Scottish skilled labour was at the forefront. The internationally structured British economy of the industrial era set the scene for contemporary Scottish ISLM. However, the form of ISLM under study varies profoundly from those preceding in its scale, pervasiveness and reciprocity. Furthermore, it varies in the degree to which the 'skilled' element relates as a proportion to the total movement of people.

Precedents for contemporary skill mobility can be seen in the early industrial period. However large scale and pervasive international skill mobility is a post war phenomenon in general, and one of the 1980s onwards in particular. This modern development is closely associated with the establishment of post 1945 political and economic structures that go hand in hand with growing technological sophistication.The internationalisation of economic activity, in particular, the international organisation of factories, headquarters and research and development facilities, has brought with it the international mobility of physical plant and personnel. Mobility has been developed as a strategic resource by *trans-national companies* (TNCs), this is true not only in terms of physical plant, but increasingly in relation to *human capital*. The following chapters examine how TNCs, as engines of the modern, global economy, engender a re-writing of the socio-spatial boundaries of work and non-work for highly qualified labour.

The remainder of the introduction sets out the aims of the current research and the intended value of the findings. Subsequently, the definitions used in the course of the thesis are delimited and the limitations of the research acknowledged. The structure of the thesis is then outlined.

1.2 The aims and value of the research

1.2.1 The aims the research

As a starting point, the research aims to critically review the existing literature on ISLM, examining the theoretical, conceptual and methodological contributions of prior work. In

the course of the research, the thesis principally examines the role of *foreign direct investment* [1](FDI) as a source and channel for Scottish ISLM. In the first instance, the research aims to quantify the numerical level of Scottish ISLM created by TNCs and other organisations.

Secondly, the study aims to evaluate the spatial and temporal characteristics of Scottish ISLM, placing Scottish skilled mobility in a UK and international context. Further, the research aims to investigate the specific economic characteristics of activities generating Scottish ISLM. The research also aims to assess the functional characteristics of the employees involved in Scottish ISLM, together with the corporate strategy and structure of their employers.

Subsequently, the research aims to evaluate, at an individual level, the significance of concurrent mobility of varying temporal character. The study then aims to identify and elucidate the interplay between work and non-work spheres in shaping Scottish ISLM. Thus, the structures of work which influence mobility are set alongside the social context and non-work considerations of individual skilled movers.

Finally, the research aims to examine the role of employers in ameliorating contrasts in the demands of social life and the global workplace. The influence of wider institutions on the policies and actions of employers is examined.

1.2.2 The value of the research

The persistence of high levels of unemployment is a great concern throughout the industrial world. In 1994, half of the 24 OECD countries had jobless rates of 10% or more of the workforce (The Economist 1994p p80). Employment has diverse causes. In the case of *frictional unemployment*, joblessness derives from movements of workers between jobs, companies and regions. *Structural unemployment* may derive from a mismatch of skills between workers and industry or a reluctance to move to a more prosperous region. Both these forms of unemployment, reflect barriers to geographical mobility. While for skilled workers, poor geographical flexibility may not always result in unemployment, better understanding of the processes of international skilled labour mobility offers opportunities for improved economic performance.

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[1] Foreign Direct Investment represents investment in foreign assets whereby a company purchases assets that it manages directly

The development of a single European market, and the wider internationalisation of economic activity, demands a mobile group of keyworkers. An effective strategy for the geographical mobility of skilled workers is increasingly important for the *employers* of managers and professionals and the *economy as a whole*. A strategy for the effective mobility of these keyworkers is important not just for employers and the economy generally, but for highly skilled *individuals* and their *families*. This is particularly so in light of a growing body of work that highlights the negative personal outcomes of geographic mobility (for example, the work of Munton 1990; Munton and Forster 1990; Ford 1992).

Recognition of the increasing role of skilled workers within economies serves to emphasise even more the value of a greater awareness of the processes of skill mobility. Increasingly the skills of the workforce are being recognised to be as important to the economies of countries as other factors, such as physical resources. As mass production jobs shift to developing areas, the emphasis on quality of production and services becomes stronger in the richer countries. Achievement of a 'high-quality' economy means developing and retaining a highly qualified workforce. It has been estimated that, in the UK,...

> "scientific and engineering professions may increase by 27 per cent between 1990 and 2000; teaching, health and other professions up by 26 per cent; corporate managers and administrators by 18 per cent. In contrast skilled manual trades are expected to decline by 8-10 per cent, semi-skilled operatives in industry and agriculture by 19 per cent" (Institute for Employment Research 1991; cited in Salt and Ford 1993 p294-295).

Thus, the development and maintenance of a highly skilled workforce is essentially tied up with the geographical flexibility of managers and professionals. Without an effective understanding of the processes of skilled international labour mobility, efforts at cultivating a highly skilled workforce will be hampered to the detriment of employees, their families, the firms they work for and the economy generally. However, as Stewart et al comment,... "the processes of skilled international migration are as yet ill-defined and there is a clear research agenda at the European level for further information and explanation of the factors affecting, and impacts of, skilled migration" (Stewart and Carey-Wood 1992 p32)

Therefore the research aims to contribute to a fuller awareness and comprehension of the patterns and processes of Scottish ISLM. In doing so it is hoped the research highlights for

policy makers in industry, commerce and elsewhere, the pitfalls and opportunities associated with international skill mobility. Although focused on Scotland, the research acts as a case study for an appreciation of the globalisation of the workplace and is of relevance to other regions in the UK and elsewhere.

1.3 Definitions used in the research

It is necessary to define the terminology used throughout the thesis, in particular, terms involving the words '*skilled*' , '*migration*' and '*mobility*'. The designations *skilled* and *highly skilled* are used to refer to the occupational grouping '*managers and administrators*', '*professional occupations*' and '*associate professional and technical occupations*' as defined by the Office of Population Censuses and Surveys (see Office of Population Censuses & Surveys 1990).

These population groups are responsible for senior management and control functions as well as professional or technical procedures requiring a high level of training. It is noted by Salt and Ford that the highly skilled do not constitute a homogenous group, but "a series of largely self-contained and non-competing subgroups,..." (Salt and Ford 1993 p295).

The definition of mobility is now considered. In discussing the skill flows associated with international investment it has been commented that, "The skill flows involved have produced new types of international migration which have been so radically different in form from their predecessors that often these skilled labour flows have escaped proper enumeration by the traditional indicators used to measure settlement migration and guestworker flows" (Findlay, Leliévre, Paddison, et al. 1994 p85).

This is partly due to the essential feature of the mobility discussed in the course of the research, its transience. Definition of the boundaries between different movements based on time is methodologically difficult and often arbitrary. Commonly used terms in the literature such as short term, transient or temporary are rather loose. Findlay suggests the need for a more refined classification system based upon the criteria of the firm or organisation, the household, and the state (Findlay, Leliévre, Paddison, et al. 1994).

Population movements can vary in scale, distance and with respect to time. It is standard for national censuses to use the term *migration* to indicate movements of people from one administrative area to another and which lead to a permanent change in residence. A distinction can be drawn between *migration* and *circulation*. Migration leads to

displacement whereas circulation involves *reciprocal flows* of a temporary, cyclical nature and without a permanent change of residence (Witherick 1990 pp75-76).

The term *mobility* is used throughout the thesis as a label that includes all population movements including both circulation and migration. In this way, the term *international skilled labour mobility* (ISLM) is used throughout in distinction to that of *skilled international migration* (SIM). The latter is commonly referred to in the literature, but is restricted to migration (e.g. Findlay and Gould 1989).

The terms *skilled transient migration* and *skilled international labour circulation* are also current in the literature (Boyle, Findlay, Leliévre, et al. 1994 p48; Cormode 1994 p68). The former is not used here, for the same reason as SIM is avoided, plus the absence of the specification of international movement. The latter term is also not used, as the term 'circulation' does not include, according to the definition used above, moves which entail a permanent change of residence.

As indicated above, the definition of migration depends upon the designation of an appropriate administrative area and the definition of permanent residence. With regard to the former, as international migration is the focus of research, the study examines movements between Scotland (as a country of the United Kingdom of Great Britain and Northern Ireland) and other nation states outwith the United Kingdom, as well as movements between nation states outwith the United Kingdom. This areal definition also applies to circulation movements studied.

Different types of mobility are also customarily defined by duration. The *permanent residence* status of a migrant is typically defined following a one year period of residence. It is noted that other criteria than duration of residence can be utilised in defining population movements. A definition of migration that is based upon relocation of the migrants family home, or dwelling, is also used within the research. Circulation movements are defined as periods where the individual is resident for less than one year and has not made a relocation of the family home or dwelling.

For the ends of the research, mobility is categorised by purpose in terms of the particular economic role. Thus circulation movements are restricted to *business travel*, which is composed of individuals engaged in *business and work tourism* (which includes conferences, exhibitions and all types of employment, both 'white collar' and 'blue collar'

as defined in British Tourist Authority 1993), and *semi-permanent mobility* (which involves moves of a relatively short duration but which do not involve home relocation.

The term 'semi-permanent mobility' is equivalent to that of *temporary secondment*, used by Salt and Ford to refer to an intermediate work-related mobility form (Salt and Ford 1993 p296). As for business travel, the migrants studied are those whose movements are connected with business or work. Thus four main types of mobility definition are used in this research: *business travel*, *semi-permanent mobility*, *relocation* and *migration*.

1.4 The limitations and assumptions of the research

There are a number of limitations and assumptions embodied within the thesis. Firstly, in examining the influence of foreign direct investment on Scottish ISLM, the thesis is less concerned with and representative of other forms of Scottish ISLM associated with non-corporate mobility. Although the study addresses the mobility of a wide range of individuals within the public sector, the thesis makes little comment on other groups, such as, for example, exchange students or the armed services.

In addition, the study draws much information from a survey of business travellers and while data are collected on all mobility types engaged in by these persons (business travel, semi-permanent mobility and relocation), the study excludes the mobility characteristics of those who do not participate in business travel. Thus persons who engage in longer terms of mobility but not business travel are not represented. However, findings presented in chapter five would suggest that this group is likely to be relatively small, with work-connected relocation predominantly being accompanied by business travel.

While the study seeks to provide insight into the patterns and processes of Scottish ISLM, much of the primary data gathered are drawn from a study based at Glasgow International Airport and thus may not fully indicate the character of ISLM in other parts of Scotland. However, findings in chapter four suggest that Glasgow International Airport is, numerically, by far the most significant source for the research survey population desired and in addition, draws persons from throughout Scotland. Further limitations and assumptions are discussed as they are encountered within the following chapters.

1.5 The structure of the thesis

Chapter two presents a review of the literature on international skilled labour mobility. Contemporary studies on ISLM and particularly, the small number pertaining to Scotland

are evaluated. These works are set in a wider context by reviewing the broad theoretical developments within the field of population geography and the field of international labour migration. The influence of these theoretical developments on ISLM literature are assessed. In addition, the principal findings of ISLM literature are indicated.

Subsequently, contributions from cognate disciplines are examined these stem mainly from management studies and occupational psychology. From a review of geographical and cognate literature several conclusions are drawn pointing to fertile areas for the current research.

Chapter three develops a response to the conclusions drawn in chapter two and the principal aims of the research project, as stated above. In designing this response, reference is made to wider social theory in an attempt to provide an organisational framework for ISLM research. Using this framework as a guide for research, the chapter then sets out the research design and the methodological tools used in pursuing the research. The major part of chapter three discusses the formulation and implementation of primary data collection through questionnaire surveys.

In following the research plan defined in chapter three, the fourth chapter draws upon secondary data sources in developing a picture of Scottish ISLM patterns and the UK and international context of these patterns. Within the context of ISLM study, much of the data presented are without prior examination. These sources, mainly on international business travel, are contrasted with secondary sources on skilled international migration derived from prior research.

The patterns of Scottish ISLM revealed in chapter four are limited in scope and thus in chapter five are developed using material gained from the author's fieldwork. These data are analysed in terms of the features of Scottish ISLM revealed, the results being contrasted with existing sources. The secondary sources examined in chapter four permitted only limited conjecture on the processes of Scottish ISLM. However, the author's fieldwork results allow a detailed investigation of the processes underlying Scottish ISLM.

The investigation of the processes of Scottish ISLM is taken up in chapters six, seven and eight. These chapters use primary research results to reveal the economic context of Scottish ISLM and to relate the specific industrial activities involved in the generation of

Scottish international skill mobility. Primary data are supplemented with secondary sources revealing the macro and meso level influences of industrial activity on mobility.

The thesis also considers the micro level influence of economic concerns on the flow of skilled labour. Thus chapter nine, using primary research results, conducts an analysis of the relationship between mobility and the career decisions of individual movers. These micro level decisions relating primarily to the work setting, are placed alongside micro level influences on mobility associated with the social and non-work lives of individual movers.

Thus the influence of factors such as dual careers, housing concerns, moving children and leaving established social settings, are investigated. Such micro level work and non-work issues are set in a larger social context with reference to secondary data sources on changes in women's work, for example. Subsequently the role of employer policies in smoothing the path of migrants is examined and placed in the context of wider policy initiatives.

Finally, in chapter ten, the principal findings of the research are summarised and overall conclusions presented. In considering the outcome of the research, results are contrasted with prior research and the progress achieved assessed. The wider implications of the study are considered and the possibilities for future research indicated.

Chapter 2

Literature review

2.1 Approaches to population geography

Previous work on the international movements of skilled labour has developed from a number of areas of concern in population geography. This chapter traces the broad movements within population geography that have been important in shaping the approach of geographers to international skilled labour mobility. Recent studies on ISLM are then evaluated in their own right.

2.1.1 Nomothetic, human capital and developmental approaches

The work of Ravenstein predated the later reincarnation of theorising and process based studies within the discipline of population geography, and has proved influential in defining the subject (Ravenstein 1885). This work, along with others, represents a desire to uncover laws of migration. Such works seek general relationships between migration and the economy as a whole and are often at variance with later behavioural approaches in ascribing the mainspring of migration.

Nomothetic works such as Ravenstein's can be criticised for their time and place specificity and their omission of processes leading to observed regularities. However, Ravenstein's laws of migration, put forward in the 1880s, identified important regularities within the characteristics of the migrants observed. Almost a century later some of the ideas in Ravenstein's work, particularly about the differentiation of different types of migration and the relationship between migration and the development of commerce, industry and the economy as a whole, were developed by Wilbur Zelinsky (Zelinsky 1971).

Zelinsky's theoretical model of a mobility transition conceptualised the idea of an evolution of personal mobility patterns through time, associated with distinct phases of modernisation or development (table 2.1; figure 2.1). The mobility transition suggested a progression from limited geographical and social mobility to wider and more differentiated types of movement. The work makes several observations about the development of skilled mobility.

For instance, the emergence of significant international migration of skilled and professional persons within 'advanced society' is put forward. Secondly, an exponential growth in circulation movements is cited (those movements not included under migration), which increases slowly from 'pre-modern' and 'traditional' societies and 'early' and 'late' 'transitional' societies and then rapidly from the 'late transitional' society onward, with a possible curbing of the growth rate in 'future super-advanced' society.

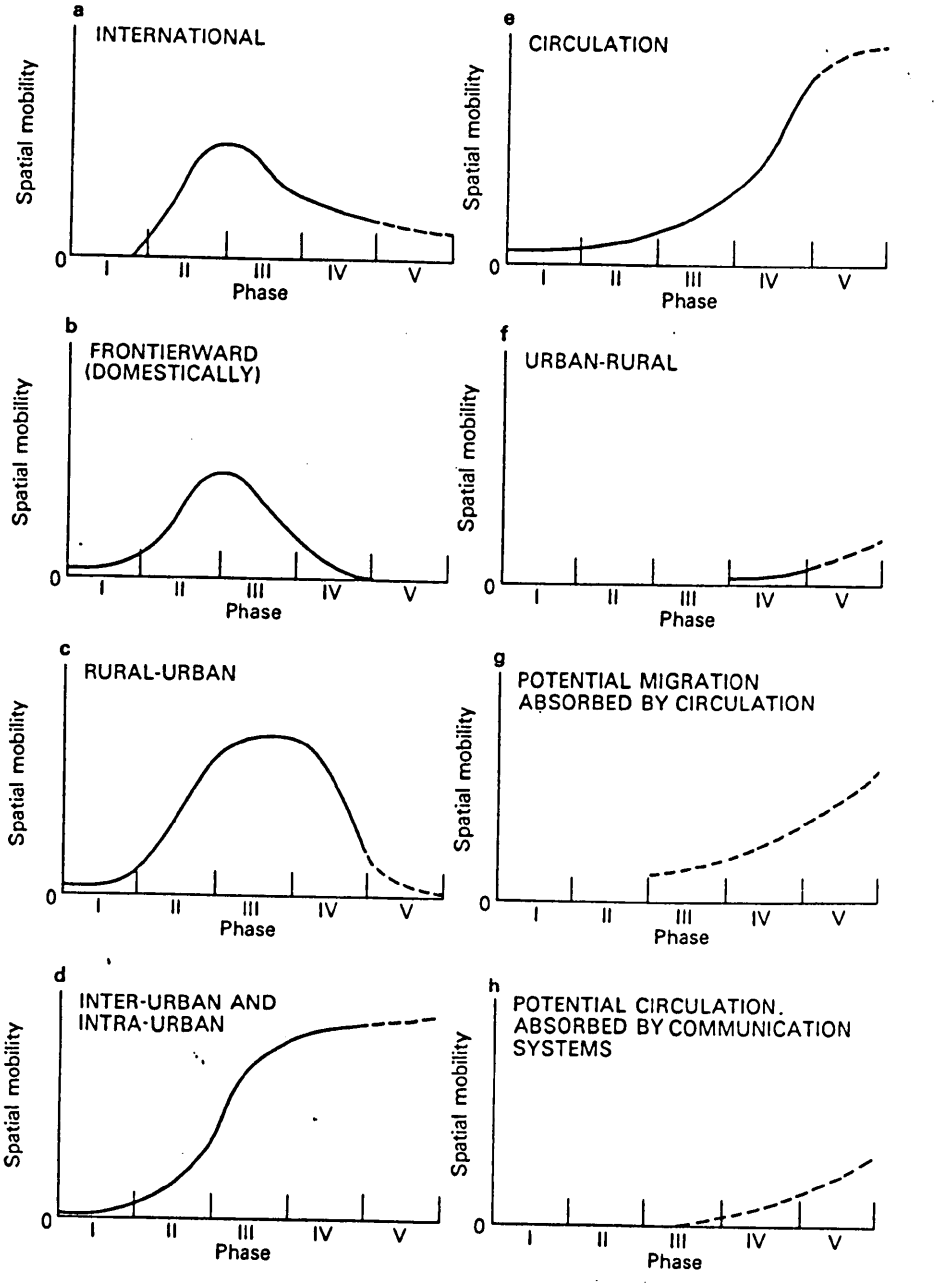

Table 2.1 Zelinsky's hypothesis of the mobility transition, the phases of the mobility transition and their relationship to the phases of the vital transition
Source: (after Zelinsky 1971)

The vital transition	The mobility transition
Phase A: The pre modern traditional society 1) A moderately high to quite high fertility pattern that tends to fluctuate only slightly 2) Mortality at nearly the same level as fertility on the average, but fluctuating much more from year to year 3)Little, if any, long range natural increase or decrease	*Phase I: The pre modern traditional society* 1) Little genuine residential migration and only such limited circulation as is sanctioned by customary practice in land utilisation, social visits, commerce, warfare, or religious observances
Phase B: The early transitional society 1) Light, but significant, rise in fertility, which then remains fairly constant at a high level 2) Rapid decline in mortality 3) A relatively rapid rate of natural increase, and thus a major growth in size of population	*Phase II: The early transitional society* 1) massive movement from countryside to cities, old and new 2) Significant movement of rural folk to colonisation frontiers, if land suitable for pioneering is available within country 3) major outflows of emigrants to available and attractive foreign destinations 4) Under certain circumstances, a small but significant, immigration of skilled workers, technicians and professionals from more advanced parts of the world 5) Significant growth of various kinds of circulation
Phase C: The late transitional society 1) A major decline in fertility, initially rather slight and slow. Later quite rapid, until another slowdown occurs as fertility approaches mortality level 2) A continuing, but slackening, decline in mortality 3) A significant, but decelerating, natural increase, at rates well below those observed during phase B	*Phase III: The late transitional society* 1) Slackening, but still major movements from countryside to city 2)Lessening flow of migrants to colonisation frontiers 3) Emigration on the decline or may have ceased altogether 4) Further increases in circulation, with growth in structural complexity
Phase D: The advanced society 1) The decline in fertility has terminated, and a socially controlled fertility oscillates rather unpredictably at low to moderate levels 2) Mortality is stabilised at levels near or slightly below fertility with little year-to-year variability 3) There is either light to moderate rate of natural increase or none at all	*Phase IV: The advanced society* 1) Residential mobility has levelled off and oscillates at a high level 2) Movement from countryside to city continues but is further reduced in absolute and relative terms 3) Vigorous movement of migrants from city to city and within individual urban agglomerations 4) If a settlement frontier has persisted, it is now stagnant or actually retreating 5) Significant net immigration of unskilled and semi-skilled workers from relatively underdeveloped lands 6) there may be significant international migration or circulation of skilled and professional persons, but direction and volume depend on specific conditions 7) Vigorous accelerating circulation, particularly the economic and pleasure oriented, but other varieties as well
Phase E: A future super-advanced society 1) No plausible predictions of fertility are available, but it is likely that births will be more carefully controlled y individuals- and perhaps by new socio-political measures 2) A stable mortality pattern slightly below present levels seems likely, unless organic diseases are controlled and lifespan is greatly extended	*Phase V: A future super-advanced society* 1) There may be a decline in level of residential migration and acceleration in some forms of circulation as better communication and delivery systems instituted 2) Nearly all residential migration may be of the inter-urban and intra-urban variety 3) Some further immigration of relatively unskilled labour from less developed areas is possible 4) Further acceleration in some current forms of circulation and perhaps the inception of new forms 5) Strict political control of internal as well as international movements may be imposed

Figure 2.1 Zelinsky's hypothesis of the mobility transition, changes in the volume of different kinds of mobility during the five phases of the mobility transition
Source: (after Zelinsky 1971)

Thirdly, while an increase in skilled international migration over time is proposed, this is accompanied by an overall decline in international mobility. The latter view could be challenged in that while traditional large, international unskilled migrations may be reduced in the advanced societies of the 1980s, large international movements of refugees have occurred as well as vast amounts of international circulation in the form of business and holiday tourism.

Zelinsky also argues for the role of an increasing absorption of migration by circulation. However, where skilled occupations are considered, international migration and circulation both appear to have grown rapidly during the 1980s (as discussed in chapter four). Lastly, in Zelinsky's advanced and super-advanced societies the case is put for reduced circulation through the adoption of improved communication systems. The extent to which such technologies may have an impact on international business travel remains to be seen, although for the present the effect appears slight (Batty 1989; Miles 1989; CBI ERC 1990a; CBI ERC 1992c; CBI ERC 1994; The Economist 1994u).

The close relationship between economic forces and migration, evident in both Ravenstein's and Zelinsky's frameworks, is also represented in the work of Sjaastad (Sjaastad 1962). This author perceives migration as a response aimed at adding to the migrants human capital, or as a means of enhancing income through a process of migration. Thus migration occurs where the economic benefits of a move outweigh the economic costs of a move. In this perspective moves are viewed as a means whereby the migrant receives investment in their human capital, leading consequently to an increase in the productivity of human resources (Da Vanzo 1981). Such micro-economic models have been labelled human capital models.

An explanatory deficit is evident, where human capital models focus solely upon the financial element of a move. However, as Clark states, the notion of human capital can be conceived in non-financial terms, with costs and benefits of migration in the form of, for example, "psychic costs, such as leaving friends and relatives, the expenses of maintaining relationships with those left behind, and the loss of various locationally specific assets" (Clark 1986 p67). Such costs and benefits are obviously harder to measure than financial considerations. In addition, human capital models can be criticised for a focus on the individual migrant and not household migration and the costs and benefits to the family as a whole.

The work of Mincer develops a family migration theory in which migration is viewed as a family investment (as opposed to a personal investment) in human capital and is pursued if family benefits outweigh family costs (Mincer 1978). Any move as a result of a job change by one partner has to be weighed against the cost to the other partner. In this scheme one partner may lose out (in financial or utility terms) if there is a net family gain with the

move. Financial loss is certainly possible where both partners have careers and this work reflects the growth of dual earner families.

It is noted that size of destination may to some degree alleviate this problem through the greater number of work opportunities that may be available (Snaith 1990). The latter point can be criticised in that demand for particular skills or occupations does not necessarily vary in direct proportion to employment market size of the destination, rather demand for certain skills may be locally concentrated out of proportion with overall job market size.

Several implications of the family migration theory can be noted: that marital status deters migration, especially where both partners work; the earning power of the wife (traditionally, but increasingly the husband) affects the migration decision; migration and the stability of the family may be inter-related; family and employment ties have an effect on the distance of migration; and that returns from migration increase less than costs with increasing family size (Mincer 1978).

Works within this framework have concluded that family migration can be costly for wives, with families having two earners incurring reduced migration. It has also been found that spouses are more likely to have lower labour force participation and mobility where the husband has a high level of education (Sandell 1977; Sandell and Koenig 1978). In contrast, Mincer indicates that married men gain more financially from mobility than unmarried men, presumably to offset the probable losses to the wife consequent upon a move.

Overall, approaches with neo-classical or human capital perspectives have viewed migration flows as the simple outcome of the workings of the market and as the expression of the prevailing relationship between the factors of supply and demand. Labour migration is explained as occurring due to the inequalities of wage levels which may exist at different geographical scales.

In general this approach has characterised migration as a positive force for all parties concerned, that is, the migrant, the receiving location and the sending location (Böhning 1984). Others have indicated that costs are also involved in migration: for example, the rising costs on the welfare state as a result of longer term effects of the settlement of relatively low-skilled migrant workers (Freeman 1986; Heisler and Heisler 1986). Additionally, effects on sending areas may be detrimental, with the development of trends

for dependency upon remittance income and drains on the resources of sending regions through the emigration of the most skilled individuals (Findlay 1987).

Criticisms of such accounts focus on the inadequate assumptions of neo-classical models: for example that migrants decisions are made on an economically rational basis; that individuals have perfect knowledge of conditions in the marketplace and the assumption that a neutral market exists. Furthermore, concentration on purely economic factors of demand and supply ignores the fact that economic factors do not operate in isolation from the political and social dimensions. The dimensions of the social and political can act in opposition to simple economic equations.

In relation to human capital models and theories, it has been suggested that "such an approach offers a 'limited' but meaningful explanation of certain types of international migration" (Garrick 1991 p58). Human capital approaches only fit the bill in accounting for migration occurring in certain places and in certain social and political circumstances.

Lee provides another refinement of Ravenstein's ideas (Lee 1966). Lee isolates several groups of factors which go towards the decision to migrate. These are factors associated with the place of origin, those associated with the place of destination, factors which act as intervening obstacles between origin and destination and personal factors which moderate these influences.

The notion of Lee's intervening obstacles is a refinement on the proposition by Ravenstein that the volume of migration is inversely related to distance. Stouffer asserted that it was not distance itself which dictated the number of migrants, rather it was the volume of intervening opportunities (to settle) along the way which determined migrant flow (Stouffer 1940; Stouffer 1960). In turn, Lee indicated the importance of obstacles to migration (political and social, in addition to economic), as well as opportunities (figure 2.2). Stouffer's rule would seem to rely upon the assumption that migration occurs in short distance stages (another of Ravenstein's laws). However, this notion has relatively little relevance to contemporary skilled international migration.

The perception and evaluation of Lee's groups of attributes varies from person to person and as such, personal factors (including individual perception but also more quantifiable attributes such as age, sex, family status etc.) form a fourth set of variables. Within Lee's work the view that migration is controlled by factors of distance and economic opportunity

is broadened, with the role of the individual decision maker becoming a significant factor alongside the more objective attributes of the migration process.

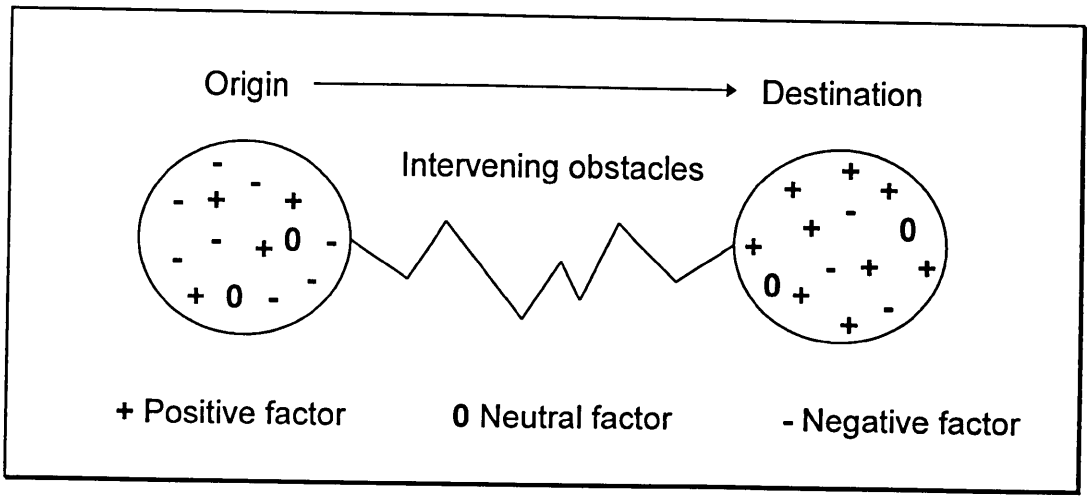

Figure 2.2 The intervening obstacle theory
Source: (after Lee 1966)

2.1.2 Behavioural approaches

As an explanation of the decision making process, Lee's work is limited. Other geographers have approached the issue of the decision making process surrounding a move as a reaction to stress. The term has been used in a generalised sense, as a description of either internal stimuli (e.g. aspirations or goals) or external stimuli or pressure (e.g. quality of environment or size of house). However, the negative effects of mobility have more recently been recognised as a contributor to stress in a strictly physiological or medical sense (Munton 1990; Munton and Forster 1990; Ford 1992).

Behavioural analysis places explanatory emphasis on the operation of two processes. These are the quantity and quality of perceived information available to the potential migrant and the ability of the migrant to make use of this information. Both of these factors are seen to reflect the socio-economic and physical environment of the migrant. In this way migrants are selected through their ability to access information and to overcome obstacles in the form of stress or other physical or legal constraints. In particular, urban residential migration decision making has been studied by behavioural geographers (Wolpert 1966; Brown and Moore 1970; Roseman 1971; Adams and Gilder 1976; Michelson 1977) (see figures 2.3 and 2.4).

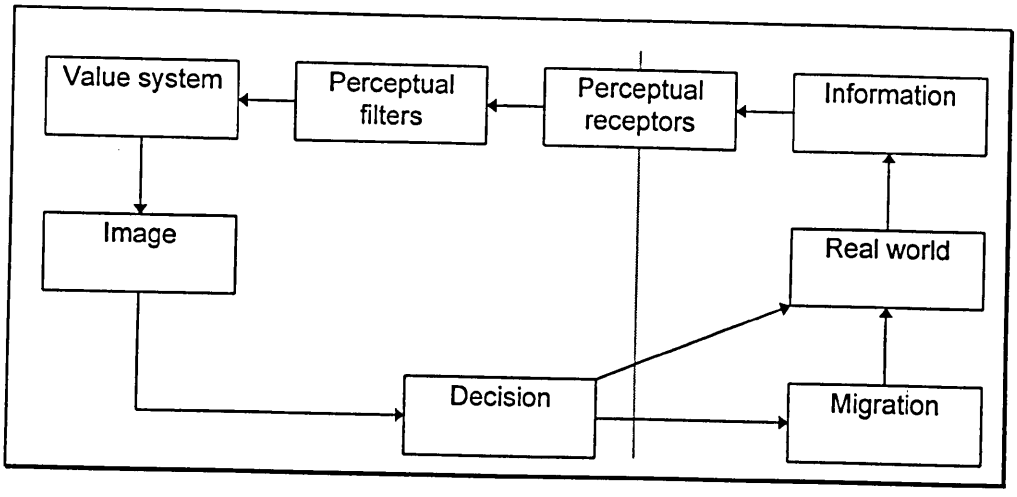

Figure 2.3 A simplified man-environment decision making system
Source: (adapted from Lewis 1982 p130)

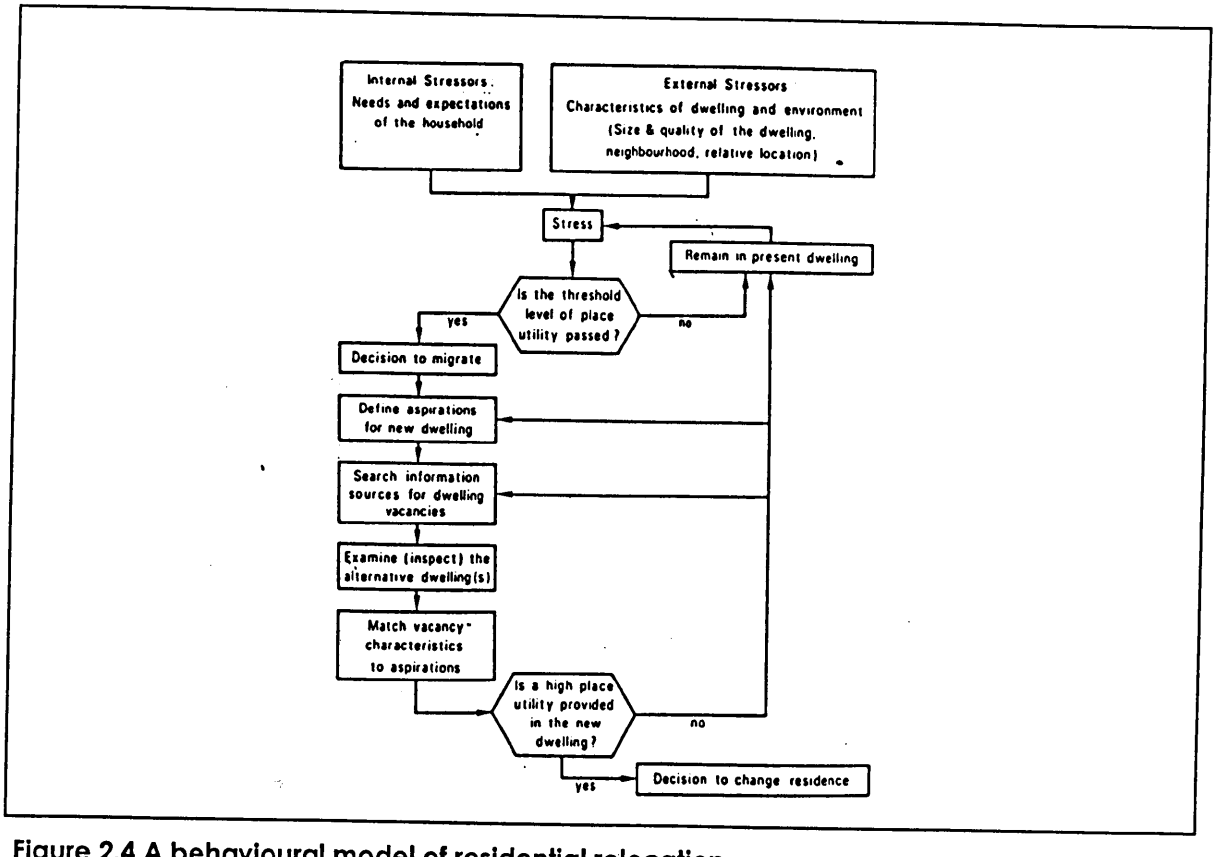

Figure 2.4 A behavioural model of residential relocation
Source: (adapted from Brown and Moore 1970 p1-13; Lewis 1982 p130)

Alternatively, more qualitative work has attempted to define the mobility experience. Fielding stresses the cultural aspects of migration:

> "There is something strange about the way we study migration. We know, often from personal experience, but also from family talk, that moving from one place to another is nearly always a major event. It is one of those events around which an individual's biography is built. The feelings associated with migration are usually complicated, the decision to migrate is typically difficult to make, and the

> outcome usually involves mixed emotions. An anticipatory excitement about life in the new place often coexists with anxieties about the move; pleasure at leaving the old place is often disturbed by the feeling that one has almost betrayed those remaining behind. Migration tends to expose one's personality, it expresses one's loyalties and reveals one's values and attachments (often previously hidden). It is a statement of an individual's world view, and is, therefore, an extremely cultural event" (Fielding 1992b p201).

The statement above supports the view of Simmel in noting the contrasts of feelings engendered by migration (Simmel 1971). In emphasising the cultural, such a perspective also jars with traditional migration models in which...

> "the migrant is seen either as a 'rational economic man' choosing individual advancement by responding to the economic signals of the job and housing markets, or as a virtual prisoner of his or her class position, and thereby subject to powerful structural economic forces set in motion by the logic of capitalist accumulation" (Fielding 1992b p201).

A good example of the contrasting individual perceptions of migration, or ways of seeing migration, is given by Fielding. The "excitement and challenge of migration" is indicated through situations captured by the phrases of 'freedom', 'new beginnings', 'joining in', 'opting out', and 'going places'. These are contrasted with the "rootlessness and sadness of migration", situations summarised by phrases such as 'rupture', 'loss of contentment', 'facing the inevitable', 'failure' (Fielding 1992b p205-207).

These phrases suggest the individualism of mobility and how this may be associated with beneficial and positive outcomes and perceptions of mobility. Yet these phrases also reveal mobility as a double edged sword, often the individualism of mobility being associated with those sentiments traditionally described as alienation or anomie.

The concept of alienation has been variously discussed by a range of authors'

> "It may be used to convey feelings of powerlessness, purposelessness and estrangement from one's own groups or institutions. It expresses the predicament of people who, in impersonal situations created by modern institutions, have lost control of, and therefore meaning in, their lives. It is however, a system or

> societal property, albeit one that is manifested at the level of the individual" (Johnston, Gregory and Smith 1989 p11).

As a concept, the term is relevant to behavioural concerns with the formulation of decision making, yet the concept derives its influence mainly from Marxist and institutionalist perspectives. Marx describes alienation as a feature inherent in the capitalist mode of production.

This condition stems from a loss of control over the processes and products of human labour. In this scheme, alienation is reinforced by increased division of labour and the commodification of people and the relationships between them (Marx 1933). That alienation is a process not necessarily derived from such totalising structural frameworks, but one which contains an element of human agency, is reflected by other works (Weber 1930; Durkheim 1933; Simmel 1971; Lukes 1973).

> "All these thinkers are concerned with effects of the loss of traditional society or community and with the likely repercussions of the loosening of the bonds that tie an individual to the social order. It is in this overwhelming individuality and modern institutional responses to collective needs that they see the manifestation of alienation" (Johnston, Gregory and Smith 1989 p11).

Themes such as 'individualism' and 'alienation' have a particular relevance to the process of ISLM in the sense that they encourage attention to be placed upon the disjuncture between emerging economic structures and contemporary social structures. However, the manifestation of this mismatch has tended to be approached, solely at micro level and in a quantitative sense, i.e., in the form of stress research, as discussed in chapter three.

Within population geography as a whole, behavioural approaches have been criticised for their paramount focus on "the micro-scale antecedents of individual migration behaviour" (Golledge 1980 p19). Such a standpoint can be criticised for paying insufficient attention to the social, economic and political contexts of individual behaviour. Garrick comments that behavioural perspectives have had more influence at internal and inter-regional scales than at the international level (Garrick 1991).

The behavioural approach can be criticised for the weight given to personal autonomy in decision making (Murie 1975; Wiseman and Roseman 1979; Bassett and Short 1980). The approach undervalues the full range of obligations and constraints that may be in place in

the physical, economic, social, cultural or political environment and as such must be viewed as a necessary but not sufficient response to earlier nomothetic models of migration.

2.1.3 Systems approaches

A more integrative approach to the migration process is developed with a systems framework, for example, the work of Mabogunje (Mabogunje 1970). The desire of such a framework is to combine political, social and economic factors within a circular migration system, in which there is interaction between inter-related variables in a self modifying system (Mabogunje's seminal article was based upon rural-urban migration in LDCs, although the principles of the approach can be applied more widely). The value of the approach is to highlight the interaction between different variables (figure 2.5).

In Mabogunje's model the emphasis is upon: the operation of external stimuli in initiating migration (for example, social or economic stimuli); the influence of institutional structures which modify migrant flow (which may be social, economic or administrative); the role of adjustment mechanisms operating at origin and destination in response to migration and closely connected with flows of information between origin and destination. The role of migration channels is important in differentiating the cost, distance and direction of migration.

While a systems approach can be criticised for not adequately explaining specific processes and individual decision making, the approach draws out potential constraints which may operate on migrants. A prime concern with these constraints is reflected in the work of a number of authors. For these authors the question of constraint tends to arise around certain issues such as access to resources, public policy, labour migration and residential mobility. For some the role of constraints as a defining force in migration is intimately related to class position and these studies adopt a Marxist based perspective. For others the question of constraint is less a reflection of the structure of society as a whole, rather than the operation of specific societal institutions.

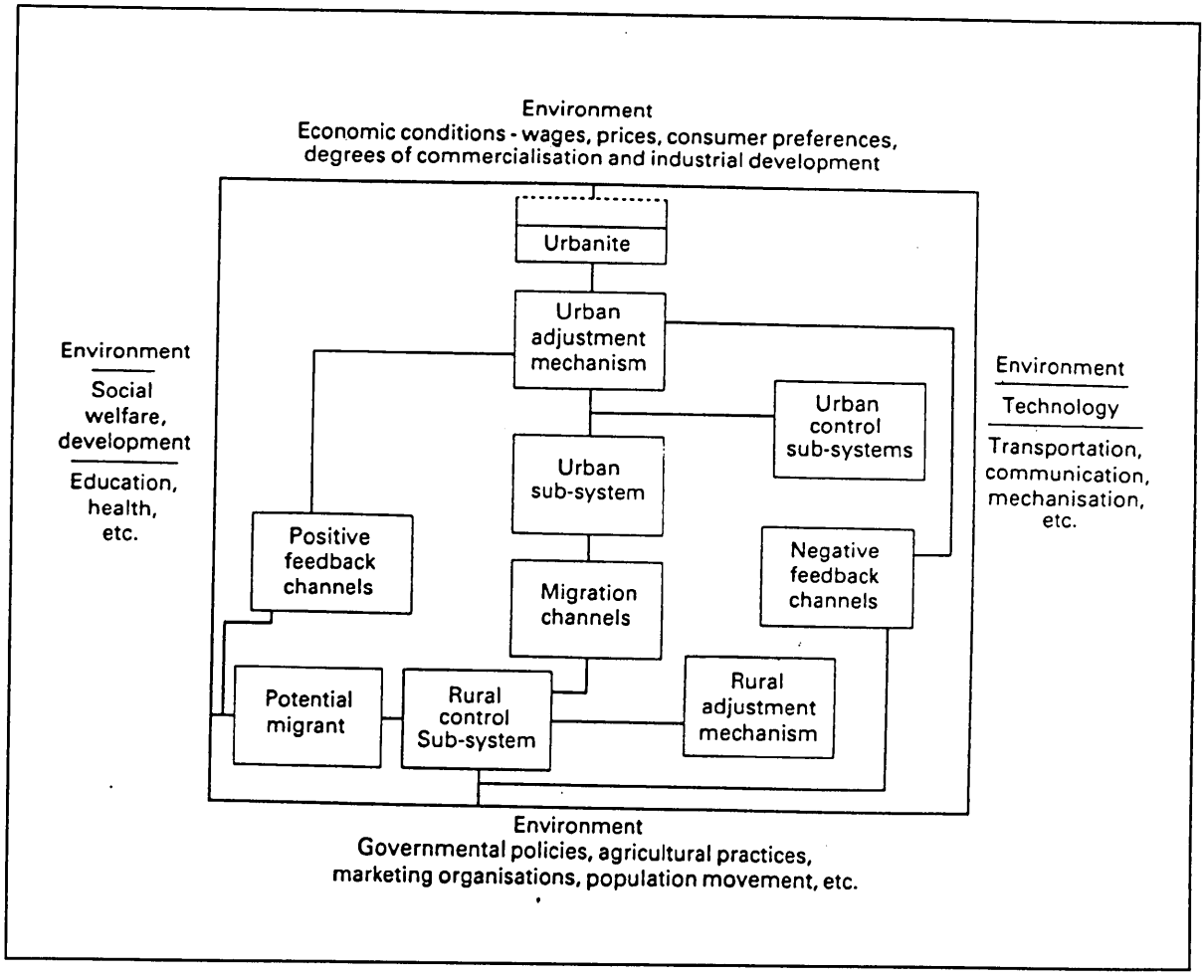

Figure 2.5 A systems approach to the study of migration from rural to urban areas
Source: (Mabogunje 1970)

2.1.4 Marxist approaches

Marxist perspectives have been influential in the explanation of international labour migration. In contrast to early nomothetic and human capital models (which implicitly or explicitly emphasise the free choice of potential migrants faced with a migration opportunity in a market situation), Marxist models emphasise controls on migration, reflecting the operation of a capitalist mode of production and the order this mode imposes on world political and economic structures (e.g., the work of Petras 1981; Miles and Satzewich 1989).

Human capital models perceive international labour migration as the working out of the laws of supply and demand, towards an equilibrium point, with labour satisfying the demand for workers in a growth area and at the same time alleviating population pressure (supply) in a less economically robust area. Contrarily, Marxists view international labour

migration as controlled by the capitalist state and as a mechanism in a process assigning access to land or capital for the garnering of profit.

Petras, drawing on Wallerstein, charts international labour migration across a world geographical core, semi periphery and periphery (Wallerstein 1974; Wallerstein 1980; Petras 1981; Wallerstein 1983). These labour movements represent the manipulation of working classes from a core, periphery or semi-periphery within a global capitalist framework. Such frameworks criticise the emphasis upon the autonomy of the individual in migration decision making.

Such studies also fault the division of population studies into different scales and types of migration or migrants, without seeking for structural commonalties beneath diverse migrations. This insight, of such structuralist works, is particularly valid when ISLM is considered, with a variety of mobility types interconnected and tied together by their common economic genesis (as discussed in chapter six).

However, Clark reveals that Marxist perspectives have little to say about migration at the local or regional level with managerialist theories based upon the operation of residential housing markets and the human capital approaches having more explanatory purchase (Clark 1986). One important contribution of these Marxist based approaches is their exhibition of the global reach and inter-connectedness of migration processes.

2.1.5 Institutionalist approaches

In common with Marxist approaches, institutional approaches see the decision to migrate as taking place within a highly structured context. With regard to institutionalists, migration patterns do not reflect individual decisions of migrants within a free market, but are a result of the competition of different power groupings within society. However, such studies contrast with Marxist approaches in their conceptual understanding of the structure of these power relations.

This approach emerges largely from perceptions of class relations and social differentiation developed by Weber (Weber 1947). In this scheme, the structure and control of migration has a fragmentary identity and is built around the distribution of power and status between competing interest groups and the control and management of the institutions in which power and status are embodied.

In such managerialist works attention is paid to the administration of these resources at different spatial scales (Harloe 1977; Cox 1979; cited in Lewis 1982). However, perhaps the dominant influence of this perspective has been upon urban residential mobility, that is, at a local or regional scale, and with the operation of associated institutions, such as building societies, estate agents etc., which control the allocation of housing resources (Rex and Moore 1967). At a national and international scale this approach has been influential in studies of ISLM, which are now considered.

2.2 International skilled labour mobility studies

The following section examines the theoretical threads embodied in the ISLM literature and the principal concepts and models which have been developed or utilised in the pursuit of an understanding of ISLM. The table below represents a simplified typology of the main geographical research into ISLM (table 2.2). Studies are predominantly within a broadly institutional or managerial frame of reference. That is not to say that influences from other approaches have not been essential in the development of these studies. However, their contribution has been predominantly in providing a broader context and framework for research.

As indicated in the introduction, and illustrated in table 2.2, empirical evidence of mobility processes are thin on the ground. While evidence of processes underlying mobility is scant, greater material is available on patterns of mobility. However, this material is largely restricted to skilled international migration. This literature and its findings are outlined following the discussion of the theoretical basis of the literature.

2.2.1 Institutionalist contributions

Findlay & Gould in their research agenda for SIM state the need for...

> "recognition that a new framework is required for the analysis of contemporary skilled international migration. Skilled movements are no longer adequately explained either by traditional macro-economic theories of migration or by micro-scale socio-psychological perspectives. Instead there is a need to focus on the range of institutional mechanisms controlling and promoting the new patterns of skill transfer which have emerged" (Findlay 1987; cited in Findlay and Gould 1989 p5).

Author/s	Geographical Area	Theoretical Composition	Main concepts/models
Beaverstock (Beaverstock 1990; Beaverstock 1991; Beaverstock 1992a; Beaverstock 1992b)	South East of England UK New York	Institutional Behavioural Structuralist	Internal Labour Markets Career Paths World-systems, NIDL, Global Cities
Cormode (Cormode 1994)	Canada Japan	Institutional Structuralist	Internal Labour Markets NIDL
Findlay (Findlay and Stewart 1986; Findlay 1987; Findlay 1988; Findlay and Gould 1989; Findlay 1990; Findlay and Garrick 1990; Findlay 1991; Findlay 1993; Findlay et al 1994)	Scotland UK Mid East	Institutional Behavioural Structuralist	Internal Labour Markets, Migration Channels Career paths World-systems, NIDL, Global Cities
Ford (Ford 1992)	UK-domestic and international	Behavioural Institutional Structuralist	Stress model, Career paths Internal Labour Markets World-systems, NIDL, Global Cities
Garrick (Findlay and Garrick 1990; Garrick 1991)	Scotland	Institutional Behavioural Structuralist	Internal Labour Markets, Migration Channels Career Paths World-systems, NIDL, Global Cities
Gould (Gould 1987; Gould 1988b; Findlay and Gould 1989	UK	Institutional Behavioural Structuralist	Internal Labour Markets Career paths World-systems, NIDL, Global cities
Salt (Salt 1983; Salt 1984; Salt and Findlay 1989; Salt 1990; Salt and Kitching 1990a; Salt and Kitching 1990b; Salt 1991; Salt and Kitching 1992; Salt and Ford 1993)	South East of England UK- domestic and international	Institutional Behavioural Structuralist	Internal Labour Markets Career paths World-systems, NIDL, Global Cities
Shuttleworth (Shuttleworth 1993)	Rep. Of Ireland	Institutional Structuralist	Internal Labour Markets NIDL

Table 2.2 Geographical research into ISLM
Source: author

This perspective has principally arisen from labour market studies and the importance attached to the internal labour markets (ILMs) of TNCs for the migration of skilled labour. Salt has commented that' "theories to explain internal migration in advanced industrial countries have largely failed to get to grips with two fundamental inter-related phenomena: the organisation of employment and the development of internal labour markets (ILMs) by employers" (Salt 1990 p53). Salt & Findlay discuss the importance of company organisation and structure and its relationship to SIM, examining the spatial and hierarchical organisation of companies (Salt and Findlay 1989) (figure 2.6).

Petit's model of firm organisation, in which the role of a technical core of workers in giving the company its commercial advantage is cited (Petit 1967). This framework describes the differentiation of labour within a firm into distinct occupational groups with varying levels of education and skills, whereby "the disaggregated nature of the modern labour market, in which specialist skills and training mean that the workforce is segmented into self-contained non-competing groups" (McKay and Whitelaw 1977; Salt 1984 p641).

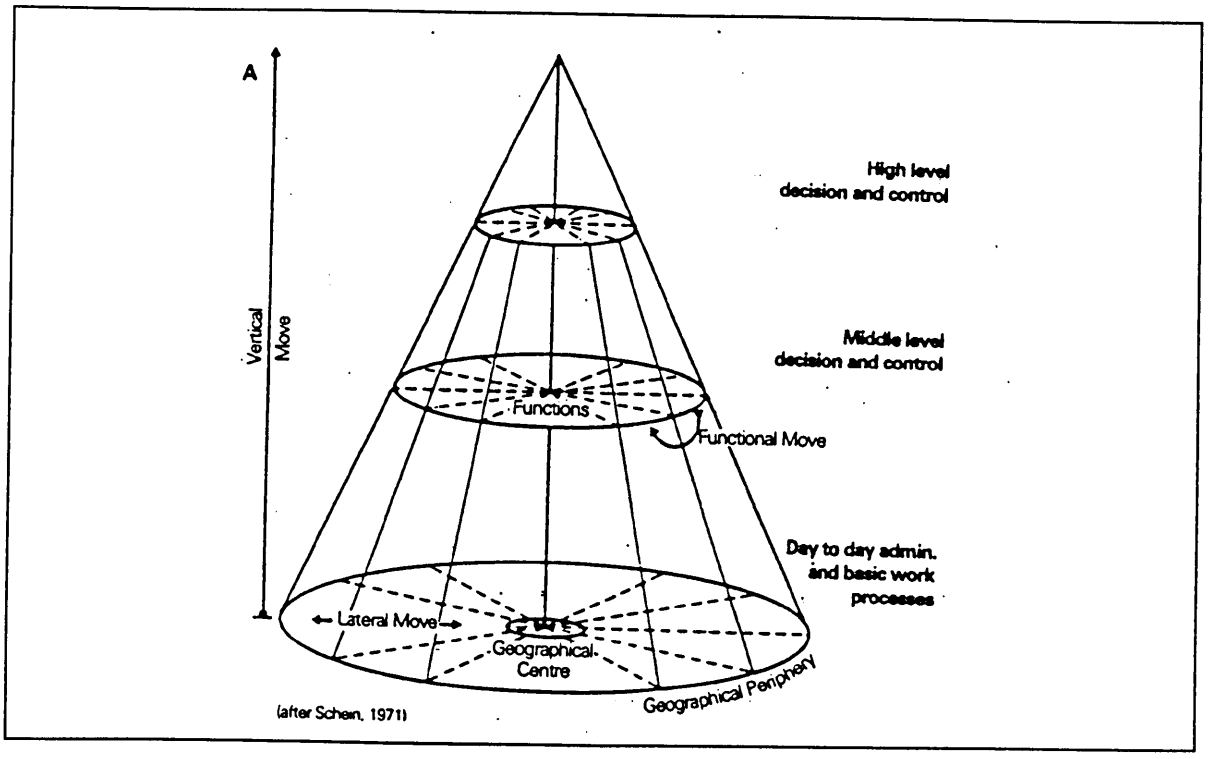

Figure 2.6 The structured internal labour market of a firm
Source: (Salt and Findlay 1989)

With this feature of internal organisation, it is noted that the core group within TNCs, is necessarily, geographically mobile. This is because the locations of production within TNCs are geographically separated. In order that such TNCs can function effectively, it has been suggested that labour migration (particularly of skilled staff) will occur (Salt 1988). For managerial and technical workers, the career path is put forward as an important factor in the explanation of skilled international migration. The role of a core labour force is charted in work by Atkinson, Curson and Darling & Lockwood in the description of a flexible workforce (Atkinson 1985b; Curson 1986; Darling and Lockwood 1988).

In developing the mechanism by which this geographical mobility of a core workforce proceeds, Salt presents as a key explanatory factor the role of the career and the career path. It is stated that the "concept of career is valuable in helping to understand much labour migration" (Salt 1984 p641) and that there is a relationship between "the career path of the individual, the nature of the job and the migration demands imposed by the organisation of work" (Salt 1984 p634).

Where the career follows a path within the ILM of a TNC, then that path will potentially lead, not only to career mobility, but also to spatial mobility. In this way career path migration'

> "implies that the geographical movement of workers is influenced by the locational decisions of large firms in relation to their strategy for the spatial division of labour. The system is sustained by the career aspirations of employees whose ambitions for promotion and career satisfaction can only be achieved by international mobility" (Findlay and Gould 1989 p4).

Complementing the focus of Salt upon the ILMs of large companies, Findlay and Findlay & Garrick have developed a broader schema for evaluating skill transfers (Findlay 1990; Findlay and Garrick 1990). They denote distinct migration channels which mould British skilled migration, with different mechanisms operating for migrant selection and placement (figure 2.7). The principal channels are presented as the ILMs of large firms, companies with international contracts and international recruitment agencies.

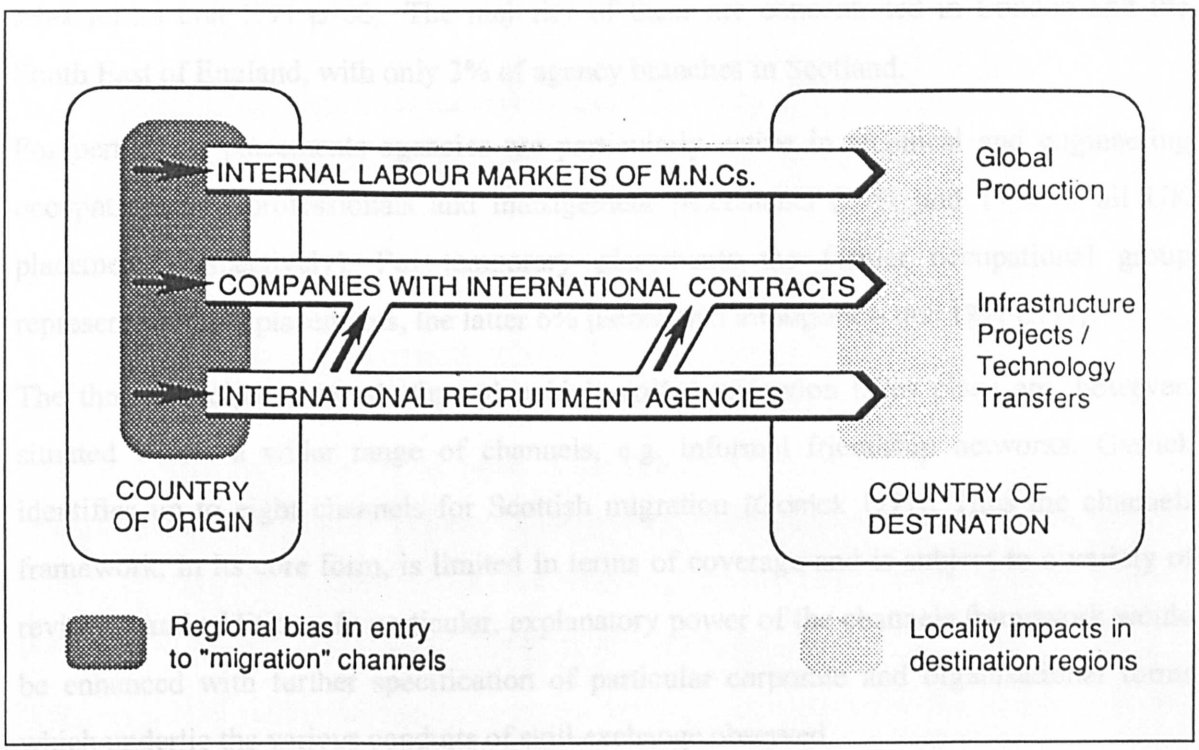

Figure 2.7 The mechanisms 'channelling' skilled migrants
Source: (Findlay and Garrick 1990 p179)

The latter two are seen as largely occurring as a result of demands for skilled labour arising from the less developed countries and being met by the adoption of a system of short-term contract migration using, notably, the services of international recruitment agencies (Findlay and Gould 1989 p5). Under this model, companies with international contracts represent a different character of corporate structure to the large TNCs, in which external recruitment is emphasised.

Findlay and Stewart indicate that recruitment agencies often function under the auspices of companies with international contracts, thus being loosely co-opted into the firm's corporate structure (Findlay and Stewart 1986). Recruitment agencies may also operate in response to the needs of overseas government bodies or private organisations (Gould 1987). These employers are more geographically fixed than the previous channels. The channel identified thus represents a response to the skill needs of an additional type of corporate or organisational structure.

Within the UK, a number of specialist and executive employment agencies operate in the fields of engineering, computing, construction & civil engineering, accountancy and management, with over 17,000 employment agency licence holders as of December 1990. Although, only around 11,000 are active in the 'mainstream' activities (Economist Intelligence Unit 1991 p108). The majority of these are concentrated in London and the South East of England, with only 3% of agency branches in Scotland.

For permanent placements agencies are particularly active in technical and engineering occupations and professionals and management placements (29% and 17% of all UK placements respectively). For temporary placements the former occupational group represents 16% of placements, the latter 6% (Economist Intelligence Unit 1991 p111).

The three principal channels through which skilled migration takes place are, however, situated within a wider range of channels, e.g. informal friendship networks. Garrick identifies up to eight channels for Scottish migration (Garrick 1991). Thus the channels framework, in its core form, is limited in terms of coverage and is subject to a variety of revisions and additions. In particular, explanatory power of the channels framework would be enhanced with further specification of particular corporate and organisational forms which underlie the various conduits of skill exchange observed.

In developing an appreciation of variability of skill exchanges, the author, along with other more recent studies, highlights the need to integrate the role of business travel alongside that of skilled migration (Beaverstock 1992b; Ford 1992; Salt and Ford 1993; Findlay, Lelièvre, Paddison, *et al.* 1994).

> As Cormode notes: "the longer-term relocation of expatriate personnel needs to be understood as one possible strategy of many, not as an end in itself. Such and understanding would yield a richer conceptulization of the importance of various

forms of employee mobility in the organization of co-ordination of international production"(Cormode 1994 p87).

Within a modified channels framework each channel can be viewed as a relationship which creates a potential for mobility. That mobility may take the form of migration or it may take some other form of movement such as business travel or semi-permanent mobility.

In addition to investigation of the variability of migration processes for skilled workers across temporal scales, opportunities are present for assessing the utility and significance of the differentiation of the migratory characteristics of skilled workers on a spatial basis, that is between domestic and international mobility. An aspect of concern with the ISLM literature is its preoccupation with international migration.

An international spatial division of labour suggests organisations operating across a variety of levels in space: regional, inter-regional and international (Massey 1984). Consequently the movement of skilled labour may take place at a variety of spatial scales. Study of ISLM must examine the processes as not solely of significance at an international level but as processes operating across spatial scales. Thus channels may be domestic or international or both.

A further institutionalist perspective that has emerged within ISLM literature is that examining the role of the state in controlling flows of skilled labour. An important way in which the state influences labour flows is through control of immigration and emigration. The administration of work permits in the UK has been studied, although primarily as a source of data on migrant flows and within a managerialist rather than a Marxist perspective (Salt and Kitching 1990b; Salt and Ford 1993).

With regard to skilled immigration to the UK, a Work Permit Scheme is run by the Department of Employment for workers whose position cannot be filled from within the UK or European Union (EU). The scheme is restricted to the following categories: those with degree level or equivalent professional qualifications, senior executive staff, highly qualified technicians with specialised experience, employees of multi-national companies who come to the company's UK office for work experience/ career development, keyworkers, entertainers, sports-persons and models, and others whose employment is in the national interest. Work permits are not issued for jobs of a manual, craft, clerical, secretarial type or for resident domestic work. Multi-national employees are issued work permits for up to three years, while keyworkers (representing specialised skills or

knowledge and not necessarily with academic or professional qualifications) are issued permits for limited periods.

The application procedure for work permits was streamlined in 1991 following a review of existing procedures and lobbying from employers organisations. While remaining restricted to posts requiring highly qualified and skilled persons, the modifications simplify employers administrative requirements for bringing non EU staff to the UK (CBI ERC 1988a; CBI ERC 1989f; CBI ERC 1990d; CBI ERC 1991h; CBI ERC 1991k; CBI ERC 1991e; CBI ERC 1991b; CBI ERC 1992a; Lawson 1994; The Economist 1994i).

The role of the state has also been studied in structuring both local and international labour markets within the Republic of Ireland (Shuttleworth 1993; Shirlow and Shuttleworth 1994). The role of the state is further commented upon by Salt and Ford, indicating that major settlement immigration countries (i.e. Australia, Canada and the USA) have increasingly revised immigration policies to favour the immigration of highly skilled labour (Salt and Ford 1993 p293).

The main focus of the above works has been upon the organisational structure of the internal labour markets of large TNCs. However, a concern with meso level institutions and mechanisms of ISLM, as reflected in the above works, are explicitly set within a wider frame of reference and are related to differing theoretical foundations.

The studies on ISLM discussed above, viewed in context of other research perspectives on labour migration, serve to make connections between these approaches through the examination of the relationships between the company structure and the mobility of the individual employee. In this way'

> "Behavioural approaches from Social Geography and managerialist approaches from Urban Geography could be integrated with the growth of theory in Development Studies and Demography to generate explanatory models of international migration and also provide a context within which particular migration networks might be explored" (Gould 1988b p382).

For example, theories on the new international division of labour (discussed below) are related to an internal spatial division of labour within the ILMs of TNCs (Salt 1988). The following section examines in greater detail the contribution of structuralist approaches to

an understanding of processes of ISLM. However, reference is first made to behavioural work in understanding ISLM.

Behavioural approaches, until recently, have had little direct influence on the study of ISLM. This is despite a concern with career paths in which the actions and decisions of the individual are placed alongside the organisational structure of the international firm. Salt has addressed the role of the individual in discussing the importance of career paths, but the discussion of the character and nature of career paths in terms of the motivations behind them is limited.

Greater examination of the role of the career path is required if as Salt suggests company organisation in space is serviced by the career aspirations of individuals. The model of the career path calls for links with behavioural approaches. Yet, this link has been problematic...

> "It is abundantly clear that recent research has been over-dependent on secondary sources to the almost total exclusion of primary research. As a result behavioural studies of SIM are few in number by comparison with macro-analytic analyses" (Findlay and Gould 1989 p6).

However, a growing awareness of contributions from management studies and Occupational Psychology has stimulated geographers in this field. Thus Ford has examined, at the micro level, the relationship between mobility and stress (Ford 1992). While drawing on cognate disciplines, such work embodies many of the concerns of a more traditional behavioural geography.

A further example is that of Beaverstock, who has carried out an in depth study of a small number of British expatriates in New York (Beaverstock 1992b). This study permits a qualitative understanding of the social world of a particular group of business elites. In doing so, emphasis is placed on the role of cultural and social amenities within global cities, acting as an important pull factor for migrants, and the agglomeration, or 'networking' benefits of working within a concentration of other professionals and managers.

That the relevance of behavioural ideas lies in refining migration theory (Woods 1985) and that behavioural approaches have no strong theoretical basis from which to address ISLM are thus questionable. Nonetheless, while there is a need for consideration of the individual

dimension with which behavioural approaches have been concerned, such a consideration requires widening from a micro-scale focus on the individual to an encompassing of the broader socio-economic context within which ISLM takes place.

This is exemplified in the work of Snaith on the role of dual careers on mobility, who, commenting on geographical research, states that, "a rather disturbing feature of this work has been the implicit assumption that household moves are made within the context of a single career" (Snaith 1990 p155). In turn a model of mobility decision making is presented for dual career couples indicating the complexity of the decision making surrounding a decision to move.

Recognition of the social context of ISLM, is however, notably absent in recent work (for example Boyle, Findlay, Lelièvre, *et al.* 1994; Cormode 1994). The predominant concern of geographers still rests with the economic context of ISLM. As a result, important issues remain open for discussion, such as the impact of mobility on the social lives of individuals and their families. This theme is returned to subsequently.

2.2.2 Structuralist contributions

2.2.2.1 World systems, the new international division of labour and global cities

World systems theories represents one particular school of social science which provides a useful insight into the relationship of Scottish skilled mobility and the internationalisation of economic activity. The core member of this approach is Wallerstein, although others have developed this approach in relation to international labour migration (Wallerstein 1974; Fröbel, Heinrichs and Kreye 1980; Wallerstein 1980; Petras 1981; Wallerstein 1983).

> "The main characteristic of their theories is the idea that an individual economy or country is only one part of a complete and structured world system. In order to understand what is happening in that country we have to see its internal developments as the effects of what is happening to the international economy as a whole" (Harris 1988 p29).

An approach within this school of particular relevance to understanding the form and development of skilled mobility, is the work of Fröbel, Heinrichs and Kreye (Fröbel, Heinrichs and Kreye 1980). This group identified a particular process occurring in the late 1960s and early 1970s, within the context of a world-wide capitalist system, in which the world economy seemed to be undergoing a process of global restructuring. This

development is seen as representing... "a system for production on a world scale in which even greater numbers of people are integrated into activities carried out by large international producers of goods and by international firms which service these producers" (Cohen 1981 p288). This development was termed the new international division of labour (NIDL).

This development related to the ability of manufacturing production to be increasingly fragmented and divided on an extensive geographical basis, with different components of the production process being subdivided between industrialised and developing countries. The development of a world market in hand with the growth of TNCs is seen as important actor in this process, with TNCs, producing and trading from a geographically dispersed range of plants, and commanding an important role in accounts of the development of the NIDL. Table 2.3 charts the principal factors acting as a basis for the NIDL.

Principal factors underlying the 'new international division of labour
• The growth of a huge reserve of labour available in Third World countries to be employed in new industrial processes at low wages and under poor terms of employment.
• The division and subdivision of production processes developed to a stage where each operation can be performed with minimal skills
• The development of transport and communications techniques enabling corporations to plan their production on a world-wide basis.

Table 2.3 Principal factors underlying the 'new international division of labour
Source: (adapted from Harris 1988 p30-31)

General criticisms of structuralist frameworks have been raised earlier. Further, NIDL approaches have been criticised for their focus on production-oriented investment from core to periphery, while not fully addressing the bulk of FDI flows between core countries (Schoenberger 1988; Boyle, Findlay, Lelièvre, *et al.* 1994). However, for the purposes of understanding ISLM, world systems theory and the account of an NIDL, points out the division of particular sets of activities and skills between different regions of the world and, importantly, an increasing capacity for international economic relationships.

One implication of the NIDL has been the transferral of traditional manufacturing capacity out of Scotland, for example steel production and shipbuilding. However, while the NIDL is responsible, at least partly, for a redefinition of the relative composition and quality of economic activities in Scotland, it is also implicated in the fact that the remaining industrial formations are increasingly linked to an international economic network.

Findlay & Gould note that Petras has attempted to link migration analysis with a world economy approach (cited in Petras 1981; Findlay and Gould 1989 p4). This work "constitutes a combination of reserve army of labour ideas, with ideas of the 'new international division of labour', and as such is an important link in the development of migration theory" (Garrick 1991 p30).

A global labour market is suggested as... "a paradigm for studying migration in global and historical perspective" (Petras 1981 p45). Petras states that it is... "possible to identify a series of labour-capital exchanges which constitute a world labour market and that this global labour market has been integral to and a consequence of, the division of the modern world economy" (Petras 1981 p59). However Petras has been criticised for not adequately accounting for the increasing numbers of transfers of skilled workers within this global labour market (Findlay and Gould 1989). While not specifically dealing with skilled mobility, Petras does indicate that the material manifestation of economic internationalisation is paralleled by a movement of human capital as well.

Work which has paid particular attention to the mobility of skilled labour within the NIDL is associated with the formation of world cities. Friedmann, presenting a world city hypothesis as a framework for the spatial organisation of the NIDL, denotes a hierarchy of world cities within the core/semi-periphery/periphery framework, which act as points of destination for large numbers of domestic and international migrants (Friedmann 1986).

In turn, Sassen-Koob (Sassen-Koob 1987; Sassen-Koob 1988), in addressing how migration has been affected by the reorganisation of the world economy, indicates a rapid growth of service industries in world cities, inferring that with specialised services and technical employment concentrated within these locations, international migration of skilled labour will occur between such cities. The role of world cities and their need for a supply of skilled labour is discussed by King, for the case of London and more generally by Beaverstock, the latter concentrating more specifically on ISLM (King 1990b; King 1990a; Beaverstock 1992b; Beaverstock 1992a) (figure 2.8).

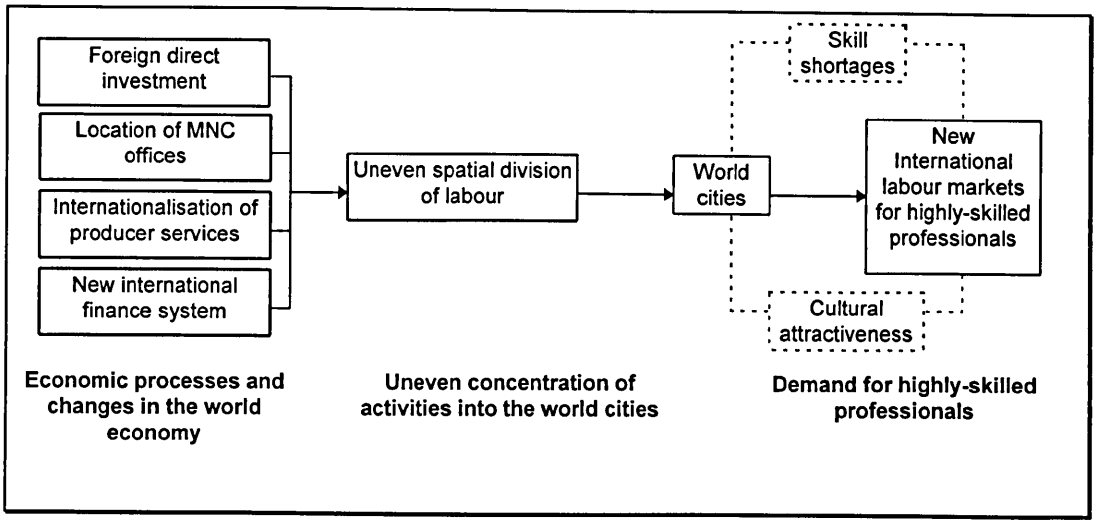

Figure 2.8 New international labour markets for highly skilled professional and managerial workers
Source: (after Beaverstock 1992a p4)

Beaverstock comments that changes in the geography of foreign direct investment, headquarters office location, the internationalisation of producer services and the emergence of an international financial system have all been implicated in a new international division of labour relating specifically to managers and professionals. It is stated that... "The main characteristic of this division of labour is that highly-skilled professional and managerial labour are concentrated in certain key locations around the globe; that is within the world cities (Cohen 1981; Friedmann and Wolff 1982; Dear 1986; Friedmann 1986; Thrift 1987; Thrift 1989; Sassen 1991)" (Beaverstock 1992a p17). In addition, the basis for the concentration of skilled labour in world cities is seen as not solely connected with the concentration of corporate activities, thus... "The attractiveness of working, and living, in a world city, like New York, Los Angeles, Tokyo or Paris, is strengthened by the possibility of higher wages and by the cultural facilities and amenities offered by them" (Beaverstock 1992a p17).

To summarise, world-systems based theorists have outlined the geographical divisions of TNC activities and the accompanying NIDL. The structure of this geographical division has been further delimited by the recognition of the role of world cities in the international economic structure. In considering the dynamics of world cities, literature within this vein has noted the importance of skill transfer to these locations. International skill mobility has been identified as a repercussion of TNC growth and the NIDL.

With reference to the UK, Massey has indicated that a growth in producer services has encouraged the concentration of an 'elite' strata of professional labour in the South East of

England (Massey 1988a). Beaverstock has in turn identified "the principal characteristic of this elite labour force"...as... "its links with the international labour market through global mobility" (Beaverstock 1992a p19). However, Miles & Satzewich criticises this approach in general for a failure to "adequately specify the significance of the role of the state in organising and regulating international migration flows" (Miles and Satzewich 1989 p19).

On the other hand, criticisms of structuralist approaches have proposed that consideration of the role of the TNC as opposed to the state is required in the consideration of the migration of skilled migrants. Hence,... "Although states continue to have power to issue or withhold work permits and entry visas, the composition of skilled migration flows has come to be much more critically determined by those who select candidates for expatriate postings within large firms and the executives of international recruitment agencies" (Gould 1987; cited in Findlay and Gould 1989 p4).

The role of the state in terms of politics or the stratifying role of immigration policies, has been largely absent in discussion of ISLM. For other forms of population movement, these issues are as apparent as the economic context of mobility (Gould and Findlay 1994b p18). The fact that political and immigration policy developments have largely satisfied rather than conflicted with demands for ISLM, has much to do with the attention of geographers on the economic context of ISLM. A clear exception to this, is the case of skilled emigration from Hong Kong (Findlay, Li, Jowett, *et al.* 1993).

A further criticism of structuralist approaches is the extent to which control of events is seen to be dictated by either the state or the controllers of capital, that is, the focus of explanation is put upon the structures and little scope is given to the agency of the individual migrants. Massey states that "on both theoretical and empirical grounds it can be argued that individual and structural elements are simultaneously involved in human migration" (Massey 1990 p7),

Structuralist approaches have been criticised for generalising tendencies, with presentations of a global labour market being criticised as an oversimplification (Clarke 1986). A need for a more sensitive understanding and accounting for relevant features has been called for, with Child-Hill claiming that NIDL must be more fully detailed in relation to specific national industries and firms, with examples set in historical and empirically verified contexts (Child-Hill 1987).

This review makes two further criticisms of the structuralist framework, in so far as its use in explaining ISLM. Firstly, the discussion of skilled mobility in the context of world cities fails to represent the spatial diversity of ISLM, and the significant role of ISLM in areas outside these cores, as indicated in this thesis. Secondly, the approach fails to fully appreciate the temporal diversity and the transient nature of much ISLM to world cities and elsewhere.

Associated with the first point is evidence of a less spatially concentrated structure within services than envisaged in the world cities literature. Marshall and Green indicate that the separation of production from control functions has changed, with the spatial concentration of corporate services within London increasingly balanced with the development of these functions in other regions (Marshall and Green 1990).

Cullen and Fell argue that diseconomies of agglomeration are responsible for the decentralisation of corporate offices from London (Cullen and Fell 1989). Marshall and Aksoy point to the role of corporate restructuring in delegating management functions from London, to operating businesses in the Midlands and North of England, and Scotland (Marshall and Aksoy 1992).

Jones, Lang, Wootton indicate that service firms accounted for 53% of London office decentralisation in 1990 and 83% in 1991 (Jones Lang Wootton 1991). Most decentralisations occurred to suburban London, although moves to the rest of the UK are increasingly important, the latter with 42% of all moves in 1991. Between 1983 and 1993 some 25% of large moves from central London had been, or were planned to be, outside of the South East of England, with 2% of these to Scotland (Jones Lang Wootton 1991 p10).

More generally, the failings of a structuralist approach in explaining ISLM are derived from an emphasis upon the physical structures of TNC growth and the impact of the NIDL on the peripheral labour force, at the expense of developments in the organisation of core human resources within international economic activities. In other words, the focus within this framework has been upon the reorganisation and re-division of the physical production chain of TNCs and the impact of this upon the shopfloor at home and abroad. While this is important, more fundamental for the purposes of explaining ISLM has been the necessary development of new managerial relationships between the different elements of the production chain.

2.2.2.2 From Fordism to flexibility

A second debate within a largely structuralist stance has been concerned with a transition occurring within the organisation of production. This is a transition in which a pervasive change of organisational rules along flexible lines, transcends the various facets of economic organisation. A key area of concern within these approaches is the division of labour within production or the technical division of labour. This section examines the relationship of ISLM with systemic economic change and those theories charting a movement from Fordism to post Fordism.

Two schools emerge as important in indirectly explaining the role of ISLM. Both of these see patterns of economic change such as those discussed above, as associated with alteration in the form of economic organisation or regulation, that is, from Fordism to a new era which has been variously defined as neo-fordism, post-fordism and flexible specialisation or accumulation (Meegan 1988 p138). The first school is the regulationist school represented by authors such as Michel Aglietta and Alain Lipietz (Aglietta 1979; Lipietz 1985). The second main school, the institutional school revolves around the work of Michael Piore and Charles Sabel (Piore and Sabel 1984).

Fordism can be generally defined as a system based on mass production and mass consumption. Fordist mass production is characterised by a labour process based around the fragmentation of tasks and the assembly line. In turn, Fordist mass production is regulated by a mass market bolstered by Keynesian welfare measures (Meegan 1988 p145). Differences exist between the two schools in defining and identifying both Fordism and emergent 'regimes', however what both see as the core of new developments are changes in production technologies. The drive behind new production processes is the integration of computer technology into an increasingly wide range of activities in the workplace (Morris 1988).

A Fordist system can be characterised by large-scale production units operating assembly-line manufacturing techniques, which produce large volumes of standardised products for a mass market. In turn, this type of production is characteristic of particular industrial activities, such as vehicle manufacture. Dicken comments that, "A number of writers now argue that this Fordist system of production (and its associated organizational structures) is in 'crisis' and is being replaced by new modes of production. The most important characteristic of the new system is flexibility: of the production process itself, of its

organization within the factory and of the organization of the relationships between customer and supplier firms" (Dicken 1992 p116).

More specifically it is the introduction of information technologies (the integration of computer technology and communications technology) in both machines and production processes which allow a higher degree of control and manipulation of the production process (The Economist 1994s). This control allows a reformulation between the scale and cost of production. In turn, the introduction of such technologies introduces the potentiality for reorganisation of many aspects of the production process at a variety of geographical scales.

However, the emerging flexible specialisation of the regulationists is defined as a production system which encompasses not only the organisation and nature of production technologies within firms, but also the way firms interact with each other and their labour force. An important part of the emergence of flexibility is the way labour is used on a flexible basis. As Dicken comments...

"In fact, it is a mistake to regard flexible manufacturing systems in a narrowly 'technological' light. Most of the benefits accrue not so much from the technology itself but from the organizational changes it involves. In other words, flexibility is more an 'organizational' property than a technical one" (Dicken 1992 p118).

There is debate over the extent to which this flexible potential is being realised. In addition it is also argued that depictions of Fordism are too sweeping a characterisation of previous systems of production and that forms of production more akin to the less structured flexible methods have often found a place in some industries. As such, the reported transition between the two modes is over simplistic and un-representative of more complex and variable arrangements of industrial production (Gertler 1988; Sayer 1989).

However, this review asserts that the debate is significant in understanding processes and trends in ISLM, in particular, the relationship presented between the flexible use of labour (including skilled labour) in conjunction with and intimately associated with, new production strategies and techniques. In considering the regulationist debate alongside the aforementioned ideas surrounding world systems, NIDL and global cities, the role of skilled, flexible, labour becomes more central than with either Petras or Sassen and of greater value in understanding the processes of ISLM.

2.2.2.3 The 'flexible' use of labour

"Flexibility... has become a rather broad term under which different theorists have subsumed a range of different developments" (Allen 1988b p185). In this section the notion of flexibility in relation to the use of skilled labour and the restructuring of working lives along flexible lines is developed. Attention is upon...

> "changes occurring in the social composition of the labour force and the breakdown of established labour market patterns" ...and the... "reorganisation of workforces within firms to achieve greater 'flexibility'" (Allen 1988b p185).

Atkinson has argued that firms are dividing their workforces into core and peripheral components (Atkinson 1985b; Atkinson 1985a; Atkinson and Gregory 1986). "Core workers comprise the full-time, permanent employees of a company who enjoy job security and high earnings in return for performing a wide range of tasks that cut across 'old' skill demarcation lines" (Allen 1988b p201).

The key feature of these workers is their functional flexibility and typically they are managerial and professional staff and multi-skilled workers. Importantly these workers are not readily available in the job market and so are particularly protected from and separated from, the external labour market. Peripheral groups of workers surround this core group. These jobs are of a less skilled nature and offer more limited career opportunities. The jobs may be full or part time. The key characteristic of this secondary group is that they are numerically flexible. This reorganisation of the workforce as part of a wider process of 'flexibilisation' is asserted to be emerging, with the reorganisation of the internal labour markets of firms into core and peripheral workforces to achieve functional and numerical flexibility. However there is debate as to the pervasiveness of this trend and the extent to which it is a new way of doing things (Allen 1988a; Meegan 1988; The Economist 1994n; The Economist 1994m; The Economist 1994p; The Economist 1994o).

While dual labour markets may have existed all along in some industries and firms, proponents of the flexible firm point out that this development is occurring in conjunction with other flexible strategies in the production process. The significant point is not whether the flexible firm is in itself a new phenomenon but that it is being created in tangent with changing production technologies and spatial strategies.

The focus within labour flexibility studies has been on the formation of a disposable, casualised workforce and a core workforce on an intra-national basis, combined with the hiving off of relatively unskilled tasks to the third world. However, within the geographical literature on ISLM, flexibilisation literature has been influential in stimulating recognition of a core workforce operating within an international setting. However, as has been indicated earlier, there is a need to appreciate more fully the structures through which this core workforce operates across borders. Despite the need for more detailed appreciation of the processes of skill mobility, the literature on ISLM has detected distinct patterns of skill mobility within Scotland and the UK. It is to these contributions which the literature now turns

2.2.3 Data sources

As Salt and Ford comment on the highly skilled, "There are few accessible data on the scale and nature of their migration" (Salt and Ford 1993 p294). The principal published and unpublished official sources for Scotland and the UK are drawn on in the literature. Each of these permit a different perspective on international skill exchanges, and are indicated in figure 2.9.

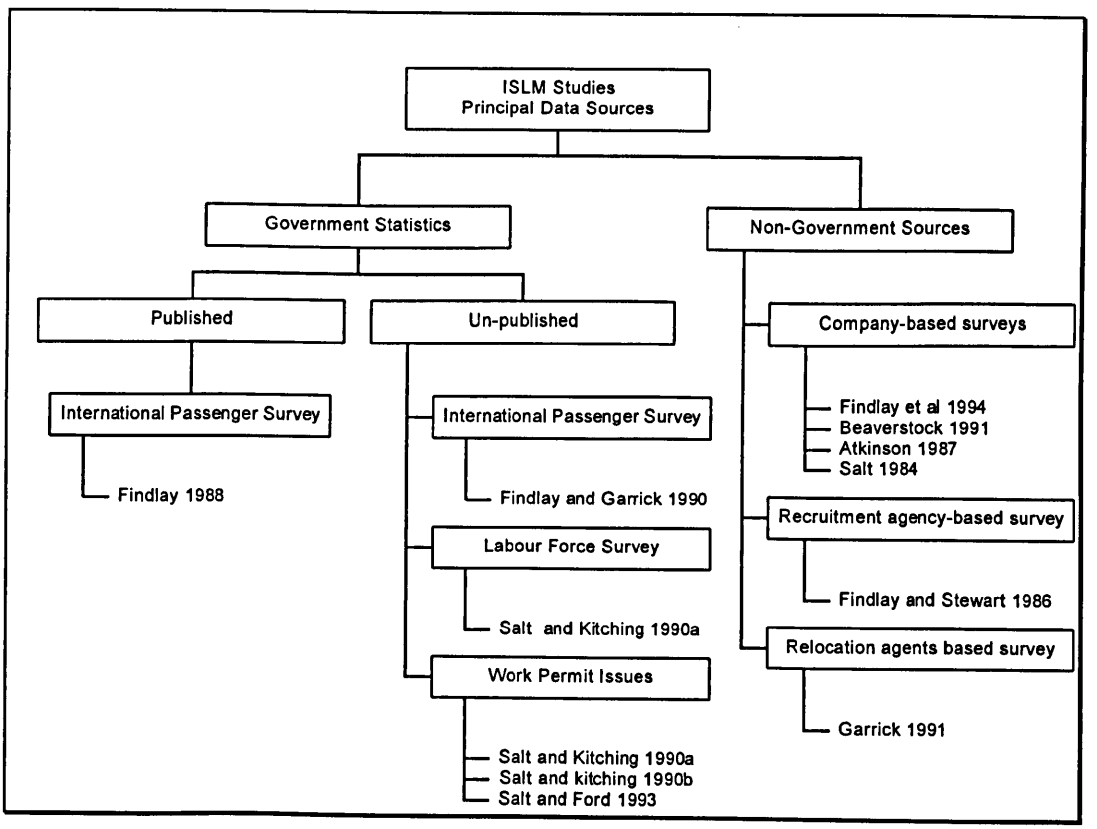

Figure 2.9 International skilled labour mobility data sources
Source: author

2.2.3.1 The International Passenger Survey

The statistical basis of the International Passenger Survey (IPS) and its development is indicated by Coleman and others (Coleman 1987; Findlay 1988; Central Statistical Office 1991b; Office of Population Censuses & Surveys 1991a; Salt and Ford 1993). Starting in 1964, the IPS provides a systematic sample coverage of all major international routes, excluding those to Eire.

It is noted that the IPS interviews only a fraction of migrants. In 1985 the estimate that 108,495 British citizens emigrated was calculated from 578 interviews (Findlay 1988 p402). Therefore figures obtained by the IPS are "subject to sampling and non-sampling error which can make the estimates for small categories unreliable" (OPCS, 1986, p.viii quoted in Findlay 1988 p402). This results in a high level of aggregation in IPS published data and subsequently diminishes the detail available on both regional and occupational characteristics of migrants.

The IPS indicates that the number of persons engaging in international immigration to the UK during the 1980s has increased considerably from 153.3 thousand in 1981 to 266.8 thousand in 1990. This inflow has been matched by a similarly large outflow over the same period (Office of Population Censuses & Surveys 1991b; Office of Population Censuses & Surveys 1991a) (figure 2.10). Within this overall growth in international migration, there has been an increasing trend towards a growth in the number of managerial and professional migrants. Findlay outlines a decline in the 1960s and 1970s of settler emigration and the progressive replacement of these by temporary movements of skilled workers (Findlay 1988 p401). "Professional and managerial staff, taken as a proportion of all actively employed emigrants increased steadily from 37% of the total in 1973 to 59% in 1985" (Findlay 1988 p402), however the proportion has not changed greatly during the 1980s (figure 2.11).

Although proportions of professional and managerial migrants have remained relatively stable during the 1980s, the total number has continued to rise, along with other types of migrant. The number of migrants entering the UK who are professional or managerial has increased substantially from 45.2 thousand in 1981 to 93.1 thousand in 1990. The outflow of professional and managerial individuals was higher than inflow at the start of the 1980s, but dropped substantially during the early 1980s, only to rise again in the late 1980s to

figures similar to the levels of inflow. By 1990 inflow was considerably greater than outflow at the UK level (figure 2.12).

A notable feature of skilled migration is the relative transience of much of this mobility. Many of the professionals and managers recorded as inflows between 1981 and 1990 are the same individuals recorded as outflows a few years later. This transience is suggested by tables 2.4 and 2.5, which indicate that many migrants born outside the UK, and who were leaving the UK, had only been in the UK for up to four years. Such durations concur with the typical period of corporate expatriation of around three years, although it has been noted that the trend is towards longer periods of four to five years (Business International 1991; Organization Resource Counselors 1991; Deroure 1992b).

In addition, it is indicated that of migrants born in the UK and returning to the UK, the majority had only left the UK within the last four years. The data establish that a rapid turnover of a large proportion of migrants occurs in the UK. Although the data do not specifically refer to professionals and managers they are likely to include a large number of such. Thus, at the UK level, a dramatic increase in the movement of managers and professionals is observed, with a net 'brain drain' at the beginning of the 1980s being replaced with a 'brain inundation' at the end of the decade. However, the IPS figures reveal movements both in and out of the UK, constituting an overall 'brain exchange'.

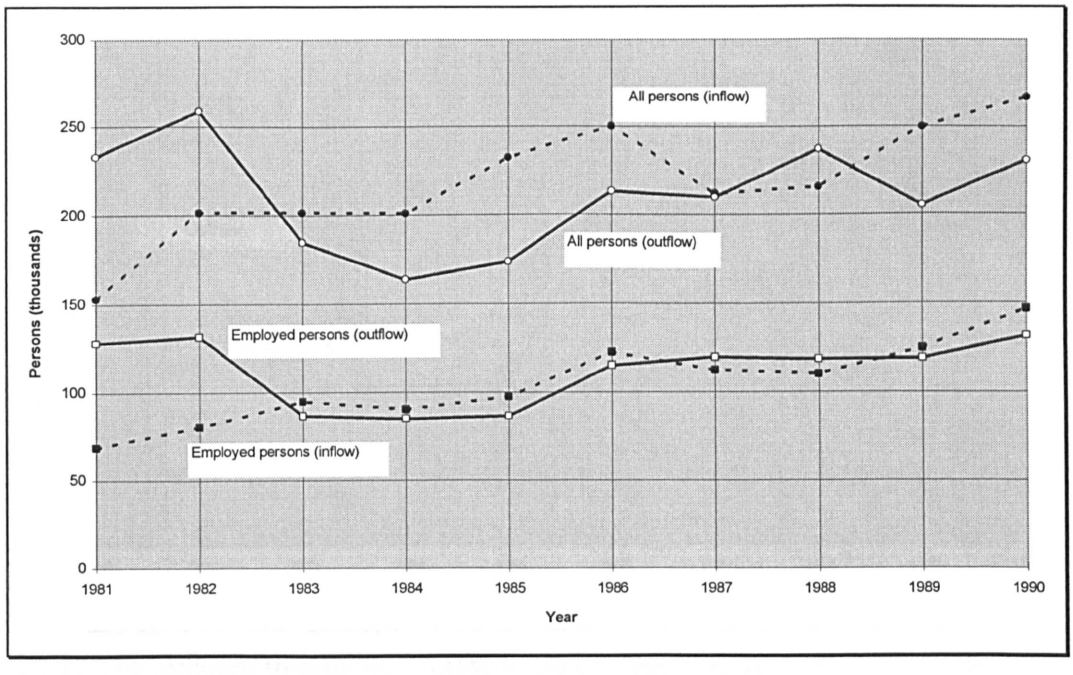

Figure 2.10 International migration, all and employed persons, 1981-1990, United Kingdom
Source: (adapted from Office of Population Censuses & Surveys 1991a p9).

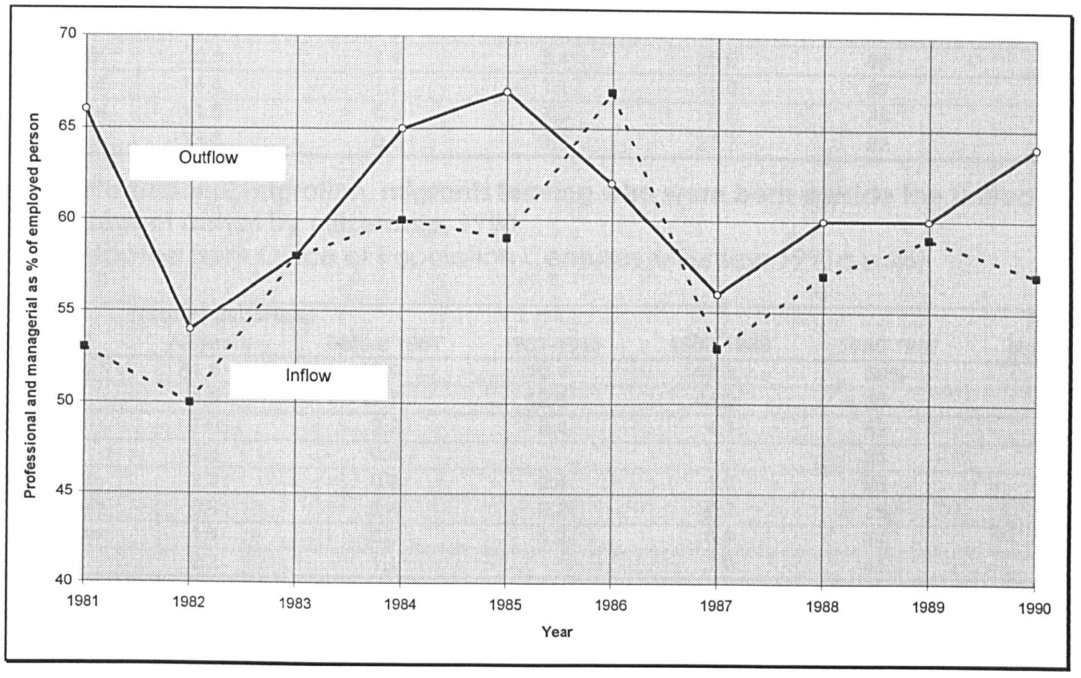

Figure 2.11 International migration, professional and managerial as % of employed persons, 1981-1990, United Kingdom
Source: (adapted from Office of Population Censuses & Surveys 1991a p9)

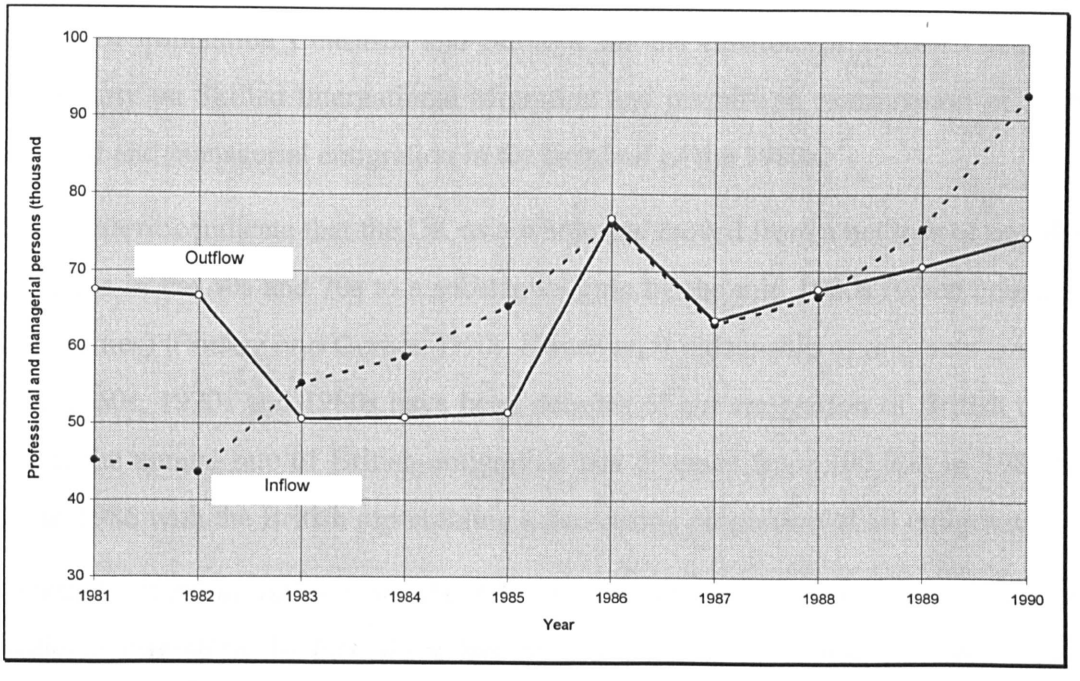

Figure 2.12 International migration, professionals and managers, 1981-1990, United Kingdom
Source: (adapted from Office of Population Censuses & Surveys 1991a p9)

Citizenship	Year of arrival All years	Before 1981	1981-1985	1986-1989	*1986-1989*	Thousands Not stated
All citizenships	100.9	13.7	12.6	70.1	*69%*	4.4
British	15.4	7.2	4.3	2.7	*17*	1.2
Non-British	85.5	6.5	8.3	67.4	*79*	3.3
EC	26.0	4.6	1.6	19.1	*74*	0.7
Commonwealth	25.8	1.4	3.4	20.6	*80*	0.4
Old	14.4	1.2	1.1	12.0	*83*	0.1
New	11.5	0.3	2.3	8.6	*75*	0.3
Other Foreign	33.6	0.6	3.3	27.7	*82*	2.1

Table 2.4 International migration, migrants leaving who were born outside the United Kingdom, year of arrival by citizenship, 1990
Source: (adapted from Office of Population Censuses & Surveys 1991a p.26)

Citizenship	Year of departure All years	Before 1981	1981-1985	1986-1989	*1986-1989*	Thousands Not stated
All citizenships	81.5	19.9	13.1	48.3	*59%*	0.2
British	74.6	17.7	12.6	44.2	*59*	-
Non-British	7.0	2.2	0.4	4.1	*59*	9.2
EC	2.6	0.4	-	2.1	*81*	9.1
Commonwealth	2.2	0.8	0.4	1.0	*45*	-
Old	0.8	0.4	0.2	0.2	*25*	-
New	1.4	0.3	0.2	0.9	*64*	-
Other Foreign	2.2	1.1	-	1.0	*45*	0.1

Table 2.5 International migration, migrants entering who were born in the United Kingdom, year of departure by citizenship, 1990
Source: (adapted from Office of Population Censuses & Surveys 1991a p.26)

The IPS provides data at the aggregate UK level. It does not provide detail on the regional pattern of migration, or on national origins of migrants. However, Findlay & Garrick describe an unpublished IPS data set developed to provide greater detail on the these dimensions (Findlay and Garrick 1990 p180). This set uses special tabulations prepared by the Office of Population Censuses and Surveys for the Institute of British Geographers Working Party on Skilled International Migration and permits an examination of Scottish professional and managerial emigration in the first half of the 1980s.

Findlay & Garrick indicate that the UK as a whole has moved from a net loss of population by migration in the 60s and 70s to a substantial gain by the mid 1980s (when considering all nationalities) (Findlay and Garrick 1990). However, if citizenship of migrants is isolated, then the 1960s, 1970s and 1980s have been decades of net emigration of British citizens. However, the annual rate of British emigration has dropped from 100,000 in 1980/81 to 12,000 in 1986 with the British representing a decreasing proportion of all emigrants.

The Scottish situation varies from the UK in experiencing a net loss of population to international migration. In fact, there has been a net loss of population from Scotland abroad and to the rest of the UK. Although migration abroad has declined since the early 1980s, UK migration has shown a different pattern. Scottish net emigration overseas equalled 38,000 from 1981-1987, with a net emigration of 47,500 to the rest of the UK in

the same period (Findlay and Garrick 1990 p182). Migration to the rest of the UK decreased in the early 1980s, then re-established itself throughout the later 1980s.

However, the net figures conceal a large gross exchange of migrants, a high proportion of whom are transients. For Scotland in 1986, 21,000 emigrants were replaced by 16,000 immigrants (Findlay and Garrick 1990 p181). In turn 27.2% of all immigrants for 1986 were transients. Findlay, using unpublished IPS data, links the temporary nature of much migration with skilled migrants (Findlay 1988). Some 41% of professionals and managers are quoted as having been abroad for only a short period of two years or less (Findlay 1988 p403). Thus, not only are return migrants an increasing proportion of all immigrants to the UK, but a growing proportion of them are of professional and managerial occupations.

Prior research emphasises how Scottish migration must be viewed in relation to different spheres of influence operating at different geographical scales. Migration is strongly related to the UK economic core and also with an international economic structure. Thus the importance of international migration to or from Scotland must be judged with reference to migration to the rest of the UK.

The picture emerges of a large exchange of migrants to and from Scotland, often on a transient basis, albeit resulting in a net loss of population. It is evident that levels of inflow and outflow of professional and managerial individuals vary for particular locations of the UK. Analysis of the region of origin of UK emigrants is possible using the unpublished IPS data (Findlay 1988). Variations in terms of volume of the flow and in the skill composition of these flows are also visible.

The areas that contribute the largest total numbers of professional and managerial emigrants are the South East of England and Scotland (Findlay 1988 p404). These regions also contribute the highest rate of outflow per head of population. Furthermore, professional and managerial emigration as a proportion of total outflow of employed persons varies substantially between regions. Thus 28,800 British citizens emigrated from Scotland between 1980 and 1985, representing 52.7 % of all employed emigrants. There was an emigration rate of 9 professional and managerial emigrants per 1000 persons (Findlay 1988 p404). This is a relatively low rate in comparison with the South East of England, but comparable with other parts of the UK.

The IPS data reveal several key points regarding the occupation of emigrating managers and professionals for 1980/1985. Some 36% of all emigrants from the UK are scientists,

engineers or technicians. Another 30% are professionals in education, health and welfare. The remainder are professionals in administration, managers, or other professionals (17%, 12% and 5% respectively) (Findlay 1988 p407). For Scotland, 39% of emigrating British citizens during 1980-1985 were scientists, engineers professional technical occupations, 34% were professionals in education, health and welfare, 14% were professionals in administration, 11% were high level and general managers, and 2% were professionals in literature, arts and sport (Findlay 1988 p407). The statistical significance of these differences are open to question given the limited sample sizes used in the IPS data.

The unpublished IPS data provide an indication of the scale, composition and duration of Scottish emigration. The IPS data also permit a view of the geographical orientation of UK emigration for 1980-1985. The Middle East and the Old Commonwealth (Australia, Canada and New Zealand) are numerically still the most significant destinations, but declining in importance. This trend is also true for areas of intermediate importance, such as the US, Africa (South Africa in particular).On the other hand, the EC and Other Commonwealth countries are also of intermediate importance as destinations but the trend remained stable over the early 1980s. The two areas of medium importance that have been growing as destinations over the early 1980s, these are the (former) Federal Republic of Germany and non-EC Europe. Other non-Commonwealth countries show low and declining importance as destinations for skilled emigration (Findlay 1988 p406).

2.2.3.2 The Labour Force Survey

Salt and Kitching utilise the Labour Force Survey (LFS) in investigating the economic nature of professional and managerial immigration to the UK (see Salt and Kitching 1990b; Salt and Kitching 1990a; Office of Population Censuses & Surveys 1992 for a discussion of LFS methodology). In contrast to the IPS based studies, this source has an emphasis upon overseas immigration to the UK rather than on the emigration of UK citizens and so provides a complementary perspective.

Salt and Kitching complement IPS data on the number of actively employed immigrants to the country with data on stocks of foreign workers in the UK, drawn from the LFS. The LFS data permit greater insight into the distribution of overseas workers, by indicating the regional breakdown of these persons within Britain and by providing a more detailed description of their national origin. In particular, the LFS indicates the economic sector in which foreign immigrants are working, rather than the IPS focus on occupational activity.

The LFS data also allow an appraisal of the link between the economic context of migration and mobility. Salt and Kitching examine the extent to which migration is associated with corporate transfers.

The LFS data calculate the number of foreign nationals working in the UK as 1,123,000 for 1985-88. Non EC nationals were in the majority, with 63% of the total. The Irish accounted for 24% of foreign nationals working and 66% of those from the EC (Salt and Kitching 1990a). The LFS indicates half the foreign workforce are located in London and the South East of England, compared with a third of the UK total workforce; foreign workers are under-represented in proportion to the UK total workforce elsewhere. EC nationals represent the group with the highest proportion of workers concentrated in London.

Salt and Kitching indicate the socio-economic structure of foreign workers to be similar to the UK workforce. However, persons from the EC are more likely to be in professional and managerial jobs and in manual work than UK citizens (excluding those from Eire). It is also indicated that the industrial sector of foreign workers is broadly similar to that of the UK workforce as a whole, although, foreign nationals in employment appear to be growing at a faster rate than the total workforce in the manufacturing industries (Salt and Kitching 1990a p540).

An important feature of the data put forward by Salt and Kitching is the extent to which labour immigration into the UK is accounted for by corporate transfers. Thus... "The LFS records whether or not an immigrant who was working abroad the year before is now working in the UK for the same employer and is thus a corporate transferee" (Salt and Kitching 1990a p541).

It is indicated that 46% (46,400) of all foreign nationals immigrating between 1985-88 were corporate employees, while corporate transferees accounted for 58% of all non-EC national migrants. In contrast, only approximately 22% of EC nationals are corporate transferees. Using LFS data, Salt *et al* have estimated that the annual number of persons involved in corporate transfers is 78,000 persons (Salt, Mervin and Shortland 1993). Of this number, 42,000 are UK citizens. In addition, it is estimated that in any one year 52,000 of these persons will be involved in an international relocation.

Thus, studies based on the LFS indicate a spectrum of immigration flows in occupational terms, of which a large proportion are professional and managerial. Much of this immigration is focused on the South East of England, but with substantial numbers in the

rest of the UK, including Scotland. These immigrants represent various source regions, the principal being the EC. In addition, a major mechanism in the conveyance of immigrants is the corporate transfer.

2.2.3.3 Work permit issues

Salt and Ford report on the value of work permit issues for determining the international exchange of professionals and managerial labour (Salt and Ford 1993 pp301-306). Department of Employment data on work permit issues are the most accurate of the government sources, as they reflect a complete census of work permits as opposed to a sample. Unfortunately published accounts of UK work permit issues ended in 1983.

A particular problem of this data source is the absence of data relating to EC nationals. However, the source allows analysis of the scale and origin of many long term (exceeding one year), highly skilled, non-EC workers. Indeed, 81% of the 19,014 permits issued in 1990 were to managerial and professional workers (Salt and Ford 1993 p305). The US, together with Japan, accounts for the largest proportion of skilled immigrants. While the proportion of skilled to other occupations does not vary greatly by area of origin, there is some difference in the internal composition of skilled groups by area of origin. For example, general management functions are less important for the US than for Japan.

A further feature noted by Salt and Ford is the increasing importance of service activities to the immigration of skilled persons. In the industrial activities of insurance, banking & finance, professional services and miscellaneous services, levels of skilled immigration have risen 264% between 1984 and 1990. With this rise, non-EC services-based professional and managerial immigrants to the UK account for 69% of long term work permit issues (Salt and Ford 1993 p306).

Work permit data also indicate that many of the personnel recorded as immigrants are corporate transfers. Around 45% of work permits in the main scheme were to corporate transfers in 1990. An additional 1,012 corporate transfers were granted work permits via a subsidiary 'Training and Work Experience Scheme' (Salt and Ford 1993 p306).

2.2.3.4 Non-official data sources

Findlay & Garrick, focusing on Scottish international skilled migrants, utilise two data sources in their examination of ISLM: data obtained via recruitment agencies, and via international removal companies (Findlay 1990; Findlay and Garrick 1990; Garrick 1991). A

further group of studies focuses on the large company as the medium and the route through which skilled migration may be studied. For instance, Salt and Atkinson focus largely upon the operation of ILMs within the UK (Salt 1984; Atkinson 1987). Beaverstock adopts a similar approach but concentrates upon international movements within ILMs (Beaverstock 1990; Beaverstock 1991; Beaverstock 1992a; Beaverstock 1992b). Findlay *et al* adopt this methodology in examining French skill flows to the UK (Findlay, Lelièvre, Paddison, *et al.* 1994).

Two studies of the company based type focus on ILMs mainly within the UK (Salt 1984; Atkinson 1987). The study by Salt concentrates upon an organisational view, working with approximately 100 large companies in different industrial sectors. The survey conducted in 1982/3 indicated 150,000 to 180,000 transferees per annum in the UK, in the early 1980s (Salt 1984 p54). In addition, Salt collected data on the size of relocated households, giving a total movement figure in the UK due to ILM transfers, of 345,000-400,000 per annum (Salt 1984 p55). The study by Atkinson centred upon a survey of individual employees, surveying 7749 managers in six large companies. Atkinson places the number of relocations in the UK at 250,000 workers per annum (Atkinson 1987 p1). However, he puts the number of corporate migrants to and from the UK at only "a few thousand per year" (Atkinson 1987 p1). Yet one hundred and thirty (or 2.1%) of Atkinson's sample of 6207 usable responses had moved outside the UK during their most recent home move (8% of his respondents were from Scotland).

Beaverstock also adopts a corporate perspective in his study of skilled transient migration in international accountancy firms (Beaverstock 1991). However, this economic activity may be untypical. Nevertheless, in contrast to Salt's and Atkinson's studies, it is the international component of the ILM that is focused upon. Beaverstock draws data from eight multinational accounting firms for 1988 (Beaverstock 1991 p1134). Four dimensions of skilled international migration within the accountancy firms are examined: magnitude of movements; occupations of migrants; time scales of movements; and geographical characteristics of movements. Amongst the companies examined 673 out of 23,011 (2.9%) personnel moved overseas in 1988, a figure of a similar order to Atkinson's study (Beaverstock 1991 p1140).

Beaverstock paints a picture composed of smaller, national-based UK firms with relatively few international personnel movements and of larger multinational firms with a relatively

large proportion of international movements. It can be deduced from these findings that, in this sector, the percentage of international secondments varies between firms on the basis of corporate structure.

Beaverstock identifies two categories of typical time scale over which mobility occurs. Short term secondments of under one year and long term secondments of between one and three year, the latter being more prominent. Some 80% of all accountancy secondments for leading firms were long-term. Further, the study indicates the insights gained with a mobility classification which includes stays of less than a year.

Geographically, 67% of staff in the firms concerned were London based. Only an eighth of the firms sent personnel overseas from the 'provincial' network, the majority were sent from London. Incoming foreign personnel predominantly went to London company headquarters. The US and Australia are the main destinations for secondments from the largest firms.

A further study which adopts an international labour market perspective is that by Findlay *et al* (Findlay, Lelièvre, Paddison, *et al.* 1994). This study examined flows of skilled migration via 153 French owned firms in the UK. It suggested variation on the basis of industrial sector, and also, more tentatively, that international business travel acts as a surrogate for international relocation. Unfortunately the above study omitted the larger sized companies. While methodologically more cumbersome to research, these may have revealed a better insight into mobility within global companies rather than the more regionally based firms studied. The findings relating to business travel are contentious and are discussed with reference to the author's results in chapters four and five.

While valuable in revealing general spatial and temporal patterns of UK ISLM, the above studies are of limited use in evaluating Scottish ISLM. A number of studies adopting a varying methodology which relate more specifically to Scottish ISLM are discussed below.

Findlay & Garrick report a UK wide survey of migration to the UK of expatriates to the Middle East. The survey was carried out via the offices of recruitment agencies in 1985, gaining 201 responses (Findlay and Garrick 1990 p184). The research indicated the skill level of Scottish migrants to be at variance with the UK picture gained with the IPS data, with variation in specific skill type being prominent by regions of the UK (Findlay and Garrick 1990 p185).

Engineering, as an occupation, proved very important for Scottish emigrants (accounting for 55% of all Scottish emigrants as against 31% for emigrants from the rest of the UK). In contrast, managerial functions were most important for emigrants from the South East of England. Findlay & Garrick note no significant differences in the average length of time abroad, previous international experience, or areas previously worked in the Middle East between Scottish migrants and other UK migrants. Thus the findings suggest the bias of relocation agencies in particular professional fields within Scotland.

In concord with the IPS data, most migrants were found to be in the 25-44 age group with little variation between UK sub areas (Findlay and Garrick 1990 p186). However, there did appear to be a marked regional contrast in the life-cycle stage of the migrants' families. For Scotland and the rest of the UK outside the South East of England, most migrants had school-age children, the next largest group having children over school age. In the South East of England most migrants had pre-school children followed by school age children. In other words, migrants from the South East had younger families at the time of expatriation.

Findlay & Garrick refer to a further data source provided by a survey of Scottish migrants obtained via the contacts of an international removal firm (Findlay and Garrick 1990; Garrick 1991). Drawing upon the above sources they suggest a three channel framework for SIM comprising recruitment agencies, companies with international contracts and the internal labour markets of multinational companies.

Findlay & Garrick suggest that the role of recruitment agencies is more prominent for migrants from Scotland than from England. It is pointed out that "the majority of Scots emigrate either to work for foreign companies or governments, linking up with these overseas employers through the activities of recruitment agencies, or else they take up overseas employment through working on a temporary basis for smaller British companies who have won foreign contracts" (Findlay and Garrick 1990 p190). They suggest that in 'peripheral' regions, small and medium-sized companies may be responsible for considerable SIM and as such, are a very different channel from ILMs of large TNCs. Recruitment agencies tended to service the staffing needs of these small companies (less than 100 employees) while larger organisations recruited expatriates in other ways. They note that this finding is supported by Brewster who studied twenty-six large TNCs in which 86% of expatriates were supplied from existing ILMs (Brewster 1988).

Findlay & Garrick submit that Scotland, with a higher proportion of migration occurring via agencies and on temporary contracts, contributes more of the skills required by these channels (i.e. engineers and construction workers) and proportionally less of managerial and administrative skills through ILMs of TNCs. As such, it is put that the structure of the local labour market and its relations with the world economy encourages channels whereby Scots leave wives and children in Scotland. One potential advantage of this is identified: it encourages the maintenance of the migrant's roots. The possible negative consequences of this are discussed subsequently.

However, it is also noted that the extent of local recruitment into the lower echelons of internal labour markets, to provide staff for the Scottish branch plants of large TNCs, remains under-researched. A study of management in twenty six Scottish branch plants controlled from non-British headquarters found that in 50% of cases the management team was entirely Scottish (White 1989). Only five cases had a substantial foreign presence. If this pattern is widespread, there may be a high level of movement of local skills in the management level of foreign TNCs and hence a potential for subsequent international transfer to other branches.

2.3 The study of ISLM from related disciplines

The organisation of expatriation by business and the problems associated with expatriation and expatriates has been examined both by Human Resource Management and Occupational Psychology; the latter has also been concerned with relocation in general rather than exclusively international expatriation and the emphasis is less on either the firm, or the individual, as discrete units of study, but on the relationships between work, relocatee and family.

The reviews of the literature by Brewster, Hiltrop & Janssens and Mendenhall & Oddou provide a route into the literature on the processes and problems of expatriation (Mendenhall and Oddou 1985; Brewster 1988; Hiltrop and Janssens 1990). Hiltrop & Janssens identify five core aspects of expatriation which have received attention in the literature (Hiltrop and Janssens 1990) (table 2.6), each of which will be examined.

Expatriation- dimensions of concern
• Increasing demand for expatriation.
• Expatriates are expensive to employ.
• Completion of assignments creates difficulties for expatriates and their families.
• Premature repatriation is costly to the company and to the expatriate.
• Failure rates are high.

Table 2.6 Expatriation- dimensions of concern
Source: (adapted from Hiltrop and Janssens 1990)

2.3.1 Reasons for expatriation

Zeira & Banai see the rapid growth in multinational companies as producing a demand for expatriates (Zeira and Banai 1985). Hamill states that "The effective management of human resources internationally is increasingly being recognised as a major determinant of success or failure in international business" ...and that... "the successful implementation of global strategies depends to a significant extent on the existence of an adequate supply of internationally experienced managers" (Hamill 1989 p18). Indeed, international managers can be seen as the "cement between subsidiaries" (Bournois and Chauchat 1990 p6). Hamill also notes that the issue of international human resource management is increasingly important for the UK given a rapid increase in British outward direct investment since the late 1970s (Hamill 1989). This is seen as the case for not only the largest British multinationals but also small and medium sized British companies who have significantly internationalised their operations in recent years.

Other authors have pointed to an increase in the need for the international mobility of managers and professionals, seeing this demand as not solely the result of internationalisation but also as resulting from changes in the organisation of firms (Coe and Stark 1991 p1). Greater emphasis on the flexibility of key staff within companies is likely to foster mobility between functions in the organisation and hence mobility between sites. Thus, as "international experience on the part of executives has become identified with upward mobility"...the... "cultivation of international executives has emerged as a key strategic concern for companies" (Business International 1991 p1).

Along with the impact of growing international sales exposure and the influence of corporate restructuring, a number of other trends have influenced the demand for international management. One such influence is the development of a broader range of relationships with competitors, such as international joint-ventures and strategic alliances.

The alteration of traditional economic structures, stressing the organisation of product lines across geographical areas is another.

Demographic trends in the form of an ageing population also give rise to concerns in developing international personnel, due to a shrinking pool of suitable workers in many countries. Further, social changes in the expectations of work-life, lead to more emphasis on the quality of personal life and increasing reluctance to accept mobility. Similarly, growth in the number of dual-career couples has added an extra obstacle to international mobility (Business International 1991 pp2-3).

Erdstrom & Galbraith argue that international transfers take place for one of three reasons, i.e., for staffing purposes; management development; and for organisation development (Erdstrom and Galbraith 1977). One study of eighty UK TNCs indicates that 52% of companies develop internal staff through expatriate assignments and that only 3% of expatriates are from external recruitment (Organization Resource Counselors 1991 p4). This is in tune with the conclusions of Gould & Findlay who comment, "What the internationalisation of business activities seems to have produced is the need for large international companies to have mobile managerial staff, who not only know their job but who also know their company..." (Gould and Findlay 1994b p22). Beaverstock's small study of 26 British business elites in the New York financial sector also confirms the factors highlighted by Erdstrom & Galbraith (Beaverstock 1992b). In addition, Brewster notes national representation and control as reasons for the use of expatriates (Brewster 1988). Hamill, looking at large UK multinationals also notes the use of expatriates for the training of locals (Hamill 1989). However, the demand for expatriates is found to depend to a large degree on corporate strategy.

Bournois and Chauchat report on the management of 'Euromanagers' in medium to large European companies in the service and industrial sectors, suggesting a framework of companies in which the main differentiating factor in terms of management characteristics was that of corporate strategy and orientation and stating that... "The context in which the company operates has a great deal of influence on its practices" (Bournois and Chauchat 1990 p14).

Hamill describes a study of seven large UK multinationals in a variety of sectors (Hamill 1989). Interviews were conducted with personnel managers and human resource directors with responsibility for overseas operations who were questioned regarding their staffing

policies, expatriate performance and expatriate policies. Policies were identified as being influenced by corporate strategy within the multinationals interviewed.

Thus, it was found that two banks favoured the employment of British nationals in foreign management positions, especially in the Third World. This position was in contrast to all except one of the remaining companies who preferred the employment of local nationals. The exception was one of the oil related companies which preferred a mix of nationalities at subsidiary level. Bournois and Chauchat found this latter policy to be the most common policy in the large multinationals which they interviewed.

Several options are available in recruiting international personnel: firms may development home country expatriates, local nationals or third-country nationals. The use of locals offers advantages in that costs may often be lower, and that they are more in tune with their market and government policies (Business International 1991 pp.13-16). On the other hand, home-country expatriates are often used to provide high level technical and functional knowledge, international experience for high potentials, and to convey corporate ethos or specific head-quarters concerns. Often third country nationals are used to implement 'difficult' tasks such as redundancies or restructuring, as they are less clearly associated with the parent company or country (Business International 1991 p18).

An increasing interest by continental European companies in recruiting UK graduates has been noted; however the level of recruitment of this group of persons remains low, only 1.7% of first degree and 1.4% of higher degree graduates (Everett and Morris 1993 p1). Further, only half of these first degree graduates go in to business or commerce activities, although a greater proportion do so for higher degrees. For first degree graduates, France, Spain and Germany are the most favoured destinations, while for higher degree graduates, Germany France and the Netherlands are the most popular.

All of the studies highlighted above emphasise the many different factors impinging on the mobility of skilled labour. Perhaps most significantly, research in Human Resource Management has drawn out how different firms and sectors are organised in ways that lead to varying mobility demands. These studies also indicate that firm strategies exist in a broader environment in which the labour market and the broader industrial relations context is itself dynamic. As such, these studies lend a greater sophistication to an explanation of mobility patterns than can be obtained solely from research carried out by geographers.

2.3.2 Financial, organisational and personal costs of relocation

The functional and monetary significance of skill mobility for firms is reflected in the financial cost of such activities (Industry Week 1976; Misa and Fabricatore 1979; Jay 1984; CBI ERC 1990c). Franco states that expatriates base salaries may increase by 25-100% due to premiums for relocation, cost of living differentials, travel expenses, children's education, etc. (Franco 1973). Schollhammer estimates that the average cost of employing executives abroad is roughly twice as high as a comparable position at home (Schollhammer 1969).

Deroure estimates that expatriate executives receive an extra 30 to 60% of their salary, although the trend within Europe is downward (Deroure 1992b p88). She also indicates that within the EC, workers from another member state are increasingly recruited on a local contract, with little additional financial advantage being gained by their expatriate status.

The costs of international relocation, based on current practices identified by the Confederation of British Industry Employee Relocation Council (CBI ERC), have been estimated more recently (Salt, Mervin and Shortland 1993). A three year assignment was estimated to cost in the range of £132,000 to £225,800 for a 30 year old executive earning £30,000 a year, married, with two children of two and six years. These costs are in addition to those costs which would normally be incurred on the same employee working in the UK (i.e. salary, national insurance, medical insurance and car). For a 40 year old executive, married with two children of 12 and 15, the costs are estimated at £220,500 to £306,100. Gross costs for the former employee are £253,000 to £346,800 and £421,500 to £507,100 for the latter employee. The average annual net overseas costs were estimated at £58,500 for the first employee and £87,700 for the second. The components of these costs are illustrated in table 2.7.

Components of international relocation costs
1. National insurance contributions
2. Company pension contribution
3. Incentives and locations payments (e.g. foreign service service premiums and hardship allowances - a payment made to expatriate employees in certain locations in recognition of the fact that their particular foreign post or assignment involves a harsh environment, isolation, political unrest or special health problems
4. Cost of living allowances (designed to maintain purchasing power parity between home and host countries. Also known as 'goods and services differential')
5. Pre-departure expenses (e.g. cultural orientation, language training, medical examinations, inoculations, administrative costs, spouse career counselling)
6. Pre-assignment and arrival expenses (e.g. house hunting trip, home search fee, temporary accommodation)
7. Housing assistance in the host country (the costs incurred directly in buying, selling and moving hoe or in moving between rented properties e.g. fees / charges)
8. housing assistance at the home location (e.g. managing employee's property)
9. Settling in (the sum of money paid by an employer to compensate for the indirect costs of moving e.g. carpets and curtains, costs of moving into host country rental accommodation and wear and tear on home country property. Also known as 'transfer allowance/grant', 'settling-in allowance', 'miscellaneous expenses grant', 'relocation allowance')
10. Education (e.g. schooling and uniform allowance)
11. Company cars
12. Medical insurance
13. Home leave and emergency trips
14. Household goods and pet transport
15. Travel to and from assignment
16. Tax assistance
17. Tax costs

Table 2.7 Components of international relocation costs
Source: (adapted from CBI ERC 1990b; Salt, Mervin and Shortland 1993)

If the annual net overseas costs are applied to Salt *et al*'s figure of 78,000 persons involved in corporate transfers annually (from Labour Force Survey data) quoted earlier (Salt, Mervin and Shortland 1993), the author derives an annual net overseas cost to employers of £4.56 billion to £6.84 billion. These figures are likely to be overestimates in that the relocation costs referred to assume a full range of relocation service provision. This is unlikely to the case for many UK expatriates, as discussed in more detail in chapter nine.

Costs for relocation within the UK have been estimated at £10,000 to £30,000 per employee (Munton and Andrews 1991). Elsewhere a figure of around £23,000 for a UK domestic relocation in 1990 has been quoted (Couldrey 1989; CBI ERC 1991c). However, the latter study suggests that, building in extra costs to the domestic relocation such as moves

to a high cost area and the effects of a property market slump, the cost can rise substantially, up to around £58,000. As such, domestic relocation must also be viewed as an expensive activity.

Yet, despite the obvious importance of mobility to firms, it has been demonstrated that completion of assignments creates difficulties for expatriates and their families. Ronen indicates that expatriates frequently operate in culturally, politically, economically and legally different environments (Ronen 1986). Brooke & Remmers and Zeira & Harari consequently report symptoms of transfer anxiety, culture shock, social dislocation, adaptation problems and feelings of abandonment amongst expatriates and their families (Brooke and Remmers 1977; Zeira and Harari 1977).

Several authors have highlighted that failure rates for expatriation assignments are high. The definitions of failure generally given in the literature, refer to assignments where the expatriate had to be brought back as a result of problems experienced by themselves or their families, or by problems they have created for the organisation (Brewster 1988 p25). However, rigorous performance appraisal systems are far from universal within companies utilising expatriates (Heenan 1970; Hays 1971; Benson 1978; Newman, Bhatt and Gutteridge 1978; Misa and Fabricatore 1979; Abe 1983; Baliga and Baker 1985). Commonly a figure of around a third is given for failure rates (Henry 1965; Lannier 1979; Misa and Fabricatore 1979; Tung 1981; Tung 1982; Harvey 1985). Tung indicates lower failure rates for European and Japanese TNCs, when compared with US TNCs (Tung 1982). Hamill also finds failure rates in large UK TNCs to be significantly lower than in the US (Hamill 1989). Although figures for failure rates and definitions of failure vary, Kobrin states that expatriation cannot be deemed successful (Kobrin 1988)(see table 2.8). Hiltrop & Janssens examined in more detail studies that examine the causes of high failure rates amongst expatriates. These are divided under several headings: personal characteristics of the expatriate manager; characteristics of the expatriate family; and subsidiary-parent company relations (Hiltrop and Janssens 1990).

Reasons for expatriate failure
1. Inadequate selection / recruitment criteria (technical skills rather than cultural empathy)
2. Inadequate pre-departure briefing
3. Poorly designed compensation packages
4. Lack of advanced planning for repatriation
5. Loss of status / remoteness through working at periphery
6. Inability to adapt to new working environment and culture
7. Family related problems

Table 2.8 Reasons for expatriate failure
Sources: (Erdstrom and Galbraith 1977; Desatnick and Bennet 1978; Heller 1980; Harvey 1981; Tung 1981; Business International Corporation 1982; Tung 1982; Toyne and Kuhne 1983; Harvey 1985; Ondrack 1985).

A number of studies have considered the personal characteristics of successful expatriate managers, e.g., (Kapoor and McKay 1971; Miller 1972; Brewster 1988; Hiltrop and Janssens 1990). However, lists of necessary qualities for an international assignment have been criticised as failing to predict expatriate performance to a significant degree (Haemmerli 1978). Brewster indicates useful reviews on criteria used for selection (Mendenhall and Oddou 1985; Zeira and Banai 1985), but concludes that there is little agreement on relevant criteria in this literature (which is mostly American). In addition, Brewster notes that there has been little research on the actual selection systems and appointment processes involved in expatriation (Baker and Ivancevich 1971a; Tung 1981; Torbiörn 1982; cited in Brewster 1988 p14).

In relation to the personal characteristics of the expatriate manager, several features can be drawn from the literature. Brewster relates... "That there is substantial evidence in the literature that technical competence is seen as a crucial factor by MNCs (Ivancevich 1969; Hays 1971; Hays 1974; Howard 1974; Lannier 1979; Tung 1981; Tung 1982; Zeira and Banai 1984; Zeira and Banai 1985), by the expatriates themselves (Gonzalez and Negandhi 1967; Hays 1971; Harris 1973; Hautaluoma and Kamen 1975; Bardo and Bardo 1980; Hawes and Kealey 1981; Zeira and Banai 1984; Zeira and Banai 1985) and by host-country nationals (Zeira and Banai 1985)" (Brewster 1988 p12). Similar evidence is provided by Hiltrop & Janssens (Hiltrop and Janssens 1990).

As suggested earlier, change in the cultural environment can create stress or emotional disturbance (Brooke and Remmers 1977; Zeira and Harari 1977). Some studies have found that experienced expatriates use certain mechanisms for coping with the stress of intercultural adaptation (Torbiörn 1982; Adler 1986), for example creating and retreating into

'stability zones', e.g., international clubs (Ratiu 1983). Mendenhall & Oddou note that expatriates who are able to find substitutes for their interests and activities at home are more likely to be successful in adapting to new cultures (Mendenhall and Oddou 1985).

The importance of communication skills and cultural empathy for successful expatriation is a feature drawn out in the literature. Expatriates who can relate well with host nationals in business and socially are more successful. This is seen as a process particularly facilitated through a willingness to learn and use the local language (Brein and David 1971; Harris 1973; Hammer, Gudykunst and Wiseman 1978; Abe 1983). Similarly, the lack of awareness of different behavioural assumptions and expectations in foreign cultures can cause problems (Triandis 1975; Adler 1986; Ronen 1986; Furnham and Bochner 1989).

Brewster notes a substantial literature from the US on preparation of expatriates for foreign assignments and concludes from this material that there is very little preparation and that it is "still the case that most organisations provide no formal training for expatriation" (Baker and Ivancevich 1971b; Lannier 1975; Lannier 1979; Baliga and Baker 1985; cited in Brewster 1988 p18). Although evidence for European TNCs is sparser, there is some evidence that there is more training, especially language training (Torbiörn 1982; Tung 1982).

In terms of the characteristics of the expatriate family, a number of studies indicate the success of the expatriate is heavily influenced by the adaptation of the spouse and children (Gaylord 1979; Howard 1980; Tung 1982; Harvey 1985; Adler 1986). A source of problems for expatriates is also identified in the relationship between company headquarters and the foreign subsidiary (Perlmutter and Heenan 1974; Rahim 1983; Ronen 1986). An additional problem that has been studied is the creation of an information gap between the expatriate and home base, whereby expatriates lose touch with developments at home (Chorafas 1967; Howard 1974).

When it comes to the actual policies of TNCs on expatriates, Brewster comments that the literature provides little information (Brewster 1988 p11). Hamill, considering large UK TNCs, indicates that there is general agreement by TNCs on areas that should be covered in terms of policy, i.e., recruitment, selection, pre-departure briefing, compensation and repatriation. Hamill found all of these to be well developed in the large UK TNCs which he examined, with the exception of repatriation, which was still seen as a dilemma (Hamill 1989 p32).

The material reviewed in this section has added an additional set of concerns which shape mobility patterns. However, the awareness of Human Resource Management on the personal issues involved in mobility processes is taken further by scholars in the field of Occupational Psychology.

2.3.3 Relocation and the family

This literature indicates that to a significant extent organisational systems and the actions of individuals and businesses with regard to expatriation and relocation are shaped by the relationship between homelife and the workplace. Munton & Forster review the available evidence concerning the possible roles the family may play in relocation and stress (Munton and Forster 1990). They note that occupational research has no tradition of involving families...

> "Life outside the workplace has often been ignored as a private world which impinges little if at all on the individual at work. More recently, however, social scientists have concluded that the work-home or private-public distinction is not as clearly delineated as once thought"...and that... "Although decisions to move may be part of the employee's career development, the decision to move is likely to involve members of both family and work systems" (Munton and Forster 1990 p75, 77).

This point is illustrated by the numbers of managers turning down career opportunities that involve relocation. One study suggested that of the 77% of all employees who at some time objected to having to relocate, over 60% gave family related reasons (Merill Lynch Relocation Management International 1986; cited in Munton and Forster 1990).

2.3.3.1 Factors influencing the willingness of employees to relocate.

The influence of employee demographics, community and organisational tenure and spouse employment status have been demonstrated as having an influence on willingness to relocate by a number of authors (Duncan and Perucci 1976; Swanson, Luloff and Warland 1979; Markham, Macken, Bonjean, *et al.* 1983; Veiga 1983; Gould and Penley 1985; Landau and Hammer 1986; Noe, Steffy and Barber 1988) Hall & Hall and Marshall & Cooper show that a family's position in a developmental life cycle, or within different life stages, to be an important factor in the decision to move (Marshall and Cooper 1976; Hall and Hall 1978).

The question of disruption to children's education, is a factor which is increasingly prominent among employees with school age children (CBI ERC 1987b; CBI ERC 1987a; CBI ERC 1989c; CBI ERC 1989b; CBI ERC 1989a; CBI ERC 1992d; CBI ERC 1992b; Clark 1992). Difficult choices are presented to families in this situation, either to have children remain at home at boarding school or have children accompany parents abroad to a British school, international school or local school. Pearce reports that 60% of relocating families list childrens' education as their prime worry and that it acts a major reason for refusal to relocate amongst married male employees (CBI ERC 1991d).

Such findings suggest that a search for reasons of 'failure' in relocations must take account of issues not focused purely on the individual employee. Munton reports on how education concerns can result in stress for relocated families, as well as children losing friends upon the move. More generally, such work suggests that difficulties encountered by one member of the family, may effect all members and hence the job performance of the relocating employee. As a consequence a recommendation for more human centred relocation policies is called for (Munton 1989b).

The issue of dual career couples is increasingly raised in response to the internationalisation of employment and the growth of female employment (Martin and Roberts 1984; CBI ERC 1987c; CBI ERC 1988b; Taylor and Lounsbury 1988; CBI ERC 1989e; Simmons 1990; CBI ERC 1991i; CBI ERC 1991a; CBI ERC 1992e; Greenbury 1992; Stewart 1992; CBI ERC 1993a; CBI ERC 1993b; Cooper and Lewis 1993). Loss of a second income and damage to the spouse's career are possible outcomes of mobility. Alternatively, spouses may refuse to leave their own career, thus acting as an obstacle to employees accepting transfers. Few companies compensate for income losses with their expatriate allowance schemes and it has been suggested that less than 10% of companies have a formal policy for management of married dual career couples, and under 5% for unmarried partners (CBI ERC 1993b). Enforced career breaks, as a result of a partners mobility, may retard career prospects, as well as possibly affecting pension rights and qualification for unemployment pay. With international moves, both visa and work permit regulations may restrict the opportunity of spouses to work, as well as differences in professional status recognition, work conditions, child care provisions and cultural norms. The likelihood of a smooth employment transition is reduced where notice of relocation is short. Yet the level of

assistance from employers in the form of income compensation or career guidance and employment assistance is generally low (CBI ERC 1991i; CBI ERC 1993b).

Commonly, the expatriate has the 'primary' career and the working partner the 'secondary' career. Where this is the case, both partners may move, with one partner taking on the role of 'trailing spouse'. Where the working partner has the primary career, or both couples are fully committed to their careers, then long distance commuting may be the outcome.

2.3.3.2 The effects of stress

Several studies have been conducted on the affect of the above issues on stress. Studies focusing mainly upon domestic relocation, have suggested that 50% of employees suffer from stress on relocation, along with 60% of partners. Further, 30% of relocated couples may experience these effects for up to six months after a move (CBI ERC 1991f). A likely outcome of stress is a negative effect upon job performance.

However, employers may underestimate the effects of disruption and stress on the willingness of employees to relocate internationally(CBI ERC 1991g). Stress has been found to be particularly associated with hostile or threatening environments, separation from family, differences in residence, culture and language, and the re-adjustment to home country norms on return (CBI ERC 1991j).

Studies by the Medical Research Council's/ Economic and Social Research Council's, Social and Applied Psychology Unit indicate that, in general, stress derives principally from issues related to property and social support. The former include buying and selling a house, locating a new house and overall changes in living standards. The latter involve moving away from family and friends and establishing new relations at work. In particular, cases where spouses needed to find work after a move rated higher stress levels. It was also suggested that other issues emerge over time, such as disruption to children's education. In domestic relocation it is also reported that long distance (150 miles plus) north - south moves incur the highest risk of stress (CBI ERC 1989d). This last point is particularly relevant to Scottish mobility characteristics.

There is limited research into the reactions of family members to job relocation as a specific occupational stressor. Munton, in a study of 111 UK employees who had relocated, found that 40% of relocating families perceived the experience as involving notable levels of stress (Munton 1990). Secondly, relocation stress was identified as not exclusively work-

related. Thirdly, loss of social networks, problems concerning spouse employment and worries about children's educational needs were all found to be important contributors to the overall stress of relocation.

Packard concludes that job relocation is responsible for a number of family problems, including increased isolation of family members and ultimately the break-up of upwardly mobile families (Packard 1985). Sense of loss is seen as a common reaction to relocation, especially amongst wives. Losses include loss of social networks, friends and relatives, as well as loss of self-esteem and identity that can accompany having to give up a job or leave school or college (Seidenburg 1973; Feinberg 1978; Gaylord 1979; Ammons, Nelson and Wodarski 1982; Munton and Andrews 1991). Lewis & Knapp's study of family adjustment following relocation identifies problems, especially for mothers, who are seen to act as 'symptom bearers' for the family (Lewis and Knapp 1990). These authors point out a need for longitudinal studies and counselling that offers support for the family and not just the employee. Fisher investigates the psychological effects of transition and change resulting from geographical relocation. In doing so, she suggests mechanisms by which deleterious psychological effects are brought about, while noting the importance of circumstantial and life history factors as determinants of reaction to geographical change (Fisher 1988).

Munton & Forster state that there is little evidence available on the effect of family stress on employee performance at work. Studies by Pardine *et al* and Sarason & Johnson concluded that negatively perceived life changes were correlated with decreases in job satisfaction (Sarason and Johnson 1979; Pardine, Higgins, Beres, *et al.* 1981). Others conclude that in order to work effectively managers need support from the home environment (Pahl and Pahl 1971; Packard 1985).

Munton reports several benefits from companies that would lessen the stress on relocating employees: suitable time allowance for house hunting; educational advice; career counselling for spouses; avoidance of family separation with provision of short term rented accommodation; information provision early on in the relocation process and effective communication between relocation managers and relocating family (Munton 1990).

The literature reported here has complemented that from Human Resource Management. Both allow the relatively pattern-based studies of geographers on skilled migration to be considered from a more informed perspective. This perspective permits skilled labour

movements to be viewed as a process shaped by a range of factors, from corporate structure to family circumstances.

2.4 Conclusion

This review has examined contributions to international skilled labour mobility (ISLM) research from within population geography and cognate disciplines. Several points emerge from a consideration of labour migration theory, which with further development would enhance the course of ISLM study.

From a human capital approach, family migration theory requires consideration of the impact of contemporary trends in women's employment upon skilled mobility. In addition, behavioural approaches, while implying an understanding of the aspirations and personal perceptions of the skilled migrant, also suggest the need to appreciate the social context of employment related mobility.

In a different vein, a Marxist conceptual framework restricted to the level of the international is open to question and raises concern for the structural commonalties of mobility operating across spatial scales. Further, institutionalist approaches prominent within ISLM studies highlight the important role of organisational structure in shaping mobility flows. However, internal labour market and channels approaches to delimiting international skilled mobility are criticised as partial and insufficiently sensitive to its variable character. Further influences from structuralist approaches suggest the benefit of a greater appreciation of changes in management and labour structures and those related to changes in the logic of production.

The findings of ISLM studies display a basic representation of the dimensions of skill mobility at the international level. However, government statistics are insufficient at the sub-UK level and studies of Scottish ISLM are focused solely on migration, to the neglect of other forms of skill mobility, revealing little of the relationship of foreign direct investment to Scottish international skill mobility. Human Resource Management studies divulge a wealth of detail on the operational control of international skilled labour mobility. However, little direct evidence of Scottish circumstances is available. Human Resource Management and Occupational Psychology also strongly reinforce the role of non-work institutions and considerations in shaping the course of skill mobility.

The research questions can now be considered in the light of the literature review. An initial goal is to establish the scale and patterns of Scottish International Skilled Labour Mobility. The research aims to ascertain the varying duration of skilled mobility to and from Scotland; the geographical direction of this mobility; the levels of skilled international mobility in aggregate and per person; and the relationship, if any, between mobility at the domestic level and at the international scale.

Existing studies of Scottish skilled international migration have limitations. They do not seek to link longer term mobility to shorter term flows, nor do the studies comment in detail on the relationship between mobility and the organisation of international business. The literature review has indicated the importance of skill flows to international business and Salt (1988), for instance, shows the importance of the 'internal labour market' structure of firms for mobility. However, the detailed relationship between the organisational demand for mobile staff and the effect on skill mobility is not evident in the literature.

This research therefore aims to evaluate the influence of industrial sector and corporate structure and strategy on mobility patterns. It would be interesting to distinguish the relative importance of manufacturing and service activities for mobility and to investigate the extent to which overseas owners influence mobility patterns. The specific organisational character of overseas investment is an important research question, for instance, the division of the production chain across space, the influence of home country management and work cultures, and market area of the product. Research from Human Resource Management vocalises most strongly the varying influence of corporate structure and strategy on mobility patterns, but scope remains for the further specification of the link between plant type and labour mobility effects. The relevance of corporate strategy for mobility is developed in the research.

The literature review indicates strong occupational traits to Scottish skill flows. The influence of occupational category is an essential area for examination, as well as considering the influence of corporate and industrial character on mobility.

Studies from Occupational Psychology and Human Resource Management indicate a further dimension of importance to understanding the shape of Scottish skill flows They indicate a host of non-work issues impinging on the mobility decision of employees. Several areas are pointed out for more detailed examination: the role of dual careers in shaping mobility; housing concerns, quality of life; and career and family stage. All of

these require some appreciation in order to make sense of mobility patterns to be revealed by the research. Further, the literature review indicates much scope for linking non-work and work-related influences on mobility patterns, especially in a peripheral geographical context.

These conclusions stretch established theoretical and conceptual positions in new directions. This research project requires a strategy which allows a reformation of the theoretical and conceptual configuration of the geographical investigation of ISLM and Scottish ISLM in particular. The mechanisms employed in this task are discussed in the following chapter.

Chapter 3

Methodology

3.1 Introduction

This chapter describes the methodology undertaken in addressing the aims of the research set out in chapter one and further specified in chapter two. Theoretical and methodological questions were raised in developing these aims. The methodology draws on theoretical debates within geography, describes the research design and the use of the selected methodological techniques. The formulation and execution of a questionnaire survey of business travellers at Glasgow International Airport are detailed to show the relationship of this approach to the thesis as a whole.

In relation to contemporary migration processes between developed societies, it has been stated that...

> "For population researchers, analysis of the new patterns and types of movement which have emerged present a number of challenges. Not least among these is the problem of accurately identifying the scale, character and pattern of new forms of mobility. A second challenge is investigating the social, economic and political processes responsible for producing change in population distributions. Third, and most difficult to achieve, is the development of new concepts and theories offering not only the intellectual satisfaction of deeper explanation of events, but also the capability to predict the likely long term impacts of population movements" (Gould and Findlay 1994b p17).

The challenges pinpointed in the above quotation are addressed by the following discussion on the research methodology with reference to Scottish international skilled labour mobility (ISLM).

3.2 Dimensions of analysis in ISLM research

Existing work on ISLM draws support from a variety of academic fields, each of which operate within a distinct frame of reference. This has disadvantages for understanding the processes of Scottish ISLM, as research points to different spheres interest. Areas examined in the literature review relate variously to economic change, organisational

change, developments in women's work, the relationship between work and family life and the relationship between mobility and health.

One intention of this research is to inter-relate diverse facets of ISLM research associated with the movement of skilled migration. This diversity is illustrated in the literature review. Drawbacks are apparent in the relatively un-integrated and uncoordinated approaches within different disciplines and sub-disciplines. Further, these divisions can be seen to correspond to different levels of analysis, each of which offer an impoverished explanatory value if they do not engage with the processes occurring at different levels. The advantage of this study, which integrates these isolated perspectives, is a fuller understanding of the processes of ISLM and a deeper explanation of Scottish ISLM.

3.2.1 Integrating dimensions of analysis in ISLM research

The research design followed is adopted as a result of a reflection and assessment of the prior literature associated with ISLM, and secondly, an attempt to acknowledge the implications of wider social theory for this work. The '*structurationist school*', mainly the work of Giddens, is useful in respect of the latter (Giddens 1981; Giddens 1984; Giddens 1985a; Giddens 1989). It is principally the methodological insights afforded by this perspective with which this section is concerned.

A significant feature of the structurationist debate is illustrated by the following quotation. "The important emphasis in Giddens is on the duality of structure, so that social structures are both constituted by human agency, and yet at the same time are the very medium of their constitution" (Fielding 1988 p3). Within this framework '*action*' and '*structure*' are not viewed as discrete, instead they are envisaged as being recursive in nature with each implying the other. In other words, "the 'personal transient encounters of daily life' are essentially bound up with the 'long-term sedimentation of social institutions'" (Cloke, Philo and Sadler 1991 p105).

A second element within the work of Giddens is the concept of time-geography, developed principally by Hägerstrand in the 1970s (Hägerstrand 1975). This contribution encourages the conception of the interactions of individuals and 'time-space structures' as a spatial entity, and highlights the importance of spatial scale in the interactions between individuals and the structures which guide their lives. This is particularly relevant to

research into ISLM which has tended to focus on miscellaneous aspects of the topic at different spatial scales.

However, the attempt to combine human agency with structural properties of society is not without criticism. The greatest criticisms have come from Marxist quarters, some of whom view the approach as essentially a dressed up version of the interpretative sociologies of Weber and Durkheim, in which too much weight is given to human agency in shaping society (Callinicos 1989). Others have engaged with the theory, but challenge the lack of definition of components such as 'structure' and the degree to which the opportunities for individual agency are allocated or created (Cloke, Philo and Sadler 1991). Criticisms have been levelled at the limited recognition of coalescences of interactions at only macro and micro levels, with a silence on the role of intervening levels (Thrift 1985).

In response to the latter, Giddens asserts that a structuration approach *stresses* the inter-connectivity of the macro and the micro worlds, commenting...

> "the spatial differentiation of the micro- and macro- becomes imprecise once we start to examine it. For the forming and reforming of encounters necessarily occurs across broader tracts of space than that involved in immediate contexts of face-to-face interactions. The paths traced by individuals in the course of the day break off some contacts by moving spatially to form others, which in turn are broken off and so on... It is apparent that what is being talked about under the heading of micro/macro processes is the positioning of the body in time-space, the nature of the interaction in situations of co-presence, and the connection between these and 'absent' influences relevant to the characterisation and explanation of social conduct" (Giddens 1985b; cited in Cloke, Philo and Sadler 1991 pp113-114).

As such, the implication of this perspective is that the *macro* and *micro* levels are not seen as distinct realms but merely as two instances on a continuum of possible levels of analysis, which in practice are broken down into a hierarchy of levels of analysis by a process of 'methodological bracketing' (Fielding 1988). In this way, academic fields posses particular methodological traditions and repertoires, which are brought to bear on recognised topics within a conventional field of research. This applies to prior research on ISLM. Explicit recognition of this academic parochialism will permit a more insightful research design and deeper explanations of population events.

To develop the point further, the micro level is a convenient scale to deal with face-to-face or situational analysis which implies a high level of spatial and temporal immediacy. For ISLM studies, this relates to work on the relationship between work and family or mobility and health. In contrast, the macro level relates to institutional phenomena which cannot be readily reduced to an individual level and therefore focuses on groups or collectivities extended over space and or time. This applies to the study of economic and organisational structure and their change in ISLM research.

Such variable levels of analysis tend to be approached by certain methodological techniques, nevertheless they can be approached with different ones. Thus, for example, it is not necessary to approach the micro level in a subjective, qualitative way; it is as amenable to quantitative approaches as larger scales of analysis. Both subjective/ qualitative and objective/ quantitative approaches have their strengths and weaknesses and it is argued that there is advantage in complementary data sources.

However, it must be recognised that some levels and approaches are more accessible than others due to the skills and resources available to the researcher. Therefore, the research requires adoption of a suitable combination of adequate and satisfactory techniques and methods (discussed below). A further point of relevance to this research project is the value of distinguishing between the scale of inquiry and the methods of inquiry. With such a distinction in mind, the approaches of ISLM related studies can be more adequately inter-related (table 3.1)

Field and main methods		Sphere/ scale of interest
Economic geography	*Macro level, quantitative*	Economy
Population geography	*Meso level, quantitative*	Industry
Management studies	*Meso level, quantitative and qualitative*	Company
o v e r l a p		Individual
Occupational psychology	*Micro level, quantitative*	Family
		Community
		Society

Table 3.1 A socio-economic framework for ISLM research
Source: author

The table above illustrates the varying scale focus of ISLM related studies and their predominant methodological approach. It is noted that while studies within population geography and occupational psychology have addressed the relationship between work and non-work issues, this interest has been largely restricted to a concern with the mover and their immediate family. Relatively little work has addressed the wider connections between social and economic organisation in the context of ISLM.

Debates on structuration theory highlight access to the material circumstances of mobility, as well as the cultural or motivational perspectives of respondents is required. Thus this research study examines the quantitative relationship between ISLM respondents and industrial context, career position and family status. This quantitative approach is bolstered by consideration of the beliefs of respondents surrounding the advantages and disadvantages of mobility in relation to a range of issues. These individual-centred approaches are contextualised with reference to macro level, secondary sources, addressing the larger scale economic and social context of Scottish ISLM.

In summary, the value of structuration theory debates for this research project are in highlighting the interplay between the micro-level events of person to person interaction in a localised environment and more abstract dimensions, such as the organisation of production. The approach allows the different aspects of research on ISLM to be

interrelated, the avenues for the current research to be clearly identified and the appropriate methodological techniques to be considered.

3.3 Research design

The methodology adopted in pursuing the research aims involved the use of a range of complementary data sources, with both primary and secondary data being referred to. In the case of the latter, use was made of a number of untapped data sources. These secondary data sources represent a macro-level perspective and include official data sources on levels of business and scheduled air travel to the UK and Scotland and levels and forms of foreign direct investment in Scotland. These sources are set out in chapters four, six and seven.

Turning to primary data, this chapter relates the use of two questionnaire surveys on international skilled labour mobility in a Scottish context. The first strategy concentrates on examining the relationships with the global economy reflected in patterns of mobility. This questionnaire allows an evaluation of these patterns and relationships across a range of mobility types and in terms of a spectrum of respondent occupations, industries and countries of ownership of employing organisations. In addition, the questionnaire survey considered variation in aspects of the organisational implementation of longer term mobility.

The component of primary data collection outlined above was intentionally restricted to a relatively *factual* and *descriptive* assessment of skilled mobility. This is developed further through a secondary follow-up survey drawn from the primary sample population. The second phase concerns the influence of the family and social context of the skilled individual's mobility, the social impact of mobility and interest in the beliefs about the problems of mobility, especially in relation to longer term relocation.

It has been commented that...

> "It is abundantly clear that recent research has been over-dependent on secondary sources to the almost total exclusion of primary research. As a result behavioural studies of SIM are few in number by comparison with macro-analytic analyses" (Findlay and Gould 1989 p6).

It is discussed above how different scales of analysis and methods of investigation can be applied to both work and non-work spheres. The above statement does not fully

differentiate between the dimensions of scale, methods and sphere of analysis. The research design employed in this study involves a multi-level analysis of the work sphere, combining this with a multi-level analysis of the non-work sphere. Predominantly quantitative approaches are used, although qualitative representations of the relationship between work, family life and mobility are also employed.

3.4 First phase questionnaire survey

3.4.1 Defining the target population

Moser and Kalton note that the methodological problems of surveys fall into three broad categories: from whom to collect the information; what methods to use for collecting it; and how to process, analyse and interpret it (Moser and Kalton 1989 p53). The first step undertaken was the process of defining the population to be investigated. When discussing the population it is useful to distinguish between the *target* population and the *survey* population. The former represents the population for which results are required, the latter indicates the population *actually covered.*

The target population consisted of professionals and managers. In particular, those professionals and managers working in Scotland, but also, for comparison, those based abroad. Previous studies on skilled mobility have adopted a case study approach, examining characteristics of skilled migration in a restricted number of, usually large, companies (Salt 1984; Atkinson 1987). A criticism of earlier work is that while information obtained may be representative of the organisations examined, the range of organisations selected for examination are limited in terms of size, activity and country of ownership. The aim here has been to achieve a wider spread of industrial activity and company size, while still obtaining a wide range of occupations and job functions.

The approach taken affords the possibility of accessing those engaged in short term business travel and relating this to other forms of mobility. This is of interest, as different types of mobility may be related to the same corporate structures and economic forms of organisations. Both business travel and transient migration share a common root in the internationalisation of economic activity.

It is indicated that while managers and professionals constituted the target population, business travellers constituted the survey population. Firstly, this group was of value in examining the nature of short term mobility, important and interesting in its own right.

Secondly, and importantly, this group provides access to a substantial section of professional and managerial labour with which to examine transient international migration. Thirdly, this survey population afforded the ability to examine the links between important forms of mobility, i.e. short term business travel and longer term transient migration.

Disadvantages of the chosen survey method include the factor that it does not allow access to skilled labour who do not engage in business travel. Therefore, inferences to the whole population of professionals and managers must take this into account. However, subsequent results would indicate that the proportion of persons who engage in longer term mobility but not short term, are likely to be relatively low.

3.4.2 Selecting the survey location.

The location of the sample at an airport allowed access to a wide range of business people from a wide range of types and sizes of industry. In addition, these people are engaged in not only short term business travel, but are also, by virtue of their economic function, likely to be involved in longer term mobility.

The airport as a travel hub, spatially and temporally concentrates an otherwise geographically disparate group, normally accessible only through a multitude of separate organisations and companies. A problem with a case study approach is the need for good co-operation on the part of the company concerned. The route chosen circumvents the influence of company co-operation and approaches individuals directly.

The tables below indicate that the majority of international business travel to and from the UK takes place by air. While the proportions of different means of transport may vary for Scotland and for Glasgow, air is likely to be the most significant mode of transport for international business travel (table 3.2 & 3.3).

Mode of travel	Thousands	%
Air	3,768	78.4
Sea	1,039	21.6
All modes	4,807	100.0

Table 3.2 Number of business visits abroad by UK residents, all areas, 1990
Source: (adapted from Central Statistical Office 1991b pp12-20)

Mode of travel	Thousands	%
Air	3,871	86.1
Sea	623	13.9
All modes	4,494	100.0

Table 3.3 Number of business visits to the UK by overseas residents, all areas, 1990
Source: (adapted from Central Statistical Office 1991b pp12-20)

Having indicated the rationale for locating the survey at an airport, the criteria for selecting *Glasgow* airport are now outlined. There are three main airports in Scotland: Glasgow, Edinburgh and Aberdeen, in order of passenger flows (table 3.4). An important reason for setting the questionnaire survey at Glasgow airport is the location's large share of passengers in relation to other Scottish airports. Glasgow Airport, provides an important node through which a variety of professionals and managers pass. It is noted that Glasgow airport is the second largest UK airport outside the London area, after Manchester (Civil Aviation Authority 1991 p3).

Glasgow airport, also draws on passengers travelling to and from *all* regions of Scotland by virtue of a monopoly on certain routes. However, it must be indicated that a study located at Glasgow airport will not be entirely representative of Scottish business travel (this point is returned to below). However, the location was accessible and could be easily reached from the author's place of study. This was an important factor given the limits to resources under which the survey was conducted.

	International services			Domestic services		
Airport	Scheduled	Charter	Total	Scheduled	Charter	Total
Aberdeen	138,581	579,691	718,272	958,796	270,114	1,228,910
Edinburgh	203,074	188,381	391,455	2,089,636	11,022	2,100,658
Glasgow	672,312	1,178,404	1,850,716	2,402,462	33,095	2,435,557

Table 3.4 International and domestic terminal passenger traffic, Scottish airports, 1990
Source: (adapted from Civil Aviation Authority 1991 pp30-31)
Note: Domestic figures are double counted. Domestic traffic is counted both at the airport of arrival and the airport of departure.

3.4.3 Stratifying business travellers

An initial problem in targeting business people at airports is that passengers are travelling for a variety of purposes, not just business travel. It was therefore important to exclude from the sample passengers whose travel was not connected with their work. A step that was taken to achieve this aim was to exclude charter flights from the sample. It was likely that the majority of business travellers would use scheduled services. Scheduled services fly direct to many business centres. In contrast, the majority of charter flights, as well as being irregular, predominantly fly to tourist destinations. It must be noted, however, that a minority of business travellers use charter flights and have been excluded from the survey.

The next problem was that although scheduled flights are the main form of air transport used by business travellers, not all passengers on these flights are business travellers. To gain an indication of the magnitude of business travellers on scheduled flights, two sets of relevant statistics were compared. These were, firstly, figures on the number of international passengers aboard scheduled flights to and from the UK (Civil Aviation Authority 1991) and secondly, figures on the numbers of business trips to and from the UK (Central Statistical Office 1991b).

Several points must be raised with regards to the interpretation of these figures. Firstly, these figures do not reflect the levels of business use on domestic flights within the UK being restricted to international air travel. Secondly, these figures refer to aggregate UK level data on flows of passengers. It is likely that the proportions of business travellers to and from different locations within the UK will vary from the pattern shown for the UK as a whole. A third point is that the estimates made from the data sets above are subject to the limitations of the original data sets. Fourthly, while the data from the Civil Aviation Authority (CAA) refers specifically to scheduled flights, that from the Central Statistical Office (CSO) refers to both scheduled and charter flights.

In 1990, terminal passenger traffic aboard international scheduled services to and from the UK was at a level of 53,541,172 (Civil Aviation Authority 1991). In 1990, the number of business visits to and from the UK by air was 7,639,000 (Central Statistical Office 1991b pp13,19). From these figures it can be estimated that 14.3% of all passengers on international scheduled flights to and from the UK were on a business visit.

The significant number of business passengers on scheduled flights meant it was likely to be worthwhile sampling scheduled flights. However, it would be necessary to identify the

purpose of travel from potential respondents. All passengers could have been sampled, but this would have been wasteful of resources. Identification of business travellers is explained in a later section.

3.4.4 Focusing the sample on international flights

Having settled upon scheduled flights as constituting the source of the survey population, with the added refinement of selecting only business travellers, the next step was to assess the feasibility and desirability of sampling all scheduled flights. The main distinction to be drawn between scheduled flights is that between international and domestic flights. As it is international mobility that is being examined, it might initially be supposed that international flights be the prime focus of interest. However, a number of points must be considered.

Firstly, passengers on domestic UK flights to another UK destination may simply be using this UK destination as a staging post for an onward flight to a foreign location. No published statistics indicate the final destination of passengers using more than one flight in succession, but it is likely that a substantial number of domestic UK passengers are ultimately destined for a foreign location. Therefore domestic flights do not necessarily equal domestic business trips.

In illustrating the potential significance of domestic services for international travel the following statistics are highlighted. As has been indicated, Glasgow Airport had 2,402,462 domestic scheduled passengers in 1990 compared with 672,312 international scheduled passengers (Civil Aviation Authority 1991 p30) (Note: domestic figures are double counted).Most of Glasgow's domestic scheduled flights are to London. Using 1989 figures, of the 2,186,600 domestic scheduled passengers using Glasgow Airport, 1,504,900, or 68.8%, travelled between London and Glasgow (Department of Transport 1991). Furthermore, the majority of international flights from the UK are from London Airports. Returning to 1990 figures, of the 53,515,000 international scheduled passengers travelling to or from the UK, 47,371,332, or 88.5%, travelled to or from London[1] (Civil Aviation Authority 1991 p31).

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[1]Heathrow, Gatwick, Stansted and London City airports

It is possible therefore, that a significant number of passengers travelling from Glasgow to London are continuing from London to an ultimate destination overseas, although it is not possible to say what proportion of passengers from Glasgow stay in London and what proportion carry on to another destination and vice versa. Even if the relative number of passengers travelling to London and on again to a foreign destination is small, the fact that the absolute number of passengers travelling on domestic scheduled flights to London is high, means that this indirect international route is likely to be significant. Results from the pilot study confirmed that this was the case.

One role of the pilot study was to examine the nature of domestic flights from London with regard to the extent to which these flights were used by passengers on international trips. The pilot study revealed that of the forty five respondents travelling on flights from London Heathrow to Glasgow, 20%, had been engaged in international travel via London.

Another reason for sampling domestic as well as international travel rests on the variable nature of international mobility. That is to say, the fact that the current trip may be domestic, does not preclude the possibility that past mobility (of a short or a long term nature) has been international. As it is the aim of the survey to elucidate mobility over time and not solely current travel, domestic passenger flights constitute a potentially relevant survey population. The pilot study indicated that 53% of the same group of respondents had travelled abroad within the last twelve months.

The points above indicate that it would be useful for the purposes of the survey to sample both domestic and international flights. However the limitations on resources imposed a restriction on the coverage of the survey. In the end it was decided not to include domestic flights, because the sampling of this population was likely to obtain a large number of responses which were not of interest in terms of the research aims.

Although the destinations covered by international flights from Glasgow corresponds with those areas having significant economic links, the range is not complete. International flights from London provide a number of flights to destinations not available directly from Glasgow. A disadvantage with this is that particular industries may be disproportionately involved with these locations and so the particular forms of mobility inherent in such links would not be highlighted by the survey.

It is indicated that only business travellers *arriving* at Glasgow Airport were selected. The reasons for this relate primarily to the criteria stipulated for access to the Airport, as well as practical difficulties in sampling domestic passengers. In addition, it is the case that the majority of travellers will arrive and depart by air and therefore the composition of passengers at both the arrivals and departures areas will prove to be approximately equal over any substantial period.

3.4.5 Designing the sampling technique

Moser and Kalton denote one of the major principles underlying sample design as the need to avoid bias in the selection procedure (Moser and Kalton 1989 p79). Bias in selection can arise in the following ways: if the sampling is carried out using a non-random sampling method; if the sampling frame which serves as the basis for selection does not cover the population adequately, completely or accurately; if some sections of the population are impossible to find, or refuse to co-operate.

The aim of the sample was to provide a representative measure of the population, in which the responses and characteristics of the sample reflected those of the survey population. With this consideration in mind, a *random* (or probability) sample is most likely to produce a representative sample and enable estimates of the sample accuracy (De Vaus 1990 p60).It can be generally stated that randomness is the basis of all sound sample designs. However, sample designs can vary in their detailed structure, ranging from straightforward simple random sampling to other designs, which while retaining the essential element of randomness, introduce various restrictions and refinements (Moser and Kalton 1989 p79).The form of sample conducted in any particular case tends to reflected the nature of the research problem, the availability of an adequate sampling frame, resources available and the method by which data are to be collected.

This is a sample in which each person has an equal chance of being selected for participation in a survey (Fink and Kosecoff 1985 p55). To ensure true randomness, the method of selection must be independent of human bias. Different procedures exist for this, for example, a lottery method, or the use of random numbers (see Moser and Kalton 1989 p82). Both require prior information on the population, for example, a population list of certain attributes or characteristics from which random selection can be made. On the other hand, with a systematic sample, "Once the sampling fraction is determined, the random selection of the starting point determines the whole sample." "In systematic

sampling, the selection of one sample member is dependent on the selection of a previous one while with simple random sampling from a large population the selections are virtually independent of each other" (Moser and Kalton 1989 p83).

An alternative to simple random sampling is systematic sampling. Using this method a desired sampling fraction is calculated (let $K = N/n$) and every Kth person is selected from a population list, starting with a randomly chosen number between 1 and K inclusive. That is, to obtain a systematic sample, a sampling fraction is worked out by dividing the population size by the required sample size. For example for a population of 50 and a sample of 10, the sampling fraction would be 1/5. One person in every five would then be selected from the population list (De Vaus 1990 p64).

Strictly speaking, this method is not equivalent to simple random sampling (unless the population list itself is in a random order). As Moser and Kalton indicate, this method of selection differs from simple random sampling in that it does not give all possible samples of size n from the population of size N an equal chance of selection (Moser and Kalton 1989 p83).

When the list from which a systematic sample is selected can be regarded as arranged "more or less at random", the method of selection can be termed *quasi-random sampling.* "In these cases, selecting at regular intervals from a list can be treated as approximately equivalent to simple random sampling" (Moser and Kalton 1989 p83).

3.4.5.1 Implementing the sampling technique

A problem with both the above sampling procedures is the necessity of having an adequate population list from which to select people either randomly or systematically. This population list was not available for the passengers who constituted the survey population. That is to say, it could not be pre-determined how many passengers were aboard a particular flight, their identity, in what order they would disembark or their status as business travellers. Therefore a variant of the systematic sample was used as a sampling technique.

The procedure for sampling was to stop the first person emerging from the arrivals gates from any particular targeted flight. This person was questioned as outlined below and the required details filled in on a recording sheet (appendix 3.1). When finished recording the details of this first person and distributing a questionnaire if required, the fieldwork

assistant looked up and turned back towards the arrivals gate and the remainder of the exiting passengers. The next person emerging from the arrivals gate who was nearest to the fieldwork assistant was approached. It was essential to select the next nearest person. The next person was selected regardless of appearance and without any influence of bias on the part of the survey member.

The first passenger to emerge from the arrivals gate was chosen as the first person approached rather than the typical random start used in basic systematic samples as outlined above. The latter was not feasible due to the absence of set sampling fractions. These were not possible due to the absence of a population list. Instead a random start was ensured by the process of passenger progress through the various stages between flight disembarkation and emergence from arrivals gates. This procedure eliminated any possibility of bias entering into selection of initial respondents.

The routine adopted ensured a systematic and unbiased basis to the sampling. Although the sampling procedure was systematic, due to the absence of a suitable population list, the sampling fraction was not regular. In adopting the strategy of systematically choosing the next nearest person after the last respondent, a variable number of passengers were able to proceed past the survey member in between the administration of the interview and questionnaire distribution and the selection of the next candidate (the characteristics of the interview and questionnaire are discussed subsequently).

However, the time taken to implement the interview and questionnaire distribution varied little, with the consequence that the number of passengers approached, per total number of passengers on a flight, was very similar. That is to say, the routine of the interview and questionnaire distribution imposed its own approximate sampling fraction.

While the sampling fraction generated by the routine of the survey was not identical for all flights, the variability in the sampling fractions between flights is low enough to be discounted in relation to the need to weight results from different flights to ensure representative results.

A potential problem with a basic systematic sample concerns periodicity of events. If a certain type of person occurs at regular intervals within the sampling frame and the sampling fraction is such that it matches this interval, then the sample will include only certain types of people and systematically exclude others (De Vaus 1990 p64). The absence

of a set sampling fraction circumvented this problem should it have existed in the first place.

Recording sheets (appendix 3.1) were used to record information on all passengers approached during the survey sample. Details were recorded as to each person approached accepted a questionnaire. A note was made of the respondent's sex. Estimates were also made as regards the respondent's age and whether their travel was connected with work or not. For each flight, details were filled in on the flight code and arrival time. Questionnaires were numbered and a record kept of which questionnaires were distributed to a particular passenger, as well as their flight number.

At the same time as one interviewer was completing recording sheets and distributing questionnaires, another researcher was undertaking a count of the total number of passengers aboard each sampled flight. This allowed a calculation of sampling fractions and response rates. Use was made of a tally counter in recording the number of passengers aboard a particular flight. These numbers were recorded on the recording sheets. The total number of passengers was counted, excluding infants.

The position of the fieldworker in relation to exiting passengers was important in relation to distribution of the questionnaires and to counting passengers. Finding the best place to stand was a balance between having good access to all the passengers who came out of the arrivals gates and avoiding passenger congestion (a condition of access to the location). Fieldworkers kept some distance back from the arrivals gate doors but still managed to keep the whole range of emerging passengers within range.

3.4.5.2 Targeting of flights

Fieldworkers were provided with a timetable for all the scheduled flights arriving at domestic and at international arrivals for the two weeks of the survey (OAG 1992a; OAG 1992b). Flights were identified by their flight code as indicated in the supplied timetable. It was usual for flights to be either early or late. Few arrived exactly on the time given in the official schedules.

When a flight landed at domestic arrivals, the arrivals information screens within the airport changed to show at what time the flight had landed. It took approximately 5 minutes from the time of landing, as shown on the arrivals screens, for the emergence of the first passengers from the arrivals gate. It then took up to 5 minutes at the most for all

the passengers from that flight to pass through the arrivals gates. This made a total of 10 minutes between landing and all passengers having exited at the arrivals gate. Therefore, if the flight targeted arrived at least 5 minutes *after* the previous flight and at least 10 minutes *before* the next flight, there was a gap in the flow of passengers out of the arrivals gate, allowing the targeted flight to be isolated for sampling.

However, where targeted flights arrived *less* than 5 minutes after the previous flight and, or *less* than 10 minutes before the next flight, passengers from these flights emerged from the arrivals gates together. It was therefore necessary to sample all of this group as one unit until there was a clear gap between passengers from different flights. When this situation arose a note was made on a recording sheet of the flight codes belonging to all the flights from which passengers were sampled.

Where two international scheduled flights arrived at or near the same time the above procedure was also adopted. However, it was rare that two scheduled international flights arrived at the same time. It was more often the case that a charter flight and a scheduled flight arrived at the same time. In this case a note was made of the flights which clashed.

Instead of sampling all passengers emerging as one from more than one flight, all those that could be positively identified as having come off the charter flight were excluded from the sampling procedure. This was done by means of identifying the luggage labels on the baggage of the people on the charter flight. Luggage labels positively indicated those passengers belonging to a particular flight. Where there was doubt as to whether a passenger was from a particular flight or not, the passenger was sampled.

3.4.5.3 Evaluating the sampling technique.

The pilot study was carried out over seven days in April 1992. The aims of the pilot study were to evaluate the interview and questionnaire procedures, to assess the proportion of passengers which could be readily sampled and to estimate the likely response rate of the survey.

A total of 5581 passengers were aboard the flights sampled during the pilot study. Of these, approximately 1106, or 19.8%, were stopped. Therefore, it was possible to approach about one in five of all passengers. Of passengers approached, 50.3% accepted a questionnaire, 556 questionnaires being distributed during the pilot study. Approximately

10% of all passengers were given a questionnaire. A response rate of 32.1% was achieved, yielding 190 responses.

In assessing the degree to which domestic flights were utilised as intermediate journeys on international trips, the pilot study focused upon London flights. As indicated earlier, London airports act as the main UK hub for international flights. The pilot study concentrated on Heathrow as the UK's largest international airport. Results for the last day of the pilot study period have been excluded because data on the total number of passengers aboard flights could not be collected. Of the 132 international scheduled flights arriving at Glasgow Airport within the pilot study period, 69 were sampled (52.3%). Of the 140 domestic scheduled flights from London Heathrow arriving at Glasgow Airport within the pilot study period, approximately 14% were sampled.

The table below indicates the coverage of the main sample, the locations from which international scheduled services fly to Glasgow and the number of flights from these destinations within the two week period of the survey. The table also indicates the proportion of these international scheduled flights that were actually sampled. Some 83.7% of all flights within the two weeks were sampled. The table further indicates that of the 307 international scheduled arrivals at Glasgow airport between the first and fourteenth of June 1992, 257 were sampled (table 3.5).

Figures for individual locations fluctuate around the average sample fraction. In particular, Dusseldorf and Hanover are under represented. Passengers from these flights proved harder to access, as they disembarked from domestic arrivals and were frequently confused with domestic flights. In addition, Halifax and New York flights are under represented, due to their very early arrivals times. Table 3.6, below, elaborates on the previous table. It shows that the total number of passengers aboard the flights sampled to be approximately 16,705. Of this number, 3,286 were approached for sampling. Column C indicates the sampling fraction obtained for approaching passengers. This column shows that approximately one in five passengers were stopped. The table also indicates that 1,401 questionnaires were distributed in total.

The number of questionnaires distributed indicates that approximately one in every twelve passengers accepted a questionnaire (column E). Moser and Kalton indicate that little precision is lost with small deviations from the sampling fraction, thus the researcher decided that weighting to compensate for different sampling fractions was not justified

(Moser and Kalton 1989 p94). In total 431 questionnaires were returned. This figure represents 31% of all the questionnaires distributed. Not all questionnaire returns proved useful. In particular, coverage of flights to Germany introduced an unexpected problem. German flights arrived at domestic arrivals because these flights stopped over at other UK airports other than Glasgow Airport. Of the 402 questionnaires distributed, only 14 were returned by passengers engaged in international travel. Some 127 were returned by domestic passengers travelling from a UK airport to Glasgow.

The high proportion of UK domestic passengers aboard German arrivals was not appreciated from the pilot study. A greater time period between the return of pilot study questionnaires in mid May, 1992, and the conduct of the main survey in June, 1992, might have allowed for a fuller appraisal of the make-up of German flights. Excluding German flights, 999 questionnaires were distributed, yielding 293 returned questionnaires. This represents a 29.3% response rate for direct international scheduled flights. A further 25 questionnaires were unusable for other reasons. Therefore, 268 useful responses were gained.

The table below estimates the total number of passengers aboard international scheduled flights within the survey period (table 3.7). Excluding German flights, a sample of 293 questionnaires from an estimated 14,429 international passengers in the two week survey period, represents a 2.03% sample of all international travellers using the airport. An estimate of sampling error is indicated in appendix 3.2.

Flight origin	A. Total no. flights	B. Total no. flights sampled	C. B as % of A
Belgium			
Brussels	22	21	95.4%
Canada			
Halifax	4	1	25.0
Toronto	12	12	100.0
Denmark			
Copenhagen	14	13	92.8
Eire			
Dublin	68	59	86.8
France			
Paris	31	28	90.3
Germany			
Dusseldorf	10	5	50.0
Frankfurt	34	27	79.4
Hanover	14	4	28.6
Munich	14	12	85.7
Iceland			
Reykjavik	6	5	83.3
Netherlands			
Amsterdam	36	35	97.2
Norway			
Stavanger	8	8	100.0
U.S.A.			
Boston	14	12	85.7
Chicago	14	14	100.0
New York	6	3	50.0
Total	307	257	83.7

Table 3.5 Survey flight coverage, Glasgow Airport Survey, 1992
Source: author

	A	B	C	D	E
Day of sample	No. of passengers on sampled flights*	No. of passengers stopped	A/B	No. of questionn-aires distributed	A/D
1	1193	333	3.6	91	13.1
2	1274	280	4.5	111	11.5
3	1312	300	4.4	120	10.9
4	1198	254	4.7	114	10.5
5	1139	252	4.5	110	10.4
6	860	142	6.1	48	17.9
7	878	182	4.8	67	13.1
8	1289	301	4.3	113	11.4
9	1533	266	5.8	127	12.1
10	1296	233	5.6	125	10.7
11	1280	226	5.7	110	11.6
12	1167	223	5.2	127	9.2
13	1224	157	7.8	74	16.5
14	1062	137	7.8	64	16.6
Total	16,705	3,286	Average 5.1	1,401	Average 11.9

Table 3.6 Survey sampling results by day of sample
Source: author

*Figures for numbers of passengers on flights were totalled to give figures on number of passengers involved in survey for each day. Figures for passengers on individual flights were obtained by three different means. Firstly, from correspondence with airlines on numbers of passengers aboard specific flights. Secondly, from counts of passengers by fieldwork assistants. Thirdly, where neither official airline figures nor counts were available, an average figure derived from the available data was calculated.

Flight origin	Total number of flights	Estimate of total number of passengers over two weeks
Belgium		
Brussels	22	317
Canada		
Halifax	4	160
Toronto	10	1,968
Denmark		
Copenhagen	14	847
Eire		
Dublin	68	2,081
France		
Paris	31	1,553
Germany		
Dusseldorf	10	707
Frankfurt	34	2,805
Hanover	14	420
Munich	14	1,396
Iceland		
Reykjavik	6	560
Netherlands		
Amsterdam	36	1,433
Norway		
Stavanger	8	204
U.S.A.		
Boston	14	2,446
Chicago	14	1,802
New York	6	1,058
Total	307	19,757

Table 3.7 Estimate of total number of passengers aboard all flights within survey period, international scheduled flights, Glasgow Airport, 1992
Source: author

Non-response can result from two situations: firstly where people have refused to accept a questionnaire; secondly, where people fail to return the questionnaire. In turn, non-response results in reduction of sample size and introduction of bias into the results. Reduction of sample size has been tackled in two ways. Firstly techniques were employed to reduce non-response such as employing appropriate interview techniques and questionnaire design. Secondly, a sample was drawn which was larger than required.

Assuming a response of approximately a third, a sample was taken which was two thirds larger than the target response desired. The final sample size was a compromise between cost, accuracy and ensuring sufficient numbers for meaningful sub-group analysis.

Turning to the issue of bias, non-respondents may be different in important respects from respondents. Observable information was used as a means of obtaining information to enable adjustments for bias. Where contact was made, but people refused to answer, information on sex, age and activity were obtained. The latter two categories were based on informed subjective assessments. The observable information on the sex of the survey population proved useful in examining differences between the sampled passengers and the returning respondents.

Of passengers accepting a questionnaire, 14.6% were female and 85.4% were male. A similar proportion was found amongst respondents. Some 12.8% of those returning a questionnaire were female as against 87.2% who were male (table 3.8).

	Sex	
Response category	Male (%)	Female (%)
Accepted questionnaire	47.6	25.9
Refused questionnaire	14.5	5.7
Questionnaire not applicable	37.8	68.4
Missing	0.1	0.0
Totals	2474	777
Missing data = 35		

Table 3.8 Response category by sex
Source: author

3.4.6 Selecting the means of sampling

3.4.6.1 Location and means of sampling

Of the remaining two options (face to face interviews and mail questionnaires), the sampling environment and the conditions of access to that environment, meant that mail administration would be a more desirable and feasible option than face to face interviews.

To elaborate upon this point, the only areas to which the author and fieldwork assistants had access at Glasgow airport were positions outside the passenger arrivals gates. Passengers exiting the arrivals gates are frequently under pressure of time for a connecting flight or a business appointment. A condition of access was that passengers should not be greatly inconvenienced or delayed and that congestion of the arrivals areas be kept to a

minimum. These conditions discouraged the adoption of lengthy interviews as a means of data collection. In addition, the location was not suitable for conducting lengthy interviews as it was frequently very busy and crowded. A further point was that the conduct of face to face interviews would result in a lower total sample number as fewer respondents could be contacted within the time allocated by the airport authorities.

A possible option for the location of the sampling procedure were the departure lounges within the airport. However, these locations raised a number of difficulties. For instance, these locations made identification of the destination of respondents difficult, with a variety of passengers from different flights being present in the lounges.

The location of the survey favoured distribution of self-administered postal questionnaires. The disadvantage with self-administered postal questionnaires lay in the probability of a lower response rate. Several steps were taken to ensure that non-response was kept to a minimum and that the effect of non-response could be estimated. Rather than rely solely upon self-administered questionnaires, it was deemed necessary to conduct a brief interview. The purpose of the interview was to ascertain the purpose of travel of the sampled passenger. Short interviews were held with respondents for three purposes: to identify whether their travel was connected with their work (that is, identifying whether they belonged to the survey population); ascertaining as to whether the passenger would be willing to participate in the survey (it was felt that this encouraged a greater sense of commitment on the part of the respondents); the course of the short interview allowed some opportunity to record observational data on the respondent.

3.4.6.2 Sample representativeness and means of sampling.

Since the overwhelming majority of individuals given a questionnaire were business people and therefore of a relatively high educational level, a mail survey was not likely to be biased in terms of its accessibility and comprehensibility to respondents, given efforts made in the questionnaire design. A potential problem was the possibility of encountering non-UK citizens, whose language was not English. While a large number of business travellers to the UK would be likely to have an ability to speak and understand English, the use of a questionnaire was preferable to that of a verbal interview in that the questions could be studied by respondents at greater length. However, the potential bias in differential ease of response should be noted.

The use of a combination of interview and mail techniques allowed a representative sample to be drawn, the interview being used to control who completed the questionnaire and to ensure the appropriate survey population was addressed. Interview surveys require a greater commitment in terms of either labour or time and hence cost. Due to restrictions on the resources available and the important consideration of the limited intrusion allowed into the normal running of airport business, face to face interviews would have resulted in too few respondents within the restricted time available.

An advantage of the mail survey lay in its reliance upon a lower staffing requirement. In addition, initial distribution of questionnaires could proceed more quickly than the time that must be devoted to interviews. However, the absolute time involved in the collection of data through self-administered questionnaires is considerable. Questionnaire distribution, from initial distribution to return of all completed forms, took several weeks.

Some of the disadvantages of the mail questionnaire were overcome by combining it with interviewing. That is, questions were delivered in person and returned by mail. The interview was used to elicit co-operation and provide opportunity for observational data to be collected. In addition it was used to ensure the appropriate and accurate identification of the survey population. Evaluation of the means of sampling was achieved through the pilot study. The pilot study allowed an opportunity to assess the viability of the form of the adopted interview and self-administered questionnaire.

3.4.7 Construction of the questionnaire

3.4.7.1 Selecting areas for investigation

The questionnaire was divided into several sections. The first section was under the heading *employment description.* This section was aimed at ascertaining basic information regarding the economic role of the respondent, their job function and the location and activity of their employer.

The following section (section two) inquired into the *current* business trip of the respondent, requiring information on the destination and function of the trip. Expanding upon section two, section three asked about *past* business travel. Information required in this section was restricted to the frequency and direction of business travel and did not seek elaboration on the function of travel.

The subsequent section, section four, moved on from a consideration with shorter term forms of mobility to a consideration of longer term forms of mobility. More specifically, this section of the questionnaire inquired about experiences of *home relocation* associated with work. The regularity of moves, the locations involved and the purpose of such moves were investigated. In addition, this section explored the management of these moves in terms of the relocation facilities utilised by the movers and their employers.

Having considered both short and longer terms of mobility, the next section, section five, sought data regarding the frequency and pervasiveness of intermediate length mobility of a temporary nature. The penultimate section of the questionnaire (section six) was not directly related to the aims of the survey as a whole, but was included at the request of the fieldwork funding body. This section was concerned with the details of local travel to and from the Airport. The inclusion of this section of the questionnaire detracted from the aim of having a focused and brief questionnaire. On the other hand the inclusion of this section ensured the co-operation and good will of the sponsor. The final section of the questionnaire (section seven) gained a background profile of the respondent and their family status.

3.4.7.2 Question content

Dillman distinguishes between four distinct types of question content: behaviour, beliefs, attitudes and attributes (Dillman 1978 p80 cited in Moser and Kalton 1989 p97). The primary questionnaire sought to ask questions relating only to *behaviour* and to *attributes*, i.e. asking what people do in the case of behaviour and obtaining information about the respondents characteristics in the case of attributes. The two types of question sought were asked, as they were appropriate to the style of information gathering, i.e. a relatively short and simple self-administered questionnaire.

Questions wished on attitudes and beliefs would have been more complex to pursue with such a self-administered questionnaire. Although it was desirable to discern attitude and belief data, it was decided such information could be gleaned more effectively from a more specialised follow up survey (discussed subsequently).

3.4.7.3 Questionnaire length.

Difficulty was encountered in deciding upon an optimum questionnaire length. This was due partly to heterogeneity within the population. For example some respondents would not be concerned with sections of the questionnaire and therefore might consider the

exercise relatively futile, whereas other were engaged with all the sections and were therefore more likely to be interested in the survey, due to its particular relevance. Variance was also likely in the amount of time available for respondents to complete the questionnaire. A need to strike a balance was required between the length and scope of the questionnaire, the need for it to be attractive to potential respondents, while maintaining its relevance to all respondents.

3.4.7.4 Multi-phase sampling

Multi-phase sampling is a design where information is obtained from the population and subsequently additional information is collected from a sub-sample of the full sample. "With only one sub-sample the technique is called *two-phase sampling* or *double sampling*" (Moser and Kalton 1989 p121).

In the case of the Glasgow airport survey, some information would have been costly and inconvenient to collect from the whole population. Therefore, it was collected from part of the entire sample. The aim was to reduce the burden on respondents and to provide a more practical and economic first phase. In addition, the information collected for the full sample could be utilised in interpreting the sub-sample results.

3.4.7.5 Wording questions

For the purpose of engineering a reliable and efficient self-administered questionnaire, attention was paid to developing clear and unambiguous questions. Following De Vaus, the steps outlined below were observed (De Vaus 1990 p83).

1. Making use of simple and accessible language.
2. Keeping questions as short as possible.
3. Avoiding 'double-barrelled' questions.
4. Taking care not to use leading questions.
5. Avoiding the use of negative questions.
6. Ensuring that respondents were likely to have the necessary knowledge to answer a set question.
7. Avoiding prestige bias in questions.
8. Removing traces of ambiguity in questions.
9. Providing a clear frame of reference for questions.
10. Avoiding either objectionable or unnecessarily detailed questions.

3.4.7.6 Selecting question type.

Many *closed question* (or forced choice) formats were utilised. These are formats in which a number of alternative answers are provided from which respondents are to select one or more. In contrast, an *open ended question* is one for which respondents formulate their own answer (De Vaus 1990 p86). Closed format was appropriate to the method of administration, that is, of ensuring ease of completion and encouraging sufficient motivation on the part of the respondent.

Forced choice questions utilised a large range of response in order to avoid biasing answers. Also the category, '*other (please specify)*' was used for coping with unanticipated responses, as was the '*don't know*' response category. A further consideration in questionnaire design was the necessity to avoid open ended questions. Mail questionnaires are not well suited to these types of question as they interrupt the flow of completion, and create an added difficulty for the respondent, burdening them with the need to express ideas in written form.

Further notes on questionnaire layout, presentation and evaluation are included in appendix 3.3. Details on interview and questionnaire distribution are also included in appendix 3.3. The questionnaire is presented in appendix 3.4.

3.5 Second phase questionnaire survey

3.5.1 Introduction

The material presented here relates to a second phase questionnaire survey based upon contacts acquired in the first phase survey described above. The aims of this second exercise in data collection and the relationship of this approach to the thesis as a whole are set out below.

The focus of this first questionnaire was primarily upon the relationship between mobility patterns and the economic characteristics of respondents, i.e. their job function and the activity and ownership characteristics of their employers. In addition, this first phase questionnaire was concerned with the behaviour and attributes of respondents in relation to mobility and economic background as well as, to a degree, the family and social background of respondents.

In line with one of the main research aims (i.e. the influence of family and social context on the characteristics of Scottish international skilled labour mobility) the first

questionnaire also investigated the family and social background of respondents and the extent to which problems associated with the conflict between mobility and social ties had been ameliorated by the employer. The approach taken with respect to this dimension of the research was restricted to a relatively *factual* and *descriptive* account.

This latter research theme has been further developed through a follow-up survey drawn from the primary sample population. This second phase extended data collection to areas of information concerned with the influence of the family and the social context of skill mobility. Developing the first phase questionnaire, the follow-up survey has a greater concern with the social context of mobility and an interest in the *beliefs* about and the *attitudes* towards mobility issues, especially in relation to longer term relocation.

The section begins by defining the target and survey populations. Following the identification of the survey population, the approach taken in determining the sampling technique is set out. The means of sampling are then explained and the reasons for their selection justified. Finally, the steps taken in the construction and administration of the survey questionnaire are detailed. Frequently, the steps taken in formulating and carrying out the second phase survey closely mirror those adopted for the first phase survey. Where this occurs reference is made to earlier discussions.

3.5.2 Defining the second phase target population

As discussed for the phase one methodology, the first step in pursuing the information required is in defining the population to be covered. For the primary survey, the sample population of interest was constituted by business travellers. The characteristics of the survey population for the second phase survey were dependent upon the criteria imposed in the definition of the primary survey population. However, the target population for the second phase survey differed in a significant way from the first phase survey as indicated above, a major role for the follow-up survey was to investigate a wider set of questions relating to the social and family context of skilled mobility. With this in mind, the follow-up questionnaire sought information not only from the managers and professionals themselves, but also from their *partners* or *spouses*. Thus the target group was extended from the individual attributes of managers and professionals themselves to include the partners or spouses of this group, where relevant.

3.5.3 Designing the sampling technique

3.5.3.1 Targeting of respondents

Of the 268 respondents from the first phase survey, 168 (63.4%) expressed a willingness to participate in a follow-up questionnaire survey. The remaining 97 respondents were either unwilling to participate in a follow-up survey or did not respond to this question (21.1% and 15.5% respectively). Of the 168 respondents, the 120 respondents who resided within the UK were sent a questionnaire. The decision to exclude respondents who were presently residing abroad was based upon the limited resources available for the follow-up survey. Of the 120 questionnaires sent out, 82 were returned. The returned questionnaires represented 68.3% of the questionnaires sent out. The follow-up survey involved approximately a third of the first phase respondents. An indication of sampling error is given in appendix 3.2.

The population from which the sub-sample was drawn was randomly selected, and so this sub-sample incorporates this random element. However, the random selection of the sub-sample has been restricted by the exclusion of overseas based respondents.

3.5.3.2 Evaluating the sampling technique

A pilot study was carried out during April 1993. The aims of the pilot study were to evaluate the questionnaire design and question content. Approximately 20 draft questionnaires were distributed to a range of colleagues and families for completion. From this study, various oversights and answering difficulties were remedied for the final draft of the questionnaire.

A general discussion of the issue of non-response is made above. In relation to the follow-up survey, the problem of non-response arises in two ways. Firstly, a degree of self-selection may occur in the sampling process, in that those most affected by and therefore interested in mobility issues, preferentially agree to participate in both the initial and secondary surveys. In this way, non-respondents may differ significantly from respondents. Secondly, the follow-up survey explicitly excluded one group of respondents from the survey (i.e. overseas respondents).

The latter problem is countered by the fact that the sampled group includes respondents who have previously lived and worked overseas, or who are currently on an overseas

posting within the UK. Therefore many of the issues that may arise with overseas relocation are likely to be encountered within the sample group.

With regard to the former issue, steps to counter non-response were incorporated in the questionnaire design and method of distribution, with the intention of encouraging response of the whole population. For the follow-up survey the possibility exists to compare the characteristics of respondents with those of the non-respondents using data available from the first phase survey (see chapter nine).

3.5.4 Selecting the means of sampling

This section explains and justifies the sampling tool utilised in carrying out the survey. A general discussion on the merits of different means of sampling has been given above. Further consideration on means of sampling for the second phase survey are detailed below with reference to their effectiveness in gaining representative results. In addition, the merits of different approaches are assessed with regard to their respective demands on available resources.

For the follow-up survey, telephone interviews were not considered. Although information on the phone number of respondents was requested in the first phase, relatively few respondents actually provided this information, therefore making this an impractical option. Furthermore, the length of questioning required would have been inconvenient and prohibitively expensive over the phone. In addition, it would have been difficult and cumbersome to convey the exact meaning of some questions over the phone.

While access to the population by phone was precluded primarily by insufficient information on phone numbers (amongst other factors), personal face-to-face interviews were not an appropriate method due, mainly, to the travel expenses inherent in this approach. As respondents lived in a variety of locations within the UK, this latter technique was not feasible within the resources available for the project,

Due to the dispersed nature of the survey population, a self-administered postal questionnaire was favoured. General considerations relevant to the construction of this questionnaire are raised above. With regard to evaluation of the means of sampling, it has been indicated that a pilot study was conducted in which the form and content of the sampling technique were assessed.

3.5.5 Construction of the questionnaire

This section describes the process involved in the formulation of the questionnaire used in the phase two survey. The areas defined for questioning are laid out, indicating the content of the questionnaire. Secondly, the section relates how the form of the questionnaire was arrived at. A specimen copy of the questionnaire is illustrated in appendix 3.5 for reference.

3.5.5.1 Selecting areas for investigation

The questionnaire was divided into two main sections. A section for the primary respondent was complemented with a broadly equivalent section for the spouse or partner of the primary respondent (where this was applicable). Each of these two main sections were further divided into three sub-sections (see figure 3.1).

The first of these sub-sections was labelled *'Non-movers'* and was directed at those respondents who had decided against a job move which involved moving home, within the previous ten years. This section was aimed at identifying the circumstances surrounding the decision not to make a home move related to a job change. This section elucidated information on the behaviour and attributes of respondents as well as the beliefs of respondents concerning the reasons for not moving home (see above for a discussion of question content).

The subsequent questionnaire section addressed those respondents who had moved home within the last ten years as the result of a job move or job change, instigated by either themselves or their partner/spouse (where applicable). This section was titled *'Moving home'* and ascertained information on the behaviour and attributes of respondents with regard to the geographical and economic context of the moves. In addition, information was obtained on respondents beliefs regarding the career consequences of any moves and in relation to the factors which encouraged or discouraged such moves.

The following questionnaire section, named *'Future home moves'*, (section 3) addressed all respondents. This section moved on from a consideration of actual past experiences, to a consideration of respondents beliefs and attitudes concerning possible future relocation. In all three questionnaire sub-sections, when respondents were questioned on beliefs and attitudes surrounding mobility, these views were sought in relation to a number of spheres indicated below.

3.5.5.2 Question content

In addition to asking questions on attributes and behavioural aspects of respondents, the follow-up survey sought information on beliefs and attitudes in relation to the social and work contexts of mobility. Questions on beliefs were concerned with what people believe to be true or false in relation to given situations (for example one question asked what effect home moves had on respondent's careers). Further, "The focus of belief questions is on establishing what people think is true rather than on the accuracy of their beliefs" (De Vaus 1990 p82). The difference between belief and attitude questions is illustrated by means of the following quote...

> "Belief questions can be distinguished from those that aim to establish the respondent's attitudes. Whereas belief questions ascertain what the respondent thinks is true, attitude questions try to establish what they think is *desirable"* (De Vaus 1990 p82).

The questionnaire did not explicitly ask questions which sought to get the respondent to identify what they thought should be the desired outcome. However, the distinction between the two question types is likely to be blurred in practice.

Questions relating to the beliefs of respondents were asked in relation to a number of themes, i.e. quality of life, housing, own work and partner's work. The basis for adopting these themes and the specific questions comes from an appraisal of prior research in the field, an examination of relevant professional press, a number of interviews with business professionals with responsibility for relocation, and by means of a pilot exercise.

It is noted that the different themes adopted are most likely to be inter-related and that one factor is unlikely to operate in isolation from others. However, "these limiting factors should not be interpreted as precluding meaningful analysis of the positive motivating factors which underpin the human decision to migrate" (Findlay 1993 p39). Thus, the individual perceptions of respondents are, as indicated earlier, set in the context of wider social and economic structures.

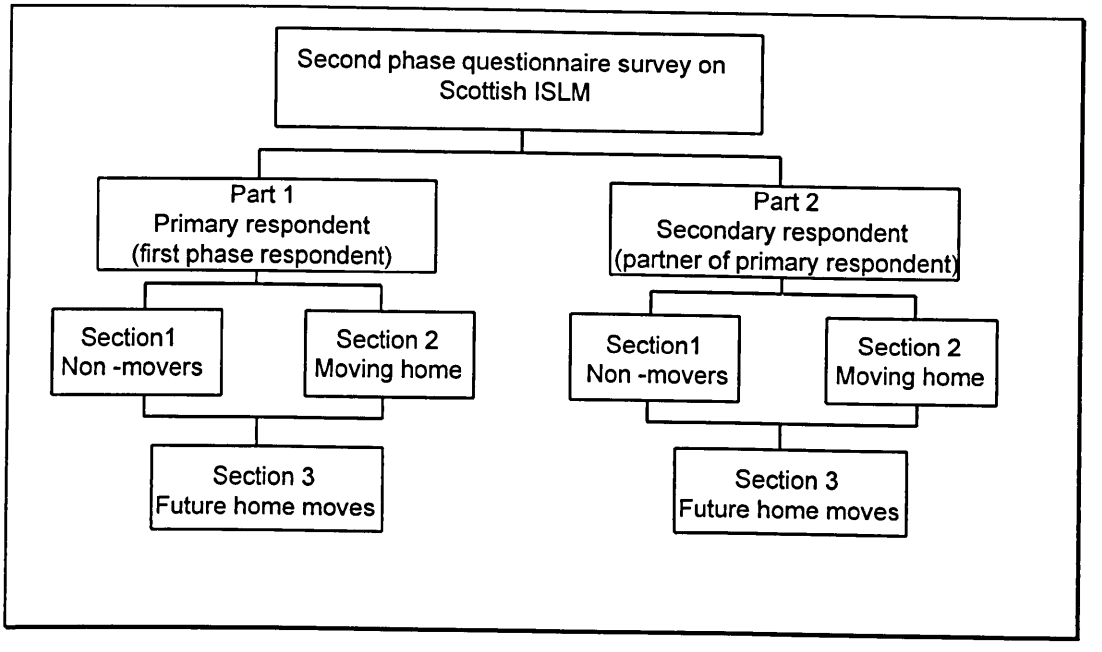


Figure 3.1 Structure of second phase questionnaire
Source: author

3.5.6 Questionnaire distribution

Effective presentation of the questionnaire was made with the intention of increasing the receptiveness of the respondents to the survey. This included a high standard of presentation for the questionnaire, covering letter and accompanying stationery. A discussion of the general content and purpose of the covering statement are outlined above.

As for the first phase survey, pre-paid envelopes, addressed to the Department of Geography at the University of Glasgow, were used for respondents to return their questionnaires. Pre-paid envelopes were enclosed with all questionnaires. This method, utilising the Royal Mail Response Service, was followed for the same reasons as set out above.

A follow-up was used in the second phase survey with the intention of enhancing the response rate. The use of such a technique can have a considerable influence on response rates as indicated by Moser and Kalton, who cite evidence of a Government Social Survey in which the use of follow-up techniques improved the response rate by 20% (Moser and Kalton 1989 p266).

The second phase survey employed a single follow-up. This consisted of short reminder letter sent out one week after the initial mailing. The reminder was sent to all candidates. A specimen copy of the follow-up reminder is contained in appendix 3.5 for reference.

3.6 Data analysis

The above methodology generated a significant amount of information on Scottish international skilled labour mobility, from both primary and secondary sources. A strategy was therefore required with which to proceed with an analysis of this data, with the intention of elucidating and communicating the value of the findings. The analysis adopted was shaped by the research questions posed in chapter one and developed in chapter two. In turn, research questions were directed at a number of variables and the relationships between these variables. Thus a range of techniques were adopted, with analysis proceeding from exploratory through to explanatory approaches.

Particular types of analysis used relate to the specific research problem under question. Further, research questions themselves were refined during the process of analysis and so the approach changed from univariate to bivariate and multivariate techniques, with initial attempts being superseded by later, more refined examinations.

Within the three broad techniques outlined above, particular procedures were selected on the basis of the level of measurement of the variable(s). Both descriptive and inferential statistics were used, the former being those which give summary of patterns in the research data. Inferential statistics were used with sample survey material to assess whether the research data were likely to hold in the population. The main techniques used are summarised in table 3.9.

Univariate methods	Bivariate methods	Multivariate methods
Frequency distributions	Crosstabulations	Conditional tables
	Scattergrams	
	Rank order correlation	
	Comparison of means	

Table 3.9 Methods of analysis for research data
Source: author

3.7 Conclusion

This chapter has described the approach taken to the research problems stated in chapter one and further specified in chapter two. In considering the divergent nature of prior ISLM study, this chapter has made an evaluation of the relationship between prior ISLM research topics and methodologies. This analysis drew on structuration theory in order to develop a

deeper analytical framework of ISLM research. This framework analyses ISLM work by the 'scale' via which relevant areas can be researched and the different methodological techniques that can be employed. The resulting theoretical/methodological map of research indicated a deficit in prior ISLM research with regard to the inter-relation of the social and economic contexts of international skilled labour mobility.

Discussion of the research design developed a procedure which addressed both the economic and social context of skilled mobility, utilising a range of secondary and primary data sources. In addition the research employs both qualitative and quantitative elements as appropriate to different areas of inquiry and available resources. The principal primary sources derived from two questionnaire surveys on Scottish ISLM conducted in the first instance on a sample of managers and professionals at Glasgow International Airport. An outline of the means of analysis of the above data sources is indicated. The remainder of the thesis is concerned with the presentation of the results of this analysis and their discussion in the light of the research questions highlighted earlier.

Chapter 4

International skilled labour mobility patterns: secondary sources

4.1 Introduction

Several specific research problems are pursued in this chapter. First it aims to establish the evidence from existing data sources for the scale and geographical direction of international business travel to and from Scotland. It then proceeds with an indication of business travel to and from the UK, referring to more extensive data from the International Passenger Survey. The Scottish and UK situations are then placed in context by looking at evidence of developments in business travel in other industrial countries. In addition, the chapter aims to compare the relative numerical importance of different mobility types for skill transfers to and from the UK using secondary sources.

4.2 International business travel

Firstly, British Tourist Authority data are used to locate international business travel relative to domestic short term mobility. An assortment of data sources are then examined as a means of gauging the numerical importance and geographical orientation of international business travel to and from Scotland. The merits and disadvantages of the approach used is discussed.

The Scottish situation is then placed in a wider setting, using data on international business travel for the UK as a whole and for selected overseas locations. A representation of the numerical importance of international business travel between the UK and specific overseas destinations is then made using calculations based on number of visits and duration of stay.

International business travel has greatly increased in importance in a relatively short space of time. However, when viewed against domestic 'business and work travel' , international business travel occupies a relatively minor place in the overall movements of skilled individuals (business and work travel includes conferences, exhibitions and all types of employment, both "white collar" and "blue collar" as defined in British Tourist Authority 1990). The majority of Scottish and UK skilled mobility takes place within the boundaries of the UK (Table 4.1).

Within Scotland the level of all types of business travel generally reflects the distribution of the population, with Strathclyde and Lothian regions accounting for the greatest part of business travel. Domestic business travel in the UK outnumbers overseas business travel by a ratio of approximately 7:1. However, if gross trip duration is examined, domestic trips outlast overseas trips by a much lower ratio of around 3:1. The average business traveller spends just over three nights on all business trips. However, domestic trips average only 2.6 days in contrast to a full 6 nights for overseas trips. In addition, business trips tend to be slightly longer in Scotland, with an overall trip length of 2.7 days (British Tourist Authority 1990 p21).

	Business and work tourism	
	Trips	Nights
England (millions)	12.0	31
London	20%	18%
Heart of England	12	12
North West England	11	11
Yorkshire & Humberside	10	10
Thames & Chilterns	9	7
West Country	9	10
East Anglia	8	7
South East England	8	7
East Midlands	7	6
Southern	5	5
Northumbria	4	3
Cumbria	3	3
Scotland (millions)	1.5	4
Strathclyde	44	39
Lothian	25	20
Grampian	19	17
Highlands & Islands	6	10
Tayside	6	7
Fife	0	0
Central	0	2
Dumfries & Galloway	0	2
Borders	0	2
Wales (millions)	1.0	2
South Wales	75	61
North Wales	25	35
Mid Wales	13	4
Northern Ireland	-	-
All destinations (millions)	16.5	50
United Kingdom	*14.5*	*38*
Non-UK	*2.0*	*12*

Table 4.1 All tourism, UK residents by destination within UK, 1989
Source: (British Tourist Authority 1990 p21)

4.2.1 Scottish international business travel

Understanding of the development of business travel to and from Scotland over the 1980s and early 1990s is impeded by the lack of immediately suitable data on Scottish business travel. The data used are from the Civil Aviation Authority (CAA) reports on international air passenger traffic using scheduled services (Civil Aviation Authority 1991), which can be used as an indicator of business travel to and from Scotland. The advantages of this data set

are that it is readily accessible and that it is a census not a sample survey. In addition it provides a detailed locational breakdown of passenger flows by UK airport and overseas destination. Further, it enables a time series over a substantial period and it enables a rudimentary inference of passenger activity.

A disadvantage of this data set is that not all UK international business travel is conducted by air. Secondly, the activity of passengers on international scheduled flights cannot be discerned so that it is not possible to distinguish between business travellers and other activities. Hence non-business travellers cannot be excluded from the CAA figures. Furthermore, figures of passenger flows to overseas airports do not necessarily indicate the final destination of passengers. Also, an unknown number of international business travellers may enter Scotland via another location within the UK, either by terrestrial routes or using domestic air travel.

The data do not allow a precise or comprehensive measure of the numbers of international business visits to and from Scotland. However, they do allow an indication of the likely relative change in the scale of international business travel to and from Scotland and an indication of the direction of this mobility.

The number of business travellers travelling by air to or from the UK (as indicated in the International Passenger Survey (IPS) (Office of Population Censuses & Surveys 1991a)) has been compared with the total numbers of international scheduled air passengers (Civil Aviation Authority 1991) (figure 4.1). At an aggregate level, both business visits and scheduled passengers have grown at similar rates.

Assuming a similar relationship between growth rates of business travel and scheduled passengers within Scotland, the level of international scheduled passengers numbers for Scottish airports can be used as a guide to the relative rate of increase in international business travel to and from Scotland. However, it must be borne in mind that rates of business travel may vary between regions.

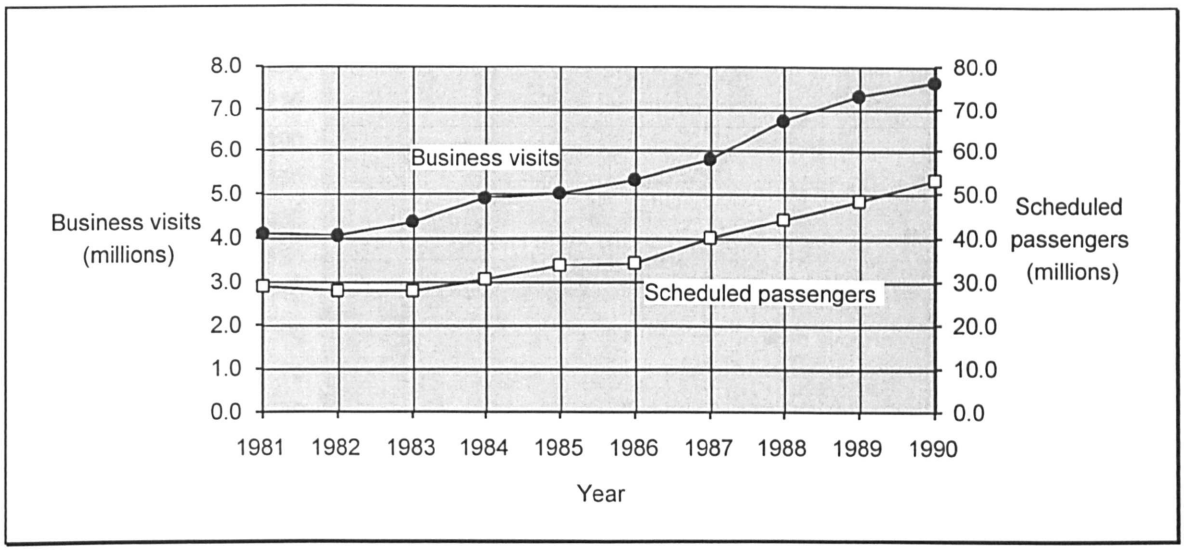


Figure 4.1 International scheduled air passenger and business visits by air to and from the UK, 1981-1990
Source: (adapted from Central Statistical Office 1991b and earlier editions; Civil Aviation Authority 1991 and earlier editions)

4.2.1.1 Scottish international business travel

The number of international scheduled passengers to UK airports has increased rapidly in the last ten years. A decline was experienced in the early 1980s and a sharp drop was experienced during 1990/91 as a result of the Gulf war and the onset of economic recession. For Scotland, the rate of growth of international scheduled passengers during the last decade is of similar proportions to the rest of the UK.

However, international air travel involving Scottish airports declined more steeply than other UK airports at the start of the 1980s. Nonetheless, it also climbed slightly more rapidly in the latter half of the 1980s and although the rate of growth slowed after 1990, it did not go into reverse as for the rest of the UK (figure 4.2). It is inferred from the above international scheduled passenger data that Scotland has experienced a rate of growth in international business travel at a level similar to that of the rest of the UK. This growth was large and rapid.

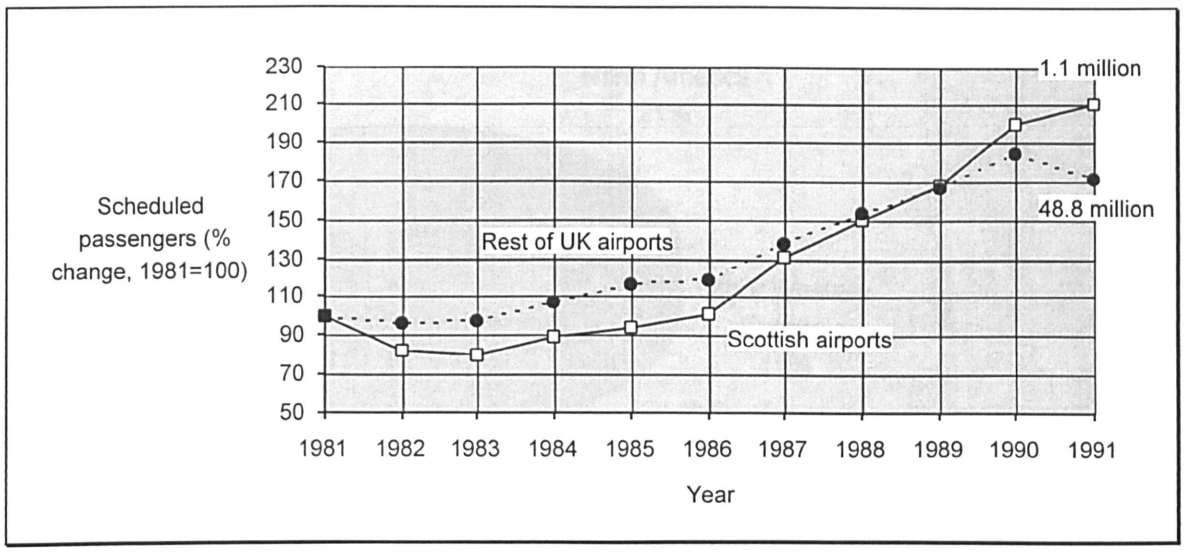


Figure 4.2 International scheduled air passengers, Scotland and the rest of the UK, 1981-1991

Source: (adapted from Civil Aviation Authority 1991)

4.2.1.2 Geographical orientation of travel

The majority of Scottish international scheduled air travel takes place between the EC and North America (figure 4.3). If these figures reflect the number of international business travellers to Scotland, then North America assumes a relatively important role in comparison with the UK as a whole (see figures 4.12 and 4.13). 'Other Western European' and 'other' destinations appear under-represented, although this is due to the absence of direct flights rather than the absence of actual business travel.

Subsequent survey work supported the latter conclusion (see chapter five). Thus, the relatively low level of EC trips and high number of North American trips in comparison with figures for the UK as a whole, are most likely artefacts of the data set used. Therefore it is probable that the Scottish figures do not vary markedly from the UK as a whole.

Nonetheless, given the likelihood of relatively long stays in North America in comparison with European trips (as discussed subsequently), North America is likely to be more important in terms of business travel than numbers of trips alone would suggest. The predominant geographical focus of Scottish short term mobility is likely to be associated with European related activities.

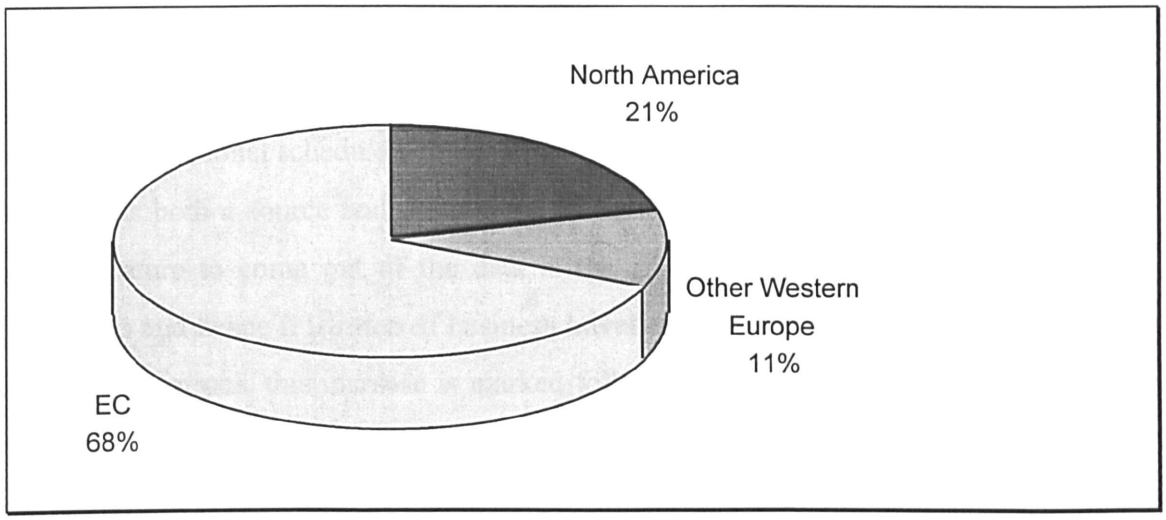


Figure 4.3 International scheduled air passengers by main areas, Scotland, 1991
Source: (adapted from Civil Aviation Authority 1991)

4.2.1.3 Regional variations in Scottish business travel

The varying importance of different regions of Scotland for international scheduled passenger traffic suggest the relative importance of these areas for international business travel. Glasgow airport occupies the prime position for international scheduled air passenger traffic. The remainder of scheduled travel is largely divided between Edinburgh and Aberdeen airports. Glasgow has come to occupy an increasingly dominant position, especially in the late 1980s and early 1990s. This is a result of continued expansion of airport activity and the transferral of North American flights from Prestwick Airport to Glasgow. However, growth in activity has also been experienced in Edinburgh and Aberdeen (figures 4.4 & 4.5).

Glasgow and the surrounding area appears to be the prime focus for business travel to Scotland (at least for travel by air). In addition, while Edinburgh and Aberdeen are also prominent, they display a different balance of travel connections in comparison with Glasgow. Edinburgh is less concerned with Trans-Atlantic contacts and more so with Europe. Similarly Aberdeen is also more exclusively focused on European business.

For Edinburgh, there are three main links, all of which are with the EC, that is, France, the Netherlands and Ireland. All of these have increased in prominence since 1986, coinciding with a period of enhanced European political and economic integration. In contrast flights to Germany, Belgium and Denmark are less prominent than for Glasgow, as are North American flights. Aberdeen shows another regional pattern, the main air traffic being between the Netherlands and Norway, although France and Denmark are also important.

Figures for Aberdeen are lower and more erratic, but a general increase following 1986 is apparent.

Data for international scheduled air passengers suggest the importance of Europe and North America as both a source and destination for international business travel in Scotland. A second feature to come out of the data is the growth in the numbers of scheduled air passengers and hence it is inferred business travellers over the last ten years or so. Thirdly, for EC destinations, this increase is marked following 1986/7. A fourth point drawn from the data is the dominance of Glasgow as a hub for international scheduled travel. In addition, variation is noted in the geographical orientation of the main Scottish regional airports.

Given the similarity in destinations of Scottish and UK travel, it is unlikely that there is a difference in overall duration of short term mobility between Scotland and the rest of the UK. However, this does not preclude the possibility that other functional aspects of Scottish short term mobility may lead to differences in duration of mobility, with potential ramifications on separation from place of employment and family. This issue is further investigated in chapters five to eight.

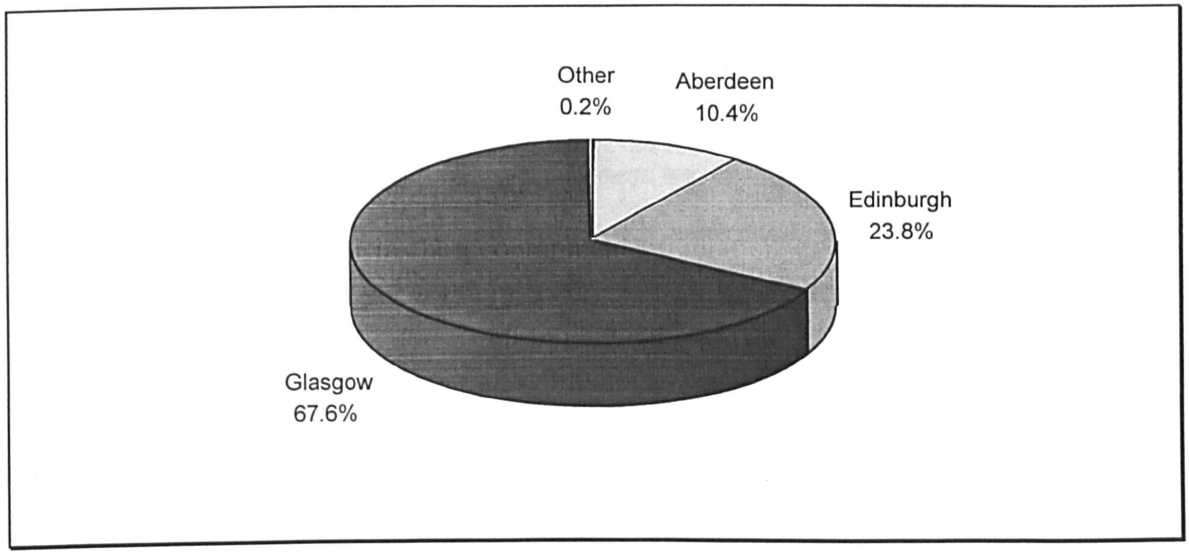


Figure 4.4 International scheduled passengers by Scottish airports, 1991
Source: (adapted from Central Statistical Office 1991b)

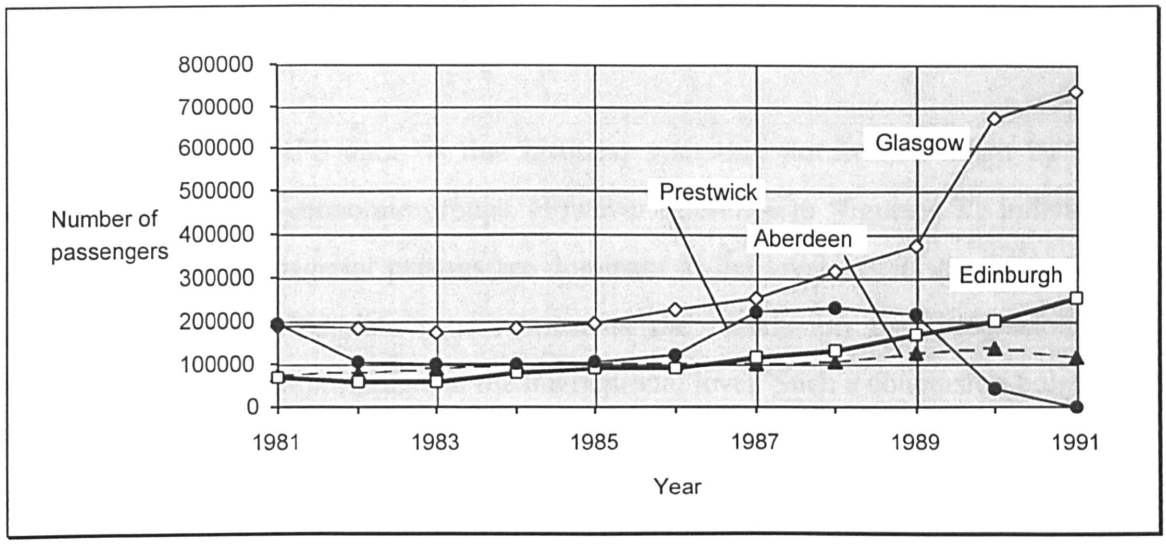


Figure 4.5 International scheduled passengers, main Scottish airports, 1981-1991
Source: (adapted from Central Statistical Office 1991b and earlier editions)

4.2.2 International business travel to and from the UK

The material drawn on below derives from the International Passenger Survey (IPS). Readers are referred to the following references for a description and critique of the survey methodology: (Findlay 1988; Central Statistical Office 1991b; Office of Population Censuses & Surveys 1991a). The IPS provides estimates of the number of business visits by both foreign residents to the UK and UK residents overseas. "Business travellers are those whose stated purpose of travel is 'business', and who intend to reside abroad or in the United Kingdom for less than a year." (Salt and Ford 1993 p299).

Although the dimensions of international business travel are relatively small in comparison with domestic movements, the level of travel associated with international business activities has greatly increased in recent years. Thus, the number of business visitors to the UK increased by 75% between 1980 and 1990 from 2,565 thousand to 4,494 thousand per year. Between 1980 and 1990, the number of business trips abroad by UK residents increased by 79%, from 2,690 thousand to 4,807 thousand (Central Statistical Office 1991b) (see figures 4.6).

There was a fall in numbers of overseas visitors to the UK during the early 1980s. However, growth returned to a rapid rate after 1982 before slowing again from 1988 onwards. In contrast, visits abroad by UK residents did not fall in the early 1980s but grew continually over the period and at a particularly high rate from 1986 onwards. It is noted that the numbers travelling both to and from the UK approximate each other. However the number of visits abroad by UK residents has generally been slightly higher than for

overseas visits to the UK (the figures referred to here include all modes of travel to and from the UK).

A disadvantage with IPS data is that business visits are not broken down by specific occupational or socio-economic groups. However reference to 'figure 4.7', indicates that professionals and managerial persons are dominant at the level of UK domestic business and work tourism. This data source warrants the conclusion that professionals and managers are at least as prominent at the international level. Such a conclusion bolsters Salt and Ford's assumption that the bulk of international business visits are made by the highly skilled (Salt and Ford 1993 p297).

While international business travel represents a relatively low proportion of all business and work tourism in the UK, it also represents a relatively low proportion of all international tourism to and from the UK. Tourism levels have grown at similar rates to business travel. For overseas visits to the UK however, business visits have come to represent an increasing proportion of all visits, growing from around a fifth to a quarter of all visits in the 1980s. This growth occurred largely after 1985. In contrast the level of business travel abroad by UK residents has remained at a fairly even level at around 15% of all tourism (figures 4.8 & 4.9).

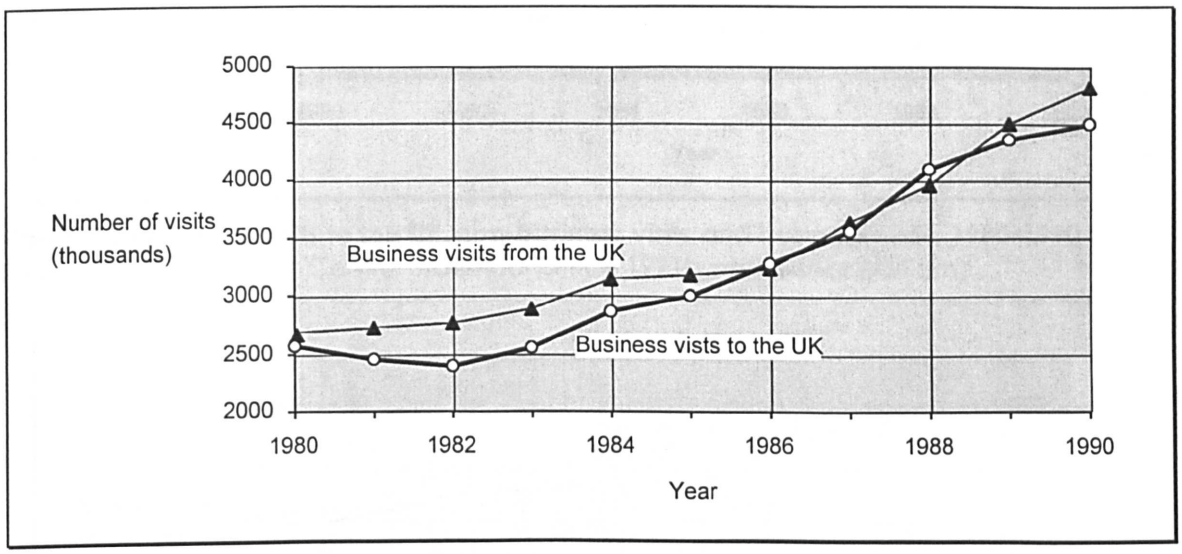


Figure 4.6 Business visits to and from the UK 1980-1990, all areas
Source: (adapted from Central Statistical Office 1991b and earlier editions)

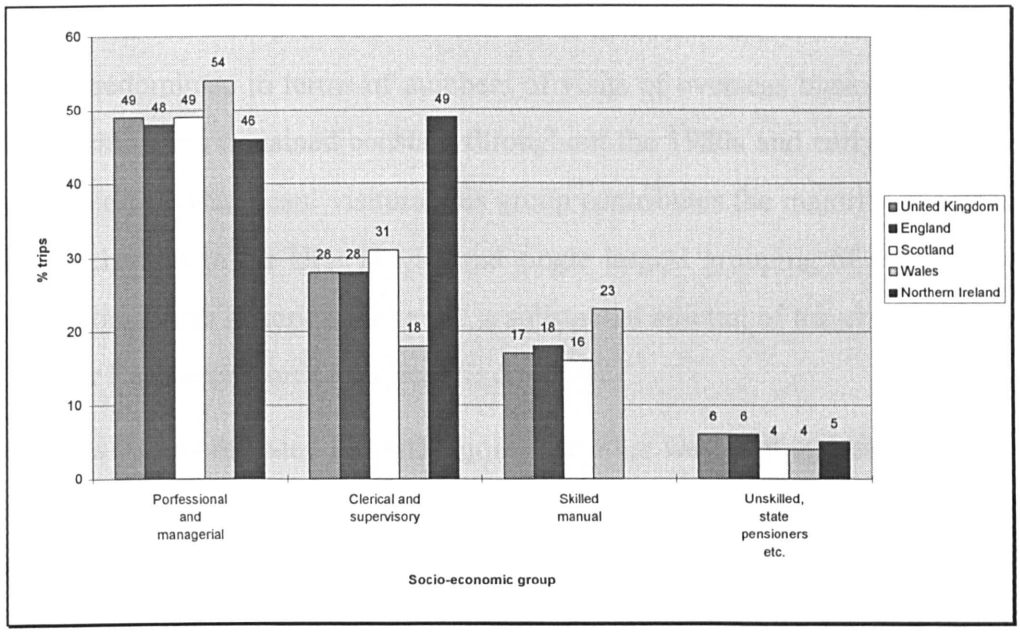


Figure 4.7 Business and work tourism in the United Kingdom, socio-economic group, 1989
Source: (adapted from British Tourist Authority 1990 p24)

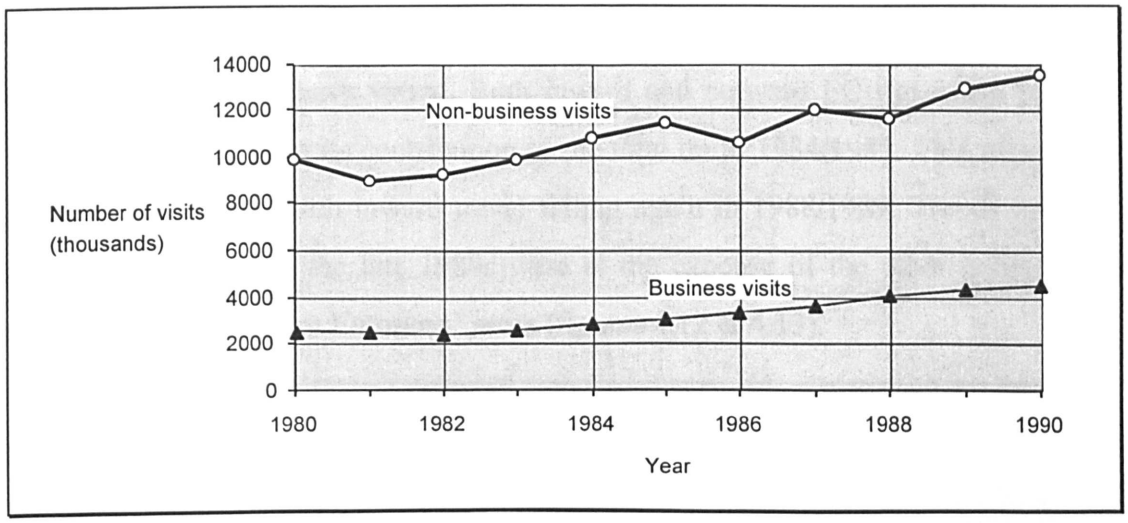


Figure 4.8 Overseas visits to the UK, non-business visits and business visits, 1980-1990
Source: (adapted from Central Statistical Office 1991b and earlier editions)

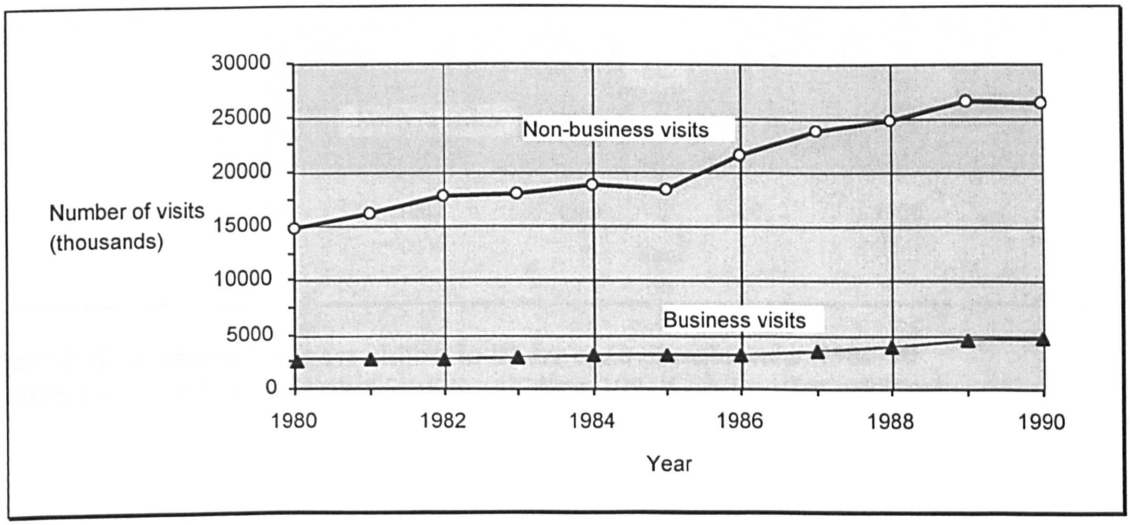


Figure 4.9 Visits abroad by UK residents, non-business visits and business visits, 1980-1990
Source: (adapted from Central Statistical Office 1991b and earlier editions)

4.2.2.1 The geography of UK international business travel

EC visitors predominate in terms of numbers of visits of overseas business visitors to the UK. This position has remained constant throughout the 1980s and early 1990s. Together with 'other Western European' visitors, this group contributes the majority of inward short term skill exchanges to the UK. The second single largest grouping of overseas business visitors are from North America. However, a substantial amount of travel is generated from outwith either Europe or North America (figure 4.10).

This pattern is largely repeated for traffic going the other way, that is, business trips abroad by UK residents. However, the dominance of the EC as a *destination* for UK residents is greater than as a source of foreign business travellers to the UK. Conversely, the North Americas, 'other Western European' countries and the remainder are less important as destinations for UK residents than as sources of foreign business visitors (figure 4.11).

Although international business travel is increasing between all areas in absolute terms, relative rates of growth have varied. Both inward and outward EC travel can be seen to have experienced a fall in its contribution to the total up to 1984/1985. This was followed by a period of growth, with inward travel falling again in 1988/1989. Trends towards an increase in EC travel in the late 1980s were at the expense of the other main locations particularly 'other Western European' areas (figures 4.12 & 4.13).

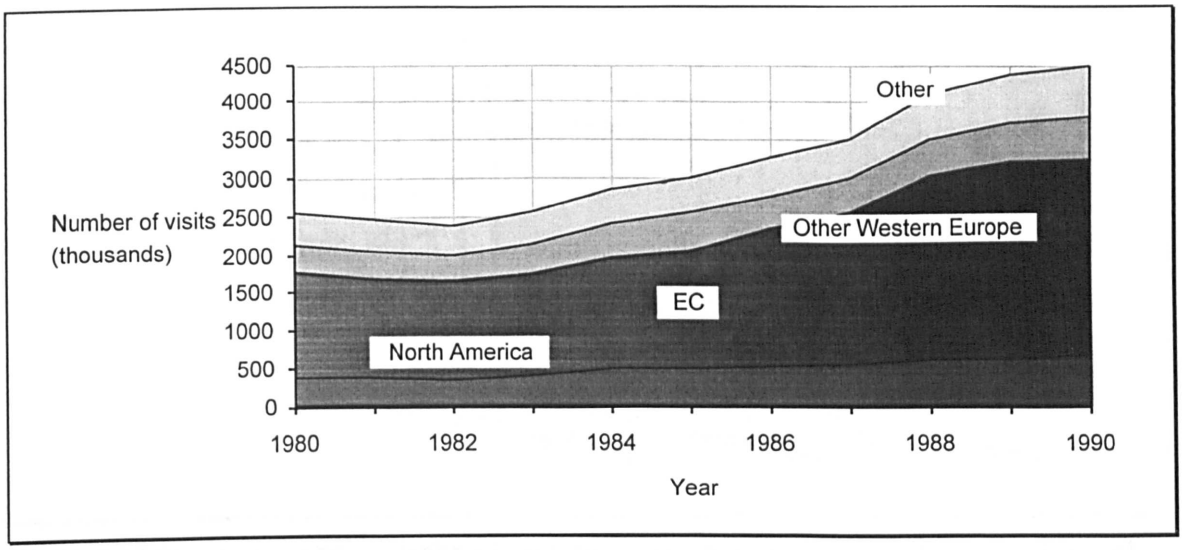


Figure 4.10 Overseas business visitors to UK by area of residence, 1980-90
Source: (adapted from Central Statistical Office 1991b and earlier editions)

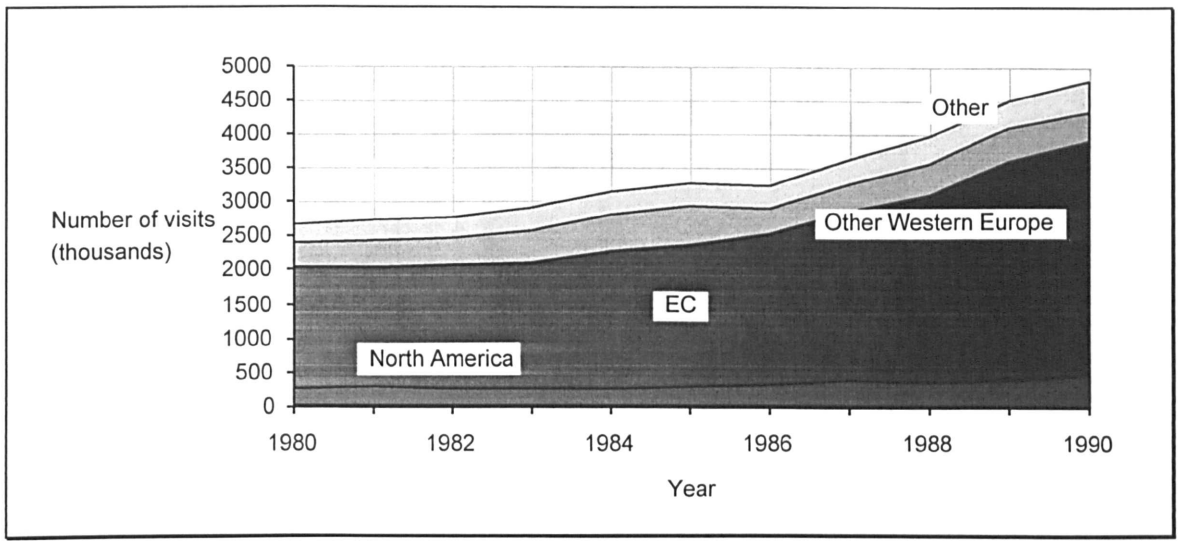


Figure 4.11 Business trips abroad by UK residents by area of destination, 1980-1990
Source: (adapted from Central Statistical Office 1991b and earlier editions)

4.2.2.2 Duration of international business travel

Thus far only numbers of business visits to and from the UK have been considered. This section focuses upon the duration of visits. There are significant differences in duration of stay between visits to and from the UK. However, the relative position of the main areas involved are the same whether trips are to or from the UK. EC trips are of the shortest duration, followed by trips involving 'other Western European' countries. Next is North America, with the trips of the longest duration being to or from 'other' countries (figures 4.14 & 4.15).

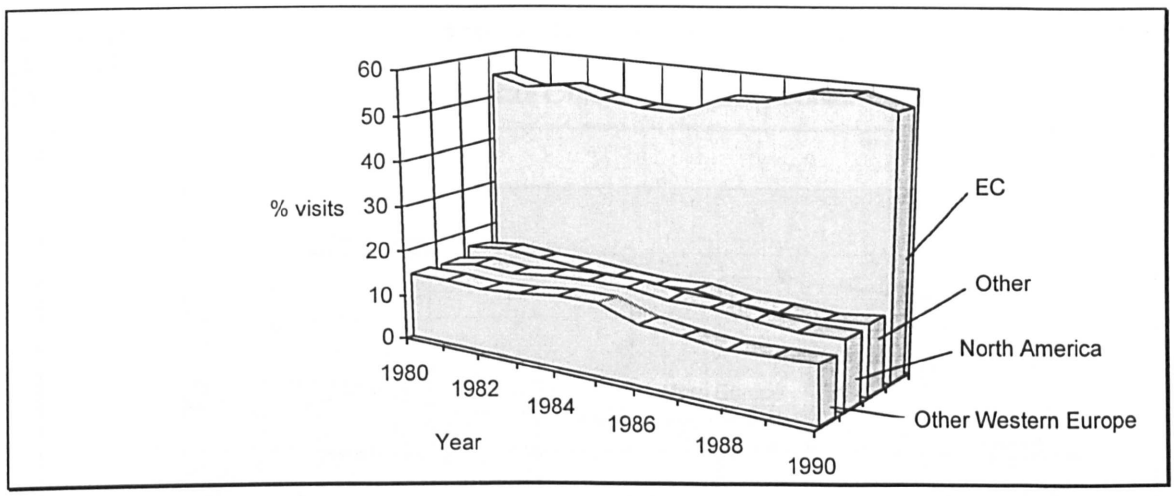


Figure 4.12 Overseas business visitors to the UK by area of residence (as percentage of all business visitors), 1980-1990
Source: (adapted from Central Statistical Office 1991b and earlier editions)

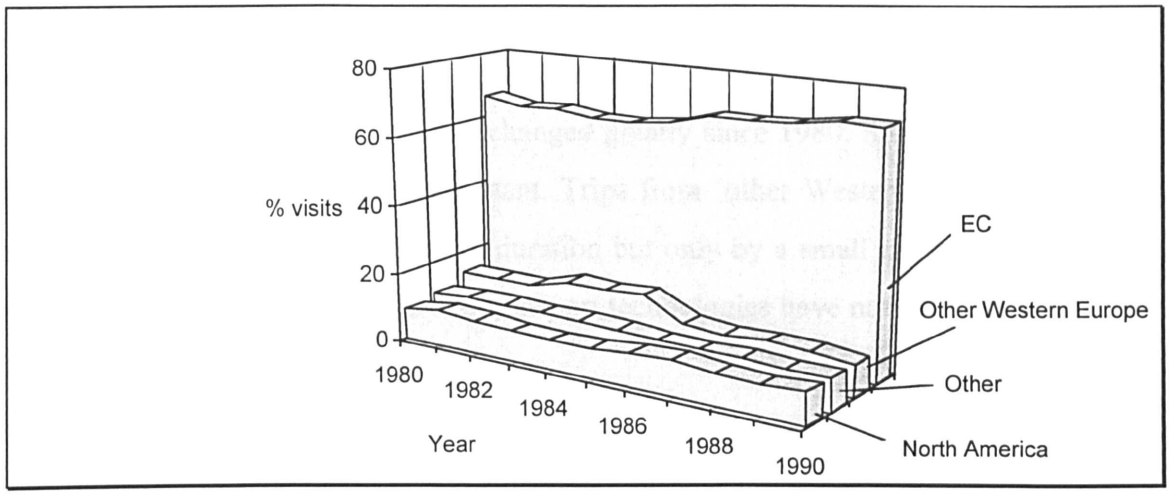


Figure 4.13 Business trips abroad by UK residents by area of destination (as % of all business visits), 1980-1990
Source: (adapted from Central Statistical Office 1991b and earlier editions)

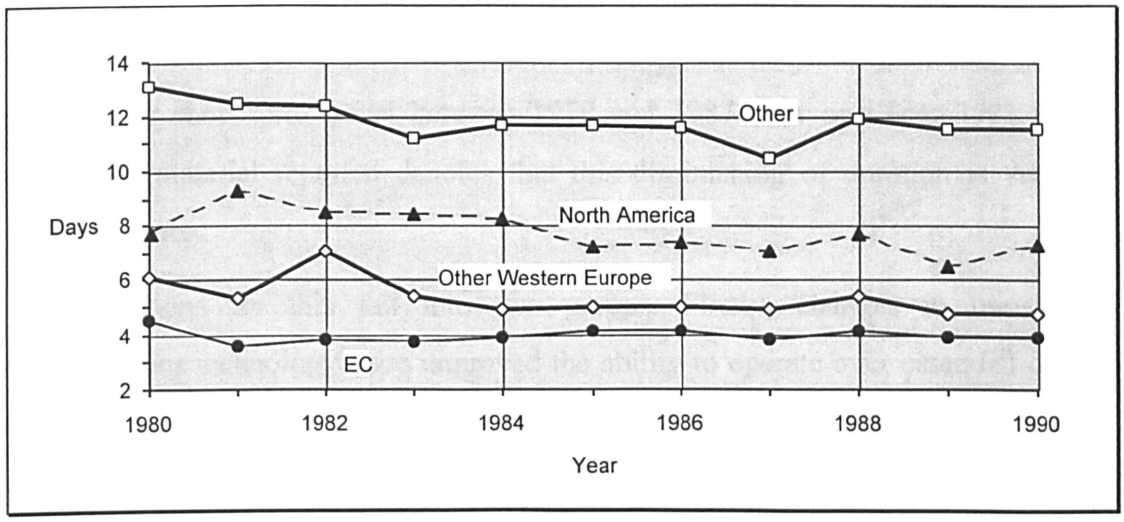


Figure 4.14 Overseas business visits to the UK, average length of stay (days) by main areas, 1980-1991
Source: (adapted from Central Statistical Office 1991b and earlier editions)

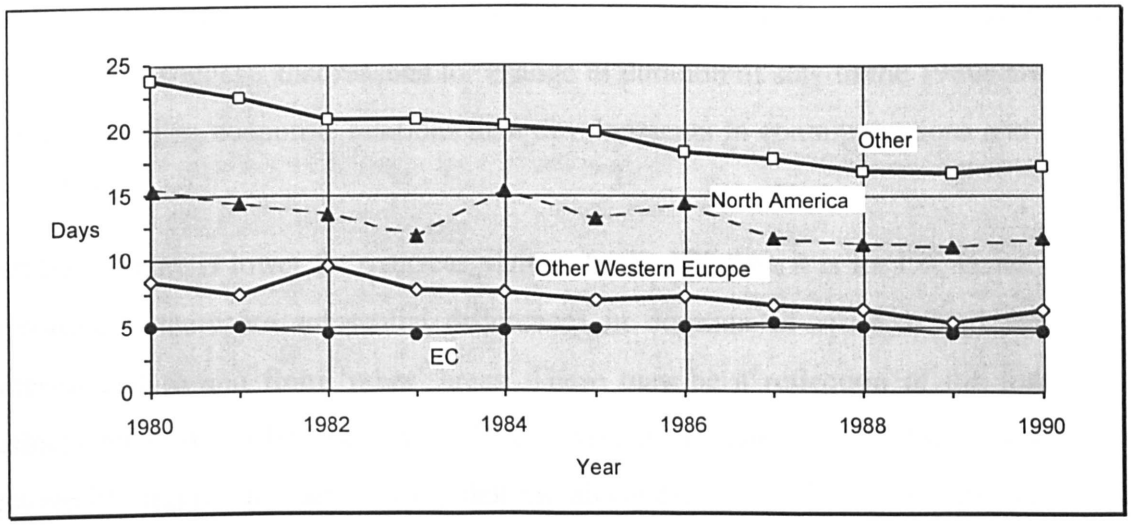


Figure 4.15 Business visits abroad by UK residents, average length of stay (days) by main areas, 1980-1991
Source: (adapted from Central Statistical Office 1991b and earlier editions)

While the number of trips being made has increased, the duration of stay has generally decreased. Considering overseas business visitors to the UK, the duration of stay of North American visitors to the UK has not changed greatly since 1980. Similarly the duration of EC visitor's stays has remained constant. Trips from 'other Western European' countries and from 'other' areas have fallen in duration but only by a small amount. Thus for some areas improved communications and transport technologies have not cut the length of short term skill exchanges undertaken.

The duration of stay in EC by UK residents countries has remained fairly constant. In contrast, the length of stay in North America has dropped quite markedly. As above, length of trips to 'other West European' countries and 'other' areas have declined but more noticeably than for overseas visits to the UK. The material reported confirms Salt and Ford's observations of unpublished data, which indicated the generally increasing importance of short term travel between 1979 and 1987 (Salt and Ford 1993 p299). In addition, the material reported denotes that this diminishing of duration is variable by geographical area.

The explanations for this fall into two groups. Firstly, changes in transport and communications technology have improved the ability to operate over extended distances. The second set of influences are changes in the organisation of economic activity. Such as in the level and direction of foreign investment, changing forms of investment (i.e. greenfield, acquisitions and mergers, or other co-operative alliances), or the internal re-organisation of companies. Since the same improvements in communications and transport technologies are available to visitors coming to the UK, as well as to UK residents going overseas, this suggests that reasons for change in duration of stay in the 1980s are more to do with changing economic relations than developments in communications and transport technologies.

Duration of stay is lower for overseas visitors to the UK than it is for UK visitors abroad. In particular there are substantial differences in duration of visits to and from North America and to and from 'other' areas. These may be a reflection of the form of the business relationship between the UK and these areas. However, it does not stand that because EC figures are fairly steady that the above changes in business organisation have not also occurred here. Rather that they have merely not resulted in a changing ratio of

contact days per individual visit. The same goes for the unchanging number of days per visit for North American and EC visits to UK.

Where employees are concerned, the main point suggested by the data is that the nature of trips to EC destinations are (on average) very different from those to 'other' countries in terms of the time spent away from the home base. This, in conjunction with the likelihood of 'other' areas being culturally less familiar than EC countries, has implications for the pressures of mobility on individuals, in relation to both work and non-work roles.

Ignoring changes in the length of business trips, variability, in terms of duration of stay, is partly a function of distance, i.e., more distant destinations justify longer stays, as the cost of the stay represents a relatively small fraction of the overall visit costs. In addition, when a high number of visits are required to a destination, then relocation becomes a more justifiable option. As such, relocation would seem more likely for Trans-Atlantic business rather than European business. The long average duration of stays to 'other' areas suggests that the potential for the translation of business travel into transient migration is much greater than for EC business, all other factors being equal.

However, other factors are likely to come into play in determining duration of trip. For example, the specific nature of the job (e.g. whether the employee is to conduct specific technical tasks or participate in longer term management functions) and the structure of the economic relationship between the locations (e.g. whether an employee is on a sales mission or a management development scheme). These issues are examined using primary research results in chapters five to eight.

It has been noted that this data source does not reflect occupational categories. Another drawback is that the average number of trips made by *individuals* is not apparent. Neither is the extent to which these individuals are involved in longer term forms of mobility, as well as international business travel. These issues are further developed in chapter five.

4.2.2.3 Number of visits and duration of stay combined

Plainly, the importance of an area for international business travel varies whether number of visits or duration of stay is examined. Where both factors are combined, a clearer indication of the degree of contact is given. This analysis reveals that the importance of destinations varies considerably from a picture relying solely either on *numbers of visits* or *average duration of stay*. A more accurate assessment of the importance of international

business travel between different areas is given by a combination of the number and duration of visits.

Adopting this perspective, it can be seen that the disparity between EC, North American and 'other' areas in terms of international business activity is revealed as much less than when only the number visits are examined (figures 4.16 & 4.17). However, 'other' areas vary considerably in their position, being substantially more important as sources of overseas visitors than as destinations for UK residents. The opposite is the case for the EC, with significantly more contact from by UK persons going to the EC, than for EC persons coming to the UK.

The figures included illustrate that the trend for the EC diverges strongly from other main geographical areas from the early 1980s. This reflects the relatively large amount of inward investment from non-EC countries, with the UK taking on a role of an investment gateway into Europe for many of these non-EC operations, a position bolstered by the improved environment for FDI in the UK and the opening up of the single European market. The reverse flows of capital from the UK are likely to result in more diverse flows of labour. This point is taken up in chapter six.

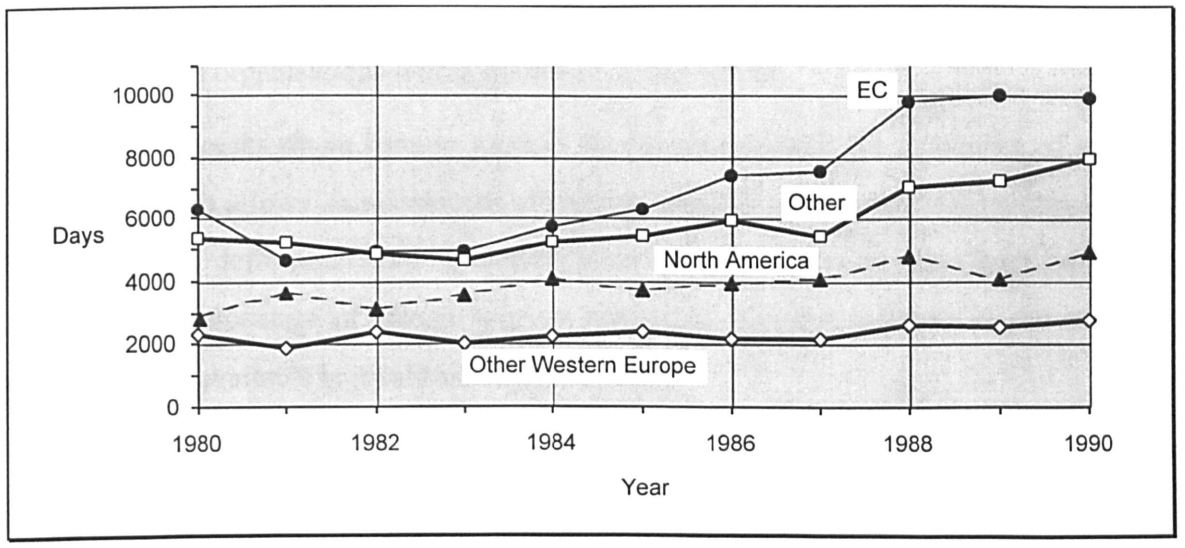


Figure 4.16 Overseas business visits to the UK, average number of visits multiplied by average length of stay by main areas, 1980-1991
Source: (adapted from Central Statistical Office 1991b and earlier editions)

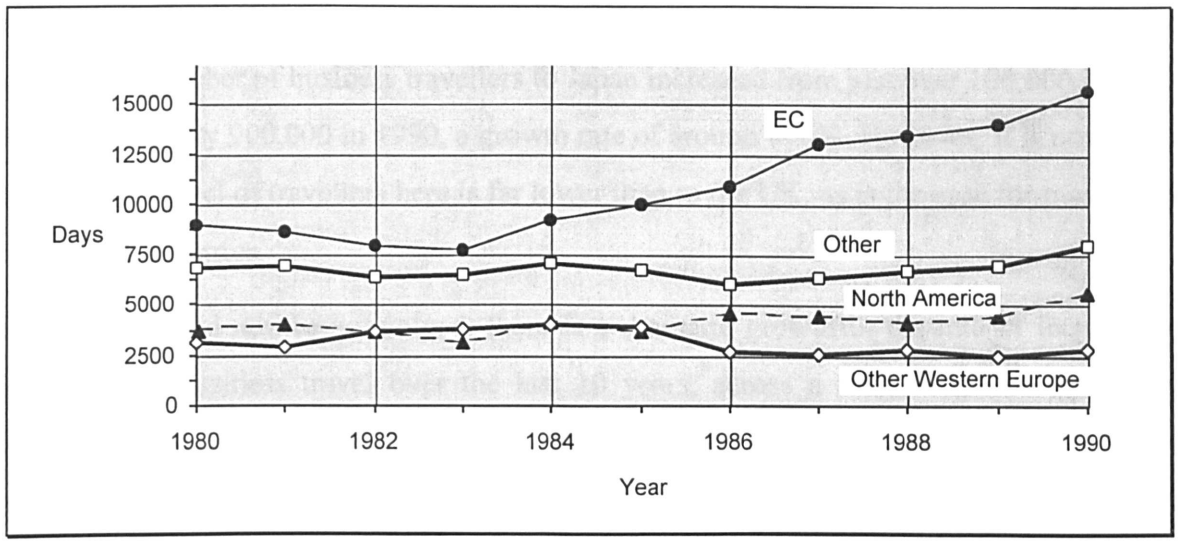


Figure 4.17 Business visits abroad by UK residents, average number of visits multiplied by average length of stay by main areas, 1980-1991
Source: (adapted from Central Statistical Office 1991b and earlier editions)

4.2.3 The international context

Relatively little data are available on the growth of business travel overseas. One estimate places the temporary movement of skilled labour at around 15 per cent of all world travel (Senior 1982; cited in Salt and Ford 1993 p297). The data source referred to below permits an indication of the levels of international business travel in a range of industrial countries (OECD 1992). The source collects information on international tourism statistics from the relevant official organisations within members of the OECD.

This data set breaks down foreign tourism by purpose of visit for a number of member countries, which allows an assessment of change in levels of international business travel. It is noted that definitions used in classification of business travel vary from country to country (The percentage of foreign tourism relating to business journeys in the states for which data are available is presented in figure 4.18).

The states represented include a wide range in terms of economic characteristics and the proportion of international business travel with respect to other purposes of travel varies considerably, e.g. from 2.4% international travel for Portugal to nearly 30% for Japan (OECD 1992). Rates of change over time also vary considerably. In addition, for some the numbers of business travellers are still growing in absolute terms, while business tourism is taking a relatively smaller role in overall tourism volume.

More interesting is the variation in the total volume of business travel and the change in this volume over time. A number of the OECD countries have experienced more or less

unchecked growth. Indeed, Japan far outstrips the UK in the rate of increase of business travel. The number of business travellers to Japan increased from just over 100,000 in 1980 to approximately 900,000 in 1990, a growth rate of around 800%. However, it is noted that the absolute level of travellers here is far lower than to the UK, as is the case for most other developed countries.

Besides the total numbers involved, there is a dramatic growth in the rate of increase in international business travel over the last 10 years, across a range of more developed countries (figure 4.19). The material reported provides further evidence of Salt and Ford's assertion that the "temporary movement of skilled labour on a global scale is large and expanding." (Salt and Ford 1993 p297).

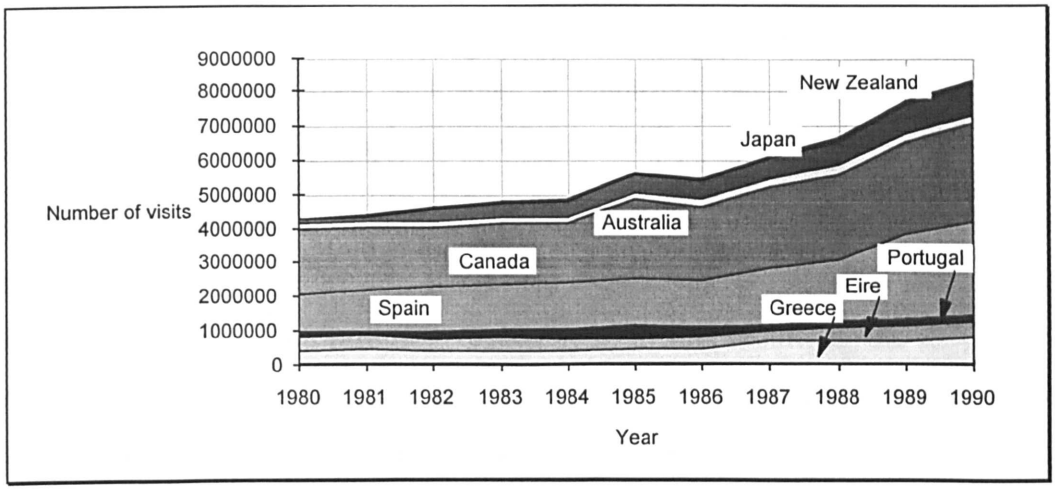


Figure 4.18 Foreign business journeys, OECD countries, 1980-1990
Source: (adapted from OECD 1992 and earlier editions).
Note: values estimated for Greece- 1982, 1983; Portugal- 1986; Canada- 1981, 1990; Australia- 1981. Estimates based on mid-point value between adjacent years.

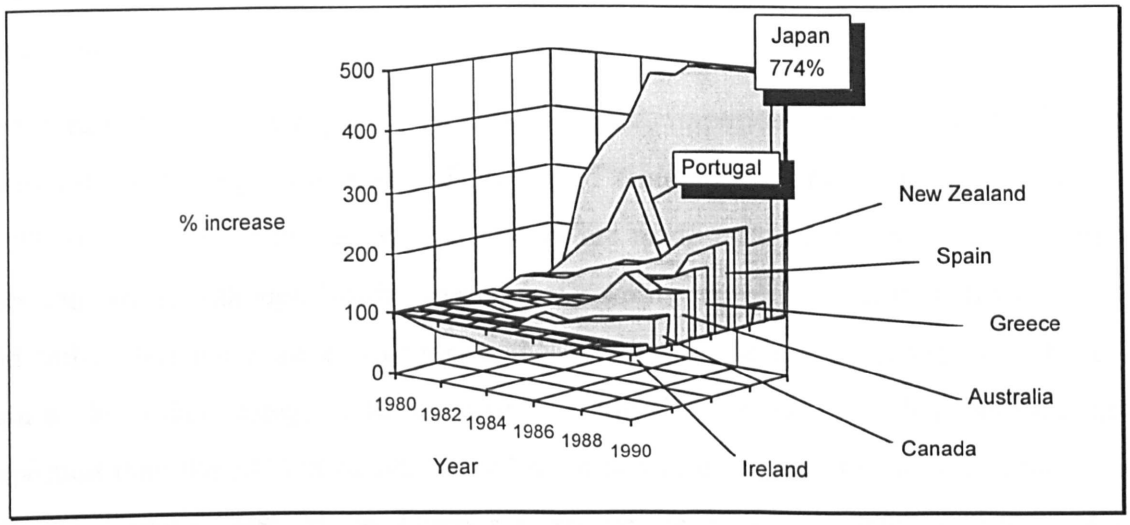


Figure 4.19 Business travel growth, selected OECD member states
Source: (adapted from OECD 1992 and earlier editions.)
Note: values estimated for Greece- 1982, 1983; Portugal- 1986; Canada- 1981, 1990; Australia- 1981. Estimates based on mid-point value between adjacent years.

4.3 Relationships between mobility types

In the case of business travel, inward visits closely match the number of outward visits. The growth in inward and outward flows has been less symmetrical for skilled international migration. For the latter, rates of inflow growth have been generally higher than outflow and have come to match and even exceed outflow in the late 1980s and early 1990s. In contrast, outflow generally stagnated during the 1980s. In addition, the growth in business travel was accompanied by a form of skilled international migration that was itself of an increasingly transient nature.

Both growth in business travel and skilled transient migration can be seen to be part of an inherently international development, with other developed countries also exchanging skilled personnel to an increasing degree. However, for business travel at least, the UK's engagement in the international circulation of managers and professionals is far more pervasive than many other developed economies.

The geographical orientation of skilled mobility shows up interesting differences where business travel and migration are contrasted. When UK professional and managerial emigration is compared with business visits abroad by UK residents, the EC is the most important destination for business travel, but this area is relatively unimportant for UK skilled emigration (accounting for only 11.4% of emigrants in 1983-85) (Findlay 1988). The EC is an area characterised by a high level of business travel, but low skilled migration. In addition, this business travel comprises a large number of short trips (figures 4.20 & 4.21; this discussion refers to the latter figure, where number and duration of business visits are combined).

In contrast the 'other' category is an area of relative importance for business travel, while accounting for a high proportion of all skilled emigration from the UK (69%) (Findlay 1988). Business visits to the 'other' category are made up of a relatively low number of very long trips. Although North America has a similar number of business trips to 'other' and 'other Western Europe' categories, the duration of these trips is substantially lower than to the 'other' category. In terms of UK skilled emigration, North America is more important than the EC but of relatively low importance in comparison with 'other' areas (13.6%) (Findlay 1988). North America is an area receiving relatively low to moderate business travel and relatively low levels of UK skilled migration. The category 'other Western Europe' has the lowest involvement in business travel of the four main areas in

relative terms. 'Other Europe' also has a very low proportion of the activity associated with UK skilled emigration (6.6%) (Findlay 1988).

It appears, where UK persons are concerned, that EC countries are serviced to a large extent by business travel, whereas 'other' destinations are heavily reliant on longer term mobility. However, 'other' destinations also receive a significant level of shorter term business travel in conjunction with longer term migration. North America and 'other Western European' countries are serviced with a moderate level of business travel and a relatively low amount of migration (although significant in absolute terms).

For mobility to the UK by overseas persons, the EC shows a relatively high level of short term mobility in association with relatively high longer term migration. The EC is three times more important as a source of foreign professional and managerial immigrants than as a destination for UK emigrants (Salt and Kitching 1990a). North America, 'other Western Europe' and 'other' areas have broadly similar relationships between international business travel and skilled international migration.

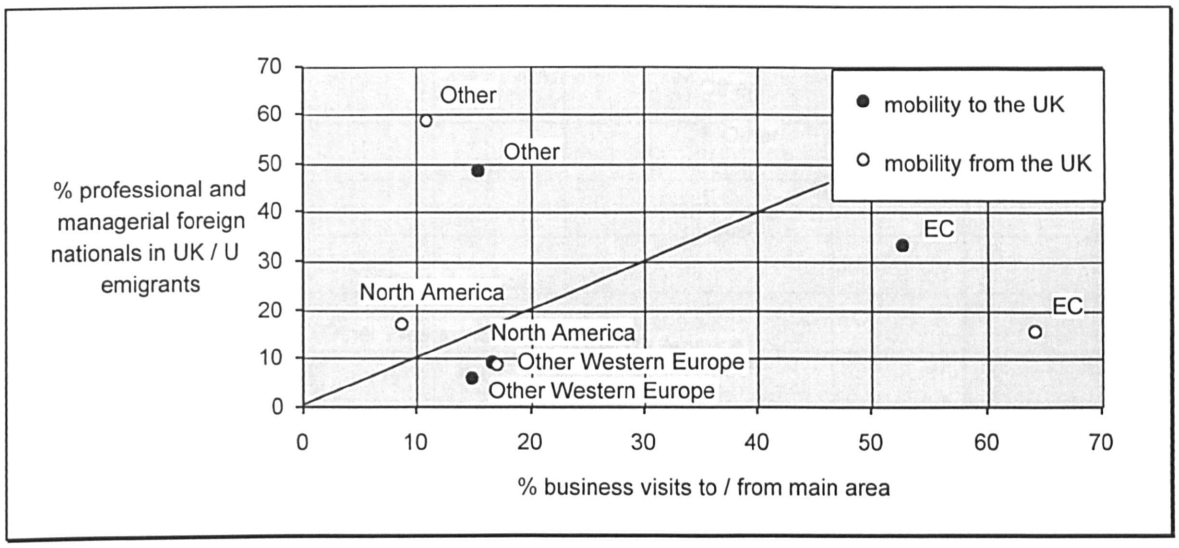
When number of days spent on business visits is contrasted with skilled migration, there appears to be a direct relationship between short term mobility and long term mobility, in other words where short term travel increases so does the level of longer term mobility. These findings are at variance with suggestions of an inverse relationship between short and long term mobility (Findlay, Leliévre, Paddison, et al. 1994). However, the exception to this finding is mobility from the UK to the EC, where a high degree of short term mobility is found with relatively low levels of skilled international migration. Thus while Findlay *et al's* results are supported for Europe, they do not appear to be universal.

These findings suggest a more complex relationship between mobility types, as opposed to a straightforward substitution of long term mobility for short term mobility. While a high degree of skilled migration tends to accompany a high level of business travel, it does not seem that where a high level of business travel exists it necessarily follows that there is a high level of migration. It is noted that these figures represent aggregate flows, it remains to be seen what the relationship between mobility types is at the individual level and how the Scottish situation differs from that of the UK.

If differences between outward and inward mobility are examined, while both have a strong flow in terms of business travel, the EC is less important for skilled international migration from the UK, than for skilled international migration to the UK. 'Other' areas

remain important and with regard to the level of professional and managerial immigration to the UK, 'other' professionals and managers account for 51.5% of foreign residents in the UK (Salt and Kitching 1990a). However, this proportion is substantially less significant than the figure for UK emigration to 'other' areas (69%). 'Other' areas can be characterised as contributing and receiving a large proportion of skills to and from the UK in terms of both business travel and skilled migration.

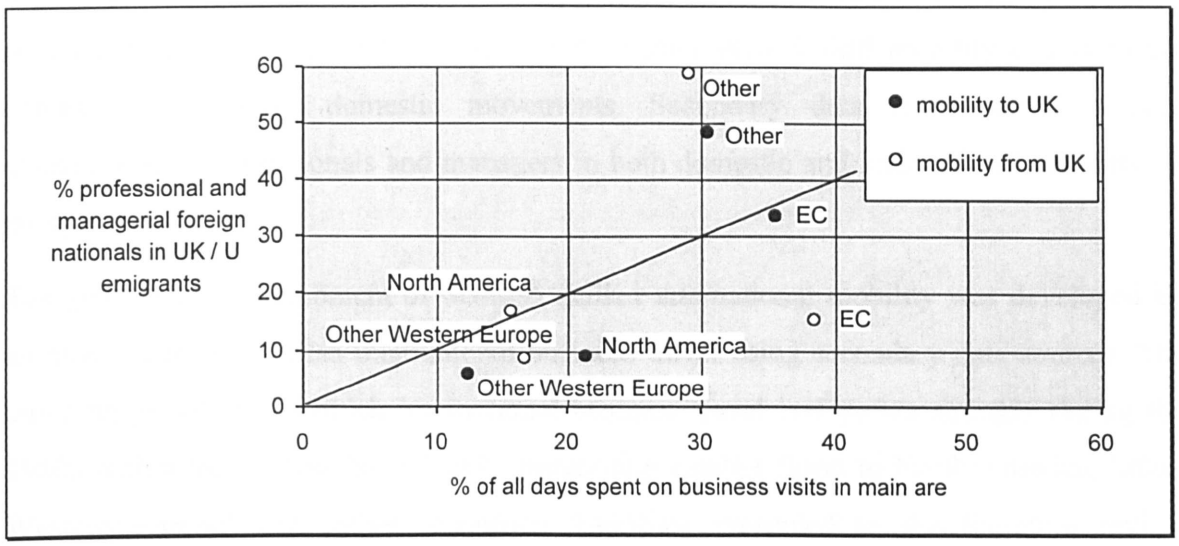
For the period examined, North America is a relatively low contributor of foreign professional and managerial immigrants to the UK (9.0%). North America, however sends a somewhat higher proportion of business visitors than it receives from the UK. 'Other Western Europe' occupies a relatively low position in terms of the number of professionals and managers it sends as both business visitors and migrants (Salt and Kitching 1990a; Central Statistical Office 1991b).



Statistical notes	Test statistic:	Spearman's correlation- see (Shaw and Wheeler 1994 pp168-171)	
H_0 states there is no difference between the observed correlation and one of zero			
H_1 states there is a positive correlation between the level of business travel and migration			
r_s value	ASE1	T value	Significance
-0.21429	0.30895	-0.53739	0.61034
H_0 accepted at 0.05 significance level			

Figure 4.20 ISLM by main areas, overseas mobility by UK residents, 1983-1985 and mobility to UK by overseas residents, 1984-1986 (business travel as number of visits)
Source: (adapted from Findlay 1988; Salt and Kitching 1990a; Central Statistical Office 1991b and earlier editions)

Notes: Information on the emigration of professional and managerial labour from the UK is drawn from Findlay 1988 for a three year average between 1983-1985. Figures for outward mobility use an average figure for business visits overseas by UK residents during the same period (1983-1985). Data for inward migration use LFS information on the number of professional and managerial foreign residents in the UK as a three year average for 1984-1986. Figures for inward short term mobility use an average figure for business visits to the UK by overseas residents during the same period (1984-1986).



Statistical notes	Test statistic:	Spearman's correlation- see (Shaw and Wheeler 1994 pp168-171)	
H_0 states there is no difference between the observed correlation and one of zero H_1 states there is a positive correlation between levels of business travel and migration			
r_s value	ASE1	T value	Significance
0.54762	0.28310	1.60313	0.16003
H_0 accepted at 0.05 significance level			

Figure 4.21 ISLM by main areas, overseas mobility by UK residents, 1983-1985 and mobility to UK by overseas residents, 1984-1986 (business travel as number of days)
Source: (adapted from Findlay 1988; Salt and Kitching 1990a; Central Statistical Office 1991b and earlier editions)

Notes: Information on the emigration of professional and managerial labour from the UK is drawn from Findlay 1988 for a three year average between 1983-1985. Figures for outward mobility use an average figure for number of days on business visits overseas by UK residents during the same period (1983-1985). Data for inward migration use LFS information on the number of professional and managerial foreign residents in the UK as a three year average for 1984-1986. Figures for inward mobility use an average figure for number of days on business visits to the UK by overseas residents during the same period (1984-1986).

4.4 Conclusion

The scale and geographical direction of international business travel to and from Scotland has been established and placed in a UK and international context. The relative numerical and temporal importance of different mobility types for skill transfers between the UK and overseas has been uncovered. The existence of international skill mobility occurs in the context of extensive domestic movements. Secondary data reveal an increasing engagement of professionals and managers in both domestic and international mobility, at an aggregate level.

The growth and development of Scottish skilled international mobility was developed by an assessment of Scottish international business travel using secondary data sources. The latter suggested that Scottish international business travel had grown strongly during the 1980s with a focus upon the EC and substantially smaller flows to North America, 'other Western Europe' and 'other' countries. Evidence presented in the literature review indicates a high level of transient skilled migration coexists with these flows. However, existing data sources are limited in allowing an appraisal of Scottish international business travel.

The chapter placed Scottish patterns in the context of UK and international business travel. As for Scotland notable differences exist in the geographical orientations of flows of business travel in and out of the UK. It has also been established that significant differences exist in the average duration of travel between the UK and main geographical areas. A downward trend is evident in the duration of business visits throughout the 1980s, so that overall, while the number of business trips are increasing, they are becoming shorter. This is especially the case for visits abroad by UK residents and suggests a changing relationship with overseas trading partners. An overall increase in international business travel has been established for a range of industrialised countries. While absolute levels are often less than in the UK, rates of growth are generally of a similar order.

The chapter has indicated the relationship between skilled international migration and international business travel at an aggregate level and for the UK as a whole. Business travel is seen to vary directly with migration in general (to a moderate level of significance), with notable outliers. The first, in the guise of mobility of UK persons to the EC, exhibits relatively low migration in combination with relatively high business travel. The second, in the guise of, again, mobility of UK persons, but this time to 'other' areas,

exhibits relatively moderate levels of business travel combined with relatively high rates of emigration. Overall, the chapter indicates the need for a more refined picture of Scottish mobility, especially in relation to business travel and the relationship between the patterns of different types of movements undertaken by professionals and managers.

With regard to UK level data, it has been illustrated that international business travel is growing at a faster rate than skilled international migration. This scenario fits with Zelinsky's 1971 mobility transition model. Thus an absolute growth of both skilled migration and circulation co-exists, but where the relative growth rate of circulation is higher than that of migration (Zelinsky 1971). The results also confirm Salt and Ford's conclusion of an examination of relevant data sources (Salt and Ford 1993 p307).

However, Ford suggests that in certain cases expatriation is being replaced by business travel (Ford 1992). Similarly, Cormode concluded that Japanese expatriation to Canada is also being replaced by business travel (Cormode 1994). In both cases, replacement is connected to the rising costs of expatriation. In evaluating the significance of these relationships, further work is required not only at the aggregate level but also at the individual level.

Investigating the relationship between French investment in the UK and long term international skilled migration, Boyle *et al* conclude that "Here we see two countries integrating without substantial skill exchanges." (Boyle, Findlay, Leliévre, et al. 1994). Regardless of Boyle *et al's* findings in relation to migration, the material reported here indicates that such findings are enhanced if short term skill exchanges are considered. This chapter indicates the business travel is a vital component of the international skill mobility required to lubricate the wheels of the global economy. As Salt and Ford suggest, "short-term trips are at least complements to, and may be substitutes for, longer-term relocation and migration." (Salt and Ford 1993 p300). In addition, the elucidation of structural relationships behind professional and managerial mobility types is desirable in developing an appreciation of the processes creating the dramatic growth of international mobility described in this chapter.

Chapter 5

Scottish international skilled labour mobility patterns: research survey results

5.1 International business travel

The author's survey constitutes a representative sample of Scottish-based business travellers returning from visits abroad and of overseas visitors arriving at Glasgow Airport. The sample represents a combination of these two streams of visitors: 60% of respondents were UK business visitors abroad while the remainder were overseas visitors to the UK. These proportions concur with UK level data on British business travel in that the number of visits abroad by UK residents is in excess of overseas visits to the UK. However, the margin by which the Scottish-based resident's visits abroad exceeds overseas resident's visits to Scotland is greater than that evident in the UK level data.

The margin between the two flows of business visitors must be viewed with some caution. It is likely that the disparity in flows is to some extent an artefact created by the methodological technique. It is probable that overseas respondents are under-represented due to language barriers in providing survey questionnaire responses. The summary profile of respondents indicates the place of work of the respondents, the lifestage category of all and Scottish-based respondents, the major occupational group of both Scottish and non Scottish-based respondents and the specific occupational group of professionals persons, the largest occupational group.

Scottish-based persons work mainly within Europe (figure 5.1). In terms of age, approximately 55% of respondents are between 40 and 59 years, a further 42% between 20 and 39 years (tables 5.1 & 5.2). Around 86% are in a 'couple' household, and approximately 65% of persons are with dependent children. All respondents are in managerial, professional or associate professional occupations, however, the largest proportion are classified as professionals (figure 5.2). Of these professionals, business & finance, together with engineers & technologists, form the largest single occupations, followed by natural scientists and then teaching professionals (figure 5.3).

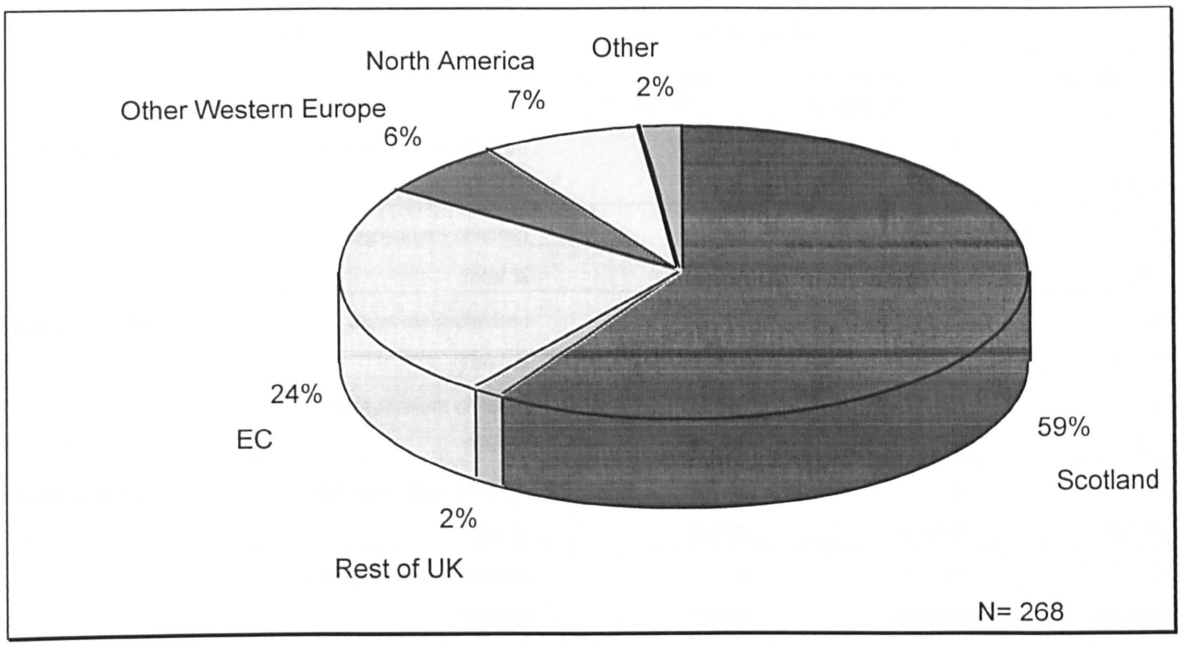


Figure 5.1 Place of work, Glasgow International Airport survey respondents
Source: author

Lifestage category		All persons		
		not in a 'couple' household	in a 'couple' household	Grand total
Less than 20	no dependent children	1	0	1
	Total %	*0.40%*	*0.00%*	*0.40%*
	with dependent children	0	0	0
	Total %	*0.00%*	*0.00%*	*0.00%*
Aged 20 to 39	no dependent children	20	23	43
	Total %	*8.06%*	*9.27%*	*17.34%*
	with dependent children	3	58	61
	Total %	*1.21%*	*23.39%*	*24.60%*
Aged 40 to 59	no dependent children	6	31	37
	Total %	*2.42%*	*12.50%*	*14.92%*
	with dependent children	4	95	99
	Total %	*1.61%*	*38.31%*	*39.92%*
over 60	no dependent children	1	5	6
	Total %	*0.40%*	*2.02%*	*2.42%*
	with dependent children	0	1	1
	Total %	*0.00%*	*0.40%*	*0.40%*
Grand total		35	213	248
	Total %	*14.11%*	*85.89%*	*100.00%*

Table 5.1 Lifestage categories, all respondents
Source: author

Note: dependent children have been defined as those living at home and include a number over 16 years

Lifestage categories		All persons		
		not in a 'couple' household	in a 'couple' household	Grand total
Less than 20	no dependent children	1	0	1
	Total %	*0.70%*	*0.00%*	*0.70%*
	with dependent children	0	0	0
	Total %	*0.00%*	*0.00%*	*0.00%*
Aged 20 to 39	no dependent children	12	16	28
	Total %	*8.39%*	*11.19%*	*19.58%*
	with dependent children	2	30	32
	Total %	*1.40%*	*20.98%*	*22.38%*
Aged 40 to 59	no dependent children	3	15	18
	Total %	*2.10%*	*10.49%*	*12.59%*
	with dependent children	2	57	59
	Total %	*1.40%*	*39.86%*	*41.26%*
Over 60	no dependent children	1	3	4
	Total %	*0.70%*	*2.10%*	*2.80%*
	with dependent children	0	1	1
	Total %	*0.00%*	*0.70%*	*0.70%*
Grand total		21	122	143
	Total %	*14.69%*	*85.31%*	*100.00%*

Table 5.2 Lifestage categories, Scottish-based respondents
Source: author

Note: dependent children have been defined as those living at home and include a number over 16 years

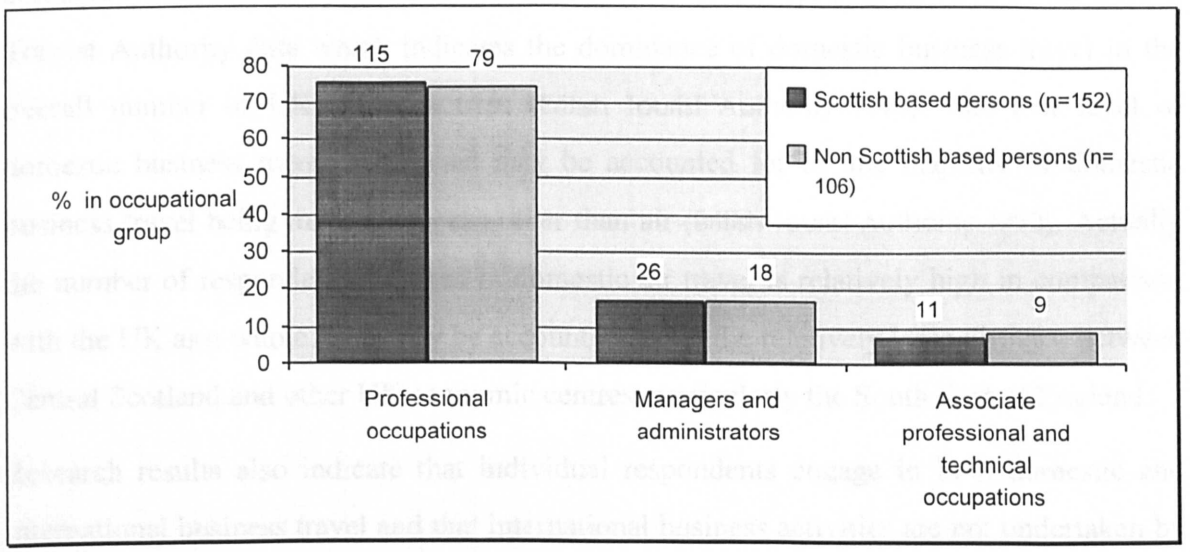


Figure 5.2 Occupation by major group, non Scottish-based and Scottish-based respondents
Source: author

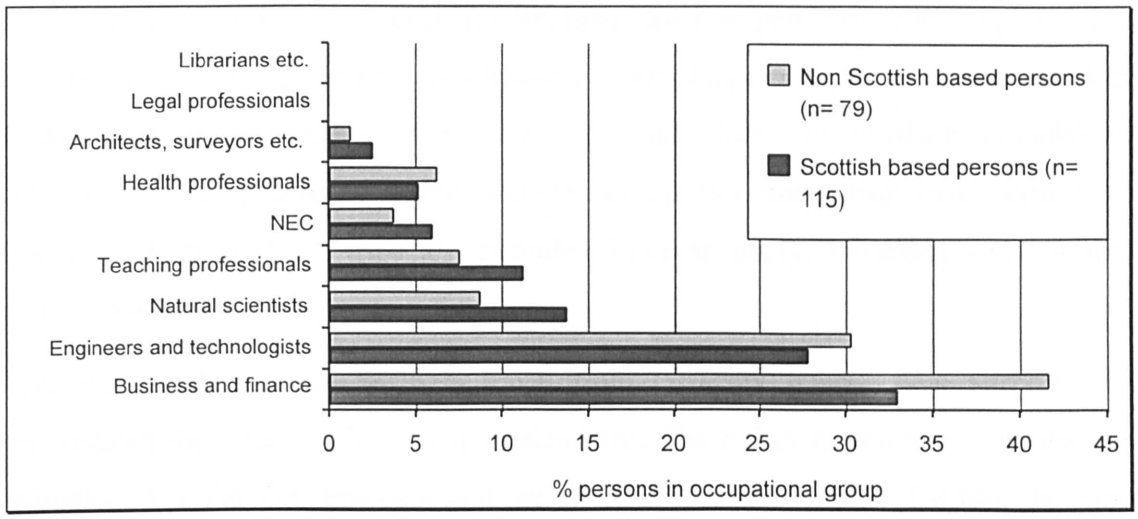


Figure 5.3 Professional occupations by sub-major group, non Scottish-based and Scottish-based respondents
Source: author
Note: NEC= professional occupations not elsewhere classified

5.1.1 Geographical orientation of travel

Scottish-based respondents were asked about the destination of the outward leg of their current business journey. In addition, both Scottish-based and overseas residents were questioned on the destinations visited on business within the previous twelve months. Scottish-based residents are examined first. When the number of trips made within a period of 12 months are examined domestic business travel has a relatively minor role when compared with overseas destinations (figure 5.4). This is surprising in view of the British Tourist Authority data which indicates the dominance of domestic business travel in the overall number of UK business trips (British Tourist Authority 1993). The low level of domestic business travel mentioned may be accounted for by the majority of domestic business travel being made by means other than air (British Tourist Authority 1993). Actually the number of respondents engaged in domestic air travel is relatively high in comparison with the UK as a whole. This may be accounted for by the relatively large distance between Central Scotland and other UK economic centres, particularly the South East of England.

Research results also indicate that individual respondents engage in both domestic and international business travel and that international business activities are not undertaken by a distinct cadre of individuals, but rather by a body of skilled labour engaging in economic activities ranging across geographical scales (figure 5.5). This finding reinforces the assertion that any consideration of the role of international mobility in the functioning of industry and in shaping the dimensions of the skilled individual's work environment, must also bear in mind the commonalties of mobility processes across spatial scales.

The EC is the premier destination for Scottish-based respondents travelling abroad on business, as it is for UK residents as a whole. A wider range of destinations are revealed in this analysis than for the CAA data examined in chapter four. This results from multi-stage overseas trips being included in the author's survey data (these trips originating with a domestic, UK trip). Such trips are excluded from an analysis looking only at *direct* international trips.

A picture of international business travel from Glasgow International Airport which approximates the overall UK pattern is identified. The EC is shown to be the dominant destination. The Far East emerges as a region of particular importance within the 'other' category.

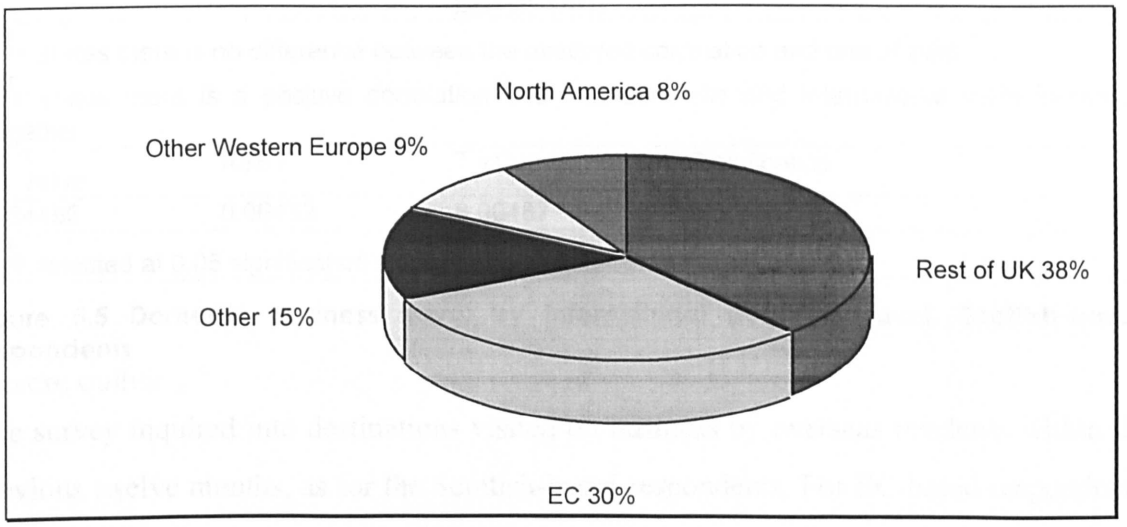
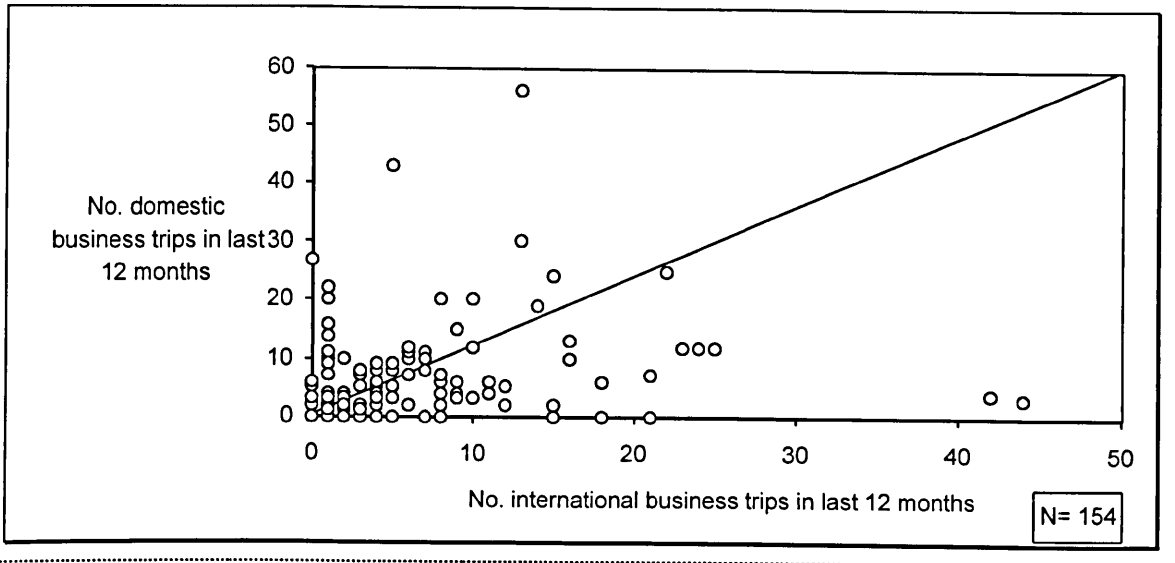


Figure 5.4 Destinations visited on business in last 12 months, Scottish-based respondents
Source: author



Statistical notes	Test statistic:	Spearman's correlation (Shaw and Wheeler 1994 pp168-171)	
H_0 states there is no difference between the observed correlation and one of zero			
H_1 states there is a positive correlation and that domestic and international visits increase together			
r_s value	ASE1	T value	Significance
0.54456	0.06432	8.00487	0.0000
H_0 rejected at 0.05 significance level			

Figure 5.5 Domestic business travel by international business travel, Scottish-based respondents
Source: author

The survey inquired into destinations visited on business by overseas residents within the previous twelve months, as for the Scottish-based respondents. For EC-based respondents, business travel to other countries within the EC dominate as short term mobility destinations. Together with the 'rest of Europe', these destinations account for in excess of 86% of all business trips by this group. Thus for EC-based persons, North America and 'other' destinations are virtually excluded from their business travel (figure 5.6).

A similar European focus can be observed with North American respondents. However, this concentration on Europe is less dominant than for EC-based residents as a greater proportion also operate in 'other' locations. As far as the 'rest of Europe' is concerned, the EC again forms the main focus for business travellers. However there is a proportionately greater focus on other 'rest of Europe' countries and 'other' countries. The structural underpinnings of these varying spheres of interest, amongst respondents based in different areas, is the subject of examination in chapters six to eight.

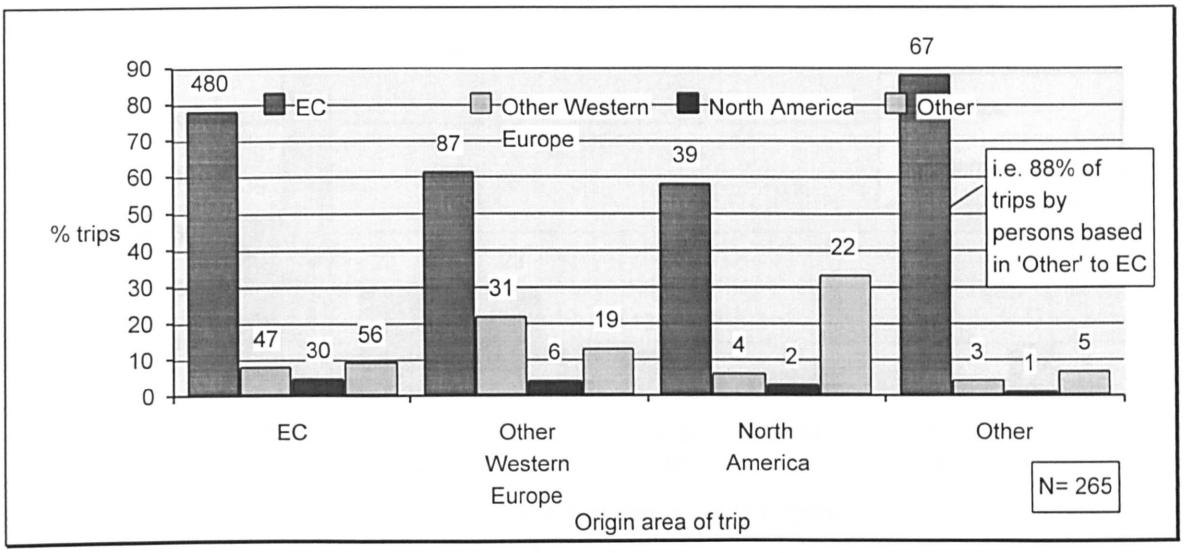


Figure 5.6 International business travel over last 12 months, overseas residents, by area of origin and area of destination
Source: author

5.1.2 Frequency and duration of international business travel

Individual levels of international business travel are generally low to moderate. Some 60% of Scottish-based respondents made 4 or fewer trips per year (domestic and international business travel combined). Although, just under 20% made 8 or more trips in the space of a year (figure 5.7). Respondents from the EC contrasted with Scottish-based respondents in that they showed a higher frequency of international short term mobility. Some 54% of EC respondents made 5 or more trips per year, compared with 39% for Scottish-based respondents. The 'rest of Europe' respondents tend towards a smaller number of trips than EC-based persons, while North American persons display the lowest frequency of short term skill exchanges. Figure 5.8 indicates that differences in the number of flights between Scottish-based and other respondents is significant.

The mean number of business trips in the previous 12 months (to all locations) for Scottish-based respondents was ten, with a mean of five for international trips. For non Scottish-based persons, the mean number of international business trips was eight. The results presented here imply that, for a minority of those managers and professionals engaged in Scottish ISLM, there is a potentially significant amount of time devoted to circulation activities of a highly transient nature. Thus for Scottish-based skilled labour, short term skill exchanges, at both the domestic and international level, are a common and important feature of the contemporary work environment.

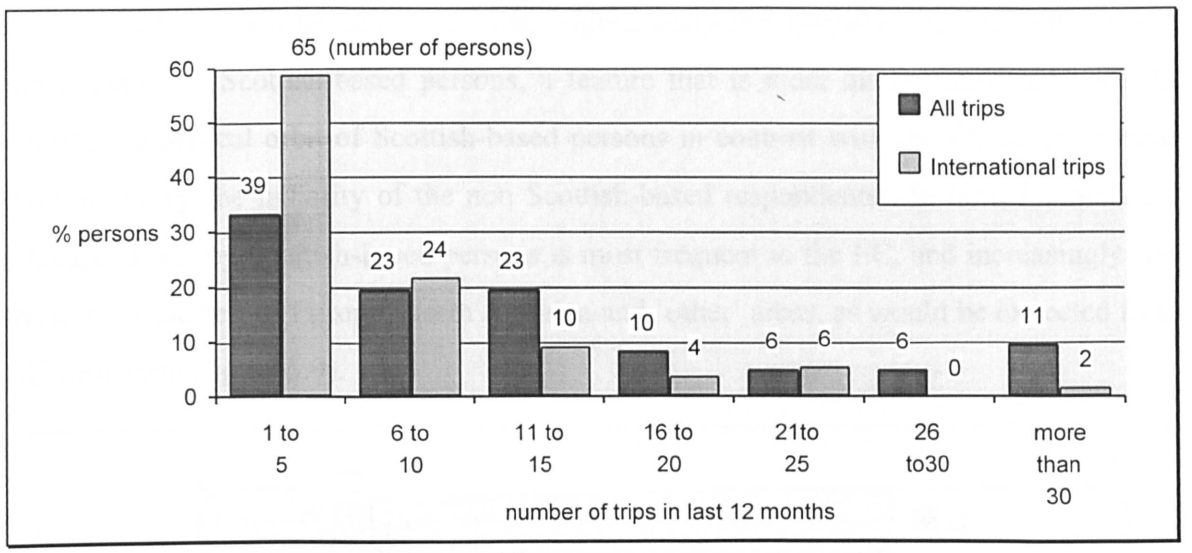
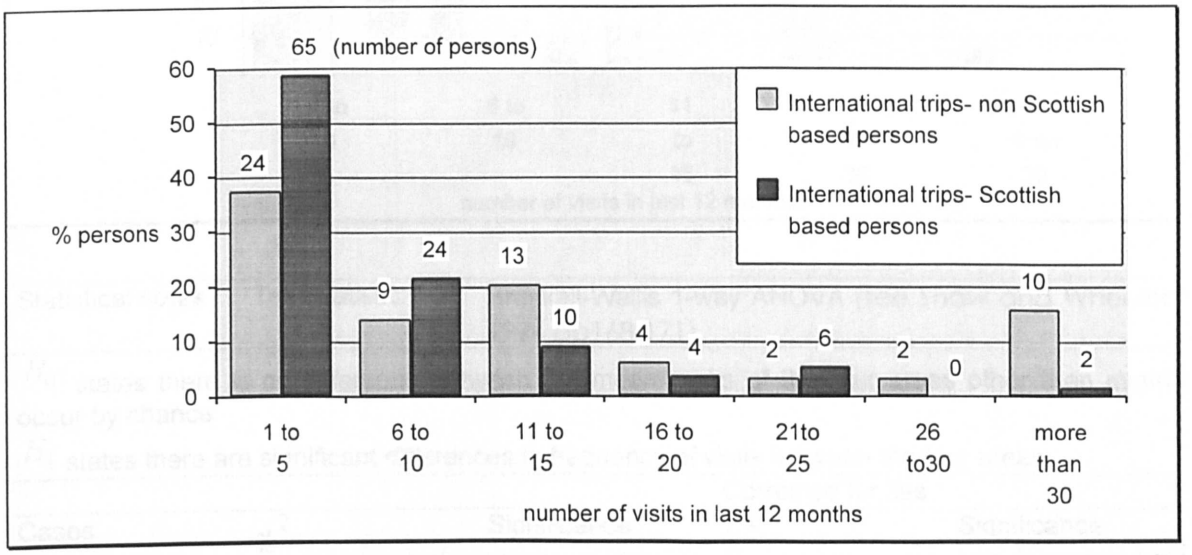


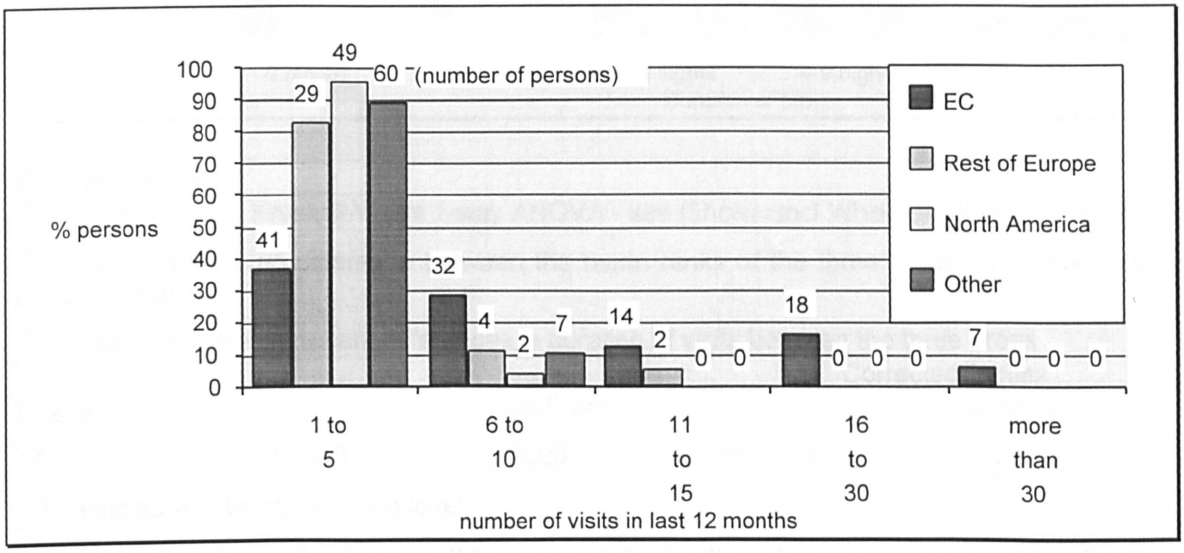
Figure 5.7 Frequency of business visits, Scottish-based persons by all visits and international visits
Source: author



Statistical notes	Test statistic:	χ^2 test (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the frequency of visits between Scottish-based and non Scottish-based persons			
H_1 states there are significant differences between the two groups so that they constitute different populations of business travellers			
χ^2	DF	Significance	Min expected frequency = 4.432
19.87798	4	0.00053	Cells with less than 5= 10%
H_0 rejected at 0.05 significance level			
Note: frequency categories collapsed: 1 to 5; 6 to 10; 11 to 15; 16 to 30; more than 30.			

Figure 5.8 Frequency of business visits, international visits by non Scottish-based and Scottish-based persons
Source: author

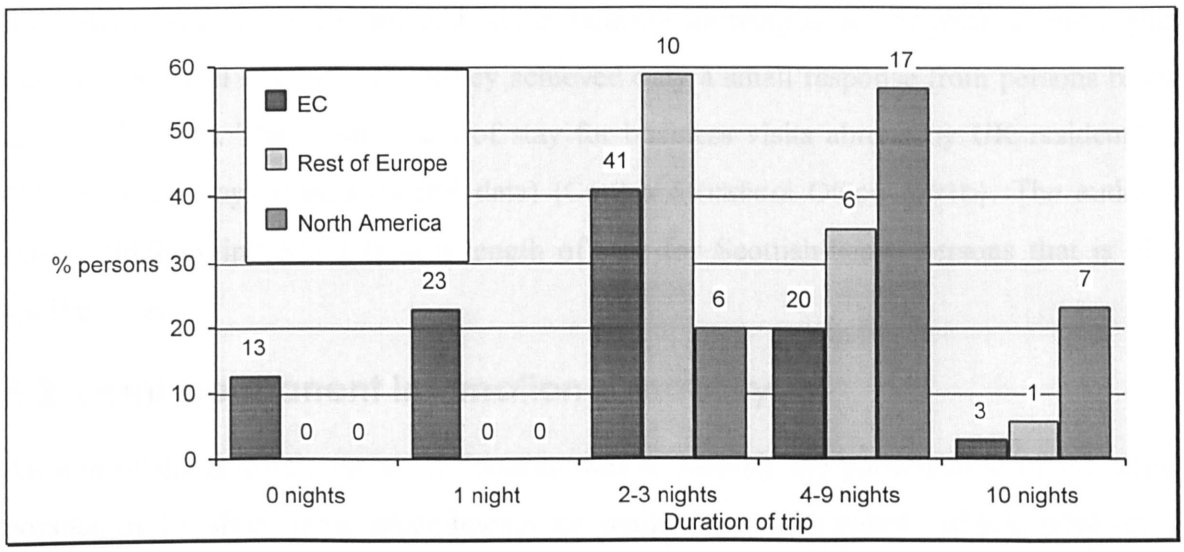
As indicated, Scottish-based persons make significantly less frequent international business travel than non Scottish-based persons, a feature that is most likely connected with the wider geographical orbit of Scottish-based persons in contrast with the EC-based persons (who make up the majority of the non Scottish-based respondents). In turn, international business travel by Scottish-based persons is most frequent to the EC, and increasingly less frequent to the rest of Europe, North America and 'other' areas, as would be expected from UK level data (figure 5.9).



Statistical notes	Test statistic:	Kruskall-Wallis 1-way ANOVA (see Shaw and Wheeler 1994 pp168-171)		
H_0 states there is no difference between the mean ranks of the four areas other than might occur by chance				
H_1 states there are significant differences in frequency of visits between the four areas				
			Corrected for ties	
Cases	χ^2	Significance	χ^2	Significance
616	114.0517	0.0000	140.2805	0.0000
H_0 rejected at 0.05 significance level				

Figure 5.9 Frequency of international business visits, Scottish-based persons by area visited
Source: author

Analysis in chapter four testified to the significant differences in duration of business travel to different areas. Thus, the author's survey respondents were questioned on the duration of their current trip. The majority of Scottish-based respondents indicated that duration of trip was predominantly of three nights or less (which accords with British Tourist Authority data indicated in chapter four). For EC-based residents an even greater proportion of trips were of a short nature, approximately 80% making trips of 3 nights or less (figure 5.10).



Statistical notes				
Test statistic:	Kruskall-Wallis 1-way ANOVA - see (Shaw and Wheeler 1994 pp168-171)			
H_0 states there is no difference between the mean ranks of the three areas other than might occur by chance				
H_1 states there are significant differences in duration of visits between the three areas				
			Corrected for ties	
Cases	χ^2	Significance	χ^2	Significance
141	34.3836	0.0000	38.4576	0.0000
H_0 rejected at 0.05 significance level				

Figure 5.10 Duration of business visit by area of destination, Scottish-based persons (current trip)

Source: author

Note: 'Other' area under-represented due to absence of direct flights from Glasgow International Airport

These figures may be a reflection of the more disparate geographical orientation of the Scottish-based business travellers surveyed in comparison with EC-based respondents. For the respondents from the 'rest of Europe', North America and 'other' areas, the limited responses within the survey indicate that these groups are engaging in relatively lengthy periods of business travel.

Scottish respondents have a relatively high proportion of longer term trips as a result of travel to more distant locations. EC respondents have predominantly short trips as a result of this group being based largely within a European arena of activity. The 'rest of Europe' shows a higher average duration of travel due to a greater degree of activity in 'other' areas. Similarly North American trips tend to be longer than average due to the fact that most international travel is directed at the EC and 'other' areas.

For Scottish-based persons, variation in trip duration corresponds with the UK data presented in chapter four, with EC trips of the highest frequency and shortest duration,

followed by the rest of Europe and North America showing lower frequencies but higher duration of travel (the author's survey achieved only a small response from persons based in 'other' areas). The mean length of stay for business visits abroad by UK residents in 1990 was 6.7 days (based on IPS data) (Central Statistical Office 1991b). The author's survey findings indicate a typical length of stay for Scottish-based persons that is of a similar order.

5.2 Semi-permanent international mobility

An aim of the research survey undertaken was to identify the participation of the target population in short term secondments or temporary assignments, which were of a substantially longer duration than typical business travel but were a less significant undertaking than a home relocation, or migration requiring, for example, international removals, arrangement of work permits, and extensive overseas allowances on salaries. Such semi-permanent trips fall within a transitional area between business travel and migration.

Such semi-permanent trips would be recorded in official data sources as either business trips or as migration. This is because official definitions use only the criteria of duration of stay in classifying the form of mobility. If an additional factor, indicating the degree of housing commitment involved in the movement, is accounted for, a transitional form of mobility can be seen which differs considerably in character from business travel or skilled migration. Thus, respondents were questioned on their experience, within the previous five years, of relatively long trips of between 1 and 6 months and of over 6 months in which they did not move their permanent home.

The survey revealed that a significant number of respondents had taken part in forms of mobility that were of significantly greater duration than typical business travel and somewhat less permanent than skilled migration or relocation. The number making semi-permanent moves in the last five years was 41 out of 268 (15%). Some 28 (10%) made trips of between 1 and 6 months, and 13 (4%) made semi-permanent trips of over 6 months. One person (0.4%) had made trips of both 1 to 6 months and over 6 months. There appears therefore to be a significant, although small, proportion of skilled individuals engaging in what can be characterised as an intermediate form of mobility (figure 5.11).

The number of semi-permanent moves made per person is generally low, most respondents making only 1 trip in the last 5 years, with a minority making more than one. Some 27 out of 41 respondents, who had made short term moves, made only 1 trip (65.8%), 5 out of 41 (12.2%) had made 2 trips, while 9 out of 41 (22.0%) had made 3 or more semi-permanent trips and 3 out of 41(7.3%) had made 9 or more semi-permanent trips (figure 5.12).

When Scottish-based respondents are considered alone, a greater proportion were engaged in semi-permanent mobility than for the sample as a whole (17.0% of Scottish-based respondents). Semi-permanent forms of mobility appear relatively common amongst Scottish-based respondents. Almost a fifth of all Scottish-based respondents had made a semi-permanent move within the last five years.

The qualitative difference of this form of mobility is recognised by firms themselves. One study of UK firm's expatriation policies indicates that, although most short term assignments are of less than 12 months, 43% of companies compensate with incentives or premium payments. Although, 54% of firms do not permit expatriates to be accompanied by their family (Organization Resource Counselors 1991 p10). This last point is of concern given evidence presented for the benefits of social support in avoiding the potential disruption caused by temporary separation from families (Munton and Andrews 1991). The geographical orientation of these trips is discussed below.

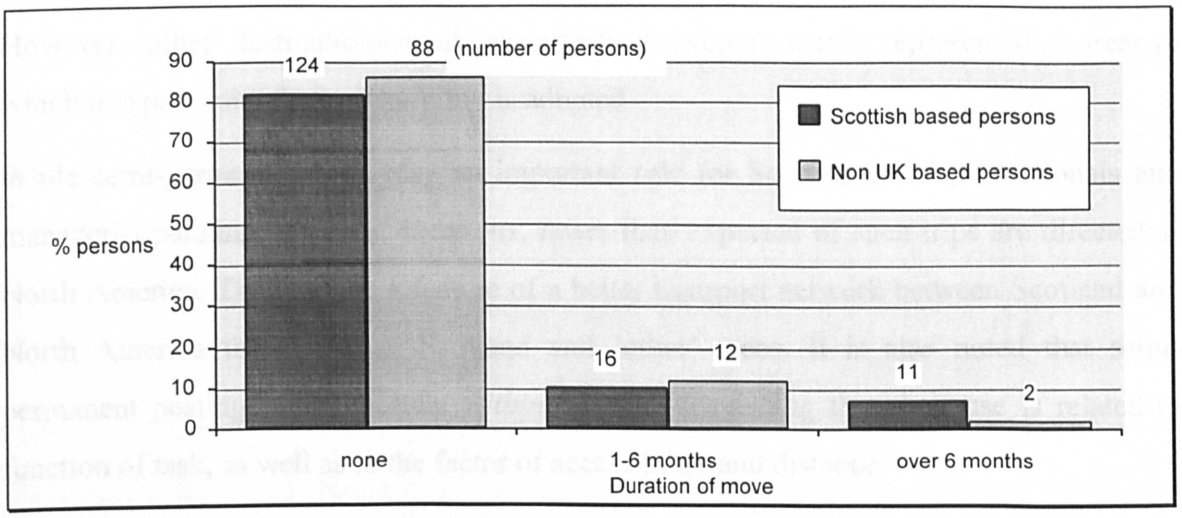


Figure 5.11 Frequency of semi-permanent moves, non UK based and Scottish-based persons
Source: author

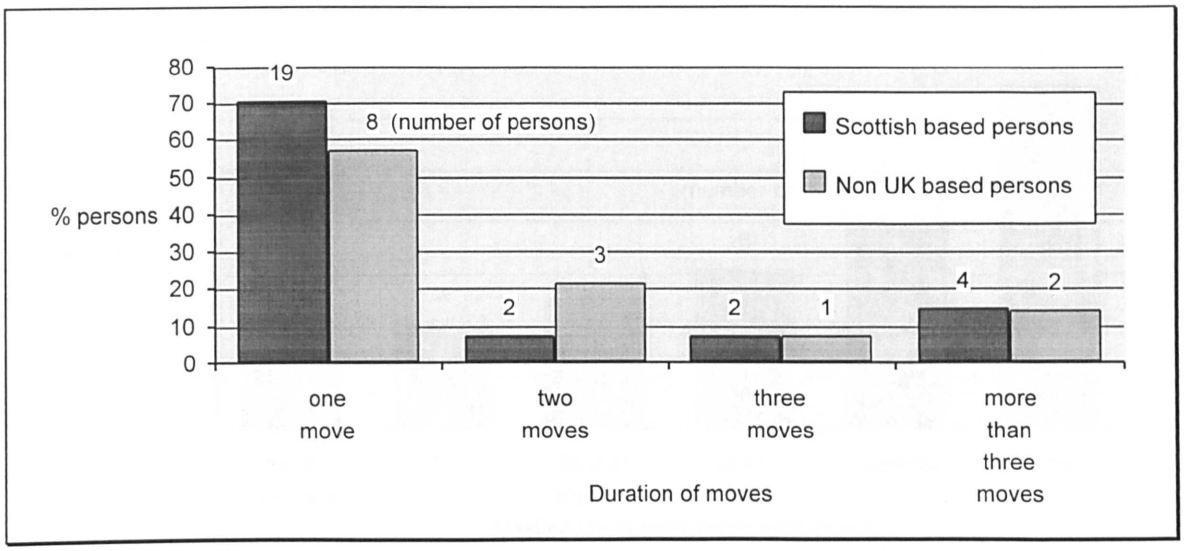


Figure 5.12 Frequency of semi-permanent moves, non UK and Scottish-based persons
Source: author

5.2.1 Geographical orientation of semi-permanent trips

For Scottish-based respondents around a third of semi-permanent trips occur within the UK. For the remainder of trips, the geographical distribution contrasts with that of international business travel. A much lower percentage of semi-permanent mobility than expected is to the EC. Instead a relatively high proportion of trips, around one third, are made to 'other' areas. The total number of individuals engaged in trips of this nature is relatively low, a sixth of the total sample (figure 5.13). The low numbers of overseas respondents engaging in semi-permanent moves makes detailed analysis unreliable. However, 'other' destinations would seem to be disproportionately represented as areas to which this particular form of mobility is adopted.

While semi-permanent trips play an important role for Scottish-based professionals and managers operating in 'other' locations, fewer than expected of such trips are directed at North America. This may be a feature of a better transport network between Scotland and North America than between Scotland and 'other' areas. It is also noted that semi-permanent postings are important *within* the UK, suggesting that their use is related to function of task, as well as to the factor of accessibility and distance.

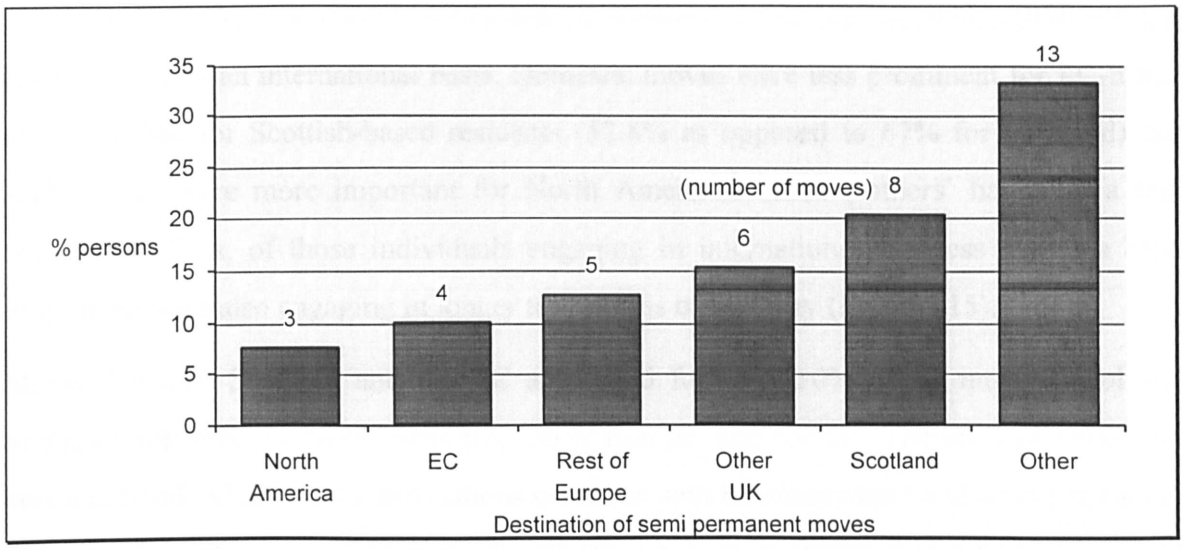


Figure 5.13 Destination of semi-permanent moves, Scottish-based persons
Source: author

5.3 Skilled migration

The following analysis adopts a different criteria for assessing skilled migration than that utilised in official data sources. The United Nations definition of a migrant is used in the United Kingdom, where a migrant to the UK is defined as a person who has resided abroad for the last year or more, and who states on arrival the intention to stay in the UK for at least the next year, and vice versa for a departing migrant from the UK (Bailey 1992 p.33). In UK official classifications migration is denoted solely around the length of time spent in or out of a particular country. Here, the emphasis is upon *relocation* rather than *migration*, i.e., whether a person has moved *home* when undertaking a move (it is noted that the majority of respondents did make moves of over one year and so would qualify as migrants under official definitions). This is the dimension which is of most concern to the mover and as relocation or expatriation is a costly exercise in monetary and human terms, it is also the dimension with which industry is increasingly concerned. Relocation is examined at the domestic and international level.

5.3.1 Geographical orientation of home moves

An analysis of Scottish-based respondents who have relocated indicates a total number of 67 movers out of 153 (i.e. 43.8% of the Scottish-based respondents) had relocated within the last 10 years. For other areas of origin, the proportions of movers were broadly similar, with the exception of 'other European' countries, who had a low proportion of movers compared to non movers (figure 5.14).

The majority of Scottish-based respondents, had moved within the UK, with a third making home moves on an international basis. Domestic moves were less prominent for EC-based residents than for Scottish-based residents (52.8% as opposed to 67% for Scotland) but such moves were more important for North American based ('others' had only a few responses). Thus, of those individuals engaging in international business travel, a high proportion were also engaging in longer term forms of mobility (figure 5.15).

Moves between Scotland and the EC accounted for over 10% of all moves involving Scotland, followed by North America, 'other Europe' and 'other'. The level of relocation between Scotland and these destinations contrasts with business travel and semi permanent mobility. In particular 'other' areas do not stand out as important destinations for longer term mobility, in the form of relocation, as they do for semi-permanent mobility (figure 5.16 and 5.17). If international business travel were to act as a surrogate for relocation, it would be expected that 'other Europe' and 'other' would have high levels of relocation. However this does not appear to be the case.

Most moves were made by EC-based residents within the EC (47.2%). In addition, over a fifth of all moves were made between the UK and the EC. It is interesting that such a high proportion of EC-based residents on business travel to Scotland had at some stage moved home between Scotland and EC. This suggests a correspondence between the geographical orientation of business travel and relocation. In addition, around 17% of EC-based persons had at some stage moved home within the UK.

Only a fraction of trips were made between the EC and North America, reflecting the UK oriented nature of this group of managers and professionals. As for business travel, the data reflect a group of EC-based respondents visiting Scotland, who are also engaged in economic activity within a largely European context, and one in which the orientation of business travel correlates positively with past home relocation. It is noted that this is not to say that there is no interchange or overlap with other areas. The survey indicated a relatively low number of North American based respondents' moves, which were largely taking place within North America (90%).

If relocation is compared with business travel and semi-permanent mobility in terms of the respective contribution by destination, then considerable variety is displayed between main areas (figure 5.17). The balance of mobility types between different areas suggests distinct differences between the EC and 'other' areas in particular, with relatively high business

travel and relocation accompanied by relatively low semi-permanent mobility to the former. The opposite case is true for the latter, with high semi-permanent mobility and relatively low instances of the other types. 'Other Europe' and North America also display unique profiles of mobility types. The former shows an increasing tendency to longer forms of mobility, whereas the latter displays broadly equal levels of mobility in each category.

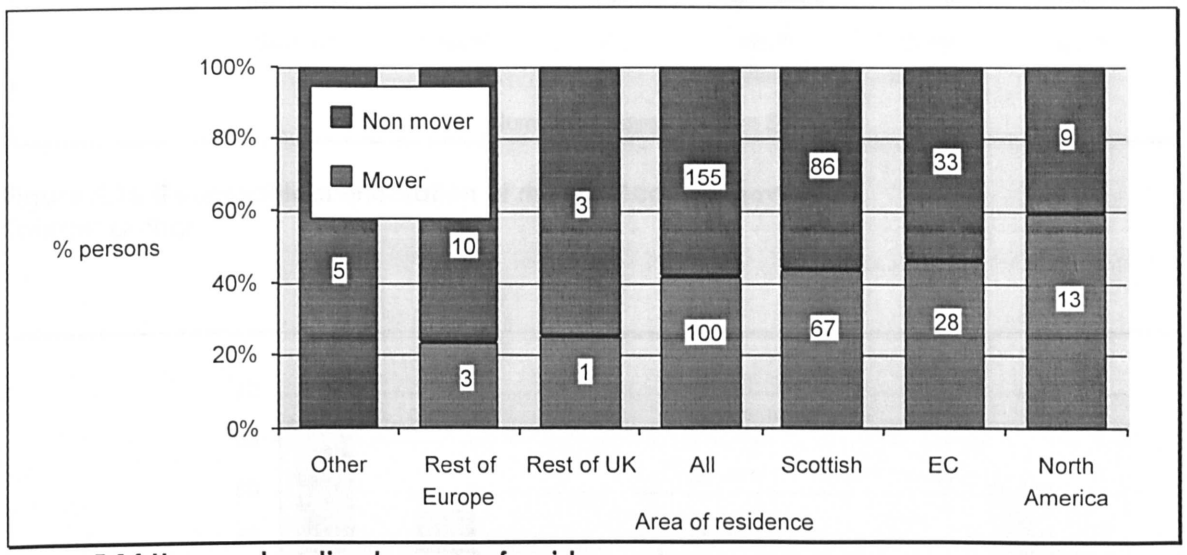


Figure 5.14 Home relocation by area of residence
Source: author

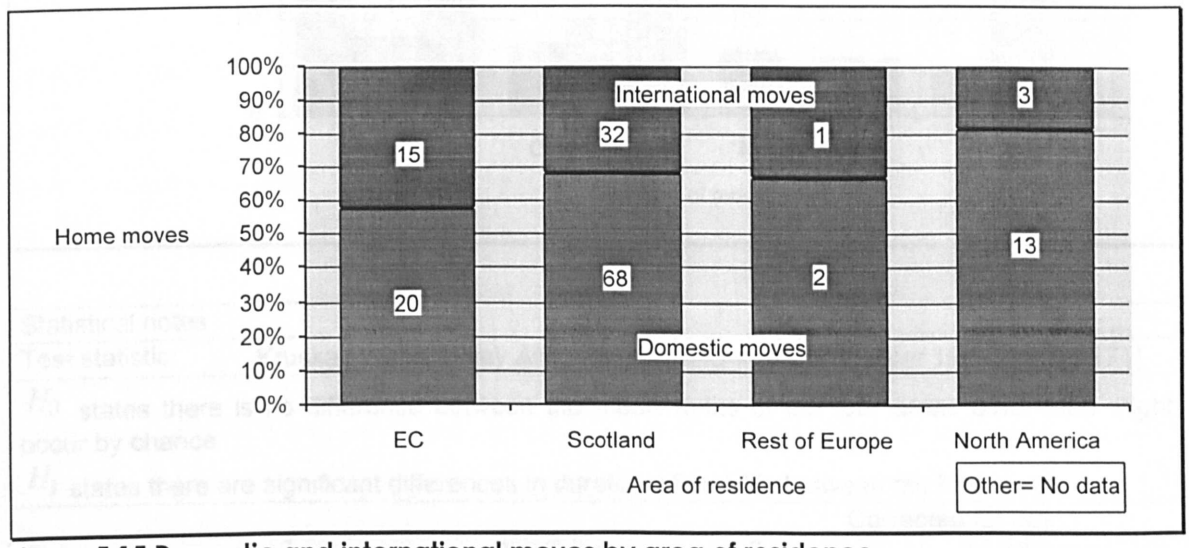


Figure 5.15 Domestic and international moves by area of residence
Source: author

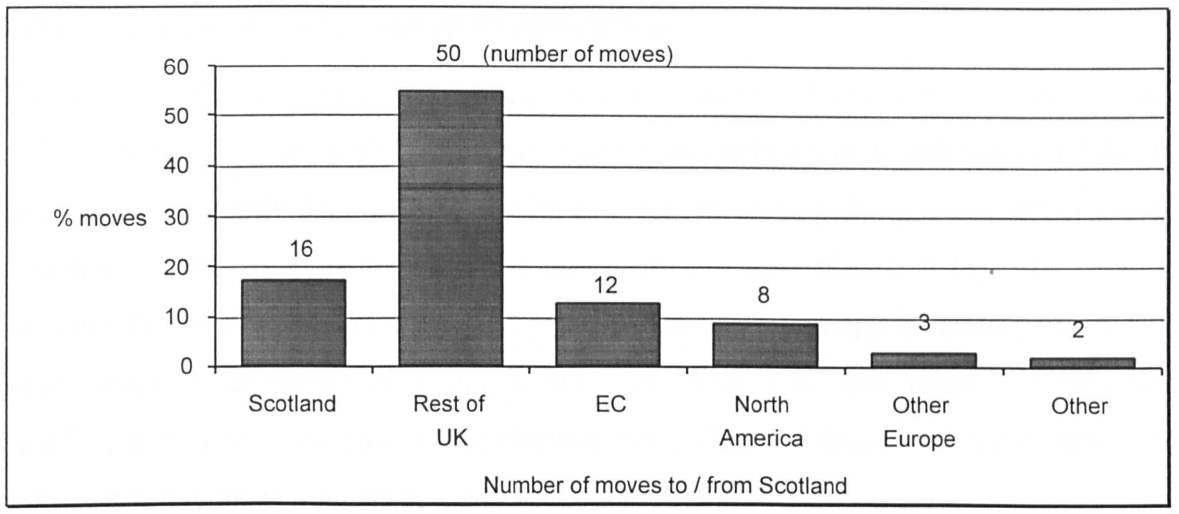
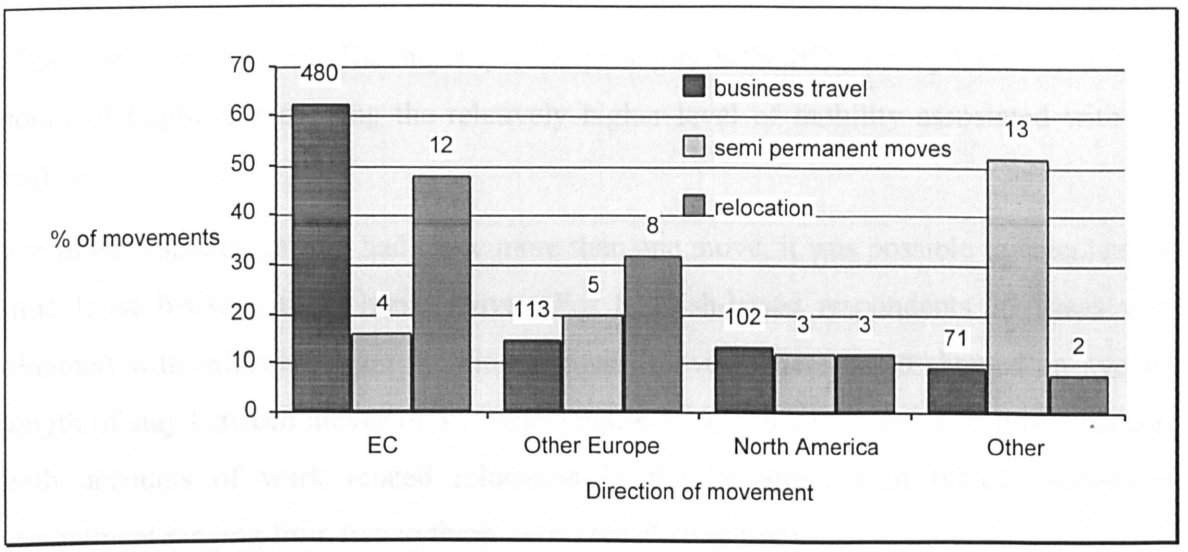


Figure 5.16 Geographical orientation of moves, Scottish moves
Source: author



Statistical notes				
Test statistic:	Kruskall-Wallis 1-way ANOVA (see Shaw and Wheeler 1994 pp168-171)			
H_0 states there is no difference between the mean ranks of the four areas other than might occur by chance				
H_1 states there are significant differences in duration of mobility between the four areas				
			Corrected for ties	
Cases	χ^2	Significance	χ^2	Significance
815	24.3924	0.0000	31.7824	0.0000
H_0 rejected at 0.05 significance level				

Figure 5.17 Mobility type by destination, Scottish-based persons
Source: author

5.3.2 Frequency and duration of relocation

The majority of Scottish-based respondents who had 'moved', had made only 1 or 2 moves in the space of 10 years (85%). However, those who made international moves tended to do so more frequently than the others, with over half of those making international moves experiencing two or more international moves in ten years (figure 5.18). The average number of moves per person within the previous ten years was approximately two for all areas except 'other European' countries (the 'rest of the UK' and 'other' countries had insufficient data to make meaningful observations). Thus EC-based and North American respondents had more frequent relocation.

The findings for Scottish-based respondents show a lower frequency of home moves than a survey of UK managers carried out by the British Institute of Management (BIM). For the latter group, a third of managers had moved at least three times in the previous ten years (Coe and Stark 1991 p5). The majority of respondents in the BIM survey were based in the south of England, indicating the relatively higher level of mobility associated with this region.

For those respondents who had made more than one move, it was possible to calculate the time lapse between these home moves. For Scottish-based respondents 35 cases were obtained with information on duration between moves. These cases showed an average length of stay between moves of 3.1 years (figure 5.19). This is a period of time in accord with accounts of work related relocation in the literature, with typical periods of secondment ranging from two to three years (see chapter two).

For EC-based respondents, an average length of stay was calculated at 2.46 years, indicating a more rapid interval between moves than for Scottish-based respondents. EC-based respondents appeared to undergo much shorter forms of relocation. Many of these would not qualify as 'migration' in the standard definition of the term, but are nonetheless more significant than business travel or semi-permanent moves in that they involve the movement of the permanent home accommodation.

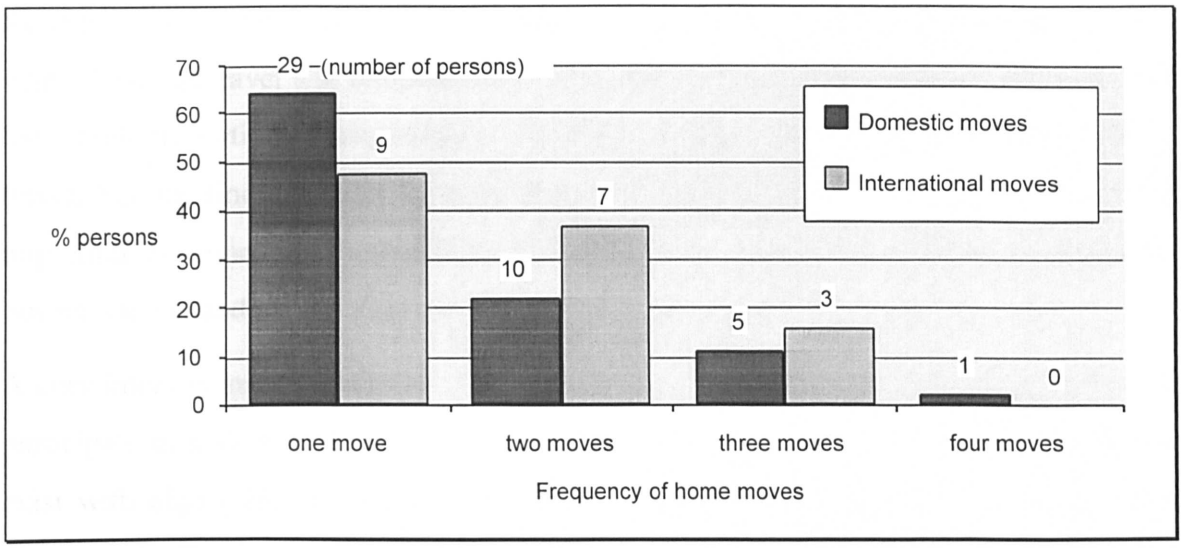


Figure 5.18 Frequency of home moves by international and domestic moves, Scottish residents
Source: author

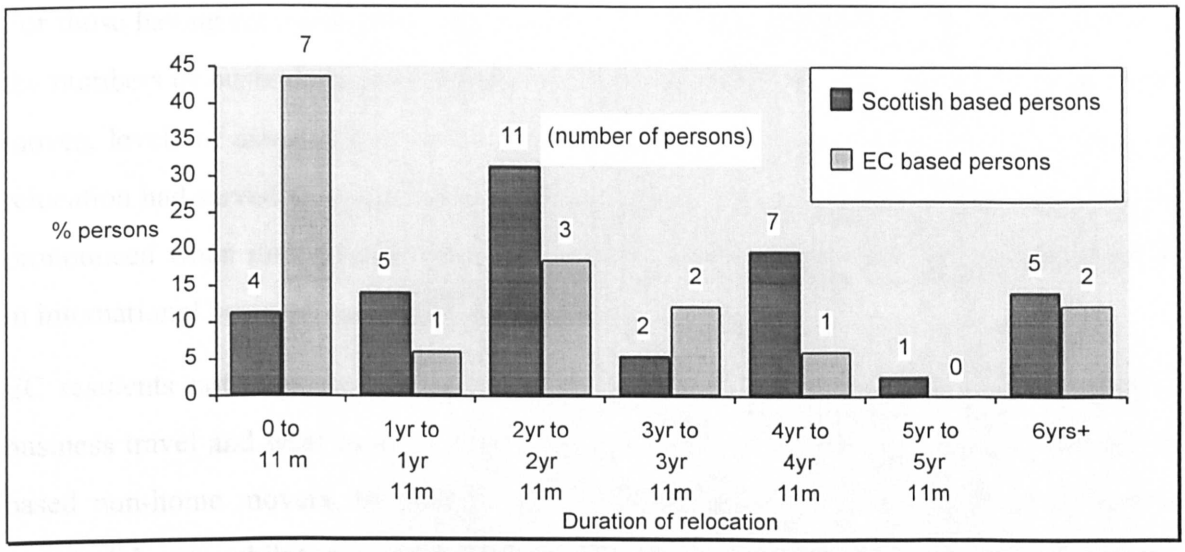


Figure 5.19 Duration of relocation, Scottish and EC-based respondents
Source: author

5.4 Concurrent mobility

The aim of this section is to examine the extent to which there is participation by respondents in simultaneous mobility of different temporal types. There is little evidence in the literature or within secondary data sources to indicate the degree to which different types of mobility are engaged in at the same time by individual professionals and managers. Evidence of this would be useful in determining the degree to which business travel can be said to act as a surrogate for relocation. Such information would also be useful in gauging the dislocation of managers and professionals from home surroundings in the course of skilled mobility.

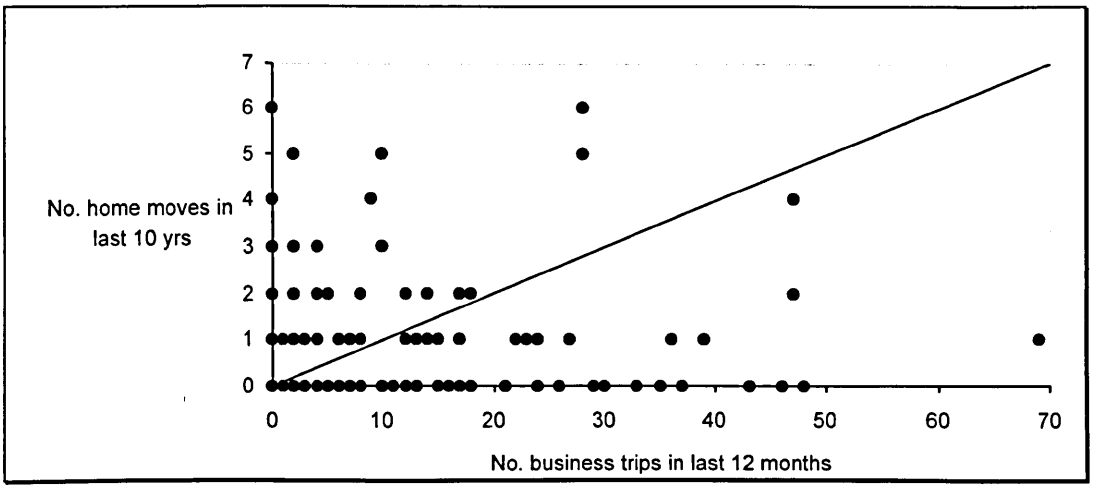
Reference to figures 5.20 to 5.22 indicates a significant degree of concurrent mobility where business travel and relocation are concerned. The evidence presented indicates that for a high proportion of respondents, relocation coexists with an engagement in business travel. Yet, the findings differ from the aggregate relationship between business travel and migration examined in chapter four, where a direct relationship between international business travel and skilled international migration was found.

A curvilinear relationship exists; at an individual level most persons who have relocated, participate in a significant level of business travel, but an inverse relationship seemed to exist with high rates of relocation or business travel. The scattergraphs do not reveal a direct or significant measure of association by virtue of the non linear arrangement of the data (figures 5.20 to 5.22).

For those having relocated once, rates of business travel appeared to be fairly irrelevant to the numbers of business trips undertaken. In contrast, for those making two or more home moves, levels of associated business travel tended towards the low side, suggesting that relocation had served to replace the need for business travel to a degree. This appears more pronounced when international move are considered separately, with a noticeable decline in international business travel upon an international relocation.

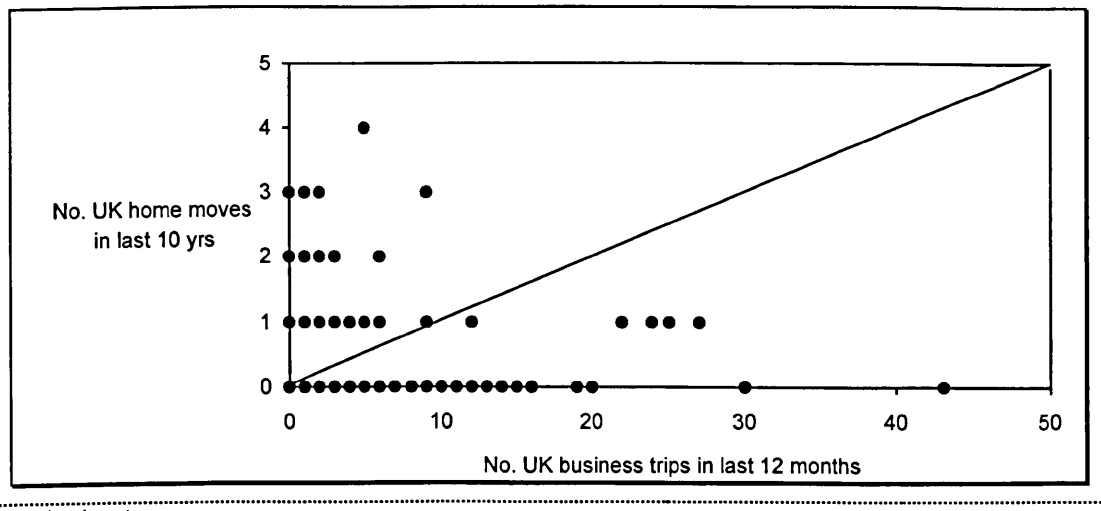
EC residents not engaging in relocation had a variety of degrees of involvement with business travel and were more inclined to be involved with business travel than Scottish-based non-home movers. In contrast, those who had moved frequently (three times or more) did not exhibit any marked lessening of the number of business trips made. Relocation does not appear to act as a substitute for business travel to the same degree as it does for Scottish-based respondents.

The majority of business travel is undertaken by those who have not moved home. For those who have moved home, business travel seems less important. Moreover, the more frequently the moves occur, the less important business travel seems to be, at least for Scottish-based respondents. It is borne in mind that the areas of economic activity of Scottish-based respondents are more spatially varied than for the EC respondents questioned. The data suggest a spectrum of mobility trade offs, between short term mobility and long-term mobility, but where short term mobility is rarely entirely dispensed with by longer term forms of mobility.



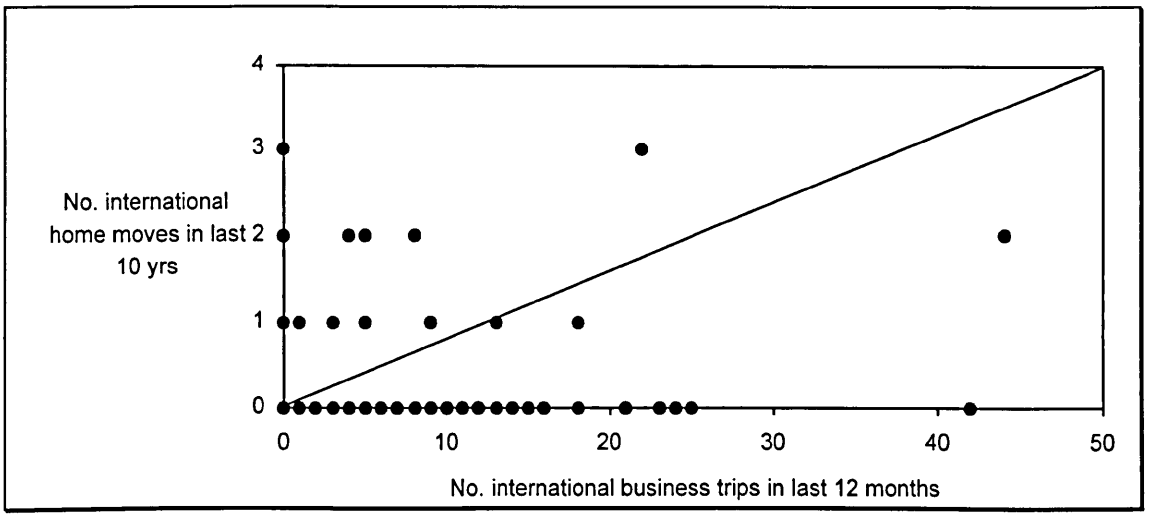
Statistical notes	Test statistic:	Spearman's (see Shaw and Wheeler 1994 pp168-171)	
H_0 states there is no difference between the observed correlation and one of zero			
H_1 states there is a negative correlation and that business travel increases as home moves decrease			
r_s value	ASE1	T value	Significance
-0.05325	0.08381	-0.65746	0.51168
H_0 accepted at 0.05 significance level			

Figure 5.20 Business travel by home moves, Scottish-based respondents
Source: author



Statistical notes			
Test statistic:	Spearman's correlation- see (Shaw and Wheeler 1994 pp168-171)		
H_0 states there is no difference between the observed correlation and one of zero			
H_1 states there is a negative correlation and that business travel increases as home moves decrease			
r_s value	ASE1	T value	Significance
0.01464	0.07606	0.18054	0.85697
H_0 accepted at 0.05 significance level			

Figure 5.21 Domestic business travel by domestic home moves, Scottish-based respondents
Source: author



Statistical notes			
Test statistic:	Spearman's correlation- see (Shaw and Wheeler 1994 pp168-171)		
H_0 states there is no difference between the observed correlation and one of zero H_1 states there is a negative correlation and that business travel increases as home moves decrease			
r_s value	ASE1	T value	Significance
0.10541	0.08609	1.30681	0.19325
H_0 accepted at 0.05 significance level			

Figure 5.22 International business travel by international home moves, Scottish-based respondents
Source: author

5.5 Conclusion

Scottish skilled international mobility has been examined and a detailed analysis of Scottish ISLM patterns developed. Overall Scottish ISLM has been characterised as a process which is intimately associated with mobility at a domestic scale. In addition, Scottish ISLM is diverse in terms of temporal scale, frequent short term mobility is accompanied by less frequent, but longer term movements. The relative balance of these mobility types varies significantly between geographical areas. Often these different skill exchanges are undertaken concurrently by individual managers and professionals. Thus international skilled labour mobility in general, and in particular in Scotland, is more variable and complex than prior research has suggested. The processes underlying the patterns of Scottish ISLM observed are now examined.

Chapter 6

The economic environment of Scottish international skilled labour mobility

6.1 The changing Scottish economy

During the 1970s and 1980s the Scottish economy underwent a period of pervasive change involving increasing *internationalisation*, accompanied by '*de-industrialisation*'. The former represents a growth in the inward and outward flows of foreign direct investment (FDI). The latter refers to the relative decline of manufacturing and the growth of services in the Scottish economy. Scotland can be portrayed as an economy which is increasingly '*open*' and one which has experienced a shift in role, within the global economy. This chapter is concerned with the interaction between this economic change and growth of Scottish international skilled labour mobility (ISLM).

6.1.1 Patterns of international trade and investment

A major feature of the world economy in the post-war period has been the growth of *production* and *trade* and the increasing geographical inter-connectedness of the global economy. Initially, this growth was associated with manufacturing activity. However, this is increasingly accompanied by the internationalisation of *circulation services* (commercial, financial and business services) (British Invisibles 1993; The Economist 1994h; The Economist 1994t). Trade in services now accounts for $1 trillion, at least 25% of all trade, according to GATT figures (GATT cited in The Economist 1994c p67). Others estimate world-wide service exports at $2.4 trillion (British Invisibles cited in The Economist 1994j p113).

Further, these general trends in the production and trade of products and services vary geographically to a great extent. A striking feature of manufacturing production is that most of it takes place within a small number of countries, around three quarters of world manufacturing production being located in USA, Western Europe and Japan (Dicken 1992 p20). In addition, within these core, older industrial economies, there have been significant shifts in the *relative* share of manufacturing production.

Of these shifts, three trends in particular stand out. Firstly, although still predominant, there has been a marked decline in the relative contribution of the US to world manufacturing

production. Secondly, this has been accompanied by a decline of the UK, which has fallen from the third largest manufacturing nation of the market economies to the fifth largest by the late 1980s. Thirdly, and in contrast to the UK and US, Japan has grown rapidly from fifth to second largest in manufacturing production by 1987 (amongst the market economies) (Dicken 1992 p.20).

With much production concentrated in older industrial countries, only a small number of *developing* market economies make a significant contribution to overall manufacturing production figures. These are the NICs: the '*newly industrialising countries*'. Brazil, Spain and India account for the greatest proportion of manufacturing output in the NICs; however, it is those in East and South East Asia that have grown fastest, especially South Korea (Dicken 1992 p26; The Economist 1994a; The Economist 1994g; The Economist 1994d).

As indicated at the outset, trade in manufactures has developed alongside growth in manufacturing production, thus implying a growing globalisation of economic activity. As a proportion of all exports, manufactures have become increasingly dominant, especially in the developed market economies, increasing from 70% to 77% of the total, between 1960 and 1988 (Dicken 1992 p27).

However, the dominance of individual countries is less marked for the export of manufactures than for production, although the developed market economies still account for 80% of all world exports in manufactures. Yet, as for production, from the 1960s onwards, the UK's proportion of world exports within the developed market economies, has fallen well below that of other main manufacturing countries such as France, Japan, the USA and Germany. (International Monetary Fund 1990 and earlier editions; British Overseas Trade Board 1991). Some 83.3% of UK imports and 80.1% of exports are with other industrial countries (International Monetary Fund 1992 p402).

Several features of international trade in manufactures stand out. Firstly, North America and especially Western Europe have strong internal and regional relations in manufacturing trade. Secondly, Japan has emerged as large exporter to both North America and Western Europe, although trade in the other direction is relatively low. Thus asymmetrical trading relations exist with Japan, especially for North America (Horsley and Buckley 1990; The Economist 1994r; The Economist 1994c).

In addition, the US and Japan are more involved in manufacturing trade with developing countries than Western Europe (The Economist 1994k). Fourth, NICs account for an increasing proportion of world exports in manufactures. However, "manufactured imports from NICs are strongly concentrated geographically into a small number of developed countries. Apart from the United States and Japan, they still account for a relatively small share of individual countries' manufactured imports" (Dicken 1992 pp39-40; The Economist 1994a; The Economist 1994d).

It is noted that increased globalisation of trade makes conventional measurements of exports and imports, such as those referred to above, increasingly redundant. Less often are goods made in the home country and transported abroad. Often the most convenient way into an overseas market for services is to set up a subsidiary, whereas in manufacturing, a growing number of products are made in local assembly plants from components shipped from around the world (The Economist 1994c; The Economist 1994h).

In conclusion, Scottish economic change must be set against the global framework of a post war period of generally high economic growth, especially in manufacturing production. This period witnessed the globalisation of manufacturing, with trade in manufactures growing faster than production. Following economic disruption in the 1970s and early 1980s, recovery took on a new and uneven pattern, with international trade increasingly driven by commercial services trade. However the predominant flows of goods and services still occur between developed market economies, despite the emergence of NICs. An important dimension of the economic developments discussed above is the role of the TNC.

6.1.2 The role of trans-national companies

The prime force shaping and channelling production and trade in the post war period has been the TNCs, through the process of foreign direct investment (Harris 1988; Thrift 1989; Dicken 1992). The TNC can be defined as: "the means of co-ordinating production from one centre of strategic decision making when this co-ordination takes firms across national boundaries." (Cowling and Sugden 1987 p60). This definition encompasses the more intangible types of international involvement, for example, inter-firm alliances, as well as those involving direct ownership.

It is estimated that around 37,000 were active by the early 1990s, operating at least 200,000 foreign affiliates (UNCTAD cited in The Economist 1994f). From a fifth to a quarter of

production in market economies is carried out by TNCs. The international activity of TNCs also denotes an increasing role in trade, much of this on an *intra*-firm basis, thus... "Possibly as much as four fifths of the United Kingdom's manufactured exports are flows of intra-firm trade either within UK enterprises with foreign affiliates or foreign-controlled enterprises with operations in the United Kingdom" (Dicken 1992 p48).

Moreover, a high proportion of all TNC activity is concentrated in a relatively small number of firms. Some 60% of TNC assets are controlled by the 100 largest firms (UNCTAD cited in The Economist 1994f). Some 80% of UK direct investment abroad is accounted for by approximately 150 firms and it is these larger TNCs that tend to operate on an extensive international basis.

TNCs grew rapidly in the post war period, forming an integral part of the overall growth in the world economy. The 1980s showed a particular surge of growth in TNC activity (Le Bideau 1991). However, as for overall figures in production and trade, TNC growth has been accompanied by shifts in the origin of TNC production and the destination of FDI. Nonetheless, during the 1980s, origins and destinations of FDI occurred largely within developed market economies, with some 97% of FDI source locations and 75% of FDI destinations.

In 1990 around $31 billion out of a total $176 billion of FDI went to developing countries. However, increased liberalisation has seen developing countries becoming more attractive for investment, capturing around four-fifths of $189 billion worth of FDI in 1993 (UNCTAD cited in The Economist 1994e p132). Furthermore, cross-investment between countries, has become more prevalent. In particular, the US has increasingly acted as a *host* to foreign direct investment as well as a principal source of FDI.

FDI is not only geographically varied (in terms of source and destination) but also by the sort of economic activity represented. Traditionally focusing on extractive, natural resource based industries, this original emphasis has moved towards manufacturing and, more recently, to service activities. In addition, within the broad categories of manufacturing and services, particular types of activity have traditionally been pursued.

In manufacturing, three sorts of activity are particularly internationalised: technologically more advanced sectors (e.g. pharmaceuticals, computers, scientific instruments, electronics, synthetic fibres); large-volume, medium technology consumer goods industries (e.g. motor vehicles, tyres, televisions, refrigerators); and mass production consumer goods industries

supplying branded products (e.g. cigarettes, soft drinks, toilet preparations, breakfast cereals). In services FDI is particularly high in trading, banking, finance and business and commercial services (e.g. advertising, accountancy, legal services, real estate) (Dicken 1992 p59).

FDI by UK firms has grown markedly in recent years, despite a *relative* decline in world share (Central Statistical Office 1991a and earlier editions). During the 1970s the greatest growth in FDI by UK firms was in manufacturing. This represented a relative shift of UK capital from domestic to overseas production (this shift of manufacturing production out of the UK is part of a de-industrialisation trend examined in more detail below). Further, services have come to contribute an increasingly important component of UK FDI alongside manufacturing, especially banking, finance and insurance (Central Statistical Office 1990a).

In terms of the geographical orientation of UK FDI, of the £86.7 billion value of UK direct investment overseas in 1987 (excluding £3.3 billion of miscellaneous investments), around a third was within the US, followed by the EC. Although it is within the US that the greatest value of investment lies, the EC is increasingly important in terms of the number of investments. A lower and diminishing, although significant level of investment in terms of value, was held in Australia and South Africa (Central Statistical Office 1990a pp3-4; Central Statistical Office 1990b; Central Statistical Office 1991a) (figures 6.1, 6.2).

Overall, a relatively low proportion of UK FDI is held within developing countries. This remaining outward FDI by British firms is widely scattered. Furthermore, in the post 1945 period there has been a general shift away from Commonwealth countries to Western Europe and the US (Central Statistical Office 1990a pp3-4; Central Statistical Office 1990b; Central Statistical Office 1991a).

A quarter of UK outward investment is in the form of oil activities, with around a further one third in manufacturing, the latter increasingly concentrated within the EC. The level of investment in banking and insurance represents a lower although growing international activity (Central Statistical Office 1990a p4). Most of these activities are represented across different geographical areas, although North America and Europe dominate in most categories of industrial activity (figures 6.3, 6.4).

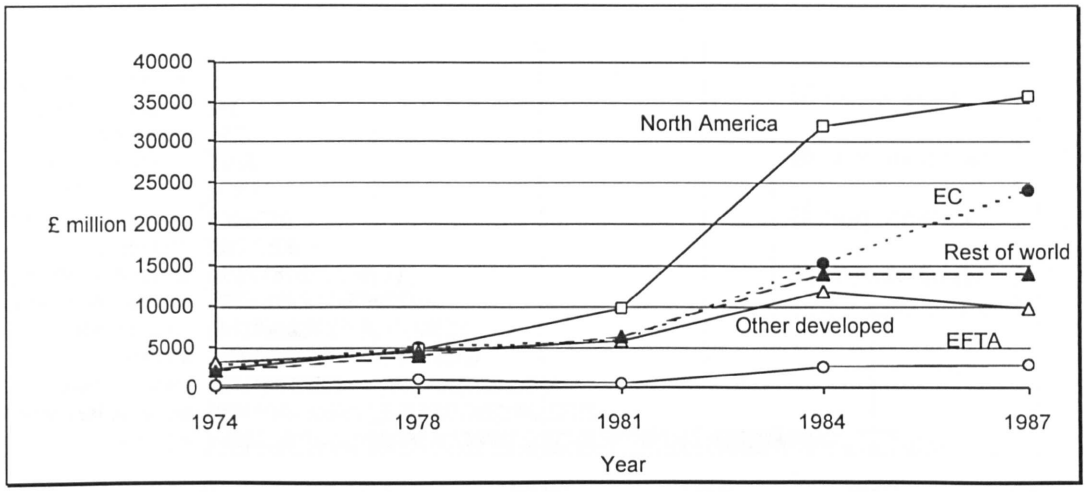


Figure 6.1 UK outward direct investment attributable to UK companies, book value of net assets by main area at end 1974-1987
Source: (adapted from Central Statistical Office 1990a p11)
Note: figures for 1974 to 1981 exclude oil companies, banks and insurance companies; 'miscellaneous' is excluded throughout.

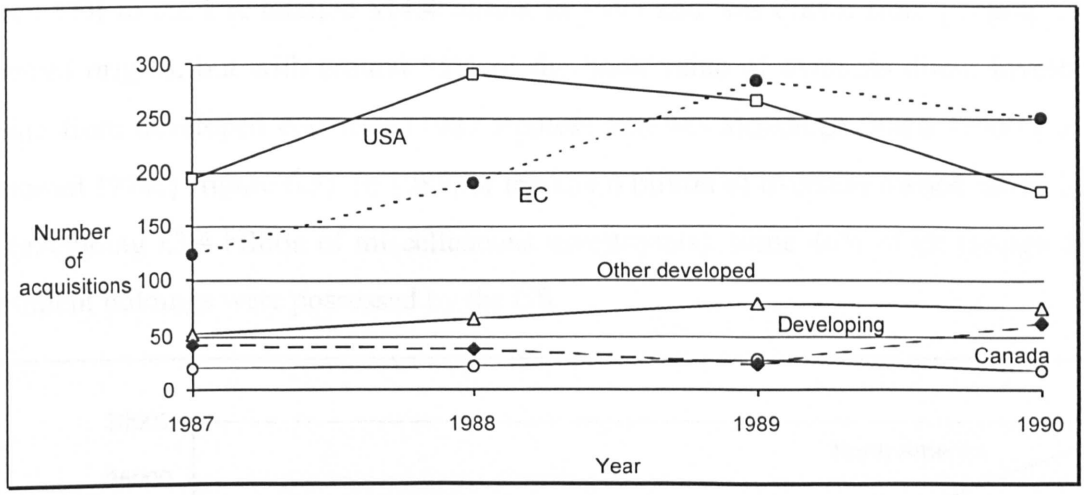


Figure 6.2 Number of cross-border acquisitions and mergers by UK companies by number, 1987-1990
Source: (adapted from Central Statistical Office 1991a p3)

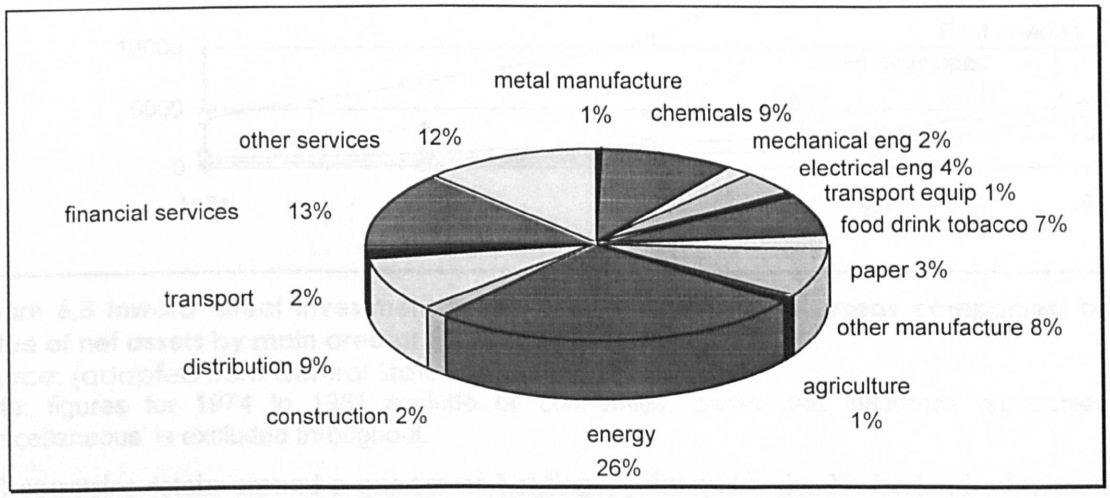


Figure 6.3 UK outward direct investment overseas attributable to UK companies, % total book value of net assets by industry at end 1987
Source: (adapted from Central Statistical Office 1990a pp20-21)

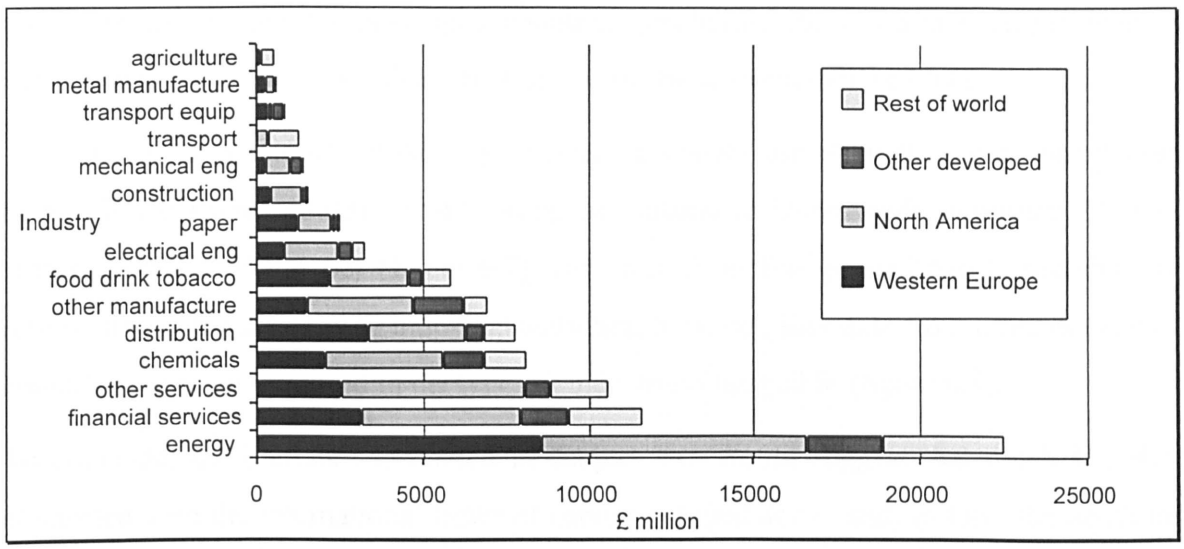


Figure 6.4 UK outward direct investment overseas attributable to UK companies, book value of net assets by industry and main area at end 1987
Source: (adapted from Central Statistical Office 1990a pp20-21)

Inward FDI to the UK totalled $14.4 billion in 1993 and was drawn from geographically dispersed origins, but with around 95% of the book value of overseas direct investment coming from developed countries (1987 figures) (Central Statistical Office 1990a p3; The Economist 1994c) (figure 6.5). In 1987, of the £54.6 billion of overseas owned assets in the UK (excluding £3.4 billion of miscellaneous investments), some 46% of all foreign direct investment holdings were possessed by the US.

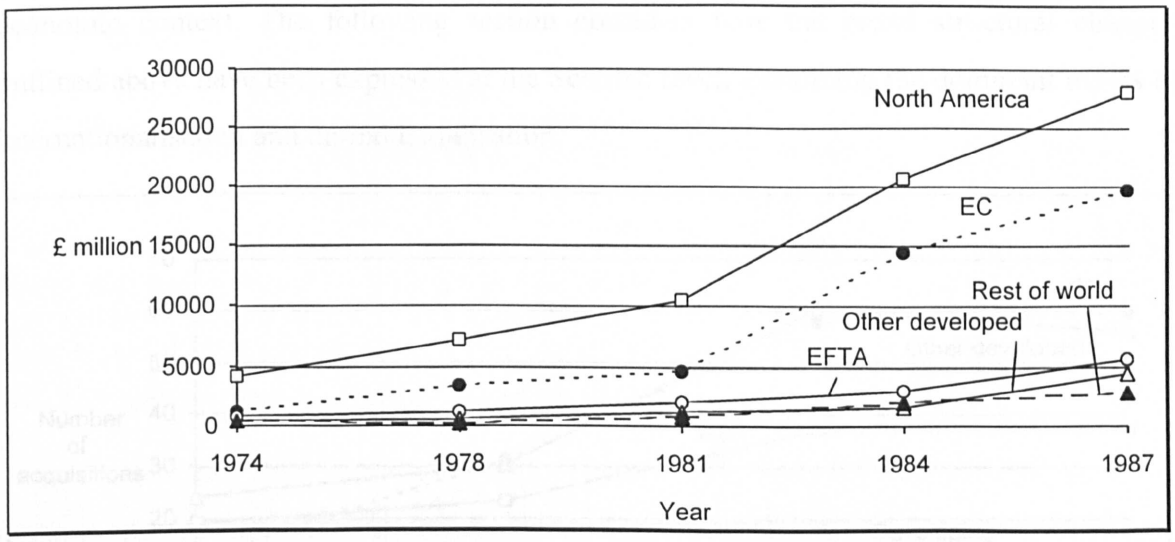


Figure 6.5 Inward direct investment in the UK attributable to overseas companies, book value of net assets by main area at end 1974-1987
Source: (adapted from Central Statistical Office 1990a p42)
Note: figures for 1974 to 1981 exclude oil companies, banks and insurance companies; 'miscellaneous' is excluded throughout.

EC countries retain around a quarter of holdings, principally the Netherlands, France and Germany. Switzerland represents a further significant holder of overseas direct investment assets. Further, the number of inward investments are increasingly made up by EC firms

and in terms of numbers developed countries (excluding the US and Canada) such as Japan, are taking a more prominent role in investment activities (figure 6.6).

The type of activities undertaken by overseas investors are distinct, major contributors being oil and manufacturing, with banking and insurance increasingly important (Central Statistical Office 1990a p3) (figure 6.7). Investors from Europe and North America are represented in the majority of industrial activities, however, investors from other developed countries are more restricted in the types of industries engaged in (figure 6.8).

To conclude, the literature examined in chapter two would suggest that much ISLM is connected with the international flows of capital outlined above and, in turn, the activities of TNCs. However, available figures on the direction, scale and value of international direct investment, while suggesting potentially significant industrial activities in the generation of ISLM, do not specifically reveal the implications of these monetary flows for the movement of human capital. Thus, from macro-level trends, it remains unclear how different activities and ownership characteristics vary in their need for ISLM and in the mechanisms through which it is achieved.

For an understanding of the relationship of Scottish ISLM with trade and investment flows, a more detailed analysis is required of the links between the skilled mover and their economic context. The following section considers how the broad structural changes outlined above have been expressed at the Scottish level, examining the dominant trends in internationalisation and de-industrialisation.

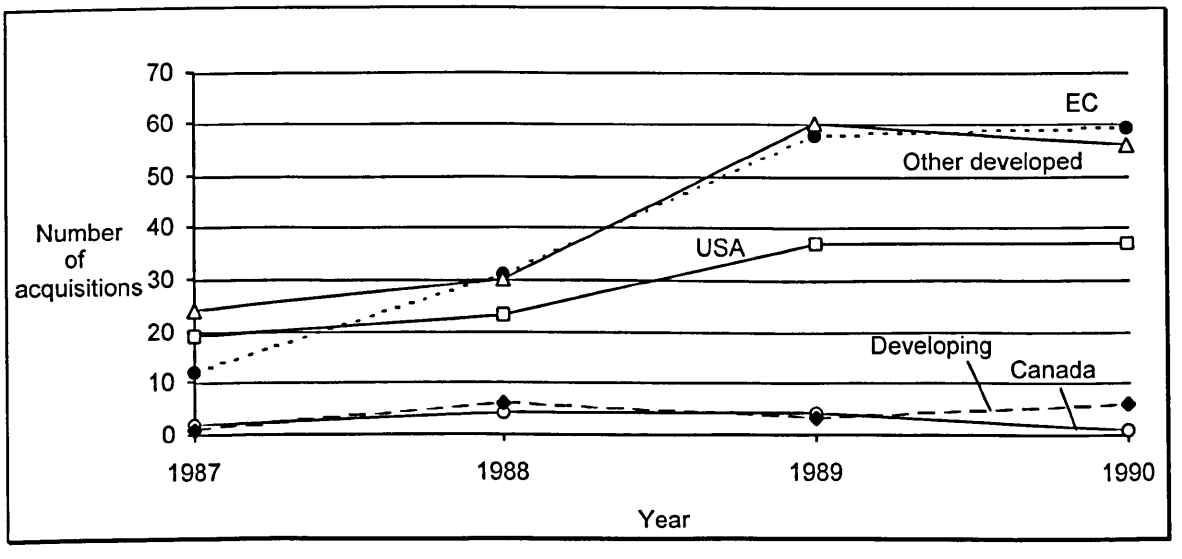


Figure 6.6 Number of cross-border acquisitions and mergers in the UK by overseas companies, by main area 1987-1990
Source: (adapted from Central Statistical Office 1991a p5)

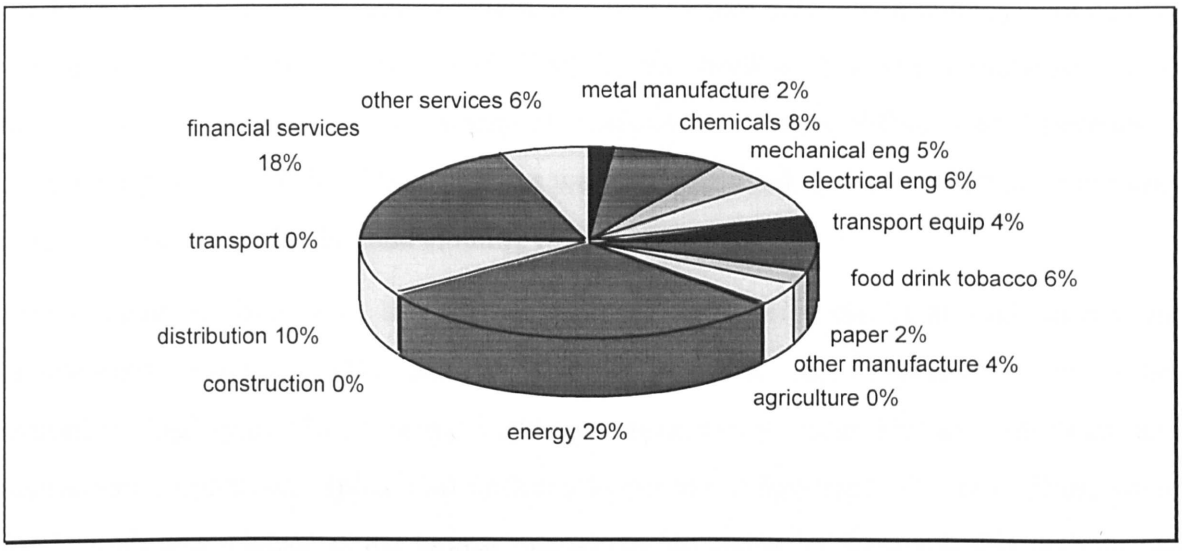


Figure 6.7 Inward direct investment in the UK attributable to overseas companies, % of total book value of net assets by industry at end 1987
Source: (adapted from Central Statistical Office 1990a pp46-47)

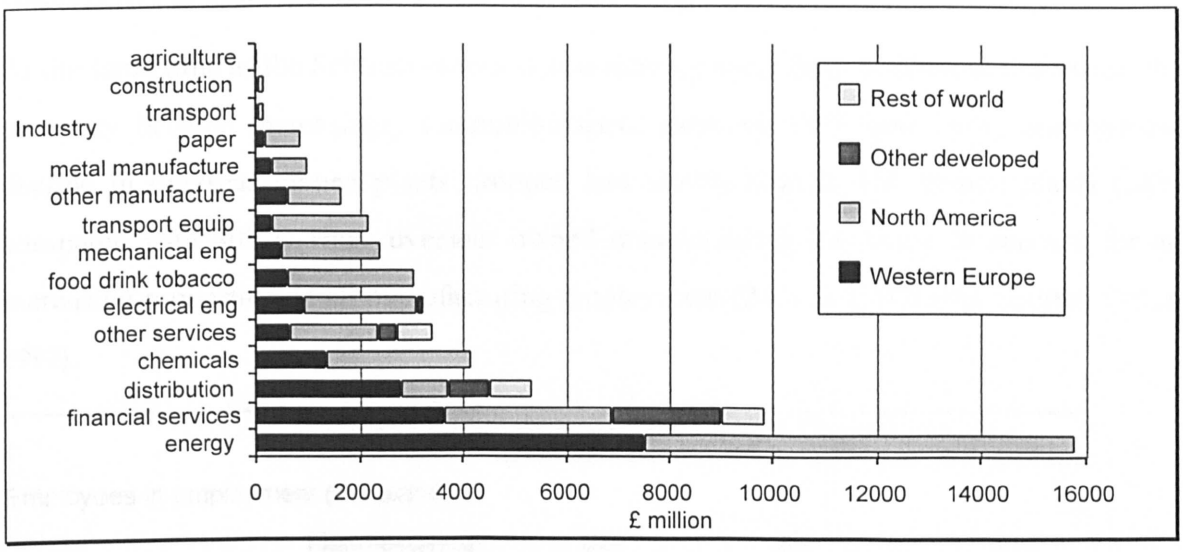


Figure 6.8 Inward direct investment in the UK attributable to overseas companies, book value of net assets by industry of UK affiliate and main area at end 1987
Source: (adapted from Central Statistical Office 1990a pp46-47)

6.1.3 Scottish manufacturing decline and internationalisation

Between 1979 and 1989, the Scottish labour market saw a period of massive manufacturing decline, with 32% of all manufacturing jobs being lost between 1979 and 1984. However, the decline in manufacturing slackened to 7% between 1984 and 1989, as the result of an increase in job gains and a decrease in job losses. In this period, a near equivalent recovery was made in the labour market as a whole, largely due to increases in self-employment and in the services sector (Industry Department Scotland 1991) (table 6.1).

In manufacturing, the overall decline masks uneven change in particular sectors, as well as the form and ownership of manufacturing activities (figure 6.9). Major employment decline was experienced between 1979 and 1984 in the traditional heavy industries: 'metal manufacturing' (minus 51%); 'transport equipment' (minus 44%); and 'mechanical engineering' (minus 40%). These changes were accompanied to a lesser degree by closures in textiles, footwear, leather and clothing industries.

Employment decline was less in the newer industries: 'electrical and instrument engineering' (minus 21%) and in 1984-89 growth was experienced in 'other manufacturing' (plus 5%); 'chemical and man made fibres' (plus 3%) and 'electrical and instrument engineering' (plus 1%) (Industry Department Scotland 1991 p4). Thus, while food, drink and tobacco is the largest manufacturing sector in Scotland, this activity has been joined by electronics activities and 'other manufacturing', as manufacturing employment in other industries fell away (figure 6.10).

At the same time as the Scottish economy was moving away from traditional industries, the economy became increasingly internationalised. Between 1979 and 1989, employment decline in overseas owned plants dropped less slowly than in UK owned plants (28% compared with 40%). Thus, overseas owned manufacturing has come to account for an increasing proportion of all manufacturing employment (24% in 1990) (The Scottish Office 1992).

	June 1979	June 1984	June 1989
Employees in employment (thousands)			
Manufacturing	604	434	416
Services	1224	1231	1331
Other industries	274	236	212
Self employed	160	185	236
Civilian Workforce in employment	2262	2104	2254

Table 6.1 Scottish employment 1979, 1984, 1989
Source: (adapted from Industry Department Scotland 1991 p3)

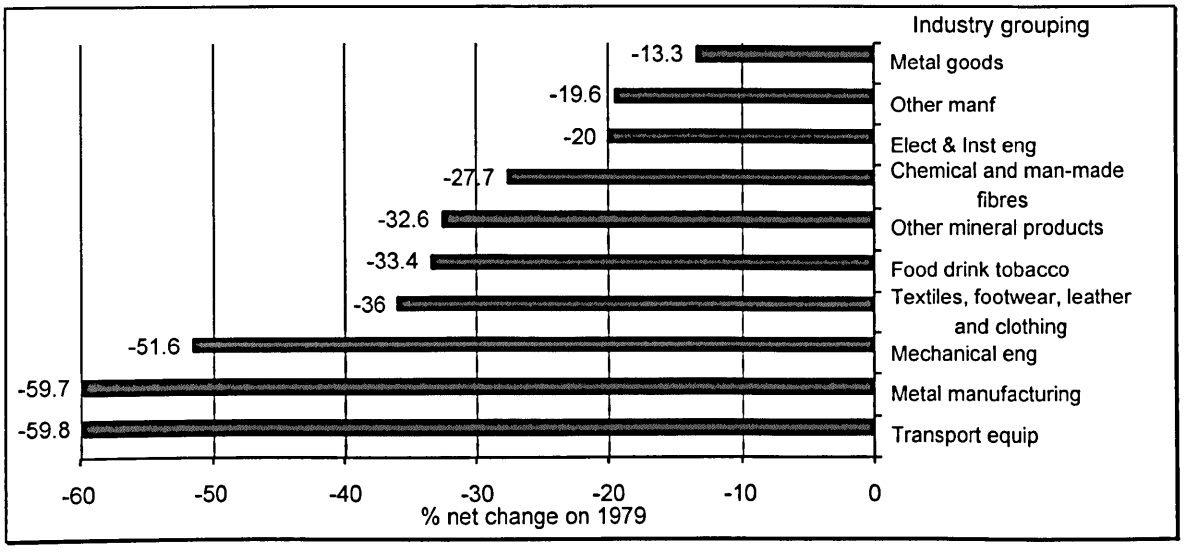


Figure 6.9 Employment change in Scottish manufacturing industries between 1979 and 1989 by industry grouping
Source: (adapted from The Scottish Office 1991 p21)

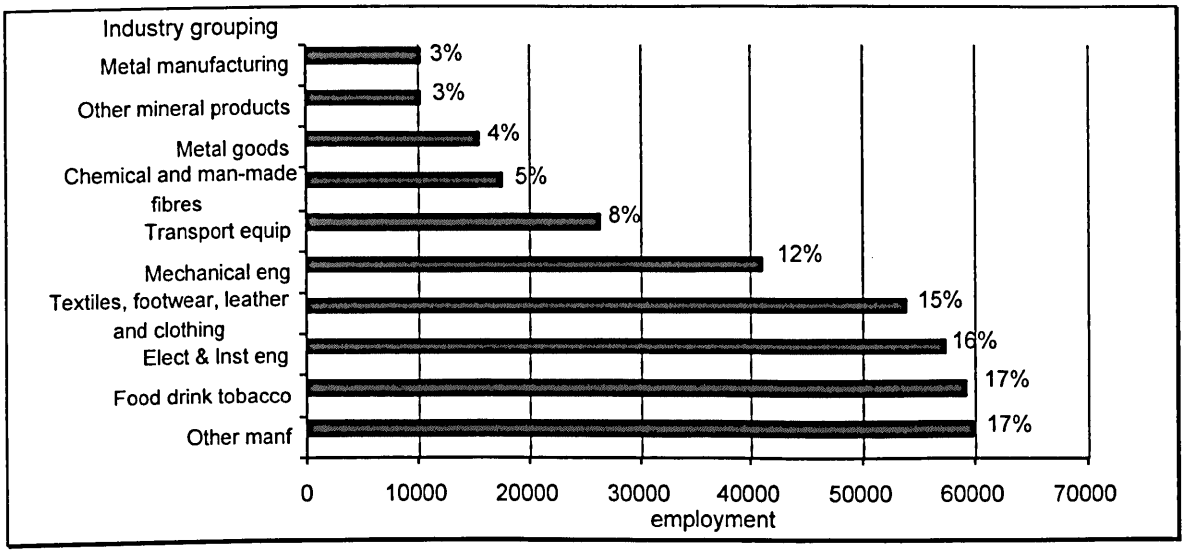


Figure 6.10 Employment in Scottish manufacturing industries by industry grouping 1989
Source: (adapted from The Scottish Office 1991 p21)

6.1.4 Overseas ownership

For Scottish companies in 1990 (those whose head office was located in Scotland) only 64% of the largest 200[1] were owned in Scotland (Dow 1992 p622). Some 18% were owned within the rest of the UK, 11% in the USA and the remaining 7% by other overseas owners. A further data source, using predominantly 1992 and 1993 company information, indicates similar findings (Scottish Business Insider 1994 pp51-90) (figure 6.11). In addition, the latter data set indicates that overseas investment is predominantly within

[1] Largest firms in terms of an index of turnover and profit

manufacturing, with a much lower engagement in 'other' activities (such as oil related construction and wholesaling) and services (figure 6.12). Reflecting the high degree of internationalisation of Scotland's manufacturing industry, Scotland's manufacturing sector is more strongly export oriented than the UK as a whole, with manufacturing exports 21% above the comparable UK figure (Eurostat 1993 p278).

Some 24% of total manufacturing employment in Scotland was in overseas-owned plants as of 1990, representing around 85,000 persons within 389 plants. Overseas ownership in manufacturing is most heavily concentrated in electrical and instrument engineering, Scotland's fastest growing sector and largest overseas earner. Overseas electronics firms represent 35% of total employment in all overseas-owned manufacturing plants and over 58% of all employment in this sector (The Scottish Office 1992 p4; The Scottish Office 1993 p1).

Overseas ownership is also prominent in a number of other large employers in the manufacturing sector, especially mechanical engineering and 'paper and printing' (figures 6.13 & 6.14). However, it is relatively low in the labour intensive sectors of 'food drink and tobacco' and textiles. Overseas ownership is also very significant in the capital intensive sector of chemicals (The Scottish Office 1992 p4). The proportion of employment in the different overseas owned industrial activities has remained relatively constant in the 1980s, although the contribution of mechanical engineering has declined markedly (figure 6.15).

The USA dominates as an overseas-owner in Scottish manufacturing, with 49% of overseas plants and 56.5% of employment in overseas owned plants (The Scottish Office 1992 p3) (figure 6.16). The USA is represented strongly across the board, ranking first, in terms of employment share, in all overseas-owned manufacturing activities apart from transport equipment and 'paper, printing and publishing', in which she is ranked second. The US presence is particularly marked in mechanical engineering (80.8% of overseas-owned employment) and electrical and instrument engineering (75.0% of overseas-owned employment).

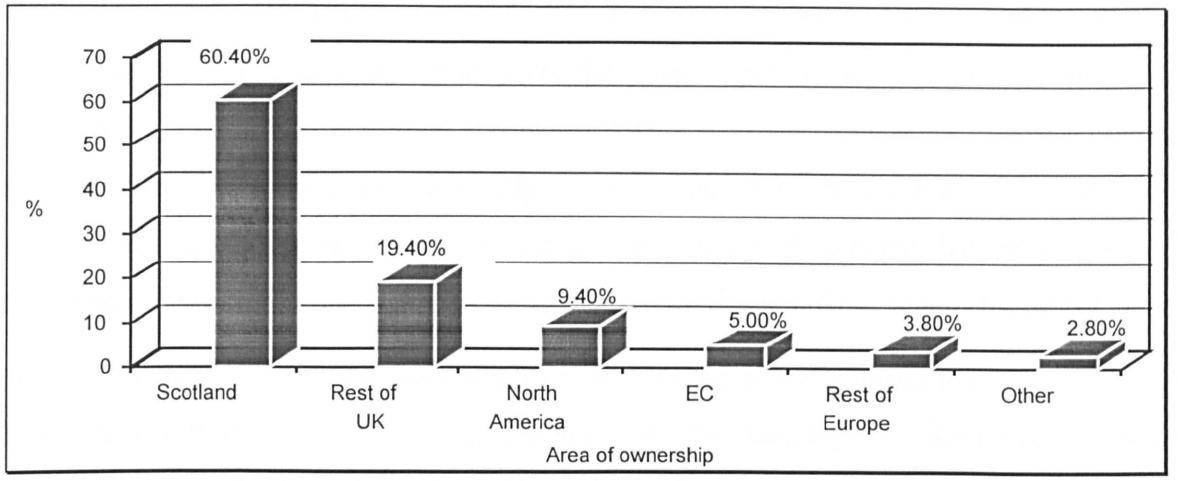


Figure 6.11 Area of ownership of largest 500 Scottish companies
Source: (adapted from Scottish Business Insider 1994 pp51-90)
Note: largest by £ value

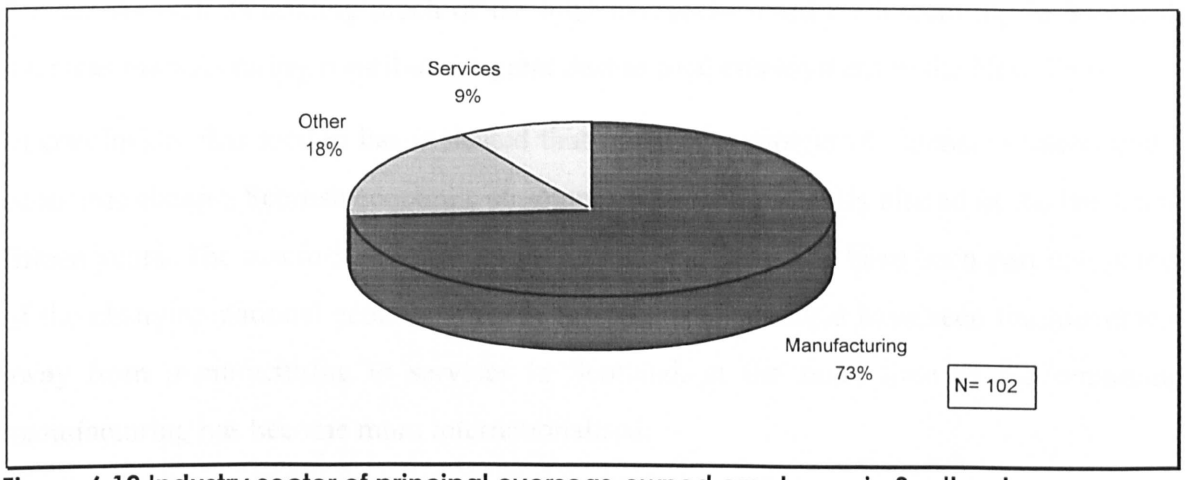


Figure 6.12 Industry sector of principal overseas-owned employers in Scotland
Source: (adapted from Scottish Business Insider 1994 pp51-90)
Note: largest by £ value

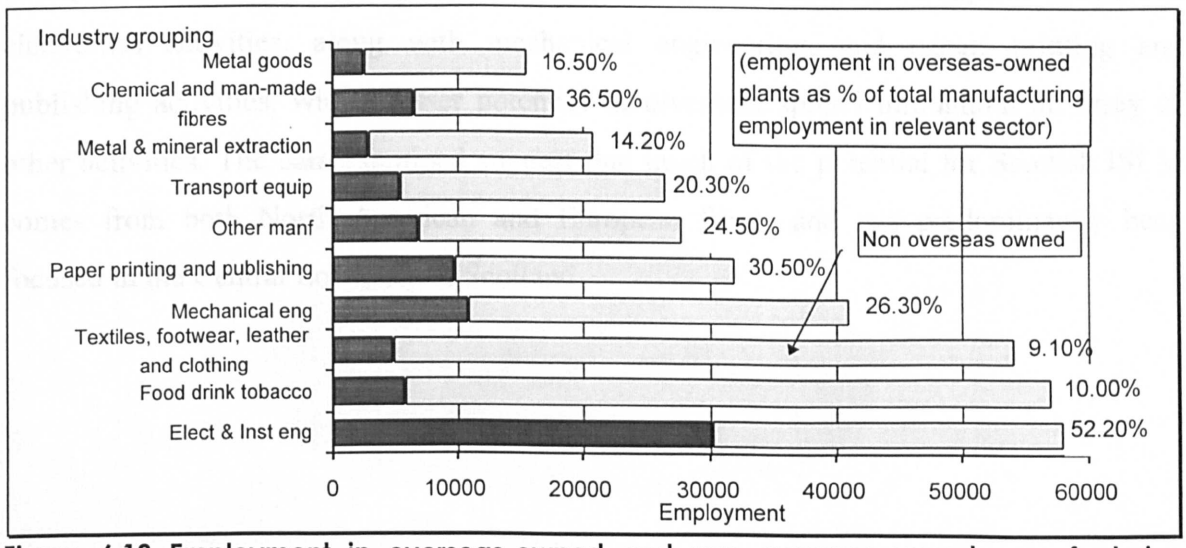


Figure 6.13 Employment in overseas-owned and non overseas-owned manufacturing plants in Scotland by industry grouping, 1990
Source: (adapted from The Scottish Office 1992 p4)
Note: Other manufacturing and paper, printing and publishing are indicated separately in this figure in contrast to the figures represented in the previous section.

The position of the US is followed by the EC, the rest of Europe and the rest of the World. The Netherlands, France and Germany are the most important EC countries in terms of plant employment. Outside Europe and North America, Japan is the main overseas owner. The remainder of companies are mostly from Commonwealth countries (i.e. Australia, Hong Kong and South Africa) (The Scottish Office 1992 p4). It is noted that the position of the US has increasingly given way to the EC and to investment from Japan (figure 6.17).

In 1990, the majority of employment in overseas-owned manufacturing plants was located in Strathclyde Region, with 170 plants (figure 6.18). The major part of the remainder were also concentrated in Central Scotland. New Towns have increasingly been the destination for overseas manufacturing, with a fifth of overseas employment in the five Scottish New Towns. As well as holding much of the total overseas-owned manufacturing in Scotland, overseas manufacturing contributes a great deal to total employment in the New Towns.

In conclusion, this section has indicated that within the context of extensive international economic change, Scottish economic structures have been radically altered in the last ten to fifteen years. The macro-level changes at the international level have been part and parcel of the changing national economy. These national level changes have seen the movement away from manufacturing to services in Scotland, at the same time as the remaining manufacturing has become more internationalised.

Given the close relationship between the activities of TNCs and the development of ISLM, as suggested in the literature, potential involvement in Scottish ISLM appears greatest in electronics activities, along with mechanical engineering, and paper, printing and publishing activities, with a lesser potential involvement spread throughout an array of other activities. The data examined suggest that much of the potential for Scottish ISLM comes from both North American and European firms, and has predominantly been focused in the Central Lowlands of Scotland.

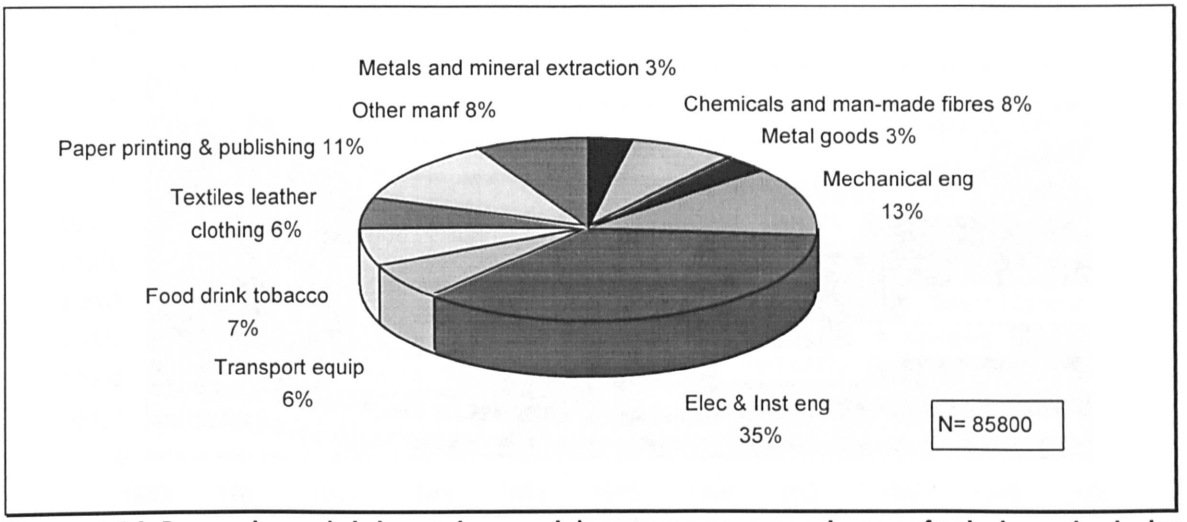


Figure 6.14 Percentage total employment in overseas owned manufacturing plants by industry grouping, 1990
Source: (adapted from The Scottish Office 1992 p21)

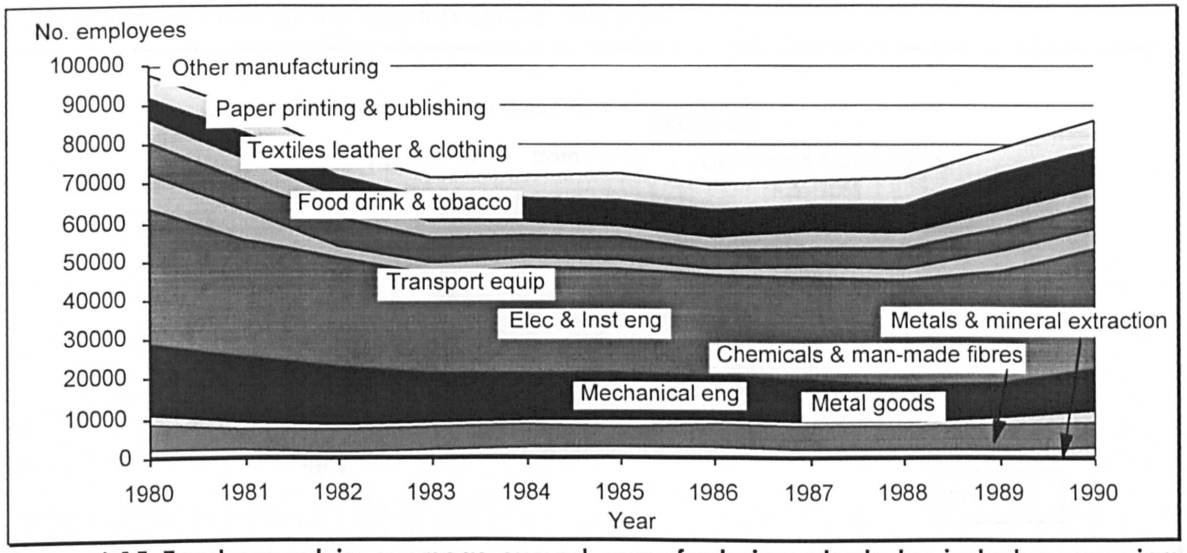


Figure 6.15 Employment in overseas-owned manufacturing plants by industry grouping, 1980-1990
Source: (adapted from The Scottish Office 1992 p21)

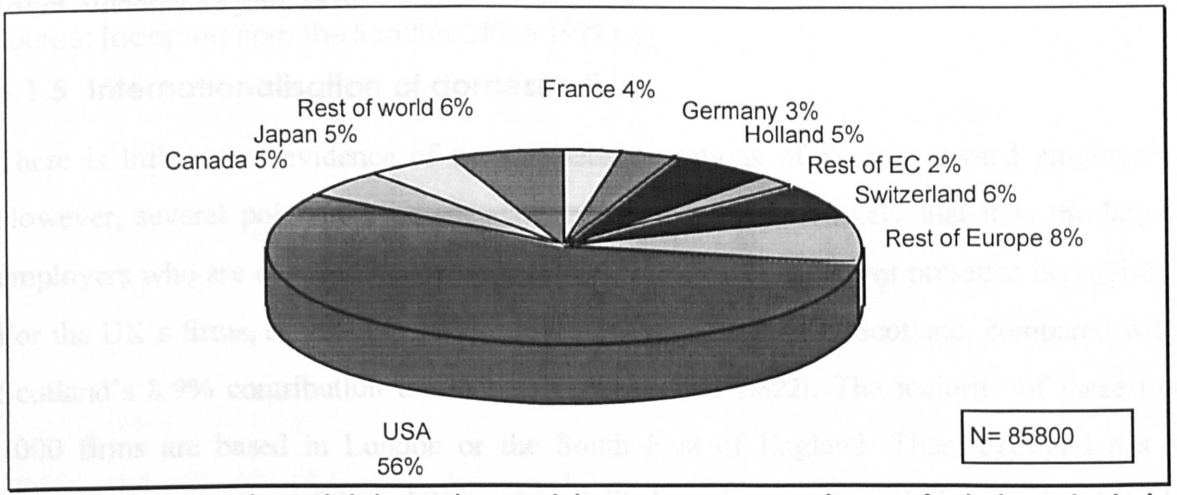


Figure 6.16 Percentage total employment in overseas owned manufacturing plants by country of ownership, 1990
Source: (adapted from The Scottish Office 1992 p20)

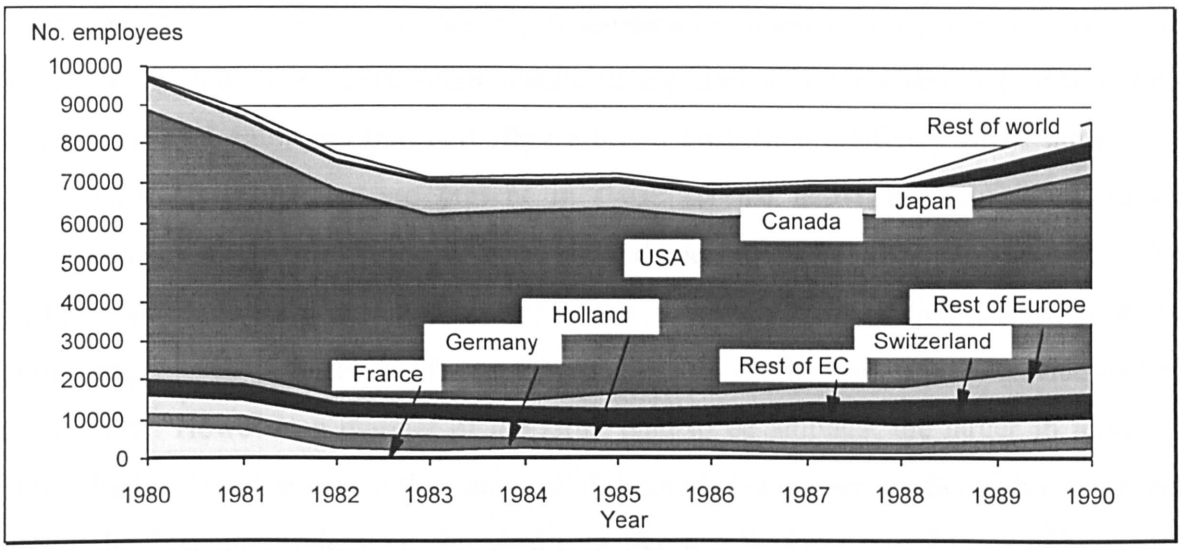


Figure 6.17 Employment in overseas-owned manufacturing plants by country of ownership, 1980-1990
Source: (adapted from The Scottish Office 1992 p20)

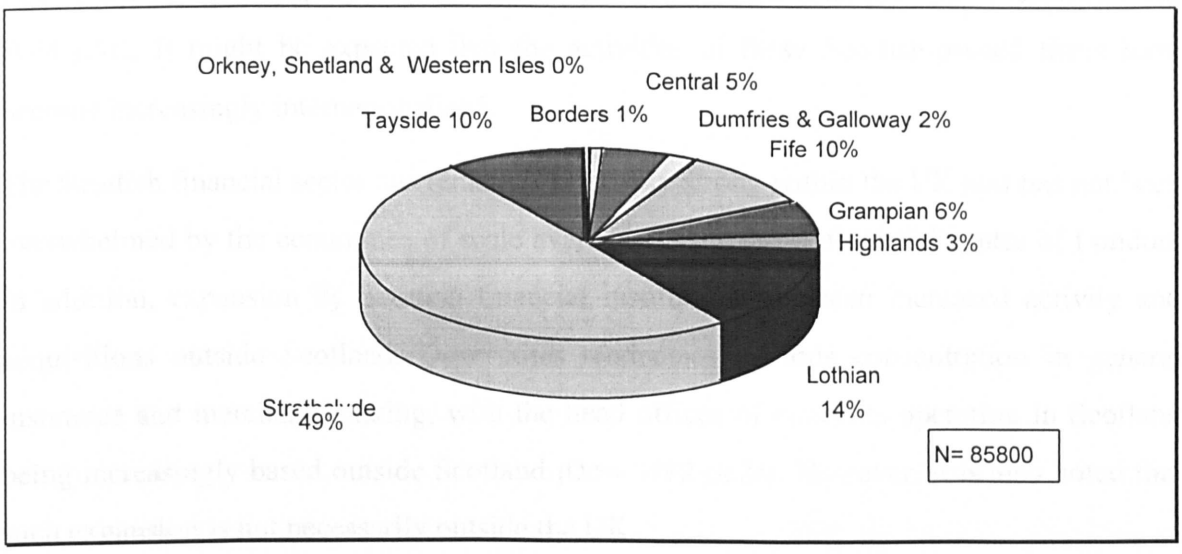


Figure 6.18 Distribution of employment in overseas owned manufacturing in Scotland by Local Authority Region, 1990
Source: (adapted from The Scottish Office 1992 p6)

6.1.5 Internationalisation of domestic firms

There is little direct evidence of the overseas operations of Scottish-owned employers. However, several points can be suggested. Firstly, it is most likely that it is the larger employers who are engaged in overseas activities where a permanent presence is required. For the UK's firms, of "the top 1000, only 5.2% were located in Scotland, compared with Scotland's 8.9% contribution to UK GDP" (Dow 1992 p622). The majority of these top 1000 firms are based in London or the South East of England. Thus, Scotland has a relatively low number of those UK employers likely to be most heavily involved in ISLM, at least longer term forms of mobility.

Secondly, the greatest part of the Scottish-owned economy is represented by those activities which are not highly internationalised, e.g. agriculture, construction, distribution (retail and wholesale) and transport (figure 6.19). Further, a relatively small number of Scottish-owned companies are present in those service activities most likely to be internationalised, i.e. the financial, business and recreational and cultural services. The Scottish financial and business sectors make a low but significant contribution to employment levels in Scotland (4% for financial sector, 5% for the business service sector) (Dow 1992). However, a number of the latter tend to be amongst the larger in terms of value. Eight of the top eleven (by value) of all Scottish companies are Scottish-owned and within the financial services, i.e. Standard Life, Scottish Widows, Royal Bank of Scotland, Scottish Amicable, Bank of Scotland, Scottish Equitable, Scottish Provident and Scottish Life. Each of these employ between 1,142 and 23,000 personnel (Scottish Business Insider 1994 p51). It might be expected that the activities of these Scottish-owned firms have become increasingly internationalised.

The Scottish financial sector has remained relatively strong within the UK and has not been overwhelmed by the economies of scale available to the larger financial centre of London. In addition, expansion by Scottish financial institutions has seen increased activity and acquisitions outside Scotland. Dow notes tendencies towards concentration in general insurance and merchant banking, with the head offices of concerns operating in Scotland being increasingly based outside Scotland (Dow 1992 p624). However, it is also noted that such expansion is not necessarily outside the UK.

Manufacturing activities are represented by a substantial minority of Scottish-owned employers and it might be expected that a degree of internationalisation has taken place within these activities. However, relatively few Scottish-owned manufacturers occupy those industries which are most internationalised, i.e. the technologically more advanced sectors and large-volume, medium technology consumer goods industries. The exception is likely to be the mass production consumer goods industries supplying branded products, which are relatively well represented in Scotland.

In conclusion it is suggested that overseas operations of Scottish-owned employers which involve a permanent presence are relatively restricted and probably most numerically significant within manufacturing activities. Thus, on the face of it, Scottish-owned firms

are less likely sources of ISLM than overseas-owned employers. The extent to which this is the case is further examined using the researcher's survey results in chapter eight.

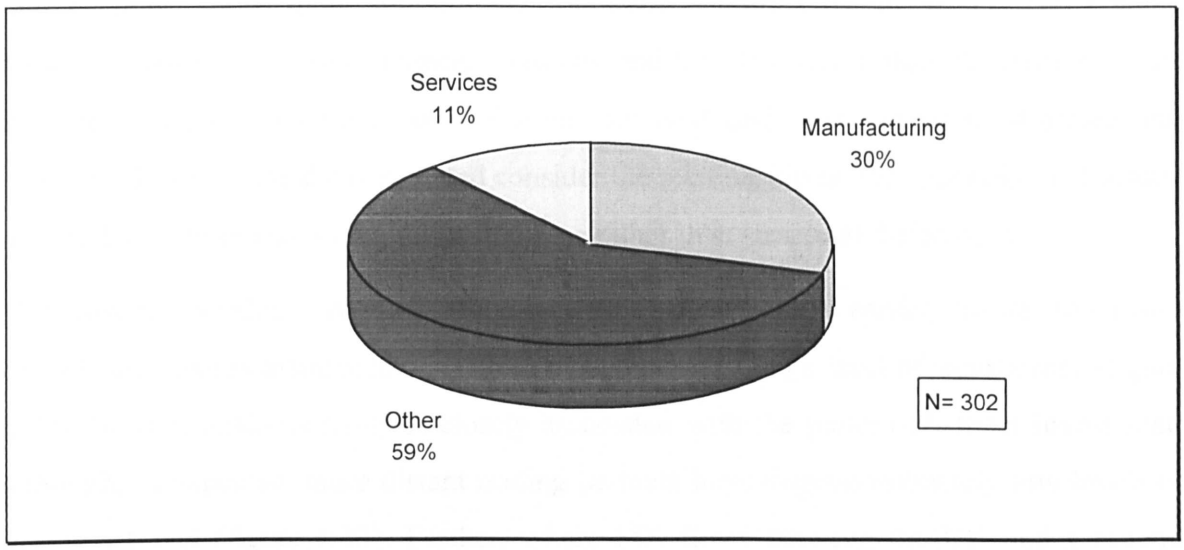


Figure 6.19 Largest Scottish owned companies by industrial activity
Source: (adapted from Scottish Business Insider 1994 pp51-90)
Note: Largest by £ value, using predominantly 1992/1993 company information. Other = energy, agriculture, construction, distribution and transport; services = financial services, business services and recreational and cultural services.

6.2 Trade, investment and international skilled labour mobility

6.2.1 Trade, investment and international business travel

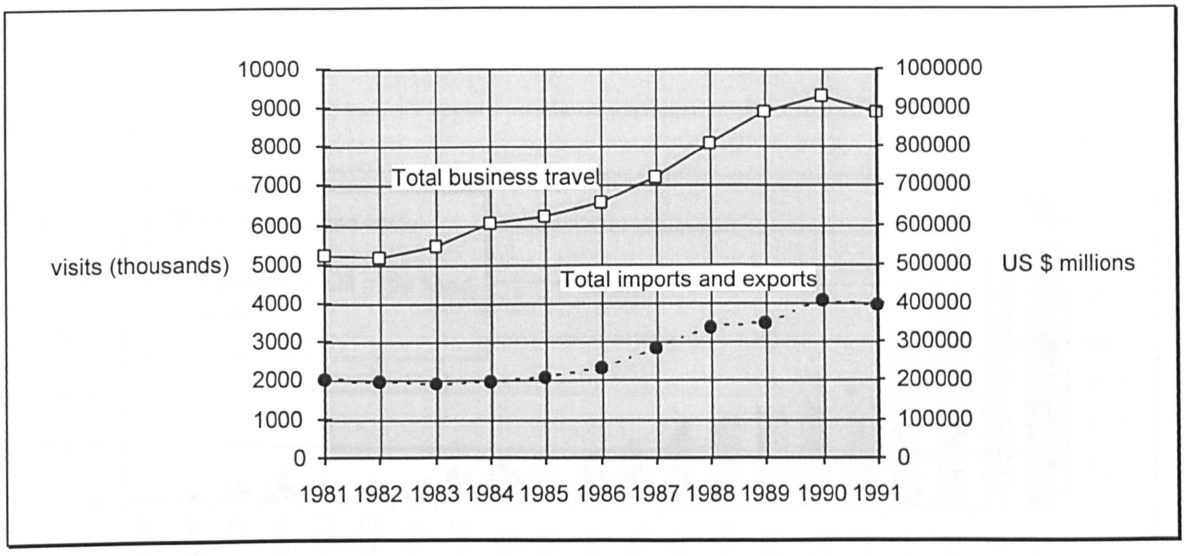
The relationship between UK international business travel and trade is a highly correlated one. These two flows are compared for the years 1981 to 1991 (figure 6.20). It can be concluded that change in the volume of imports and exports over time, closely matches change in the volume of business travel. Moreover, at the onset of economic recovery in the 1980s, an upswing of rates of business travel precedes that of trade; from the mid to late 1980s, the rate of trade growth caught up with that of business travel. When trade levels faltered towards the end of the 1980s, business travel continued to grow until 1990/91. The findings suggest that business travel has generally grown at a higher rate than the level of trade, an indication that the internationalisation of the economy entails an increasingly extensive level of skill exchange.

In general there is a close correlation between trade and business travel between the UK and individual trading partners. This is indicated for the UK with North America and the EC (figure 6.20: statistical notes) The material reported supports Salt and Ford's identification of a strong correlation between gross business travel (to and from major world states and regions) and gross trade flows (in dollars), using 1985 data (Salt and Ford

1993 p299). Yet, while there is a strong degree of correspondence between changes in levels of trade and travel over time, the absolute level of UK business travel generated per unit of trade varies quite substantially for some countries (figure 6.21). The notable variances that do exist (e.g. France, Germany and the US) may reflect differences in the balance of industrial activity of the firms involved and their corporate structure and strategy. However, the data examined consider the relationship in one year only, and results may reflect shorter run economic fluctuations rather than structural differences.

The close relationship between FDI and international trade noted earlier, ensures that flows of trade are broadly associated with flows of FDI to a moderate level of significance (figure 6.22). In turn, business travel is closely associated with the pattern of direct investment, although, as expected, more distant trading partners have disproportionately low levels of business travel (figure 6.23). Further, where FDI flows between the UK and a second location are strongly made up of manufacturing, a relatively high degree of business travel is expected due to the relative internationalisation of manufacturing in comparison with most non-manufacturing activities. However, this not a straightforward relationship (figure 6.23: statistical notes).

While business travel is closely associated with FDI flows overall, a positive influence on business travel is not significantly associated with high levels of manufacturing direct investment. However, manufacturing activities do suggest a stronger, positive influence on business travel flows, than non-manufacturing activities. The findings suggest, as might be expected, that there are considerable internal differences in manufacturing and non-manufacturing activities, in terms of their mobility implications. The available data sources do not allow a more detailed examination of the relationship between FDI activity and business travel.

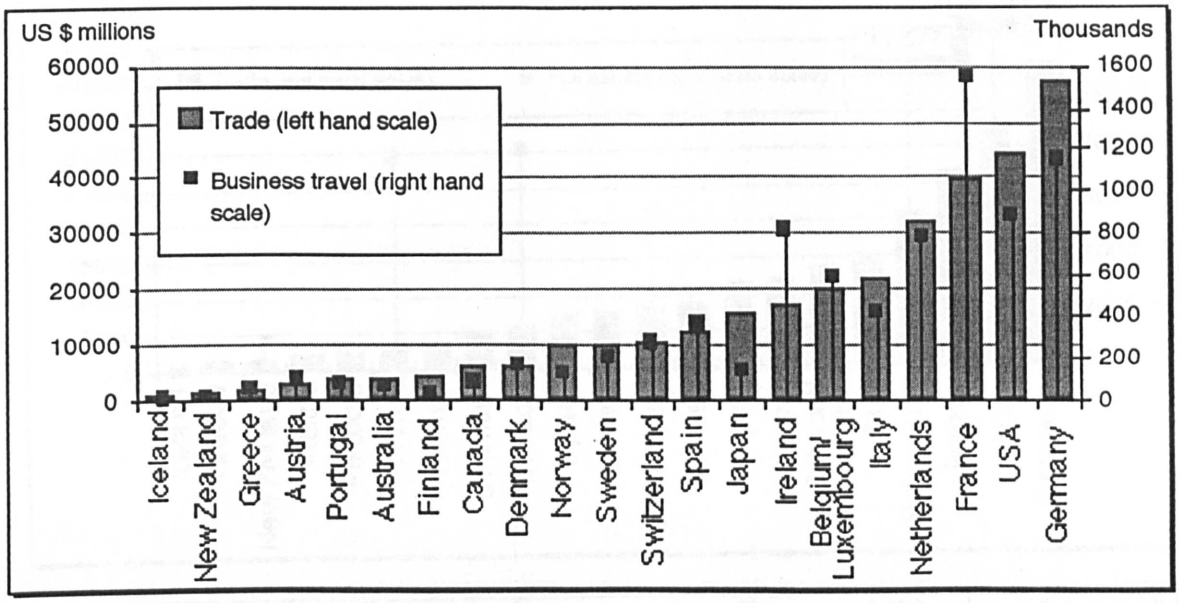


Statistical notes				
Test statistic	Spearman's correlation- see (Shaw and Wheeler 1994 pp 183-189)			
H_0 states that there is no correlation between UK total trade and UK total business travel (1= all areas; 2= North America; 3= EC)				
H_1 states that there is a significant correlation between UK total trade and UK total business travel (1= all areas; 2= North America; 3= EC)				
Statistic	Value	ASE1	T value	Significance
1. r_s	0.95455	0.05895	9.60741	0.00000
2. r_s	0.96364	0.4056	10.81858	0.00000
3. r_s	0.94545	0.04771	8.70707	0.00001
1,2 and 3: H_0 rejected at 0.05 significance level				

Figure 6.20 UK trade and international business travel, all areas 1981-1991 (both directions combined)

Source: (adapted from International Monetary Fund 1990; Central Statistical Office 1991b)

Note: Trade is measured in terms of total UK imports and exports valued in US $. Business travel is measured in terms of the total number of overseas visits by UK residents and the total number of visits to the UK by overseas residents.

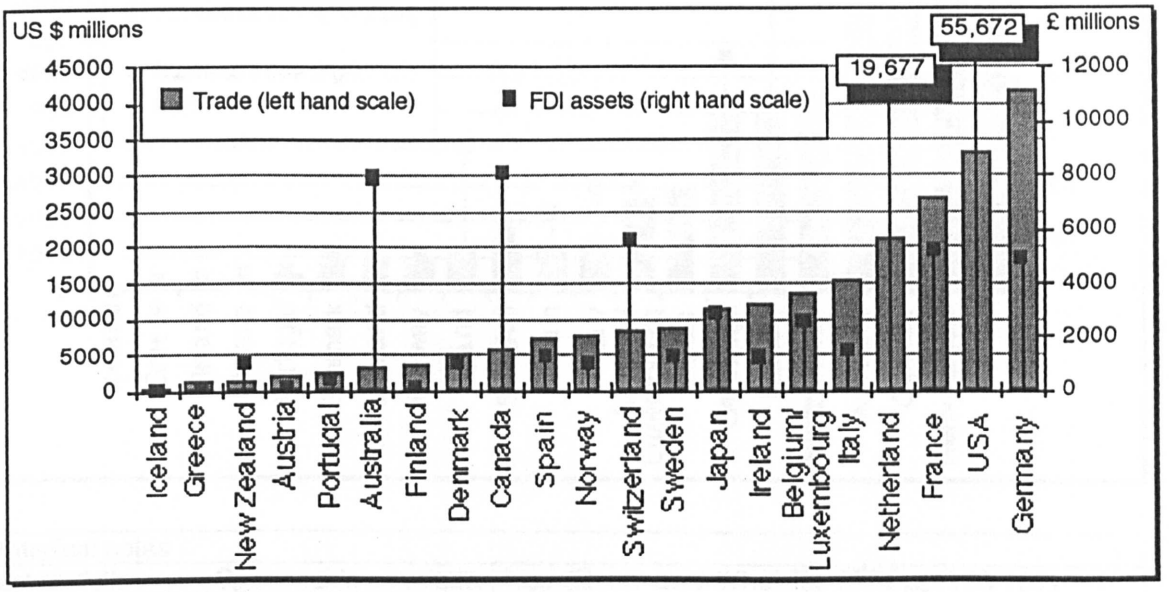


Statistical notes				
Test statistic	Spearman's correlation- see (Shaw and Wheeler 1994 pp 183-189)			
H_0 states that there is no correlation between UK trade with industrial countries and UK business travel with industrial countries H_1 states that there is a significant correlation between UK trade with industrial countries and UK business travel with industrial countries				
Statistic	Value	ASE1	T value	Significance
r_s	0.94805	0.02269	12.99045	0.00000
H_0 rejected at 0.05 significance level				

Figure 6.21 UK international trade and business travel, industrial countries 1991 (both directions combined)

Source: (adapted from International Monetry Fund 1990 and earlier editions; Central Statistical Office 1991b and earlier editions)

Note: Imports and exports, and inward and outward business travel are combined.

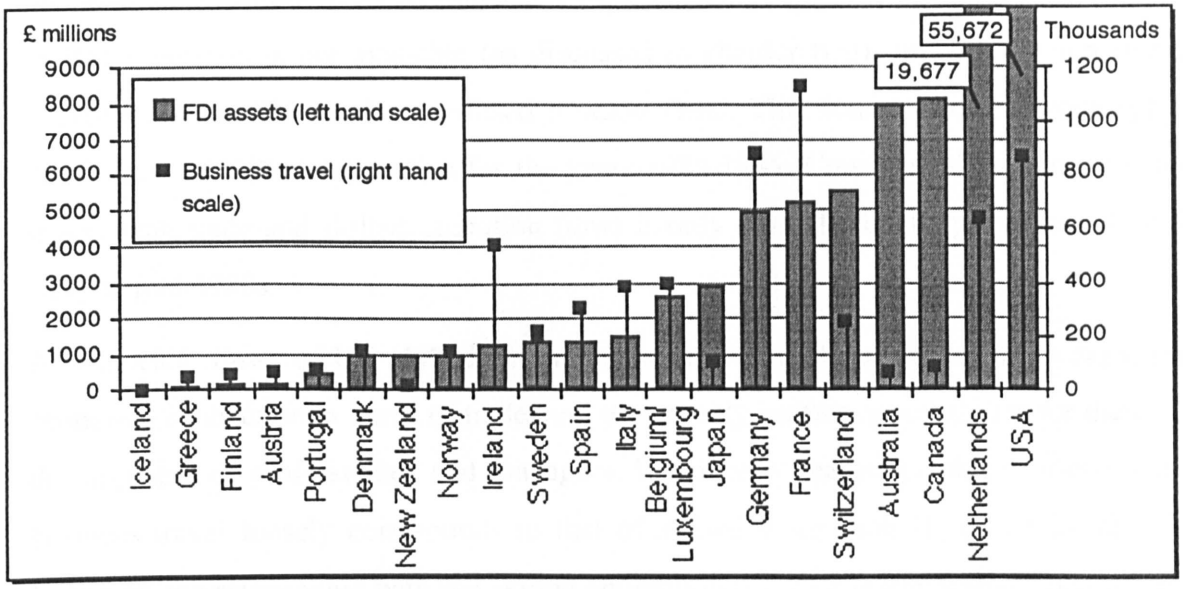


Statistical notes	Test statistic	Spearman's (see Shaw and Wheeler 1994 pp 183-189)		
H_0 states that there is no correlation between UK trade with industrial countries and UK FDI between industrial countries H_1 states that there is a significant correlation between UK trade with industrial countries and UK FDI between industrial countries				
Statistic	Value	ASE1	T value	Significance
r_s	0.42707	0.22044	2.00382	0.06038
H_0 accepted at 0.05 significance level				

Figure 6.22 UK trade and FDI with industrial countries 1987 (both directions combined)

Source: (adapted from Central Statistical Office 1990a; International Monetry Fund 1990)

Note: figure excludes investment into UK by Greek and Portuguese based companies and UK outward investment to Finland and Iceland. All aforementioned figures suppressed in source document.



Statistical notes				
Test statistic	Spearman's correlation- see (Shaw and Wheeler 1994 pp 183-189)			
H_0 states that there is no correlation between UK FDI between industrial countries and UK business travel between industrial countries (1= all FDI*; 2= Manufacturing FDI**; 3= Non-manufacturing FDI***)				
H_1 states that there is a significant correlation between UK FDI between industrial countries and UK business travel between industrial countries (1= all FDI*; 2= Manufacturing FDI**; 3= Non-manufacturing FDI***)				
Statistic	Value	ASE1	T value	Significance
1. r_s	0.66617	0.16202	3.78960	0.00134
2. r_s	0.40000	0.26102	1.57359	0.13960
3. r_s	0.15385	0.29257	0.51640	0.61580
1. H_0 rejected at 0.05 significance level				
2. & 3. H_0 accepted at 0.05 significance level				
* 20 cases ** 15 cases *** 13 cases				

Figure 6.23 UK international business travel and FDI with industrial countries 1987 (both directions combined)

Source: (adapted from Central Statistical Office 1990a; Central Statistical Office 1991b)

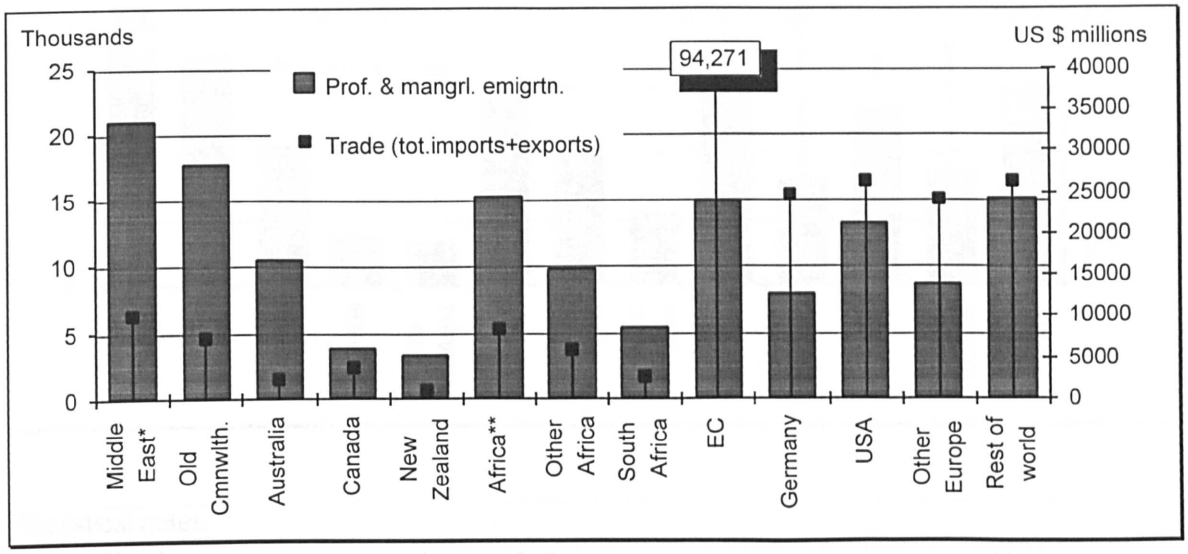
Note: statistic on manufacturing FDI excluded figures for Austria, Spain, Italy, New Zealand, Iceland and Finland, due to suppressed and insufficient data in source. The statistic on non manufacturing FDI excluded the aforementioned countries, plus Greece and Portugal for identical reasons.

6.2.2 Trade, investment and skilled emigration

Having examined the macro-level relationships between business travel and international trade and investment, attention is turned to the relationship between longer term mobility and international trade and investment. However, a detailed geographical breakdown of UK skilled migration is not available (as discussed in chapter two). Instead, an unpublished source from the IPS has been utilised (Findlay 1988). This source allows a geographical breakdown of skilled emigration for the years 1983-1985. Consequently a comparison of investment, trade and skilled migration flows is only possible for the period covering the early to mid 1980s.

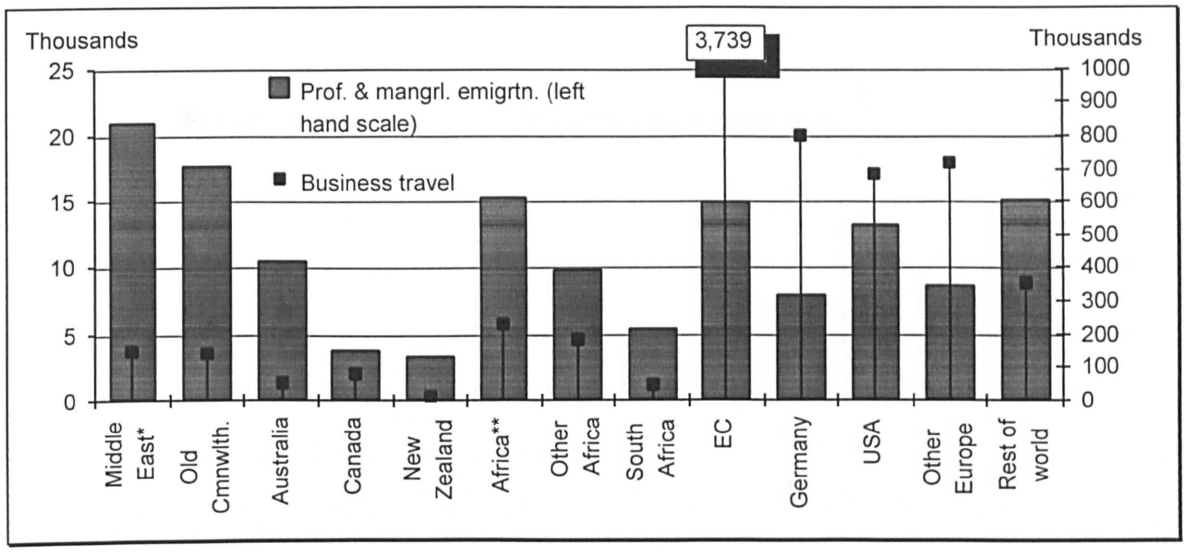
As expected, flows of UK skilled emigration tend towards those areas with a significant economic connection in terms of trade, and presumably greater opportunities for the career development of professionals and managers. In this way the geographical orientation of business travel loosely corresponds to that of skilled emigration (figures 6.24 & 6.25). However, the relationship between skilled emigration and FDI is less straightforward, with no clear association in the levels of emigration and investment (figure 6.26). Thus marked discrepancies in UK FDI flows and UK skilled emigration exist for specific areas.

The relatively high contribution of emigration to the Middle East and Africa, despite low rates of FDI, suggests the importance of other mechanisms for stimulating ISLM to those areas. Although the ultimate employment may very well be with a TNC, it does not seem likely to be through the ILMs of UK companies that emigrants to these areas predominantly arrive. The low levels of FDI with the Middle East is in contrast to the EC and the US, where there is closer match between high emigration and high direct investment. This evidence lends weight to the channels approach as a means of explaining and differentiating between skilled migration flows for certain areas.



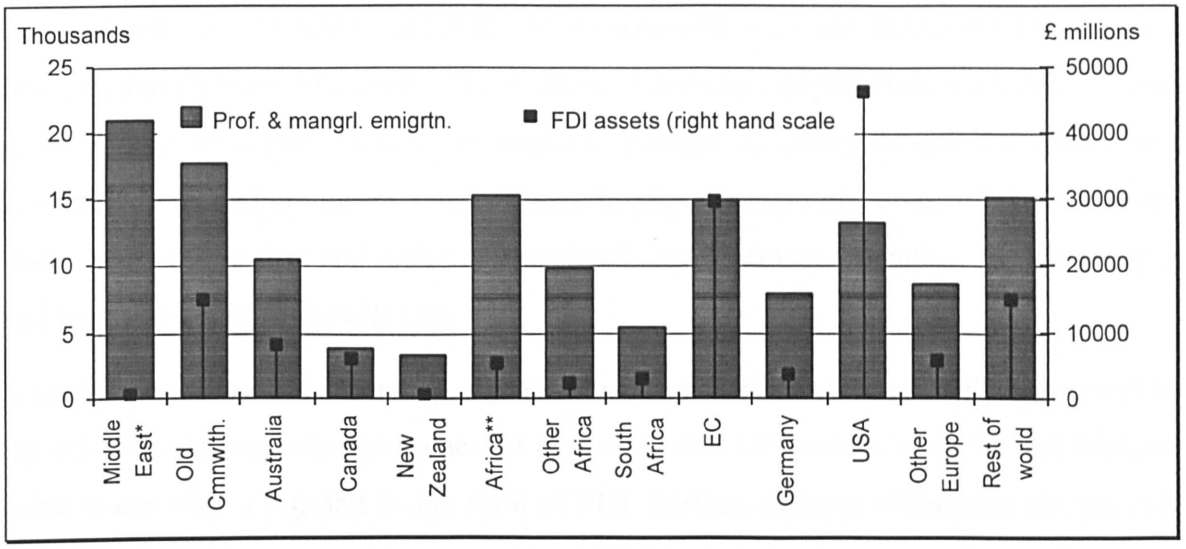
Statistical notes				
Test statistic	Spearman's correlation- see (Shaw and Wheeler 1994 pp 183-189)			
H_0 states that there is no correlation between UK trade with above countries/ areas and UK skilled emigration to above countries/ areas				
H_1 states that there is a significant correlation between UK trade with above countries/ areas and UK skilled emigration to above countries/ areas				
Statistic	Value	ASE1	T value	Significance
r_s	0.67273	0.15159	2.57168	0.03304
H_0 rejected at 0.05 significance level				
* statistic excludes the categories: Africa, Old Commonwealth and Germany, i.e. 10 cases used				

Figure 6.24 Trade 1984 and UK skilled emigration, 1983-1985
Source: (adapted from Findlay 1988 p406; International Monetary Fund 1990)



Statistical notes				
Test statistic	Spearman's correlation- see (Shaw and Wheeler 1994 pp 183-189)			
H_0 states that there is no correlation between UK skilled emigration and UK international business travel				
H_1 states that there is a significant correlation between UK skilled emigration and UK international business travel				
(1= business travel as overseas visitors to the UK and visits abroad by UK residents; 2= business travel as visits abroad by UK residents)				
Statistic	Value	ASE1	T value	Significance
1. r_s	0.55152	0.24585	1.87004	0.09840
2. r_s	0.53496	0.24453	1.79089	0.11109
H_0 accepted at 0.05 significance level				
* statistic excludes the categories: Africa, Old Commonwealth and Germany, i.e. 10 cases used				

Figure 6.25 UK skilled emigration 1983-1985 and business travel 1984
Source: (adapted from Findlay 1988 p406; Central Statistical Office 1991b and earlier editions)



Statistical notes				
Test statistic	Spearman's correlation- see (Shaw and Wheeler 1994 pp 183-189)			
H_0 states that there is no correlation between UK skilled emigration and UK FDI between above countries/ areas*				
H_1 states that there is a significant correlation between UK skilled emigration and UK FDI between above countries/ areas*				
Statistic	Value	ASE1	T value	Significance
r_s	0.29697	0.42136	0.87964	0.40470
H_0 accepted at 0.05 significance level				
* statistic excludes the categories: Africa, Old Commonwealth and Germany, i.e. 10 cases used				

Figure 6.26 Foreign direct investment (by asset value), 1984 and UK skilled emigration, 1983-1985
Source: (adapted from Findlay 1988 p406; Central Statistical Office 1990a)
Note: * UK outward direct investment to the Middle East attributable to UK companies only

6.3 Conclusion

The nature of Foreign Direct Investment can be influenced by the particular corporate strategy and structure of individuals sectors and firms. In turn multinational strategies can only in some cases be related to broader socio-economic processes represented by the New International Division of Labour. The location of activities in particular sites can be based on a variety of criteria: access to markets, sources of cheap labour for production, proximity to related producers. Each of these implies different divisions of labour between components of the firm and different associated organisational structures. In turn the type and amount of skill flows will vary.

A further set of issues influencing organisational structures, and hence skill flows, will be the cultural relations between home and host countries. Differences in social and business cultures can play a big part in the form of FDI. Further, cultural differences do not only occur between the home and host countries of TNCs, but also between different firms with the same home country. Thus American firms may be less well placed to adopt a particular organisational structure in one region than another TNC home country, with consequences for skill flow patterns. Equally, a firm such as IBM with a unified corporate culture may adopt different organisational patterns to a much more decentralised and disparate entity such as Nestlé. These issues are examined in more detail in chapter seven.

This examination of secondary sources develops the field of research by contributing evidence of the macro level association of UK ISLM and international economic activity. In addition, this chapter also identifies the development and key economic characteristics of potentially important actors in international labour exchange within Scotland: overseas owned firms in manufacturing, especially in electrical and mechanical engineering. The meso level linkages between these economic structures and international skilled labour mobility are developed in the following chapters.

Chapter 7

Corporate structure & strategy and international skilled labour mobility

7.1 Introduction

This chapter examines the division of economic tasks within the Transnational Corporation (TNC) as an important influence on Scottish International Skilled Labour Mobility. It is necessary to appreciate, "the networks of relationships which exist both within and between firms and the geographical expression of those relationships at global, national and local scales" in order to understand the processes shaping the flows of skilled mobility to and from Scotland (Dicken 1992 p.189).

It is necessary to consider the functional role when identifying the subsidiary strategies of overseas-owned plants. The greatest part of overseas activity in Scotland is exclusively dedicated to manufacturing and the associated activities of purchasing, warehousing, distribution and sales/ marketing. There are relatively low levels of R&D in most firms; although around 50% of overseas-owned manufacturers carry out some form of R&D. This proportion is increasing (Locate in Scotland 1991a)

Sales and marketing activities are carried out in approximately 50% of overseas plants, although this function is more prominent for North American plants. Service and maintenance activities, although relatively unimportant in overseas manufacturing activities in Scotland, are more important for North American than for European or 'other' overseas plants. Most overseas-owned manufacturing plants export to a regional EC market. However, a large proportion of plants also trade on a much wider geographical basis (Locate in Scotland 1991a,b).

7.2 Classifying corporate structure and strategy

Recent work concludes with a need to address the specific organisational form of international investment as an influence on ISLM. Cormode's work on the circulation of Japanese personnel to Canada, examines mobility in relation to industrial activity (Cormode 1994). However, reference is also made to the production chain, as a basis for relating skilled circulation to FDI. Similarly, Boyle *et al*, in examining French investment in the UK, divide FDI types between those 'low commitment' firms in sales and marketing

and distribution activities and those 'high commitment' firms in production and related services (Boyle, Findlay, Leliévre, et al. 1994).

Both studies examine different sorts of enterprises, not just in terms of country of ownership, activity or function, but in size as well. Boyle *et al* focus on small investments (in terms of three or less plants or offices), while Cormode does not differentiate Japanese FDI by number of plants or offices. The differing approaches lead to different conclusions on the relationship between FDI and skilled migration (discussion of other mobility forms, such as business travel, is limited).

Boyle *et al* conclude that skill exchanges are low for both types of investment, high and low commitment firms. However, production-related investment has proportionately more than sales, marketing and distribution activities (Boyle, Findlay, Leliévre, et al. 1994 p58). By contrast, Cormode, relates higher levels of skilled international circulation across the board, but particularly in wholesalers or distributors. Rather less is reported in manufacturing, shipping & tourism and other activities (Cormode 1994 p84).

These differences partly relate to geography; shorter term skill transfers are a more viable option for UK-France business than for the spatially distant Japanese-Canadian links. This is a view supported by Salt and Ford, who comment that "within Europe where distances are shorter, joint ventures may be serviced by frequent short-term trips rather than by secondment" (Salt and Ford 1993 p296). However, differences in the relationship between institutional form and ISLM remain problematic. Consequently..."The differences of position in the interpretation of skilled transient processes between these case studies underscores the need for further conceptual and theoretical work in this field" (Gould and Findlay 1994b p23).

Three sets of organisational dimensions dictate the structural form of TNC activities: *function*, *product* and *geography*. These different factors influence management roles and development, and shape the structures of organisations into distinct parts (Humes 1993). *Functional units* relate to the activities of manufacturing, sourcing, marketing and sales, research and development, financial support services, personnel services and public relations. These different functions can be envisaged as parts of a *production chain*. An idea of the variety with which this production chain may vary in composition and in geographical scope is indicated in figure 7.1.

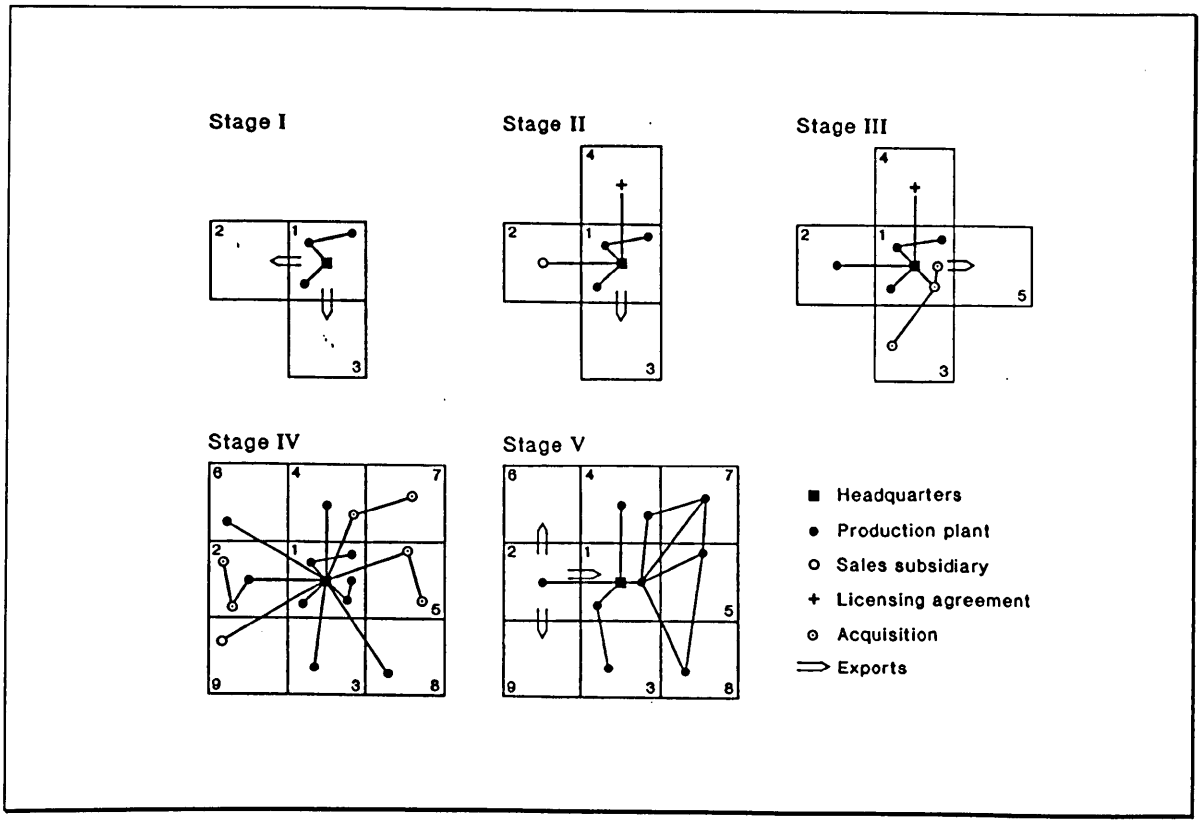


Figure 7.1 Reorganisation, restructuring and spatial change in a TNC, an idealised sequence
Source: (Dicken 1992 p211)

A second organisational principle is that of the *product division.* These may take the form of groups, sectors or subsidiaries responsible for a particular line or type of products or businesses. In addition, firms may organise around the principal of *geographic* or territorial entities, which may be based at the national, regional or continental level. Such operations act with responsibility for a spatially defined market (Humes 1993).

These three organising principles are emphasised to different degrees in different firms, with the three dimensions forming a variety of possible combinations (figure 7.2). Some organisational structures require more management control *across* geographical areas than others. In particular, structures that emphasise product division and functional division imply greater operation across geographical areas. Humes notes that many firms are re-developing strategies to stress area or product dimensions (Humes 1993 p12). However, while tending to emphasise one factor, most firms combine elements in at least some parts of the organisation, thus creating the potential for ISLM.

A similar approach, drawing on the work of Porter, derives a typology of company strategies, based upon the interaction between the *configuration* and *co-ordination* of international activities (Porter 1986) (figure 7.3). This approach is useful for considering

multi-nationals as single entities but is less useful for thinking about the position of the overseas-owned plants within the corporate structure.

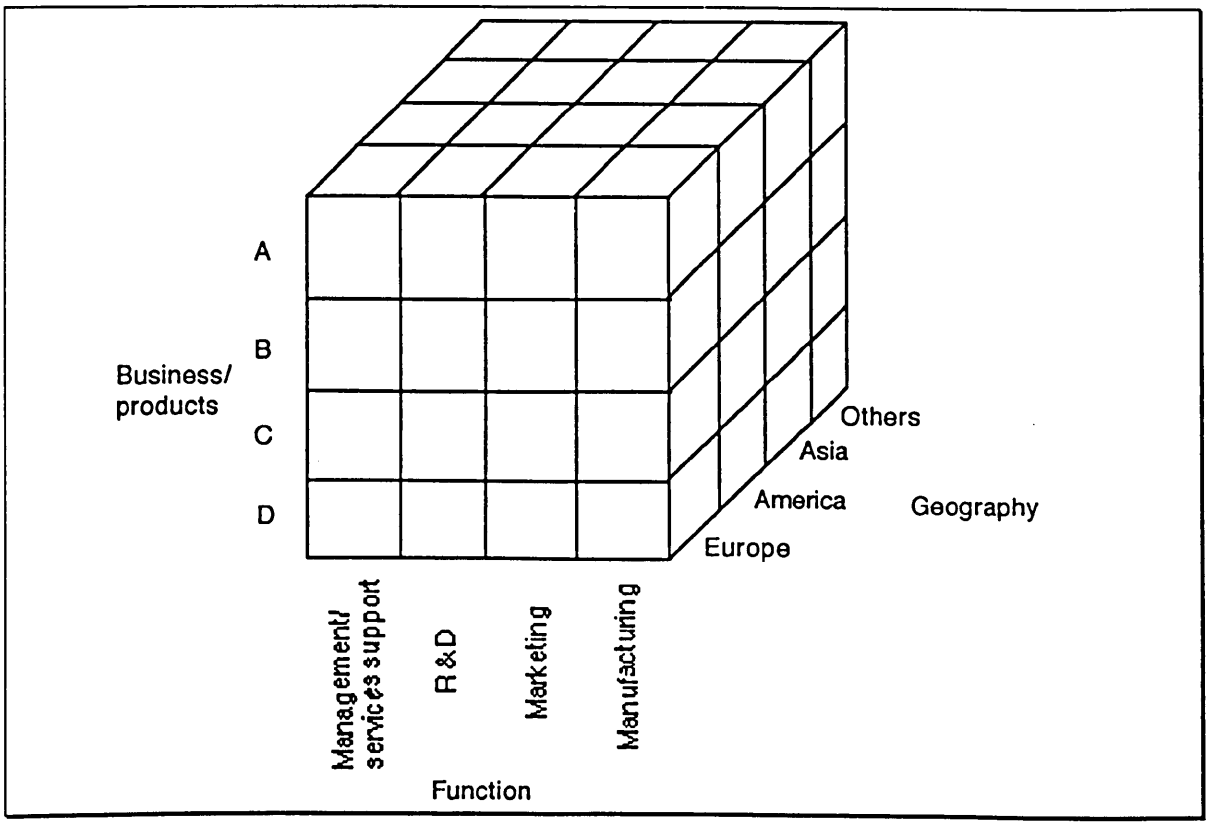


Figure 7.2 Three sets of perspectives driving multinational mosaics
Source: (after Humes 1993 p12)

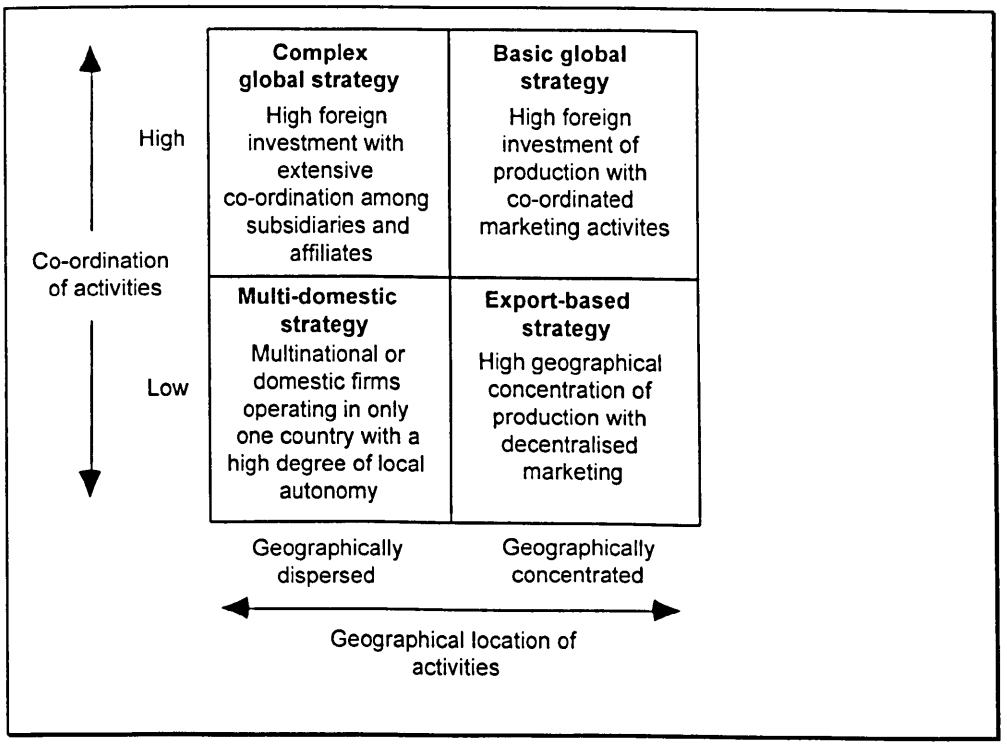


Figure 7.3 A typology of international strategy
Source: (adapted from Porter 1986; Dicken 1992 p 195; Taggart 1992 p2)

In step with the approaches illustrated in figures 7.2 and 7.3, White and Poynter, examining US TNCs in Canada, suggest a five-fold classification of foreign-owned subsidiaries (White and Poynter 1984). This classification is based upon *product scope* (the freedom available to develop products); *market scope* (the geographical range of markets); and *value added scope* (the degree to which value is added by virtue of the functional characteristics of the subsidiary) (Taggart 1992 p2). Five types of subsidiary strategy are derived from this scheme, each of which refer to distinct product businesses. These subsidiary strategies are outlined in table 7.1.

Young *et al*, developing the work of White and Poynter, categorise the strategy of Scottish overseas-owned subsidiaries (White and Poynter 1984; Young, Hood and Dunlop 1990). Overseas subsidiaries are categorised into five types on the basis of the following factors:

> "subsidiary R & D, market areas supplied from the Scottish factories, the nature of production operations, intra-TNC import and export trade, width of product ranges, and locus of decision-making from market areas and product ranges as well as data on employment, period of establishment and nationality of ownership" (Young, Hood and Dunlop 1990 p489).

Four distinct groups of Scottish overseas owned plants are derived, with rationalised manufacturers and product specialist/ strategic independent manufacturers, being given the dominant role in overseas subsidiary activity within Scotland. Smaller, although significant roles are given to miniature replica manufacturers. A summary of the findings is given in table 7.2.

Young *et al* indicate that US firms predominate within the rationalised and product specialist/ strategic independent groups (Young, Hood and Dunlop 1990). In contrast, European and other overseas plants are represented more heavily as miniature replica firms. Overall, the research does not indicate clear distinctions of subsidiary role by industry group. However, some assignment of activities to particular categories is made. In particular, computer, semiconductor, mechanical engineering and electro-mechanical firms tend to be within the rationalised manufacturer group. In contrast food companies, along with some Japanese and European companies and acquisition entrants, conform to the miniature replica status (Young, Hood and Dunlop 1990 p490).

Subsidiary classification	Strategic role
1. Marketing satellite	Marketing subsidiaries selling products into the local trading area. Plants do not manufacture, but act as importers and may be involved in activities from wholesaling to distribution, sales and customer support.
2. Miniature Replica	Subsidiary produces and markets some of the parent's product lines or related product lines in the local country- vary in degree to which existing products are altered or developed for local markets
3. Rationalised manufacturer	Subsidiary produces a particular set of component parts or products for a multi-country or global market. Limited product scope and value added. Marketing, R&D and new product decisions located centrally with parent
4. Product specialist	Subsidiary develops, manufactures and markets a limited product line for regional or global markets. Similar technologies to parent but few exchanges. Strategic control over products and self-sufficient in applied R&D, production and marketing
5. Strategic independent	Subsidiary permitted independence to develop lines of business for either local, multi-country or global market. Autonomous in R&D, production and marketing

Table 7.1 Subsidiary classifications and their strategic role
Source: (Young, Hood and Dunlop 1990; Taggart 1992)

	Classification			
	Group 1	*Group 2*	*Group 3*	*Group 4*
	Product specialist/Strategic independent	Rationalised manufacturer	Miniature replica (development uncertain)	Miniature replica
Ownership, size and period of establishment	Mainly American; av. up to 500 employees; well-established	Mainly American; employing under 200	Av. employment about 100; highest % of non American MNEs	Small in employment terms; significant non-US presence
Behavioural characteristics	Widest market area (European/World markets); fairly self-contained manufacturing operation; limited linkages with other group plants; significant R&D (product/ process development for Europe/ World markets)	Wide market area; closest to assembly end of production spectrum; substantial linkages with other group plants; low level R&D	Market area limited to UK (perhaps selected European Countries); narrow product range; little R&D	Market mainly Europe; wide product range; self-contained manufacturing; R&D mainly concerned with adaptation; limited linkages with other group plants
Decision-making	Significant tendency for in-house marketing in Scotland relatively high level of authority allowed to Scottish management on market an product decisions	Lowest levels of decision-making authority in Scotland	Marketing mostly outside Scotland; moderate autonomy	Some marketing departments in Scotland; relatively high level of authority permitted to subsidiary management in Scotland
No. of firms	45	50	17	17
% of firms	35.0	38.6	13.2	13.2

Table 7.2 Overseas-owned subsidiaries in Scotland, corporate strategy
Source: (adapted from Young, Hood and Dunlop 1990 p491-492)

7.3 Case studies

As suggested above, the way a firm is organised across space will have a direct bearing on the character of mobility generated by its employees. This section makes a detailed examination of specific TNC operations in Scotland, identifying the implications of different corporate strategies and structures for the mobility of managers and professionals. A range of companies has been selected on the basis strategy, activity and ownership. Strategies of firms have been selected in accordance with the scheme developed by White and Poynter and developed by Young *et al*, as discussed above (White and Poynter 1984; Young, Hood and Dunlop 1990). The first firm examined is Johnson and Johnson which has been classified as a 'miniature replica' plant.

7.3.1.1 Johnson & Johnson

Johnson & Johnson is a US based multinational manufacturer of health care products with 175 operating companies in 54 countries and employing 83,000 personnel (Barham and Devine 1991 p41). Europe accounts for 28% of sales and 42% of operating profit. Johnson and Johnson are the largest North American overseas employer in Scotland.

Within Scotland, Johnson & Johnson operate a number of businesses, mainly manufacturing medical related products, i.e.: Devro Ltd. (Glasgow and Lanarkshire, established 1964, employs 501-700, manufacture collagen sausage casing and collagen film for meat wrapping, and also manufacture collagen products for biomedical applications); Ethicon Ltd. (Edinburgh and Livingston, 4 plants, established 1947, employs 1001-2000, manufacture surgical sutures and wound closure products, market Ethicon's range of products); IOLAB (Livingston, established 1986, employs 51-100, manufacture intra-ocular lenses); Surgikos Ltd. (Livingston, established 1976, employs 401-500, manufacture disposable medical drapes, gowns, head wear, masks, latex examination gloves) (Locate in Scotland 1991a).

In terms of corporate strategy and structure, Johnson & Johnson place an emphasis on decentralised management, with overseas operations largely operated by citizens of the particular country concerned. Only sixty US expatriates are based overseas. In addition, only a small number of these are engaged in running an overseas subsidiary.

In terms of the production chain, the majority of operating companies engage in their own manufacturing and marketing requirements. However, research functions tend to be more

centralised. In Europe, the result is a relatively fragmented array of small companies and manufacturing operations within several different countries.

There are several mechanisms whereby managers and professionals are engaged in international mobility within Johnson & Johnson.. There are three separate schemes of 'international management training and development' through which different levels of managerial talent are involved. The first is a scheme in which the most senior executives of Johnson & Johnson's 1,500 senior managers participate in a programme based in the US (Executive Conference Course). These 1,500 represent 170 management teams spread across Johnson & Johnson's world operations (Barham and Devine 1991 p44).

A second level of managerial resources participates in an 'Advanced Management Programme'. This scheme is aimed at managers within the operating companies and likewise takes place in the US. A third level of management training focuses upon basic supervisory and management training. This level of training occurs within the operating companies.

Recent developments, reflecting the 'globalisation' of company strategy, place a fuller emphasis on training within geographical regions rather than US. Other courses are also run on manufacturing topics including innovations in technological and labour processes and are aimed at the various production units.

The programmes outlined above clearly generate a degree of mobility within the ILM of Johnson & Johnson. The form of this mobility, in terms of skill level, cuts across a range of activities and levels of seniority. In terms of temporal significance, it is posited that the mobility generated is of a relatively short duration, perhaps a few days to a couple of weeks. Certainly duration is far less than anything that could be classified as migration.

The second process in which Johnson & Johnson's skilled employees are engaged in mobility is through 'international assignments' and 'international MBAs'. In this case the mobility is of a much lengthier format and consequently involves much wider set of considerations for company and employee.

While the majority of Johnson & Johnson operations rely upon the use of indigenous talent in overseas operations, the company also seeks to develop top management potential through an 'International Development Programme'. In this case, middle level managers in overseas companies may find themselves on a 1-2 year programme in the US. In addition,

younger US and overseas middle managers are increasingly being placed on assignments abroad.

Furthermore, Johnson & Johnson operates an 'International MBA Programme'. This scheme adopts 50-60 overseas students on MBA courses in the US and sends them to work in operating companies within their home countries on completion of degrees. In a sense the company is sponsoring and incorporating employees into the ILM in the USA, using business schools as recruitment agencies. In addition to these more formal schemes, increasing internationalisation of the company has led to an enhanced effort to develop communication between head office and operating companies. This has spawned an increase in informal conferences and group meetings.

In conclusion, Johnson & Johnson create a range of mobility types. The corporate structure mainly requires mobility of senior executives and operating managers. The form of this mobility ranges from business travel to longer term relocation. In addition to these forms of mobility it may be expected that operating companies generate a limited amount of business travel through external relations i.e. sales and marketing, customer services and outside contracting. Thus, this case study conforms to the hypothesised model outlined earlier.

European integration has important implications for corporate strategy and structure and hence ISLM. As a result of integration, consideration has reportedly been paid to the consolidation of management functions in some of Johnson and Johnson's many small companies and manufacturing companies (Barham and Devine 1991). One consequence is the greater international co-ordination of recruitment of management into the ILM and secondly the propensity for greater mobility within the ILM across national borders. Thus Scottish employees of Johnson & Johnson are increasingly exposed to ISLM.

7.3.1.2 Nestlé

Nestlé represents a Swiss-based holding company of over 200 operating companies involved in mainly food related activities. The company has developed through a series of acquisitions of existing firms such Crosse & Blackwell, Rowntree and Carnation. Nestlé is a particularly internationalised firm, with only 2% of turnover based in Switzerland (Maucher 1985 p13).

The roughly 200 Nestlé owned companies employed just under 200,000 persons in 1991. Of these employees, around 3,000 are located within Switzerland. The remainder are distributed among 420 factories in 60 countries and in five continents, although the greatest part of business is focused on Europe. However, despite its fragmented nature, the company has increasingly integrated different lines of business under common management, both within and between countries.

In Scotland several plants are operated, i.e.: Crosse & Blackwell (Aberdeenshire, established 1960, employs 401-500, manufactures food in tins, glass and combibloc containers); Rowntree Mackintosh (Ayrshire, established 1988, employs 51-100, manufactures milk chocolate crumb); Gray, Dunn & Co. (Glasgow, established 1988, employs 401-500, manufactures chocolate coated biscuits); British Vinegars (Cumbernauld, established 1982, employs 11-50, manufactures soya sauce); Carnation (Dumfries, established 1985, employs 301-400, manufactures evaporated milk and coffee creamer) (Locate in Scotland 1991b).

Overall management in Nestlé is composed of different nationalities, for example, German, Spanish, British, Italian and US managers being represented on the executive board. These senior corporate executives oversee different aspects of the business, which is divided along geographical lines as well as functional and product lines. However, this control is remote in nature, with operating companies existing within a highly decentralised structure. Between the holding company executives and the local companies operate affiliate heads.

The year 1990 saw the integration of Nestlé's previously autonomous UK subsidiaries under an affiliate structure. Thus a degree of independence within the Scottish plants has been reduced and the scope for ISLM increased. Another development promoting integration has been the development of new structures with responsibility for operational development, marketing, sales etc., which span the regional and continental divisions.

Despite some integration, most staffing is controlled locally. However, senior management, while being drawn internally, is also drawn from throughout the organisation. Within the Swiss headquarters over 50 nationalities are represented. Many are seconded with the purpose of gaining an appreciation of the company as a whole (Humes 1993 p216).

As suggested, management development is generally handled from within the operating companies, although Nestlé-wide programmes are also used. Such development involves experience of other plants and also course-based training. Senior staff within operating companies are seconded to other Nestlé companies abroad and, in addition, encouraged to participate in training and graduate management courses at Nestlé's international training centre and other institutions.

In addition, a specific international cadre has been developed to plug gaps in local operating firms. This group of employees tends to be drawn from younger staff with specialised knowledge in areas such as, economics, sales or engineering, along with language expertise. The role requires the international cadre to have a commitment to a high level of mobility. Overall, during the late 1980s Nestlé was involved in around 600 expatriate assignments (Humes 1993).

Nestlé has a similar structure to that of, Johnson & Johnson, although the limited dominance of the parent country gives a more international scope to management training and development. The limited integration of operating firms, akin to Johnson & Johnson, suggests that intra-corporate generated international business travel will be relatively low. The national scope of subsidiaries also suggests that overseas travel for exporting, marketing and service and support will be relatively limited. Nestlé exhibits a case where mobility opportunities appear limited and is in accordance with the hypothesised model. The exception to this rule is the recently increasing demand for internationally experienced specialist managers to implement a greater co-ordination of firm activities across geographical areas.

7.3.2 Rationalised manufacturers

Rationalised manufacturers are suggested as playing an important role in the strategic position of overseas manufacturers in Scotland (Young, Hood and Dunlop 1990). In turn, it is hypothesised that rationalised manufacturers generate significant levels of business travel and also longer term international employee movements. The importance of electronics within the activities of rationalised manufacturers makes it useful to outline some of the major structural developments within this industry. This sector alone, as indicated above, accounts for a substantial part of the total overseas owned employment in Scotland (table 7.3).

In terms of export activity and of the extensive cross border activities of the parent TNCs, the electronics sector represents a significant component of Scotland's 'internationalised' economy. The strength of overseas ownership is particularly strong in the semiconductor industry and Scotland has become one of the principal sites for semiconductor production in the UK and in Europe (Henderson 1989).

Henderson, concentrating upon semiconductor activities, indicates that it is the more technologically advanced labour processes that have been established in Europe, especially by US companies (Henderson 1989). He argues that while US electronics investment in East Asia was associated with cheap unskilled labour...

> "...cheap unskilled labour was not one of the reasons why US companies set up plants in Europe. Though...the cheapness and quality of engineering and technical labour (particularly in Scotland) may well be a primary reason why US (and other) companies continue to invest in advanced labour processes in Europe, the initial impetus for investment there was more the existence of a substantial and growing market, but one protected by high EEC tariff barriers" (Henderson 1989 p118).

Wafer fabrication is the main production process carried out by US semiconductor plants in Scotland. In terms of labour utilisation, highly skilled electronics engineers and technicians along with significant numbers of semi and unskilled workers are employed. Henderson estimates that the split between skilled and unskilled is around fifty-fifty, with around a quarter of the workforce as engineers or technicians and a further quarter as managerial, supervisory and clerical (Henderson 1989 p127).

Henderson cautiously notes the salience of NIDL approaches in accounting for the dispersal of certain activities to peripheral economies that require cheap manual labour. However, the crucial aspect within high technology industries of seeking relatively cheap sources of *skilled* technical labour power is indicated. The availability of sources of technically competent employees has been an important component of locational decisions in Scottish electronics.

The majority of labour processes and managerial functions of US companies are concentrated in the US. Research and development and corporate control are almost solely concentrated in the US. In addition to this, the more sophisticated manufacturing process

are also based in the US. In contrast, routine assembly production processes have mainly been relocated to peripheral economies, where large supplies of cheap unskilled labour are available. However, associated with developments in production technology, there is evidence that automated assembly facilities are being relocated to core economies. An example of this in Scotland is given by the electronics firm Motorola.

The exception to keeping the more advanced production in the US is wafer fabrication, which has received limited dispersion, mainly to Europe and particularly to Scotland. Final testing is another capital intensive function that has been dispersed, to an extent, mainly to non-home, core countries. Still, much of the senior decision making, scientific and technical work takes place outwith Scotland. An exception to this is, again, Motorola, which exhibits a less hierarchical corporate structure and consequently more local autonomy in decision making.

Company	Location	Products	Employees	Nationality of parent
IBM	Greenock	PCs and monitors	2300	USA
MOTOROLA	E Kilbride	semi-conductors	2000	USA
MOTOROLA	Bathgate	cellular phones	1600	USA
NCR	Dundee	auto teller machines	1600	USA
DIGITAL	Ayr	workstations and PCs	1550	USA
NATIONAL SEMI	Greenock	microchips	1300	USA
HEWLETT PACKARD	S Queensferry	telecomms	1000	USA
NEC	Livingston	semiconductors	850	JAPAN
COMPAQ	Erskine	PCs	700	USA
JVC	E Kilbride	televisions	700	JAPAN
DIGITAL	S Queensferry	wafers	559	USA
MITSUBISHI	Haddington	televisions	514	JAPAN
OKI	Cumbernauld	printers	500	JAPAN
GEC MARCONI	Edinburgh	defence	386	UK
SUN MICRO	Linlithgow	workstations	330	USA
CONNER	Irvine	disk drives	300	USA
FORTRONIC	Dunfermline	payment systems	250	USA
SPIDER	Edinburgh	networking	200	SCO
RACAL-MESL	Newbridge	defence	200	UK

Table 7.3 Leading Scottish electronics firms by employment size
Source: (Scottish Business Insider 1993)

7.3.2.1 NEC

A further case study is presented which differs in important dimensions from above examples. Firstly the company under consideration, NEC, is a Japanese firm and secondly it is based in electronics and communications activities, generally conforming to a rationalised manufacturer status. NEC Semiconductors (UK) Ltd., established in 1981, is a significant overseas employer in Scotland, employing between 601-700 employees in its

Livingston branch plant (Locate in Scotland 1991b p18). A further £530 million investment for its Livingston semiconductor activities was announced in September 1994 (The Economist 1994v p5).

In terms of structure there is greater diversity than within Johnson & Johnson or Nestlé and generally there is less autonomy in overseas operations. NEC operates 25 branch plants in 12 countries. Besides these plants there are 29 affiliates in 18 countries that themselves are engaged in marketing, servicing and research, and 26 liaison offices in 24 countries (Barham and Devine 1991 p97). It can be immediately seen that the production chain is less fragmented than the miniature replicas through the operation of branch plants. However, the company retains a significant proportion of its overseas business within the relatively autonomous operations of its affiliates.

This structure reflects a strategy in which NEC seeks to internationalise the production, marketing and sales components of the production chain. With regard to production, the strategy is to integrate on a global basis. For marketing and sales, the aim is to become more responsive to local demands. Thus the emphasis is upon giving greater autonomy to the local level with respect to certain functions, while linking the production requirements in a more broadly based network.

NECs drive to internationalisation was initiated in the mid 1960s. Until the late 1970s, the approach to working overseas was sought through relatively informal 'hands-on' training in overseas operations. In 1980 a more explicit and focused approach to internationalising NEC employees was adopted (The Economist 1994r) (figure 7.4). One component of this was to upgrade the career prospects of those engaging in overseas activities to an equal footing with employees based in Japan.

As one senior NEC executive puts it, "international service is not a detour, but a shortcut. Overseas assignments form an important and honourable part of a career path at NEC" (Hajime Hasegawa of the NEC Institute of Management cited in Business International 1991 p103). In 1991, NEC had around 800 Japanese expatriates, with assignments typically lasting from four to six years (Business International 1991 p14, 101).

A further overt attempt to internationalise the company was the establishment of a company-wide scheme for selecting international employees. This system vets all employees of all positions and functions, other than production workers, in suitability for international work (Barham and Devine 1991). Within Japan some 90-95% of new recruits

are taken directly from Japanese universities. Outside Japan, new entrants to the internal labour market are obtained via professional recruiters or through placing advertisements in local newspapers (Business International 1991 p32).

In terms of preparation for overseas assignments, NEC requires extensive pre-departure training. All outgoing Japanese expatriates are provided with a range of courses (many are open to all employees) which may last up to six months (Business International 1991 p35,47). The principal aspect of this preparation is language training, but also more in depth cultural awareness and communication skills training are available, along with area studies and training on overseas business practices. NEC's overseas personnel division assists expatriates with health insurance and advice on children's education. Japanese publications and food may even be supplied, and over ten company doctors tour overseas subsidiaries to perform staff health checks (Business International 1991 pp50-51).

However, this sort of intensive training and investment in NEC executives is only feasible under the Japanese life-time employment policy, adopted by many large employers. The pursuit of such extensive training for international personnel is perceived as a less justifiable exercise within overseas operations (Business International 1991 p48). Thus local nationals in Scotland may receive more limited preparation and training for the development of international careers.

In NEC, the production chain is more geographically extended than in Johnson & Johnson or Nestlé. In turn, it can be illustrated that in terms of skilled mobility, exposure of managers and professionals to the international ILM is more pervasive in NEC than in Johnson & Johnson or Nestlé. In NEC this exposure to international business is a pro-active and explicit component of corporate strategy and consists of a wide range of measures to develop and support international personnel. Therefore Scottish employees, other than production workers, can be expected to be drawn into an international employment network. NEC fits the hypothesised mobility patterns of a rationalised manufacturer. Indeed, the firms international outlook may promote greater long term mobility of managers and professionals than comparable firms.

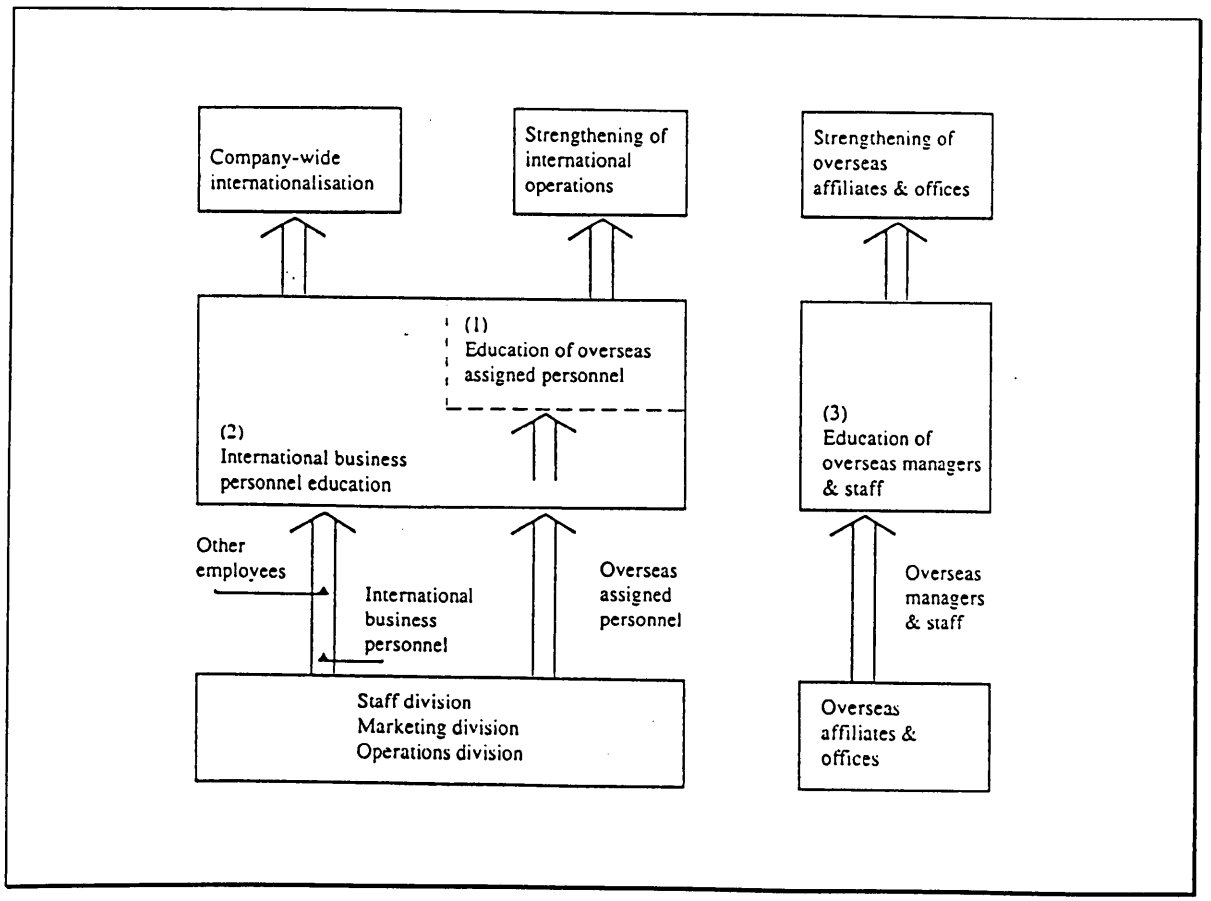


Figure 7.4 NEC, international education map
Source: (Barham and Devine 1991 p102)

7.3.2.2 Mitsubishi

Mitsubishi electric, established in 1921, forms the largest component of the Mitsubishi group of companies. Mitsubishi electric is one of the world's 12 largest electronics companies and Japan's eighth largest industrial firm. The group as a whole represents hundreds of companies tied together by extensive cross-shareholdings and partnerships. This *zaibatsu* structure contains around 28 core groupings in a wide variety of activities. Each of these 28 groupings operates relatively independently, with their own subsidiaries.

The firm began production in the UK in 1979. This expansion overseas, especially after 1985, reflects a devaluing of the yen that was accompanied by a flood of Japanese capital overseas (Horsley and Buckley 1990). Within Scotland the firm operates a number of plants, manufacturing consumer electronics and electrical components, and employing over a thousand staff (Locate in Scotland 1991b; CBI ERC 1993c).

Mitsubishi Electric Co. is organised around six main product groups: electronic devices, electronic products and systems, information and communications, consumer products, automatic equipment, and energy and industry systems. Each of these are divided into

planning, management and marketing departments, the products being made in around 60 affiliated companies on five continents, and employing 103,000 people (Economist Intelligence Unit 1993 p97; Humes 1993). All international activities are brought together under an International Operations Group (IOG), which cover planning, exporting, local production, sales, support and technology transfers (figure 7.5).

Activities within Europe are co-ordinated from Germany, headed, as is the company as a whole, by Japanese personnel. The European affiliate provides administrative support for various national marketing affiliates and manufacturing plants, although these subsidiaries answer mainly to the Tokyo based divisional headquarters.

The IOG is comparable to the other product divisions in stature. The group comprises six Japan-based units and two overseas bases, the latter in California and London. The London centre, established in 1990, acts to formulate management and marketing strategies in the European market. The IOG does not have full control over manufacturing and R&D overseas. This is supplemented from Japan. However, overseas subsidiaries are increasingly free to design and produce goods.

National plants have lines of communication with their parent company via the IOG and directly to their related division in Tokyo. Japanese firms tend to conform to a more centralised structure than European firms. The IOG is responsible for limited issues associated with human resources, legal issues and support functions. However, there is a trend, as with NEC, to move towards a looser European model.

The recruitment policies of the largest Japanese firms are rigorous, companies selecting only from the best performers in the top Japanese universities. Outside Japan recruitment is less formal. However, promotion is principally based on length of time served as a manager. Employment for life remains an important feature for Mitsubishi and many other large Japanese firms (Horsley and Buckley 1990; The Economist 1994l; The Economist 1994r).

The secondment and rotation of managers overseas is routine. However, expatriate policies for Japanese nationals are determined differently from overseas nationals. It is noted anecdotally, that of several junior, US, MBA graduates recruited and transferred to Japan, the majority quit the company due to restricted opportunity for career advancement (Economist Intelligence Unit 1993 p101). In this respect Mitsubishi can be seen to differ from the more overtly international NEC.

More generally, Wiltshire notes the role of the lifetime employment system as facilitating a high degree of occupational and spatial mobility for Japanese employees (Wiltshire 1990 p49). This is seen as a potential obstacle to foreign employees' career progression. Kuwahara and Inohara indicate the limited extent to which non-Japanese are promoted within company headquarters or branch plants (Inohara 1982; Kuwahara 1987). Inohara indicates that "Promotion of local personnel is a 'cosmetic' practice", however an increasing emphasis on internationalisation since the early 1980s may have ameliorated this stance (Inohara 1982 p33).

As for NEC, the rationalised manufacturer status of Mitsubishi implies that a need for co-ordination of plant activity through short term visits exists. However, home country control and staffing are more marked in Mitsubishi. As a result the opportunities for the involvement of Scottish personnel in longer term mobility are relatively restricted. Individual company philosophy, which is partly related to the Japanese industrial relations regime and labour market regulation, makes this firm unlikely to fit neatly in the hypothesised model set out earlier.

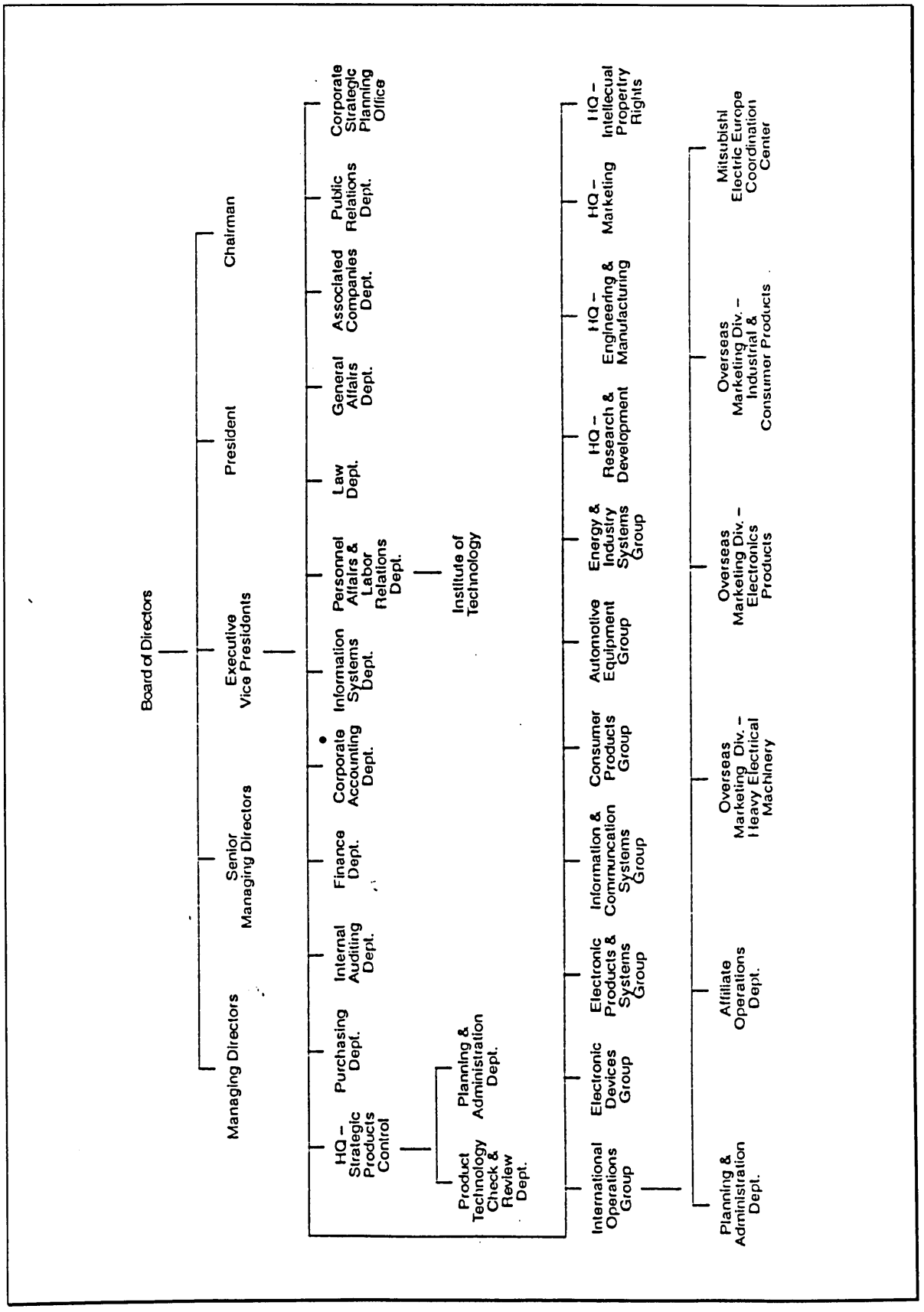


Figure 7.5 Mitsubishi Electric Co. corporate structure
Source: (Economist Intelligence Unit 1993 p98)

7.3.2.3 Philips

Philips, established in the Netherlands in 1891, contrasts with firms such as Nestlé in having a high degree of integration between its national organisations. The firm is one of the largest electronics TNCs, with affiliates in over 60 countries, although the majority of sales are based in Europe. The overall structure of the organisation is based around product divisions, i.e. lighting, components, consumer electronics, domestic appliances, medical systems, industrial and electric acoustic systems, information systems and communication systems (figure 7.6).

Philips presence in Scotland is significant, with a number of plants in a range of product areas, i.e.: Philips Circuit Assemblies (Fife, established 1964, employs 501-600, contract manufacturing services to European electronics industry including purchasing, assembly, testing and distribution); Philips (Lighting) Hamilton Ltd. (Lanarkshire, established 1945, employs 501-600, manufactures lamps and luminaries); Philips TMC (Lanarkshire, established 1963, employees 401-500, manufactures telecommunication equipment) (Locate in Scotland 1991b p23). The lighting division, which forms the original business, has a relatively high degree of autonomy (Humes 1993 p255).

The main product divisions are further divided into particular business or product lines, of which around 25% are headquartered outside the Netherlands. This formation varies from an earlier organisation of national companies in which product involvement overlapped. The product subdivisions have responsibility for production facilities, marketing and sales.

Within these sub-divisions the emphasis is upon a single product for continent-wide markets, instead of a range of products for the national market. Thus production has become 'continentalised', with the product sub-division taking on a more spatially extensive role than their national affiliate predecessors. Product divisions within the UK manage their own marketing and manufacturing and are responsible for a wide range of decision making. Such key centres also play a role in co-ordinating corporate human resource, legal and financial issues.

A diversity of nationalities are represented on the board and senior management committees, including a German, a Swede, an American, a Frenchman, a Belgian and an Englishman. Generally, employment takes place through product divisions in individual countries. Some 85% of middle and senior management spend their whole career with Philips and 70% within the same product division (Humes 1993 p257). Although most

management needs are met within the company, sales and marketing professionals are often recruited externally, with the use of corporate 'head-hunting' agencies (Business International 1991 p28).

Product divisions, in co-ordination with national managements, arrange expatriation, with around 1,200 expatriated managers in 1990. The majority of these (700), were Dutch. Such mobility is carried out for experience and career development purposes, the role of informal contacts and structures playing an important part in the implementation of such schemes. The key to global success as perceived by a senior manager, "is to develop managers who have 'generalized expertise across all areas of Philips' activities' and who are 'more international'" (Blunt 1990 p53).

Another senior executive comments that, "Increasingly, we make it clear that anyone who wants a senior position in this company has to gain experience in foreign locations," (Business International 1991 p103). Assignments are normally of four years duration, and may be up to six at senior levels. It is felt that these periods allow enough time to achieve something worthwhile within the destination (Business International 1991 p101).

Many TNCs are developing extensive pre-departure training for expatriates, as indicated above for NEC. However, Philips tends to offer little formal cross-cultural training to home country expatriates. Cross-cultural programs may take the form of one or two days intensive training on the assigned destination's values, traditions and customs, possibly accompanied by more extensive language training. For Philips, these courses are taught in-house, as opposed to using specialist consultants (Business International 1991 p38,43). The lower level of training than for Japanese firms may reflect longer international experience and narrower cultural divides between home and host countries.

Thus short term international mobility within Philips is likely to be relatively great due to the geographical spread of individual product divisions. Training programs are also likely to generate business travel, for example, Philips holds a three week international program for sixty senior managers per year (Business International 1991 p66). However, trips outwith the organisation are likely to be more limited, although Philips is involved in several joint ventures, with firms such as Polygram and Marantz. In addition, longer term mobility can be expected to match the overall distribution of product divisions.

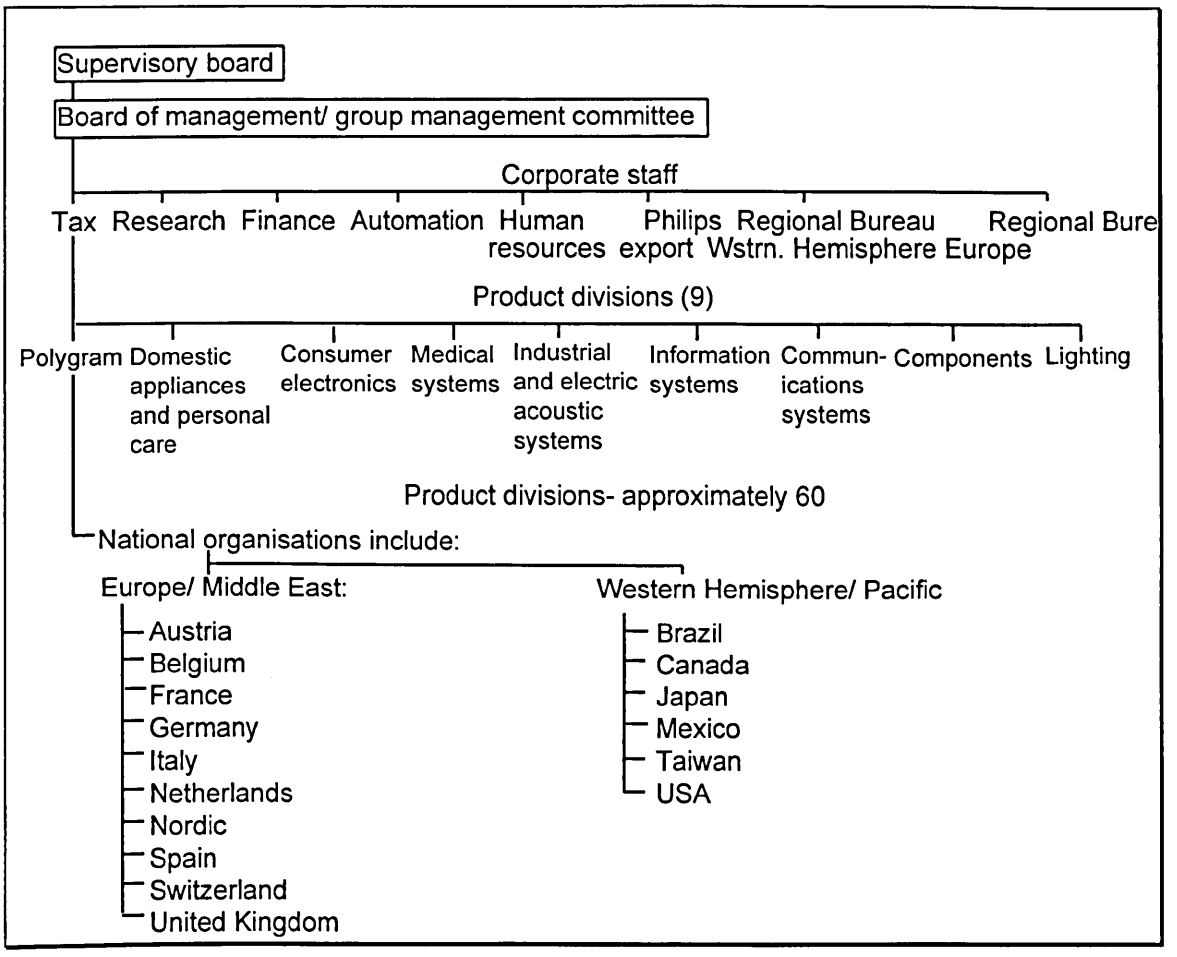


Figure 7.6 Philips corporate structure
Source: (adapted from Humes 1993 p256)

7.3.3 Product specialist

7.3.3.1 IBM

IBM manufactures a wide range of products within the computer and office machines industry, e.g., mainframe computers to personal computers, typewriters, and software. As one of the largest TNCs, IBM has a presence in around 132 counties outside the US, representing around 60% of all operations, and employing 370,000 person in 1990 (Business International 1991; Humes 1993). Within Scotland, IBM's Greenock plant, established in 1951, employs between 2-3,000 personnel and is involved in the manufacturing of the personal computer product range and other associated products (Locate in Scotland 1991a p20).

IBM represents a TNC that has adopted a continental based structure to its operations, combining elements of product and geographic organisation. Thus IBM operates what are for many purposes local companies within a world-wide corporation. IBM has an emphasis upon employing host country nationals for its overseas plants and of promoting internally

within a company that has a strong corporate identity throughout the firm. The result is a relatively high level of mobility, denoted by the comment of some staff that the acronym IBM stands for 'I've been moved' (cited in Humes 1993 p203).

IBM operates different lines of business in separate divisions, each with global scope, but answerable to the US general management. These are supported by a geographically structured set of marketing, sales and service companies. Four continental offices are primarily responsible for marketing and services: IBM US; IBM Europe/Middle East/Africa (Paris); IBM Asia/ Pacific (Tokyo, Hong Kong); IBM Latin America (New York) (figure 7.7).

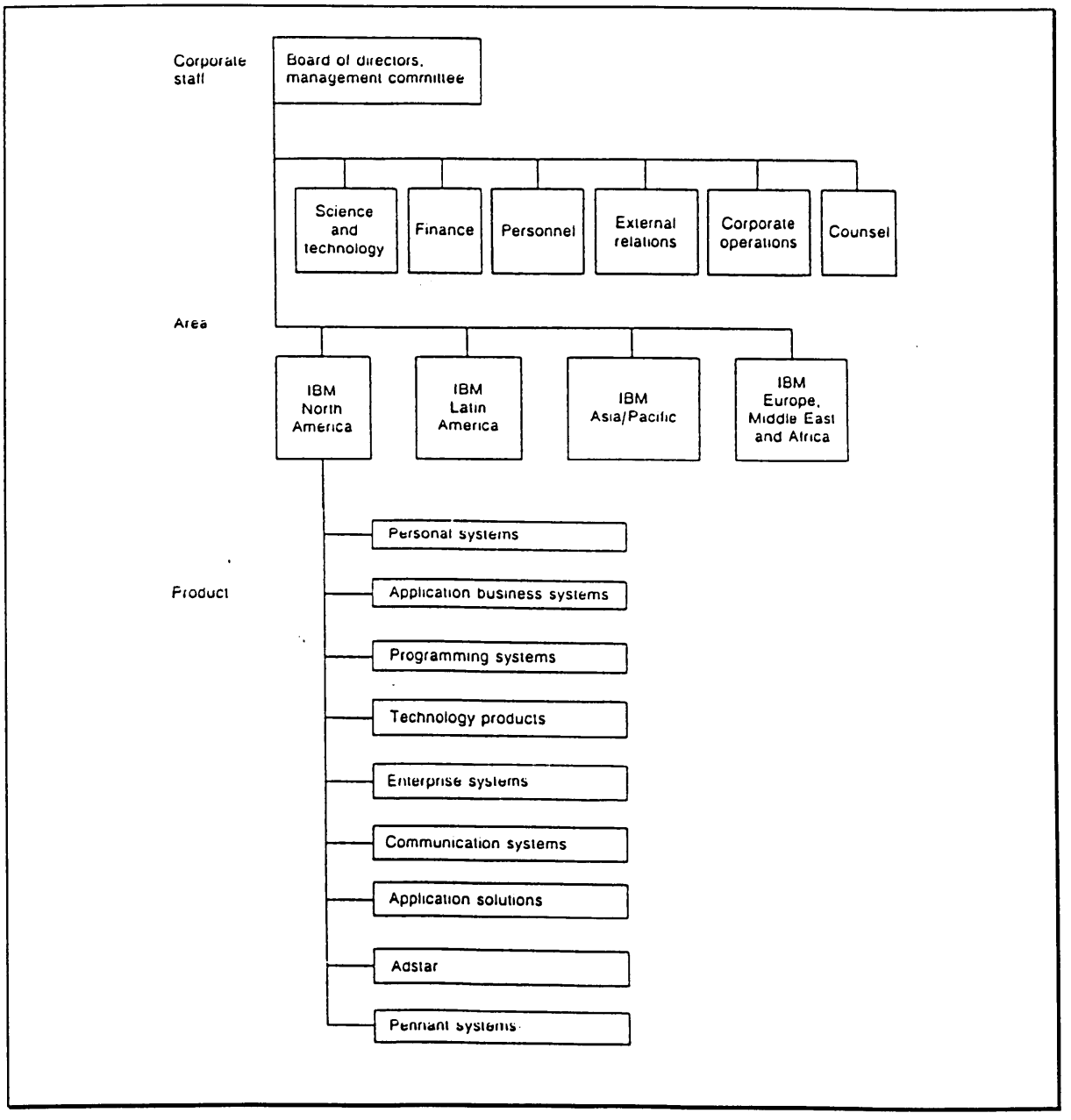


Figure 7.7 IBM corporate structure 1991
Source: (Kirkpatrick 1992 p 113, 120; cited in Humes 1993 p200)

The continental offices direct and control the activities of IBM national plants within their own sphere of influence, making decisions on production, location, employment and overall strategy. Each plant is responsible for a specific product or part. Within Europe a greater degree of responsibility has been handed over to prime operations. Thus management of business in relation to mainframes has been devolved to the German affiliate, that of mid-range computers to the Italian operation, whereas the UK has responsibility for finance and marketing.

National entities are primarily concerned with marketing, however, in those where production takes place, responsibility for administration also rests with the national body. In addition, the national firms are responsible for activities such as customer services, finance and planning, legal services and human resources. There is a considerable degree of autonomy in national plants, although the continental office may advise in relation to finance, personnel and technical matters.

The most senior management in continental operations are made up of 50% non-Americans. Similarly, around half of this senior management will be based in the US. Within the national operations it is predominantly local personnel that are employed. However, the senior managers within these plants are most often required to have two to three years experience in continental or corporate headquarters. In addition, most up and coming professionals and managers are placed in new assignments every two to three years and less commonly for five years. Commonly, mid-level, non-US executives may be transferred to corporate or regional headquarters.

IBM employed around 3,000 expatriates as of 1991, less than 1% of the overall workforce (Business International 1991 p14). Around a third of IBM's 3,000 expatriates are placed overseas with the intention of providing overseas experience. Others are primarily sent abroad for such reasons as assisting with product transfer, or to learn a particular skill. Although most high potential managers are offered a foreign posting, places are limited. One study estimates that only 35% of large US companies require international assignment as part of a career development scheme (Business International 1991 p81).

In terms of preparing employees for overseas assignments, IBM, along with Philips, could be referred to as "cross-cultural 'minimalists'" (Business International 1991 p43). Little formal training is given before assignment of home country nationals, relying on the

initiative of the host subsidiary to meet the needs of expatriates. However, IBM extends existing preparation and training to local as well as home country nationals.

Shorter term mobility derives from the use of training centres in the US, Europe and Asia, with the average employee spending approximately 12 days in training (Humes 1993 p203). All executives, including local nationals are offered basic management training on a week long course (Business International 1991 p71). Other training courses in management may last from two to six weeks.

IBM also has developed a number of collaborations with other TNCs in the computer industry, such as Apple, Motorola, Siemens and Bull, with which combined efforts are made on developing, producing and selling products. Such relationships are likely to spawn a wider set of mobility flows of both a short and longer term nature. From the available evidence it is probable the IBM does conform to the hypothesised mobility/subsidiary relationship of a product specialist.

7.4 The link between firms and mobility characteristics

This section considers the mobility implications of the different firm types identified in the previous sections. The ISLM associated with marketing satellites is most likely restrained by virtue of limited geographical markets and a relationship with the wider corporate product line that is restricted to importation.

Miniature replica subsidiaries are likely to have a higher degree of ISLM. However, total levels of movement will be low given the limited interaction with the parent. Business travel and longer movements are likely to be between related subsidiaries overseas and to be associated with attaining knowledge of developments in production techniques and marketing programmes.

A higher level of mobility is likely associated with rationalised manufacturers as contacts are required with other plants in the corporate production chain. Business travel or longer term movements will be associated with developing production techniques and integrating production of component parts with other plants. As such, this type of plant will require mobility from mainly technical and professional occupations, which most likely would take the form of business trips of between a few days and several months. However, little mobility is apt to be associated with marketing and sales activities outside the direct production chain. The latter is controlled centrally, as is R&D.

In contrast, a greater degree of overseas mobility associated with marketing and sales is probable for product specialists and strategic independents. Much of this is liable to take the form of shorter term business travel. However, intra- company mobility is apt to be more restricted than for rationalised manufacturers, especially within the highly autonomous strategic independents. A limited amount of intra-company mobility of short and longer term types is possible for product specialists, associated with attaining current knowledge on R&D, production and marketing developments.

Within all company types it is probable that some managers and professionals will be involved in training & development programmes which require longer term secondment to different components of the firm. These sorts of schemes will be more routinised in the rationalised manufacturers and the more integrated subsidiary types. However, the internationalisation of human resource management means that the development of an international cadre is also extending to marketing satellite and miniature replica subsidiaries. It is also likely that senior management and technical staff engage in short term mobility associated with the development of corporate strategy. The above, suppositions are summarised in table 7.4.

Assuming the mobility implications of corporate structures suggested above are realistic, then it is likely that the predominantly non-US miniature replica subsidiaries in activities such as food manufacturing have a low to moderate degree of ISLM. This is in terms of both international business travel and longer movements. Such movements being largely between related subsidiaries overseas and associated with attaining knowledge of developments in production characteristics and marketing programmes and in management development.

However, higher levels of mobility are liable with the predominantly US, rationalised manufacturers, product specialists and strategic independents, in activities such as electrical and mechanical engineering. Mobility within this group would conceivably entail a relatively large amount of international business travel, both within and outside the corporation, in addition to longer term movements associated with development of operations and management training.

The empirical testing of these hypothesised links between mobility type and firm type are investigated empirically subsequently. Individual firms will meet mobility needs in different ways according to their own organisational practices. Further, the particular

labour market contexts and industrial relations regimes in which subsidiaries are located will have a bearing on mobility patterns.

	Relative frequency of mobility			
	Product specialist / Strategic independent	Rationalised manufacturer	Miniature replica	Marketing satellite
Short term international mobility	High	High	Medium	Low
Longer term international mobility	High	Medium	Medium	Low

Table 7.4 Subsidiary classifications and ISLM, a hypothetical scheme
Source: author

7.5 Conclusion

Corporate structure and strategy have a significant effect on the nature of ISLM within and between companies. The nature of this relationship has been modelled and links between subsidiary type and mobility type hypothesised. A number of case studies suggest that the hypothesised links are sustainable although are likely to be influenced by corporate culture and national industrial relations and labour market conditions. The applicability of the hypothesised links require further empirical investigation.

In particular, employees of miniature replica plants, such as those within Nestlé and Johnson & Johnson, occupy a more limited spatial arena. All the same, even these firms are changing in the face pressures to internationalise operations, "That means not only moving production facilities around to benefit from the quickest brains or the cheapest hands, but also breaking down internal barriers to the free movement of people and, particularly, of ideas" (The Economist 1994b p65).

However, international mobility has a higher profile in rationalised manufacturers and product specialists such as NEC, Mitsubishi, Philips and IBM. Nonetheless, scope for mobility is not uniform within these categories. Particular corporate structures and organisational heritages influence mobility in different ways. For some, like NEC and IBM, internationalisation and mobility form a distinct part of the corporate ethos, for others, such as Philips and Mitsubishi, this emphasis is more constrained.

Yet, given the differences between firms, mobility of managers and professionals is an increasingly important part of corporate organisation. It is also more often a normal part of managerial career progression. This mobility takes the form of relatively formalised long

term secondments and assignments, as well as sometimes planned, but more often ad hoc, short term international mobility. However, case material only permits a broad idea of the sorts of skill flows and attitudes to mobility within a few parent firms that have plants in Scotland. Relatively little can be said about the scale and role of business travel. Neither can the links between different mobility types be examined or the changing balance between these as companies or individual careers change.

Boyle *et al* assert that skilled international migration will not... "'inevitably' increase as national economies become more integrated" (Boyle, Findlay, Leliévre, et al. 1994 p48). Rather, the most significant contribution to skilled international migration is seen come from major investments into greenfield sites at a great distance from the sender country. The material presented above indicates that the movement of skilled labour, associated with the integration of national economies, does indeed represent a real prospect for increased skill transfers. However, this is subject to the corporate strategy and structure of particular enterprises.

Chapter 8

Developing the economic context of Scottish international skilled labour mobility: survey results

8.1 Business travel and industrial activity

A disparity is evident between the industrial activity of the respondents' employers and the relative position of these activities in the Scottish economy. In terms of employment structure in 1991, over 80% of those working in Scotland were in services or 'other' activities, with approximately 16% in manufacturing (General Register Office for Scotland 1993). For managerial, administrative and professional occupations, a lower proportion are in manufacturing and a considerably higher proportion in service occupations. Yet, in contrast only around 52% of Scottish-based respondents sampled by the author had an employer in services or 'other' activities, as opposed to almost 48% with a manufacturing employer (figure 8.1).

Thus for Scottish-based respondents, manufacturing contributes more to international business travel than services and other activities in relative terms, despite manufacturing's limited contribution to the Scottish employment of managers and professionals. However, 'other' activities, such as agriculture, distribution and transport, are represented in international business travel at a level far below that which would be expected. It is noted that services contribute to international business travel to the degree that their role in the employment of managers and professionals might suggest.

These findings point to the different way in which firms within services, manufacturing and 'other' activities relate to organisations outside Scotland and the UK. For Scottish services, the need for short term international mobility appears in line with the relative contribution to the economy in terms of employment of managers and professionals. 'Other' activities display a much lower level of international short term skill exchange. In contrast, Scottish manufacturing requires a high degree of international business travel.

It may be suggested that regional variations in the composition of industrial activity in Scotland will cause a biasing of results within a study based in the West of Scotland. In this way it may be suspected that the role of services in international mobility is undervalued, in that many services likely to be internationalised are present in the East of

the country. However, it is noted that there are substantial business and financial services in the West of Scotland (Eurostat 1993). Keeble *et al* indicate that both Edinburgh and Glasgow are major provincial centres for business services (Keeble, Bryson and Wood 1991). In addition, the limited coverage of flight routes from the East of Scotland ensures that East coast-based persons are represented in the author's results. Some 25% of all respondents are East coast-based, with 20 out 24 Edinburgh-based respondents in service activities.

The findings above consider the distribution of skill mobility amongst different activities at one point in time. However, it may be that for manufacturing a large number of persons make a small number of trips. For services and other activities a small number of persons may make a large number of trips. When the number of trips taken by Scottish-based persons in the previous twelve months is considered, the findings reinforce the representation of different activities in the sample itself (table 8.1 & figure 8.2). Thus individuals in manufacturing make more frequent international business travel than those in services and 'other' activities, in that order. In addition, those in manufacturing make proportionately more of their short term mobility outside the UK, than those in services and other activities in that order.

The author's research findings indicate a varying contribution to Scottish international business travel *within* the broad categories of manufacturing, services and 'other' activities (figure 8.3). Within manufacturing, the largest group of respondents are from electrical and electronic engineering. This group contributed almost a quarter of all business travellers sampled. Other prominent activities within manufacturing are mechanical engineering, chemicals, other manufacturing (notably oil related activities) and food, drink and tobacco. The latter contributes a small amount to Scottish short term skilled mobility flows considering the activity's important position in the Scottish economy in terms of employment. It is noted that the first three activities all have relatively high levels of overseas ownership.

Within service activities, education, research and health related services are the greatest contributors to short term mobility amongst all persons sampled, and for Scottish-based persons alone (figure 8.4). For the latter group of respondents financial services are also notable as a contributor to mobility flows. There is a lesser influence from business

services and public administration. Overall, there is not a significant difference for service activities between Scottish-based and other persons (figure 8.4: statistical notes).

As for manufacturing, service activities show internal variation in the level of international skill transfers. The distribution of the short term mobility by Scottish-based respondents, amongst the different types of services, generally reflects the contribution of these service activities to the national employment of Scottish residents in managerial, administrative and professional occupations (figure 8.5).

If the destination of Scottish-based persons within different industrial activities is considered, the pattern generally corresponds with the expected one, i.e. with the EC as the prime destination, followed by 'other', rest of Europe and North America (figure 8.6). The significant exceptions are those persons in the 'other' activity, e.g. transport, distribution, energy, and agriculture (for the sampled group, oil production activities were predominant). This group has a relatively great connection with 'other' countries and North America, at the expense of the EC and the rest of Europe. However, numbers sampled in this category are low and so caution should be applied in considering the findings.

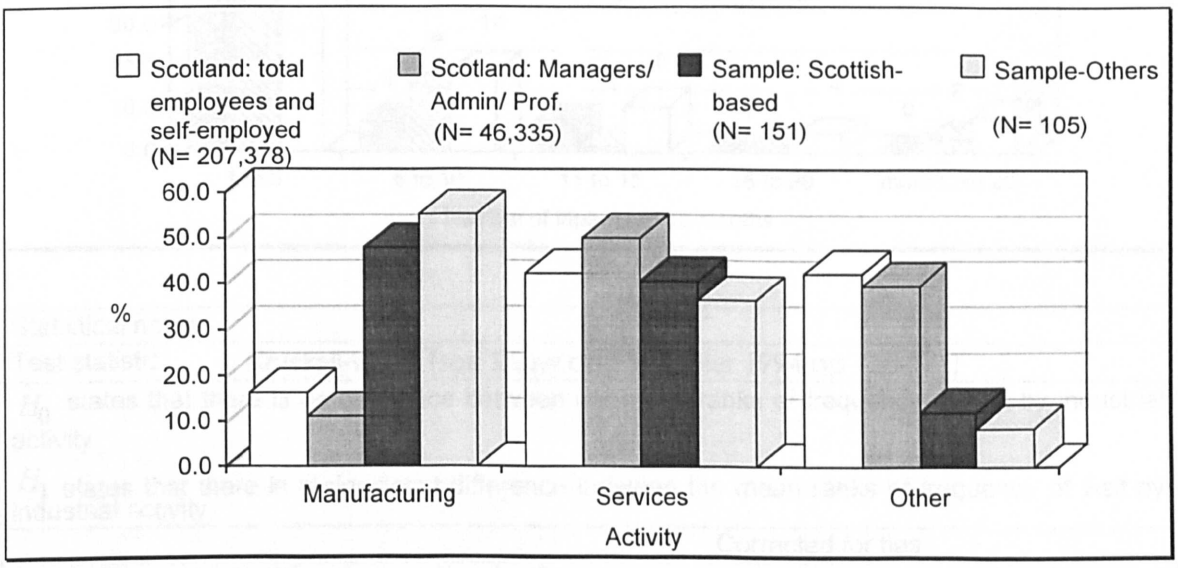
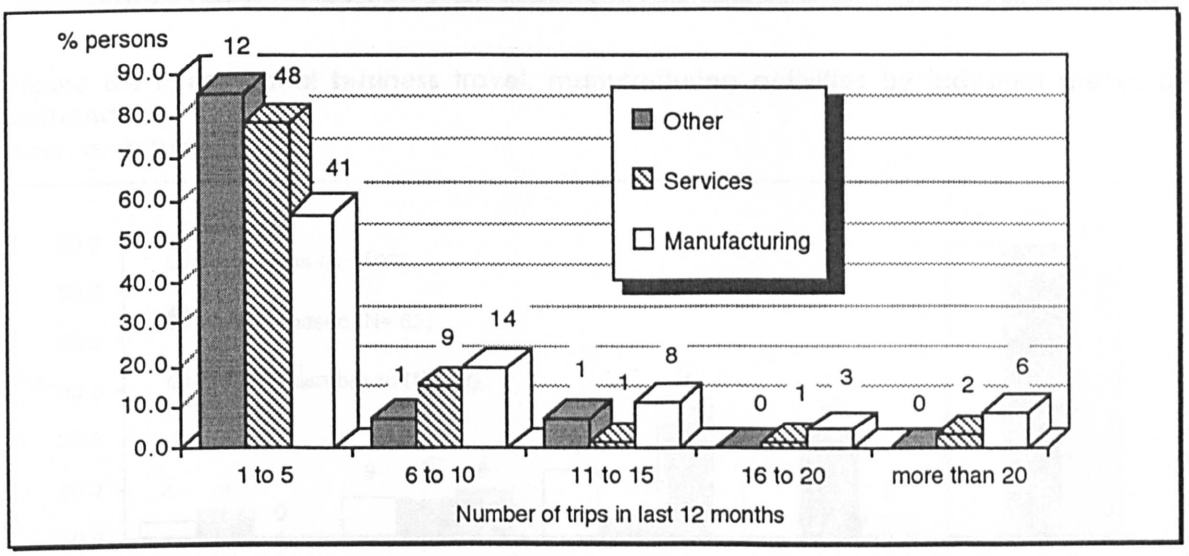


Figure 8.1 Industrial activity, Scottish census compared with sample of international business travellers
Source: author & (adapted from General Register Office for Scotland 1993 p79)

	Manufacturing		Services		Other	
Visits (number)	All	International	All	International	All	International
Mean	12.6	7.2	8.2	3.4	8.6	2.8
Median	8	4.5	4	2	5	1
Maximum	48	44	69	22	28	15
N	72	72	61	61	14	14

Table 8.1 Business visits in last twelve months, Scottish-based persons by industrial activity and destination
Source: author



Statistical notes				
Test statistic	Kruskall-Wallis (see Shaw and Wheeler 1994 pp 168-171)			
H_0 states that there is no difference between the mean ranks of frequency of visit by industrial activity				
H_1 states that there is a significant difference between the mean ranks of frequency of visit by industrial activity				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
147	10.5986	0.0050	10.8948	0.0043
H_0 rejected at 0.05 significance level				

Figure 8.2 Frequency of international business travel by industrial activity, Scottish-based persons
Source: author

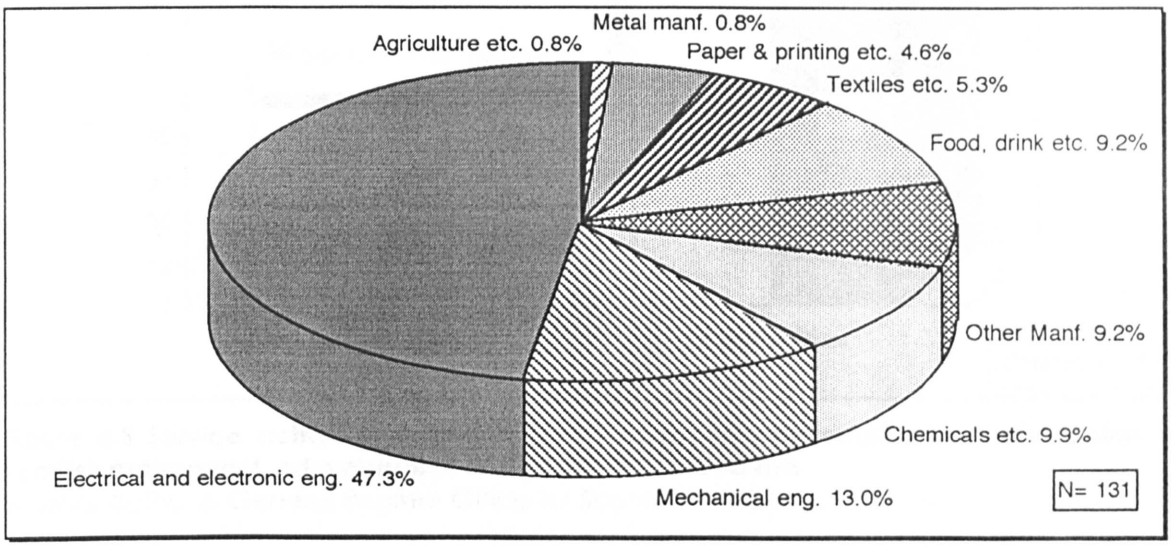
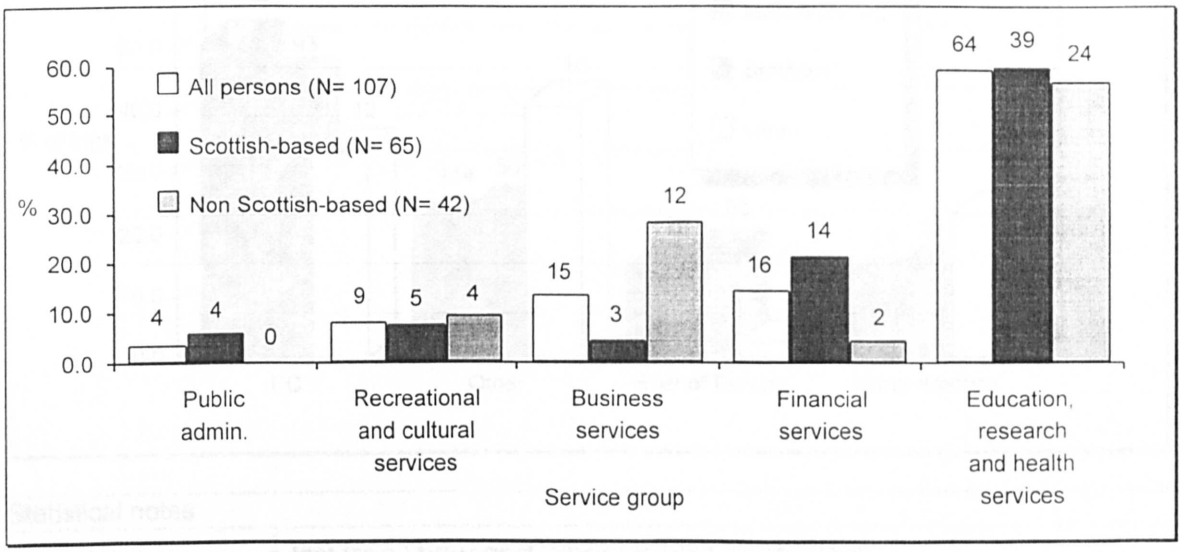


Figure 8.3 International business travel, manufacturing activities by industrial group, all respondents
Source: author



Statistical notes				
Test statistic	Mann-Whitney (see Shaw and Wheeler 1994 pp 157-162)			
H_0 states that there is no difference between the mean ranks of Scottish-based persons in service activities and other persons				
H_1 states that there is a significant difference between the mean ranks of Scottish-based persons in service activities and other persons				
			Corrected for ties	
U	W	2-tailed signif.	Z	2-tailed signif.
8.5	31.5	0.4206	-0.8381	0.4020
H_0 accepted at 0.05 significance level				

Figure 8.4 International business travel, service activities by industry group
Source: author

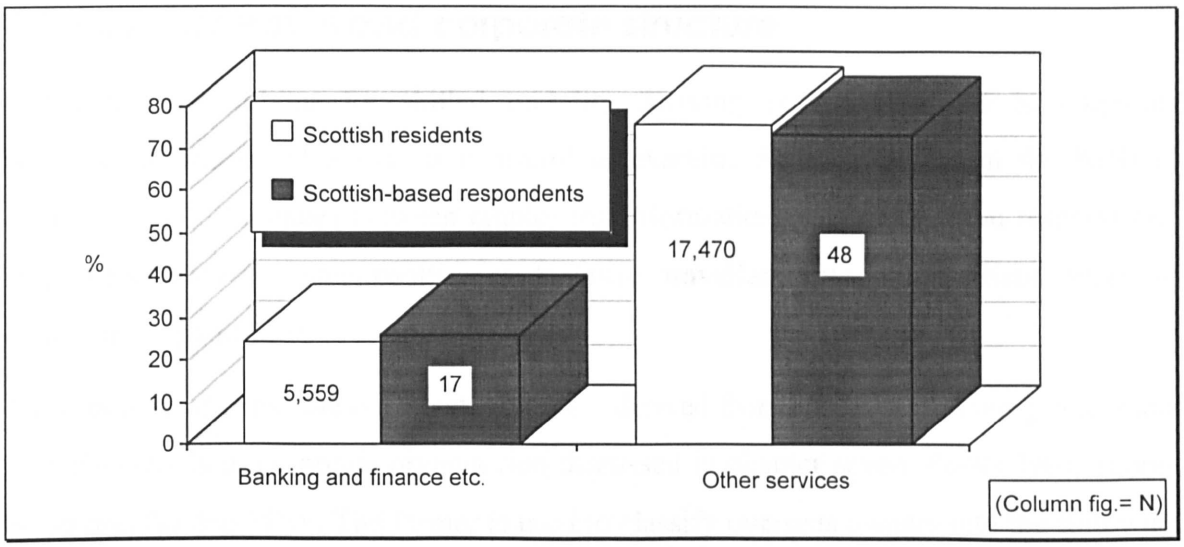
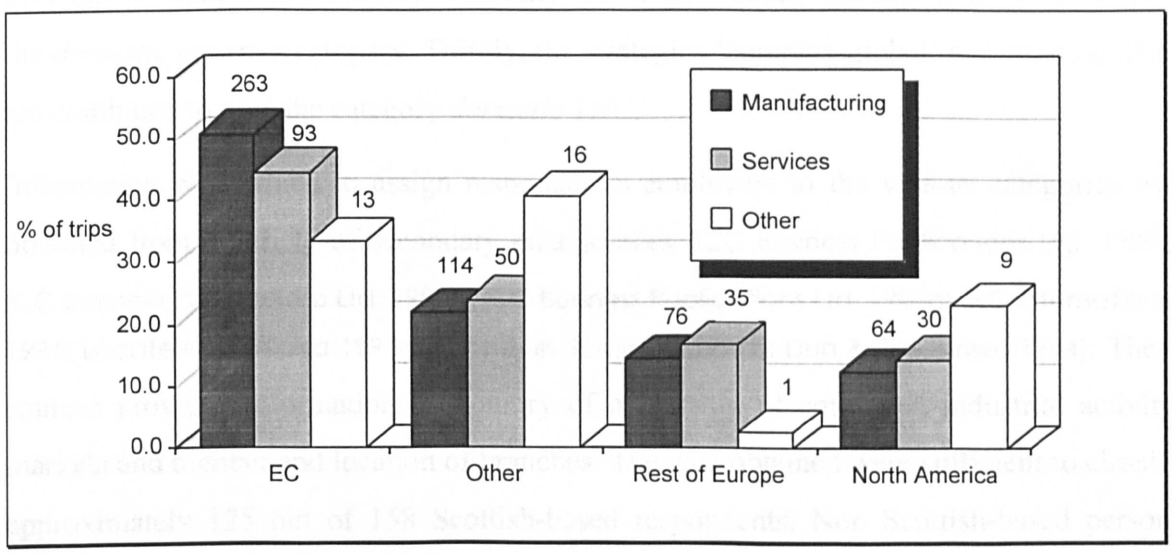


Figure 8.5 Service activities, Scottish-based respondents by employment distribution of Scottish managerial, administrative and professional residents
Source: author & General Register Office for Scotland 1993



Statistical notes			
Test statistic	χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the frequency of visits to main areas by the different industrial activities			
H_1 states there are significant differences in the frequency of visits to main areas by the different industrial activities so that they constitute different populations of business travellers			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 5.258
16.46597	6	0.01146	No cells with less than 5
H_0 rejected at 0.05 significance level			

Figure 8.6 Destination of international business travel in last 12 months, Scottish-based persons by industrial activity
Source: author

8.2 Business travel and corporate structure

Given the implications for skilled mobility deriving from differences in corporate structure, as suggested above, it is useful to examine Scottish ISLM on the basis of organisational differences between employers. Information was obtained on respondents' employers enabling categorisation of business travellers into characteristic types of employing organisation.

The typology of corporate organisation used is derived from elements of Young *et al's* and Porter's models of corporate organisation discussed in chapter seven (Porter 1986; Young, Hood and Dunlop 1990). The former is used to classify overseas owners into the following three groups: *marketing satellites*, *miniature replicas* and *rationalised manufacturers/ product specialists/ strategic independents*. The latter author is used to classify domestic owners on the basis of corporate structure. Porter's 'multi-domestic' strategy is modified to give the *domestic local* category. Secondly, the 'export-based' strategy is modified to give the *domestic exporter* category. Thirdly, the strategies 'complex-global' and 'basic-global' are combined to give the category *domestic TNC*.

Information with which to assign respondent's employers to the various categories was obtained from a variety of secondary data sources (ICC Business Publications Ltd. 1989a; ICC Business Publications Ltd. 1989b; ICC Business Publications Ltd. 1989c; ELC International 1991; Locate in Scotland 1991a; Locate in Scotland 1991b; Dun & Bradstreet 1994). These sources provided information on country of ownership of employer, industrial activity, markets and number and location of branches. The data obtained were sufficient to classify approximately 125 out of 158 Scottish-based respondents. Non Scottish-based persons were not categorised due to the difficulty in obtaining sufficient information to make an assessment of the corporate structure of the respondent's employer.

In addition, the categories 'rationalised manufacturer', 'product specialist' and 'strategic independent' are combined. Adequate information from secondary sources on the degree of autonomy in product development, research & development and marketing, was not available to consistently differentiate between these employers. Thus the approach is useful but limited in being able to determine differences in mobility patterns between employers with different corporate structures, by virtue of the need to combine different categories. The classification of companies is elaborated in appendix 8.1. This appendix indicates the

name, activity and country of ownership of each respondent's employer and the corporate structure category which has been assigned to that firm.

Domestic-owned employers are in the majority in the sample. However, the number of Scottish-owned employers is comparatively low, with proportionately greater involvement of other UK-based organisations and overseas owners (figure 8.7). These results generally support the view that overseas owners are present in activities likely to be associated to a notable degree with short term ISLM.

Business travellers working for overseas owners are predominantly involved in activities that are of a 'rationalised manufacturer/ product specialist/ strategic independent' type. From the discussion on corporate structure in chapter eight, it seems likely that relatively low amounts of short term mobility would be generated by geographically uncoordinated activities. The results suggest that few respondents are employed within marketing satellites or miniature replicas (figure 8.8).

A minority of domestic employers (Scottish and UK) are engaged heavily in exporting activities. There are also a number of Scottish-based persons working within UK-owned TNCs. However, most Scottish and UK employers belong to relatively geographically uncoordinated operations, the majority being active locally, within Scotland or the UK. Thus, the relatively large number of Scottish-based persons engaged in international business travel with mainly locally oriented employers appears self-contradictory. The nature of this travel is examined in more detail subsequently. However, the findings indicate that, even for employers with apparently relatively local concerns, there is a need for international skill mobility of some description (figure 8.9).

It is likely that closely associated types of industrial activity share common approaches to corporate strategy and structure. That this is the case is demonstrated by the large number of employers of Scottish-based persons who share a 'rationalised manufacturer/ product specialist/ strategic independent' structure with a manufacturing activity. The more internationally oriented domestic employers also tend to work in the field of manufacturing, although 'other' activities appear relatively more important in this instance.

In contrast, 'miniature replicas' and 'domestic locals' appear more strongly represented by service activities. The mainly local orientation of service activities is supported by O'Farrell *et al.* They indicate, in a study of Scottish business service firms, that 55% of

sales are generated within a forty-mile radius of the office, 41% to the rest of the UK and only 4% overseas (O'Farrell, Hitchens and Moffat 1992 p523). The findings again beg the question of why there is a substantial presence of a relatively large number of mainly Scottish-based travellers from the 'un-internationalised' service activities (figure 8.8).

Before considering this question, analysis of frequency of international business travel by corporate structure did not indicate a significant difference in number of visits within the last twelve months (figure 8.10). However, the low numbers present within some of the categories and the relatively imprecise differentiation between corporate structures may equally have obscured real differences. In this case, industrial activity is a better predictor of frequency of international business travel. Since it has been suggested that industrial activity often overlaps with corporate structure it is suggested that more detailed investigation of the relationship between corporate structure and ISLM is merited.

The remainder of the section examines differences in Scottish ISLM on the basis of industrial activity. The latter is used as a surrogate for corporate structure. This is justified on the grounds that it allows a fuller coverage of respondents, both Scottish-based and non Scottish-based, than the partial coverage available with corporate structure classifications. In addition, as suggested above, there is likely to be, in any case, a significant relationship between industrial activity and corporate structure for many employers.

International business travel is undertaken for a wide variety of reasons and, in terms of corporate organisation, to a range of functional entities. Trips may be *intra corporate* and take place to another part of the same parent organisation, such as R&D facilities, production plants, sales outlets and administrative headquarters. On the other hand visits may be inter corporate, that is, to a destination outside the immediate parent. For instance, to a business partner or sub-contractor, sales agent, customer, or for other purposes such as conferences.

A more detailed examination of the relationship between corporate organisation and Scottish ISLM indicates that for services only a limited amount of international business travel is generated by intra corporate business (i.e. between components of the same parent organisation). In contrast, manufacturing generates a high level of intra corporate travel. This contrast is particularly marked for Scottish-based respondents (figure 8.11). It is noted that the majority of trips made by respondents in manufacturing, involved people from the electrical and electronic engineering activity. Some 60% of trips involving individuals

from electrical and electronic engineering were to a destination within the same parent organisation.

Scottish service companies, being generally domestic in focus, have limited functions and activities overseas and thus little intra-corporate mobility. In contrast manufacturing firms reflect generally have a higher degree of internationalisation, especially in electronics, with a concomitant flow of corporate international business travel.

For intra corporate visits in manufacturing, there is a notable difference in the type of facility visited between Scottish and non Scottish-based persons (figure 8.12). Thus, for overseas visits by Scottish-based persons, trips to headquarters are most common. For others visiting Scotland, trips to production plants are most frequent. This pattern confirms the importance of a 'rationalised manufacturer' status for many Scottish employers. However, other aspects of the nature of Scottish business travel imply a variety of corporate strategies. In this way, marketing and R&D facilities feature as destinations for persons travelling in both directions.

Inter corporate visits by those in manufacturing indicate the importance of relatively loose associations of economic enterprises for cross-border production and trade. Thus sub-contractors are important as a destination, along with other business partners and sales agents. Findings suggest that Scottish-based persons are relatively more involved in the marketing of products as well as their production than overseas visitors to Scotland. The latter are more concerned with the operation of local facilities (figure 8.13). Thus, with mobility to an array of functional units, the character of Scottish-based short term ISLM leads to the relatively diverse geographical orientation illustrated in chapter five.

Service activities have been shown to generate relatively less international business travel than manufacturing and individuals within services have been revealed as participating in less frequent overseas visits. The relatively un-internationalised nature of services has however been questioned due to the number of persons working for 'locally' oriented firms, who nonetheless engaged in international mobility. Examination of the nature of inter corporate trips confirms the mainly local structure of these employers. There are few connections overseas as customers or sales agents. However, a number of links exist of a more indirect type, i.e., sub-contractors and business partners (figure 8.14).

The main part of overseas short term mobility in services is associated with conference activity. The results indicate that, despite the un-internationalised nature of services in terms of corporate structure, international mobility is still important in the conduct of these types of activities. However, the settings in which this takes place are more functionally disaggregated than in manufacturing. As expected, only a relatively small number of persons in services engage in intra corporate short term mobility (5 persons). In addition, only a small number of responses were gained for those in 'other' activities, which indicated a variety of intra and inter corporate destinations (14 persons).

Within Scotland international business travel is a feature more prominently associated with manufacturing than with service activities. As indicated above, although services have become increasingly dominant in terms of contribution to employment, it is within manufacturing activities that the majority of business travel is generated. This confirms the relatively internationalised nature of Scottish manufacturing in comparison with services. As such, the working environment of employees in manufacturing is represented by an extensive geographical context.

Interestingly, much of the business travel generated to and from Scotland takes place between members of the same parent organisation. This indicates that, akin to business migration, a great deal of mobility occurs in the context of individual TNCs. Such intra-corporate trips are a more common feature of manufacturing activities than of services. With the extensive international corporate linkages of many Scottish manufacturing activities, high levels of intra corporate short term mobility reflects the important position of skill mobility in the successful operation of the TNC.

The survey data indicate that by virtue of working within internationalised industries, a number of employees are obliged to engage in a high degree of short term international mobility. The increasing concentration of manufacturing within foreign owned, internationalised firms, creates a growing number of employees exposed to a geographically dispersed workplace. Such a development, especially if occurring within an ILM, would suggest a larger propensity for longer term ISLM (and also exposure to a wider external labour market).

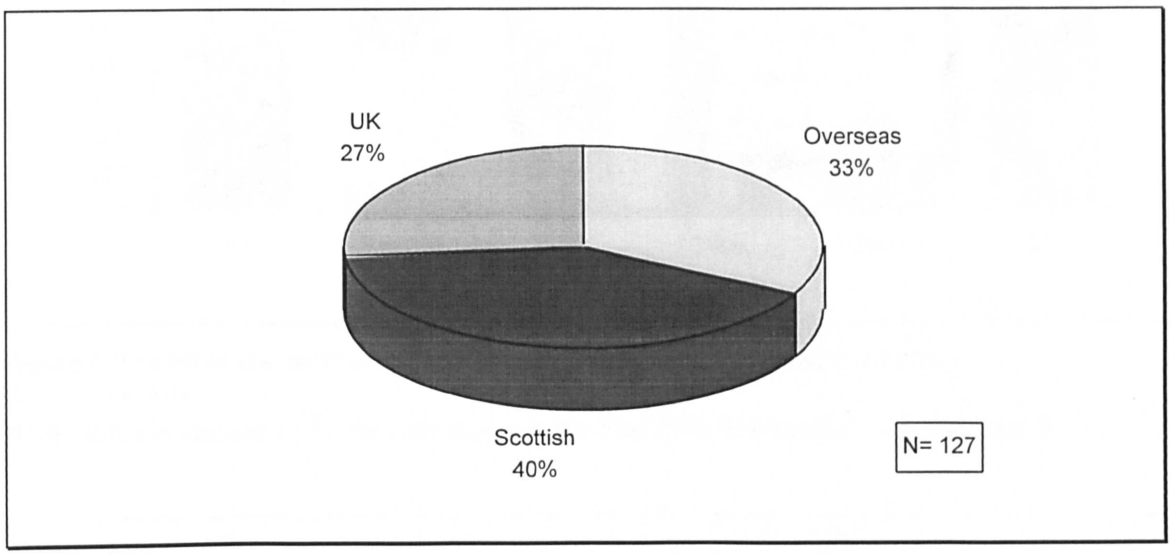


Figure 8.7 Employers of Scottish-based persons, area of ownership
Source: author

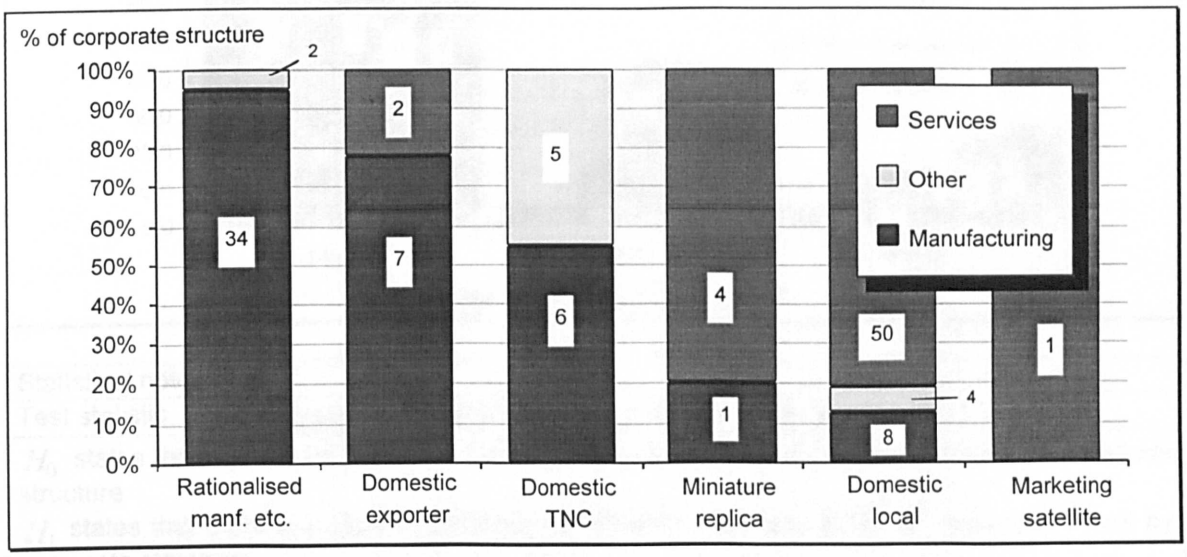


Figure 8.8 Corporate structure by industrial activity, Scottish-based persons
Source: author
Note: Suitable statistic (χ^2) not valid due to more than 20% of expected cells less than 5.

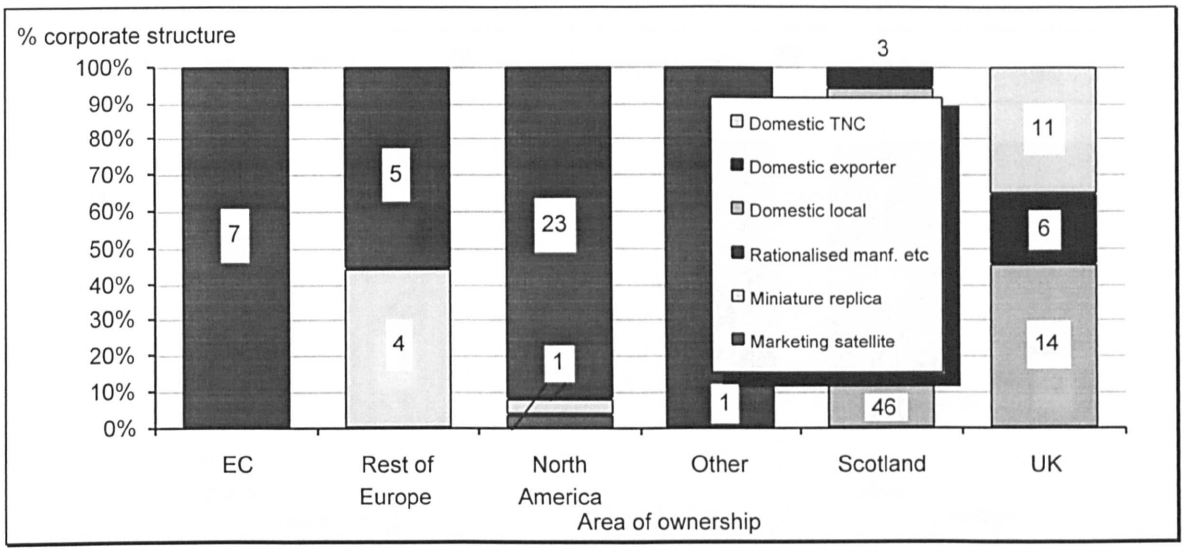
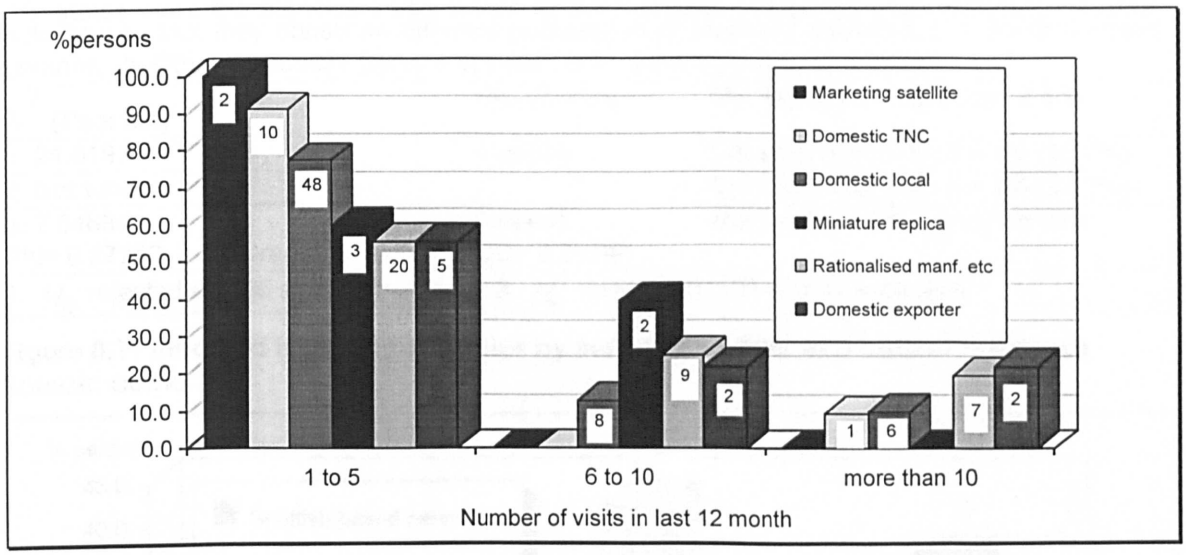
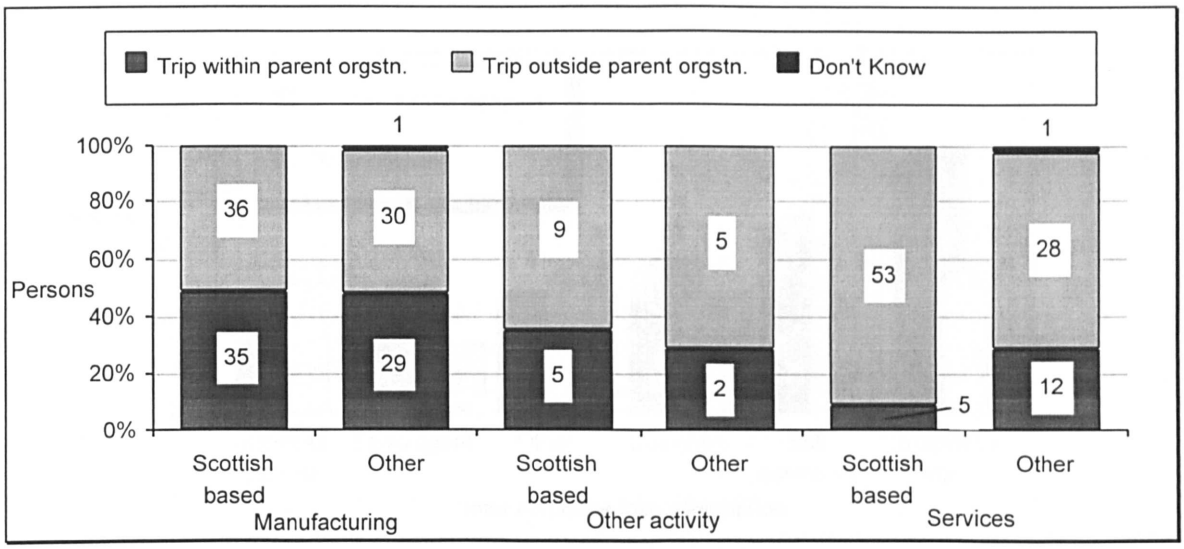


Figure 8.9 Area of ownership by corporate structure, Scottish-based persons
Source: author
Note: Suitable statistic (χ^2) not valid due to more than 20% of expected cells less than 5



Statistical notes				
Test statistic	Kruskall-Wallis (see Shaw and Wheeler 1994 pp 168-171)			
H_0 states that there is no difference between the mean ranks of frequency of visit by corporate structure H_1 states that there is a significant difference between the mean ranks of frequency of visit by corporate structure				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
124	8.6168	0.1254	8.9100	0.1127
H_0 accepted at 0.05 significance level				

Figure 8.10 Frequency of international business travel by corporate structure, Scottish-based persons
Source: author



Statistical notes	Test statistic:	χ^2 test (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the function of trip between different industrial activities (1= Scottish-based persons; 2= Other persons; 3= Service activities, Scottish-based v. Others)			
H_1 states there are significant differences in the functions of trips between different industrial activities so that they constitute different populations of business travellers (1= Scottish-based persons; 2= Other persons3= Service activities only, Scottish-based v. Others)			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 4.406
1. 24.6193	2	0.00000	Cells with less than 5 = 1/6 (16.7%)
2. Not valid	-	-	Cells with less than 5 = 2/6 (33.3%)
3. 7.54688	1	0.00601	Min expected frequency= 6.939
Phi= 0.27750	Cramer's V= 0.28	CC= 0.26740	
1. H_0 rejected at 0.05 significance level. 3. H_0 rejected at 0.05 significance level			

Figure 8.11 Intra and inter corporate trips by industrial activity and area of residence
Source: author

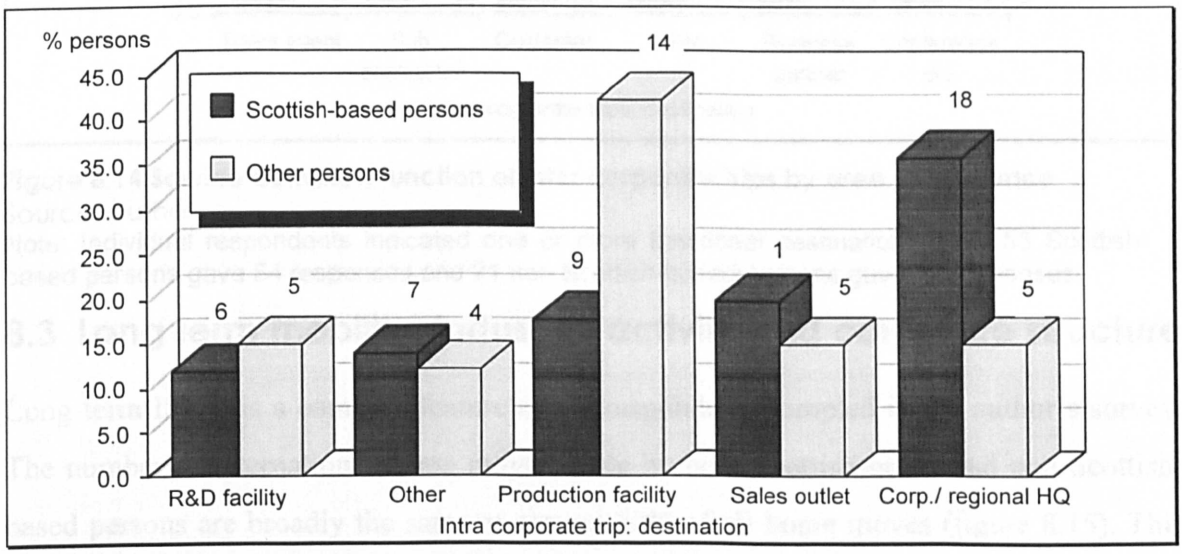


Figure 8.12 Manufacturing activities, function of intra corporate trips by area of residence
Source: author
Note: Individual respondents indicated one or more functional destinations, thus 33 Scottish-based persons gave 50 responses and 26 non Scottish-based persons gave 33 responses.

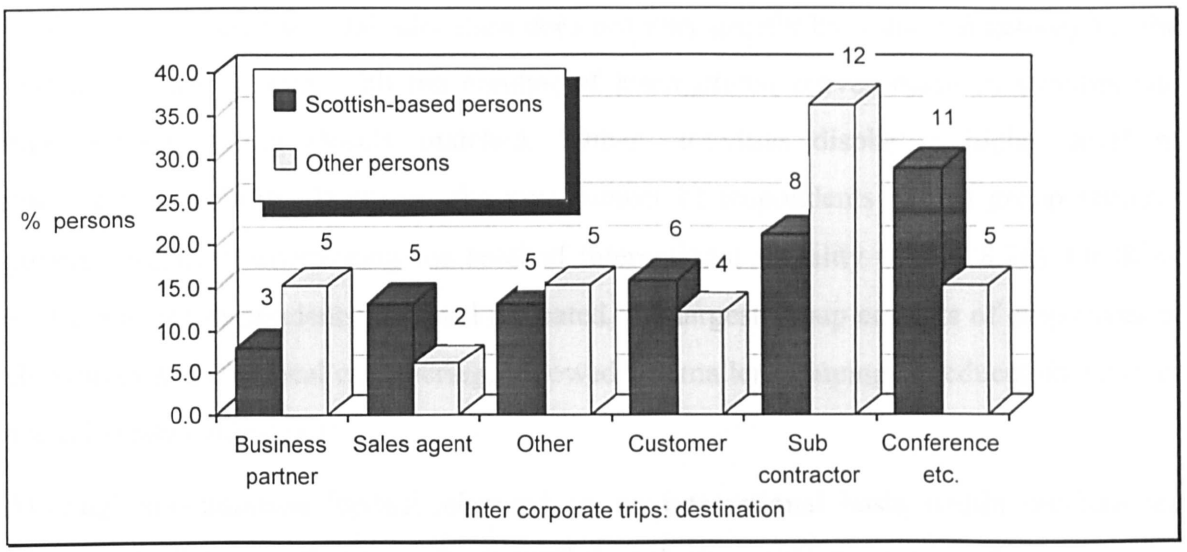


Figure 8.13 Manufacturing activities, function of inter corporate trips by area of residence
Source: author
Note: Individual respondents indicated one or more functional destinations, thus 35 Scottish-based persons gave 38 responses and 28 non Scottish-based persons gave 33 responses.

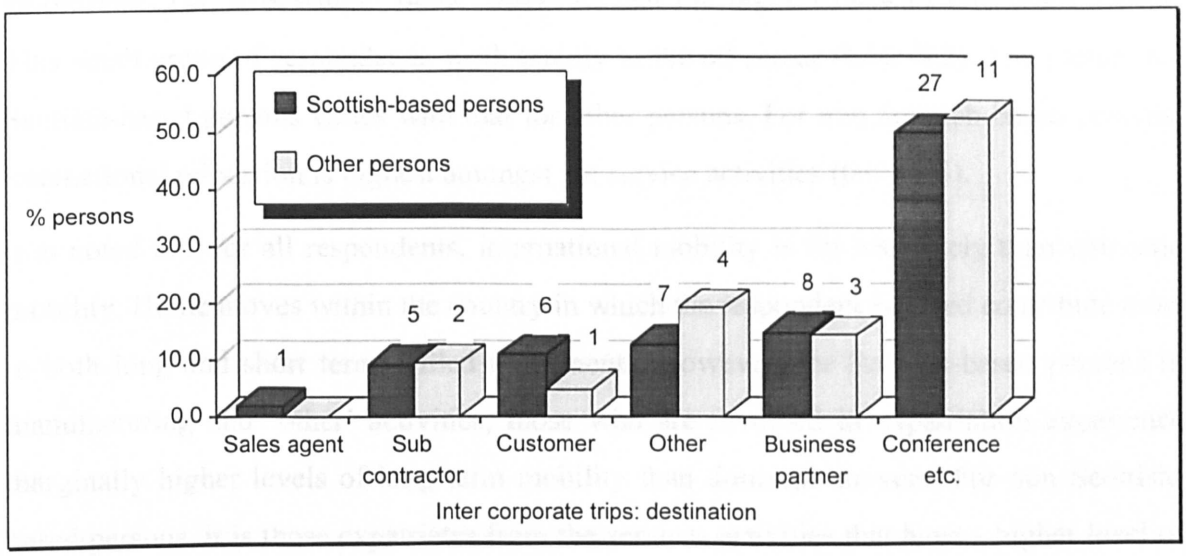


Figure 8.14 Service activities, function of inter corporate trips by area of residence
Source: author
Note: Individual respondents indicated one or more functional destinations, thus 53 Scottish-based persons gave 54 responses and 21 non Scottish-based persons gave 21 responses.

8.3 Long term mobility, industrial activity and corporate structure

Long term ISLM is a common feature of the respondents sampled in the author's survey. The number of international home moves made by both Scottish-based and non Scottish-based persons are broadly the same at around 30% of all home moves (figure 8.15). This section considers the extent to which long term mobility varies with the industrial activity of the individual, industrial activity serving as a surrogate measure of corporate structure.

Participation in international relocation does not vary greatly by industrial activity for the majority of the sample, with the number of international moves made in services and manufacturing being closely matched. 'Other' activities display a higher level of international mobility. However, the low number of respondents in this group requires greater caution in interpreting the level of international mobility (figure 8.16). Of those Scottish-based respondents who had relocated, the largest group consists of employees in electronics and electrical engineering, followed by smaller groupings in education services and oil-related industries.

Although the numbers having relocated on an international basis within services are comparable with manufacturing, for Scottish-based persons the frequency of relocation per individual is somewhat less in service activities. Thus the more internationalised nature of manufacturing reveals itself in a higher level of long term international mobility for employees. Yet, it is within 'other' activities that the highest rates of relocation appear. This small group of respondents, work mainly in the oil sector (table 8.2). The picture for Scottish-based persons varies with that for other persons. For non Scottish-based persons, international relocation is highest amongst the service activities (table 8.3).

It is noted that for all respondents, international mobility is far less likely than domestic mobility. Home moves within the country in which the respondent is based contribute most to both long and short term skilled movements. However, for Scottish-based persons in manufacturing and 'other' activities, those who are involved in expatriation experience marginally higher levels of long term mobility than domestic movers. For non Scottish-based persons, it is those expatriates from the services activities that have a higher level of home mobility than their domestic counterparts (tables 8.2 & 8.3).

Overall there is little significant difference apparent in the geographical orientation of long term mobility for Scottish-based persons. However, it is notable that those in services have a high proportion of relocation on an axis running between Scotland and the rest of the UK, mainly the South East of England. Such a pattern corresponds with the greater domestic orientation of services activities and the concentration of many administrative functions of these activities in the South East. In addition, the findings may reflect the role of the South East as an *escalator region*, absorbing upwardly mobile young adults from outside the region, who subsequently migrate out at a later career stage (Fielding 1992a). In contrast, this feature is less noticeable in manufacturing and other activities (figure 8.17).

For Scottish-based persons in manufacturing, relocation within Scotland and expatriation to or from North America is relatively prominent. The latter reflects the influence of US ownership in electronics and mechanical engineering, a sector strongly represented in the sample. Respondents in 'other' activities, mainly oil, have a more geographically diverse history of long term moves. The latter group's greater degree of operation outside the EC or North America points to possible differences in the qualitative nature of expatriations for these persons. That is, this group of persons may have more 'difficult' overseas assignments in terms of mastering cultural and social diversity.

The above statement on the international relocations of those in 'other' activities assumes that most of these moves are made as corporate relocations. Indeed, most international relocations occur with an employer rather than to take up a new position with a different employer (figure 8.18). In labour market terms most international moves are made via the *internal labour market*, although a sizeable number are made via recruitment from the *external labour market*. This is as expected, given the restricted degree to which employers will look overseas for recruits.

But at the same time the results confirm the findings of earlier studies that highlight the importance of other channels for Scottish managerial and professional migration (Findlay and Garrick 1990; Garrick 1991). A number of respondents would fit with Salt and Ford's observation of an increasing demand for the skills of "quasi-independent professional and technical workers, many of them consultants" (Salt and Ford 1993p295-296). In contrast, the external labour market has a wider role within the domestic setting. Overall, there is little difference between industrial activities in the labour market context of relocation, although in this case, restricted respondent cases inhibit accurate distinctions (figures 8.19 & 8.20).

The findings indicate that there is a high incidence of relocation in particular activities, in particular electrical and electronic engineering, education services and oil. In addition, the electronics and electrical engineering sector showed the largest group of individuals experiencing the most frequent business travel. A quarter of the individuals in this sector travelled abroad between ten and thirty times in the last year. Thus, for this group in particular, there is a high correspondence between business travel and business migration.

If concurrent mobility by individuals is examined, rather than at an aggregate level, a marked distinction in the patterns of mobility appears between main industrial activities

(figures 8.21 to 8.23). Generally, mobility is more restricted within services than manufacturing, the latter having more frequent relocation and business travel. However, for both groups a curvilinear pattern persists, with moderate levels of relocation and mobility common for the majority and high levels of either relocation or travel existing the expense of the other. No relationship is visible in the 'other' activities, although the results reflect a small sub-group.

Given the data presented above and in the previous chapters, it is possible to make a crude estimate of the cost of corporate transfers for Scottish industry. In 1991 there were 64,569 persons in the managerial, professional and associate professional occupations in Scotland (General Register Office for Scotland 1993 p79). If the proportion of persons within the research sample population, who have made an international move in the last ten years, is applied to 64,569, a figure of 8,018 is gained (19 out of 153 Scottish-based persons sampled).

From survey findings it is estimated that around 53% of these are corporate transfers (i.e. moves were made with an employer). This results in an estimated level of 4,250 Scottish resident managers and professionals who have made at least one international corporate move within the last ten years. That some 16% of Scottish-based international movers, within the author's survey, had made three international moves within the last ten years, may suggest a higher level of corporate transfer activity.

Findlay and Garrick's study of unpublished International Passenger Survey data indicate 37,000 migrants (of all occupations) to or from Scotland in 1986 (Findlay and Garrick 1990 p81). In addition, Findlay and Garrick indicate that 27.2% of immigrants are transients (defined as those migrants returning to UK in 1986 who last departed from UK in 1983, 1984 or 1985). If it is assumed that transient migrants are predominantly professional and managerial, and that an approximately similar magnitude of emigrants are transient, then it can be estimated that 1986 saw the migration of 10,064 managers and professionals to or from Scotland. If it is again assumed that around 53% of these are corporate transfers, then a higher level of 5,334 international corporate moves can be derived from Findlay and Garrick's work. These persons can be assumed to have made at least one international move within the previous four years.

It is further assumed that these corporate transfers are of approximately three years duration, as suggested by the research findings and supported by prior literature (e.g.

Organization Resource Counselors 1991). As indicated in chapter two, Salt *et al* estimate a typical net annual overseas cost for corporate transferees of £58,500, giving a three year net cost of £175,500 (Salt, Mervin and Shortland 1993). Applying these expatriation costs to the author's calculated number of Scottish resident corporate transferees, the ten year cost of Scottish international corporate transfers is £0.75 thousand million. The annual cost is estimated at £75 million. If the expatriation costs are applied to estimates based on Findlay and Garrick's figures, then an annual cost of £234 million for Scottish international corporate transfers is gained.

Findlay and Garrick's 1986 figures may overestimate current corporate mobility in that they noted a downward trend in the level of migration from Scotland (Findlay and Garrick 1990). In addition, it is possible that the period 1983-86, one of extensive employment decline in Scottish manufacturing, saw a lower proportion of corporate transfers relative to external labour market international mobility. In addition, it is likely that both figures are overestimates in that the overseas costs referred to assume a full range of relocation service provision. This is unlikely to be the case for a large proportion of expatriates, as research material indicates in the following chapter.

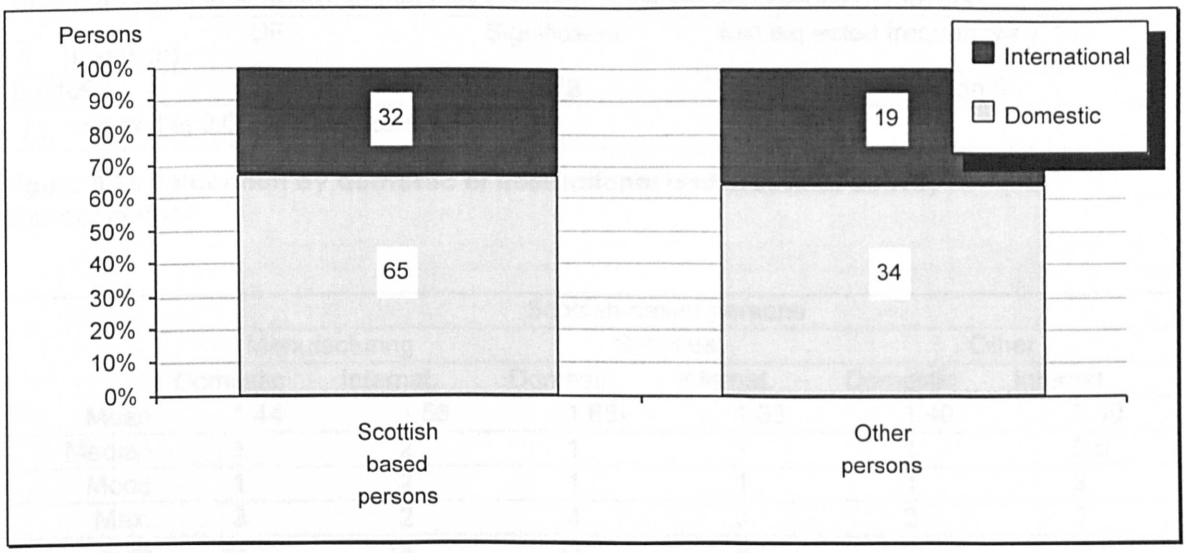
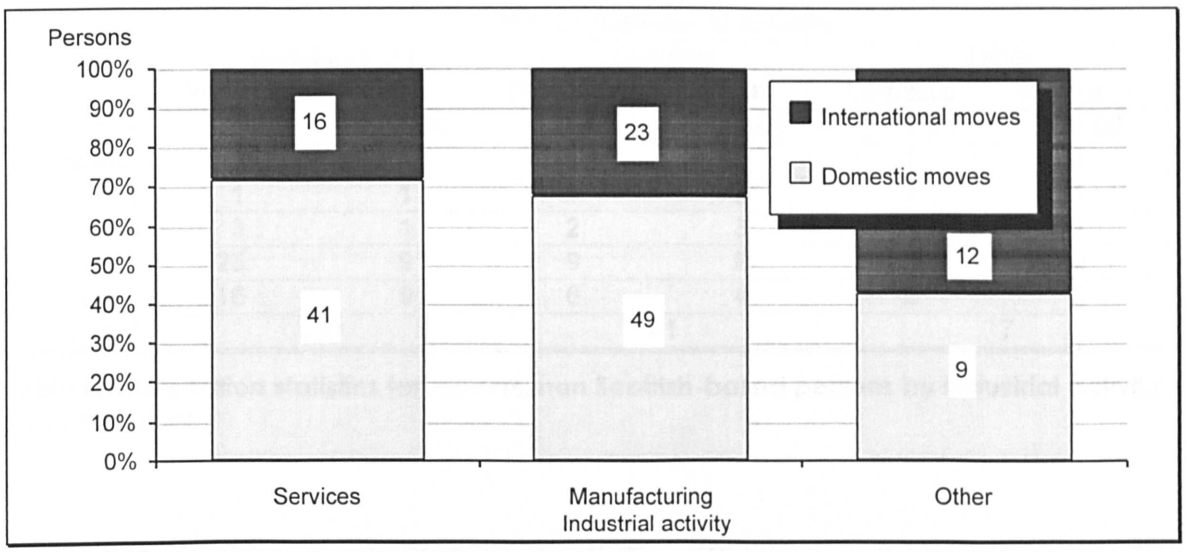


Figure 8.15 Relocation by destination and area of residence
Source: author



Statistical notes			
Test statistic	χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the level of international relocation between the different industrial activities			
H_1 states there are significant differences in the level of international relocation between the different industrial activities so that they constitute different populations of movers			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 7.140
6.04097	2	0.04878	No cells with less than 5
H_0 rejected at 0.05 significance level			

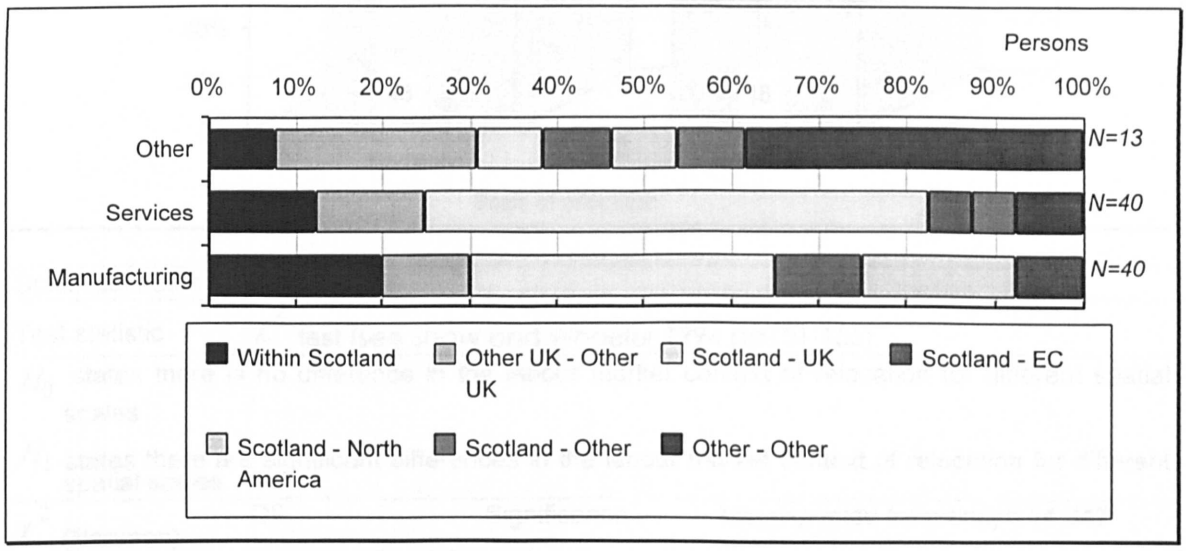
Figure 8.16 Relocation by domestic or international and industrial activity
Source: author

	Scottish-based persons					
	Manufacturing		Services		Other	
	Domestic	Internat.	Domestic	Internat.	Domestic	Internat.
Mean	1.44	1.56	1.68	1.33	1.40	2.50
Median	1	2	1	1	1	2.5
Mode	1	2	1	1	1	3
Max.	3	2	4	3	2	3
Sum	26	14	32	8	7	10
Count	18	9	19	6	5	4
Total N	71		58		14	

Table 8.2 Relocation statistics for movers, Scottish-based persons by industrial activity
Source: author

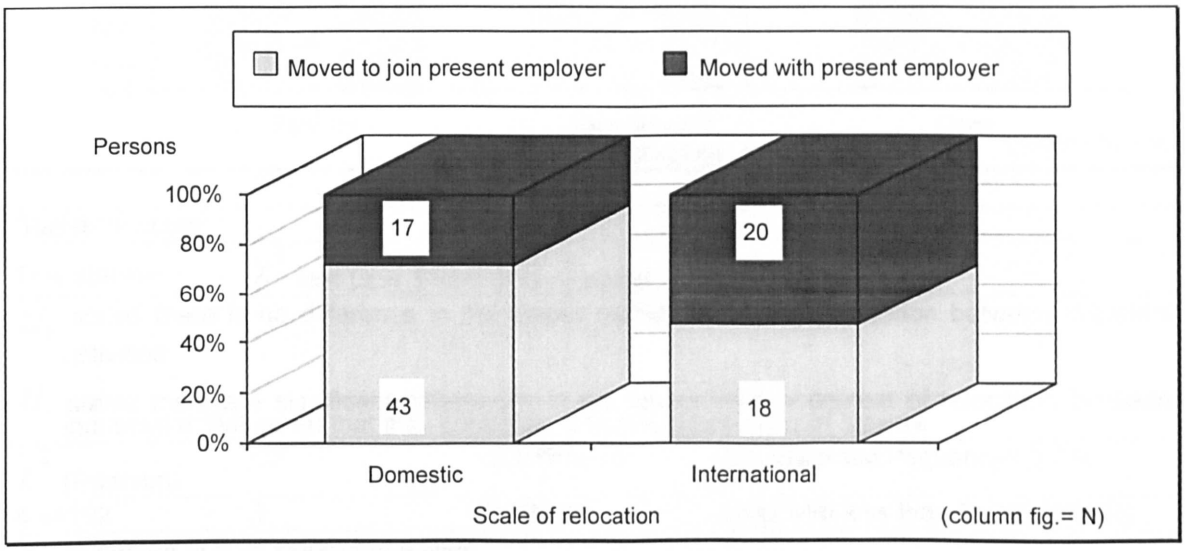
	Non Scottish-based persons					
	Manufacturing		Services		Other	
	Domestic	Internat.	Domestic	Internat.	Domestic	Internat.
Mean	1.44	1.00	1.50	2.00	1.00	1.00
Median	1	1	1.5	2	1	1
Mode	1	1	1	2	1	1
Max.	3	1	2	3	1	1
Sum	23	9	9	8	2	2
Count	16	9	6	4	2	2
Total N	60		41		7	

Table 8.3 Relocation statistics for movers, non Scottish-based persons by industrial activity
Source: author



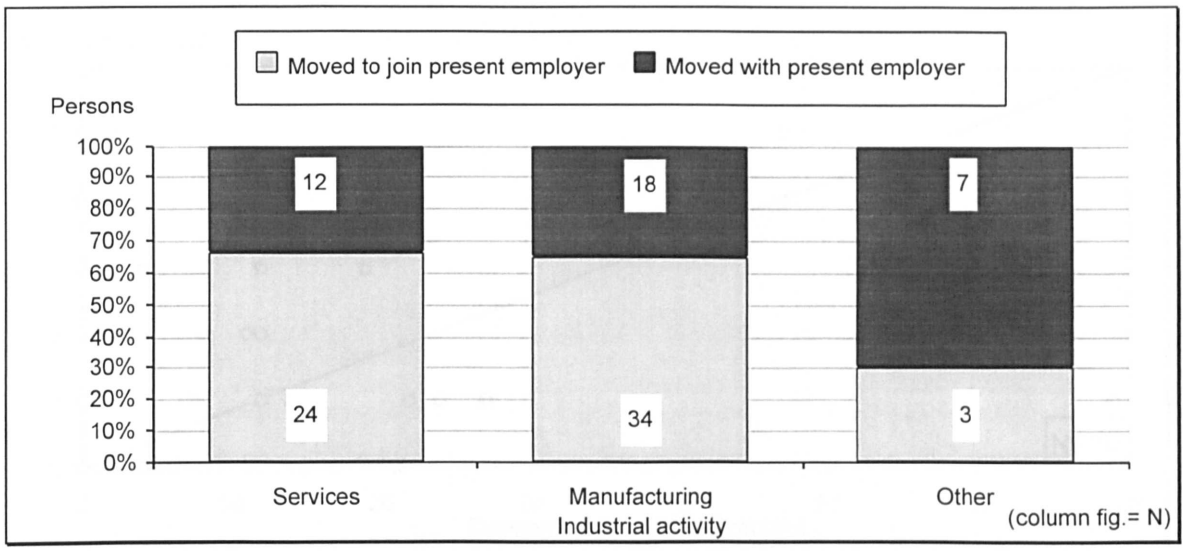
Statistical notes			
Test statistic	χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the geographical orientation of relocation between different industrial activities			
H_1 states there are significant differences in the geographical orientation of relocation between different industrial activities, so they constitute different populations of movers			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 10.244
4.47641	2	0.10665	No cells with less than 5
H_0 accepted at 0.05 significance level			

Figure 8.17 Geographical orientation of relocation by industrial activity, Scottish-based persons
Source: author



Statistical notes			
Test statistic	χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the labour market context of relocation for different spatial scales			
H_1 states there are significant differences in the labour market context of relocation for different spatial scales			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 14.347
5.84493	1	0.01562	No cells with less than 5
Phi = 0.24422	Cramer's V = 0.24422		Correlation coefficient = 0.23724
H_0 rejected at 0.05 significance level			

Figure 8.18 Labour market context of relocation by spatial scale of relocation, all persons
Source: author



Statistical notes			
Test statistic	χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the labour market context of relocation between industrial activities			
H_1 states there are significant differences in the labour market context of relocation between industrial activities, so that they constitute different populations of movers			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 3.776
4.94192	2	0.08450	Cells with less than 5= 1/6 (16.7%)
H_0 accepted at 0.05 significance level			

Figure 8.19 Labour market context of relocation by industrial activity, all persons
Source: author

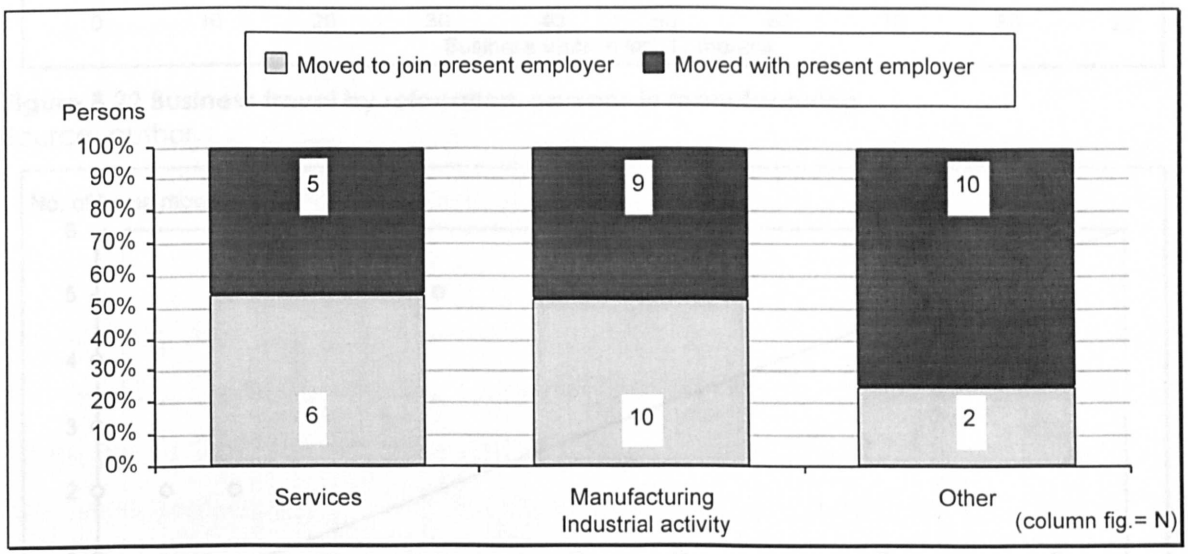


Figure 8.20 Labour market context of international relocation by industrial activity, all persons
Source: author
Note: χ^2 test not valid

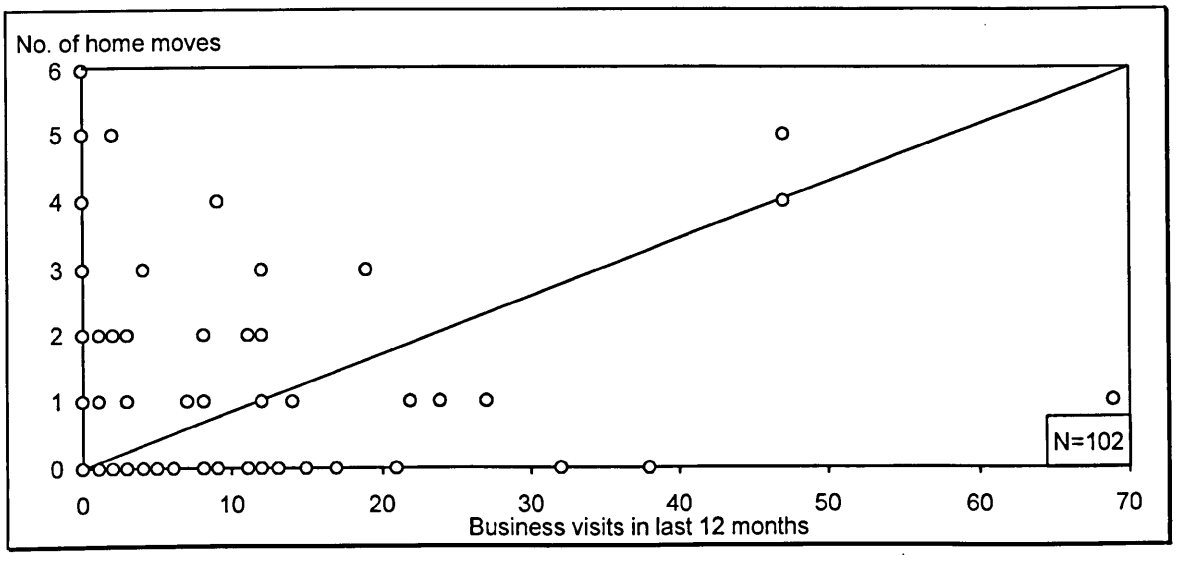


Figure 8.21 Business travel by relocation, persons in services
Source: author

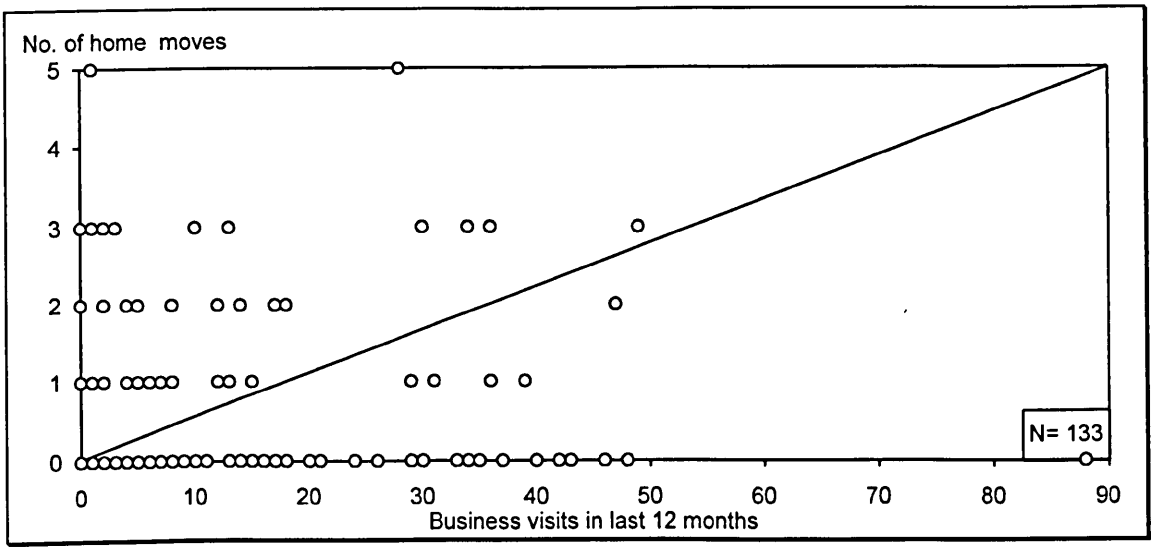


Figure 8.22 Business travel by relocation, persons in manufacturing
Source: author

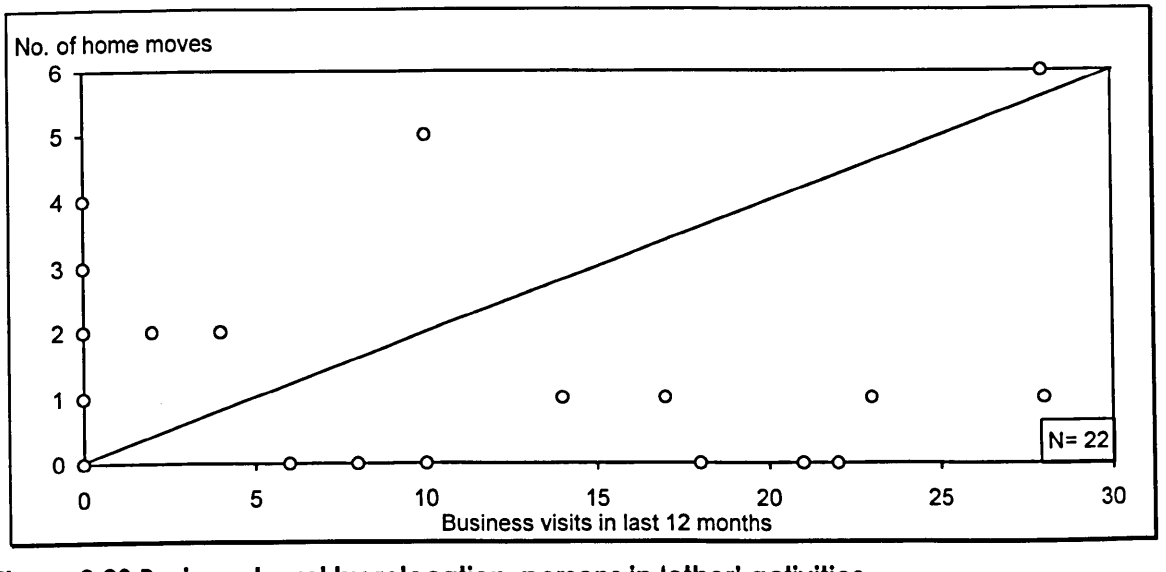


Figure 8.23 Business travel by relocation, persons in 'other' activities
Source: author

8.4 The influence of occupation on mobility

Thus far it has been assumed that the economic context of skilled labour influences mobility primarily in relation to the dimensions of industrial activity and corporate structure and strategy. However, individual occupations may be subject to higher levels of ISLM than others. In this way mobility patterns may be explained partly due to the type of job of the mover as well as the type of organisation in which the individual is employed.

Within the population sampled certain types of job were found to be synonymous with particular industrial sectors. Thus health and teaching professionals worked exclusively within services. Other occupations occur predominantly within manufacturing, i.e. specialist management posts. However, most managerial and professional occupations are found across industrial activities (figure 8.24).

If manufacturing is considered first of all, it is found that there is little difference in the level of short term mobility amongst the different occupations. This is the case for all business travel and for international travel alone (tables 8.4 & 8.5). If longer term relocation is considered, technical, business and financial professionals tend to have a higher level of mobility than those in management and administrative positions and other professional and associate professional jobs. However, this is not evident to a marked degree (table 8.6).

When international relocation is singled out, longer term mobility remains most prevalent with the technical professions, who are accompanied by managers and administrators, ahead of the other occupations. The business and financial professionals appear to have relatively restricted longer term international mobility, although the differences between the groups are not marked (table 8.7).

For services, there is a greater contrast in mobility between occupations. Those in health and teaching professions have a greater degree of short term mobility (domestic and international) than those in management and administration and other professional and associated professional groups. The differences between groups are less notable for international business travel alone however. Business and finance professionals, along with managers and administrators, are more involved in international mobility than the other main service occupations. This implies the more domesticated nature of the activities associated with health and education professionals (tables 8.8 & 8.9). The longer term

mobility of employees in services does not indicate a great difference in the level of relocation between the main occupations (tables 8.10 & 8.11)

If those occupations that are dispersed across industrial activities are inspected (i.e. managers and administrators and business and financial professionals), managers and administrators in manufacturing display greater short term international mobility than those in services, as do business and finance professionals. However, with regard to longer term mobility, the relative internationalisation of manufacturing does not lead to a great difference in the level of international relocation for occupations occurring in the different sectors.

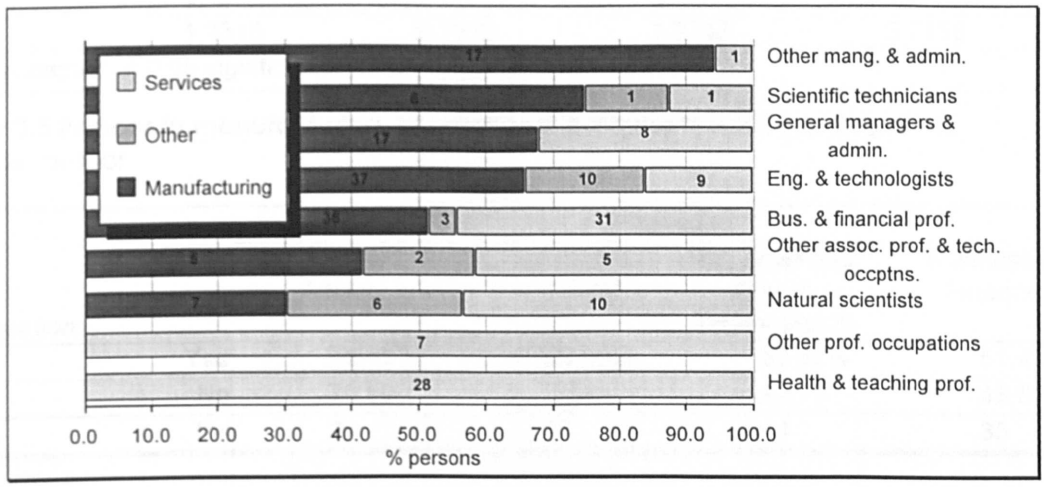


Figure 8.24 Occupation by industrial activity, all persons
Source: author

	Occupation			
No. of business visits	Management. & Admin.	Other Prof. & assoc. Prof.	Nat. scientists, Eng. & Technologists	Business & Finance
1-5	47.06%	58.82%	45.45%	52.78%
6-10	8.82	11.76	11.36	5.56
11-20	41.18	29.41	43.18	41.67
more than 20	2.94	0.00	0.00	0.00
N=	34	17	44	36

Statistical notes	Test statistic: Kruskall-Wallis (see Shaw and Wheeler 1994 pp 168-171)			
H_0 states that there is no difference between the mean ranks of frequency of visit by occupation				
H_1 states that there is a significant difference between the mean ranks of frequency of visit by occupation				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
131	0.8235	0.8438	0.8389	0.8401
H_0 accepted at 0.05 significance level				

Table 8.4 Persons in manufacturing, domestic and international business travel by occupation
Source: author

No. international business visits	*Occupation*			
	Management. & Admin.	Other Prof. & assoc. Prof.	Nat. scientists, Eng. & Technologists	Business & Finance
1-5	64.71%	82.35%	59.09%	58.33%
6-10	14.71	5.88	18.18	8.33
more than 10	20.59	11.76	22.73	33.33
N=	34	17	44	36

Statistical notes	Kruskall-Wallis (see Shaw and Wheeler 1994 pp 168-171)			
H_0 states that there is no difference between the mean ranks of frequency of visit by occupation H_1 states that there is a significant difference between the mean ranks of frequency of visit by occupation				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
131	1.3318	0.7216	1.3742	0.7116
H_0 accepted at 0.05 significance level				

Table 8.5 Persons in manufacturing, international business travel by occupation
Source: author

Relocation	*Occupation*			
	Management. & Admin.	Other Prof. & assoc. Prof.	Nat. scientists, Eng. & Technologists	Business & Finance
Yes	29.41%	23.53%	52.27%	51.43%
No	70.59	76.47	47.73	48.57
N=	34	17	44	35

Statistical notes	Test statistic: χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the level of relocation between the different occupations H_1 states there are significant differences in the level of relocation between the different occupations so that they constitute different populations of movers			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 7.192
7.75553	3	0.05134	No cells with less than 5
H_0 accepted at 0.05 significance level			

Table 8.6 Persons in manufacturing, relocation by occupation
Source: author

International relocation	*Occupation*			
	Management. & Admin.	Other Prof. & assoc. Prof.	Nat. scientists, Eng. & Technologists	Business & Finance
No	85.29%	94.12%	79.55%	91.67%
Yes	14.71	5.88	20.45	8.33
N=	34	17	44	36

Table 8.7 Persons in manufacturing, international relocation by occupation
Source: author. Note: χ^2 test not valid

No. business visits		*Occupation* Health & teaching	Business and Finance	Management. & Admin.	Other Prof. & assoc. Prof.
	1-5	67.86%	38.71%	88.89%	65.63%
	6-10	3.57	9.68	0.00	21.88
	11-19	28.57	48.39	11.11	1.25
	20+	0.00	3.23	0.00	0.00
	N=	28	31	9	32

Statistical notes	Test statistic: Kruskall-Wallis (see Shaw and Wheeler 1994 pp 168-171)			
H_0 states that there is no difference between the mean ranks of frequency of visit by occupation H_1 states that there is a significant difference between the mean ranks of frequency of visit by occupation				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
100	9.0212	0.0290	11.8577	0.0079
H_0 rejected at 0.05 significance level				

Table 8.8 Persons in services, domestic and international business travel by occupation
Source: author

No. international business visits		*Occupation* Health & Teaching	Business & Finance	Management. & Admin.	Other Prof. & assoc. Prof.
	1-5	78.57%	64.52%	88.89%	90.63%
	6-10	17.86	16.13	0.00	6.25
	11+	3.57	19.35	11.11	3.13
	N=	28	31	9	32

Statistical notes	Test statistic: Kruskall-Wallis (see Shaw and Wheeler 1994 pp 168-171)			
H_0 states that there is no difference between the mean ranks of frequency of visit by occupation H_1 states that there is a significant difference between the mean ranks of frequency of visit by occupation				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
100	3.6976	0.2960	7.3284	0.0621
H_0 accepted at 0.05 significance level				

Table 8.9 Persons in services, international business travel by occupation
Source: author

Relocation		*Occupation*			
		Health & Teaching	Business & Finance	Management. & Admin.	Other Prof. & assoc. Prof.
	Yes	32.14%	32.26%	33.33%	46.88%
	No	67.86	67.74	66.67	53.13
	N=	28	31	9	32

Statistical notes	Test statistic: χ^2 test (see Shaw and Wheeler 1994 pp151-155)		
H_0 states there is no difference in the level of relocation between the different occupations H_1 states there are significant differences in the level of relocation between the different occupations so that they constitute different populations of movers			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 3.330
1.97303	3	0.57802	Cells with less than 5= 1/8 (12.5%)
H_0 accepted at 0.05 significance level			

Table 8.10 Persons in services, relocation by occupation
Source: author

International relocation		*Occupation*			
		Health & Teaching	Business & Finance	Management. & Admin.	Other Prof. & assoc. Prof.
	No	92.86%	87.1%	88.89%	90.63%
	Yes	7.14	12.9	11.11	9.38
	N=	28	31	9	32

Table 8.11 Persons in services, international relocation by occupation
Source: author. Note: χ^2 test not valid

8.5 Conclusion

Scottish ISLM occurs against a background of economic, technological and organisational change. Variable evolution of enhanced geographical flexibility of production, and the implications of this for the organisation of international business, ensures that patterns of Scottish ISLM are closely connected with the industrial activities in which individuals work. In this way, the extent and role of Scottish mobility associated with particular firms or industries is influenced by the geographical arrangement of the production chain and associated corporate international division of labour.

The macro-level relationship between trade, investment and ISLM at the UK level has been investigated. A strong relationship between short term forms of ISLM with patterns of trade and investment was revealed At the same time the more variable nature of the relationship between longer term forms of international mobility and trade and investment was shown.

The penetration of overseas owners into Scottish manufacturing is influential in establishing structures for the development of contemporary Scottish ISLM patterns. North American and EC countries play the greatest role in Scotland's international activities. These are to be found for the most part in electrical and electronic engineering, paper and printing, mechanical engineering together with lesser involvement in a host of other manufacturing activities.

In contrast, Scottish owned operations appear less internationalised. Much Scottish industrial activity occurs as services, and while these activities are increasingly internationalised, this is not so apparent within Scotland. The specific organisational structure of industries markedly influences ISLM by virtue of their geographical co-ordination of activities.

Industries, particularly in services, which reveal a geographically uncoordinated structure have lower levels of short and long term ISLM than many manufacturing activities. However, even for employees local operations, international mobility plays a significant role in their work. Longer term forms of ISLM are less variable in relation to both corporate structure and to job type than short term forms, although overall, such movements are relatively more limited in service activities. The generation of mobility is strongly differentiated within the Scottish economy.

In the geographical literature, debates on the effect of economic internationalisation for ISLM have referred to the role of 'global cities'. Their command and control functions create flows of skilled workers to and between them (Sassen-Koob 1987; Sassen-Koob 1988). In the UK debate exists on the extent that these increasingly international, command and control functions and services embody a new spatial division of labour between a South East, where management and control functions are concentrated, and an unskilled North (Allen 1988b).

The corollary of this perspective is that ISLM is also likely to be most concentrated in the South East. This is associated with the highly skilled key workers of the internationalised, private sector, service industries (as examined in the work of Beaverstock, for example Beaverstock 1991), and the command and control functions of manufacturing TNCs. However, a focus on ISLM associated with large economic centres has neglected the degree of ISLM in other economic areas such as Scotland.

Global city perspectives undervalue the impact on ISLM of the internationalisation of manufacturing, as well as services, and not just in the South East but throughout the UK. In addition, with regard to manufacturing in particular, a focus on 'global cities' does not give due weight to the extent to which management and control of these operations is based *outside* the larger economic centres.

Electronics activities have a particularly pronounced effect on the international mobility of Scottish skilled labour. Yet the electronics sector and its role in Scottish ISLM may be susceptible to change by virtue of the very nature of the internationalisation that encourages ISLM. The impact of global competition has led to fears that the Scottish electronics industry may lose out on continued and new investment. One estimate puts employment losses at 40% of total by 1997 without remedial action (Scottish Business Insider 1993).

Structural weaknesses in the sector may provoke the migration of existing TNCs and new investment to lower cost locations in Eastern Europe and to better skilled areas in Asia. In addition, other leading electronics centres (e.g. Massachusetts, California, Texas, Singapore, Ireland, Bavaria and Japan) may possess potential for production of technologies that are more competitive in the longer term, the latter tending to be software manufacture and not the hardware manufacture with which Scotland is predominantly involved.

The mobility implication of a re-direction of investment involves a reduction in the level of short and long term mobility associated with electronics. It can be expected that many of these newly redundant skills would migrate elsewhere utilising different channels from the internal labour market. This scenario resembles the events in the early to mid 1980s charted by Findlay, of an emigration of Scottish engineering workers abroad via the channel of recruitment agencies (Findlay and Garrick 1990).

It is asserted that strategies that aim to maintain a competitive Scottish electronics industry partly involve a capacity to ensure the effective management of mobility issues. The increase in size and competitiveness of Scottish firms, the attraction of research and design components of the production chain, and the supply of the appropriate skills rest, in part, upon the effective management of the international mobility. Such mobility is amongst the most apparent in this sector.

Chapter 9

The contest between social life and the global workplace

9.1 An overview of influences on mobility

This chapter examines the interaction between the social context of international skilled labour mobility and the economic context. The influence of the social context on mobility is often best perceived at the level of the individual and this chapter illustrates how the personal circumstances of individual actors help determine mobility outcomes. This approach is informed by structuration theory although the depth and range of all micro-level issues which impinge on mobility are beyond the scope of the chapter. Instead, the chapter concentrates on specific themes which go some way towards illustrating the connections between social / economic and micro / macro topics in shaping mobility. The section is concerned with motivations of different courses persons took in relation to varying opportunities for long term mobility and to the perception of issues relating to potential future relocation.

This section draws on a second phase, follow-up questionnaire survey undertaken by the author (see chapter three). The sub-sample contains a range of professionals and managers with respect to long term mobility characteristics. First of all, as outlined in the methodology chapter, all respondents are Scottish-based. Secondly, long term mobility history varies amongst respondents (opportunities to move within the last ten years were considered). Some were not presented with the opportunity for a job-related home move. Some turned down or avoided opportunities for job-related moves. Others have taken-up all options for relocation.

For the sub-sample, propensity for relocation appears highest in the mainly oil-related 'other' industrial activity, with relatively more reluctant mobility within services and manufacturing (figure 9.1). Decisions not to move are correspondingly high in services and manufacturing, while low in 'other' activities. Overall, the majority of the sub-sample have been exposed at some time or another, within the last ten years, to a potential home move. Decisions not to move were most frequent for persons in manufacturing, although the low number of cases involved do not exhibit any marked statistical difference between industrial activities (figure 9.2).

Data collected from the above source are also concerned with the geographical scale of any such long term mobility. Therefore, those respondents who have relocated can be sub-divided by the geographical scale of mobility. As would be expected from the results presented in chapter five, most relocation takes place in a sub-national setting, only a small number of respondents having relocated internationally (8 respondents making 12 international relocations out of 31).

As a result, sub-group analysis of international movers is limited. However, the analysis carried out is valuable for a number of reasons. Firstly, the value of the findings presented are as much in delineating those factors that lead to a decision not to relocate, as they are in specifying the characteristics of international movers. Secondly, the results presented on the nature of decisions to relocate, while obtained from mainly sub-national moves, are likely in many cases to be relevant at all scales of movement.

Thirdly, a large proportion of the relocations studied are long distance moves within the UK, mostly between Scotland and the South East of England (17 out of 20 Scottish-Other UK relocations). As such, these relocations share certain characteristics with many of the more geographically restricted international moves in terms of distance, and cultural and institutional distinctions between origin and destination. The findings presented partly relate to the perception of prospective ISLM. As such, they inquire into beliefs surrounding future international as well as domestic long term managerial and professional mobility.

The labour market context of moves made by sub-sample respondents approximates that for the main sample. Around a quarter of all moves, made by the sub-sample of respondents, were made within an internal labour market setting. If international moves are isolated the proportion of internal labour market transfers is correspondingly higher, at around 40% of all international moves.

Analysis of the influence of work and non-work factors on Scottish ISLM was undertaken relative to: decisions not to move, actual moves and potential future moves. In addition, the perceptions of primary and secondary respondents are distinguished. In this instance, primary respondents were most often male, full-time earners, whereas secondary respondents, i.e. spouses or partners, were predominantly females, who were not working or were earning on a part-time basis.

If persons who have moved are considered, several features stand out. For this group there are notable differences in the types of issues affecting mobility. Quality of life and the

respondent's own work are revealed as the most significant influences in relocation, as perceived by respondents, followed by factors associated with housing and the partner's work. These four categories are the result of grouping together responses to a range of more specific issues. They are therefore to a certain extent arbitrary groupings and are not mutually exclusive. Thus, issues surrounding housing and careers are also bound up in overall quality of life. The factors comprising the four categories are specified in appendix 9.1, table A.9.1 to A.9.3. The influence of the specific components of the four main groups of issues on mobility are examined in more detail subsequently.

Quality of life and 'own work' were most frequently cited by the majority of respondents as issues most closely involved in relocation decisions. As indicated in chapter three, respondents selected from a range of potentially influential issues. The range of issues placed before respondents were presented on the basis of the findings of prior literature (as discussed in chapter two), and the piloting of research materials. However, the possibility remains that respondent perceptions are artificially prompted by the issues deemed most relevant by the researcher. In addition, it is difficult to assess the real influence of the different issues, as well as the accuracy of respondent perceptions. Therefore, these behavioural insights are subsequently supplemented by an examination of the variability of mobility with regard to attribute data on career, family and housing status.

Another feature of the data presented in figures 9.3 and 9.4 is that the balance of the four main groups of factors varies between those which encourage relocation and those which discourage relocation. Thus, issues associated with work tend to be more often cited as encouraging relocation, while issues relating to housing or quality of life are more often given as disincentives to relocation. A similar pattern is present for perceptions surrounding potential future moves.

In other words, issues associated with a particular category such as quality of life may sometimes favour mobility, while other issues associated with this category may sometimes act as a disincentive to move home. For the quality of life category a large gross response indicating these issues as encouraging a move is countered by a large gross response indicating other quality of life issues as discouraging a move. Thus, overall, quality of life issues are a net disincentive to move home.

However for one group, secondary respondents commenting on their last home move, there is little difference between factors in terms of whether they encourage or discourage long-

term ISLM (table 9.1). Such findings draw attention to the fact that, while there may be net differences in the types of issues promoting or hindering mobility, groups of issues are often simultaneously sources of encouragement and discouragement for relocation. The two-faced nature of relocation, as suggested by Fielding, is sharply outlined by the figures presented (Fielding 1992b).

Respondents perceive both advantages and disadvantages to relocation in relation to particular facets of their everyday life and work (figures 9.3 and 9.4). The individual beliefs of respondents with regard to their work-related mobility actions are strongly mediated by concerns expressed in relation to other non-work structures associated with housing, as well as family-related and environmental issues subsumed under the category 'quality of life'.

A further important distinction in the sorts of issues perceived as important in shaping the decision to relocate, occurs between primary and secondary respondents. Thus, while there is general accord in determining the issues which act as deterrents to mobility, a significant divergence occurs in the perception of issues encouraging relocation (figures 9.3 and 9.4: statistical notes). In this way, secondary respondents more often perceive issues connected with quality of life, housing and their partner's career, as important pull factors. Relatively greater emphasis is placed by the primary respondent on their own career as a pull factor. These findings raise questions over the place of dual careers within Scottish long term ISLM, a topic returned to subsequently.

More limited data were available in relation to decisions not to move. The most striking feature emerging from analysis of the decision not to move home is the extent to which quality of life issues play a part (figure 9.5). For primary respondents in this category, it is also noted that the reasons for not moving are more often connected with the partner's work than for the group who have moved. Again, these findings raise the issue of the role of dual careers in influencing the character of Scottish ISLM.

This overview, drawn from the beliefs of a range of Scottish-based business travellers and regarding the factors encouraging of discouraging longer term mobility, indicates that decisions to move home are made with regard to a variety of factors related to both work and non-work spheres. Such spheres of influence often exhibit both advantages and disadvantages associated with mobility. In addition, the advantages and disadvantages in the contest between social life and the global workplace are often perceived differently by

partners. The issues identified in this section are examined in more detail below in relation to long term mobility and, where appropriate, shorter term mobility.

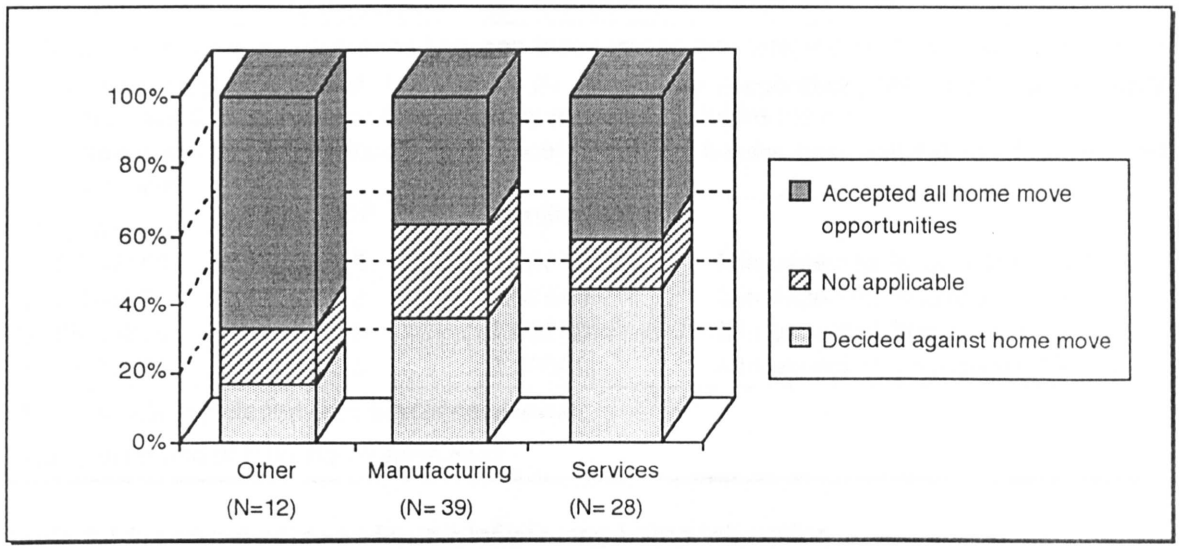
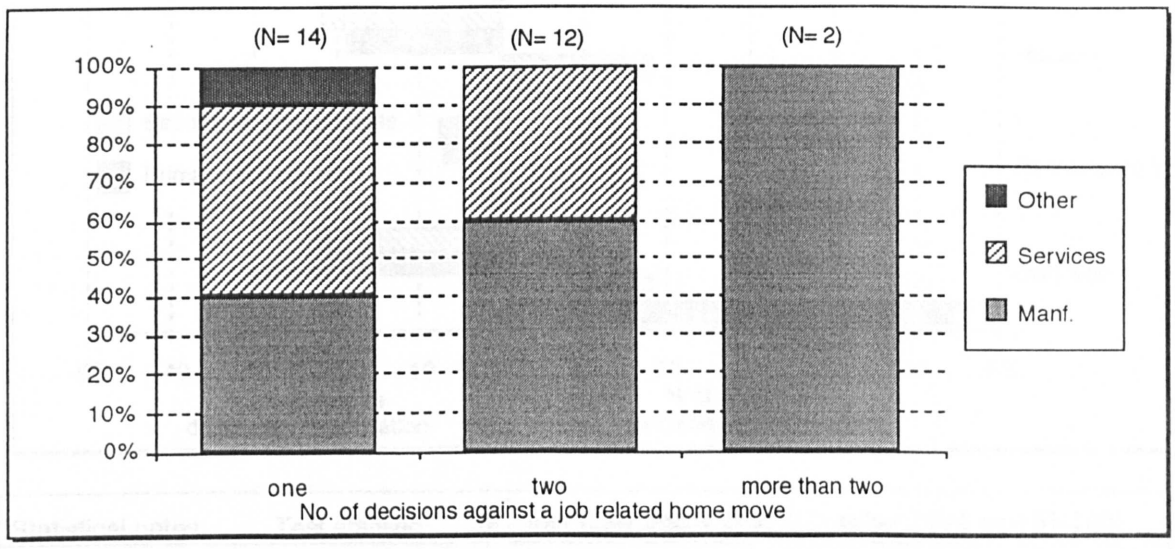


Figure 9.1 Job related home moves in last ten years by industrial activity
Source: author

Note: Not applicable = have not considered moving and/ or have not been requested to move home due to a job move or change.

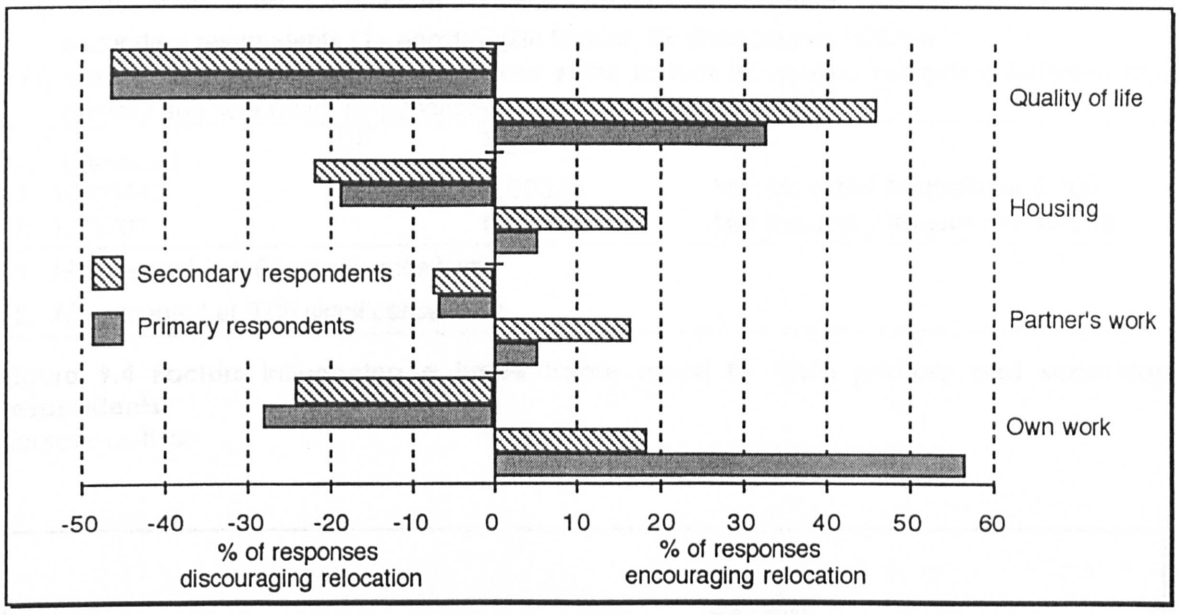


Statistical notes	Test statistic	Kruskall-Wallis (Shaw and Wheeler 1994 pp 168-171)		
H_0 states that there is no difference between the mean ranks of frequency of decision against job-related home move by industrial activity				
H_1 states that there is a significant difference between the mean ranks of frequency of decision against job-related home move by industrial activity				
			Corrected for ties	
Cases	χ^2	significance	χ^2	significance
29	2.2975	0.3170	3.7327	0.1549
H_0 accepted at 0.05 significance level				

Figure 9.2 Frequency of negative job-related relocation decisions by industrial activity
Source: author

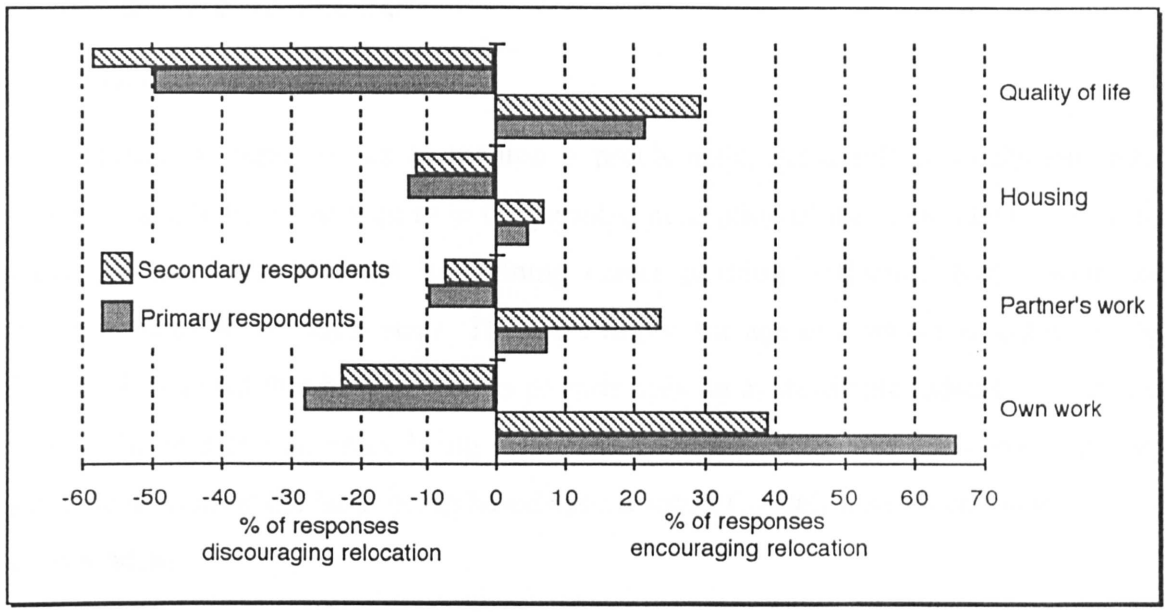
Statistical notes	Test statistic:	χ^2 test (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference between those issues encouraging or discouraging relocation (1= primary respondent, last move; 2= secondary respondent, last move; 3= primary respondent, future move; 4= secondary respondent, future move)			
H_1 states there are significant differences between issues encouraging or discouraging relocation			
χ^2 (Pearson)	DF	Significance	
1. 20.97159	3	0.00011	Min expected frequency= 5.562
2. 2.16237	3	0.53940	Min expected frequency= 5.196
3. 66.89378	3	0.00000	Min expected frequency= 19.500
4. 31.39287	3	0.00000	Min expected frequency= 13.704
1, 3 & 4. H_0 rejected at 0.05 significance level			
2. H_0 accepted at 0.05 significance level			

Table 9.1 Statistical notes on factors influencing home relocation
Source: author



Statistical notes	Test statistic:	χ^2 test (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the factors influencing relocation between the primary and secondary respondents (1= encouraging factors; 2= discouraging factors)			
H_1 states there are significant differences in the factors influencing relocation between the primary and secondary respondents			
χ^2 (Pearson)	DF	Significance	
1. 35.84728	3	0.00000	Min expected frequency= 10.945
2. 0.3733.	3	0.94570	Min expected frequency= 6.894
1. H_0 rejected at 0.05 significance level.			
2. H_0 accepted at 0.05 significance level			

Figure 9.3 Factors influencing last home move for both primary and secondary respondents
Source: author



Statistical notes	Test statistic:	χ^2 test (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the factors influencing relocation between the primary and secondary respondents (1= encouraging factors; 2= discouraging factors)			
H_1 states there are significant differences in the factors influencing relocation between the primary and secondary respondents			
χ^2 (Pearson)	DF	Significance	
1. 16.86443	3	0.00075	Min expected frequency= 6.000
2. 1.71701	3	0.63316	Min expected frequency= 10.000
1. H_0 rejected at 0.05 significance level.			
2. H_0 accepted at 0.05 significance level			

Figure 9.4 Factors influencing a future home move for both primary and secondary respondents
Source: author

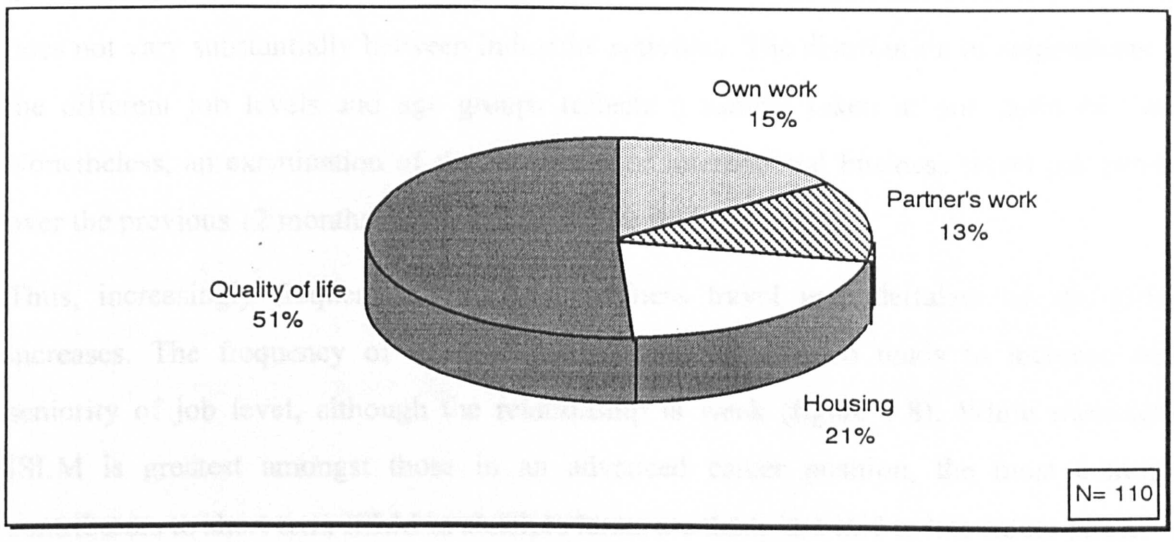


Figure 9.5 Reasons for not relocating, non-movers, primary respondent
Source: author

9.2 Mobility and career

9.2.1 The role of career

The definition of career status or position is problematic, being related to the particular occupation and industry, as well as to the personal perception of the respondent. Two main factors are taken into account in defining career position, reflecting both social and economic indicators of career stage. These are firstly, the age of respondent and secondly, job level. It is noted that both indicators provide only an approximate indication of career position, the former's accuracy being premised on the assumption of the survey eliciting legitimate responses; the latter being based upon a subjective self-assessment on the part of the respondent.

The majority of main sample respondents class themselves as senior in terms of job level, with a sizeable minority defining themselves as of a middle job level and only a small proportion at a junior level. There is little difference in job level self-classification between Scottish-based and other persons. Age is a second variable which can be used to gauge the career position of the respondents, and in the sampled group, age is generally associated with the job level of respondents, more senior job levels corresponding with older age groups (figure 9.6).

As for job level, there is little difference in age profile between Scottish-based and other persons, as revealed by chi square statistics (figure 9.7). Thus, those persons most heavily involved in international business travel are of a mid to senior job level, aged predominantly between 30 and 49 years. This profile of international business travellers does not vary substantially between industrial activities. The distribution of respondents in the different job levels and age groups reflects a sample taken at one point in time. Nonetheless, an examination of the frequency of international business travel per person over the previous 12 months reinforces the above findings.

Thus, increasingly frequent international business travel is undertaken as age group increases. The frequency of international business travel also tends to increase with seniority of job level, although the relationship is weak (figure 9.8). While short term ISLM is greatest amongst those in an advanced career position, the most common contributors to short term ISLM in absolute terms are those in a mid to late career phase.

For all job-related relocations, both intra-national and international, there is little significant difference in the experience of relocation between different job levels. Between 45% and 60% of all job levels have undertaken some form of home relocation within the previous ten years. However, age data indicate that experience of relocation is decreasingly common with age. The older the respondent, the less likely they are to have moved home because of work within the last ten years (figure 9.9). Such a finding is also supported when *frequency* of home relocation is examined (figure 9.10). Chi square tests carried out on both data sets yielded significant relationships at p 0.05.

International skilled labour mobility is less variable for longer term forms of movement. International work-related relocation within the last ten years tends to be more evenly distributed amongst the age groups than for domestic relocation (excluding the over 50's), although the difference is not a significant one.

The findings indicate that as employees get older, they are less likely to be involved in work related relocations, but are more likely to be involved in international business travel. Similarly, younger employees are most likely to be involved in moving home because of work and least likely to participate in international business travel. Those within the age range 30 to 49 years have the best, or worst, of both worlds.

Between 35% and 50% of the 30 to 49 year group can expect to have moved home at least once within the last ten years, with 25% to 30% participating in six or more international business trips a year (possibly supplemented with a substantial number of domestic trips). In turn, age related mobility patterns are likely to imply particular sets of non-work issues being more prominent than others in connection with the general life-cycle characteristics of respondents. This is investigated in more detail subsequently.

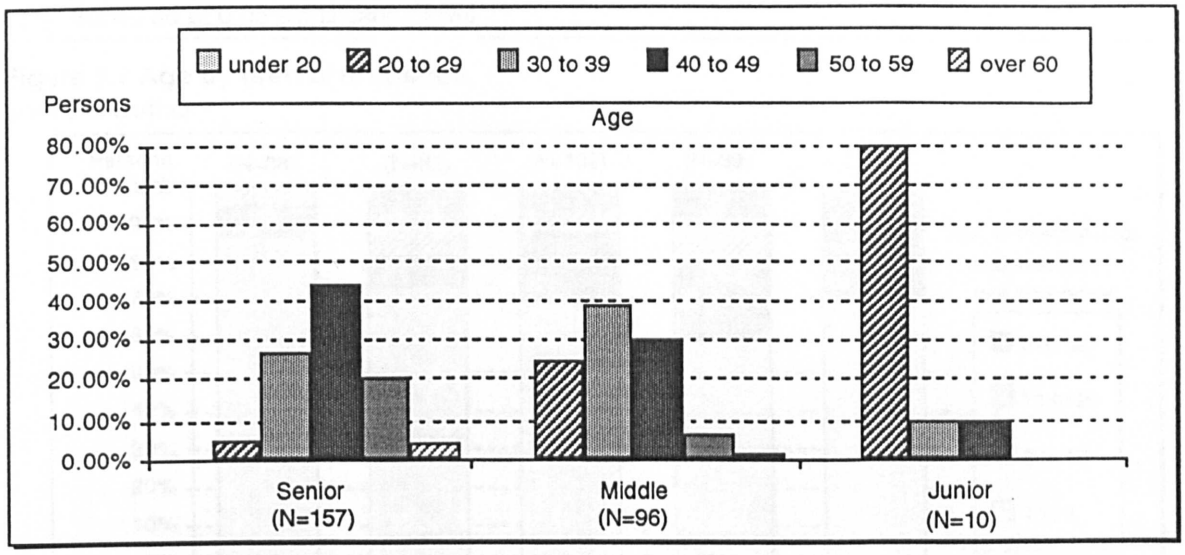
While the younger age groups are relatively more likely to be involved in relocation, this is most often a movement via the external labour market of a firm (figure 9.11). The findings are supported by a study of the employment of UK graduates by continental European companies, in which students' most favoured strategies for securing jobs are press adverts, career service facilities, course placements and speculative applications (Everett and Morris 1993 p1).

As the age and job level of respondents increases, home moves occur more frequently within the internal labour market of employing organisations, although the difference between age groups is not strongly significant. The data for Scottish-based persons alone,

correspond to this pattern, while having, as indicated previously, a higher level of internal labour market movement.

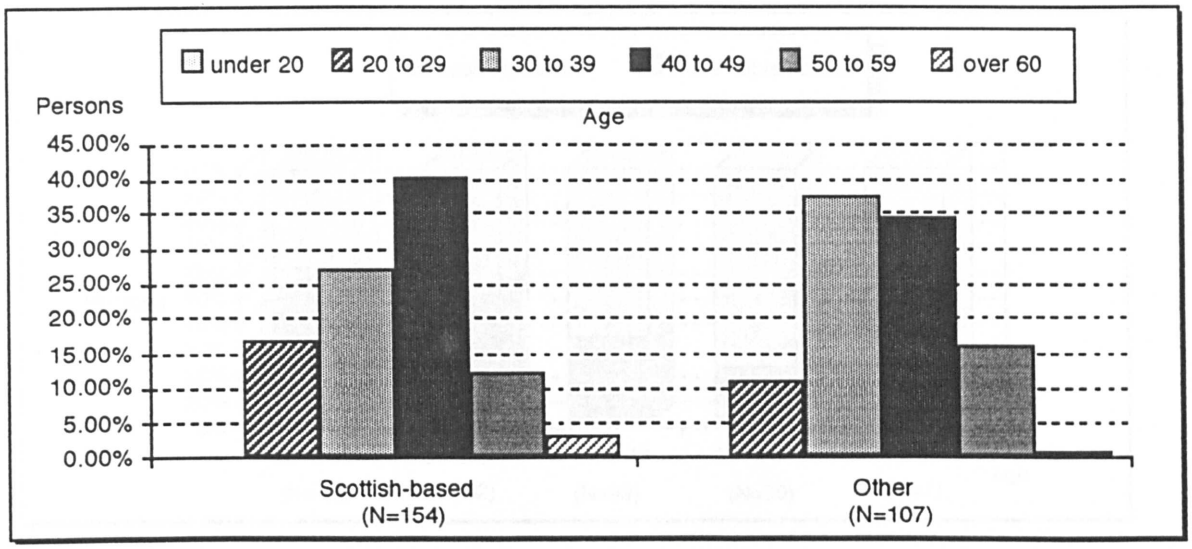
For longer term mobility, the pattern found generally conforms with the age-specific migration probabilities expected from other migration work (Findlay 1993). In addition, the figures presented are supported by the those of a survey of UK managers (mainly in the South East of England) which indicated that up to the age of 35, managers are likely to change employer frequently. Decreases after this period reflect the increased importance of family ties and career stability (Coe and Stark 1991).

However, the age related probabilities of short term mobility would appear to operate within different parameters. While career position can be seen to occupy an important place in the mobility experience of individuals, the extent to which these spatial career paths are, or are not, forged in response to the demands of both the economic and social spheres is unclear from such meso-level characterisations of ISLM.



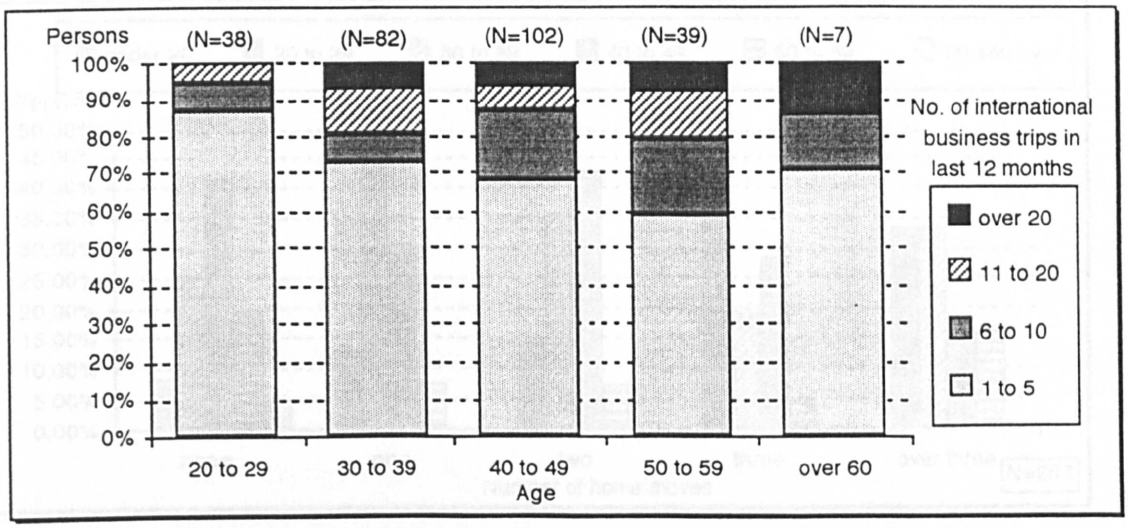
Statistical notes	Test statistic:	Spearman's: (Shaw and Wheeler 1994 pp 183-189)		
H_0 states that there is no correlation between age and job level				
H_1 states that there is a significant correlation between age and job level				
Statistic	Value	ASE1	T value	Significance
r_s	0.41543	0.05376	7.36408	0.00000
H_0 rejected at 0.05 significance level				

Figure 9.6 Age by seniority, all persons
Source: author



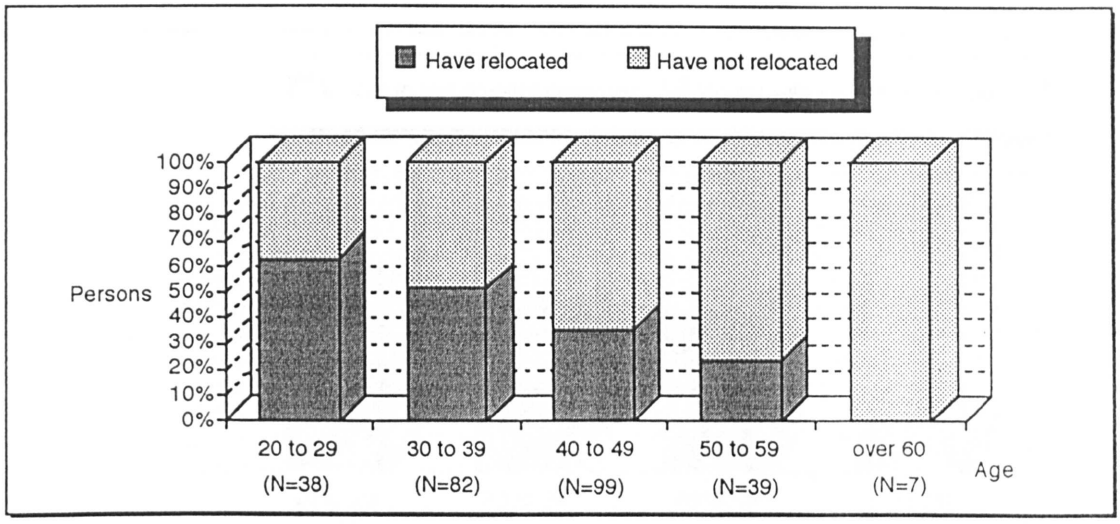
Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the age of respondents between area of residence			
H_1 states there are significant differences in the age of respondents between area of residence			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 2.469
5.90849	4	0.20609	Expected cells <5= 20%
H_0 accepted at 0.05 significance level			

Figure 9.7 Age by area of residence
Source: author



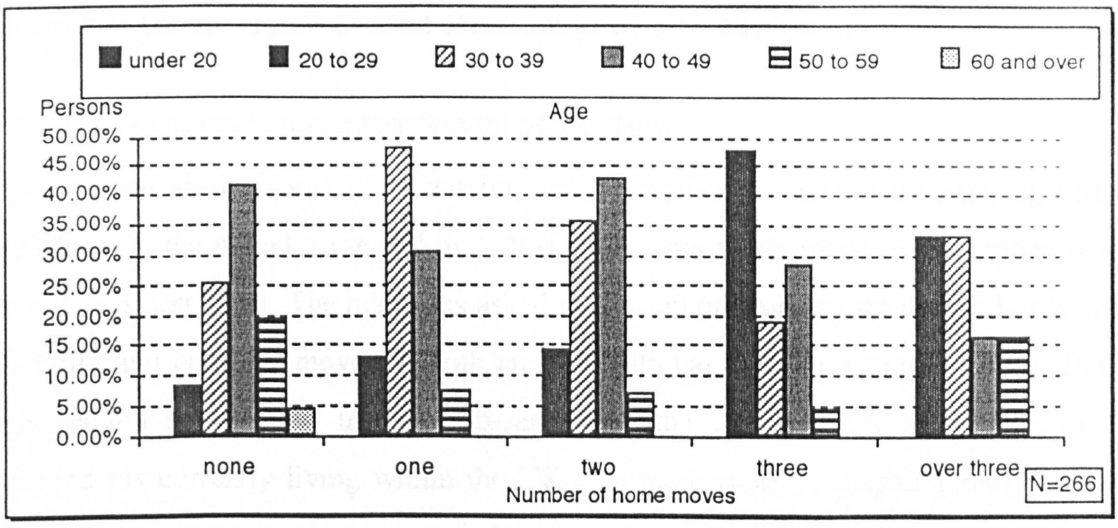
Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the frequency of international business travel by age group			
H_1 states there are significant differences in the frequency of international business travel by age			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 5.404
13.67822	6	0.03344	No expected cells <5
H_0 rejected at 0.05 significance level			
Note: for age groups '50-59' and 'over 60' combined; for business travel frequency groups '11-20' and 'over 20' combined			

Figure 9.8 Frequency of international business travel in last 12 months by job level, all persons
Source: author



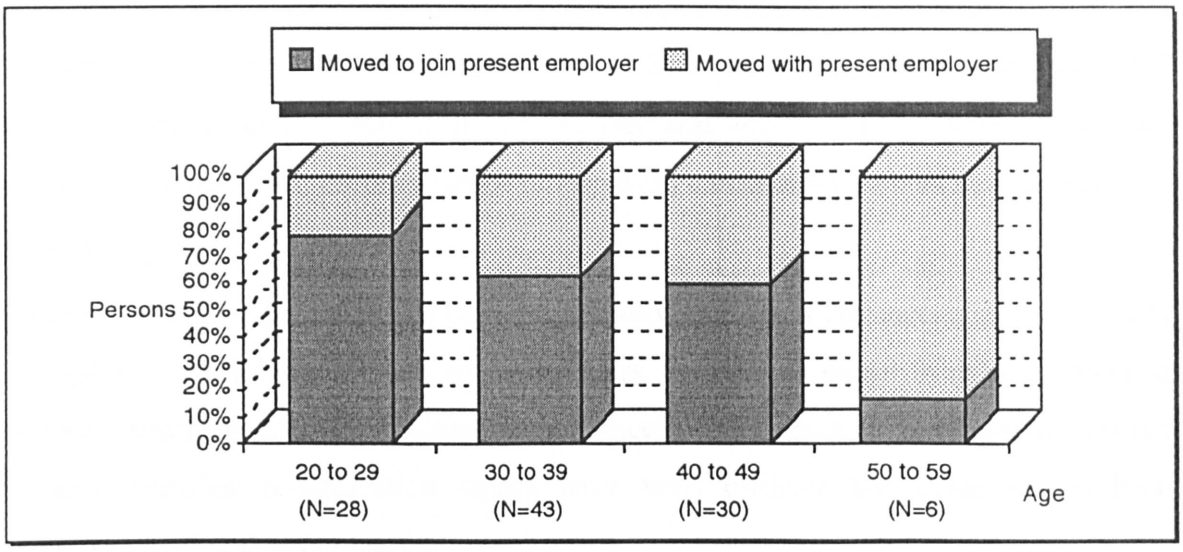
Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the incidence of relocation by age of respondent			
H_1 states there are significant differences in the incidence of relocation by age of respondents			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 15.774
21.18826	3	0.00010	No expected cells <5
H_0 rejected at 0.05 significance level. (Note: 'over 60' combined with '50-59')			

Figure 9.9 Home relocation by age, all persons
Source: author



Statistical notes	Test statistic	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in the frequency of relocation by age of respondent			
H_1 states there are significant differences in the frequency of relocation by age of respondents			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 4.105
41.95869	9	0.00000	Expected cells <5= 18.8%
H_0 rejected at 0.05 significance level Note: for age groups: '60 +' combined with '50-59'; for frequency groups 'three' and 'over three' combined			

Figure 9.10 Frequency of home relocation by age, all persons
Source: author



Statistical notes	Test statistic	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)
H_0 states there is no difference in the labour market context of relocation by age of respondent		
H_1 states there are significant differences in the labour market context of relocation by age of respondents, so that they constitute different populations of relocatees		
χ^2 (Pearson)	DF	Significance	Min expected frequency= 11.111
4.41324	2	0.11007	No expected cells <5
H_0 accepted at 0.05 significance level (note: 'over 60' combined with '50-59')		

Figure 9.11 Labour market context of relocation by age, all persons
Source: author

9.2.1.1 Mobility and career: respondent perceptions

This section allows some understanding of the motivation behind mobility and permits insights into the model presented by Salt (i.e. the career path model, see chapters two and three) (e.g. Salt 1988). The questions asked in the author's survey are directed at long term mobility and consider moves of both an intra-national and international nature. Data for this section are derived from a sub-sample of the entire survey and refers to those respondents currently living within the UK (see methodology, chapter three). Long term mobility is concentrated upon, as it is asserted that such movements are more readily related to the career development of individuals than shorter term mobility. Semi-permanent trips were not common in the sample and so offered too limited an occurrence for detailed examination.

Around a third of respondents had, at some stage within the last ten years, decided against taking a job that involved moving home. Results indicate that moves which did not contribute to career advancement are of some importance in deciding against a move,

although not to an over-riding degree. In response to factors deterring a past residential move, the career related factors- 'move would not have improved career advancement' and 'inadequate salary increase', were ranked 9th and 10th respectively, after issues associated with domestic disruption and quality of life (see appendix 9.1, table A.9.4). Restricted monetary gain accompanies the absence of improved career advancement as a disincentive to move.

A further issue in the relationship between mobility and career advancement is the ability of employees to re-integrate into an earlier work location on return from assignment or training. Most respondents did not envisage difficulty, only seven respondents thought it a problem. Whether re-integration would have been difficult had these moves been undertaken is of course not known.

The career related factors which appear to encourage mobility to the greatest degree are those concerned with enhanced career prospects and availability of new work experience. It seems direct financial benefit is relatively less important than the career potential inherent in the move. Issues related to job security, working in new surroundings and opportunities for training are also ranked highly as pull factors (appendix 9.1, table A.9.5 & A.9.7).

Damage to job security was viewed as a relatively important issue in discouraging mobility (appendix 9.1, table A.9.6 & A.9.8). Thus, while job security does not appear strongly as a positive goal of mobility, it does feature as an issue causing second thoughts about a move. Home moves not contributing to career prospects or salary were also viewed as discouraging mobility. It seems the main conflict perceived in mobility, where the career alone is considered, is between the potential benefits of enhanced career development, as against the risk of job insecurity involved in the move. It is noted that mobility was perceived to have had a positive effect on the career after the move (although the number of respondents answering this question was low) (figure 9.12).

Respondents were also questioned as to their career-related motivations regarding future moves. The beliefs surrounding those factors which would encourage future moves differ in some respects from those factors which encouraged moves that had taken place already. The goal of improved career prospects and work experience associated with moving are again strongly felt (table A.9.6 & A.9.8). The issue of job security was also strongly held as something which would play an important role in future moves.

These factors are, however, more firmly reinforced by a desire for improved financial reward. This is something that was not of such immediate importance to those who had actually moved. In addition, thoughts of future moves appear to be motivated by the prospect of working overseas and in new business cultures. This is not an issue which came out strongly when respondents considered actual moves they had made in the past (although only a small proportion of these were international moves).

International relocation to new jobs appears to have an intrinsic appeal, although this is of secondary importance to opportunities for overall career enhancement and financial reward. These findings are in accord with those of Beaverstock for a study of 26 highly skilled British persons in the New York financial sector. The career related role of international relocation is suggested by one of Beaverstock's respondents...

> "Career development is paramount. The attractiveness of working overseas on a secondment basis is that you have greater job satisfaction, greater responsibilities invested in you, and on the whole you are promoted more than if you were back at base" (Beaverstock 1992b p12).

Other factors, such as forming new work relationships, availability of specific training and provision for reintegration, do not loom large in the minds of employees as factors attracting a move in their own right. Neither did these factors feature highly as disincentives for those who had moved (tables A.9.7 & A.9.9). However, as for past moves, damage to career prospects and low financial reward prove significant disincentives. Another factor which did appear to put people off future moves, but had not featured in discouraging past moves, was the possible negative effects of mobility on pension or retirement plans.

Disadvantages of future work related moves are potentially damaging effects to career prospects and job security, combined with limited financial reward. Mobility is perceived to be a function of the potential value of the move to the overall career, often closely allied to the financial benefits of the move. Such findings compare well with Beaverstock's study of the international mobility of chartered accountants, who were motivated to work abroad in order to gain higher salaries and to enhance career development (Beaverstock 1990; Beaverstock 1991).

Yet something of the constraints upon the mobility decision is reflected in the relatively large proportion of respondents who would move home if this were to be linked to the

chance of securing a promotion (figure 9.13). As discussed in chapters two and seven, change in the structure and organisation of industry means that the role of both national and international mobility of managers and professional is increasingly central to their function.

The findings presented suggest that the while the career path of Scottish-based managers and professionals is sustained by the career aspirations of the individual (in line with Salt's (Salt 1988) career path model), in the increasingly spatially extensive workplace, the choice to move or not may also be a decision between career progression and stagnation. Thus the 'choice' in Scottish work-related mobility may be an increasingly circumscribed one.

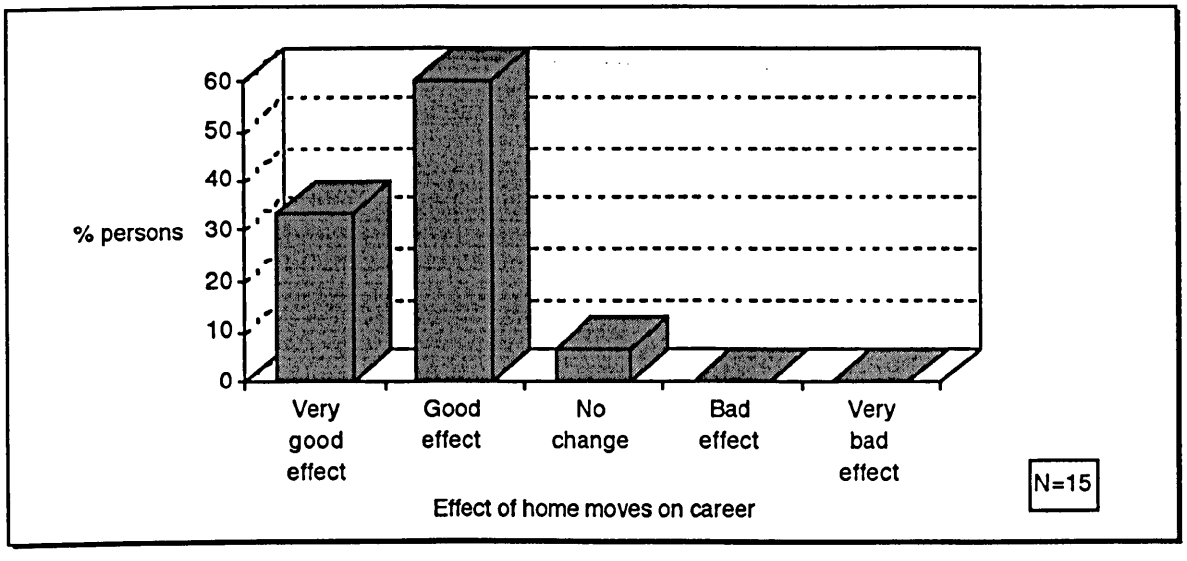


Figure 9.12 The effect of home moves on career, primary respondent
Source: author

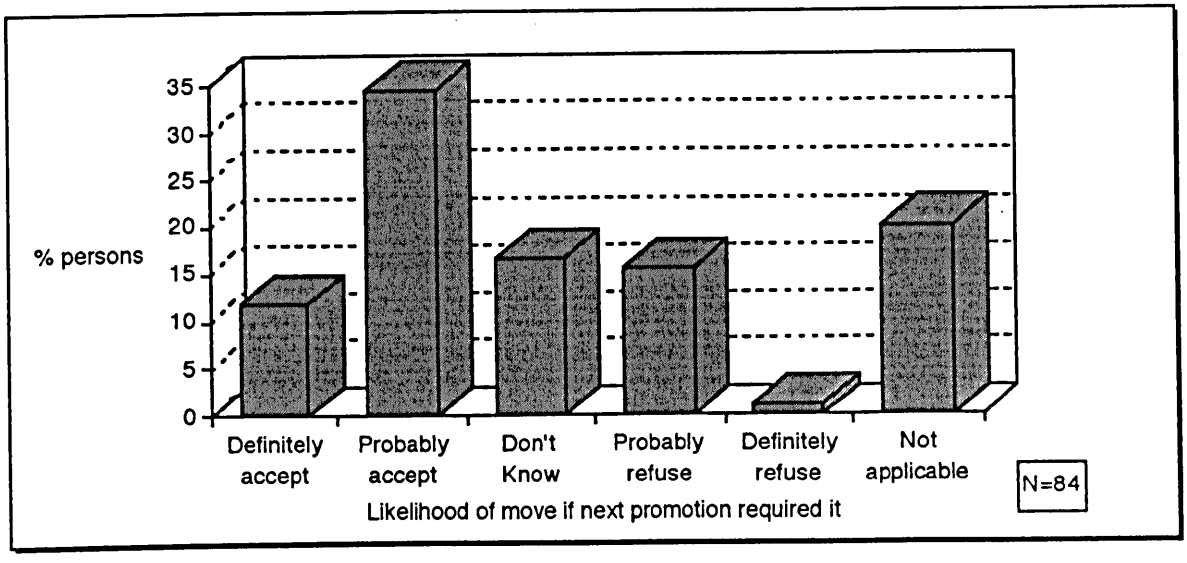


Figure 9.13 Likelihood of moving home if next promotion required it, primary respondent
Source: author

9.3 Mobility and dual careers

As noted by Snaith, "In light of the steady rise in the labour force participation of married women over recent years, and their increased career commitment, it is clearly an area which is deserving of research attention" (Snaith 1990 p155). A potential ingredient influencing Scottish ISLM comes from changing trends in the employment characteristics of women. An increasing role for women in the workforce promises to act as an important constraint on overall mobility levels. In particular, developments stemming from this change may play an increasingly important role in determining the international mobility of skilled labour.

To expand, the proportion of female employment growth in the UK for 1983-1987 was 11.0%, with 5.4% growth for 1987-1990 (Rubery and Fagan 1993 p5). This growth has been strongest for married women. Furthermore, there has been a corresponding increase in activity rates for females in Scotland (figure 9.14). Yet while the relative growth in female employment has been strong overall, there is variation within occupational groupings. In the UK, after clerical and related workers, growth has been highest in professional, technical and related workers (Rubery and Fagan 1993 p11) (figure 9.15).

Two implications can be drawn from this with regard to skilled mobility. Firstly, an enhanced economic participation rate by women, especially if married, will lead to more dual career couples, an increasing proportion of which are likely to be in skilled occupations. Thus, the growth of dual income families is likely to impose increasing strains on the mobility of any individual partner. Secondly, women managers and professionals may show more resistance to mobility due to greater family commitments and responsibilities than their male counterparts.

As Forster states...

> "It has been estimated that 400,000 more women will enter newly created full-time white-collar career jobs in the 1990s. This is in addition to the large numbers of women who are expected to start or return to work over the next few years. Increasing numbers of women are increasingly unwilling to accept their traditional 'secondary role' in the family economy. As a result, there are growing numbers of dual earner and dual career couples in the labour market" (Forster 1990 p.26).

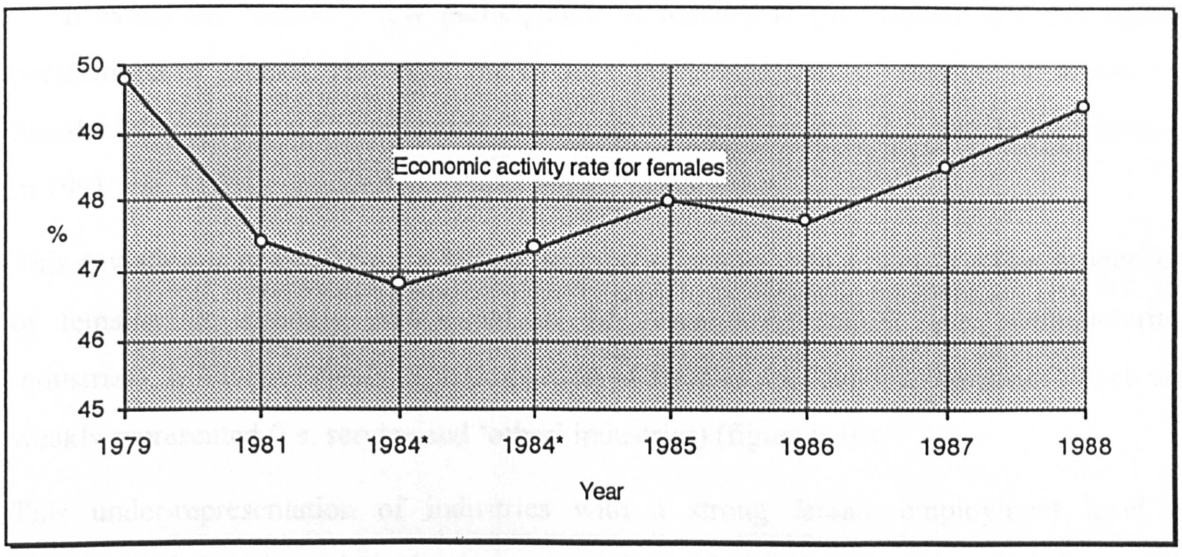


Figure 9.14 Economic activity rate, females, Scotland 1971-1988
Source: (adapted from Central Statistical Office 1993 Table 10.5 p 149)
Percentage of the home population aged 16 and over who are in the civilian labour force.
*GB labour force definitions up to 1984, ILO/OECD definitions from 1984.

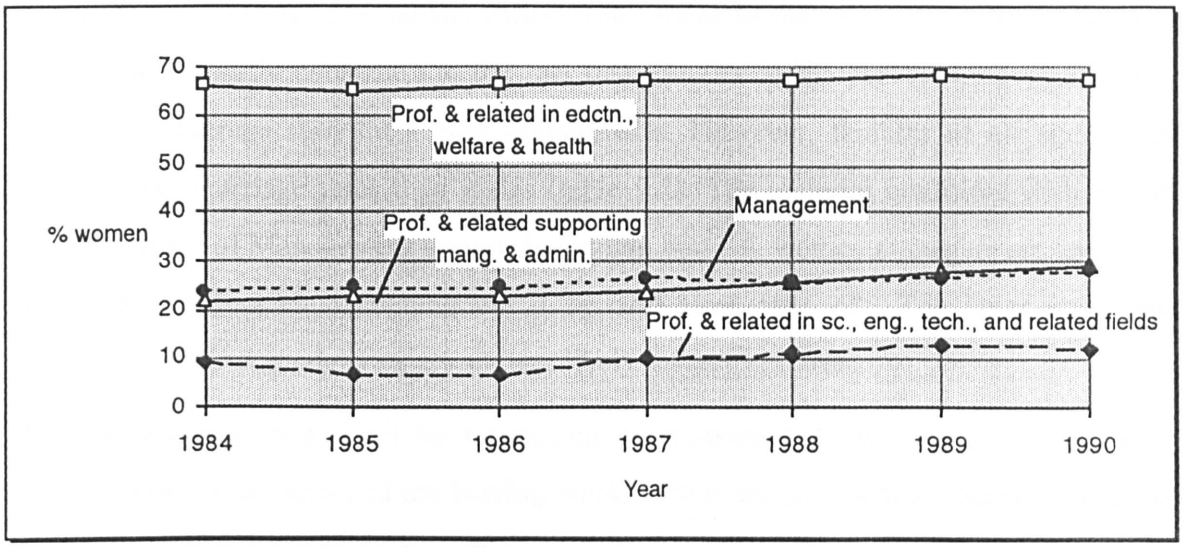


Figure 9.15 Percentage in selected occupations who were women aged 16 and over, Great Britain, Spring 1984-90
Source (adapted from Office of Population Censuses & Surveys 1992 Table 5.10 p 17)

9.3.1 The role of the partner's career

First of all, the gender profile of the respondents reveals that 87% are male, which reflects to an extent the relatively low participation of females in professional and managerial occupations in general. However, the average percentage female contribution across the Standard Occupational Classification 'highly skilled' groupings 1, 2, 3 and 7a for Scotland in 1991 was 34.6% compared to 13% of female respondents.

This deviation may result from a biased sample; industries with a relatively low proportion of females are strongly represented in the researcher's sample (i.e. manufacturing industries), while a relatively high proportion of females are found in industries which are weakly represented (i.e. service and 'other' industries) (figure 9.16).

This under-representation of industries with a strong female employment level is compounded by the relatively low proportion of females in those highly skilled occupations with a strong affinity to manufacturing activities (i.e. scientific and technical activities), and conversely, the relatively high proportion of females in highly skilled posts associated with particular services (i.e. health and education professional and associate professional occupations) (figure 9.17).

Thus the majority of business travellers are male, and while most respondents are male, the majority are also married. Only around one fifth of respondents are not married or living with a partner. Female respondents varied from males in that they were more frequently single. This is partly connected to the fact that females in the survey were significantly younger on average than their male counterparts. However, females of all age groups exhibit lower marriage rates than males (table 9.2). The material conforms with a 1988 British Institute of Management survey, indicating that UK women managers are less likely to be married than male counterparts (Coe and Stark 1991 p7). The latter study also indicates the UK women managers are less likely to have children.

The findings presented could be interpreted as showing that females in the relatively mobile occupations examined are leaving work subsequent to marriage, possibly after the first child, and not returning to earlier occupations. The relatively low number that do continue working in such activities are more likely to be single than male equivalents, but may have fewer barriers to mobility. The low proportion of older, married women may reflect the difficulties of maintaining dual careers in mobility prone occupations. However, the decision not to pursue such careers on the part of women may also reflect other commitments such as child rearing.

Around two-thirds of partners are in employment, of which approximately 56% are employed full-time, as opposed to 44% part-time. For the UK population as a whole, of those in employment (employees and self-employed), 78% are full-time and 22% part-time (Office of Population Censuses & Surveys 1992 table 6.9 p 25). However, the majority of partners in the sample are female and as such the distribution of employment between part and full-time approximates to the distribution for married women in the UK (Office of Population Censuses & Surveys 1992 table 6.9 p 25).

While the overall distribution of part-time to full-time work is comparable with the broad pattern of work hours for women in the UK economy, this is despite a high proportion of partners of respondents working in professional occupations (in which the majority of positions are full-time) (figures 9.18 and 9.19). These findings suggest the movement of partners into occupations affording greater opportunity for part-time work e.g., clerical and secretarial occupations, sales, personal and protective services, plant and machine operatives and, most of all, those professional occupations in which part-time employment is a viable option, e.g. teaching and health care.

Thus while many partners of primary respondents are in full-time employment, the tendency is for concentration in those occupations, e.g. teaching and health professions, which do not penalise career breaks (breaks may arise from starting a family and/ or from mobility). The alternative path is economic inactivity and this is a course followed by a large proportion of partners (tables 9.3 & 9.4).

The difficulty inherent in maintaining a career in the face of mobility is suggested by the higher proportion of non-home movers amongst those partners who are employed full-time. However, the findings do not support a significant difference in whether relocation has taken place (in the last ten years) on the basis of partner's employment status (table 9.5: statistical notes).

Nor, if the frequency of home relocation is examined, does this vary by the employment status of the partner, or for that matter, on the basis of occupation (table 9.6). Furthermore, long term mobility (in terms of whether persons have moved or not, and in terms of frequency of relocation) is not influenced significantly by whether respondents have children or dependent relatives living with them. Given that neither partner's employment status, occupation, or the presence of dependants (as variables on their own), influence long term mobility greatly, it appears that other factors, such as the primary respondent's career status and industrial activity, have a much stronger bearing.

Nonetheless, it may be the case that other factors come into play in determining long term mobility, such as the social rootedness of respondents in a particular place, e.g. the numbers of social contacts in terms of family and friends and the level of involvement in a locality outside of work. However, the direct influence of such factors is not discernible from the data acquired.

In addition, the factors cited above may influence mobility decisions in combination, decisions being made with regard to several variables, as suggested before. Indeed, it is likely to be the case that all of the above factors influence the decision to move to some degree.

The relatively low level of dual, highly skilled careers, where both partners are employed full-time, suggests that many couples opt for 'two-person careers', with one partner (usually the female) taking on a part-time job or no job, while also presumably, in many cases, taking a larger role in child rearing. In such circumstances, the other partner has a full time career and if mobility is required for the furtherance of this career, this person's

career takes precedence. Furthermore, the findings suggest that the minority of secondary respondents in full-time work, even those in highly skilled occupations, conform to a 'two-person career' model, with little influence on long term mobility levels coming from the occupation or employment status of the partner directly.

More generally, it is suggested that while women as a whole are concentrated in part-time jobs in the Scottish economy (jobs which may be more amenable to breaks for child-rearing or mobility), growth of female employment in professional and managerial positions, with their full-time implications, will give rise to mobility dilemmas for an increasing proportion of female Scottish workers, their families and the firms for which they work.

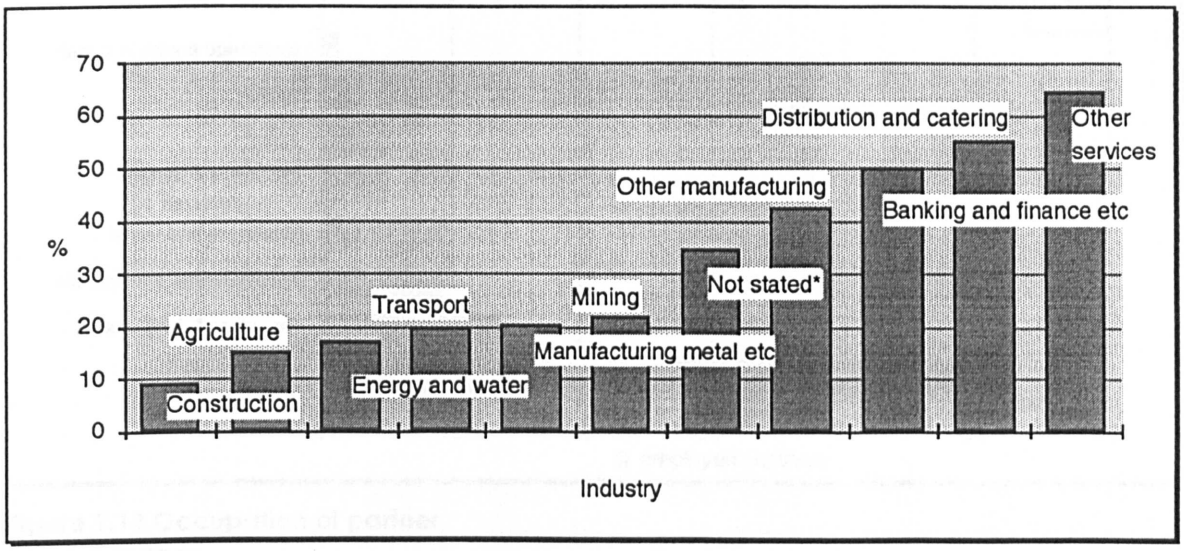


Figure 9.16 Females as percentage of industries, Scotland, 1991
Source: adapted from (General Register Office for Scotland 1993 Table 73, Pt 2, p46)

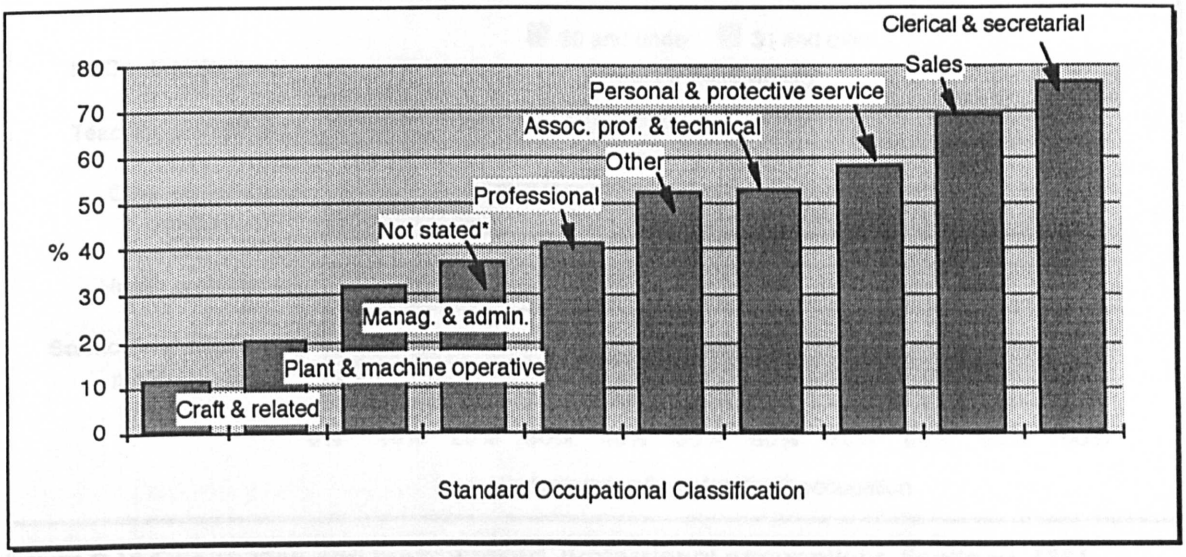


Figure 9.17 Females as percentage of selected occupational groupings, Scotland, 1991
Source: adapted from (General Register Office for Scotland 1993 Table 74, Pt 2, p53)

	Age									
	20 - 29		30 - 39		40 - 49		50 - 59		60 +	
Marital status	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Married	50.0%	33.3%	83.6%	77.8%	91.6%	57.1%	94.1%	100%	100%	0.0%
Single	50.0	66.7	16.4	22.2	8.4	42.9	5.9	0.0	0.0	100
N=	26	12	73	9	95	7	34	5	6	1

Table 9.2 Marital status* by age and sex, all persons
Source: author, * 'Married' includes cohabiting.

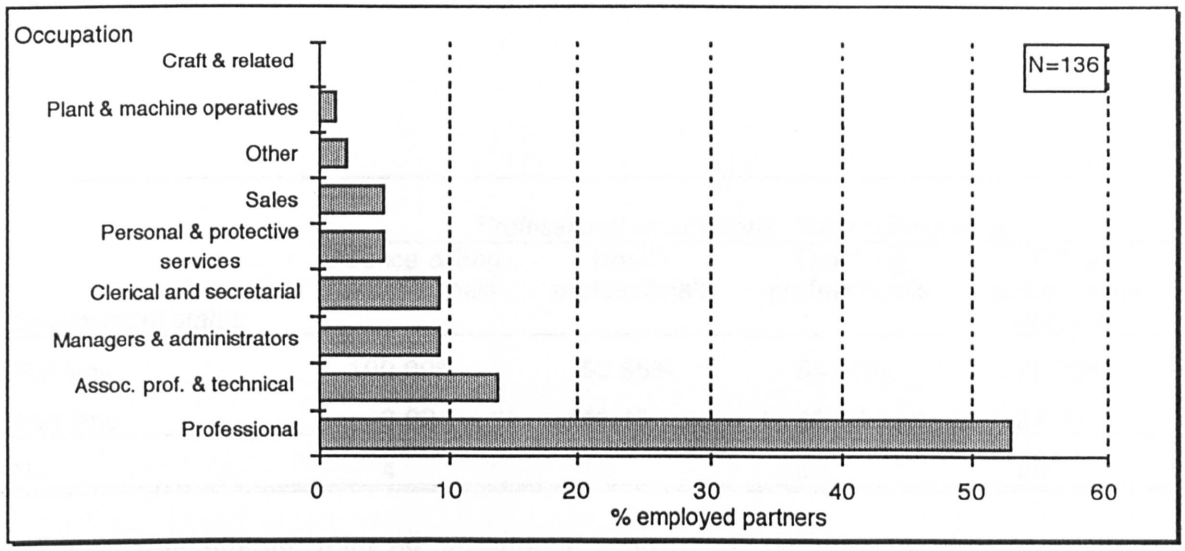


Figure 9.18 Occupation of partner
Source: author
Note: Occupation by Standard Occupational Classification, major group

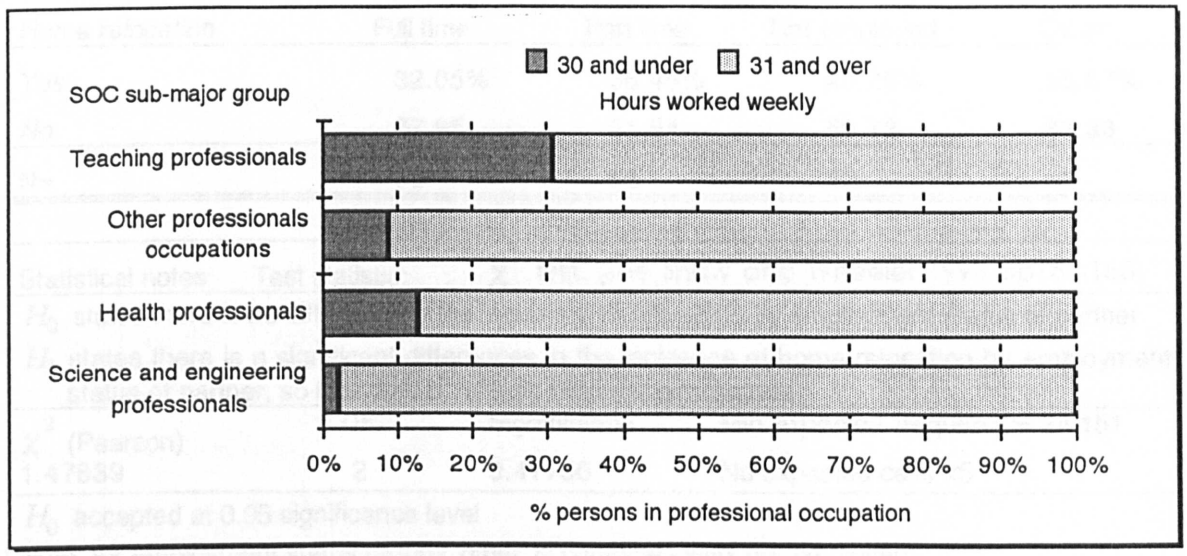


Figure 9.19 Occupation and hours worked, professional occupations. Scotland, 1991
Source: (adapted from General Register Office for Scotland 1993 Pt 2, Table 78, p99)
* excluding 'not stated'

	Standard Occupational Classification- major groups						
Employment status	Managers & Admin.	Prof. occupations	Assoc. prof. & tech. occptns.	Clerical & secretarial occptns.	Personal & protective services	Sales occupations	Plant & mach. operatives & other occptns.
Full time	69.23%	62.50%	57.89%	53.85%	14.29%	28.57%	20.00%
Part time	30.77	37.50	42.11	46.15	85.71	71.43	60.00
Economically inactive	0.00	0.00	0.00	0.00	0.00	0.00	20.00
N=	13	72	19	13	7	7	5

Table 9.3 Employment status and occupation, partners
Source: author

	Professional occupations. Sub-major groups			
Employment status	Science & Eng. professionals	Health professionals	Teaching professionals	Other professional occptns.
Full time	100.00%	53.85%	54.55%	72.73%
Part time	0.00	46.15	45.45	27.27
N=	4	13	33	22

Table 9.4 Employment status by occupation, professional occupations, sub-major groups, partners
Source: author

	Employment status			
Home relocation	Full time	Part time	Not employed	Other
Yes	32.05%	38.46%	40.28%	66.67%
No	67.95	61.54	59.72	33.33
N=	78	65	72	3

Statistical notes Test statistic:		χ^2 test: (see Shaw and Wheeler 1994 pp151-155)
H_0 states there is no difference in the incidence of relocation by employment status of partner		
H_1 states there is a significant differences in the incidence of home relocation by employment status of partner, so that they constitute different populations		
χ^2 (Pearson)	DF	Significance	Min expected frequency= 24.151
1.47839	2	0.47750	No expected cells <5
H_0 accepted at 0.05 significance level		
Note: for employment status groups 'other' is combined with 'not employed'		

Table 9.5 Home relocation by employment status of partner
Source: author

Statistical notes	Test statistic:	χ^2 test (see Shaw and Wheeler 1994 pp151-155)
(A) H_0 states there is no difference in the level of relocation between persons with and without dependants (1= whether relocation has occurred or not; 2= frequency of relocation)		
H_1 states there are significant differences in the level of relocation between persons with and without dependants		
(B) H_0 states there is no difference in the level of relocation between by occupation of partner		
H_1 states there are significant differences in the level of relocation by occupation of partner		
χ^2 (Pearson)	DF	Significance
(A.1) 0.51948	1	0.47106 Min expected frequency= 32.400
(A.2) 4.93912*	3	0.17631 Min expected frequency= 8.927
(B) 4.51250**	2	0.10474 Min expected frequency= 8.060
(A.1), (A.2) & (B) H_0 accepted at 0.05 significance level		
* Note: for frequency groups, relocations above 2 in number combined as '2+'		
**Note: for occupation groups, professional and associate professional and technical occupations combined; all other occupations combined in second group		

Table 9.6 Statistical notes on relationship between relocation, dependants and occupation
Source: author

9.3.2 Mobility and partner's career: respondent perceptions

While the motivation behind the non-mobility of primary respondents appears most closely related to issues of quality of life and housing, there is also evidence that the effect on the partner's career plays a role in many instances. A substantial proportion of those non-movers questioned, reported a disincentive to move associated with effects on the partner's career, a minority voiced this concern as a very, or extremely important consideration in not moving home (see appendix 9.1 table A.9.4).

These career-related reasons for not moving were connected with the difficulty the secondary respondent would face in finding new employment in the destination and the harmful effect a move would have on the career of the secondary respondent. It is noted that the perceptions of secondary respondents with regard to decisions not to move are not included, as only a small number of responses were achieved for this sub-group. On the other hand, for those who had moved home, results are presented for both primary and secondary respondents.

For movers, primary respondents did not view the beneficial effects of moves on the partner's career as a particularly strong motivating factor in moving home, certainly much less important than the beneficial effects upon their own career. In conjunction, partners of

the primary respondents did not rate highly the beneficial effects of moving on their own career as an encouragement to move. Indeed, the beneficial effects of a move on the primary respondent's career were viewed, by secondary respondents, as just as important as their own career.

On the other hand, primary respondents did not appear to attach a high value to the negative effects of mobility on the partner's career. This is in contrast to the discouraging effects on mobility of negative impacts on the primary respondent's own career. Neither, from the secondary respondent's view, did the negative impacts upon their own career seem to act as a major disincentive to move home. These findings would support the view that where mobility and career interact, primacy in maintaining career options is perceived as being assigned to one partner in preference to the other (e.g. Snaith 1990).

Perceptions of both primary respondents and their partners (secondary respondents), in relation to those secondary respondent career-related factors encouraging or discouraging a future move, are now considered. It is noted that expectations of future home moves within the next five years appeared relatively low overall, although from 10 to 15% thought this very likely. There was little difference in perception of future mobility between partners.

For primary respondents, factors encouraging moves were firmly tied to enhanced career prospects, improved salary and job security and markedly less so to the benefits accruing to the partner's career. Perhaps surprisingly, given the evidence thus far, secondary respondents also viewed factors encouraging future moves to be quite strongly linked to their own career improvement, although these still took second place to the secondary respondent's aspirations associated with the primary respondent's career(see appendix 9.1, tables A.9.9 & A.9.11).

Yet, only a low level of long term mobility is acceptable to secondary respondents as a whole, even where their own promotion required mobility (figure 9.20). For many, the issue of promotion is not applicable as respondents were not working. Still, for those in employment, the majority did not reveal a strong commitment to the career. This is in contrast to primary respondents, for whom a greater proportion would accept future long term mobility if a promotion entailed this. However, it is noted that substantial proportions of primary respondents would refuse mobility despite its connection with promotion.

The partitioning of career roles is further evidenced when anticipated reasons for future moves are taken into account. Respondents and partners were again questioned on beliefs

about the origin of future moves. A much greater proportion of primary respondents than secondary respondents see future moves as arising out of either being moved in their job, or applying to move to another job. Few secondary respondents, see future moves connected with their own job changes, but to a greater extent, connected to those of the primary respondent's employment (figure 9.21).

The beliefs of respondents with regard to mobility is bolstered by an examination of the behaviour of respondents with regard to the initiation of long term mobility. Thus behavioural data, focused on actual events, rather than perceived motivations, is presented for past moves.

Firstly, considering non-movers, it is noted that the majority of responses came from primary respondents. Here, the decision not to move was associated with actions relating to their own career, i.e. not applying for a post, declining a position initially sought, or rejecting a request from an employer. The latter factor raises interesting questions regarding the difficulties facing firms requiring the geographical flexibility of employees. Although the response of secondary respondents to this line of questioning was low, there appeared a tendency for decisions not to move to be influenced by the decision of the primary respondent in relation to the latter's own career (figure 9.22).

For movers, this split between the initiation of mobility is again quite defined between the primary and secondary respondent, with one of the partners taking the lead role in determining mobility issues (figure 9.23). These findings serve to reinforce the evidence from the beliefs of primary respondents concerning initiation of future home moves and to back-up the findings on the motivating factors behind job moves and career related decisions.

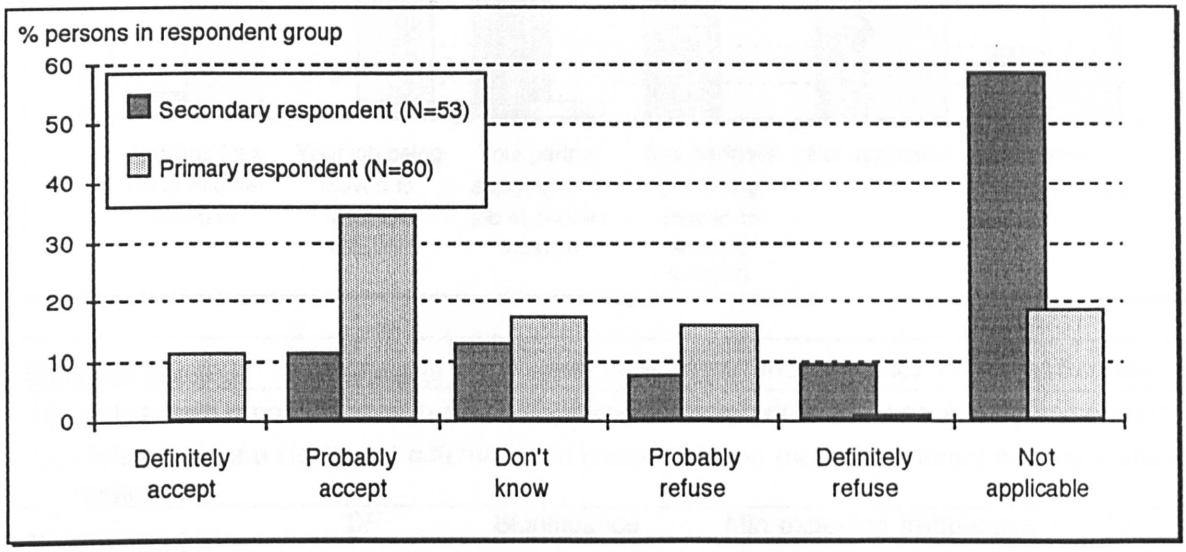
Such findings display the limited role of dual careers within this group of respondents, with most persons adopting a strategy in which all the eggs are put in one basket, in terms of career development. The material reported on the place of dual careers in Scottish ISLM concurs with a wider European study of the experiences of mobile couples in indicating that "women still follow their husband, rather than vice versa" (Deroure 1992a; Deroure 1992b p90). In addition, a study of the effect of mobility on the women's careers in the UK also notes "that in the majority of cases within dual career households, moves due to the demands of a husband's occupation take clear precedence over moves for a wife's career" (Snaith 1990 p156).

Yet it has been noted that factors encouraging future mobility on the part of secondary respondents are frequently related to personal career factors. The difference between beliefs of future career-related long term mobility and actual career-related mobility suggests a potential for dissatisfaction with the 'two person career' strategy, at least in some instances. In support of this, reference is made to a study of partners of expatriate spouses in six European countries, in which 42% felt they were put under pressure by their husband to accept the transfer, 60% felt a refusal would have a negative effect on their husband's career and 72% of whom had to abandon a career (Golesorkhi 1992 p92).

It can be conjectured that any increase in the level of female professionals and managers in particular will enhance the scale of this problem. As Stewart and Carey comment...

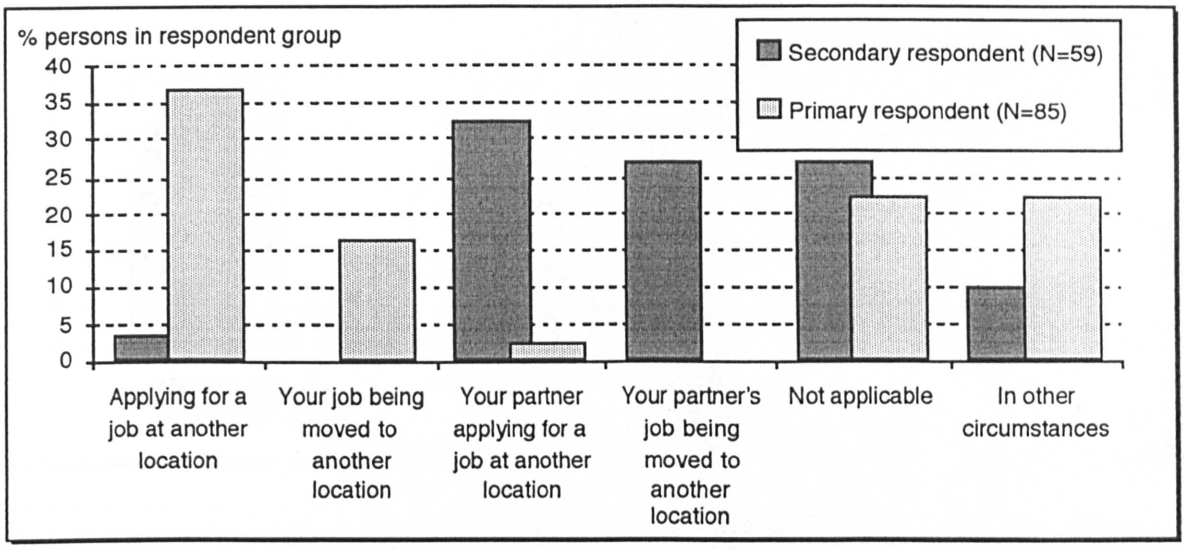
> "As international mobility...increases there will be pressures for partners- predominantly women- to come out of the labour market temporarily (or even permanently) in order to allow family mobility" (Stewart and Carey-Wood 1992 p43).

The crux of this problem is the reconciliation of, the pursuit of highly skilled careers in an increasingly spatially extended work environment, while maintaining a 'traditional' supporting role of a 'two person career' strategy. Such an observation raises issues of gender inequality in the changing organisation of careers. These inequalities have been viewed as a "threat to the position of women in the labour market from migrant male professionals" (Stewart and Carey-Wood 1992 p43). Rather, these threats come from a changing economic structure in which there is not only a growing double burden upon women in the guise of firstly, child-rearing and secondly, paid work, but a triple burden of child rearing or caring for older relatives, paid work and mobility. The growth of mobility serves to reinforce, rather than initiate, the difficulties of female career development.



Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in likelihood of accepting next promotion if it meant home relocation, by primary and secondary respondents H_1 states there are significant differences in likelihood of accepting next promotion in it meant home relocation between, by primary and secondary respondents			
χ^2 (Pearson) 13.17490	DF 3	Significance 0.00427	Min expected frequency= 1.568 Expected cells <5= 37.5%
Test not valid Note: groups 'definitely accept' and 'probably accept' combined; 'not applicable' excluded			

Figure 9.20 Likelihood of accepting next promotion if it meant home relocation
Source: author



Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)
H_0 states there is no difference in cause of moving home by primary and secondary respondent		
H_1 states there are significant differences in cause of home move by primary and secondary respondent		
χ^2 (Pearson)	DF	Significance	Min expected frequency= 10.172
74.33266	3	0.00000	No expected cells <5
H_0 rejected at 0.05 significance level (note: categories 'applying for a job at another location' and 'your job being moved to another location' combined; and 'your partner applying for a job at another location' and 'your partners job being moved to another location' combined)			

Figure 9.21 Cause of future relocation, primary and secondary respondents
Source: author

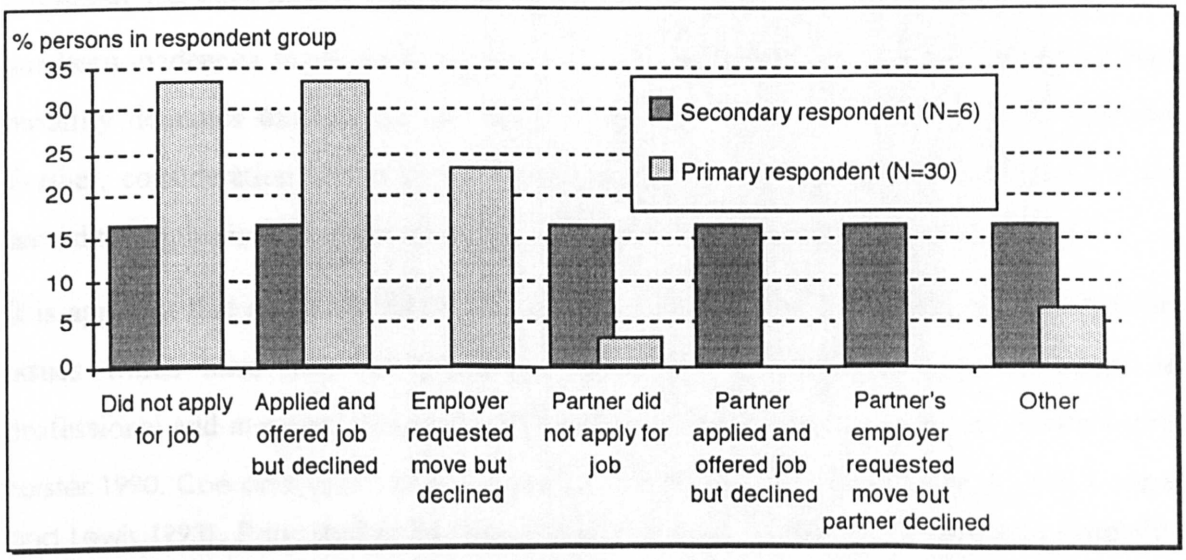
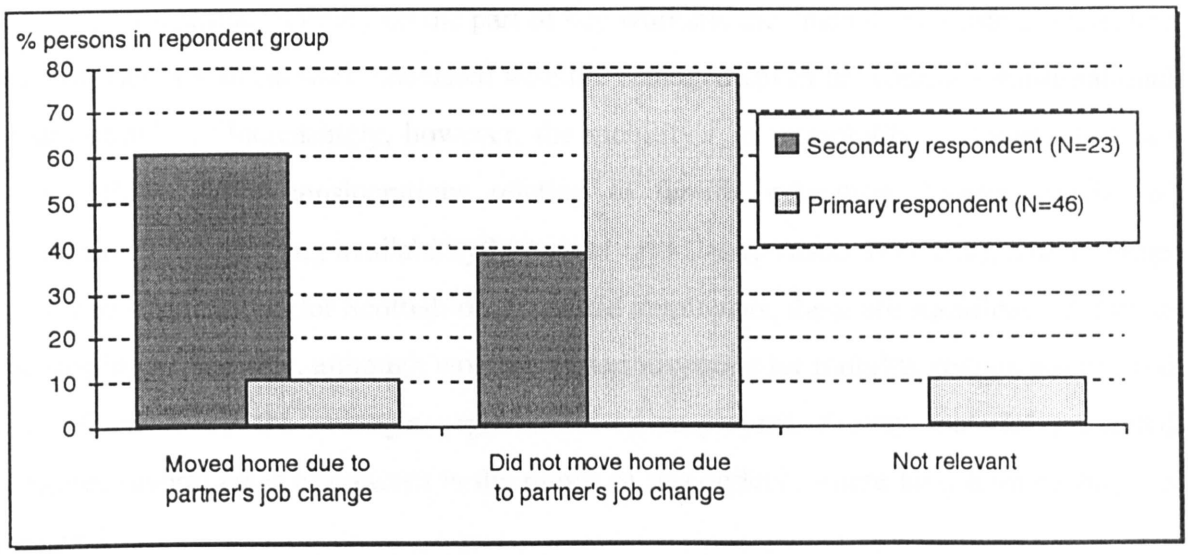


Figure 9.22 Circumstance of deciding against relocation (non-movers), primary and secondary respondents
Source: author



Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in incidence of relocation due to partner's job change, by primary and secondary respondents H_1 states there are significant differences in incidence of moving home due to partner's job change, by primary and secondary respondents			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 7.273
14.03012	1	0.00018	No expected cells <5
H_0 rejected at 0.05 significance level (note: category 'not relevant' excluded)			

Figure 9.23 Home moves due to job change of partner (movers), primary and secondary respondent
Source: author

9.4 Mobility and the non-work context

Much emphasis within geography, in relation to the explanation of skilled international migration, has been on the 'career'. While the importance of careers as motors of mobility has been evidenced for Scottish managers and professionals, the potential for competing mobility demands through the development of dual careers has also been highlighted. Further, consideration of the career-related activities of the partners of respondents has served to emphasise the wider non-work influences on individual employee mobility.

It is apparent that non-work factors are of particular concern to respondents, yet these are issues which have only recently been fully recognised as having an influence on professional and managerial mobility (Forster 1990; Hiltrop and Janssens 1990; Munton and Forster 1990; Coe and Stark 1991; Deroure 1992a; Stewart and Carey Wood 1992; Cooper and Lewis 1993). Prior studies have indicated that some of the main obstacles to mobility are related to family concerns rather than purely financial or work considerations (Snaith 1990; Coe and Stark 1991). Chapters two, four and five of this thesis have indicated

increased residential mobility on the part of key workers, the "managers, professionals, key scientific and technical staff associated with the management of the complex multi-national organisation"... "Increasingly, however, the mobility - or immobility - of such staff has been influenced by considerations relating to family, education, leisure, quality of environment and housing availability" (Stewart and Carey-Wood 1992 p32). The findings presented showed that, for Scottish-based skilled employees, these are significant factors in the shaping of mobility, although work-related motivations for mobility remain strong, and are influenced by the strategic organisation of employers. Survey material presented indicates several areas of concern in the minds of respondents where long term mobility is involved.

For a high proportion of respondents, childrens' education and relationships with family and friends act as a major deterrent to mobility. A further important dimension in the decision to move is apparent in the overall quality of the destination . On top of these issues the potential role of dual careers as an obstacle to mobility has already been referred to.

Issues such as childrens' education, housing and quality of environment illustrate the competing spatial requirements of the work and non-work dimensions of many Scottish-based managers and professionals. Harvey's conception of the distinction between space and place is borrowed in elucidating this geographical contest between social life and the global workplace (Harvey 1990). Thus, with regard to the multi-locational work environment, the function of the location is tied solely to its value as an economic 'space'.

Chapter five of this thesis illustrated how the location of economic space is increasingly internationally dispersed and how the relationships between these spaces are becoming more inter-connected. This is in contrast with the more spatially fixed non-work environment, where, as illustrated subsequently, the function of the location is more strongly tied to the social and cultural value of 'place'.

While the economic space of Scottish highly skilled labour has become more diverse and flexible, the role of place remains a notion tied to the structures of family and community and the distinctiveness of localities. Consequently, the author's findings illustrate areas of competition in the resolution of the economic and the social, or between space and place.

While tied to a Marxist/ structuralist theory of capitalist accumulation, Harvey's work in denoting the distinction that can be drawn between space and place, and in tying these

differences into the transition of Fordist patterns of 'accumulation' to flexible modes of 'accumulation', represents a theoretical bridge between the patterns of Scottish economic change discussed earlier and the actual and perceived social world of internationally mobile Scottish-based skilled labour. Thus... "The more global interrelations become... and the more spatial barriers disintegrate, so more rather than less of the world's population clings to place and neighbourhood... Such a quest for visible and tangible marks of identity is readily understandable in the midst of fierce space-time compression" (Harvey 1990 p427).

The material reported indicates that even in 'two person careers' (where a working husband is supported by a non-working housewife) there are important non-work criteria shaping mobility. This non-work area is developed by investigating influences on mobility in relation to two main dimensions of concern identified within the author's follow-up survey (see chapter three), i.e. housing market considerations, and also the social ties associated with family, friends and locality, summarised under the heading 'quality of life'. In doing so, it is acknowledged that mobility decisions exist within a complex of competing factors.

9.4.1 The non-work context of mobility

The life-stage occupied by many of the respondents indicates that a high proportion of the more mobile are with dependants. As such a potential difficulty faces movers with regard to such issues as childcare facilities and educational continuity, along with other possible non-work obstacles to mobility, for example, housing.

Most respondents from the author's initial survey (both Scottish-based and other persons) were in the owner occupied sector of the housing market, with the greatest part of the remainder in privately rented accommodation. While the majority of those having experienced home relocation were in owner occupied accommodation, those in privately rented accommodation showed a significantly greater likelihood of having experienced relocation (figure 9.24 & 9.25). This indicates the importance of the latter sector for the mobility of a significant segment of the sample, and points to the relative ease of relocating in the privately rented sector. In addition, the results suggest the potential importance of appropriate private rented facilities for localities promoting themselves as locations for mobile skilled labour and their employers.

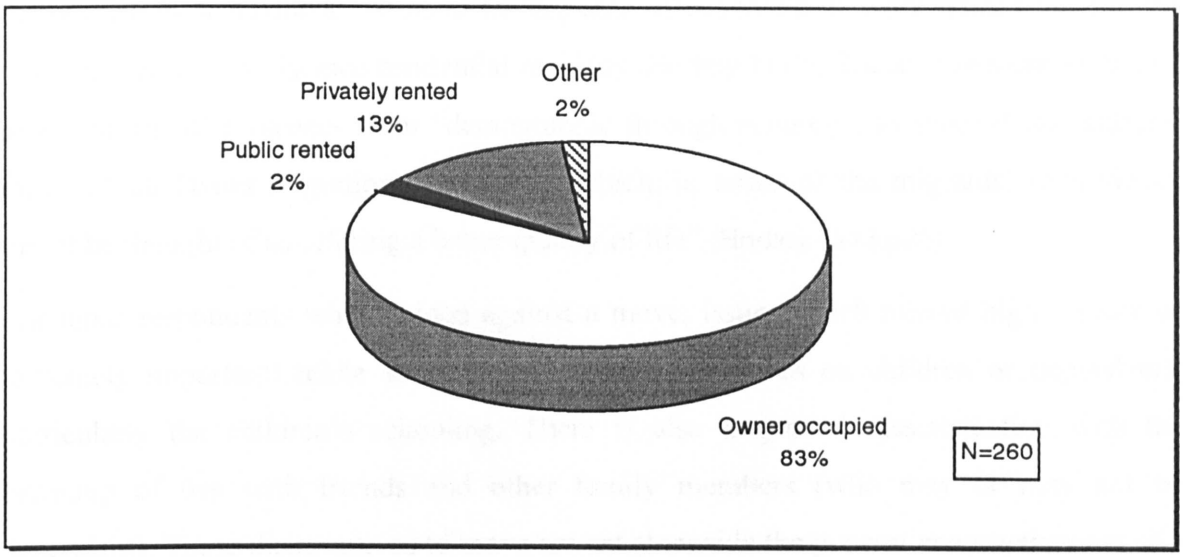
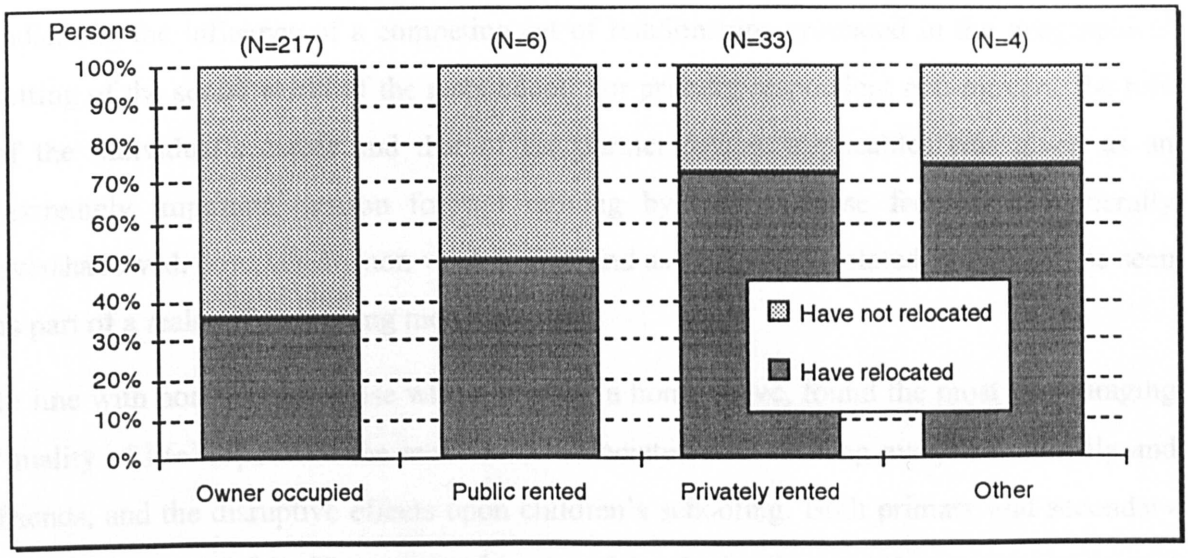


Figure 9.24 Tenure, all persons
Source: author



Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in home relocation between persons in owner occupied and privately rented tenures H_1 states there are significant differences in home relocation between persons in owner occupied and privately rented tenures			
χ^2 (Pearson) 14.62414	DF 1	Significance 0.00013	Min expected frequency= 13.817 No expected cells <5
H_0 rejected at 0.05 significance level (note: categories 'public rented' and 'other' excluded)			

Figure 9.25 Home relocation by tenure, all persons
Source: author

9.4.1.1 Mobility and quality of life: respondent perceptions

It has been shown that within the UK, issues relating to quality of life are gaining in importance in decisions to move, at the expense of economic or work related factors, for both long and short distance residential mobility (Findlay 1993). These issues can be traced to a number of influences from "demographic through economic to societal and cultural ones, which favour migration to locations which, in terms of the migrants' own views, might be thought of as offering a better quality of life" (Findlay 1993 p38).

For those respondents who decided against a move, issues which ranked highly (very or extremely important) relate strongly to the effect of moves on children or dependants, particularly the children's schooling. There is also a general dissatisfaction with the breaking of ties with friends and other family members (who may or may not be dependent). These disincentives to move are set alongside the general unattractiveness of a potential destination as an important factor for not making a home move (see appendix 9.1, table A.9.4).

Such perceptions place the importance of strictly 'work' concerns in a wider context, indicating the influence of a competing set of relationships grounded in the geographical setting of the social world of the respondent. For primary respondent non-movers, the role of the individual's career and that of the partner (where applicable) was given as an 'extremely important' reason for not moving by many. These factors are generally overshadowed, however, by non-work issues, and as such, work-related factors can be seen as part of a realm of competing motivations.

In line with non-movers, those who had made a home move, found the most discouraging 'quality of life' aspects of the move to be associated with moving away from family and friends, and the disruptive effects upon children's schooling. Both primary and secondary respondents noted this. The unattractiveness of the destination and the need to participate in a new and different social culture, posed notable disincentives to a much lesser degree. While the different factors connected with careers added up to a more substantial area of concern for home movers, issues associated with quality of life remain an obvious source of dissatisfaction with relocation.

Two factors stand out as encouraging a home move, namely the ability to return to an area of origin and to move to what is perceived as a more attractive area. These both, as for non-movers, emphasise the importance of 'geography' in the decision to move, and indicate the

significant pull of distinct regional or national, social and cultural affiliations, in the spatial interaction between highly skilled labour and international or national economic structures (see appendix 9.1, tables A.9.5 to A.9.7). The findings reinforce the point that mobility decisions are influenced by factors outwith the scope of the ILM and the career structures of firms.

This importance attached to quality of life is in accord with a wider UK migration study, conducted by the Glasgow Quality of Life Group (Findlay 1993). However, Fielding notes that mobility itself act as a social escalator and that "Each of the three paths leading to middle class membership (credentials to professionals, organizational experience to managers and entrepreneurial skill to petite bourgeoisie) requires knowledge of, and ability to handle, non-locally based information, codes, rules, and systems of thought and action" (Fielding 1992a pp14-15). Albeit, the gains through mobility for Scottish skilled labour are won against a desire for a more 'place-full' environment.

The increasing spatial flexibility of the workplace of Scottish managers and professionals is likely to some degree to enhance the significance of spatial variations in quality of life within relocation decisions. It has been argued that localities themselves have increasingly sought to market themselves as attractive places to live an work in order to attract capital and human resources (Findlay 1993 p47). Malecki and Bradbury note that the locational preference of US research and development facilities is strongly influenced by the locational desires of their core skilled labour force (Malecki and Bradbury 1992). The importance of quality of life issues in encouraging the international mobility of managerial and professional labour via Scotland, a process intimately connected with the operation of a significant part of the economy, points to the need to promote accurate information about quality of life to overcome place 'bias'.

As indicated above, important factors discouraging past moves related to moving to a less attractive area, the disruption of children's schooling and to moving away from family and friends. This is again the case when respondents are asked about future moves. Such factors stand out as being of a stature similar in importance to the several issues connected with work. However, quality of life factors encouraging future mobility diverged somewhat between primary and secondary respondents, the former citing the opportunity for international mobility as a notable enticement to move, along with moving to a generally more attractive area (see appendix 9.1, tables A9.9 to A.9.11).

For the latter group, while the attractiveness of the destination is also an important consideration, the ability to live in the same location as their partner is much higher on the list of priorities. The possibility of future return moves to an area of origin was not as much of an encouraging factor as for past moves, since for many respondents, a return relocation had already been accomplished.

The findings are in agreement with Beaverstock's qualitative interpretation of the motivations of British business elites in the New York financial sector, in that quality of life is an important factor in the mobility process (Beaverstock 1992b). However, the particular concerns of Scottish-based respondents appear more diverse than the relatively young, highly paid bankers and management consultants operating in the international financial services of a world city such as New York.

The latter are strongly attracted by diverse recreational amenities and an active social life. Scottish-based respondents, who tend to be older, married and with children, place a much greater emphasis on the negative aspects of mobility connected to family ties. This difference in the definition and perception of quality of life between different age groups is reflected more generally in other UK work (Findlay 1993).

9.4.1.2 Mobility and housing: respondent perceptions

Apart from 'quality of life' criteria, the role of housing is perceived as an important dimension by respondents. For non-movers, the role of the housing market in channelling the flow of professional and managerial skills is indicated by the sizeable proportion of respondents who perceived housing costs as an obstacle to mobility Otherwise, the more practical aspects of relocation did not loom large in discouraging moves, i.e. removal activities, selling and financing.

Housing issues do not form a group of concerns which by themselves principally motivate relocation for those Scottish-based persons commenting on the reasons for or against their last home move. Nonetheless, housing related factors such as moving to a more expensive area, good relocation assistance and ease of buying or selling accommodation, are relatively more important to the secondary respondent. For those who had moved, disadvantages involved were expressed as the time and effort involved in relocating, difficulties in the buying, selling, or renting and the expense of moving. Expense of moving, difficulties buying or selling, the general time and effort of moving and the absence of good relocation assistance by the employer are the most off-putting factors

when contemplating a future move. However, the detailed processes of moving home do not appear strongly as factors either encouraging or discouraging future home moves.

Research results indicate that to a certain degree, housing is an important aspect of the competition between the economic and the social for Scottish skilled labour. The difficulties of mobility in the form of housing market constraints are an obvious issue, however...

> "In addition to access, transfer costs within the housing market represent a barrier to mobility. In many countries there are costs associated with gaining access to the formal and informal networks through which access to accommodation is mediated, with the legal transfer of property or access rights, with the possible arrangement of temporary accommodation, with the physical move itself and with the social and economic disruption of a move. These combine to make up a significant financial burden" (Stewart and Carey- Wood 1992 p29).

Other factors involved in the problems of matching housing and mobility requirements include, the quantity and quality of housing, and the location of housing. The research findings on the role of housing issues are echoed by Maclennan and O'Sullivan, who indicate problems in movements from southern England to Scotland; they relate this partly to image problems and partly to constraints on the availability of private rented accommodation (Maclennan and O'Sullivan 1986).

High levels of home ownership and spatially uneven or volatile property values can deter mobility, as indicated in the research results. An important part of the mobility equation in Scotland is the disparity in property values with the South East of England. Domestic Scottish-South East moves often the first step towards future international moves; thus if domestic moves are constrained, so too are subsequent international ones.

Competition between space and place in the field of housing can be extended from a focus on financial burden to a social and psychological burden associated with geographical movement, particularly where international moves are considered. International mobility already creates serious problems from both the employers and the employees point of view. These relate mainly to longer term mobility but business travel must also be considered as an additional contributory factor (Ford 1992). Practical problems such as leaving behind friends or relatives, changes to children's schooling, and settling accommodation issues

may also translate into emotional problems, as indicated in the literature review (chapter two).

Previous research suggests the impact of relocation on children may be significant and that concern over this issue represents an important inhibiting factor in employees decisions to move (Cooper and Makin 1985; Fisher and Cooper 1990; Cooper and Lewis 1993). These findings are supported by the survey material presented above, particularly in the relation to children's education. A further factor brought out by the aforementioned works is that fears over relocation may be linked to the adequacy or cost of child care in new locations. Absence of adequate child care can act as a contributing factor to problems faced by spouses of relocated personnel especially in the context of increasing workforce participation rates of women (Munton 1989a; Munton and Forster 1990; Deroure 1992a).

It is increasingly likely that employers may find that their key staff will prove more reluctant to move without greater assistance with the effects of mobility on their personal lives. In addition, there is an emerging consensus that if and when employers secure mobility from an employee, there is a strong cost in ignoring employee's problems brought on by relocation.

9.5 Mobility and the employer

Chapters seven and eight of this thesis pointed to the importance of corporate strategy and structure for international flows of Scottish skills. However, production chain structures and the institutional mechanisms for the international movement of staff do not in themselves fully explain these flows. The course of Scottish skilled labour via the structures of international capital has been shown to be mediated by personal circumstances which may facilitate or obstruct mobility. However, to appreciate the interaction between the economic structures and the social context of skilled movers, it is useful to examine the personnel or human resource strategies adopted by firms in matching mobility supply and demand.

The institution of the employing organisation is an important player in the area of reconciling the sometimes competing demands of the social and the economic. Employers have increasingly, although not uniformly, adopted the role of mediator between the competing social and economic spheres of the employee. In acting as a potential mediator, the requirement for mobility is lubricated by the employing institutions themselves through

mobility assistance. More generally, the response of the employer is considered in relation to structures for change emanating from government, unions and other groups.

9.5.1 Employer responses to mobility issues

An obvious mechanism whereby employers can alleviate the inconveniences of long term skill mobility are through its substitution by business travel, semi-permanent mobility or advanced communications technology. However, it has been noted earlier (chapter two) that telecommunications advances have had as yet little influence on the demand for mobility (The Economist 1994b), although, there is some evidence that in the face of the rising costs of expatriation and relocation, long term mobility is being replaced with shorter term modes of movement (Ford 1992; Cormode 1994). As we have seen frequent business travel is associated with low levels of relocation for a limited proportion of Scottish-based managers and professionals.

The coverage of relocation services provided by employers to mobile staff and their families has been examined using the researcher's first phase survey, respondents being questioned as to their experience of a variety of relocation services upon moving home. Respondents selected from a list of services drawn up on the basis of an examination of current practices in the field of personnel management, as reflected in the specialist literature (e.g. Confederation of British Industry Employer Relocation Council, Relocation News); an appraisal of previous research into this area (Atkinson 1987; Coe and Stark 1991); on the basis of interviews with a relevant professionals; and via a pilot study of the adopted methodology set out in chapter three of this thesis.

A large proportion of persons do not receive any form of relocation service, even for such 'basics' as payment of removal costs, temporary accommodation costs, temporary travel costs and fees on housing transactions. Such services that are relatively commonly provided are related to housing transactions and the most direct aspects of moving home. Services aimed at facilitating the transition of the employee with respect to their wider social context are least commonly provided by employers (figure 9.26).

Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in relocation service provision by labour market context of move			
H_1 states there are significant differences in level of relocation service provision by labour market context of move			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 112.491
74.29540	1	0.00000	No expected cells <5
H_0 rejected at 0.05 significance level			

Figure 9.26 Labour market context of relocation service provision, movers
Source: author

Relocation services are more commonly provided for those employees moving within a firm's internal labour market than for those persons relocating within an external labour market setting. Thus, those employees relocating to join a firm as new recruits shoulder a relatively large proportion of relocation costs themselves; they are least likely to receive any form of assistance with the impacts of a move, other than for housing transactions and removal costs.

Over 80% of those making work-related moves with their present employer receive services such as removal costs and temporary accommodation costs. Between approximately 55% and 70% have access to other financial assistance associated with costs of buying and selling, and searching for a house. Around 55% of corporate transfers are also compensated by means of a disturbance allowance.

Factors indirectly connected with the move itself are less commonly provided. Thus, general information on the area being moved to is provided to less than 40% of movers. Help with children's education does not seem a factor addressed by employers, with a school search service available to just over 20% and more general counselling on

educational matters provided to under 5% of respondents. The extent to which the issues affecting spouses are met by employers would appear limited, with less than 5% of employers providing some sort of formal spouse counselling.

Results from the author's study indicate that the relocation services available to corporate transfers are more generous than those available to recruits. Removal costs were provided to around 56% of transferees. But only a third or fewer new recruits received assistance with the financial costs of relocation. Further, employer help with educational issues and the effects of mobility on the spouse is virtually non-existent. Just under 10% of recruits do receive area information and over 20% are provided with some form of disturbance allowance.

It has already been noted that a large proportion of Scottish-based persons move nationally and internationally outside of corporate structures, as 'self-motivating' migrants. Thus, for many Scottish managers and professionals there is a relocation service deficit. Those employed on local contracts are unlikely to enjoy the advantages of corporate movers. This is bound to be most acute where international moves are concerned.

Within the EC, these workers have only EC guarantees to employment and social benefits, as opposed to the extensive financial support of corporate employers. In addition, although expatriates are generally personally liable for tax returns, these are most often taken care of by a company-designated tax adviser for corporate movers (Organization Resource Counselors 1991 p7).

As the relocation services commonly offered are those most directly associated with housing transactions and removal activities, concerns with these activities do not stand out as factors discouraging a move, as discussed above. However, general concerns about the quality of the environment in the destination did feature prominently in the thoughts of respondents on mobility disincentives. Information about destinations was not provided as frequently as services for housing transactions and removals, although contributions for house hunting expenses was relatively common.

There is a notable contrast between the concern of respondents with childrens' educational issues (and to a lesser extent dual careers) and the level of relocation services directed at overcoming these obstacles. However, a study of employment related mobility in a European-wide context indicated that help with finding schools, or a job for the partner, may often be provided on an informal basis (Deroure 1992a), although a study of eighty

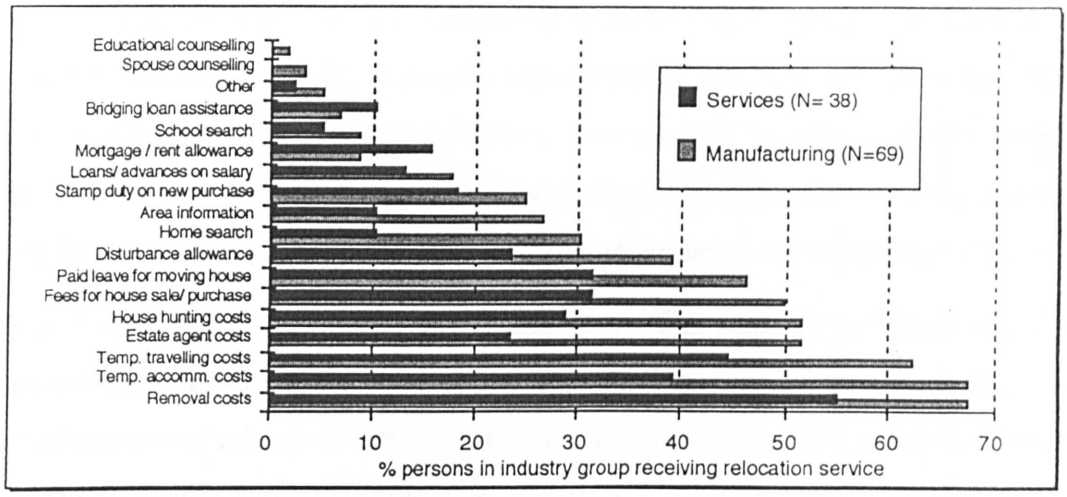
UK TNC's expatriation policies indicated that 91% of firms have no formal policy on working spouses and that 84% had no informal policy either (Organization Resource Counselors 1991 p5).

In terms of the extent to which relocation services did address the social and psychological burdens of mobility in areas not directly connected with housing, paid leave to movers is relatively frequent. This provision of this would clearly act as a mechanism for relieving certain work pressures for mobile employees, but nonetheless it does not specifically assist particular non-housing concerns identified by respondents, nor is it clear from this study how generous this facility is in the length of time made available to employees.

Despite a similar pattern of labour market contexts for relocation in the different industrial activities, as indicated in chapter eight of this thesis, manufacturing employers are more common purveyors of assistance across the range of relocation measures, with service activities making a noticeably smaller commitment (figure 9.27). 'Other' activities are closely matched with manufacturing in the provision of relocation services (figure 9.28). The more international orientation of employers in manufacturing and 'other' activities may account for the more extensive provision of costs associated with moving house, the more common distribution of disturbance allowances and the more frequent imparting of area information. However, all three main industrial activities devote little attention to the wider issues of relocation affecting the employee's family.

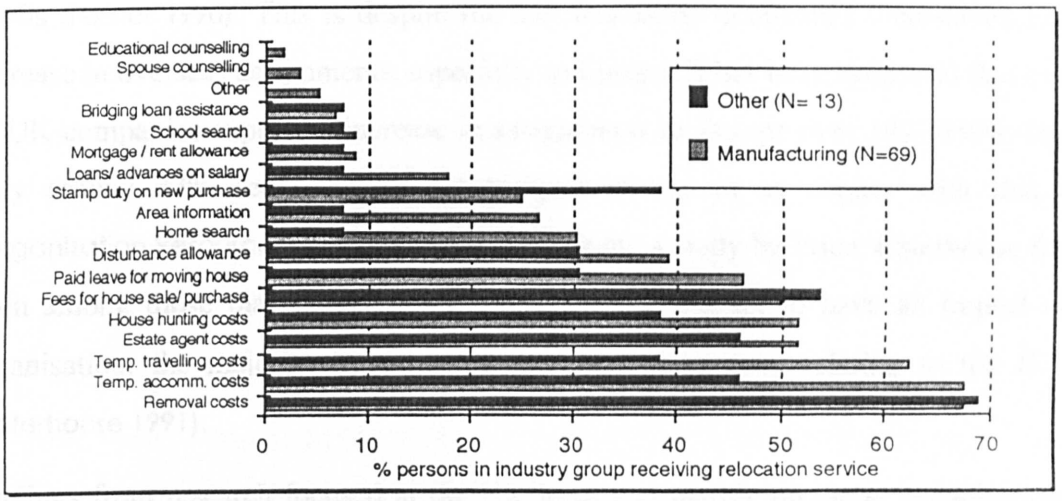
Within the manufacturing sector, electrical and electronic engineering firms (one of the most internationalised industrial activities) stand out as providing a relatively high level of relocation services aimed at non-housing issues, i.e. general area information, school searches and paid leave. However, the absolute level of the provision of these facilities is still low.

A particular problem for Scottish managers and professionals may be the relatively low levels of training and assistance available to local nationals. As indicated in one study, "few subsidiaries offer the same pre-departure training to employees en route to other countries as does the home office for its outward-bound staff" (Business International 1991p51,53). This tendency has developed as it has traditionally been the headquarters which sends out staff, rather than overseas plants transferring personnel.



Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in relocation service provision by manufacturing and services			
H_1 states there are significant differences in relocation service by manufacturing and services			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 163.364
7.40310	1	0.00651	No expected cells <5
H_0 rejected at 0.05 significance level			

Figure 9.27 Relocation service provision by manufacturing and services
Source: author



Statistical notes	Test statistic:	χ^2 test: (see Shaw and Wheeler 1994 pp151-155)	
H_0 states there is no difference in level of relocation service provision between manufacturing and other activities			
H_1 states there are significant differences in level of relocation service provision between manufacturing and other activities			
χ^2 (Pearson)	DF	Significance	Min expected frequency= 59.927
0.22836	1	0.63274	No expected cells <5
H_0 accepted at 0.05 significance level			

Figure 9.28 Provision of relocation services by industrial group, manufacturing and other
Source: author

In addition, it may be assumed by some employers that expatriations of local nationals to parent company facilities are less demanding than for home country nationals venturing abroad. Further, home country nationals expatriated to Scotland may be relatively senior and so in a position to commandeer greater resources for training and other relocation assistance. On the other hand, Scottish managers and professionals moving abroad may occupy lower levels and thus be less able to assert their desire for relocation services.

In accord with other studies based at a UK level, this research indicates that Scottish employers (be they domestic or overseas owned) place too great an emphasis on the financial aspects of relocation while under-estimating the potentially deleterious effects of relocation on family and social life (e.g. Hiltrop and Janssens 1990; Coe and Stark 1991; Deroure 1992a). Few Scottish employers appear to have formal strategies to cope with the family and social disruption caused by relocation.

The author's research findings confirm for Scotland the view that few companies in the UK as a whole have started to come to terms with strategies to deal with increased mobility; and that very few UK firms are promoting policies which will create the necessary flexibility to harmonise the potentially conflicting demands of work and family life in the 1990s (Forster 1990). This is despite the fact that many companies themselves expect an increase in overseas assignments, especially to Europe. It has been estimated that over 70% of UK companies expect an increase in assignments to Europe over 1991-1994. However, only around 33% see their present assignment system as coping with this change (Organization Resource Counselors 1991). Similarly, a study by Price Waterhouse finds that even among those that expect the Single European Market to have an impact on their organisation, the majority have no human resource strategy relating to the EC (Price Waterhouse 1991).

Findings from research focused at the UK level and mainly on larger organisations have found responses to issues of mobility to be partial, sporadic and overly concerned with the financial aspects of mobility (Hamill 1989). Overall, there is little empirical evidence concerning international management of human resources in Scottish companies. While the largest and most sophisticated companies may have developed effective international human resource policies, it is likely that smaller and medium scale organisations lack the experience and resources of these larger companies.

As a consequence of the sorts of difficulties encountered in employee mobility discussed above, it may be expected that employers react by introducing measures to counteract mobility constraints, as suggested above. One such course may be 'head hunting' of appropriate personnel from proximate firms or the use of recruitment agencies to tap specific skills in regional markets, as indicated by Findlay (Findlay and Garrick 1990). A negative effect of this sort of action may be to increase the price of suitable skilled employees within the area, thus making a locality less attractive to investors in the long term.

An alternative may be to develop more effective recruitment and promotion packages which smooth the path of relocation. As indicated above for Scottish-based employers, these measures have tended to focus on housing market facilities, such as advice and financial help with moving home.

Responses by employers to the contest between social life and the global workplace could be addressed in a number of ways, as noted by Deroure, for example, by being better informed about the circumstances and attitudes of couples, more flexible in finding solutions, offering a choice of job to the employee, assisting in employment for the partner and giving greater emphasis to preparation for mobility (Deroure 1992a). Golesorkhi notes that many firms are considering new methods through, for example, legal aid for obtaining work permits, professional orientation for the partner, job exchange programmes for partners, visits home for orientation prior to return, even company hot lines for urgent problems. However, although different companies may adopt particular measures, few have a comprehensive policy that involves the whole family and not just the individual employee (Golesorkhi 1992 p93).

A further issue of importance to employers is the supply of child care facilities, the lack of which may add to the difficulties of spouse relocation. One 1991 survey indicated that only 120 employer-funded nurseries exist in the UK, with only enough child care places to cater for 8% of potential demand (Coe and Stark 1991 p11). In addition, a study of UK companies' expatriate remuneration policies indicates that 63% of firms do not address the loss of state benefits, such as child benefit (Organization Resource Counselors 1991 p7). The development of child care measures potentially involves other institutions, and it is the role of government and other agencies in influencing employer policies which is now considered.

9.5.2 Wider influences on employer policies.

There is evidence at the UK level that, to a certain extent, some companies and individuals have made use of a growing number of specialist firms and consultants which offer solutions to many of the issues involved with employee relocation, for example housing, education issues, and career issues (Stewart and Carey-Wood 1992). However, as indicated above, the extent to which Scottish employers make use of such facilities appears limited. One course of action on the part of employers has been the establishment of bodies for the discussion and dissemination of information concerning relocation, such as the Confederation of British Industry's Employee Relocation Council. At the governmental level, Stewart and Carey-Wood note the formation of 'Eurologement', aimed at airing the housing consequences of the European single market, which has held a conference on European mobility and housing (Logement, 1990).

However, in the UK, mechanisms to address mobility issues occur through individual firms or via employers' organisations. The role of the state has been marginal. Although there is a long standing recognition of the importance of mobility in the civil service, where subsidisation of relocation and special rates on mortgage loans are common incentives to move (Stewart and Carey-Wood 1992), direct intervention by the state in promoting more widespread professional and managerial mobility is limited.

The state has played an influential role in defining the tax regime under which relocation and expatriation takes place and in establishing the immigration regulations which govern access to the UK labour market for overseas professionals and managers (see literature review, chapter two). Another indirect mechanism aiding mobility in the UK has been legislative changes to make private pension schemes more flexible. For example, the provisions on pensions of the social security acts in 1986 and 1990 have been followed by the establishment of the Occupational Pensions Board, which facilitates individuals in tracking past pension rights following mobility (Coe and Stark 1991 p13). In addition, systems informing on employment opportunities within the EC are being developed (Deroure 1992a). The SEDOC scheme aims to facilitate the mobility of workers via the establishment of databases dealing with the demand and supply of jobs, as well as on living and working conditions within the EC.

The role of the state varies elsewhere. France has a similar system of civil service mobility assistance as the UK. However this takes place within a system relevant to the wider,

private sector economy. Here privileged access to the habitations à loyer modéré (HLM) sector is used as a counter to civil service mobility difficulties, a framework also shared with private companies. However, in contrast to direct assistance to employees, there is evidence of relatively low levels of indirect funding of housing needs being made by employers through general housing finance measures for the EC as a whole (IAURIF 1989).Gallaine illustrates the way in which statutory obligations for housing contributions in France may be used as an avenue for circumventing housing constraints on mobility (Gallaine 1990).

Much EC law exists in relation to the freedom of movement of workers, dating back to the Treaty of Rome in 1957. Several regulations in the 1960s and 1970s accord workers and their families territorial and professional mobility along with rights to social security within the EC (Deroure 1992a). For instance, the Multilateral Agreement on Social Security in the early 1970s sought equality of treatment for EC nationals, aggregation or totalisation of benefits and the ability to export benefits (Coe and Stark 1991 p14).

However, national schemes for the funding of social security remain at odds and are likely to constrain mobility to a degree (Eadie 1993). The lack of multilateral agreements is more marked for private pension schemes. It is noted, however, that deregulation within the financial and insurance industry is likely to stimulate EC-wide compatibility in pension arrangement. According to one study, 80% of UK companies keep their expatriates within the home country pension and life assurances schemes (Organization Resource Counselors 1991 p8). Given the relatively high proportion of Scottish persons moving outside an internal labour market, this issue is particularly relevant to Scottish ISLM.

In addition, the European level has seen a number of policy initiatives in relation to the reconciliation of work practices and family life. The spur for this policy area is noted by the Director-general of the Department of Employment, Industrial Relations and Social Affairs of the Commission of the European Communities, "The evolution of work organization must meet the demands of flexibility, involving frequent changes and reorganization within the family life, in order to be able to meet the demands of an industrial society which increasingly requires workers to be professionally and geographically mobile" (Degimbe 1992 p12).

The context of European Commission proposals is set against wider political responses to work and family matters. For example, a 1989 agreement by the Council of Ministers to

encourage the co-ordination of family policy including policies directed at the reconciliation of work and family life. A further impetus derives from the Charter of worker's fundamental rights, adopted by heads of state and governments in 1989, and condoning measures for the reconciliation of workers work and family life.

A European Commission working program in response to this context has seen proposals for work hours, influencing for instance, weekly and annual leave arrangements. Other measures address job security for pregnant women and new mothers, and the development of accessible and suitable child care (Degimbe 1992 pp12-13). These policies are not specifically directed at the issue of mobility, or at professionals and managers, although they are of relevance.

In addition, a number of business organisations have sought means to reconcile work and family life. Here again, the response to the particular issues facing mobile managers and professionals is more limited than general mechanisms for workers as a whole, for whom mobility is a less crucial element. These activities have focused on childcare services, flexible work times and maternity leave (Gangloff 1992; Hefftner 1992; Kamp 1992; Muller 1992; Versailles-Tondreau 1992).

A further instance of mechanisms aimed at reconciling the demands of work, family and mobility can be found in organisations addressing the needs of diplomats and civil servants. ECFASA is a European network of associations for diplomats' partners which exchanges information on issues relating to family assistance (Deroure 1992b p89). Focus Career Service is another organisation aimed at supporting the partners of the many European Commission civil servants and others seconded to Brussels (Coory 1992). Both organisations recognise that one of the main reasons for failure of mobility is derived from difficulties partners have in accommodating the change. More generally, Deroure points to the potential role of other bodies in helping the mobile employee and his or her family establish themselves in a new environment, especially, local employment services, mobile professional associations, company associations, cultural associations as well as specialist consultancy services in careers or psychology (Deroure 1992b p90).

Within Scotland, research has indicated problems of skill shortages and recruitment difficulties. This has been partly related to high rates of emigration, especially for graduates and skilled workers. As Findlay has demonstrated, a net 'brain drain' persists. Danson et al note that this has been encouraged by the 'branch plant economy', with many

career paths leading out of Scotland (Danson, Reeves and Talbot 1993 p6). In turn, the loss of skilled workers, either permanently or temporarily, is viewed as impeding wider development of the labour force and economy. Although the positive roles of career development via internal labour markets must also be acknowledged.

Gibson asserts that, of the approximately 7500 scientists and engineers who graduate in Scotland every year, around 4000 leave Scotland (Gibson 1993). He estimates that this represents a financial loss per person of between £40,000 (approximate cost of education) and £1 million (approximate lifetime contribution to Scotland). Assuming an intermediate figure of £250,000 per person, the annual loss via skilled emigration is calculated at £1 billion per year. However, this 'brain drain' cost may be negated to a certain extent by the inflow of skilled labour via the existence of an underlying 'brain exchange'.

Findlay and Garrick's study of unpublished International Passenger Survey data indicates a net outflow of 5000 migrants (of all occupations) from Scotland in 1986 (Findlay and Garrick 1990 p81). In addition, it is indicated that 27.2% of immigrants are transients. If it is assumed that transient migrants are predominantly professional and managerial and that an approximately similar magnitude of emigrants are transient, then it can be estimated that 1986 saw the emigration of 1360 managers and professionals from Scotland. If a similar cost is attached to these emigrants as cited above by Gibson, then this net outflow represents £0.34 billion per year.

In countering this problem, Danson et al suggest a role for Scottish Enterprise (Scotland's quasi-governmental economic development agency) in co-ordinating the improvement of data collection on Scottish skill shortages and recruitment difficulties within Scotland, which are currently collected by a range of trades associations, professional bodies, Local Enterprise Companies, training boards, employment agencies and others (Danson, Reeves and Talbot 1993). The research findings reported here suggest that an essential component of such an exercise must relate to issues of domestic and international professional and managerial mobility to and from Scotland, together with the work-related and non-work constraints operating upon this.

Such exercises, in assessing the demand for skills and the obstacles to their provision, also have a more general role to play in the development of human resources within Scotland. For example, Glasgow Development Agency, in proposing a human resource development

strategy, notes the importance of developing a highly skilled workforce in achieving international competitiveness (Glasgow Development Agency 1992).

Several of the key human resource development objectives cited by Glasgow Development Agency are particularly relevant, to skilled labour mobility, e.g., assisting companies maximise their competitive position and profitability through effective investment in employees; improving the quality, communication, and use of labour market information; enabling employees to maximise their individual potential, career development and earning capacity; and promoting educational and training capability outwith Scotland (Glasgow Development Agency 1992 p4). The research material reported above implies that Scottish human resource development objectives could be usefully targeted at companies and employees involved in national and international mobility.

9.6 Conclusion

This chapter has highlighted a number of issues which suggest that, in some areas and for some people, a contest exists between social life the emergence of the 'global workplace'. It must be noted at the outset, that the findings presented in this chapter have only touched upon the links that exist between the social and economic contexts of Scottish skilled mobility. As a result the chapter offers an indication of issues which are worthy of a more in-depth investigation rather than presenting detailed explanations of the causal relationships between social and economic factors in determining the character of Scottish skilled mobility.

The results show that, as expected from the work of Salt, Findlay, Garrick and others, the demands of the workplace and the momentum of the career plays a key role in instigating mobility. These can be viewed as the pull factors. On the other hand the findings reveal the strength of constraining factors, such as effects on quality of life and the obstacles and inconveniences attached to moving home, as forces which significantly direct the mobility decisions of the persons involved. The main thing the findings clearly show is that mobile skills are not just cogs within the internal dynamics of international business, but are social beings for which the opportunities / demands of work are part of a wider complex of issues which reflect attitudes to family-life, attachments to place and community, and the importance and significance of the career.

The chapter also indicates that the demands for mobility placed on individuals, and the reaction to those demands, change according to career stage and life-cycle position. There are significant differences in who participants in any particular form of mobility, depending on their age and their job level. These findings indicate, that to appreciate the dynamics of global skill flows, they must be defined, not only in terms of economic function and context, but also in terms of particular social groups and characteristics.

Another issue highlighted concerns the impact of a growing number of dual careers on skill mobility levels. The main conclusion drawn is that growth of dual carers in Scotland has not acted as a major impediment to skilled mobility. That is not to say that increased participation of women in the workforce has not led to individuals and couples adopting strategies which mitigate or by-pass the potential mobility constraints thrown-up by dual careers.

An important finding is that relatively few couples appear to pursue 'high-profile' careers simultaneously. It seems that the structures, either within the workplace or the community, are not adequately established to make this sort of life-style a realistic prospect for many. Rather, the most common approach is for one partner, usually the wife, to adopt a career which is 'mobility-friendly' such as nursing or teaching. Another strategy is embodied by the relatively high proportion of career-women revealed who are not married or living in a couple. The changing contribution of women in the workforce is one that carries significant ramifications for the future direction of international skilled labour mobility. Further, female economic participation is a nationally variable phenomena, with the consequence that 'global' forces such as the internationalisation of Human Resource Management will interact in a variable way with different local contexts. The ability of the local context to reconcile its own mobility advantages and disadvantages with global trends may be an important element in sustaining the local's competitive advantage.

Lastly, the chapter picks out a number of deficiencies in the ability of Scottish industry to effectively meet the growing demand for skill mobility. Given that mobility trends look set to continue and even increase, the importance of adopting policies which view mobile skills solely as economic variables, is likely to undermine the long term ability of firms to address the challenge of the global workplace.

Chapter 10

Conclusion

The major issue raised by this thesis concerns the role of business travel: it is asserted that it can substitute for the international skilled labour migration on which most literature has concentrated. Moreover, specific economic activities and destinations are associated with these flows, which is indicative of the importance of economic and geographical issues to the understanding of population movement and in the development of population theory.

Forms of international skilled labour mobility, such as business travel and migration however, are largely regarded as distinct and independent processes in the prior literature. Business travel itself has been largely ignored by geographers as a population phenomenon, perhaps even regarded as a trivial process in relation to the much 'weightier' issues of migration. Yet, this thesis shows that different forms of skilled labour mobility are tied to the same underlying changes in economic structure. One consequence of this is that 'migration' studies of skilled labour must consider the whole mobility spectrum of skilled labour. This is necessary to appreciate the relationship of migratory movements to a broader transformation of the character of labour mobility in the post-Fordist era. Emerging forms of mobility are more variable in time and space and are intimately associated with new structures of work. Indeed, growth in the transient and temporary movements of short term business travel challenges 'migration' as the temporal form of contemporary population flow that really matters for the operation of the global economy.

The flows and circulations of contemporary skilled labour examined here reveal a more intricate pattern than existing accounts have recognised. These flows range from a matter of days to several years, with individuals and firms juggling different sorts of mobility to meet a range of functional needs. Findings suggest that in some instances short term mobility may act as substitute for longer term migration. However, the two population flows often exist side by side. Indeed, both are increasing at a high rate, albeit with business travel growing at a relatively higher rate than skilled international migration.

Different types of mobility are used depending on geographical destination. Thus short visits are favoured to Europe, while longer term flows are more common to North America. Intermediate mobility forms are most common to the remainder of locations. Many

individuals participate in both short and long term mobility at home and abroad. Thus, geographical scale and duration of mobility are variable phenomena even at the individual level.

Developments in trade and investment have had important but varying impacts on flows of business visits and longer term movements. Corporate structure and strategy strongly influence the level and form of international skilled labour mobility. Thus, questions of mobility substitution are also linked to the particular industrial context of mobility. Moreover the career stage of the individual interacts with industrial context in determining the mobility patterns.

There are also a number of disadvantages embodied in the strategy of considering business travel and relocation together. The main disadvantage is methodological: the survey instrument used tends to obscure those persons who may engage in longer term work-related migration but do not participate in shorter term travel as well. A second possible disadvantage relates to the scope available within a single research project to fully explore the processes influencing either short term flows or longer term flows in an in-depth, case study approach. Clearly, a larger study would be able to devote a more intensive effort into the detailed nature of the individual mobility patterns examined.

Scottish international skilled labour mobility occurs against a background of economic, technological and organisational change. A differential evolution of enhanced geographical flexibility of production, and the implications of this for the organisation of international business, ensures that patterns of Scottish ISLM are closely connected with the industrial activities in which individuals work. The scale, duration and function of Scottish mobility is influenced by the varying geographical arrangement of the production chain and the associated corporate international division of labour.

This thesis has shown how corporate structure and strategy have a significant effect on the nature of ISLM within and between companies with a Scottish presence. For many firms, mobility of managers and professionals is an increasingly important part of corporate organisation and more often a part of normal managerial career progression. Mobility takes the form of relatively formalised long term secondments and assignments, as well as sometimes planned, but more often ad hoc, short term international mobility.

Yet, as noted, Boyle *et al* assert that skilled international migration will not... "'inevitably' increase as national economies become more integrated" (Boyle, Findlay, Leliévre, *et al.*

1994 p48). Rather, the most significant contribution to skilled international migration comes from major investments into greenfield sites at a great distance from the sender country. This thesis indicates that the movement of skilled labour, associated with the integration of national economies, does indeed represent a real prospect for increased skill transfers. However, this is subject to the corporate strategy and structure of particular enterprises.

A further issue raised by this thesis relates to the role of 'global cities', whose command and control functions create flows of skilled workers to and between them (Sassen-Koob 1987; Sassen-Koob 1988). The focus on such large economic centres has neglected the degree of ISLM in peripheral economic areas such as Scotland.

A feature that emerges in the thesis is how the penetration of overseas owners into Scottish manufacturing is influential in establishing structures for the development of contemporary Scottish ISLM patterns. North American and EC countries play the greatest role here and are to be mainly found in electrical and electronic engineering, paper and printing, mechanical engineering. On the other hand service industries, which reveal a geographically uncoordinated structure, have lower levels of short and long term ISLM than many manufacturing activities. However, international mobility plays a significant role in the work of employees in activities with a local sphere of operations.

The thesis illustrates how different corporate strategies and structures, often inter-linked with sectoral categories, generate demands for different sorts of skilled labour flows. In turn, these mobility demands are managed in different ways depending on particular human resource philosophies. The latter reflect overall corporate stance but also individual national and company specific management cultures.

Given the links between skilled mobility and economic structure, the dynamic nature of corporate change raises issues for the future course of mobility trends. Electronics activities have a pronounced effect on the international mobility of Scottish skilled labour. Structural weaknesses in this sector may provoke the migration of existing TNCs and new investment to lower cost locations. In addition, other leading electronics centres may possess potential for the production of technologies that are more competitive in the longer term. The mobility implication of a re-direction of investment is a reduction in the level of short and long term mobility associated with electronics. It can be expected that many of these newly redundant skills would migrate elsewhere utilising different channels from the internal

labour market. This scenario resembles the events in the early to mid 1980s charted by Findlay, of an emigration of Scottish engineering workers abroad via recruitment agencies (Findlay and Garrick 1990).

Overall, this thesis indicates the need for population theory to address changes in economic organisation. The investigation of the detailed influence of corporate structure behind many mobility flows has served to develop knowledge on the causal dynamics of Scottish international skilled labour mobility. The approach also illustrates the important function mobility has within the operation of the Scottish economy. A closer dialogue between both economic geography and population geography would facilitate the development of theories of contemporary socio-economic processes in both fields.

This thesis refers to structuration theory as a means of providing an organising framework for the study of ISLM This approach has proved useful, although to a limited degree. An interpretation of this body of work emphasises its salience in highlighting the interplay between the micro-level events of person to person interaction in a localised environment, and to the operation and interaction of more abstract structures (such as changes in the organisation of production). In making explicit the need to draw out the nature of interaction at and between different levels of analysis, this approach allowed the methodological character of different facets of research into and around the topic of ISLM to be contrasted. It allowed the different areas of investigation into ISLM to be explicitly inter-related in terms of the sorts of areas of inquiry and levels of analysis to which they contributed. The establishment of such a framework of existing research pinpointed exactly those areas to which relatively little attention had been given. In this way, the thesis indicated the degree to which much of the pertinent literature, especially within population geography, was largely engaged in a research agenda at a meso level of analysis. This research has limited extensions into the study of processes at other scales.

Population geographers have been primarily interested in the institutional workings of a relatively narrow type of firm with regard to ISLM. Consequently less attention has been given to wider issues, such as the influence of changes in productive organisation and associated changes in corporate strategies and structures that pervade whole industries and sectors. At the opposite extreme, relatively little work within population geography has sought to establish wider social influences on ISLM operationalised via the individual

employees. In turn, scope exists to link these dynamic social variables, such as the rise of dual careers, to the institutional processes of ISLM.

This research adopts an approach that seeks to draw out the interaction between different levels of analysis in relation to ISLM. Thus the research contributes to debate by specifying the role of institutional dynamics in encouraging wider mobility. At the same time, particular instances of ISLM patterns have been situated in a wider economic context of internationalisation, technological development, changing corporate structure and emerging practices in human resource management.

The structuration-informed approach has also been valuable in defining the theoretical importance of issues often best perceived and registered at a micro scale, that is the social influence on ISLM. The research allowed issues associated with such themes as the increasing value of quality of life, the growing role of female participation in the workforce and the growth of dual career families, to be situated more coherently in relation to work on the institutional characteristics of ISLM. The theoretical and conceptual approach has been of value in this regard. However, the research approach and methodology adopted was less successful in specifying (in an empirical fashion) the interactions between the arena of social issues (as channelled through the individual employee) and how these are negotiated with the employer as to result in particular mobility outcomes.

In conclusion, a conceptual approach that utilised structuration theory was a valuable means of extending the relationship between meso level events in ISLM and macro level issues in the organisation of work. This was achieved both theoretically and empirically. To a lesser extent the conceptual approach was not as sufficiently developed or tested in empirical terms by the adopted methodology as might be. However, the approach was useful on theoretical grounds in terms of fostering a more explicit recognition of the value and role of the micro level issues in ISLM. Scope for further work remains here. This research project failed to develop the empirical relationships between the micro scale and the social influences on Scottish international skilled labour mobility, and processes at other levels. This reflected the scarce resources within an inevitably limited research project. Given access to greater resources this research avenue remains a fruitful one.

The relationship between economic structure and mobility requires a more detailed investigation of the mobility consequences of trends in corporate organisation, human resources management and industrial relations structures. The conceptual understanding of

international business as a key player in much international managerial and professional mobility, is a significant constraint in appreciating the function, form and value of contemporary skill flows. A fuller awareness of the structural developments of international business and associated international human resource strategies will throw new light on the nature of international skilled labour mobility.

This thesis indicates the important role of electronics and electrical engineering firms in the generation of Scottish skilled international labour mobility (chapters six, seven and eight). Given the strong role of this sector, greater attention is warranted for the mobility processes within these firms. This would explain the factors influencing a significant proportion of Scottish skill flows. In addition, awareness of the functional role of mobility within this sector would help understand the organisation of production in this sector.

An issue raised by the thesis relates to strategies for investment in the human capital of the periphery, in particular how they may be complicated by changes in business structures and industrial relations practices which promote greater employee mobility (Begg 1990, Young *et al* 1994). Peripheral regions increasingly recognise the virtue of fully developing and utilising their human capital as a source of competitive advantage, with a close eye on enhancing the entrepreneurial and innovative capacity of peripheral economies. The basic premise underlying this strategy is the recognition within peripheral regions of the need to compete on the basis of quality and innovation. This is in opposition to relying upon a low cost environment for relatively low skill functions as a source of economic advantage. This urge comes from the increasing competition for the latter trajectory from Newly Industrialised Countries (NICs) and the emerging economies of Eastern Europe.

Investment in human capital is viewed as a means of both attracting new investment for the periphery and as a means of stimulating the development of existing overseas and indigenous firms. The latter is achieved either directly, from an enhanced stock of qualified, innovative and entrepreneurial labour in indigenous small and medium sized enterprises (SMEs), or indirectly via innovation spin-offs from inward investors.

However a second trend within business structures and organisational practices has potentially significant consequences for fulfilling the aim of human capital investment as a source of competitive advantage. This trend is the mobility of employees, which is becoming an essential part in the management of an increasingly internationalised business

environment. This is particularly so for trans-national companies (TNCs) present in peripheral regions.

A fundamental inconsistency may be emerging between the desire of regions to cultivate an innovative and entrepreneurial capacity within and between branch plants and suppliers and an organisational necessity for *mobile* managers and professionals. The latters' energies may be focused on a global corporate network, rather than local regional economies. Thus policies directed at improving the innovative or entrepreneurial capacity of local managers as a means of bettering the performance of TNCs and making them more deeply embedded in the region conflict in varying degrees with the fact that in order to operate competitively in an international business, TNCs increasingly require a mobile managerial core of employees. Policy makers are likely to be caught on the horns of a dilemma when it comes to targeting efforts for innovation on branch plant managers.

On the one hand there is the demand for mobility from TNCs. As business structures are increasingly internationalised and place greater emphasis on flexibility, there is a growing need for this managerial mobility. As less favoured regions rely to a large extent on the continued vibrancy of the FDI sector (Grimes 1993), the competitive advantage of the periphery is connected with the ability of TNCs to meet the demand for mobility. In a sense, factors impeding the mobility of corporate skilled labour also impede the competitive advantage of the periphery. Thus there is a need to identify those factors both facilitating and impeding mobility in the periphery, whether internal to the firm or from the external environment.

On the other hand, mobility may act to denude the periphery of talent and potentially renders ineffective attempts to imbue subsidiary mangers with innovative and entrepreneurial capacities. Thus mobility may act to constrain efforts to broaden the engagement of FDI with the wider economy, locking the periphery into a dependent relationship with the core. This of course assumes that mobility represents a permanent loss of human capital, whereas there is evidence to the contrary that suggests that corporate mobility is rather more cyclical and transitory (Findlay 1988).

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Appendix 3.1

Recording sheet

Date: ..... Origin Airport: ..... Scheduled Time of Arrival: .....
Flight Code: ..... Estimated Time of Arrival: .....

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Accept																															
Refusal																															
-20																															
20-29																															
30-39																															
40-49																															
50-59																															
60+																															
Male																															
Female																															
Business																															
Non-business																															

Number Approached: ..... Number of Passengers (Excl. Infants): .....
First Questionnaire I.D. Number: ..... Last Questionnaire I.D. Number: .....
Comments / Notes:

Date: ..... Origin Airport: ..... Scheduled Time of Arrival: .....
Flight Code: ..... Estimated Time of Arrival: .....

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Accept																															
Refusal																															
-20																															
20-29																															
30-39																															
40-49																															
50-59																															
60+																															
Male																															
Female																															
Business																															
Non-business																															

Number Approached: ..... Number of Passengers (Excl. Infants): .....
First Questionnaire I.D. Number: ..... Last Questionnaire I.D. Number: .....
Comments / Notes:

Date: ..... Origin Airport: ..... Scheduled Time of Arrival: .....
Flight Code: ..... Estimated Time of Arrival: .....

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Accept																															
Refusal																															
-20																															
20-29																															
30-39																															
40-49																															
50-59																															
60+																															
Male																															
Female																															
Business																															
Non-business																															

Number Approached: ..... Number of Passengers (Excl. Infants): .....
First Questionnaire I.D. Number: ..... Last Questionnaire I.D. Number: .....
Comments / Notes:

(Note: original reduced by 25%)

Appendix 3.2

Sampling error

The surveys carried out consisted of only one of a number of possible samples and as with all surveys the results are liable to sampling error. As such, a different sample would probably have produced a varying set of estimates. This variation can be measured as 'sampling error'.

The 'standard error' of the samples have been calculated using the formula:

$$SE_p = \sqrt{\frac{p\%q\%}{n}} \text{ per cent of } n$$

where SE_p is the binomial standard error as a proportion, n is the sample size and p and q represent proportions as percentages (Hammond and McCullagh 1986). The table overleaf indicates the standard error associated with percentages of different sample sizes reffered to within the research results (table A.3.2.1).

	Standard error of percentage (95% confidence)			Standard error of percentage (95% confidence)	
Per cent	n=268	n=82	Per cent	n=268	n=82
1	1.22	2.21	51	6.17	11.15
2	1.72	3.11	52	6.17	11.15
3	2.09	3.79	53	6.16	11.14
4	2.41	4.35	54	6.15	11.13
5	2.68	4.84	55	6.15	11.11
6	2.92	5.27	56	6.13	11.09
7	3.13	5.67	57	6.12	11.06
8	3.33	6.02	58	6.10	11.03
9	3.52	6.36	59	6.08	10.99
10	3.69	6.66	60	6.06	10.95
11	3.84	6.95	61	6.03	10.91
12	3.99	7.22	62	6.01	10.86
13	4.13	7.47	63	5.98	10.81
14	4.26	7.71	64	5.95	10.75
15	4.39	7.93	65	5.91	10.68
16	4.51	8.15	66	5.87	10.62
17	4.62	8.35	67	5.83	10.54
18	4.72	8.54	68	5.79	10.46
19	4.82	8.72	69	5.74	10.38
20	4.92	8.89	70	5.69	10.29
21	5.01	9.05	71	5.64	10.19
22	5.09	9.21	72	5.58	10.09
23	5.17	9.35	73	5.52	9.99
24	5.25	9.49	74	5.46	9.87
25	5.33	9.63	75	5.39	9.75
26	5.39	9.75	76	5.33	9.63
27	5.46	9.87	77	5.25	9.49
28	5.52	9.99	78	5.17	9.35
29	5.58	10.09	79	5.09	9.21
30	5.64	10.19	80	5.01	9.05
31	5.69	10.29	81	4.92	8.89
32	5.74	10.38	82	4.82	8.72
33	5.79	10.46	83	4.72	8.54
34	5.83	10.54	84	4.62	8.35
35	5.87	10.62	85	4.51	8.15
36	5.91	10.68	86	4.39	7.93
37	5.95	10.75	87	4.26	7.71
38	5.98	10.81	88	4.13	7.47
39	6.01	10.86	89	3.99	7.22
40	6.03	10.91	90	3.84	6.95
41	6.06	10.95	91	3.69	6.66
42	6.08	10.99	92	3.52	6.36
43	6.10	11.03	93	3.33	6.02
44	6.12	11.06	94	3.13	5.67
45	6.13	11.09	95	2.92	5.27
46	6.15	11.11	96	2.68	4.84
47	6.15	11.13	97	2.41	4.35
48	6.16	11.14	98	2.09	3.79
49	6.17	11.15	99	1.72	3.11
50	6.17	11.15	100	1.22	2.21

Table A.3.2.1 Binomial standard error as a proportion for survey percentages
Source: author

Appendix 3.3

Questionnaire layout, presentation and evaluation

Following De Vaus, the following guidelines were observed when preparing questionnaire layout (De Vaus 1990). With regard to *answering procedures*, most questions, as indicated above, were provided as forced choice in format. Respondents were asked to tick a box opposite the relevant item on the appropriate checklist. To avoid misunderstanding and delay, *contingency questions* were used. Instructions, lettering style and inset boxes were used to highlight follow-up questions.

In order to provide flow, the following types of *instruction* were used:

1. *General instructions*. These referred to method of returning the completed questionnaire, information on how to enquire about the questionnaire, and how to participate in an incentive prize draw.

2. *Section introductions*. Questions were divided into sections and these were denoted by distinct section headings, describing the subject of enquiry in that part of the questionnaire and, where necessary, explaining the terms used.

3. *Question instructions*. These indicated how many responses and what sort of responses were desired from the respondent; which parts of the question to complete; where to proceed to next, indicating question and page number.

4. *'Go to' instructions*. These were used with contingency questions in order to help ease the completion of the questionnaire and therefore encourage a higher response rate.

With regard to *use of space*, an effort was made to avoid cluttering the questionnaire and therefore aid completion. This desire had to be balanced however, with the need to keep the questionnaire short, for both reasons of cost and boosting the morale of the respondent. Turning to the *order of questions*, following De Vaus, the points below were implemented in the construction of the questionnaire (De Vaus 1990 p92):

1. The first set of questions was obviously related to the topic cited on the front page and the stated purpose of the survey. In addition, these questions were made straightforward and factual and on questions familiar to the respondent.

2. Demographic questions were avoided at the start, such as age and marital status.

3. Relatively easy to answer questions were also placed near the end to take into account respondent boredom and fatigue.

4. To minimise loss of interest and aid understanding, questions were grouped into sections to help structure the questionnaire and provide flow.

5. Question formats were varied in style of presentation where possible, so as to increase visual appeal and interest.

6. Relatively sensitive questions were placed towards the end of the questionnaire, but not at the end. No questions were considered very sensitive.

7. The questions proceeded from easy to more difficult questions.

8. Open ended questions were kept to a minimum and placed at the end of the questionnaire.

9. Use was made of filter questions to ensure that questions were relevant to respondents

Lastly, before questions were included in the final draft of the questionnaire they were evaluated by means of a pilot study.

Interviews and questionnaire distribution

Interview procedure

For the purposes of the identification of the survey population, passengers were briefly questioned as to their status as business travellers and handed a questionnaire on the basis of this information. The following routine was adopted:

Survey member- *"Excuse me, is your travel today connected with your work?"*

If the passenger answered negatively, they were then thanked and allowed to proceed. If the passenger answered positively, they were then asked-

Survey member- *"Would you like to take this questionnaire away with you?"*

After either a positive or negative reply the passenger was thanked and allowed to proceed.

In the first question, the term '*work*' and not '*business*' was used, as the former is more general in scope, reflecting the surveys concern in gaining a representative reflection of employment types within the survey population. In the second question, by saying '*away*', it was implied to the respondent that they did not have to fill in the questionnaire on the spot. Occasionally fieldworkers were asked by passengers when they were meant to fill the questionnaire in, or how it was to be returned. In this instance it was indicated that the questionnaire could be taken away with them and mailed back by *Freepost*, emphasising the free postage as a convenience to potential respondents.

Fieldworkers were occasionally asked by passengers about the purpose of the questionnaire. In such cases the information on the questionnaire cover was cited and it was added that if the respondent would like any more information then to write to the contact address, also on the questionnaire cover. Interaction with passengers was kept to a

minimum in order to avoid missing a large number of potential respondents and thereby reducing the total response.

Maximising the response rate in personal interviews and questionnaire distribution

A number of techniques were followed with the objective of increasing the response rate during the face to face interviews and questionnaire distribution. These were as follows:

1. A confident approach which assumed co-operation but avoided argumentativeness and belligerence, the aim being to improve the response rate.

2. It was important to create a positive impression with the survey respondents and to project an authoritative and responsible image. Therefore fieldworkers dressed smartly, in a 'business-like' manner.

3. Interviewers were prepared to explain how and why a person had been chosen and to meet any possible objections to participating.

4. The front page of the questionnaire acted as a covering letter. This provided the main opportunity to motivate the respondent to complete the questionnaire. As illustrated in appendix 3.4, the questionnaire cover included the following points:

    1. A statement of the organisation through which the study was taking place, that is, the University of Glasgow.
    2. An explanation of the study's purpose and usefulness.
    3. An explanation of the reason why the respondent was selected.
    4. An assurance of confidentiality.
    5. An offer to answer any questions that might arise.
    6. A statement indicating the supporting agency (Glasgow Development Agency).
    7. Instructions on how to return the questionnaire.
    8. Information on material incentives available to respondents returning completed questionnaires.

5. An identification card provided by the airport authorities, indicating official status, was used.

6. The voluntary nature of survey was indicated.

7. Interviews were kept short and direct.

8. Uniformity in the distribution of questionnaires and in the conduct of the interviews was important, therefore questions were read exactly as they appeared on the interview schedule.

9. The questionnaire was held so that the front page was visible to passengers as they approached. This meant that the wording 'questionnaire' and 'University of Glasgow' were prominent, thereby indicating in advance the reason for their being approached.

10. The questionnaire was held out towards the respondent as the second question of the interview was asked, as an aid to the uptake of the questionnaires.

11. The questions were asked with the tone of voice of the survey member indicating the second question as rhetorical, that is, as more of an instruction than a query. This approach proved more successful in the pilot study.

Training and supervision

The majority of interviews were conducted by the author, with sufficient practice in adopting a successful interview procedure being obtained during the pilot study period. Where fieldwork assistants were employed to do interviews, a number of steps were taken to aid the process, ensuring quality in personal interviews. However, the main task of fieldwork assistants was to aid in the recording of passenger numbers.

In order to facilitate the smooth implementation of personal interviews, questionnaire distribution and the recording of passenger data several steps were taken to ensure familiarisation with the required routine. These were as follows:

1. The interviews were relatively simple and straightforward, however training ensured assistants were using the correct question wording and methods of collecting data. This was done by both verbal instruction and the provision of written notes. In addition, opportunity was made for observation of the interview and questionnaire distribution procedure prior to starting.

2. Written and verbal instructions were also given with respect to the implementation of passenger counting and the recording of this information.

3. Assistants were provided with feedback after carrying out initial interviews and completing schedules. This provided the opportunity to give positive feedback and identify problems with coding, legibility or completion and to avoid problems in subsequent interviews. Occasional checks were made by the author on performance and completing of schedules to ensure interview and data collection proceeded as planned.

Postal administration of the questionnaire survey

Pre-paid envelopes addressed to the Department of Geography at the University of Glasgow were used for respondents to return their questionnaires. Envelopes were attached to all questionnaires. Use was made of the Royal Mail Response Service for the following reasons:

1. Ease of questionnaire return on the part of the respondents.

2. Provision of a pre-printed envelope with freepost address enhances presentation and professional image of survey.

3. For reasons of cost. Pre-paid envelopes are less taxing on financial resources than sending individual stamps, as only the returned mail is paid for.

The use of pre-paid envelopes for the return of mail entails notable disadvantages. It has been noted in the literature that the use of stamps may be of greater benefit in encouraging response due to the apparent value they represent. Respondents may feel a greater sense of obligation if receiving these items of monetary value. In addition, the use of stamps coveys a more personalised image to the survey (De Vaus 1990 p110).

It was necessary to ensure that all supplies were available in advance of the survey. This meant that the required supplies had to be anticipated in advance. This was accomplished using information obtained from the pilot study and through information available from the appropriate flight timetables.

Questionnaire follow-up

Follow-up can be utilised in surveys to enhance the response rate. However this course of action was not possible due to the fact that no adequate population data was available and that no relevant information was gathered at the interview stage.

Appendix 3.4

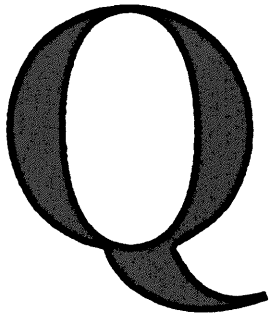
Questionnaire

University of Glasgow

QUESTIONNAIRE

- This survey is part of a research project examining the structure and impacts of the movement of skilled workers to and from Scotland.

- This research is important because the movement of skilled workers is of growing significance to both the overall economies of countries such as Scotland and to individual businesses, employees and their families, especially in view of European integration and 1992.



- This questionnaire is being distributed to an extensive cross-section of business travellers arriving at Glasgow Airport.

- Information obtained by this questionnaire relating to individuals and their organisations will be treated with confidentiallity.

- If you have any queries regarding this questionnaire please contact:
Alastair McPherson,
Applied Population Research Unit,
Dept. of Geography & Topographic Science,
University of Glasgow,
Glasgow, G12 8QQ,
Scotland, U.K.
Tel: 041 339 8855

Please return this questionnaire in the prepaid envelope supplied.

PRIZE DRAW
Persons returning completed copies of this questionnaire will be entered in a prize draw for a bottle of 12 year old malt Scotch whisky.

This survey is supported by Glasgow Development Agency

SECTION 1 EMPLOYMENT DESCRIPTION

Q.1 Which of the following most closely describes the function of your present job?

(TICK √ all that apply)

	Senior	Middle	Junior
General management / Administration / Policy development	☐	☐	☐
Operational management	☐	☐	☐
Research or development	☐	☐	☐
Engineering / Technology	☐	☐	☐
Marketing	☐	☐	☐
Sales	☐	☐	☐
Finance	☐	☐	☐
Legal	☐	☐	☐
Personnel	☐	☐	☐
Computing / Data Processing	☐	☐	☐
Other (please specify)_____	☐	☐	☐

Q.2 What is your job title? _____

Q.3 What are your employment conditions?
(TICK √ one box)

- Permanent, full-time ☐
- Permanent, part-time ☐
- Temporary contract, full-time ☐
- Temporary contract, part-time ☐
- Self-employed ☐

Q.4 What is the location of your present job? _____
(give *town* and *country*)

Q.5 What is the activity of your company / organisation? (TICK √all that apply)

Manufacturing:

- Food, Drink or Tobacco ☐
- Electrical/ Electronic engineering ☐
- Mechanical engineering ☐
- Chemical industry ☐
- Textile industry ☐
- Paper and Printing ☐
- Rubber and Plastic ☐
- Transport equipment ☐
- Other manufacturing ☐
  please specify_____

- Agriculture, Forestry and Fishing ☐
- Mining ☐
- Construction ☐
- Transport and Communications ☐
- Trade services ☐
- Financial services ☐
- Business services ☐
- Insurance services ☐
- Education services ☐
- Health related services ☐
- Recreational and Cultural services ☐
- Personal services ☐
- Public Administration ☐
- Other ☐
  please specify_____

Q.6 What is the name of your company / organisation? _____

SECTION 2 CURRENT BUSINESS TRIP

(The term 'Business' in this section and following sections refers to all activities associated with your work)

Q.1 Is your work normally based in Scotland? (TICK √ one box)

Yes... ☐ ...complete Part A *on page 2*

No.. ☐ ...complete Part B *on page 3*

Part A (If your work is normally based in Scotland complete the questions below)

1. Where have you come from? (give *town* and *country*)

2. Was your trip to a company / organisation within the same parent organisation as your own?
Yes...☐...go to a. No..☐...go to b. Don't know..☐...go to 3. (TICK √ one box)

a. Was your trip to one of the following? (TICK √ all that apply)
- Sales outlet ☐
- Production facility ☐
- Research and Development (R & D) facility ☐
- Corporate / regional headquarters ☐
- Other ☐
  please specify_____

} go to 3.

b. Was your trip to one of the following? (TICK √ all that apply)
- Sales agent ☐ ..... go to 3.
- Manufacturing subcontractor ☐
- Service provider ☐
- Business partner / Ally ☐
- Conference / seminar / workshop ☐
- Other ☐
  please specify_____

} go to part c.

c. What is the activity of the company / organisation that you were visiting? (TICK √ all that apply)

Manufacturing:
- Food, Drink or Tobacco ☐
- Electrical/ Electronic engineering ☐
- Mechanical engineering ☐
- Chemical industry ☐
- Textile industry ☐
- Paper and Printing ☐
- Rubber and Plastic ☐
- Transport equipment ☐
- Other manufacturing ☐
  please specify_____

- Agriculture, Forestry and Fishing ☐
- Mining ☐
- Construction ☐
- Transport and Communications ☐
- Trade services ☐
- Financial services ☐
- Business services ☐
- Insurance services ☐
- Education services ☐
- Health related services ☐
- Recreational and Cultural services ☐
- Personal services ☐
- Public Administration ☐
- Other ☐
  please specify_____

3. What is the name of the company / organisation that you were visiting?
(If you answered 'Yes' to 2. give name only if different from your company / organisation's name)

4. Did you meet representatives of the company / organisation you visited at their place of work?
Yes...☐ No..☐ if 'No', where is their place of work?
(give *town* and *country*)

5. How long did your trip last? (TICK √ one box)
- 0 nights ☐
- 1 night ☐
- 2-3 nights ☐
- 4-9 nights ☐
- 10 or more nights ☐

6. How many people are travelling with you? (TICK √ one box)
- 0 persons ☐
- 1 person ☐
- 2 persons ☐
- 3 persons ☐
- 4 persons ☐
- 5 or more persons ☐

Go to Section 3 on *page 4*

Part B (If your work is normally based outside of Scotland complete the questions below)

1. Where are you going? (give *town* and *country*)

2. Is your trip to a company / organisation within the same parent organisation as your own?
Yes...☐...go to a. No..☐...go to b. Don't know..☐..go to 3. (TICK √ one box)

a. Is your trip to one of the following? (TICK √ all that apply)
- Sales outlet ☐
- Production facility ☐
- Research and Development (R & D) facility ☐
- Corporate / regional headquarters ☐
- Other ☐
- please specify _____

} go to 3.

b. Is your trip to one of the following? (TICK √ all that apply)
- Sales agent ☐ ...go to 3.
- Manufacturing subcontractor ☐
- Service provider ☐
- Business partner / Ally ☐
- Conference/ seminar/ workshop ☐
- Other ☐
- please specify _____

} go to part c.

c. What is the activity of the company / organisation that you are visiting? (TICK √ all that apply)

Manufacturing:
- Food, Drink or Tobacco ☐
- Electrical/ Electronic engineering ☐
- Mechanical engineering ☐
- Chemical industry ☐
- Textile industry ☐
- Paper and Printing ☐
- Rubber and Plastic ☐
- Transport equipment ☐
- Other manufacturing ☐
- please specify _____

- Agriculture, Forestry and Fishing ☐
- Mining ☐
- Construction ☐
- Transport and Communications ☐
- Trade services ☐
- Financial services ☐
- Business services ☐
- Insurance services ☐
- Education services ☐
- Health related services ☐
- Recreational and Cultural services ☐
- Personal services ☐
- Public Administration ☐
- Other ☐
- please specify _____

3. What is the name of the company / organisation that you are visiting?
(If you answered 'Yes' to 2. give name only if different from your company / organisation's name)

4. Are you going to meet representatives of the company / organisation you are visiting at their place of work?
Yes...☐ No....☐ if 'No', where is their place of work? (give *town* and *country*)

5. How long will your trip last? (TICK √ one box)
- 0 nights ☐
- 1 night ☐
- 2-3 nights ☐
- 4-9 nights ☐
- 10 or more nights ☐

6. How many people are travelling with you? (TICK √ one box)
- 0 persons ☐
- 1 person ☐
- 2 persons ☐
- 3 persons ☐
- 4 persons ☐
- 5 or more persons ☐

Go to Section 3 on *page 4*

SECTION 3 PAST BUSINESS TRAVEL

Q.1 How many business trips have you made *outside your country of residence* within the last :

7 Days...____ 4 Weeks...____ None...☐ If 'None' go to Q.3

Q.2 How long on average did these business trips last? (TICK √ the most frequent length of trip)

0 nights..... ☐
1 night..... ☐
2-3 nights..... ☐
4-9 nights..... ☐
10 or more nights... ☐

Q.3 Which of the following countries / regions have you visited *on business* in the last 12 months?
(Excluding your country of residence)

	TICK √	Number of Trips
Scotland	☐	____
South East of England	☐	____
Rest of England	☐	____
Wales	☐	____
Northern Ireland	☐	____
France	☐	____
Germany	☐	____
Netherlands	☐	____
Italy	☐	____
Spain	☐	____
Belgium	☐	____
Ireland	☐	____
Portugal	☐	____
Greece	☐	____
Denmark	☐	____
Luxembourg	☐	____
Switzerland	☐	____
Austria	☐	____
Sweden	☐	____
Norway	☐	____
Finland	☐	____
Other Western Europe	☐	____
please specify ____		
Other, (Eastern Europe)	☐	____
please specify ____		

	TICK √	Number of Trips
USA	☐	____
Canada	☐	____
Japan	☐	____
Hong Kong	☐	____
Singapore	☐	____
South Korea	☐	____
Taiwan	☐	____
Australia	☐	____
Other Far East	☐	____
please specify ____		
Other, (Asia)	☐	____
please specify ____		
Other, (Middle East)	☐	____
please specify ____		
Other, (Africa)	☐	____
please specify ____		
Other, (Latin America)	☐	____
please specify ____		
Other	☐	____
please specify ____		
None	☐	

SECTION 4 HOME RELOCATION

Q.1 In the last *10 years* have you moved home because of a job move or change? (TICK √ one box)

Yes..☐...If 'Yes' how many times?...____ No..☐...**please go to section 5** ***on page 5***

Q.2 Have any of these moves been made due to: (TICK √ all that apply)

			dates of move/s	*from / to (give town & country)*
Moving *to join* your present employer.....	No...☐	Yes...☐	_____	_____
Moving jobs *with* present employer.....	No...☐	Yes...☐	_____	_____
Moving with or to join a *previous* employer.	No...☐	Yes...☐	_____	_____

Q.3 Did your employer or a 'third-party' firm, do any of the following for you due to a job move or change involving home relocation? (TICK √ all that apply)

Pay legal fees for house sale / purchase..... ☐
Pay estate agent commission..... ☐
Pay stamp duty on new purchase..... ☐
Reimburse physical removal costs..... ☐
Pay house hunting expenses..... ☐
Allow paid leave for moving house..... ☐
Meet temporary accomodation costs..... ☐
Meet temporary travelling expenses..... ☐
Pay disturbance allowance / transfer grant.... ☐
Provide financial assistance for bridging loan.. ☐

Provide mortgage differential assistance or subsidy / excess rent allowance..... ☐
Provide beneficial loans / advances on salary..... ☐
Provide home search..... ☐
Provide school search..... ☐
Provide educational counselling..... ☐
Provide spouse counselling..... ☐
Provide area information..... ☐
Other(please specify)_____ ☐
Not applicable..... ☐

SECTION 5 TEMPORARY MOVES

(This section refers to temporary work assignments that *did not* involve moving your home.)

Q.1 In the last *five years* have you made a temporary move which required you to live away from home for a period of :

		Number of times?	*Where did you go? (give town & country)*
1 to 6 months.....	No...☐ Yes...☐	_____	_____
Over 6 months.....	No...☐ Yes...☐	_____	_____

Not applicable.....☐

SECTION 6 TRANSPORT TO / FROM GLASGOW AIRPORT

Q.1 Is your work normally based in Scotland? Yes...☐...**complete** Part A
No...☐...**complete** Part B *on page 6*

Part A

1. Did you make your outward journey from Glasgow Airport? Yes...☐...**go to a.**
No...☐...**go to 2.**

a. How did you travel to Glasgow Airport?

Delivered at the airport by friends / relatives/ colleagues... ☐ (TICK √ all that apply)
Own private car..... ☐
Hired car..... ☐
Taxi / mini-cab..... ☐
Public bus / coach from Paisley..... ☐
Public bus / coach from all other places..... ☐
Train..... ☐
Private bus / coach..... ☐
Connecting flight from another airport..... ☐
Other, please specify_____ ☐
Don't know..... ☐

2. What kind of transportation did you use for your onward journey from Glasgow Airport to your next destinaton in Scotland?

Collected by friends / relatives / colleagues..... ☐
Own private car..... ☐ (TICK √ all that apply)
Hired car..... ☐
Taxi / mini-cab..... ☐
Public bus / coach from Glasgow Airport to Paisley..... ☐
Public bus / coach from Glasgow Airport to all other places.. ☐
Train..... ☐
Private bus / coach..... ☐
Connecting flight to another airport..... ☐
Other, please specify_____ ☐
Don't know..... ☐

Part B (If your work is mainly based outside of Scotland complete the questions below)

1. What kind of transportation did you use for your onward journey from Glasgow Airport to your next destinaton in Scotland?

(TICK √ all that apply)

- Collected by friends / relatives / colleagues ☐
- Own private car ☐
- Hired car ☐
- Taxi / mini-cab ☐
- Public bus / coach from Glasgow Airport to Paisley ☐
- Public bus / coach from Glasgow Airport to all other places ☐
- Train ☐
- Private bus / coach ☐
- Connecting flight to another airport ☐
- Other, please specify _____ ☐
- Don't know ☐

SECTION 7 BACKGROUND DETAILS

Q.1 Are you... Male... ☐ Female... ☐

Q.2 What is your age?

- Less than 20 years... ☐
- 20 to 29 years... ☐
- 30 to 39 years... ☐
- 40 to 49 years... ☐
- 50 to 59 years... ☐
- 60 + years... ☐

Q.3 Do you hold any of the following qualifications? (TICK √ all that apply)

- Undergraduate (First) Degree ... ☐ ...(subject area) _____
- Postgraduate (Higher) Degree... ☐ ...(subject area) _____
- Membership of professional body... ☐ ... (please specify) _____
- Other technical or business qualifications... ☐ ... (please specify) _____

Q.4 Do you speak any languages?
(Excluding English and/or your native language)

Yes... ☐ please specify [ ]
No... ☐

Q.5 What is your marital status?

- Married or Living with a partner... ☐
- Single or Not living with a partner. ☐ ...go to Q.8

Q.6 Is your spouse/ partner employed?

(TICK √ one box)

- Full time... ☐
- Part time (under 30 hours a week) ... ☐
- Other (e.g. student, voluntary work)... ☐
- Not employed... ☐

Q.7 If spouse / partner is employed (full or part-time) what is their occupation?

[ ]

Not applicable... ☐

Q.8 Do you have any children who are living with you? (TICK √ one box)

Yes... ☐ If 'Yes' what are their ages? [ ]

No... ☐

Q.9 Do you have any dependent relatives who are living with you or near you? Yes... ☐ (TICK √ one box)
No... ☐

Q.10 In which town and country are you currently living? ☐

Q.11 Are you currently living in :

Privately owned accomodation (including mortgage)..... ☐ (TICK √ one box)
Privately rented accomodation..... ☐
Public rented accomodation..... ☐
Other..... ☐
please specify_____

Q.12 Do you have any comments you would like to make? If so, please use the space below.

☐

Thank you for your assistance.

Please return your questionnaire in the pre-paid envelope supplied.

Would you be willing to participate in a follow-up questionnaire survey ?

Yes ☐ please give your name and address below No ☐

Do you wish to be entered in the prize draw ?

Yes ☐ please give your name and address below No ☐

Name.....

Address.....
.....
.....
.....
.....Post Code.....

Tel:.....

The prize draw will be held on the 1st of July 1992. The name of the winner will be supplied on request.

Appendix 3.5

Follow-up questionnaire

UNIVERSITY
of
GLASGOW

SURVEY ON EMPLOYEE MOBILITY

Tuesday, 6th April, 1993

Dear

- You may recall completing a questionnaire survey at Glasgow International Airport in June of last year on the mobility of skilled workers. In that questionnaire you expressed interest in participating in a follow-up questionnaire. Please find attached a copy of this follow-up questionnaire.

- The follow-up questionnaire aims to provide greater understanding on views and experiences of geographical mobility among managerial and professional individuals and their families.

- The questionnaire is concerned as much with those who have not moved as with those who have.

- I would be very grateful if you and your spouse/partner (where applicable) would complete the enclosed questionnaire and return it directly to me at Glasgow University in the prepaid envelope as soon as possible.

- Information obtained by this questionnaire relating to individuals will be treated in confidence. The number at the rear of the questionnaire is only to allow the administration of the survey and to check who has replied.

- The questionnaire should only take a short time to complete. Not all the questions will apply to you and most only require you to tick boxes. If you have any queries regarding this questionnaire please contact me at the address below.

Thank you in anticipation of your help.

Alastair McPherson
Doctoral Researcher

DEPARTMENT OF GEOGRAPHY & TOPOGRAPHIC SCIENCE
University of Glasgow, Glasgow G12 8QQ, Scotland, U.K.
Telephone: 041-339 8855 Ext. 6653 *Telex:* 777070 UNIGLA *Fax:* 041-330 4894

CONFIDENTIAL FOR OFFICE USE

Questionnaire on Employee Mobility and Housing

Instructions

- *Part A, below, is to be completed by the person named on the front of the questionnaire. Part B is to be completed by the spouse or partner of this person (where applicable).*

PART A	TO BE COMPLETED BY PERSON NAMED ON FRONT PAGE

- Have you at some time in the last ten years decided against a job move which involved moving home?

Yes..... ☐ *go to SECTION 1, below*

No..... ☐ *go to SECTION 2, page 3*
(i.e. have accepted all opportunities to move)

Not applicable.... ☐ *go to SECTION 3, page 4*
(i.e. have not considered moving and/or have not been requested to move home due to a job move or change)

Other..... ☐ *go to SECTION 1 if you have not moved. Go to SECTION 2 if you have moved*
(i.e. set up dual location homes, please give details).....

(4)

PART A SECTION 1 NON-MOVERS

- This section asks about the experiences of those who have decided against a home move connected with a job move or change.

Q.1 (a) How many times in the last ten years have you decided against a job move because it involved moving home?..... ☐

(6-7)

(b) Thinking of the last time you decided against a job move on the grounds of reluctance to move home, which of the following situations match the circumstances in which you decided against the move?

(please tick one)

Did not apply for job..... ☐
Applied and offered job but declined..... ☐
Employer requested move but declined..... ☐
Spouse/partner did not apply for job..... ☐
Spouse/partner applied and offered job but declined..... ☐
Spouse's/partner's employer requested move but spouse/partner declined.. ☐
Other (please specify)..... ☐
.....

(9)

Q.2 Considering the last time you decided against a home move-

In which town and country were you living? ☐

(11-14)

In which town and country was the job which you or your spouse/partner (where applicable) considered? ☐

(16-19)

please turn over

FOR OFFICE US

Q.3 How important for you, as an individual, were the following reasons for not moving home at that time?

(please circle the number that indicates how important each factor was to you)

	not important	of limited importance	quite important	very important	extremely important	not relevant	
• Move would not have improved career advancement.....	1	2	3	4	5	X	(21)
• Inadequate salary increase.....	1	2	3	4	5	X	(23)
• Spouse/partner would have difficulty finding new employment in destination area.....	1	2	3	4	5	X	(25)
• Harmful effect on career of spouse/partner.....	1	2	3	4	5	X	(27)
• Moving away from friends or relatives.....	1	2	3	4	5	X	(29)
• Effect of move on dependent relatives.....	1	2	3	4	5	X	(31)
• Spouse/partner/children did not like the proposed move.....	1	2	3	4	5	X	(33)
• Disruption to children's schooling.....	1	2	3	4	5	X	(35)
• Destination was a less attractive area.....	1	2	3	4	5	X	(37)
• Higher cost of housing in destination area.....	1	2	3	4	5	X	(39)
• A lot of time and effort involved in moving home.....	1	2	3	4	5	X	(41)
• Difficulties in renting housing in destination area.....	1	2	3	4	5	X	(43)
• Difficulties in selling and/or buying homes.....	1	2	3	4	5	X	(45)
• Inadequate financial relocation assistance provided by employer for the move.....	1	2	3	4	5	X	(47)
• Difficulty re-integrating into organisation on return	1	2	3	4	5	X	(49)
• Lack of appropriate foreign language skills.....	1	2	3	4	5	X	(51)
• Difficulty of working in new business culture...	1	2	3	4	5	X	(53)
• Difficulty of living in new social culture.....	1	2	3	4	5	X	(55)
• Other (please specify).....	1	2	3	4	5	X	(57)

.....

.....

.....

Q.4 In the last ten years have you moved home as the result of a job move or change by either yourself or your spouse/partner(where applicable).

Yes.....☐ please go to Part A, section 2 (59)

No.....☐ please go to Part A, section 3

please turn over

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PART A SECTION 2 MOVING HOME

- This section is about your experience of moving home as the result of a job move or job change by either yourself or your spouse/partner (where applicable).

Q.5 (a) Between which town and country was your most recent home move (where the move was made as the result of a job move or job change)?

From..... (61-64)

To..... (66-69)

(b) Please give the date of this last move (month and year) (71-74)

(c) Did this last home move occur as the result of: *(Please tick one box)*

- moving jobs with your present employer..... ☐
- moving to join your present employer..... ☐
- moving to join or moving between jobs with previous employers..... ☐
- spouse/partner moving jobs with their present employer..... ☐
- spouse/partner moving to join their present employer..... ☐
- spouse/partner moving to join or moving between jobs with previous employers..... ☐ (76)
- other (please specify)..... ☐

Q.6 Was there any difference in your job type before and after this last move?

	Before move	***After move***
(a) Occupation.....	(78-79)	(81-82)
(b) Employment status:		
Full time.....	☐	☐ (84)
Part time (under 30 hours a week)....	☐	☐
Other (eg student, voluntary work)...	☐	☐ (86)
Not employed.....	☐	☐
(c)Annual salary:		
£nil-£9,999.....	☐	☐ (88)
£10,000-£14,999.....	☐	☐
£15,000-£24,999.....	☐	☐
£25,000-£34,999.....	☐	☐ (90)
£35,000+.....	☐	☐
Do not wish to answer.....	☐	☐

Q.7 (a) Including your last home move, have you in the last ten years made a home move as a result of a change in the job of your spouse/partner? (92)

Yes... ☐ No.... ☐ Not relevant.. ☐

please turn over

(b) If 'Yes',how many times? ☐

(c) What has been the overall effect of such move/s on your career development?

(please tick one box only)

Very good effect	Good effect	No change	Bad effect	Very bad effect	Don't Know
☐	☐	☐	☐	☐	☐

Q.8 (a) Thinking about your most recent home move, which factors do you think were of greatest importance in encouraging you to move home at that time?

(please choose up to three from those listed in TABLE 1, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes)

☐ ☐ ☐ other (please specify)_____

(b) And which factors do you think were of greatest importance in discouraging you from moving home at that time?

(please choose up to three from those listed in TABLE 2, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes)

☐ ☐ ☐ other (please specify)_____

PLEASE GO TO PART A, SECTION 3

PART A SECTION 3 FUTURE HOME MOVES

- This section is about your attitudes to home moves that may occur as a result of a job move or change in the future

Q.9 Looking at the next five years, how likely is it that you will have to move home as a result of a job move or job change affecting either yourself or your spouse/partner?

(please tick one box only)

Very likely	Quite likely	Undecided/Don't know	Quite unlikely	Very unlikely
☐	☐	☐	☐	☐

Q.10 Do you expect your next home move to arise as a result of:

(please tick one box only)

Applying for a job at another location..... ☐
Your job being moved to another location..... ☐
Your spouse/partner applying for a job at another location..... ☐
Your spouse's/partner's job being moved to another location.. ☐
Not applicable..... ☐
In other circumstances (please specify)..... ☐
.....

Q.11 If securing your next promotion* required you to move home, is it likely that you would:

(please tick one box only)

Definitely accept	Probably accept	Don't know	Probably refuse	Definitely refuse	Not applicable
☐	☐	☐	☐	☐	☐

*(* Next promotion means the kind of promotion you realistically expect to achieve)*

FOR OFFICE US
(94-95)
(97)
(99-100)
(102-103)
(105-106)
(108-109)
(111-112)
(114-115)
(117)
(119)
(121)

FOR OFFICE US

Q.12 (a) Which factors do you think would be of greatest importance in encouraging a home move in the next five years for reasons relating to a job move or change? (123-124)

(please choose up to three from those listed on TABLE 1, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes) (126-127)

☐ ☐ ☐ other (please specify)_____ (129-130)

(b) And which factors do you think would be of greatest importance to you in discouraging such a future move?

(please choose up to three from those listed on TABLE 2, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes) (132-133)

☐ ☐ ☐ other (please specify)_____ (135-136)

(137-138)

•IF YOU ARE NOT LIVING WITH A SPOUSE/PARTNER PLEASE RETURN QUESTIONNAIRE IN PREPAID ENVELOPE SUPPLIED.

•IF YOU ARE LIVING WITH A SPOUSE/PARTNER PLEASE PASS ON QUESTIONNAIRE FOR THEM TO COMPLETE PART B

FOR OFFICE US

PART B	TO BE COMPLETED BY SPOUSE OR PARTNER OF PERSON NAMED ON FRONT PAGE

• Have you at some time in the last ten years decided against a job move which involved moving home?

Yes..... ☐ *go to SECTION 1, below*

No..... ☐ *go to SECTION 2, page 8*
(i.e. have accepted all opportunities to move)

Not applicable..... ☐ *go to SECTION 3, page 9*
(i.e. have not considered moving and/or have not been requested to move home due to a job move or change)

Other..... ☐ *go to SECTION 1 if you have not moved. Go to SECTION 2 if you have moved* (140-142)

(i.e. set up dual location homes, please give details).....

PART B SECTION 1 NON-MOVERS

•This section asks about the experiences of those who have decided against a home move connected with a job move or change.

Q.13 (a) How many times in the last ten years have you decided against a job move because it involved moving home?.... ☐ (144-145)

(b) Thinking of the last time you decided against a job move on the grounds of reluctance to move home,which of the following situations match the circumstances in which you decided against the move?

(please tick one)

Did not apply for job..... ☐
Applied and offered job but declined..... ☐
Employer requested move but declined..... ☐
Spouse/partner did not apply for job..... ☐
Spouse/partner applied and offered job but declined..... ☐
Spouse's/partner's employer requested move but spouse/partner declined.. ☐
Other (please specify)..... ☐ (147)
.....

Q.14 Considering the last time you decided against a home move-

In which town and country were you living? ☐ (149-152)

In which town and country was the job which you or your spouse/partner (where applicable) considered? ☐ (154-157)

please turn over

FOR OFFICE US

Q.15 How important for you, as an individual, were the following reasons for not moving home at that time?

(please circle the number that indicates how important each factor is to you)

	not important	of limited importance	quite important	very important	extremely important	not relevant	
• Move would not have improved career advancement	1	2	3	4	5	X	(159)
• Inadequate salary increase	1	2	3	4	5	X	(161)
• Spouse/partner would have difficulty finding new employment in destination area	1	2	3	4	5	X	(163)
• Harmful effect on career of spouse/partner	1	2	3	4	5	X	(165)
• Moving away from friends or relatives	1	2	3	4	5	X	(167)
• Effect of move on dependent relatives	1	2	3	4	5	X	(169)
• Spouse/partner/children did not like the proposed move	1	2	3	4	5	X	(171)
• Disruption to children's schooling	1	2	3	4	5	X	(173)
• Destination was a less attractive area	1	2	3	4	5	X	(175)
• Higher cost of housing in destination area	1	2	3	4	5	X	(177)
• A lot of time and effort involved in moving home	1	2	3	4	5	X	(179)
• Difficulties in renting housing in destination area	1	2	3	4	5	X	(181)
• Difficulties in selling and/or buying homes	1	2	3	4	5	X	(183)
• Inadequate financial relocation assistance provided by employer for the move	1	2	3	4	5	X	(185)
• Difficulty re-integrating into organisation on return	1	2	3	4	5	X	(187)
• Lack of appropriate foreign language skills	1	2	3	4	5	X	(189)
• Difficulty of working in new business culture	1	2	3	4	5	X	(191)
• Difficulty of living in new social culture	1	2	3	4	5	X	(193)
• Other (please specify)	1	2	3	4	5	X	(195)

.....

.....

.....

Q.16 In the last ten years have you moved home as the result of a job move or change by either yourself or your spouse/partner(where applicable)

Yes..... ☐ please go to Part B, section 2

No..... ☐ please go to Part B, section 3 (197)

please turn over

PART B SECTION 2 MOVING HOME

•This section is about your experience of moving home as the result of a job move or change by either yourself or your spouse/partner (where applicable).

Q.17 (a) Thinking about your most recent home move, which factors do you think were of greatest importance in encouraging you to move home at that time? (199-200)

(please choose up to three from those listed in TABLE 1, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes) (202-203)

☐ ☐ ☐ other (please specify)_____ (205-206)

(b) And which factors do you think were of greatest importance in discouraging you from moving home at that time? (208-209)

(please choose up to three from those listed in TABLE 2, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes) (211-212)

☐ ☐ ☐ other (please specify)_____

Q.18 (a) Between which town and country was your most recent home move (where the move was made as the result of a job move or change)? (214-215)

From..... ☐ To..... ☐ (217-220)

(b) Please give the date of this last move (month and year)_____ (222-225)

Q.19 When making decisions about where you and your partner/family should live, does: *(please tick one box only)*

The career of your spouse or partner normally take priority over your own..... ☐
Your own career normally take priority over that of your spouse or partner..... ☐
Both careers are given equal priority..... ☐
Not relevant ..... ☐ (227)

Q.20 (a) Have you in the last ten years made a home move as a result of a change in the job of your spouse/partner? (229)

Yes... ☐ *(how many times?_____)* No.... ☐ Not relevant.. ☐ (231-232)

(b) How long have you been married/living together as a couple with your spouse/partner? (years_____ months_____) (234-237)

(c) What has been the overall effect of such move/s on your career development?

Very good effect	Good effect	No change	Bad effect	Very bad effect	Don't Know
☐	☐	☐	☐	☐	☐

(239)

Q.21 Was there any difference in your job type before and after your last move?

	Before move	***After move***
(a) Occupation.....	☐	☐

(241-242) (244-245)

(b) Employment status:

Before move		After move	
Full time.....	☐	Full time.....	☐
Part time (under 30 hours a week)....	☐	Part time (under 30 hours a week)....	☐
Other (eg student, voluntary work)...	☐	Other (eg student, voluntary work)...	☐
Not employed.....	☐	Not employed.....	☐

(247) (249)

please turn over

FOR OFFICE US

(c)Annual salary:

Before move		After move	
£nil-£9,999	☐	£nil-£9,999	☐
£10,000-£14,999	☐	£10,000-£14,999	☐
£15,000-£24,999	☐	£15,000-£24,999	☐
£25,000-£34,999	☐	£25,000-£34,999	☐
£35,000+	☐	£35,000+	☐
Do not wish to answer	☐	Do not wish to answer	☐

(251)

(253)

PLEASE GO TO PART B, SECTION 3

PART B SECTION 3 FUTURE HOME MOVES

- This section is about your attitudes to home moves that may occur as a result of a job move or change in the future

Q.22 Looking at the next five years, how likely is it that you will have to move home as a result of a job move or change affecting either yourself or your spouse/partner?
(please tick one box only)

Very likely ☐ Quite likely ☐ Undecided/Don't know ☐ Quite unlikely ☐ Very unlikely ☐

(255)

Q.23 Do you expect your next home move to arise as a result of:
(please tick one box only)

Applying for a job at another location ☐
Your job being moved to another location ☐
Your spouse/partner applying for a job at another location ☐
Your spouse's/partner's job being moved to another location ☐
Not applicable ☐
In other circumstances (please specify) ☐
.....

(257)

Q.24 If securing your next promotion* required you to move home, is it likely that you would:
(please tick one box only)

Definitely accept ☐ *Probably accept* ☐ *Don't know* ☐ *Probably refuse* ☐ *Definitely refuse* ☐ *Not applicable* ☐

(259)

(Next promotion means the kind of promotion you realistically expect to achieve)*

Q.25 (a) Which factors do you think would be of greatest importance in encouraging a home move in the next five years for reasons relating to a job move or change?

(261-262)

(264-265)

(please choose up to three from those listed on TABLE 1, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes)

(267-268)

☐ ☐ ☐ other (please specify)_____

(b) And which factors do you think would be of greatest importance to you in discouraging such a future move?

(270-271)

(please choose up to three from those listed on TABLE 2, (SEE ENCLOSED YELLOW SHEET), and put their numbers in the boxes)

(273-274)

(276-277)

☐ ☐ ☐ other (please specify)_____

Thank you for your assistance.

Please return your questionnaire in the prepaid envelope supplied.

This survey is supported by Glasgow Development Agency, the Carnegie Trust for the Universities of Scotland and the Glasgow Educational Trust and is sponsored by Highland Park Distillers Ltd.

TABLE 1

Factors ENCOURAGING you to move

	FACTORS TO DO WITH WORK
1	• Improvement to career prospects
2	• Higher salary of new job
3	• Improvement in future job security
4	• Availability of training/retraining in new job
5	• Provision of new work experience
6	• Good re-integration into organisation on return
7	• Possibility of establishing new work relationships
8	• Want to work overseas
9	• Good relocation assistance provided by employer
10	• Working in a new business culture
	FACTORS TO DO WITH FAMILY AND FRIENDS
11	• Ease with which spouse/partner may find new employment
12	• Beneficial effect of move on career of spouse/partner
13	• Living in a new social culture
14	• Return to origin area
15	• Need to speak a foreign language
16	• Ability to live in same location as spouse/partner
	FACTORS TO DO WITH HOUSING
17	• Moving to a more attractive area
18	• Moving to a more expensive housing area
19	• Moving to a less expensive housing area
20	• Ease of renting housing in new area
21	• Ease of selling and or buying new homes

TABLE 2

Factors DISCOURAGING you from moving

	FACTORS TO DO WITH WORK
1	• Damage to career prospects
2	• Same/lower salary of new job
3	• No improvement in future job security
4	• Damaging effect on pension/retirement plans
5	• No availability of training/retraining in new job
6	• Poor re-integration into organisation on return
7	• Need to establish new work relationships
8	• Did not want to work overseas
9	• Poor relocation assistance provided by employer
10	• Working in a new business culture
	FACTORS TO DO WITH FAMILY AND FRIENDS
11	• Difficulty spouse/partner may have in finding new employment
12	• Damaging effect of move on career of spouse/partner
13	• Disruption to children's schooling
14	• Moving away from friends or relatives
15	• Living in a new social culture
16	• Care of elderly relatives
17	• Return to origin area
18	• Need to speak a foreign language
19	• Unable to live in same location as spouse/partner
	FACTORS TO DO WITH HOUSING
20	• Moving to a less attractive area
21	• Moving to a more expensive housing area
22	• Moving to a less expensive housing area
23	• A lot of time and effort involved in moving
24	• Difficulty in renting housing in new area
25	• Difficulties in selling and or buying new homes

UNIVERSITY
of
GLASGOW

SURVEY ON EMPLOYEE MOBILITY

Tuesday, 13th April, 1993

Dear Sir / Madam,

Last week a questionnaire was mailed to you asking for your experiences of mobility connected with your career and for those of your spouse/partner (where applicable).

If you have completed the questionnaire already please accept my sincere thanks. If not, could you please return it as soon as possible.

It is important that your responses are included in the study if I am to represent people's experiences adequately.

If by some chance you did not receive the questionnaire or have mislaid it, please call me (on 041-339 8855 Extension 6653) and I will send you another copy today.

Yours sincerely

Alastair McPherson
Doctoral Research Student

DEPARTMENT OF GEOGRAPHY & TOPOGRAPHIC SCIENCE
University of Glasgow, Glasgow G12 8QQ, Scotland, U.K.
Telephone: 041-339 8855 Ext. 6653 *Telex:* 777070 UNIGLA *Fax:* 041-330 4894

Appendix 8.1

Company classfication

Company Name	Industry activity	Ownership	Corporate structure
James Finlay Asset Finance Ltd	Financial and Business Services	Scotland	Domestic exporter
Lang Brothers	Manufacturing industries	Scotland	Domestic exporter
Kingston Spinners	Manufacturing industries	Scotland	Domestic exporter
3i GROUP PLC	Financial and Business Services	UK	Domestic exporter
John Brown Engineering	Manufacturing industries	UK	Domestic exporter
British Steel Plc	Manufacturing industries	UK	Domestic exporter
John Brown Engineering	Manufacturing industries	UK	Domestic exporter
United Distillers	Manufacturing industries	UK	Domestic exporter
Rolls Royce Plc	Manufacturing industries	UK	Domestic exporter
Scottish Parasite Diagnostic Laboratory	Education, Research and Public Services	Scotland	Domestic local
Edinburgh University	Education, Research and Public Services	Scotland	Domestic local
Edinburgh University	Education, Research and Public Services	Scotland	Domestic local
Institute Of Chartered Accountants Of Scotland	Education, Research and Public Services	Scotland	Domestic local
Glasgow University	Education, Research and Public Services	Scotland	Domestic local
Heriot Watt University	Education, Research and Public Services	Scotland	Domestic local
European Policies Research Centre	Education, Research and Public Services	Scotland	Domestic local
Scottish Television	Education, Research and Public Services	Scotland	Domestic local
Strathclyde University	Education, Research and Public Services	Scotland	Domestic local
Strathclyde University	Education, Research and Public Services	Scotland	Domestic local
European Policies Research Centre	Education, Research and Public Services	Scotland	Domestic local
Strathclyde Industrial Development Office	Education, Research and Public Services	Scotland	Domestic local
Strathclyde University	Education, Research and Public Services	Scotland	Domestic local
Edinburgh Designs	Education, Research and Public Services	Scotland	Domestic local
Edinburgh University	Education, Research and Public Services	Scotland	Domestic local
Rehab Scotland	Education, Research and Public Services	Scotland	Domestic local
Scottish Law Commission	Education, Research and Public Services	Scotland	Domestic local
Glasgow University	Education, Research and Public Services	Scotland	Domestic local
University Of Strathclyde	Education, Research and Public Services	Scotland	Domestic local
Glasgow University	Education, Research and Public Services	Scotland	Domestic local
Dunbartonshire Enterprise	Education, Research and Public Services	Scotland	Domestic local
University Of Strathclyde	Education, Research and Public Services	Scotland	Domestic local
Scottish Enterprise	Education, Research and Public Services	Scotland	Domestic local
Lothian Health Board	Education, Research and Public Services	Scotland	Domestic local
Clyde Marine Training Ltd.	Education, Research and Public Services	Scotland	Domestic local
Glasgow University	Education, Research and Public Services	Scotland	Domestic local
Edinburgh University	Education, Research and Public Services	Scotland	Domestic local
Edinburgh University	Education, Research and Public Services	Scotland	Domestic local
Glasgow University	Education, Research and Public Services	Scotland	Domestic local
Strathclyde University	Education, Research and Public Services	Scotland	Domestic local
Napier University	Education, Research and Public Services	Scotland	Domestic local
Strathclyde Regional Council	Education, Research and Public Services	Scotland	Domestic local
St. Andrews University	Education, Research and Public Services	Scotland	Domestic local
Glasgow Polytechnic	Education, Research and Public Services	Scotland	Domestic local
Kenneth Mackenzie Holdings Ltd	Financial and Business Services	Scotland	Domestic local

Scobie & Junor Group	Financial and Business Services	Scotland	Domestic local
Simpson Dalgarno Partnership	Financial and Business Services	Scotland	Domestic local
MJI Business Solutions	Financial and Business Services	Scotland	Domestic local
Walter Runciman Plc	Financial and Business Services	Scotland	Domestic local
RPS Cairns Ltd	Financial and Business Services	Scotland	Domestic local
Stewart Ivory & Co.	Financial and Business Services	Scotland	Domestic local
A.S. Barr Plc	Manufacturing industries	Scotland	Domestic local
Scottish Pride	Manufacturing industries	Scotland	Domestic local
A.S. Neill & Partners Ltd	Manufacturing industries	Scotland	Domestic local
Flemings Laces	Manufacturing industries	Scotland	Domestic local
Denholm Ship Management UK Ltd	Transport Services	Scotland	Domestic local
Scottish Nuclear	Utilities	Scotland	Domestic local
Maloney Crawford UK Ltd	Construction	UK	Domestic local
Greater Glasgow Health Board	Education, Research and Public Services	UK	Domestic local
Kelvin Geophysical	Education, Research and Public Services	UK	Domestic local
National Union Of Students	Education, Research and Public Services	UK	Domestic local
Overseas Development Administration	Education, Research and Public Services	UK	Domestic local
National Engineering Laboratory	Education, Research and Public Services	UK	Domestic local
National Health Services	Education, Research and Public Services	UK	Domestic local
Greater Glasgow Health Board	Education, Research and Public Services	UK	Domestic local
Allied Dunbar Assurance Ltd	Financial and Business Services	UK	Domestic local
Allied Dunbar Assurance Ltd	Financial and Business Services	UK	Domestic local
Royal Liver Assurance	Financial and Business Services	UK	Domestic local
Store Design Havelock	Manufacturing industries	UK	Domestic local
DMC Telecom UK Ltd	Manufacturing industries	UK	Domestic local
Servisair Ltd	Transport Services	UK	Domestic local
Macgas Ltd	Wholesale and Retail Industries	UK	Domestic local
BP Exploration	Extractive Industries	UK	Domestic TNC
BP Exploration	Extractive Industries	UK	Domestic TNC
BP Exploration	Extractive Industries	UK	Domestic TNC
BP Exploration	Extractive Industries	UK	Domestic TNC
GEC Ferranti	Manufacturing industries	UK	Domestic TNC
Pilkington Optronics	Manufacturing industries	UK	Domestic TNC
BT	Manufacturing industries	UK	Domestic TNC
Smith Kline Beecham	Manufacturing industries	UK	Domestic TNC
Tate & Lyle Process Technology	Manufacturing industries	UK	Domestic TNC
Racal Survey (UK) Ltd	Manufacturing industries	UK	Domestic TNC
Shell	Extractive Industries	UK/Netherlands	Domestic TNC
Citicorp	Financial and Business Services	USA	Marketing satellite
Clydesdale Bank Plc	Financial and Business Services	Australia	Miniature replica
Clydesdale Bank	Financial and Business Services	Australia	Miniature replica
Wilson Sporting Goods	Manufacturing industries	Finland	Miniature replica
Inveresk Clinical Research	Education, Research and Public Services	Switzerland	Miniature replica
Arthur Anderson	Financial and Business Services	USA	Miniature replica
Chivas Brothers Ltd	Manufacturing industries	Canada	Rationalised Manufacturer etc.
Caledonian Paper	Manufacturing industries	Finland	Rationalised Manufacturer etc.
Caledonian Plc	Manufacturing industries	Finland	Rationalised Manufacturer etc.
Caledonian Paper Plc	Manufacturing industries	Finland	Rationalised Manufacturer etc.
Total Oil Marine	Extractive Industries	France	Rationalised Manufacturer etc.
Total Oil Marine	Extractive Industries	France	Rationalised Manufacturer etc.
Bull Information Systems	Manufacturing industries	France	Rationalised Manufacturer etc.
Isola Werk Ltd	Manufacturing industries	Germany	Rationalised Manufacturer etc.

JVC	Manufacturing industries	Japan	Rationalised Manufacturer etc.
Philips Bcs	Manufacturing industries	Netherlands	Rationalised Manufacturer etc.
Philips Bcs	Manufacturing industries	Netherlands	Rationalised Manufacturer etc.
Philips Lighting	Manufacturing industries	Netherlands	Rationalised Manufacturer etc.
Kvaerner	Manufacturing industries	Norway	Rationalised Manufacturer etc.
Volvo Trucks (GB) Ltd	Manufacturing industries	Sweden	Rationalised Manufacturer etc.
IBM	Manufacturing industries	USA	Rationalised Manufacturer etc.
Keystone Valve UK Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
IBM UK Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
Polaroid UK Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
IBM UK Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
Ryder Caledonian Airline Systems	Manufacturing industries	USA	Rationalised Manufacturer etc.
Digital Equipment Scotland Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
Digital Equipment Scotland Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
IBM	Manufacturing industries	USA	Rationalised Manufacturer etc.
Honeywell Control Systems Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
IBM UK Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
Office Workstations Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
IBM UK Ltd	Manufacturing industries	USA	Rationalised Manufacturer etc.
Digital Equipment	Manufacturing industries	USA	Rationalised Manufacturer etc.
Sun Microsystems	Manufacturing industries	USA	Rationalised Manufacturer etc.
Motorola	Manufacturing industries	USA	Rationalised Manufacturer etc.
Motorola	Manufacturing industries	USA	Rationalised Manufacturer etc.
Unisys	Manufacturing industries	USA	Rationalised Manufacturer etc.
Compaq Computers	Manufacturing industries	USA	Rationalised Manufacturer etc.
Digital Equipment	Manufacturing industries	USA	Rationalised Manufacturer etc.
Digital	Manufacturing industries	USA	Rationalised Manufacturer etc.
Hewlett-Packard	Manufacturing industries	USA	Rationalised Manufacturer etc.

Appendix 9.1

	Factors encouraging a home move
Own work	Improvement to career prospects
	Higher salary of new job
	Improvement in future job security
	Availability of training/ retraining in new job
	Provision of new work experience
	Good reintegration into organisation on return
	Possibility of establishing new work relationships
	Working in a new business culture
Partner's work	Ease with which spouse/ partner may find new employment
	Beneficial effect of move on career of spouse/ partner
Quality of life	Want to work overseas
	Living in a new social culture
	Return to origin area
	Need to speak a foreign language
	Ability to live in same location as spouse/ partner
	Moving to a more attractive area
Housing	Good relocation assistance provided by employer
	moving to a more expensive housing area
	Moving to less expensive housing area
	Ease of renting housing in new area
	Ease of selling and or buying new homes

Table A.9.1 Components of main factors encouraging home moves
Source: author

	Factors discouraging a home move
Own work	Damage to career prospects
	Same/ lower salary of new job
	No improvement in future job security
	No availability of training/ retraining in new job
	Poor re-integration into organisation on return
	Need to establish new work relationships
	Working in a new business culture
Partner's work	Difficulty spouse / partner may have in finding new employment
	Damaging effect of move on career of spouse/ partner
Quality of life	Damaging effect on pension/retirement plans
	Did not want top work overseas
	Disruption to children's schooling
	Moving away from friends or relatives
	Living in a new social culture
	Care of elderly relatives
	Return to origin are
	Need to speak a foreign language
	Unable to live in same location as spouse/ partner
Housing	Poor relocation assistance provided by employer
	Moving to a more expensive housing area
	Moving to a less expensive housing area
	A lot of time and effort involved in moving
	Difficulty in renting housing in new area
	Difficulties in selling and or buying new homes

Table A.9.2 Components of main factors discouraging home moves
Source: author

	Factors discouraging a home move
Own work	Move would not have improved career advancement
	Inadequate salary increase
	Difficulty re-integrating into organisation on return
	Difficulty of working in new business culture
Partner's work	Spouse/ partner would have difficulty finding employment in destination area
	Harmful effect on career of spouse/ partner
Quality of life	Moving away from friends or relatives
	Effect on dependent relatives
	Spouse/ partner' children did not like proposed move
	Disruption to children's schooling
	Destination was a less attractive area
	Lack of appropriate foreign language skills
	Difficulty of living in new social culture
Housing	Higher cost of housing in destination area
	A lot of time and effort involved in moving home
	Difficulties in renting housing in destination area
	Difficulties in selling and/ or buying homes
	Inadequate financial relocation assistance provided by employer for the move

Table A.9.3 Components of main factors discouraging home moves, non-movers
Source: author

Rank	Factor	Very or extremely important (%)	N=
1	Destination was a less attractive area	46.4	28
2=	Partner or children did not like the proposed move	37.9	29
2=	Disruption to children's schooling	37.9	29
4=	Higher cost of housing in destination area	33.3	30
4=	Effect of move on dependent relatives	33.3	30
6	Moving away from friends or relatives	28.6	28
7=	Partner would have difficulty finding new employment in destination area	25.0	28
7=	Harmful effect on career of spouse/partner	25.0	28
9	Move would not have improved career advancement	20.7	29
10	Inadequate salary increase	20.0	30
11	Difficulties in selling and/or buying homes	17.2	29
12	Inadequate financial relocation assistance provided by employer for the move	16.7	30
13	Difficulty re-integrating into organisation on return	13.7	29
14	Difficulty of living in new social culture	10.7	28
15	A lot of time and effort involved in moving home	7.1	28
16=	Difficulty of working in new business culture	3.6	28
16=	Difficulties in renting housing in destination area	3.6	28
18	Lack of appropriate foreign language skills	0.0	29

Table A.9.4 Non movers, reasons for not moving home, primary respondent
Source: author

Rank	Factors encouraging a past job move	Frequency	%
1	Improvement to career prospects	24	20.3
2	Return to origin area	16	13.6
3	Provision of new work experience	14	11.9
4	Moving to a more attractive area	13	11.0
5=	Living in a new social culture	6	5.1
5=	Working in a new business culture	6	5.1
5=	Higher salary of new job	6	5.1
8=	Availability of training/retraining in new job	5	4.2
8=	Improvement in future job security	5	4.2
10	Possibility of establishing new work relationships	4	3.4
11=	Other	3	2.5
11=	Beneficial effect of move on career of spouse / partner	3	2.5
11=	Ease with which spouse/partner may find new employment	3	2.5
11=	Good relocation assistance provided by employer	3	2.5
15=	Moving to a less expensive housing area	2	1.7
15=	Want to work overseas	2	1.7
17=	Moving to a more expensive housing area	1	0.8
17=	Ability to live in same location as spouse/partner	1	0.8
17=	Good re-integration into organisation on return	1	0.8
20=	Ease of selling and or buying new homes	0	0.0
20=	Ease of renting housing in new area	0	0.0
20=	Need to speak a foreign language	0	0.0
	Total N =	118	100.0

Table A.9.5 Factors encouraging a past home move, primary respondent
Source: author

Rank	Factors encouraging a past job move	Frequency	%
1	Moving to a more attractive area	11	20.4
2=	Ability to live in same location as spouse/partner	7	13.0
2=	Beneficial effect of move on career of spouse / partner	7	13.0
4	Improvement to career prospects	5	9.3
5	Return to origin area	4	7.4
6=	Moving to a more expensive housing area	3	5.6
6=	Good relocation assistance provided by employer	3	5.6
8=	Ease of selling and or buying new homes	2	3.7
8=	Living in a new social culture	2	3.7
8=	Ease with which spouse/partner may find new employment	2	3.7
8=	Higher salary of new job	2	3.7
12=	Ease of renting housing in new area	1	1.9
12=	Moving to a less expensive housing area	1	1.9
12=	Want to work overseas	1	1.9
12=	Good re-integration into organisation on return	1	1.9
12=	Provision of new work experience	1	1.9
12=	Improvement in future job security	1	1.9
18=	Other	0	0.0
18=	Need to speak a foreign language	0	0.0
18=	Working in a new business culture	0	0.0
18=	Possibility of establishing new work relationships	0	0.0
18=	Availability of training/retraining in new job	0	0.0
	Total N =	54	100.0

Table A.9.6 Factors encouraging a past home move, secondary respondents
Source: author

Rank	Factors discouraging a past job move	Frequency	%
1	Moving away from friends or relatives	17	19.1
2=	Disruption to children's schooling	9	10.1
2=	No improvement in future job security	9	10.1
4=	A lot of time and effort involved in moving	6	6.7
4=	Same/lower salary of new job	6	6.7
4=	Damage to career prospects	6	6.7
7	Moving to a more expensive housing area	5	5.6
8=	Moving to a less attractive area	4	4.5
8=	Living in a new social culture	4	4.5
8=	Damaging effect of move on career of spouse / partner	4	4.5
11=	Other	3	3.4
11=	Difficulties in selling and or buying new homes	3	3.4
13=	Difficulty in renting housing in new area	2	2.2
13=	Unable to live in same location as spouse/partner	2	2.2
13=	Care of elderly relatives	2	2.2
13=	Difficulty spouse/partner may have in finding new employment	2	2.2
13=	No availability of training/retraining in new job	2	2.2
13=	Damaging effect on pension/retirement plans	2	2.2
19	Need to establish new work relationships	1	1.1
20=	Moving to a less expensive housing area	0	0.0
20=	Need to speak a foreign language	0	0.0
20=	Return to origin area	0	0.0
20=	Working in a new business culture	0	0.0
20=	Poor relocation assistance provided by employer	0	0.0
20=	Did not want to work overseas	0	0.0
20=	Poor re-integration into organisation on return	0	0.0
	Total N =	89	100.0

Table A.9.7 Factors discouraging a past home move, primary respondent
Source: author

Rank	Factors discouraging a past job move	Frequency	%
1	Moving away from friends or relatives	9	21.4
2	Disruption to children's schooling	6	14.3
3=	A lot of time and effort involved in moving	4	9.5
3=	No improvement in future job security	4	9.5
5=	Difficulties in selling and or buying new homes	3	7.1
5=	Damage to career prospects	3	7.1
7=	Living in a new social culture	2	4.8
7=	Damaging effect of move on career of spouse / partner	2	4.8
7=	Poor re-integration into organisation on return	2	4.8
10=	Other	1	2.4
10=	Difficulty in renting housing in new area	1	2.4
10=	Moving to a more expensive housing area	1	2.4
10=	Moving to a less attractive area	1	2.4
10=	Care of elderly relatives	1	2.4
10=	Difficulty partner may have in finding new employment	1	2.4
10=	Need to establish new work relationships	1	2.4
17=	Moving to a less expensive housing area	0	0.0
17=	Unable to live in same location as spouse/partner	0	0.0
17=	Need to speak a foreign language	0	0.0
17=	Return to origin area	0	0.0
17=	Working in a new business culture	0	0.0
17=	Poor relocation assistance provided by employer	0	0.0
17=	Did not want to work overseas	0	0.0
17=	No availability of training/retraining in new job	0	0.0
17=	Damaging effect on pension/retirement plans	0	0.0
17=	Same/lower salary of new job	0	0.0
	Total N =	42	100.0

Table A.9.8 Factors discouraging a past home move, secondary respondent
Source: author

Rank	Factors encouraging a future job move	Frequency	%
1	Higher salary of new job	48	21.4
2	Improvement to career prospects	42	18.8
3	Improvement in future job security	25	11.2
4	Want to work overseas	19	8.5
5	Provision of new work experience	16	7.1
6	Moving to a more attractive area	12	5.4
7=	Working in a new business culture	11	4.9
7=	Ease with which spouse/partner may find new employment	11	4.9
9	Good relocation assistance provided by employer	9	4.0
10	Living in a new social culture	8	3.6
11	Beneficial effect of move on career of spouse/partner	6	2.7
12=	Possibility of establishing new work relationships	3	1.3
12=	Return to origin area	3	1.3
12=	Need to speak a foreign language	3	1.3
12=	Ability to live in same location as spouse/partner	3	1.3
16	Availability of training/retraining in new job	2	0.9
17=	Good re-integration into organisation on return	1	0.4
17=	Ease of renting housing in new area	1	0.4
17=	Ease of selling and or buying new homes	1	0.4
20=	Moving to a more expensive housing area	0	0.0
20=	Moving to a less expensive housing area	0	0.0
20=	Other	0	0.0
	Total N =	224	100.0

Table A.9. 9 Factors encouraging a future job move, primary respondent
Source: author

Rank	Factors encouraging a future job move	Frequency	%
1	Beneficial effect of move on career of spouse / partner	22	15.8
2	Moving to a more attractive area	17	12.2
3	Improvement in future job security	17	12.2
4	Improvement to career prospects	16	11.5
5=	Ability to live in same location as spouse/partner	12	8.6
5=	Higher salary of new job	12	8.6
7	Ease with which spouse/partner may find new employment	11	7.9
8	Good relocation assistance provided by employer	6	4.3
9=	Living in a new social culture	5	3.6
9=	Want to work overseas	5	3.6
11=	Ease of selling and or buying new homes	3	2.2
11=	Working in a new business culture	3	2.2
13=	Return to origin area	2	1.4
13=	Good re-integration into organisation on return	2	1.4
13=	Provision of new work experience	2	1.4
13=	Availability of training/retraining in new job	2	1.4
17=	Other	1	0.7
17=	Ease of renting housing in new area	1	0.7
19=	Moving to a less expensive housing area	0	0.0
19=	Moving to a more expensive housing area	0	0.0
19=	Need to speak a foreign language	0	0.0
19=	Possibility of establishing new work relationships	0	0.0
	Total N =	139	100.0

Table A.9.10 Factors encouraging a future job move, secondary respondent
Source: author

Rank	Factors discouraging future moves	Frequency	%
1	Moving to a less attractive area	28	12.3
2	Disruption to children's schooling	25	11.0
3=	Moving away from friends or relatives	22	9.7
3=	Damage to career prospects	22	9.7
5=	Damaging effect on pension/ retirement plans	15	6.6
5=	No improvement in future *job security*	15	6.6
5=	Same/lower salary of new job	15	6.6
8	Difficulty spouse/partner may have in finding new employment	13	5.7
9=	Moving to a more expensive housing area	9	4.0
9=	Damaging effect of move on career of spouse / partner	9	4.0
11=	Unable to live in same location as spouse/partner	7	3.1
11=	Poor relocation assistance provided by employer	7	3.1
13	A lot of time and effort involved in moving	6	2.6
14=	Difficulties in selling and or buying new homes	5	2.2
14=	Care of elderly relatives	5	2.2
14=	Living in a new social culture	5	2.2
17	No availability of training/retraining in new job	4	1.8
18	Working in a new business culture	3	1.3
19=	Other	2	0.9
19=	Need to speak a foreign language	2	0.9
19=	Need to establish new work relationships	2	0.9
19=	Poor re-integration into organisation on return	2	0.9
23=	Difficulty in renting housing in new area	1	0.4
23=	Moving to a less expensive housing area	1	0.4
23=	Return to origin area	1	0.4
23=	Did not want to work overseas	1	0.4
	Total N =	227	100.0

Table A.9.11 Factors discouraging future moves , primary respondent
Source: author