A Channels Framework For The Study of Skilled International Migration

by

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Abstract

Recent studies have identified a fundamental change in the character of much international migration. Skilled migrants have become a major component of most population flows and a majority in some cases. New forms of international labour migration and new historical and geographical contexts of international skill transfer, therefore require new frameworks for analysis.

The main thrust of this research is to apply, extend and adapt a 'migration channels' framework within the specific geographical context of Scotland's skilled international migration system.

The concept of migration channels is founded on the observation that fewer and fewer international migrants themselves directly obtain jobs, work permits or residence visas. Increasingly, international skill transfers are regulated and manipulated by intermediary agencies. Identification and analysis of migration channels is therefore important since they play a key role in explaining firstly, which persons from the large pool of potential migrants are selected for migration, and secondly, how a highly skilled international migration system is controlled and directed.

A main aim of this research is to identify and understand the international migration processes operating in the Scottish context of skilled international migration. These processes are examined in relation to the differential selectivity and 'control' each represents, with regard to the characteristics of the migrants involved with them, and the characteristics of their migration history. The importance of the concept of career and career advancement for explanation of skilled international migration is examined, in relation to respondents involved with each channel.

Examples of the types of migration channels which have been found to be of importance in transferring highly skilled migrants within the world economy during the latter part of the 20th Century include international recruitment agencies, intra-company transfers by multinational companies, and skill transfer by small and intermediate sized companies. In this study of the Scottish context, other 'informal' channels are also found to be of significance, for example, newspaper and media, family and friends.

It is argued that migration channels can be expected to reflect aspects of the geographical specificity of the labour market locations in which they have evolved, as well as the historical, political and economic arenas of their development. Thus, this research advocates an analytical approach applicable within a broader context,

beyond that of the case study. The structure of the channels framework in Scotland is attributed to its position in the structure and dynamics of the international division of labour. Explanation of skill flows in other spatial contexts can be achieved by investigating the development, operation and control of specific migration channels within the confines outlined by the concerns of geography.

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Chapter 1 Introduction and Review of Literature

1.1 Introduction

The study of human migration is a vast and diverse area for contemplation, and requires clearly defined boundaries of research. The portion of this phenomenon which is to receive attention must be recognized as a part of the much larger 'migration research'.

When beginning this research, three important questions were asked :-

- Why study skilled international migration?
- Why study the Scottish context?
- Why a geographer studying this topic?

Justification for the research with regard to these issues is given, before consideration of the definitions and problems of definition which are an integral part of any study of migration.

1.1.1 Why Study Skilled International Migration (SIM)?

There exists a relative paucity of information relating to the international migration of skilled individuals. Recent studies, at both micro- and macro-scale, have identified a fundamental change in the character of much international migration occurring in the developed and less developed world (Appleyard 1989, Findlay 1988, Findlay and Gould 1989, Gould 1988, King 1986, Salt 1984 and 1986b). In Western Europe since the mid 1980's the demand for unskilled industrial labour has slackened and high-level manpower movements increased. Movements between states by persons intending to settle

permanently at their new destination have become more and more difficult as states have progressively introduced legislation to halt settler immigration. Conversely, nearly all countries participate in an international system of temporary labour movements.

These temporary labour movements have proved to be highly selective of those holding specific skills. The definition of 'skilled' relative to 'unskilled' in one context (defined through occupation, education or income) may not be recognized in another. Despite definitional problems, the main feature of the recent trend is the "international transfer of scarce human resources from one state to another" (Findlay and Gould 1989 p3).

The term 'skilled transient' was first coined by Appleyard (1985) to refer to international transfers of skilled staff within multi-national organizations, but can be used more widely to refer to all skilled migrants whose "outstanding characteristic is their readiness to move from one country to another and back again for the purposes of employment" (Richmond 1968 p263). Thus, while settler international migration contributes to the net redistribution of population in the medium and long term, skilled transient moves are temporary in nature and have no long term redistributive effect on population stocks.

Gould (1988 p383) described that, "whether defined by educational level, occupational status or income, skilled migrants had become a major component of most flows and a majority in some". The characteristics of this migration

sets it apart from unskilled movements in many respects. Such movement is of a "disproportionally large economic significance" (Gould 1988 p383), and therefore they "as a group have warranted specific consideration" (ibid).

The international migration of skilled labour is not a new phenomenon, but its "resurgence in recent decades as a key component of the evolving world economic system has provided a stimulus for studies of labour markets for highly skilled people" (Gould 1988 p381). The range and type of contemporary skilled international labour migration raises a number of theoretical and other issues. Significant and continuing progress has been made in recent years by geographers investigating patterns of British skilled international migration (SIM).

1.1.2 Why Study The Scottish Context?

While Scotland is a region familiar to the researcher, its choice as the locus of study has not been made for parochial reasons, but rather arises out of previous research on regional patterns of British emigration (Findlay and Gould 1989). Research which identified the need for greater depth of understanding of skilled migration at the level of localities and regions. In particular, studies of migration in the so-called 'peripheral' regions were called for, in order to discover whether skill transfers from these areas mirrored, or differed significantly from, those being witnessed in the economic core of the South East (Salt 1988).

Scotland has a long tradition of emigration and during the 1980's was, after London, the single most important source region for British emigration (evidenced and discussed further in Chapter 2). The study of Scottish migration is interesting and significant, not only because of the large numbers of people involved, but because they are drawn from a distinctive regional labour market, whose history and structure are very different to that of the South East of England - the other main area of involvement with SIM.

Concentrating upon the Scottish context as a study area allows for the description and explanation of the SIM phenomenon in this case. The resultant theoretical developments may be applied or adapted to account for the historically, economically, politically, socially, culturally and spatially specific forms of SIM occurring in other areas.

1.1.3 Why Should a Geographer Study This Topic?

The study of migration phenomenon is of an inter-disciplinary nature, involving the disciplines of economics, politics, sociology and geography. What may be thought of as the unique contribution geographers have to make to the study of migration? Woods (1984 p240) has argued that "there is no justification and never has been for asking 'but is it geography?'". Findlay and Graham (1991 p159) however believe that such a question should not be taken as evidence of paranoia, but "unless 'geography' is to become a redundant category under the

march of postmodernism then it behoves geographers as geographers to shoulder a small part of the responsibility for demonstrating its content and usefulness".

There exist many competing definitions of population geography (Eg. Trewartha 1953, Clarke 1972).

> "Population geography deals with the analysis and explanation of interrelationships between population phenomena and the geographic character of places as both vary through space and time. Population phenomena include the dynamics of population distribution, urban/rural location, density and growth (or decline); mortality, fertility and migration; and structural characteristics including age, sex, ethnicity, marital status, economic composition, nationality and religion" (Pryor 1984 p25).

Such a definition stresses the 'holistic' nature of geographical studies. Neither 'space' nor 'society' can be understood independently. The spatial patterns of human migration are not just an outcome, but are part of any process of societal change.

The study of migration within population geography has proved complex, with many differences in the levels of understanding and explanation sought. For example, while some research deals with the correlates of flow patterns (Greenwood 1981), others are concerned with the characteristics of movers compared with stayers (Speare 1971, White and Woods 1980) or the psychology of decision making and implementation (Wolpert 1964, 1965 and 1966, Lieber 1978, Desbarates 1983) - all contribute to a body of information and theory relating to migration.

Migration is a human activity which occurs at all geographical scales from local to international levels. However, while international migration has a well established place in the range of interest of population geography, the importance of its study has varied. A post-war boom in studies of international migration was followed by very little attention to this phenomena during the 1960's and 1970's - a period when studies of internal migration dominated. Since this time, interest in international migration has grown (Gould 1988), with the further development of theoretical issues, and the application and extension of certain approaches first developed to study internal migration.

Pacione (1986 p7) has concluded that "the major contribution of the geographical approach (to the study of international migration) lies in its ability to identify variations within and between migration networks which both highlights the danger of over generalization and helps define the limits of any general theory of international migration". This conclusion can be extended and becomes more meaningful if one considers that "population geography is the study of population using the spatial perspective" (Woods 1982 preface).

The meaning and definition of the term 'spatial perspective' is of great importance in understanding why a geographer should study migration. 'Spatial' is a concept which encompasses many 'meanings' at societal and individual levels - distance, place, belonging, perceived

space and distance, environment (social and personal) etc. The scale of 'space' and hence of the spatial perspective which geography brings to population research will vary, dependent upon the particular focus of the study. However, definitions of space and a spatial perspective are not static but represent the dynamic context. Thus, "geography's contribution to population studies will be mainly concerned with the analysis and explanation of those changing spatio-temporal patterns and the processes that create them" (Woods 1979 p252).

Therefore, the questions for population geographers are posed by the "contemporary social context : the need to investigate the demographic and distributional consequences of new forms of social grouping as well as the new kinds of people who have emerged in recent decades" (Findlay and Graham 1991 p158). The study of the 'geography' of skilled international migrants may therefore be justified as an example of a 'new social grouping' in relation to contemporary spatial, social, economic and political contexts.

1.1.4 Definitional Issues

Regarding this research, three important distinctions must be drawn - i) between internal and international migration, ii) between labour migration and other forms of migration, and iii) within labour migration, between skilled and unskilled movements. The inadequacy of the distinction between labour migration and other forms of migration is noted, "exposed by a large body of evidence

which demonstrates that a great deal of labour migration is induced, indeed forced, by factors such as rural poverty, land dispossession, taxation, and so on" (Miles 1990 p291).

However, in the context of this research, consideration will be given exclusively to the migration of labour, described as "individuals whose purpose in moving is to sell their work capacity in the receiving area" (Portes and Walton 1981 p21). These authors noted that the term 'migration' "has become synonymous with the displacement of labour" (ibid). Differentiation between 'skilled' and 'unskilled' labour was an issue discussed previously with regard to justification for the study of skilled international migrants.

Reference only to international migration requires consideration of the importance of international boundaries (and their degree of permeability) and national status. This adds international economic, political and social dimensions to the study. However, in the developed countries of the world "it is becoming increasingly difficult to separate internal moves of population from international moves" (Johnson and Salt 1990 p1). Such difficulties are attributed to "the emergence of supra-national economic groupings of states and because of the freer movement of highly specialized workers" (ibid).

Orientation of research does not overcome problems which exist with regard to the actual definitions of the terms of study. In popular terms, a definition of the

phenomenon under examination is straight forward (Eg. "to move from one place to another, especially in order to find work", Collins English Dictionary 1987). In reality, however, such a simple definition is unlikely to suffice. "The reason for the difference between the conceptual (simple) definition and the operational (workable) definition lies in the nature of the sources available for the study of any migration phenomena" (White and Woods 1980 p3). They believe that much of the study of migration phenomena has been 'source-led'. The definitions of the phenomena and the questions asked are often tailored to suit the information available. This a view echoed more recently by Findlay and Gould (1989 p5), who noted that much research into SIM had been 'data-led'.

Salt (1986a p166) has commented on the problems of definition in the area of international migration study, describing how in an ideal world for researchers, "data are available on all border crossings so that all possible types of movement are recorded". In reality, however, "governments collect data only on certain types of immigrants", and "the selected time period for definition and the specified list of trip types considered as migrations vary from country to country" (ibid). Salt concludes that the range of data collected by states varies enormously and that studies of international migration have tended to reflect the definitions used.

Such definitional problems must be bourne in mind during any study of migration, since the specific

definitions of the phenomena will affect both the method of study and the outcomes. Much of the study of international labour migration is concerned with data from governments regarding border crossings, work permits issued etc. However, such data may not be comprehensive, and may indeed contain errors (Eg. where certain border crossings do not need to be recorded). Issues of definition, reliability and bias of secondary data sources are further discussed in Chapter 2 in relation to the main source of information on British international migration - the International Passenger Survey.

1.2 International Labour Migration : A Review of the Literature

Within this review of the literature, attention will be focussed on three main areas or issues which arise from a consideration of the phenomenon. The first aspect for contemplation is the question - what is thought of as explaining international labour migration within the literature? A consideration of these explanations leads to examination of theoretical and methodological issues within migration research.

The second aspect for discussion is a short consideration of how studies of international migration have progressed through time, reflecting changes in world labour migration patterns, and changes in explanation and interpretation.

Finally, discussion will focus on the literature related specifically to the international migration of

skilled labour. Recent research work will be discussed, leading on to consideration of the specific research questions and aims of this study.

1.2.1 Literature on International Labour Migration

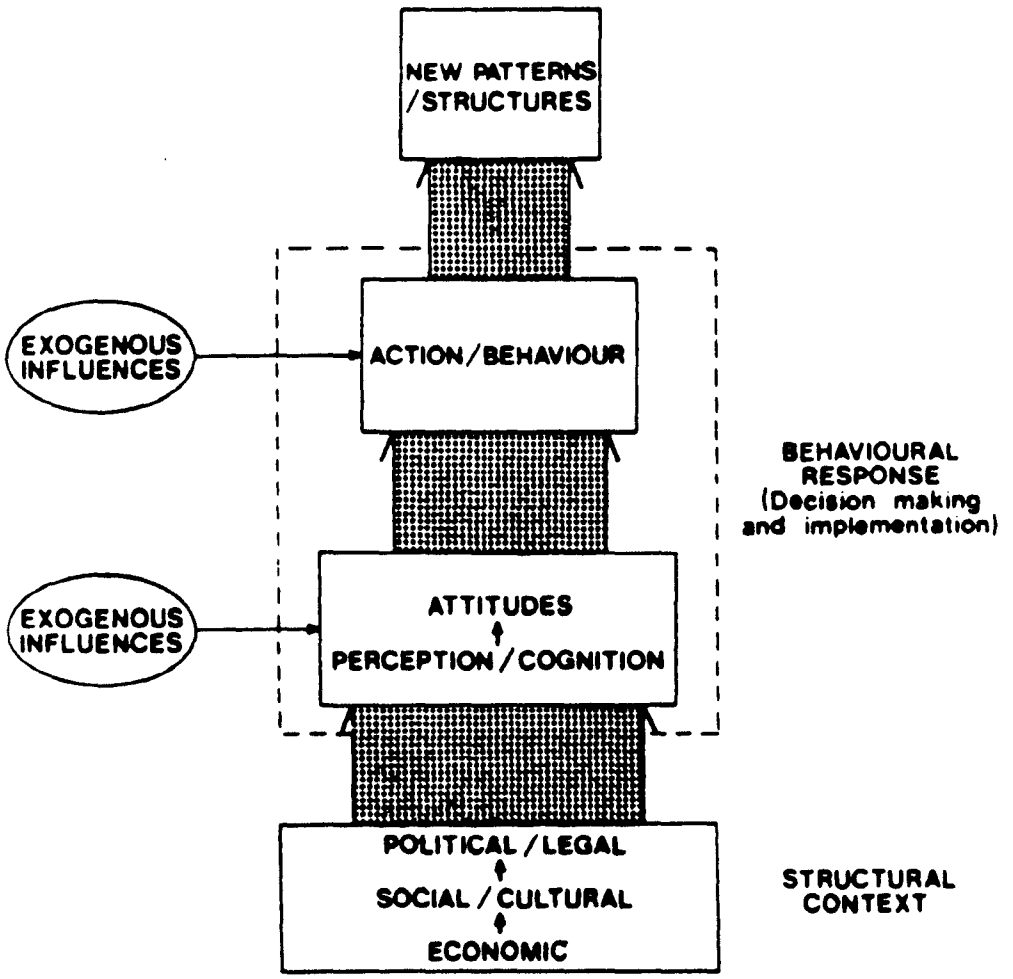
1.2.1.1 Behavioural Perspectives

Woods (1982) presented a review of recent developments in migration theory, and in 1985 argued the case for, and outlined a possible contender for, the title 'a general theory of migration'. In doing so, Woods drew the distinction between theories which deal with the decision-making procedures of individuals and those that consider aggregate behaviour of migrant groups.

Behavioural geography is an approach within human geography particularly concerned with the processes of perception and cognition which influence the formation of attitudes among individuals and groups. Research emphasis in this perspective is placed on "the micro-scale antecedents of individual migration behaviour" (Golledge 1980 p19). It has been recognized that behavioural methodology has "not influenced to any large extent the macro-level origin-destination studies" (ibid). Behavioural perspectives of migration have been more important at internal and inter-regional scales (for example, Kitching 1990, Lieber 1978, Maier 1990, Saunders 1990, Wolpert 1964, 1965, 1966) than at international.

Figure 1.1 represents Woods (1985) framework for a general theory of migration. Behavioural perspectives have been criticized for placing too much attention at the

Figure 1.1 Framework of a General Theory of Migration



(source : Woods 1985 p3)

individual level, without orienting individual actions and perceptions within economic, political and social contexts. Hence in terms of the model presented, have placed too great emphasis upon the 'behavioural response' layer. The behavioural input to an understanding of migration is undoubtedly important, however, 'new' behavioural perspectives of migration have recognized that "migration is obviously a response to a combination of forces that represent both underlying preferences and contextual constraints" (Cadwallader 1989 p19, Desbarats 1983). In terms of Figure 1.1, causal explanation of international migration will arise from interpretation and understanding of the bottom layer, 'structural context'. The behavioural response is conditioned but not determined by this layer.

Thus, behavioural perspectives can be considered to provide the 'icing on the cake' in terms of migration theory. Such a methodology can be used to refine rather than define a theoretical basis for explanation of the causes of international migration.

Woods' (1985) ideas on a general theory of migration therefore provide a useful 'starting point', a functional although not universal construction of the elements needed for a reasonable, intermediate theory of international labour migration. With reference to these ideas, a number of theories for the explanation of international migration will be discussed, with description of the main

theoretical elements and the criticisms which have been put forward.

1.2.1.2 Neo-classical Theories

Neo-classical theories to explain labour migration can be expressed as 'equilibrium' or 'human capital' perspectives. The theoretical base for these perspectives is related to simple economics, an extension of the theory of resource allocation - the laws of demand and supply. Labour is conceptualized as a commodity, and wages are the key element controlling the labour market and hence migration (Hicks 1963). The demand for and supply of labour (at different skill levels) affects the level of wages paid.

Higher skilled/educated individuals (a relatively scare commodity) represent a greater degree of investment in human capital and hence receive greater financial rewards. There are many more individuals of low skill with little human capital investment who receive lowered wages. The relationship between labour and wages is postulated as relatively simple - if demand for skills is high, and supply of the necessary talented labour is low, then wages increase (Cebula 1979, Freeman 1972, Perlman 1969, Phelps-Brown 1962, Tarver 1965). Similarly, there may be supply side changes, for example, fewer individuals entering the labour market will also result in increased wage levels (Eg. the demographic changes in Western Europe at present).

Labour migration or transfer is explained as occurring due to inequalities of wage levels, inequalities which may exist at different geographical scales. Labour migration is viewed as a rational economic process, a self-regulatory process by which spatial differences in labour demand and supply adjust themselves (Böhning 1972). Human capital perspectives have been the basis of much research related to internal migration (Blanco 1963, Goodrich 1935, Sjaastad 1960 and 1962, Speare 1971). According to Todaro (1969), migration may be conceptualized as an investment in human productivity, which like all forms of investment has costs and returns. He further describes how rational actors may anticipate these costs and benefits (expected gains) in deciding whether and where to migrate.

The study of international labour migration, however, involves consideration of several issues which are not relevant to internal or inter-regional movements. The boundaries which exist between nations restrict the operation of a free market (except where steps are taken to allow the free movement of labour, for example, European Community (Böhning 1984)). Also different countries have different relationships between labour, capital and state (Eg. socialist, free market etc) which further affect the human capital model. Other government controls on, for example, access of immigrants to citizenship, length of stay, selectivity of migrants

allowed to enter the labour market, etc, will additionally influence labour migration in an international setting.

At a superficial level, this model of labour migration describes greater net benefits and advantages than costs. Böhning (1984) has reviewed the way in which labour importing countries have gained from the admittance of economically active foreigners, making more effective use of the capital base of the country and contributing to economic growth. He argued that benefits must accrue to the importing country because "if the foreign human resources were not demonstrably required they would be neither desired nor admitted" (Böhning 1984 p35). The migrants themselves were described as "reaping benefits" (ibid) from their action, otherwise rationality would impel them to cease working in the immigration country. Where the labour exporting country is poor and developing, Böhning described how "it usually also benefits from the employment of citizens abroad" (ibid), although he did suggest that it was a little more difficult to determine the precise balance of costs and benefits and to make generalized judgements for exporting countries.

By way of example, Böhning (1972) explained that with post-war expansion in the developed industrialized countries of Europe, the working classes here had experienced a fast and sustained increase in living standards. These increases had occurred within the traditional job structure of industrialization, with socially undesirable and low wage jobs at the bottom. With

labour shortages in these undesirable jobs (indigenous workers able to obtain better employment which helped fulfil their aspirations) the capitalist society was faced with a number of options. One option would be to pay higher wages for such jobs and increase their status. However, it was the second option open to these capitalist countries which Böhning believed was important for international labour migration. They "could fill these jobs with foreign workers admitted not for settlement but for the specific purpose of filling the supposedly temporary gaps in the labour market" (1972 p57). These gaps were believed to be temporary, due to an economic boom, and were expected to disappear under more normal conditions. Such a policy of economic rotation had the advantage of providing a 'buffer' against the vagaries of the economic cycle for the indigenous labour force. In times of recession it was believed that the nationals of the host country could be protected from unemployment by the release of aliens from employment (Salt 1981).

However, the neo-classical approach is not epitomized by a description of labour migration as a solely beneficial process, recognizing that there are costs as well as benefits (Borjas and Tienda 1987, Greenwood 1975 and 1985, Greenwood and McDowell 1986, Todaro 1980, Yap 1977). For example, the passage of time affects the costs and benefits of international migration. The labour importing country receives people, not just labour. People who require housing, health care, the provision of

infrastructure etc. The costs of having an immigrant population are not insignificant, and increase over time, for example, as the migration becomes of a more permanent nature, family join the migrant in the destination area, citizenship claims, problems of ethnicity and race increase etc. The longer the migrant stays, the lower are the returns to capital for the importing country (Böhning 1984, Booth 1985, Castles 1980, Castles, Booth and Wallace 1984, Jones and Smith 1970, O'Loughlin 1980, Peach 1965, Piore 1979).

Salt and Clout (1976) described how most migrants do not learn any skills or receive training while abroad. Indeed, it seems that the supply countries may even experience a net loss of skilled workers as a result of emigration, since skilled workers are those most in demand in the destination countries (Portes 1985). They are the first to emigrate and often reluctant to return due to the economic benefits gained abroad.

For those migrants who do receive training, there is no guarantee of a suitable job on return to their origin country. They discover that their skills have become specialized in the country to which they have moved, and of little use in the labour market of the origin country (Kayser 1971, Vigorelli 1969, Zingaro 1969). Any investment in human capital which has occurred is not a benefit transferable or realizable for the migrant.

For the origin country, while remittance levels were high at the beginning of the time abroad, the level

decreases in the longer term. With evidence that the remittance money is not invested as productively as it could be, and indeed is used to buy food, clothes and consumer goods - much of which come from foreign markets (Baucic 1971, Hume 1973, Kayser 1971 and 1972, ILO 1973, Lewis 1986, Time 1973). As foreign employment opportunities become more restricted, migrants seldom return home. Thus a change occurs from circulation employment abroad to more permanent emigration. Individuals from the most productive age cohorts are lost, to be later followed by their families (Anwar 1979, Birks, Sinclair and Socknat 1978, Böhning 1975a and 1975b, Borjas and Tienda 1987, Ecevit and Zachariah 1978, Hadley 1977, Paine 1974, Sinclair 1977, Todaro 1980).

Thus the returns on human capital tend to diminish over time and costs increase, both for the sending and receiving countries.

Böhning (1984) described how many States had viewed labour migration at some stage in the past as a mechanism to facilitate economic growth. This was evidenced in relation to cycles of post-war migration to the USA, Europe and Canada (Booth 1985, Bouscaren 1969, Jones 1978, O'Loughlin 1980, Rist 1979, Thomas 1973).

Böhning (1984 p184) however did describe the "fallacy of the aggregate human capital approach", in contrast to earlier uncritical acceptance of the potential human capital gain from international migration. Further recent advances in the human capital school have occurred, with

elaboration and refinement of the neo-classical model resulting in a more complex but more sensitive theory (Birks and Sinclair 1980, Cole and Sanders 1985, Mincer 1978, Salt and Clout 1976).

An overall evaluation of the neo-classical human capital model suggests that in certain cases this approach does appear to be helpful. For example, international migration which occurred at lower levels of development (past European migration, recent Middle Eastern situation). However, while the model is of use in describing how certain migration streams originated, it does not subsequently explain the patterns and development of international migration. Certain of the assumptions, along with the static nature of the equilibrium theory, prove to be limiting to the explanatory power offered. For example, it does not satisfactorily explain why migrant labour flows are not much larger than they are at present, given the very large wage differentials between developing and developed regions.

There are other constraints than wage differentials on labour migration. For example, state boundaries. These state boundaries and government controls may be of such importance that they are of greater value in explaining labour migration than the economic concepts of demand and supply (Eg. UK strict controls on immigration). When demand for labour falls, neo-classical models become less useful.

Neo-classical theories of migration have been criticized as too simplistic, in relation to both an understanding of macro- and of micro-factors. At the level of the individual migrant (micro-level), human capital theories have been criticized for the consideration of only economic factors for migratory movements. The view of migration as somehow 'automatic' once long-term benefits have been judged to outweigh short-term costs has been discredited (Woods 1985).

Behavioural theorists have argued that there are many more factors of importance underlying the decision to migrate than economic gain or higher wages. These theorists criticize the importance placed upon the concept of 'objectively rational' or 'economic' behaviour. Woods (1985) has described how rational men exist only in theories, and that access to information (upon which 'rational' decisions depend) will be imperfect and restricted.

At a macro-level, Marxist/structuralist philosophy disagrees with the definition of the 'market' and the way it operates relative to labour portrayed within the human capital perspective. It is argued that such a perspective does not explain the ultimate forces which cause and control movement (Castells 1975, Castles and Kosack 1973). The spatial domination of the labour market by capital (employers) means that labour demand and wages are not organized, but determined.

The labour market approach interprets migrant labour as a 'buffer', which is released from employment at times of recession. This was not evidenced in Western Europe in the 1970's. As Salt (1981 p142) has noted, "the effect of migration was to make more rigid the structure of occupations in industrial countries...occupations came to be reserved for immigrants...these were not necessarily the jobs that were lost at times of recession". As a result, economic stagnation in Europe after 1973 did not result in such widespread redundancies among foreign workers as might have been expected (Salt 1981).

Finally, human capital theories are limited in their discussion of the developmental implications of international labour migration. It is an assumption that in overall economic terms, there is a net benefit due to migration (for example to the countries supplying labour). A criticism of this claim is described in 'cumulative causation' or 'dependency' theory (Frank 1969, Griffin 1969). This theory describes a process whereby surplus is drained from underdeveloped areas. This is not a self-regulatory process but a cumulative one, leading to an ever greater impoverishment and depopulation of these regions. Myrdal (1957) noted how capital flows originated in the periphery, and did not function to develop peripheral areas but to deepen their underdevelopment. Myrdal argued that the flow of trade and investment capital from advanced to peripheral countries did not lead to parity or equality, but rather to the progressive

subordination of the peripheral economies causing stagnation or a rate of growth dictated by the core.

However, such dependency theories have also received criticism, for the simplistic description of relations between less developed and developed countries as essentially unequal and exploitative (Adler 1977). In contrast, the importance of 'interdependence' theories (Brookfield 1975) have been stressed, describing mutually bonding ties and obligations between labour exporting and importing countries (for example, as identified in the case of Algeria and France by Adler (1977)).

1.2.1.3 Marxian/Structural Theories

The international system as an explanation for international labour migration is further developed within Marxian or structural perspectives. Marxian and neo-classical perspectives (human capital) share common roots in the so-called 'classical' economics of the late 18th and 19th centuries. A main difference between these two perspectives is provided by their fundamentally different treatment of the labour theory of value. Whereas neo-classical analysis sees value (reflected in prices and income) as arising from some almost mechanical process of market determination, Marxian economics uses the concept of value to expose the social relations which manifest inequality under capitalism.

Two basic assumptions underlie the Marxist philosophy - that there exist a large number of people who do not control the means of production, while, those who do

control production are a small politically powerful minority (Miles 1987). Capitalism appropriates surplus wealth by exploiting labour. The minority who control the means of production appropriate surplus from the majority who have only their labour to sell. Workers are free to, and compelled to, sell their labour to those who control production (Marx 1968 p74). The difference between the returns of such production and the amount paid in wages is the surplus used to reproduce the capitalist system and society. The social relations of production in capitalism serve to exploit labour and technology (Miles 1987).

Weber (1968) provided definitions of the distinction between free and unfree labour. 'Unfree labour' was characterized as when another individual possesses property rights over the labour, for example, slavery and serfdom. Free labour was defined as existing when "the services of labour are the subject of a contractual relationship which is formally free on both sides" (Weber 1968 p127-8).

However, Miles (1987 p32) has described how it is, that labour may be formally free under capitalism, but nevertheless remains constrained in certain circumstances by political and economic relations which necessitate the description of unfree wage labour. An example of unfree labour was detailed as the politico-legal restrictions on the operation of the labour market with regard to migrant labour, especially immigrants employed as "contract migrants" (ibid p159). Miles questioned why as capitalism

has developed, it has not swept away all forms of non-wage and unfree labour.

The contention that "migration and labour recruitment have been on an international scale for at least four Centuries" (Miles 1987 p5), raises controversy over the conceptual and theoretical framework within which such movement is analysed and explained. Problems arise in understanding these migrations in relation to the development of the capitalist mode of production.

A resolution might be the adoption of the world system approach of Wallerstein (1974), and a rejection of the individual society or nation state as the unit of analysis. This is a theory which claims that the world capitalist system was formed by 1650, and that migration has occurred within phases in the expansion and development of that system and therefore is synonymous with capitalism. Wallerstein conceived the capitalist world economy to be divided into three zones - core, semi-periphery and periphery - distinguished by different forms of labour appropriation and exploitation. These divisions of the world economy were distinguished as necessary structural positions, with varying nation states occupying each position at any point in time. Over time the composition of the core changes, as does the relationship between the nation-states which constitute the core (Wallerstein 1980 p8-9), although the structure of inequality remains unaltered (Petras 1981 p54).

Marxist perspectives for the explanation of international labour migration, and the significance of such labour movements (in relation to modes of production) were utilized in explanation of the large scale movements of people into Western Europe after the second World War to fill vacant labour force positions (Castles and Kosack 1973, Castells 1975, Nikolinakos 1975). These theories described an international 'reserve army of labour'. However, Miles (1987 p4) has criticized the context whereby Marxist perspectives have become "synonymous with twentieth century movements of (unskilled) people (of rural origin) from the periphery of the capitalist world economy to its centre where they are proletarianized".

Castells (1975 p35) has described how at first glance, "migratory movements may be analysed as simply the result of two laws of the capitalist mode of production : the submission of the worker to the organization of capital; and the uneven development between sectors and regions, and between countries". The decline of regions whose productive structure has been weakened in favour of the most advanced capitalist countries forms a basic feature of the social structure of monopoly capitalism. Thus Castells argued that capitalism, can only develop by continually decomposing backward sectors, and freeing an even larger labour force. Hence, uneven development is not due to disparities in the distribution of natural resources, but arises from the logic of capital and the resulting division of labour. Uneven development (at

regional and world scales) is then "a structural tendency of the (capitalist) mode of production" (Castells 1975 p36).

The formation of a permanent emigrant labour force from sending countries was explained as due to the "decomposition of backward productive structures; structural unemployment in certain sectors; and the much higher nominal and real wages available in the advanced capitalist countries" (Castells 1975 p36). Sassen-Koob (1987 p66) has described how "characteristics of the labour supply systems in a given area.....can be accounted for by the area's role in the world economy".

Wallerstein's general conceptualization of the development of the modern world system also influenced the work of Petras (1981). Her contribution to the literature on international labour migration is of very great importance as it constitutes a combination of the '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.

Petras conceptualized the contemporary world economy, within which labour was divided into Wallerstein's three interdependent but distinct zones - core, semi-periphery, periphery (Petras 1981 p44). The major hypothesis under examination was that it was "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 p45). Wage zones were viewed as a way of expressing the unevenness of world capitalist development - low levels of real wages prevailed at the periphery, with much higher real wages at the core. Petras described how movements from low to high wages zones had generally predominated (although allowed that there had been exceptions to this), which could be explained by two contradictory forces - the desires of labour, and the needs of capital. The conceptualized global labour market was "segmented in the form of a seemingly discrete set of very different national labour markets, each more or less regulated, and a loosely interrelating international labour market" (Petras 1981 p48). Core states were generally believed to have more power in regulating labour migration and defining the permeability of their borders. It was a contention that weaker states with less control would perhaps enact defensive legislation to deter labour emigration.

Petras (1981 p59) concluded by proposing the global labour market as "a paradigm for studying migration in global and historical perspective". The focus of labour migration studies for her was "the underlying relations which create them and, therefore, the manner in which they are an expression of a single world system" (ibid).

Structuralist interpretations of labour migration in relation to the concept of a global labour market inevitably requires consideration of the concept of the 'new international division of labour' (NIDL). In defining

the NIDL, Cohen (1981) explained that until recently the international division of labour reflected differences in trade between firms which produced goods in different nations - the sourcing of raw material inputs in the developing countries, for use by industrial companies in developed nations. The NIDL reflected "a number of transformations in the world economy" (Cohen 1981 p288). These transformations included the international spread of manufacturing and production (United Nations 1988), the international spread of corporate related services, and the existence of a system of international financial markets. In essence, the NIDL "represents a system for production on a world scale in which even greater numbers of people are integrated into activities carried on by large international producers of goods and by international firms which service these producers" (Cohen 1981 p288). This system of production was further characterized as a "complex hierarchical system which integrates different types of useful forms of labour of individual producers carried on under the aegis of large, highly integrated international companies " (Cohen 1981 p289).

In retrospect, Cohen (1987 p144) criticizes previous migration theory and suggests that "both orthodox economists (human capital theorists) and a number of Marxists became trapped into a timeless functionality and exaggerated the extent to which migrant labour was a permanent solution for European capital". As he described,

"the international economic relationships which dominated the immediate post war period have been overturned" (Cohen 1981 p287). Fröbel et al (1980 p1) commented in a similar vein that "the probability is that the post-war era of unusual rapid economic expansion is over", and described how the 'old' or 'classical' international division of labour (examined by Castles and Kosack (1973), and Castells (1975)) was ready for replacement.

The evidence of changes in the world economy "at some time during the late 1960's and early 1970's" (Johnston and Taylor 1986 p1) which had given rise to such statements included sharp oil price rises in 1973 (Johnston and Taylor 1986), high rates of structural unemployment in industrialised countries since 1975 (Fröbel et al 1980), plant closures and diminishing industrial output (Dicken 1986, Piore and Sabel 1984, Portes and Walton 1981, Salt 1987b). Many of the changes which occurred within the most advanced countries were referred to as the process of 'deindustrialization' (Bluestone and Bennet 1982, Martin and Rowthorn 1986). Investment in the largest industrialized countries had been stagnant and was seen to be falling (Thrift 1986a), while foreign investment originating from the Western industrialized countries had been increasing for a number of years. Much of this investment was directed to developing countries, a process referred to as 'peripheral Fordism' (Lall 1984, Wells 1983). The world economy seemed

to be undergoing a process of 'global restructuring' (Henderson and Castells 1987).

However, the situation was not fateful for all companies, as Fröbel et al (1980 p3) described, "many companies, both large and small, from the industrialized countries are expanding their investments, production capacities and employment abroad, especially in the developing countries, whilst their investments, production capacities and employment at home are stagnating or even declining". The electronics industry was cited as an example, where characteristics of production allowed for the shifting of production and assembly jobs to low wage countries, where it employed mainly unskilled women (Lin 1987, Nash and Fernandez Kelly 1983, Safa 1981).

Industrial relocation was described as resulting from three pre-conditions (Fröbel et al 1980) : i) a practically inexhaustible reservoir of disposable labour in the developing countries, ii) the division and sub-division of the production process into fragmented operations easily carried out with minimal levels of skill, and iii) innovations in transport and communication which made possible the complete or partial production of goods at any site in the world. These conditions, it was suggested, brought into existence a world market for labour, a real world reserve army of workers, together with a world market for production sites. "Workers in the already industrialized countries are now placed on a world wide labour market and forced to compete for their jobs

with their fellow workers in the developing countries" (Cohen 1981 p13).

Neither Fröbel et al (1980) nor Cohen (1981) gave a description of the effects of the NIDL on international migration, although Fröbel et al (1980 p3) suggested that the implication was for "increased 'mobility' for workers". Indeed, while much has been written about the emergence of a NIDL and its effects (Eg. Bradbury 1985, Jenkins 1984, Lipietz 1982, Tharakan 1980), attention has been devoted almost entirely to new patterns of industrial production and not to flows of labour. However Lewis (1986 p28) described the "impossibility of a serious discussion of any new international division of labour without the inclusion of movements of labour".

Sassen-Koob (1988 p3) has described current migration as a result of conditions that arise out of the reorganization of the world economy, with the formation of transnational space in which the circulation of workers can be regarded as one of several flows including capital, goods, services and information. Cohen (1988 p7-12) evidenced some examples of the international migration patterns involved - migration to the oil rich countries due to massive expansion of infrastructural development programmes, illegal migration, refugee and asylum migration, and project and tied contract workers.

Sassen-Koob (1987) suggested three ways that global restructuring has affected labour migration. Firstly, large amounts of rural to urban migration in many of the

Newly Industrializing countries, which provides a largely female workforce willing to accept authority and low wages (a new phase of migration and proletarianization at the periphery). Secondly, the movement of millions of migrant workers into OPEC countries, and lastly, the use of migrant workers (many illegal) in low-paid, labour intensive industrial and service jobs, many of which arise in the informal sector of the control centres of the international economy - the 'global cities'. She views migration as the use by capital of unorganized third world workers in its struggle against workers in the core economies, and that world-wide migration patterns are interdependent through the "class struggle" (Sassen-Koob 1987).

Massey (1988) is among others who have researched the changes in the context of restructuring at the 'core', in the UK and in UK labour markets. She evidences the outcome of these changes as a shift from manufacturing to services (and attendant regional problems within the UK), the growth of flexible work arrangements, a changing occupational structure of the workforce, rising unemployment, and that the most rapidly growing segment of the population in paid work is professionals, managers and administrators.

Friedmann (1986) has proposed the 'World-City hypothesis' as a framework for research of the spatial organization of the NIDL, a thesis that would link urbanization processes to global economic forces. This

hypothesis describes a hierarchy of world cities, involving core, semi-periphery and peripheral areas. The categorisation of these world cities was due to their use by global capital as 'basing points' in the spatial organization and articulation of production, markets and capital accumulation. The most interesting hypothesis propounded by Friedmann (1986 p77) with regard to international migration is that "world cities are points of destination for large numbers of both domestic and/or international migrants".

Sassen-Koob (1986 p86) examined the labour question in relation to these 'global cities', and indicated that the rapid growth of specialized service industries in such cities "generates not only high level technical and administrative jobs but also low wage, unskilled jobs". While she allowed for "a large influx of wealthy foreigners" (ibid p98) to New York (the case study city), there was no specific mention made of skilled immigration to the city - attention was concentrated mainly on the migration effects of an expanded low wage sector. It is a contention, however, that with specialized services and technical employment concentrated within these world cities, international migration of skilled labour between such cities will occur.

A further contention with regard to the NIDL is that of Walton (1985 p3), who suggested that the phenomena claimed as a 'new' international division of labour was better understood as a "third transformation of the

international division of labour". Historically he defined the 'first' as involving the incorporation of colonial regions as raw material suppliers and consumers for the economies of industrializing European states. The 'second' was dated as roughly from the 1930's and involved industrialization within the underdeveloped periphery at the hands of a national bourgeoisie or foreign enterprise. Walton's 'third' international division of labour described how "geographical barriers and differentiated national markets are now more fully superseded in a functionally unitary global economy" (Walton 1985 p4). Walton characterized this phase as the exportation of capital and production from the deindustrializing advanced countries (where unemployment increased) for relocation in the hospitable confines of Third World assembly plants using cheap labour.

However Walton's claims may be criticized, in relation to the divisions of labour which existed in the capitalist system (as defined by Wallerstein) prior to his 'first' division. Have there really been three NIDL? or four, five or six?

1.2.1.4 Criticisms of Marxist/Structuralist Theories

Such theories and research as have been discussed under the broad title of Marxist/structuralist research (Castles and Kosack to Walton) are open to a range of criticisms. Some of the limitations of such theories have been examined by for example, Corbridge (1986), and Miles

and Satzewich (1989). The main points of the critique are summarized in the following discussion.

The conceptualization of a world or global labour market central to such structuralist interpretations (Eg. Petras 1981) is criticized as an oversimplification of reality (Miles and Satzewich 1989). All regions cannot be conceived as being within one labour market, as areas of the world are 'shut off' due to national/transnational political and military relations (for example, many socialist countries were distinct and separate until the 1990's from the global labour market).

Further, with regard to the NIDL, which attributes changes in the division of labour to the geographical reorganization of multinational corporations, Child Hill (1987 p34) has argued that the "wage cost thesis of the new international division of labour poorly captures the complexities of transnational collaboration and rivalry". While links between labour costs and industrialization may go some way, however, towards explanation of the global organization of activities such as the US automobile industry, it cannot explain the enormous success of the Japanese auto industry or its industrialization. Clarke (1986 p21) has described how explanation of the emerging new international division of labour "has been considerably overplayed. Anecdotal and often unrelated evidence...used to support the proposition that business organizations are responding to the spatially

differentiated qualities of labour, thereby invoking a direct causal link".

Sassen-Koob (1987) has noted that, following a period of investment in less developed countries, there has recently been a growing tendency for industrial capital to become re-concentrated in the core economies. "Global restructuring, then, is creating conditions which will allow, once again, the spatial re-integration of production with principal markets" (Sassen-Koob 1987 p12). Is this then evidence of a fourth NIDL in Walton's terms?

The goal of capitalism may not always be exploitation, for example, in the situation of Japanese capitalism, where worker loyalty to the company is of greater importance (Child-Hill 1987). Capital exists in an environment of competition, struggles between capital may result in the importance of other goals. As Child Hill (1987) discusses (again with regard to the automobile industry), the imperatives of accumulation (productivity, labour control and wage cost containment) may be met through methods other than de-skilling, changing corporate culture etc. The success of the Japanese auto industry was not built upon the concept of a 'global factory', nor on cheap labour or sophisticated technology, but on the spatially concentrated organization of both production and the lives of its workforce, associated with the development of a 'company town' (Child-Hill 1987 p36). Thus he claimed that the NIDL must be historically and

empirically specified in relation to national industries and specific firms.

The State is endowed with a great deal of power under Marxist philosophy, and Miles and Satzewich (1989 p19) have criticized the political economists (Castles in particular, but others in general) for their failure to "adequately specify the significance of the role of the state in organizing and regulating international migration flows". They described how it was necessary to highlight the role of both the nation as a spatial and political unit, and of the state as an institutional complex. This was needed because "the rise of the nation state was dialectically related to the emergence of the capitalist mode of production" (Miles and Satzewich 1989 p19).

How powerful are states in controlling international migration or determining the permeability of their borders? Cohen (1987) has examined state responses to migration and concluded that while Western European states (Britain, Germany, France, Switzerland) have a record of trying to control labour immigration, only South Africa has come close to an absolute system of labour regulation. However, this regulation was possible only by instituting a brutal system of repression (Cohen 1987). The US was described as having had greatest difficulty in restricting migrant flows. In comparison with the state, how strong are the powers of other international institutions and multinational companies in international migration?

A further criticism of Marxian theory is that control of migration is placed wholly in the state and the controllers of capital - control is given to the underlying structures and not to the individual migrant. Such displacement of the human 'actor' and the resultant migration 'determinism' is a major criticism posed by realist philosophy (Sarre 1987, Sayer 1985). Realists would argue that migration cannot be reduced only to a consideration of labour, as human agency is a powerful factor which is not directly controlled.

As Jones (1990 p228) indicates, "this is why some migration analysts are attracted to Giddens (1979) concept of 'structuration', which deals with the complexity of interaction between structural forces and human agency". Jones continues that "it is particularly important to see how different individuals and groups respond in their migration behaviour to what are undoubtedly common structural causes of social and spatial inequality" (ibid). Gilbert and Kleinpenning (1986 p4) agree, and describe how "many authors are now recognising that circumstances differ in the migration process in time and place and that people respond differently to structurally determined economic and social realities".

The structuration approach has been utilized by several researchers in the development field (Lewis 1986, Forbes 1984), with these studies serving to show that the migration process is constantly changing in response to local, national and international trends. However, Forbes

(1984 p140) concludes that a shift in the focus of explanation is "not intended to replace the basic insights of the political economy approach...rather, the aim is to build into regional political economy a means of recognizing the significance of human action in space".

Criticisms of the political economy perspectives may be similarly raised with regard to the inadequate attention given to 'place factors' in migration explanation. Wilber and Jameson (1988 p25) call for "a throwing off (of) the conceptual binders of the paradigms", and claimed that research should be less concerned with the spatial international division of labour per se and more concerned with place. As Brown (1990 p204) has noted "the appropriate question is not how does place i exemplify the spatial division of labor? so much as what are the labor market dynamics of place i".

One final criticism is that of 'post-modern' or 'post-Fordist' philosophy. Hall (1988 p24) described "a whole new epoch distinct from the era of mass production", characterized by new information technologies, decentralized forms of labour processes, a new emphasis on consumption, a decline in the skilled male manual working class, the feminisation of the workforce etc. However Hall noted in passing that this 'brave new world' was also characterized by the domination of multinational companies and a new international division of labour. Theorists of the NIDL emphasize that mass commodity production has not ceased, but rather relocated. The partial transfer of mass

commodity production to new spatial locations is a crucial precondition for many of the processes that post-modernists refer to (Miles and Satzewich 1989 p2). Miles and Satzewich (1989 p1) further argue "that the apparent difficulties facing explanations of migration which are grounded in political economy in interpreting recent developments arise largely from their inadequacies in explaining migration in "pre-'post-modern' capitalism".

1.2.1.5 Managerial/Organizational Perspective

The last perspective to be considered here in relation to explanations of international migration is the 'managerial' or 'organizational' perspective. The development of such a perspective has arisen from labour market studies, and the importance attached to the internal labour markets (ILM's) of multinational and transnational companies for international moves.

Several of the perspectives examined for explanation of international labour migration assume the existence of labour markets. In international migration studies emphasis is placed upon the State as the level at which international migration occurs. However, labour markets do not necessarily equate with neo-classical micro-economic theory and the conceptualization of the labour market as the place where the supply of and demand for labour meet, nor do they equate with the State and its boundaries (Peck 1989).

The notion of a labour market is somewhat ambiguous and can be studied at a variety of spatial scales. For

example, labour markets at a local level may be defined in terms of travel to work areas and related to daily commuting behaviour (Champion et al 1987, Cooke 1986). However, such a definition of the labour market is evidently not acceptable for the delimitation of national or international labour markets.

Labour market segmentation theory was developed in the late 1960's to explain inequalities and discontinuities in labour market operation. At a straight forward level, the segmentation approach described how the labour market was divided into two sectors. The primary sector contained better quality jobs in the labour market, while the secondary sector was characterized by low wages, poor working conditions and lack of job security (Cooke 1983, Loveridge and Mok 1979). However Peck (1989 p55), described the outcome of the segmentation process as "considerably more diverse". In addition, Lee (1986) indicated the influence of uneven state intervention in the labour market, the extent of state employment and self employment, and the uneven development of capitalism over time as preventing any universally applicable model of labour market discontinuities.

Salt (1990b p53) has suggested that "theories to explain internal migration in advanced industrial countries have largely failed to get to grips with two fundamental and interrelated phenomena : the organisation of employment and the development of internal labour markets (ILM's) by employers". The form of employment

organization and the operation of ILM's are further important forms of labour market segmentation. Peck (1989) noted that in the basic definition of primary and secondary labour markets, internal labour markets were prevalent in the primary sector.

It is suggested that such criticisms may be similarly levelled at theories of international migration. For much of this century the tendency has been for business and employment to be organized in a complex and hierarchical form, with much literature related to the internationalization of economic activity and multinational and trans-national companies (Dicken 1986, Lall 1984, Taylor and Thrift 1982, Tharakan 1980, Wells 1983). At the heart of the NIDL is the "internal spatial division of labour of the trans-national corporation" (Salt 1986b p7). "The growth of these large international corporations being instrumental in creating a global organization of labour (much of it highly skilled) within which mobility takes place" (ibid).

Lloyd and Dicken (1977) indicated that the general trend during the present century has been for a larger share of economic activity at all scales to be performed by a relatively small number of extremely large business corporations. These "enterprises make decisions which have a great impact on the spatial organization of economic activities (and hence the everyday lives of people)" (Lloyd and Dicken 1977 p342). While it was noted that this trend towards concentration was of more importance in

certain industrial sectors, it was also noted that these large enterprises also became increasingly involved in a variety of industries - 'multi-product diversified' enterprises (Lloyd and Dicken 1977). A corollary of the multi-product nature of enterprises was that they were also 'multi-plant', and operate in a wide variety of geographical locations and often at a vast geographical scale (Lloyd and Dicken 1977 p342-46). Taylor and Thrift (1982 preface) report the existence of an "extra-national network of inter and intra-firm linkages spreading rapidly over the globe", with certain MNC's having world-wide sales which total more than the GNP of significant nation states.

Within such MNC's (the question of definition of MNC's is not yet solved - Linge and Hamilton 1981) the location of decision making and production are geographically separated (Lloyd and Dicken 1977). Manufacturing will occur perhaps at several different international locations - for example, due to the range of products, production in peripheral regions where labour costs are cheaper (Fröbel et al 1980), or at high tech locations not necessarily at the periphery (Sassen-Koob 1987). The corporate head office (and regional head offices) are the bases for innovation, development and decision making. Friedmann (1986), believed that these offices are located within the 'World cities'.

Hymer (1979) described how organizations create a division of labour between countries corresponding to the

division between various levels in the corporate hierarchy, with centralized high level decision making in a few key sites. The geographically complex structure of MNC's was described as due to efficient telecommunications, developments of administrative science, sophisticated business management techniques, the increased financial awareness of these large businesses and their ability to unlock resources held at one location and transfer them quickly to a more profitable location (Taylor and Thrift 1982).

In order that such MNC's function effectively, it was suggested that labour migration (particularly of skilled staff) will occur (Salt 1988). Dicken (1986) indicated that the shape of the organizational system, and consequent staff relocation is affected by the corporation strategy being pursued - for example, the extent to which units created (in various locations) are independent or interdependent. The latter demands greater transfer of knowledge. Salt (1986b p9) emphasized the 'organic' or 'mechanistic' technology employed within units of the corporation. In the former, the firm operates on the frontiers of new technology, with continual product and process innovation and the need to transfer technology specialists frequently. In the latter, technology and production processes are well established and familiar, with less need to relocate expertise.

Petit (1967) developed a model of the organization of a firm which described that each company has at its core

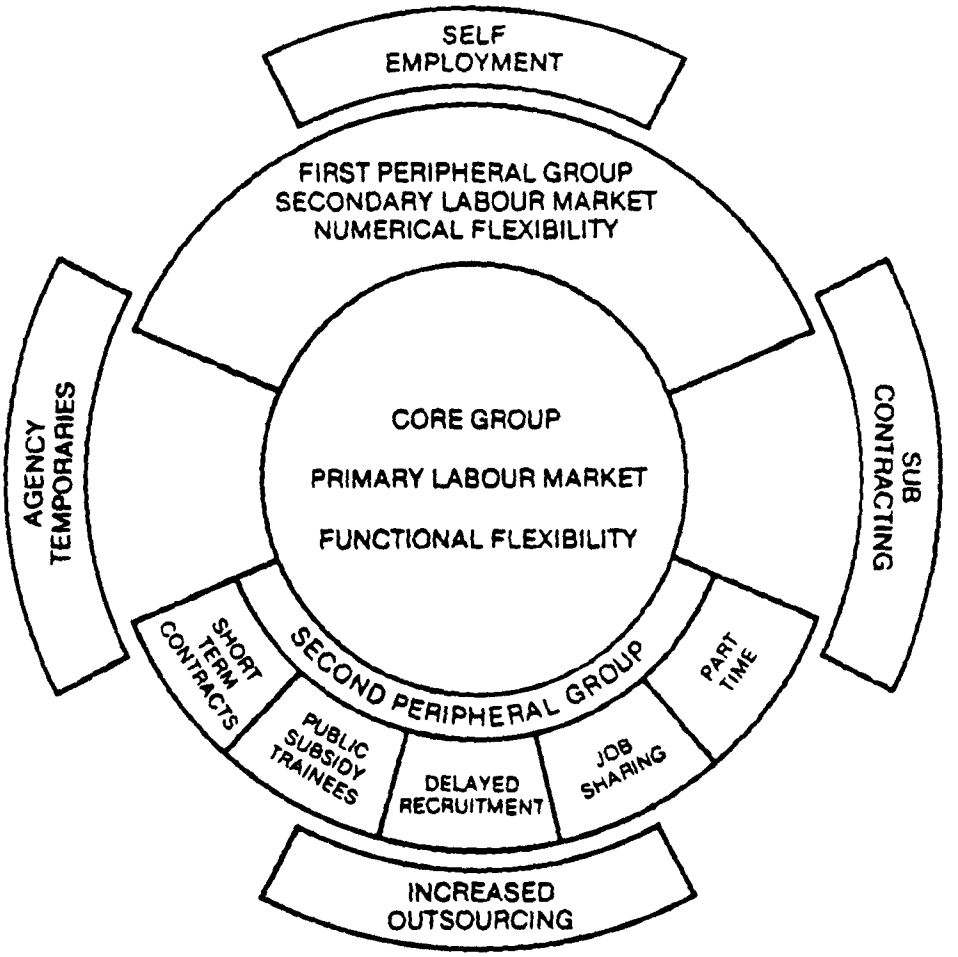
a process which allows it advantages over others - its technical core. Around this core, at managerial or organizational level, are employees who work to maintain the core - making sure technology is updated, studying market and competitor information. Outside the core are other lower levels of employment within the organisation. These different levels of employment allow the company to act as a system, an employment hierarchy which creates the company environment.

This pattern of employment and depiction of the ILM was echoed by Atkinson (1985a, 1985b), Curson (1986) and Darling and Lockwood (1988) in description of a flexible workforce (Figure 1.2). The core is made up of employees with full time, permanent status and is central to the long term future of the organization. Employees at the core enjoy greater job security, good promotion and re-skilling prospects, relatively generous pension insurance and other fringe benefit rights. This group is necessarily geographically mobile (Curson 1986 p11).

International migration within the ILM of a company may occur in different ways - at the core, the employee is on a permanent contract and is moved within the company to pass on technology. At lower levels, at the edge of the company (Eg. sub-contracting, short term contracts) individuals may be employed abroad by the company for a number of years then have no links with the company.

Research work does exist on MNC's and their role in internal and international labour migration (Brewster

Figure 1.2 The Flexible Firm



(source : Curson 1986 p9)

1988, Clarke 1982, 1986, Johnson and Salt 1990). In a study of twenty six MNC's there existed some 13,000 expatriate employees (Brewster 1988), indicative of the great importance of the ILM's for migration. Expatriates may be used by MNC's in many different ways, and in Brewster's study it was found that British companies made greater use of expatriates than Dutch or German MNC's. Inohara (1982) has also shown that Japanese companies deploy expatriates in a different way from American and West European MNC's. This was true not only for internal but also for international transfers of employees within the internal labour markets of Japanese companies (Wiltshire 1990).

Not only does the level of expatriate usage vary between multinational companies of different countries of origin, but also by destination country. For example, analysis of the expatriate management policies of 190 of the USA's largest firms showed that branches in the Middle East required large expatriate staff numbers, while Australasia, Central and South America and Caribbean branches need below average numbers of expatriate personnel (Salt and Findlay 1989 p168)

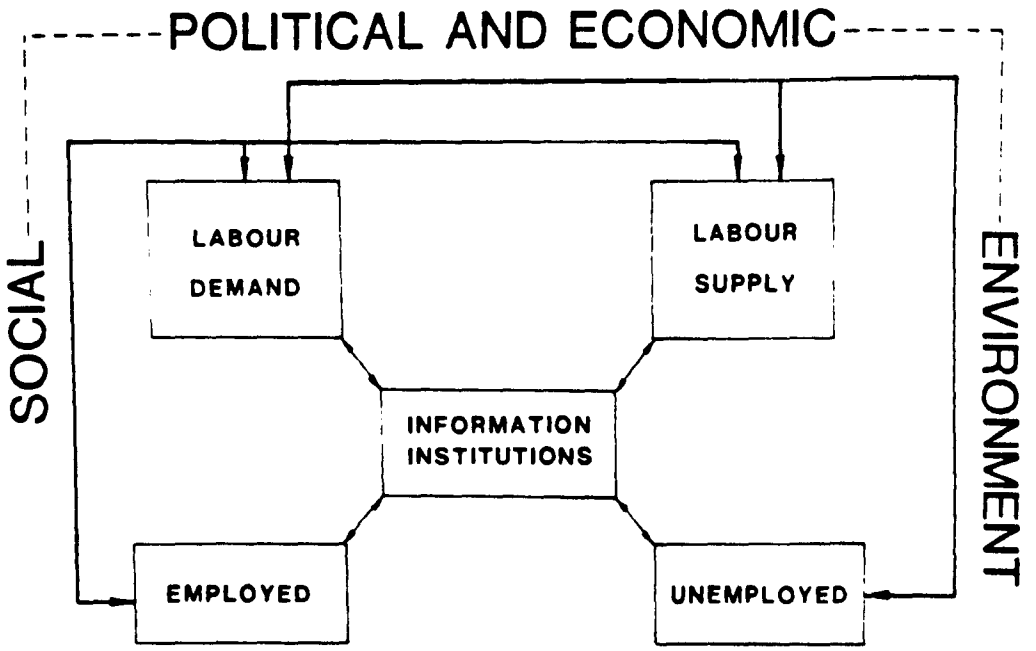
Certain sectors of economic activity were found to use proportionally fewer expatriates than others (Brewster 1988). For example, the petroleum and electronics industries made use of many more expatriates than the transportation and food sectors.

As to the reasons for expatriate employment, management studies have found that local staff are judged unable to fulfil certain key tasks (managerial, financial and technical), and that expatriates are used to permit career development, to promote organizational development and to interpret corporate policy in the local context (Estrom and Galbraith (1977) and Tung (1982)). A further significant reason given was that countries hosting branch plants expected senior executives to be nationals from the country where the headquarters of the company are located, to ensure proper communication and liaison with the rest of the international organization.

Figure 1.3 is a graphical representation of an external labour market (Salt 1987b p40). Where an international company is the labour market, the 'information institution' may be personnel managers or recruitment agencies. These people control employment information and becoming powerful 'gatekeepers'.

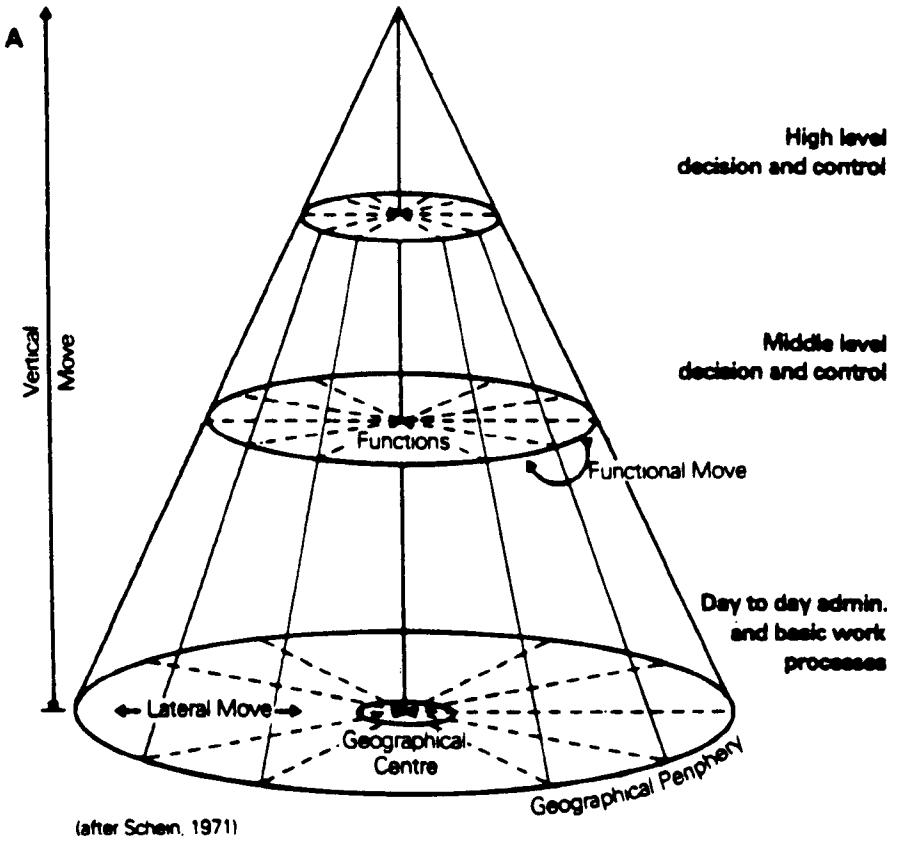
The company and the individual come together in the ILM - represented graphically in Figure 1.4 (Salt 1984). The hierarchical structure of the ILM reflects the form of functions and specialisms of the company. Salt proposed an explanatory framework for international migration of the highly skilled which is based upon 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, 1986b).

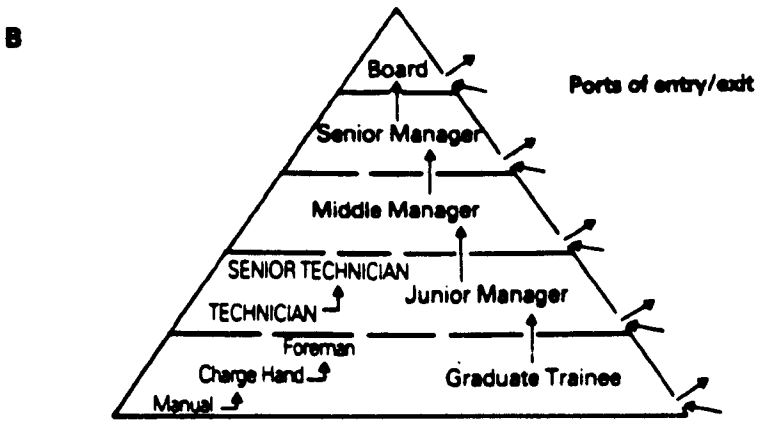
Figure 1.3 The Macro-Environment of the Labour Market



(source : Salt 1987b p 40)

Figure 1.4 Structured Internal Labour Market





(source : Salt 1988 p390)

For Salt, the key explanation of international migration within an ILM is the concept of career (advancement) and an associated career path. "The concept of career is valuable in helping to understand much labour migration" (Salt 1984 p641). He suggests that a close relationship exists between the "career path of the individual, the nature of the job and the migration demands imposed by the organization of work" (Salt 1984 p634). The career consists of a sequence of jobs held by an individual and related to each other by the acquisition of experience and skill. Mobility between jobs results from either task and/or locational change and may occur within an employing organization or in movement between organizations. Thus "in a multinational organization these careers may transgress national boundaries" (Salt 1984 p644).

Salt (1984 p641) hypothesized that "on these career paths, critical points occur at which the propensity to move increases and labour migration results". Such points reflect the occupation and the tasks contained within the career, and the way in which an employer organizes the work and manages careers (demand side). Critical points may also reflect supply side characteristics of the life cycle.

Managerial perspectives (Salt 1984, 1986b, 1988 and Beaverstock 1990) thus contain certain structural elements (Eg. internal structure of employer, structure and links of organization) but place greatest emphasis for

explanation of international migration upon the individual career of the migrant. Such research could thus be described as behavioural in nature - with the work attitudes and behaviour of the individual migrant as they choose and progress through their career as of great importance.

Several questions arise from a consideration of managerial/career path perspectives. Marxist interpretation of such international moves within an ILM would stress the exploitative nature of such a system. The 'core' of the company is protected, and while skills are 'moved' they are not transferred - dependency still exists.

Concern may also be raised with regard to the great importance given to consideration of 'career'. The actual degree or form of importance of the career among individuals is not considered. Similarly the only form of career studied is that which develops within the ILM of a company. What about the importance of career and hence career path explanations for international migrants moving out with the ILM of a MNC? Only ILM's within the largest MNC's have been described and analysed under such managerial perspectives. What would be the form of labour market organization operating amongst smaller companies with overseas contracts, para-state organizations etc?

Many issues discussed in relation to managerial perspectives will be picked up later during discussion of

the literature relating specifically to international migration of skilled labour.

1.3 Progress in Labour Migration Explanation

Obviously, changes in the nature of international migration have led to changes in the type of explanation posited. For example, the type and form of international migration within Western Europe studied by Böhning (1972) is of a very different nature to that explained by Salt (1984). It is "clear that major changes had taken place...in the character and patterns of international migration " (Gould 1988 p382).

Also, changes within all social science disciplines - the quantitative and conceptual revolutions - have moulded new modes of thought. For example, the 'human capital' explanation for international migration is very positivistic in nature - attempting a model building, universal theory of international migration based upon economic theories and spatial variations in wage levels. Such an approach offers a "limited" but meaningful explanation of certain types of international migration (Eg. flows of human capital from underdeveloped countries to developed countries).

However, structuralist 'reserve army of labour' explanations of international migration (in studying similar patterns of international migration to that of human capital) advanced an explanation dependent upon the universal structure of capitalism and the concerns of the State (Eg. Castles and Kosack 1973). In these explanations

predominant concern was given to concepts of 'core' and 'periphery', labour exploitation and social relations. "Sometimes powers which we might initially attribute to individuals (people or objects) turn out to be grounded in structures of which those individuals are just part" (Keat and Urry 1982 p163)

Massey (1990 p3) describes the "ultimate locus of migratory action" as a source of dissension in migration literature. "The issue here is whether migration is best understood in individual or structural terms...whether migration is appropriately viewed as an aggregate outcome of individuals' decisions or whether it is the product of powerful structural changes in society that supersede individual actions" (ibid). Massey concludes 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). He further suggests that "migration decision making varies from setting to setting and is highly structured by context" (ibid). Macro-economic and structural theories explain how social and economic institutions and distributions are transformed in different geographic regions to determine local opportunities, while human capital and behavioural theory provide a way to explain how individuals make decisions within these structures.

Recently studies of decision making - by individuals, by institutions, by private companies, and by governments - have become a means of identifying the processes that

create spatial patterns and generate spatial interaction. "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 1988 p382). Two points arise from consideration of this comment. Firstly, ideas on 'behaviour' and 'decision making' came from outside geography (from psychology) and were adopted within certain areas of geography. Secondly, as indicated with regard to Woods (1985) ideas on a general theory of migration, while behavioural ideas are important in migration studies, their main importance lies in refining migration theory. These approaches can not therefore form a strong theoretical basis for explaining international migration.

Salt (1986a) has argued that the study of the geographically particular forces a rejection of universal theories of international migration, and introduces more valid modes of explanation. Thus, with a weakening of the search for regularities, history comes back into geographical explanation. Theories which interpret and explain historical patterns of migration have changed as understanding has advanced.

While no 'grand theory' of international migration has emerged, nor is likely to (Salt 1988), progress in the study and explanation of international migration means

that future studies have a better empirical, conceptual and theoretical base upon which to build. Future explanation of international labour migration can avoid the singularity trap (individual phenomena) and the generalization trap (universal applicability), with a search for a combination of the general and particular - ie. favouring eclecticism or a pluralistic methodology.

1.4 Focus on Literature Relating to Skilled International Migration

Established theories of international migration fail to account sufficiently for the international movement of skilled workers. Indeed, much of the literature related to international labour migration makes no explicit mention of the migration of 'skilled' individuals. Assessing the absolute and relative significance of the migration of skilled labour is difficult due to "the limited academic attention devoted to the phenomenon, and, the absence of adequate official statistics" (Miles and Satzewich 1989 p10). This reflects a broader determinant, that is "such migration flows are seen to be part of the normal and necessary working of the capitalist economy and not to require political attention on the grounds that they give rise to problematic consequences" (ibid).

Petras (1981) concentrated on explaining the numerically more important moves of unskilled workers, although she did admit the possibility of skilled international migration. For her, an international division of labour necessitated the movement of only "a

small number of highly paid and trained technicians and managers who accompany capital investments to location of production in low wage zones" (Petras 1981 p48).

No longer can the international movement of skilled individuals be considered small in number, nor can they be classified under the traditional 'brain drain' term. This term is used conventionally to describe the movement of those best qualified individuals from less developed to more developed economies - where they become permanently settled and hence lost to their origin country (Bhagwati and Dellafar 1973, Böhning 1984, Fortney 1970, Salt 1987a).

Salt (1989 p5) has studied the British work permit system and indicates that "analysis of national origins makes it unlikely that the UK is benefiting to any major extent from brain drains from developing countries, since the main origin countries have high standards of living". This recent work shows that a large number of individuals move from 'core' to 'core' economies - for example to the UK from America and Canada. Thus, contemporary skilled international migrations are more correctly defined as "brain exchanges" (Salt 1986b p2), and the individuals involved more correctly described as "skilled transients".

The inadequacy of existing theoretical frameworks to deal with recent migration trends has led to a search for new approaches to the understanding of international skill transfers. One possible approach adopted by Salt (1984, 1986b, 1988) and Beaverstock (1990) evaluates the career

path mechanisms which operate within the ILM's of large companies - a managerial perspective on labour migration. Salt's study of work permits issued to immigrants to the UK identified those who were being transferred to the UK within the ILM of their employers. He has indicated that "the trend in their use is upward" (Salt 1989 p5). The numbers of work permits issued to such immigrants in 1987 was found to have increased by 25.7% on the previous year.

While accepting the importance of MNC's in channelling skilled international migration, Findlay (1990) and Findlay and Garrick (1990) propose a broader schema for evaluating skill transfers. They identified three main channels of migration which currently mould patterns of British skilled movement (Figure 1.5). The emphasis given to the three separate channels of skilled migration is an important new conceptualization of the international migration process. This approach investigates the ways in which each of these channels employs different mechanisms for migrant selection and placement, and consequently each involves distinctive patterns. The three channels which were described were - ILM's of MNC's, international recruitment agencies, and international skill transfers by small and intermediate sized firms involved in foreign contracts.

The two latter channels were described as being brought into existence as a result of rather different forces from those driving the ILM's of MNC's. "The motor of economic growth (as distinct from economic development)

Figure 1.5 The Mechanisms Channelling Skilled International Migration

(source : Findlay and Garrick 1990 p179)

in certain parts of the third world and Middle East has created increased demand for specific skill categories, not immediately available within the indigenous labour forces of these countries " (Findlay and Garrick 1990 p179). For example, during the 1970's the Arab oil states had abundant capital with which to launch ambitious 'development' programmes, but lacked the necessary skills to fully implement these plans (Findlay 1986b). Thus they required external expertise to achieve such programmes (Appleyard 1989, Findlay and Godden 1985).

It is postulated that such expertise has been 'imported' through the two further international migration channels shown. One method of importation being that 'western' companies were invited to undertake specific contracts. In order to fulfil such contracts, the companies recruited workers to service these overseas commitments. Unlike MNC's expatriates, the skilled migrants working for these small companies were usually recruited 'externally' to the firm, employed only for the temporary period of the overseas contract (Findlay and Garrick 1990).

Also, international recruitment agencies have been employed by governments, state organizations, armed forces and private companies in less developed economies to select appropriate foreign technical, professional and managerial skills (Findlay and Garrick 1990), these recruitment agencies therefore act as conduits or filters for the flow of skilled migrants. Miles and Satzewich

(1989 p10) describe the existence of "an international labour market for various forms of highly specialized, skilled non-manual labour".

Roberts (1986) and Gould (1987b) have reported briefly on the evolution and influence of international recruitment agencies on British emigration, and have shown that these agencies link British skills not only with Third World labour markets, but also with those of other parts of the more developed world. Findlay and Stewart (1986) described how this migration channel does not only operate independently from the others, with smaller companies holding international contracts sometimes turning to international recruitment agencies to select appropriate staff for foreign postings.

Distinct spatial dimensions of such a channels framework were identified with regard to the UK (Findlay and Garrick 1990). MNC's are expected to make international transfers from their ILM's, drawing mainly upon the skill pools found at their headquarters situated in the core region of the economy. Consequently, skilled international migration via this channel was expected to be greatest from such a core region. In the UK context, it was indicated that such moves would therefore be greatest from London and the South East (as studied by Salt 1984, 1986b, 1988) and Beaverstock 1990) and involve mainly personnel in the 'service' industries who would dominate employment in 'world cities' (Friedmann 1986).

The patterns of skilled international migration organized by international recruitment agencies and through the operations of small and medium sized companies are less easily interpreted and more selective than those associated with MNC's. There is evidence that recruitment agencies hold stereo-typed images of regional labour markets within the UK, making it more probable that they recruit specific skills in certain regions. For example, Scotland and Teeside labour markets have been used for recruitment of engineering skills (Roberts 1986, Lewis 1987a), while Gould (1990) emphasizes the importance of Liverpool as a recruitment area for seamen and port workers.

It also seemed plausible that smaller and medium sized companies in the 'peripheral' regions of the British economy are more likely to have been 'forced' to look abroad for work as a strategy for survival, than similar companies located in the more prosperous South East 'core' region. Therefore, international migration of skilled workers through this channel may be expected to be greater from the periphery.

1.5 Research Questions

It was from a review of the skilled international migration literature that the three main aims and questions of this research project were formulated. These may be summarized as follows :-

a) to apply extend and adapt a migration channels framework to the historically and geographically specific

context of Scottish skilled international migration. To achieve this aim two inter-related issues need to be tackled : i) to examine the 'real' importance of various channelling mechanisms for SIM in the Scottish context. For example, ILM and international recruitment agency channels have received the greatest research attention at present. How important are such channels, and the other identified (but less well researched) channel of small and intermediate sized firms with overseas contracts? ii) to identify other channels by which skilled international migration occurs. Findlay and Garrick (1990 p191) concluded that "other channels clearly exist which serve to facilitate international population movements". For example, Kockel (1989) and Shuttleworth (1989) have shown that kinship and informal friendship networks remain powerful in channelling contemporary Irish migration to the UK. Such family and personal networks were similarly of concern to Boyd (1989) and Fawcett (1989). What are the nature of 'other' channels in the Scottish situation? How do such channelling mechanisms operate in an international context? What is the relative numerical importance of these 'other' channels?

b) to assess the nature of 'selectivity' represented by various channelling mechanisms with regard to the characteristics of the migrants involved with them, and the international migration and employment history of these individuals. To achieve this aim there are again two issues to be tackled : i) to relate channel to the

characteristics of the migrants involved with them (Eg. in terms of age, employment type, job status) and the characteristics of their movement (Eg. destination country, duration of stay)? ii) to examine the international migration history of the migrants. For example, how many international moves does an individual make? What was the duration of these moves overseas? Did the migrant return 'home' between international moves? What was the duration of these return visits? What was the type of employment held while abroad? Did spouse/partner and children accompany the migrant abroad? One aim was therefore to identify the migration/employment/ career/family histories of international migrants.

c) to investigate the 'real' importance of the concept of career and career advancement. In managerial perspectives these concepts are endowed with great explanatory power for international migration. For example, it is claimed that ILM individuals may have to migrate in order to move up the company career ladder. Can such importance be justified with regard to ILM migrants? It is a contention that the 'real' situation is somewhat more complex - with MNC's and careers only one category within this complexity. What is the importance of career for those international migrants not involved in movement through ILM's? For these individuals, are considerations other than career of predominant importance in explanation of international migration?

The remainder of this thesis is therefore devoted to extending the academic study of labour migration in relation to the main aims listed above. This is done first of all by considering the evidence of existing secondary data sources (chapter 2), before establishing a methodology for primary research (chapter 3).

Chapter 2 The Picture of Skilled International Migration from the International Passenger Survey (IPS)

2.1 Introduction

In this Chapter, discussion will concentrate on the context of skilled international migration (SIM) at an aggregate level. This is the level at which official statistics are collected by the British International Passenger Survey (IPS). IPS data is produced by the Office of Population Census and Surveys (OPCS), the most recent available data covering the period 1980-1988. Throughout this analysis specially commissioned unpublished IPS data is used. The researcher has re-aggregated the detailed data provided by OPCS to allow sharper analysis of regional dimensions. While Scotland is the main region receiving analysis, comparisons will be drawn with the South East of England, and more especially Greater London, as these are two areas of the UK most involved in the SIM phenomena.

Concentration on these two regions allows for consideration of the distinct economic and labour market conditions in the 'peripheral' region of Scotland, which set it apart from the 'core' city region. As to the interpretation of SIM in these two different regions, it is a contention that the explanatory mechanisms required differ between the regions, with differing levels of emphasis placed on the various migration channels operating in each region. The validity of this contention

can be investigated using IPS information, before concentrating in later chapters at the level of individual migrants in the Scottish context.

2.2 Suitability of IPS Data for the Study of International Migration and SIM

Since 1964 the OPCS has undertaken a continuous sample of international population movements between the UK and other countries of the World (excluding Eire). Coleman (1987 p1162) has described this lack of data for movements between the UK and Ireland as "a major omission" in UK migration statistics.

Regular samples are taken on all international routes through major sea and airports. The IPS employs a sampling interval (n), and every nth passenger entering or leaving the UK is approached and asked to participate in a voluntary interview. The size of this sampling interval will vary with post, season, type of migrant (immigrant or emigrant) and other factors (between 0.1 percent and 4 percent of passengers, OPCS 1987). Each passenger contact or interview is attributed a grossing/weighting factor, which indicates the number of people the interviewee represents in the total flow.

The techniques employed in collecting the IPS inevitably result in sampling errors in the data. Approximately 80% of all interviews for the IPS are conducted at Heathrow Airport. The lack of coverage of regional airports is a problem with regard to the reliability of regional data, for example, in Scotland

where Glasgow and Prestwick airports are not sampled on a regular basis.

The sampling interval or fraction used in the IPS varies markedly, for example with different sampling fractions used at each terminal of Heathrow Airport. The use of different sampling intervals for different types of migrant lead to inequalities in the number of interviews carried out with immigrants and emigrants. Smaller sampling intervals and hence more interviews are undertaken for immigrants into the UK.

The resulting sample sizes are small, consequently "sampling errors are large due to the small number of contacts on which the estimates are based" (OPCS 1987 pvi). For example, in 1988, 1,300 immigrants to the UK and 974 emigrants from the UK were interviewed. These samples were weighted to give net immigration and emigration totals of 216,031 and 237,904 respectively. In terms of SIM, 417 skilled immigrants and 282 skilled emigrants were interviewed. The resulting weighted figures for net SIM for the UK were 65,279 immigrants and 69,327 emigrants. Similar figures for the Scottish region indicate only 30 skilled immigrant interviews, and 19 emigrant contacts. The weighted totals for this Scottish skilled international migration being 4,703 immigrants and 4,120 emigrants.

In order to overcome sampling errors, OPCS statisticians calculate the standard errors for IPS data. The standard error is a measure of how much a sample

estimate is likely to differ from the true value because of sampling errors. OPCS (1983 px) has indicated that "roughly speaking for figures between 1,000 and 10,000 the standard errors are between 40 percent and 10 percent of the grossed figures". The standard error increases if the cell count under consideration contains only a small number of interviews with migrants. However, if consideration is given to a sequence of years (in this case nine years data, 1980-88) then this increases the sample size and hence reduces the standard error and helps to offset the effects of sampling error.

Added to the problems of sampling errors are the complications of non-sampling errors within IPS data. Such non-sampling errors may result for a number of reasons. One area identified as contributing to non-sampling error is the definitions used in the IPS.

> A migrant into the UK is a person who has resided abroad for a year or more and on entering has declared the intention to stay in the United Kingdom for a year or more.
>
> A migrant from the UK is a person who has resided in the United Kingdom for a year or more and on leaving has declared the intention to reside abroad for a year or more. (OPCS, 1987 p vii)

Such definitions are however based upon 'intention' to migrate, which may or may not be fulfilled. Interviewees may not know how long the stay/migration will last, while some may deliberately conceal their true migration intentions.

The suitability of using a one year period of time to define migration must also be questioned. When considering

SIM, the term 'skilled transient' is used in academic research (Richmond 1968, Appleyard 1985) to describe those who move frequently from country to country for employment. Such employment may not last for a period of one year and will not therefore be recorded by the IPS, but are an important part of the whole SIM phenomena.

As a result of the definition of citizenship utilized by IPS (the nationality of passport which the traveller is carrying), it is very difficult from the data tables (and almost impossible from published IPS statistics) to accurately identify or distinguish Scottish emigration (as distinct from emigration from Scotland of other UK passport holders) and Scottish return migration (as distinct from immigration of other UK passport holders). Similarly, foreign return migrants to their own country cannot be easily distinguished.

Further aspects of non-sampling errors and dissatisfaction relate to categorisation of countries of destination and origin, and the categorisation of the occupational characteristics of the interviewees. Due to the voluntary nature of the survey, problems of incomplete response or non-response to the interview on specific questions are a further concern. Another problem is the incomplete nature of survey cover (for example, those people leaving or entering the UK during times when no survey shift is in operation, particularly in the late evening and at night).

Coleman (1987, p1138) indicated that "no one source (of international migration data) gives a demographically satisfactory account of net migration". Salt and Ford (1990 p327) have further commented that "the labor market impact of immigrant workers is uncertain : we are unsure about the specific skills coming in and leaving, and about where British skills go to and from which parts of the country". However, despite the problems identified with IPS data, it remains the main UK source of information on international immigration and emigration (Bulusu 1986, Davis and Walker 1975, Devis 1984 and 1985, Devis and Wilson 1981, OPCS 1977, 1979a, 1979b, 1983, 1987, 1988). Many of the problems arise because "the present system (of data collection) was not designed as a whole. Its intricacies can only be understood in terms of the piecemeal development and extension of immigration control in 20th century Britain in response to successive challenges presented by different, novel migration streams" (Coleman 1987 p1138). Similarly, it is recognised that this data collection system was not designed as specifically suitable for the study of SIM, with many other political, economic and social concerns guiding the present day form of the IPS.

IPS data does, however, provide the researcher with a broad contextual basis upon which to build a study of skilled international migration. The data provided is most useful when used in combination with other data sources and detailed primary information. Previous research has

used data in this way, the results showing that information regarding SIM gained from the IPS seems compatible with information collected from other sources (Eg. Brewster 1988, Findlay and Stewart 1986, Findlay and Garrick 1990).

If IPS data is used carefully, and the limitations of such a source recognized, then it can be used in a meaningful way in the study of SIM.

2.3 International Migration Flows

The most frequently quoted statistics from the IPS relate to net international migration, providing an overall view of the population changes which are occurring, and a general background to further considerations of a more specific regional and occupational nature.

Table 2.1 displays values for gross international migration flows and resulting average net migration details for the 1980-88 period. Net migration figures for the UK as a whole indicate that over the nine year period studied, the UK experienced an average annual net loss of population through international migration of approximately 7,000 persons. This figure suggests a relatively minor net loss when the size of the British population is considered. However, overall national figures conceal very real differences which exist at regional level.

The figures for Scotland suggest that this area differs significantly from the national picture.

Table 2.1 Migration Flows : All Citizenships and Occupations 1980-1988

	Immigration	Emigration	Average annual net loss/gain
All UK	1,842,600	1,904,900	-6,900
Scotland	107,600	181,000	-8,200
England	1,672,100	1,625,100	+5,200
Greater London	564,300	446,700	+13,100

source : unpublished IPS data

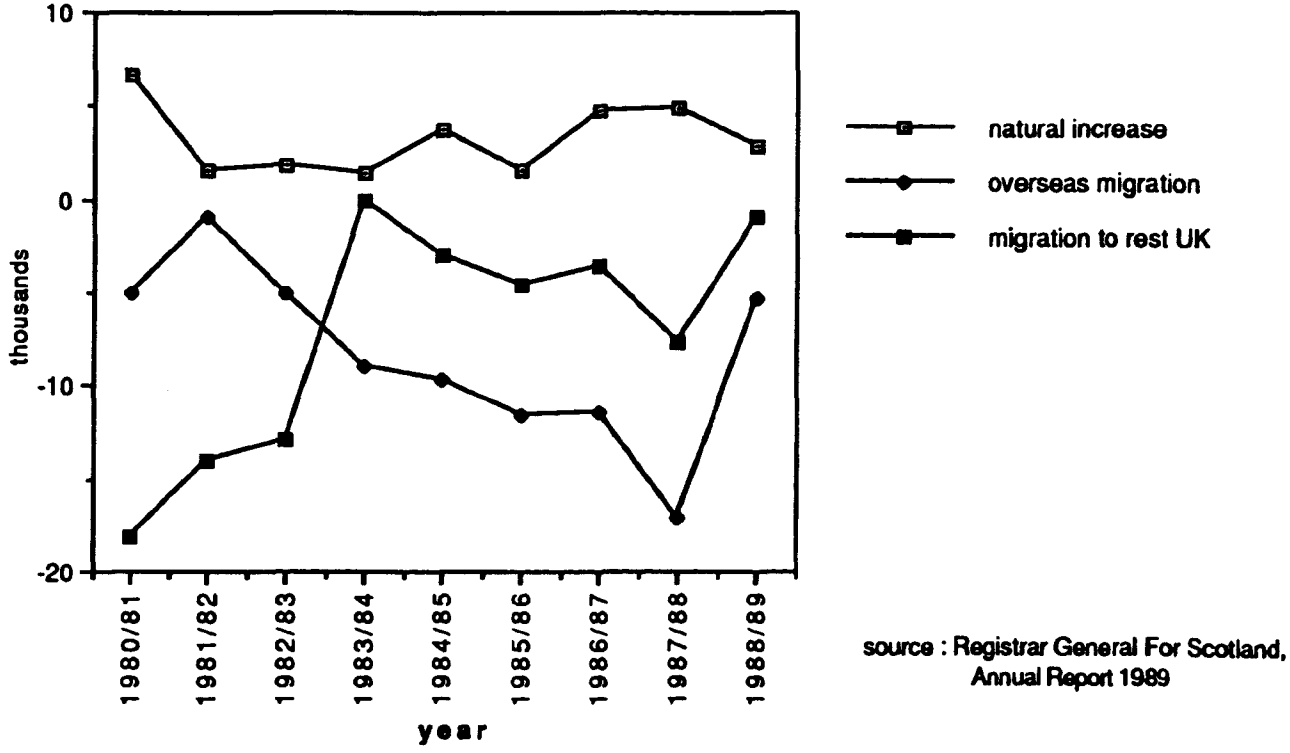
Throughout the 1980's, Scotland made an average net annual loss of some 8,000 people, a higher average annual loss than that recorded for the whole UK (of much greater numerical importance relative to the regional population total).

Regional average net annual migration figures for England, and more specifically for Greater London, reveal a pattern which differs from both the national and Scottish situations. England made a net gain through international migration of some 5,000 people per year, while throughout the 1980's annual international immigration to Greater London exceeded international emigration by approximately 13,000 persons. These figures provide some evidence to support a 'traditional' view of international migration in these regions. Scotland appears as a region of net international emigration, while figures for Greater London describe net gains in population due to international immigration.

For Scotland, the continued loss of population by both internal and international migration has become an increasingly important force in determining total population change. This is shown in Figure 2.1, which graphs natural increase and emigration figures throughout the 1980's. This indicates that small gains in population by natural increase have been largely erased by population losses through overseas emigration in five of the last nine years. When international emigration losses are added to net losses through out-migration to the rest of the UK, the migration process can be seen to dominate trends in Scotland's population total.

This pattern is reinforced by the statistics shown in Table 2.2, which show the constant fall in gains to Scottish population due to natural increase (since 1951), while a much lower rate of decline in net civilian migration over the same period has occurred. This is detailed further by consideration of the figures included in column 4, describing how between 1971-81, total net civilian migration (internal and international) was two and a half times as great as the level of natural increase. Population data for the period 1981-89 (the most recent available), indicate that this ratio is increased to one to five (ie. net migration five times greater than natural increase). It is a contention that the data revealed from 1990 estimates and the 1991 census will yield figures consistent with this pattern.

Figure 2.1 Elements of Scottish Population Change : 1980-89



source : Registrar General For Scotland, Annual Report 1989

Table 2.2 Natural Increase and Migration as Components of Scottish Population Change 1951-1989 (000's)

			Net migration		
	1	2	3	4	2/1
1951-61~	+339.3	-282.0	-140.0	-142.0	0.83
1961-71~	+346.3	-326.5	-169.0	-157.5	0.94
1971-81~	+58.6	-151.2	-52.1	-99.1	2.58
1981-89~~	+22.5	-116.4	-69.9	-46.5	5.17

1 Natural increase
2 Total civilian net migration
3 Rest of UK
4 Overseas

~ intercensal
~~ mid-year estimates

source : adapted from GRO Scotland

2.4 Characteristics of Skilled International Migrant Flows

The figures presented in Tables 2.1 and 2.2, and Figure 2.1 provide quantitative information regarding gross and net international migration flows. However, this data takes no account of the qualitative details of such international migration processes. It has been noted that there has been a shift in the dominant form of international migration. This shift has been away from an international movement intended to lead to permanent settlement towards more 'transient' moves of skilled personnel within the international arena (Findlay 1988, Salt 1984, 1988).

IPS data can serve to identify important characteristics with regard to the international migration flows of the UK. For example, the occupational characteristics of the migrants can be investigated, as can evidence of the 'transient' nature of the migration.

2.4.1 Occupational Characteristics

IPS collects categorical information on the occupational characteristics of the international migrants. Migrants defined as 'actively employed' are subsequently categorized on a dichotomous basis as professional/managerial, or, manual/clerical. Those defined as 'not actively employed' include students, children, housewives and unemployed migrants. Throughout the rest of this chapter the term 'skilled' is applied to the professional and managerial category of migrants. This is not to imply that other migrants were not without skills, but simply indicates the more highly skilled nature of professional and managerial staff.

The relative importance of skilled international migrants amongst flows of both UK and non-UK actively employed citizens in Scotland and Greater London is shown in Table 2.3. These figures provide evidence of an international migration system where moves of skilled personnel among actively employed migrants predominated. In all cases, those migrants in professional/managerial occupations accounted for a greater proportion of international flows than did manual/clerical workers. Differences in migrant occupational status between

Table 2.3 International Migration Flows : Actively Employed Migrants, UK and Non-UK Citizens 1980-88

	% professional/ managerial	% manual/ clerical
UK CITIZENS		
Scotland		
immigrants	64.8	35.2
emigrants	51.2	48.8
Greater London		
immigrants	66.2	33.8
emigrants	60.7	39.3
NON-UK CITIZENS		
Scotland		
immigrants	76.8	23.2
emigrants	74.6	25.4
Greater London		
immigrants	57.0	43.0
emigrants	61.0	39.0

source : unpublished IPS data

Scotland and Greater London are relatively minor. In Britain as a whole, there has been a trend towards professional/managerial migration becoming an ever larger proportion of all labour migration. This reflects the international tendency for nations to restrict tightly the circulation of unskilled and less skilled labour through the application of strict immigration policies (Coleman 1989).

However, Greater London did have a higher proportion of UK citizens in the professional/managerial category for both international immigration and emigration. Scotland's migrants (particularly UK emigrants) displayed greater levels of involvement with manual/clerical occupations.

Increased proportions of manual/clerical employment were also found amongst non-UK citizen immigrants to Greater London. This reflects the tendency for immigrants into the UK (of all skill levels) to cluster in the capital city. Overall the highest proportions of skilled migrants were noted for the international migration of non-UK citizens both to and from Scotland.

2.4.2 Transient Nature of Skilled International Migration

The phenomenon of 'transience' has been identified as a characteristic of present day SIM. Evidence of the temporary nature of movements of skilled migrants can be obtained from IPS questions relating to previous immigration/emigration to/from the UK (Table 2.4).

Table 2.4 Previous Arrival/Departure To/From The UK : Professional/Managerial Occupations, All Citizens 1980-88

	years since previous emigration/ immigration (% of sample)					
	1 yr	2 yrs	3 yrs	4 yrs	>4 yrs	other
Scotland						
immigrants	11.7	7.4	9.6	6.2	23.7	41.4
emigrants	10.4	8.8	4.3	3.4	19.3	53.8
Greater London						
immigrants	11.3	9.8	3.5	4.4	16.5	54.5
emigrants	14.2	13.2	7.8	5.0	24.5	35.3

source : unpublished IPS data

'Transience' can be most easily identified in Table 2.4 from studying the 'other' column. This column represents the proportions of immigrants and emigrants who

have not previously visited the UK, or who did not state an answer to this question. Amongst immigrants to Scotland and emigrants from Greater London, this group forms a minority. By inference then the majority of migrants have previously entered or left the country. In the case of Scotland, a larger proportion of skilled immigrants (58.6%) than emigrants (46.2%) declared that they had previously arrived in/departed from the UK. This suggests that a relatively large proportion of international emigration of professional/managerial people from Scotland during the 1980's was made up of 'first time' emigration. Which can be taken as an indication of a certain level of 'brain drain' from Scotland. Conversely, a majority of skilled immigrants of all citizenships to Scotland had previously visited the UK, and were re-entering after some period spent abroad. Evidence of such return international migration of skilled migrants is borne out by previous IPS research (Devis 1985).

The figures for Greater London describe a somewhat different situation. Here, skilled immigrants appeared to display slightly fewer signs of 'transience' - with higher levels of 'first time' immigration (54.5% of immigrants of professional/managerial occupation had not previously visited the UK). However, of skilled emigrants from Greater London during this nine year period, 64.7% had previously arrived in/departed from the UK. Table 2.4 therefore presents strong evidence of population

circulation and of the transient nature of contemporary SIM.

2.4.3 Gross and Net Statistics of SIM

Gross and net migration statistics for 'actively employed' persons can be used to define SIM patterns for Scotland and Greater London. Table 2.5 displays these figures for all citizenships, while Table 2.6 separates gross and net migration figures for actively employed UK citizens.

The statistics for Scotland describe a net loss of approximately 45,000 actively employed people of all citizenships over the period 1980-88. Approximately 60% of this loss was of migrants in the manual/clerical occupational category, with a corresponding 40% in the professional/managerial category (17,000 persons). Similar information for Scotland on actively employed UK citizens, revealed losses of approximately 52,200 persons over the same period (22,900 professional/managerial), a figure which is actually somewhat higher than that given previously for all citizenships. Explanation of this situation requires net immigration to have occurred among professional and managerial workers who were non-UK citizens. While Scotland's overall situation was one of losing skills and talent (especially UK citizens), there did also exist a degree of immigration of skill from overseas, which represents some transfer to this country (albeit an unequal one) of skills.

Comparable statistics on gross inflows and outflows

Table 2.5 Gross and Net Migration Flows : Actively Employed, All Citizenships 1980-88

	professional/ managerial	manual/ clerical	total
Scotland			
gross inflow	38,600	16,100	54,700
gross outflow	55,600	44,100	99,700
net flow	-17,000	-28,000	-45,000
Greater London			
gross inflow	179,100	119,500	298,600
gross outflow	161,300	103,800	265,100
net flow	17,800	15,700	33,500

source : unpublished IPS data

Table 2.6 Gross and Net Migration Flows : Actively Employed, UK Citizens 1980-88

	professional / managerial	manual/ clerical	total
Scotland			
gross inflow	18,200	9,900	28,100
gross outflow	41,100	39,200	80,300
net flow	-22,900	-29,300	-52,200
Greater London			
gross inflow	64,500	33,000	97,500
gross outflow	84,700	55,000	139,700
net flow	-20,200	-22,000	-42,200

source : unpublished IPS data

of professional/managerial status migrants for Greater London illustrated a different situation to the Scottish one. Overall, Greater London was in a situation of gaining skilled immigrants of all citizenships (an increase of approximately 18,000 for the period 1980-88). However, over this same period, the Greater London area actually

recorded a loss of some 20,200 professional/managerial people of UK citizenship (a lower level of loss than that recorded for UK citizens from Scotland). Higher levels of skilled immigration of non-UK citizens into London negates the effects of high emigration rates of skilled UK citizens. This results, therefore, in an overall gain of skills in Greater London due to international migration.

2.4.4 Rates of Skilled Emigration and Immigration

A method of standardizing gross flow figures to produce more meaningful interpretations is to calculate emigration and immigration rates for the regions of the UK in terms of the average actively employed population of these regions (Tables 2.7, 2.8, 2.9 and 2.10).

Four regions had skilled emigration rates above the national average for the 1980-1988 period (Table 2.7), Greater London had the highest value (24.5 per 1000). Significant emigration rates were also recorded for the South West (23.1), the Rest of the South East (22.4) and Scotland (21.6). Taken together, these four regions accounted for approximately 64% of all professional/ managerial emigration of UK citizens over this period.

Table 2.8 shows similarly standardized emigration rates for non-UK citizens with professional/managerial occupations. Again, Greater London showed the highest emigration rate, while the South West, the Rest of the South East, and Scotland fell below the national average. The dominant position of Greater London for non-UK professional/ managerial emigration is highlighted by

Table 2.7 Emigration Rate : Professional/Managerial Occupation, UK Citizens 1980-88

Region	Emigration as % of total	Av. employed population (000's)	Emigration Rate
Greater London	22.1	3463	24.5
South West	9.1	1511	23.1
Rest of S.E.	21.6	3699	22.4
Scotland	10.7	1906	21.6
East Anglia	3.3	696	18.2
Wales	3.9	896	16.5
North	4.1	1090	14.6
North West	9.0	2375	14.6
Yorkshire and Humberside	5.9	1792	12.7
East Midlands	4.5	1447	11.9
West Midlands	5.8	1984	11.1
Great Britain	100.0	20862	18.4

source : unpublished IPS data

Table 2.8 Emigration Rate : Professional/Managerial Occupation, Non-UK Citizens 1980-88

Region	Emigration as % of total	Av. employed population (000's)	Emigration Rate
Greater London	43.8	3463	22.1
East Anglia	4.3	696	10.9
Rest of S.E.	17.1	3699	8.1
Scotland	8.3	1906	7.6
South West	6.5	1511	7.5
Wales	2.7	896	5.2
West Midlands	4.5	1984	4.0
Yorkshire and Humberside	3.9	1792	3.9
North West	5.3	2375	3.9
East Midlands	2.2	1447	2.6
North	1.4	1090	2.2
Great Britain	100.0	20862	8.4

source : unpublished IPS data

these figures, accounting for some 44% of this type of emigration during the 1980's. Scotland, while displaying a high emigration rate for skilled UK citizens, was much less involved in emigration of skilled non-UK citizens.

Standardized calculations of the immigration of professional/managerial personnel are given in Table 2.9 and Table 2.10, for UK and non-UK citizens respectively. The highest immigration rate for UK citizens was experienced by Greater London, accounting for some 25% of this type of immigration to Britain. However, the South West and the Rest of the South East were also the destinations for large proportions of this skilled immigration. Scotland, on the other hand, had an immigration rate for skilled UK citizens of below the national average. Thus implying Scotland's relatively disadvantaged position as a destination region for returning UK citizens.

The highest rate of immigration for skilled non-UK citizens (Table 2.10) was again experienced by Greater London (33.1 per 1000), with next highest rates being for the Rest of the South East and East Anglia. The figures revealing that once more London greatly dominated the skilled international system in the UK, and served as the main destination region for skilled non-UK citizens, accounting for over 40% of this type of immigration. Scotland's immigration rate for non-UK persons stood at only 10.7 per 1000, below the national average rate. Scotland was a destination for slightly less than 8% of

Table 2.9 Immigration Rate : Professional/Managerial Occupation, UK Citizens 1980-88

Region	Immigration as % of total	Av. employed population (000's)	Immigration Rate
Greater London	25.6	3463	18.6
South West	10.0	1511	16.6
Rest of S.E.	23.9	3699	16.2
East Anglia	3.2	696	11.5
North	4.9	1090	11.2
North West	9.1	2375	9.7
Scotland	7.2	1906	9.5
Yorkshire and Humberside	6.0	1792	8.4
East Midlands	4.0	1447	7.0
West Midlands	4.6	1984	5.8
Wales	1.5	896	4.2
Great Britain	100.0	20862	12.1

source : unpublished IPS data

Table 2.10 Immigration Rate : Professional/Managerial Occupation, Non-UK Citizen 1980-88

Region	Immigration as % of total	Av. employed population (000's)	Immigration Rate
Greater London	43.8	3463	33.1
Rest of S.E.	18.9	3699	13.3
East Anglia	3.4	696	12.6
Scotland	7.8	1906	10.7
Wales	2.9	896	8.6
South West	4.5	1511	7.7
North West	6.1	2375	6.8
East Midlands	3.5	1447	6.4
North	2.2	1090	5.2
West Midlands	3.7	1984	4.9
Yorkshire and Humberside	3.2	1792	4.6
Great Britain	100.0	20862	12.5

source : unpublished IPS data

all non-UK skilled immigrants.

The main distinctions which can be drawn in regional patterns of SIM (from consideration of Table 2.5 to Table 2.10), concern the balance of immigration and emigration of skilled UK and non-UK citizens. While both Scotland and Greater London suffered net losses of skilled UK citizens over the 1980-88 period, the numerical loss recorded in Scotland was actually greater than that for London. In terms of all skilled citizens, while Scotland was noted as an area experiencing net loss, Greater London actually made net gains of skilled population as a result of participation in international transfers.

This is explained by the higher degree of involvement of Greater London in the international immigration of skilled personnel, especially of non-UK citizens. Scotland was not greatly involved in international immigration, and hence the loss of skilled UK citizens was not offset by a comparable gain of skilled non-UK citizens as was the case in Greater London. This implies that Greater London was very much more involved in international skill transfers, explained by its position as economic 'core' of the UK and its 'world city' status (Friedmann 1986). Scotland's more peripheral position within the UK and world economy, results in it being characterized by problems of skill loss. As this chapter has shown, this occurs not just to the core of the UK economy, but to other parts of the world economy.

Clearly, explanation of the 'skill exchanges' occurring in the South East of England are likely to differ from those of the 'brain drain' which characterized the Scottish situation in the past and to a lesser extent the present. By implication, very different types of 'migration channels' mould the characteristics of international population movements in the two regions.

Discussion so far has identified certain characteristics and differences of the skilled international migration systems operating in the Scottish and London contexts. However, IPS data also provides further information relating to type of employment/ profession, demographic characteristics (age and gender), and the patterns of destination and origin countries.

2.5 Characteristics of SIM : Type of Employment, Gender, Age and Destination/Origin Regions

2.5.1. Type of Employment/Profession

IPS data relating to the nature of skilled employment undertaken by the international migrants can be used to further characterize the 'type' of SIM occurring in each region. What are the predominant forms of skilled employment involved in international migration? What further information does this provide in relation to the regional labour market and economy, and hence to an understanding and explanation of SIM processes?

Table 2.11 summarizes employment type information for UK and non-UK immigrants and emigrants to/from Scotland and Greater London. Regarding the Scottish situation,

Table 2.11 Occupational Type : Professional/Managerial Occupation, UK and Non-UK Citizens 1980-88

	UK CITIZENS		NON-UK CITIZENS	
	immig. %	emig. %	immig. %	emig. %
Scotland				
HL GEN MAN	0.0	0.0	0.8	0.0
PRO ADMIN	4.8	16.4	8.6	16.9
P ED/WEL/HEALTH	40.5	34.2	50.6	59.6
P LIT/ART/SPORT	7.7	2.9	3.0	4.8
P SC/ENG/TECH	41.0	36.0	34.1	15.1
MANAGERS	6.0	10.6	2.8	3.6
Greater London				
HL GEN MAN	2.3	0.2	1.9	2.2
PRO ADMIN	30.6	27.0	34.9	29.3
P ED/WEL/HEALTH	24.6	32.1	32.2	34.0
P LIT/ART/SPORT	9.0	8.2	7.7	6.5
P SC/ENG/TECH	23.7	22.9	14.0	17.4
MANAGERS	9.8	9.6	9.3	10.6

HL GEN MAN - high level general management
PRO ADMIN - administrative professionals
P ED/WEL/HEALTH - education, welfare and health professionals
P LIT/ART/SPORT - literature, art and sport professionals
P SC/ENG/TECH - science, engineering and technology professionals

source : unpublished IPS data

involvement with two types of employment dominated skilled international migration during the 1980's - education/ welfare/health professionals, and science/engineering/ technology professionals. Involvement with these two professions accounted for between 70.2% and 84.7% of each category of migrant.

While SIM in the Scottish context can be characterized by concentrated involvement with two profession types, employment information for Greater London revealed a very different situation. Involvement

with each of the professional categories was much more evenly distributed. Administration employment, and education/welfare/health professionals were overall of greatest importance in the London context, with science/engineering/technology employment also of significance. All other employment categories were of increased significance in comparison to the Scottish situation (for example, migrant involvement with high level general management, managerial and literature/art/ sport professions).

The characterization of these two regions by different forms of skilled employment provides further evidence for, and indication of, the varying interpretative and explanatory mechanisms required for understanding contemporary SIM. However, from IPS sources, it is impossible to determine the reasons for these differences in the socio-professional composition of SIM. Are they due to different channels of migration operating in the two regions, or to differences in their labour market specialisms, or to contrasting labour market opportunities for skilled personnel in the two regions? It has already been noted in the previous chapter that recruitment agencies hold certain stereo-typed images of regional labour markets (Findlay and Stewart 1986, Gould 1987), and it is probable that they recruit specific skills in one region rather than another. Is Scotland, therefore, viewed as a region from which education/ welfare/health professionals and scientists, engineers and

technologists may be recruited? While Greater London provides a greater 'pool' for managerial and administrative employees?

If consideration is given to another form of channelling mechanism - internal labour markets within multinational companies - explanation of the importance of managerial and administrative personnel in the Greater London context could relate to the organization of the firm (head offices in 'core' regions, branch plants in more 'peripheral' areas such as Scotland), and the transfer of 'core' staff (with managerial and administrative skills) to branches within the world economy.

2.5.2 Gender and SIM

Previous research into the phenomenon of SIM has noted a lack of female involvement (Brewster 1988, Salt 1987). Research suggests that women have been involved in SIM mainly in their capacity as wives, moving internationally with their husbands. However, Findlay (1988) using IPS data, found that women were of numerical significance in certain specific SIM flows, especially with regard to certain skill categories and regions.

Table 2.12 provides information of the gender characteristics of professional/managerial migrants during the 1980-88 period. Consideration of the details would suggest that IPS data is not in agreement with much previous research regarding a lack of female involvement with SIM. Considering those migrants who described

Table 2.12 Gender Characteristics of Professional/ Managerial Occupation, UK and Non-UK Citizens 1980-88

	UK CITIZENS		NON-UK CITIZENS	
	male %	female %	male %	female %
Scotland				
immigration	67.9	32.1	68.1	31.9
emigration	66.1	33.9	59.7	40.3
Greater London				
immigration	70.4	29.6	67.5	32.5
emigration	63.6	36.4	63.0	37.0

source : unpublished IPS data

themselves as of professional/managerial status, the lowest proportion of female involvement was 29.6% (UK citizen female immigration to Greater London), and with a highest value of 40.3% (non-UK female emigration from Scotland). These levels of involvement suggest that previous research was carried out in such a way as to overlook or omit the importance of female SIM. It is possible that previous studies have considered only those 'channels' which are male dominated (Eg. certain international recruitment agency activities and internal labour market transfers of MNC personnel). This perhaps would suggest that other channels exist, through which the majority of female skilled international migration occurs. An alternative explanation is that women accompanying their husbands may report their occupation to IPS, even if they do not have any possibility of working when abroad.

The breakdown of gender characteristics indicates that only relatively minor differences existed in the involvement of females in SIM between Scotland and Greater

London, and between UK and non-UK citizens. In all cases the proportion of males in the skilled international migration streams was higher than the corresponding level of female involvement. However, female representation in these migration streams was of large enough significance to pose the question why it has not been reported upon in previous SIM studies. Other insights into the interpretation and explanation of gender differences may be gleaned from IPS data which identifies sub-categories of employment by type (Table 2.13).

In respect of gender differences, for both regions and citizenship categories, the greatest percentage of skilled female involvement was found in the education/welfare/health employment category. The concentration of female involvement with this employment type was much higher for Scotland (82.3% and 74.5%) than for Greater London (52.8% and 58.7%). While no other employment type accounted for 10% or more of female SIM in the Scottish situation, in the Greater London region, professional administration employment accounted for a further 20% of female UK and non-UK citizen skilled migration. For Greater London, women migrants were seen to be involved in a more diverse range of skill sub categories than in the Scottish situation. It is interesting to note that virtually no female involvement was recorded in either region or citizenship category for the highest status employment category.

The situation for male SIM was somewhat different,

Table 2.13 Occupational Type : Professional Occupations, UK and Non-UK Citizens, by Gender 1980-88

		UK CITIZENS %	NON-UK CITIZENS %
Scotland			
HL GEN MAN	male	0.0	0.8
	female	0.0	0.0
PRO ADMIN	male	17.5	13.2
	female	3.4	9.5
P ED/WEL/HEALTH	male	13.0	42.3
	female	82.3	74.5
P LIT/ART/SPORT	male	3.9	2.4
	female	5.3	5.9
P SC/ENG/TECH	male	53.8	37.5
	female	5.1	7.9
MANAGERS	male	11.8	3.7
	female	4.0	2.2
Greater London			
HL GEN MAN	male	1.7	3.1
	female	0.0	0.3
PRO ADMIN	male	32.1	38.4
	female	21.4	21.4
P ED/WEL/HEALTH	male	16.8	19.6
	female	52.8	58.7
P LIT/ART/SPORT	male	7.1	6.2
	female	11.4	9.1
P SC/ENG/TECH	male	31.5	20.2
	female	6.9	6.1
MANAGERS	male	10.7	12.5
	female	7.4	4.6

source : unpublished IPS data

with no one skill sub category as predominant as education/welfare/health for female migrants. Scotland displayed higher percentages of male UK citizen employment in science/engineering/technology activities, while employment in education/welfare/health professions employment in education/welfare/health professions dominated male non-UK migrant occupations.

In the Greater London situation, male involvement with professional administrative occupations were of

greatest significance, with science/engineering/technology jobs of secondary importance. Male SIM in London also displayed greater levels of involvement with a diverse range of occupational types than was the case in Scotland.

The domination of female SIM by professional education/welfare/health employment (particularly in Scotland) may provide a degree of explanation for the lack of female SIM reported in previous research. Many previous studies were concerned with international movement through the internal labour markets of multinational companies and the operation of international recruiting agencies specializing in scientific and technical employment. It is a contention that the international movement of professional education/welfare/health skills (and hence much female SIM) would occur through the operation of 'other' migration channels. Such channels may involve newspaper or other media adverts, information passed on by colleagues, or the existence of specialist recruitment agencies for this type of skill (not previously studied). For example, visits by private American, Canadian or Middle Eastern companies to Scotland have been reported in the media. These companies interview nurses and offer them jobs in hospitals abroad at much increased salaries. Such 'channelling' mechanisms need further examination.

2.5.3. Age and SIM

The most striking feature of IPS age data (Table 2.14) is that in both Scotland and Greater London (for UK and non-UK citizens, immigrants and emigrants) the largest

Table 2.14 Age Characteristics of Professional/ Managerial Occupation, UK and Non-UK Citizens 1980-88

	IMMIGRATION		EMIGRATION	
	% UK	% NON-UK	% UK	% NON-UK
Scotland				
15-24 years	2.2	11.3	18.2	15.6
25-44 years	84.8	82.0	68.6	76.1
45-64/59 years	12.9	2.0	12.0	6.7
65/60 years +	0.1	4.7	1.2	1.6
	100.0	100.0	100.0	100.0
Greater London				
15-24 years	14.1	19.0	18.4	15.1
25-44 years	67.7	71.0	72.5	76.7
45-64/59 years	17.3	9.7	9.1	6.3
65/60 years +	0.9	0.3	0.0	1.9
	100.0	100.0	100.0	100.0

source : unpublished IPS data

proportions of professional/managerial international migrants were from the younger part of the labour force (aged 25-44 years). Comparison of the regional age characteristics suggest, in general, the slightly older nature of skilled international emigration and immigration in the Scottish context.

More detailed demographic information regarding age, citizenship and gender are contained in Table 2.15 and reveal that, in general, female skilled international migrants in professional/managerial occupations were of a younger age than their male counterparts. The highest proportions of young women involved with SIM were found among UK emigrants from Scotland, and non-UK immigrants to Greater London. Male UK citizen immigration and emigration

Table 2.15 Age and Gender Characteristics : Professional/Managerial Occupation, UK and Non-UK Citizens, 1980-88

	IMMIGRATION		EMIGRATION	
	% UK	% NON-UK	% UK	% NON-UK
Scotland				
MALES				
15-24 years	1.5	8.3	12.8	7.3
25-44 years	80.4	89.3	67.2	78.4
45-64/59 years	18.0	2.4	20.0	11.6
65/60 years +	0.1	0.0	0.0	2.7
	100.0	100.0	100.0	100.0
FEMALES				
15-24 years	3.7	17.8	31.4	27.0
25-44 years	94.0	66.4	63.3	73.0
45-64/59 years	2.3	1.2	2.1	0.0
65/60 years +	0.0	14.6	3.2	0.0
	100.0	100.0	100.0	100.0
Greater London				
MALES				
15-24 years	9.4	13.0	15.4	11.4
25-44 years	67.6	73.6	73.1	77.1
45-64/59 years	22.3	13.1	11.5	9.4
65/60 years +	0.7	0.3	0.0	2.1
	100.0	100.0	100.0	100.0
FEMALES				
15-24 years	25.1	31.4	23.5	21.1
25-44 years	67.9	65.5	71.5	75.9
45-64/59 years	5.6	2.7	5.0	1.2
65/60 years +	1.4	0.4	0.0	1.8
	100.0	100.0	100.0	100.0

source : unpublished IPS data

to and from both regions tended to contain an element of labour migration from the older employment age cohort - 45-64 years.

Age and gender information indicates the involvement

of a large proportion of females from the active employment age cohorts, although IPS data does not make it possible to tell whether these were wives following their spouses, or whether they were themselves labour migrants. However, the much higher levels of female than male SIM at younger age levels would tend to suggest a degree of international movement of single skilled women to and especially from the UK.

2.5.4. Destination and Origin Countries

Examination of information on country of destination for SIM emigrants for 1980-88 (Table 2.16) suggests that Scotland and Greater London had very broadly similar patterns of migrant destinations for both UK and non-UK citizens. For UK citizen emigrants from both regions, proportions leaving for traditional Old Commonwealth destinations (Canada, Australia, New Zealand) were high, while the EEC countries were also important destination areas. The countries of the Middle East, however, played a much more important role as a destination for migrants from Scotland than from Greater London. As Findlay and Stewart (1986), and Findlay and Garrick (1990) have discussed, this reflects the concentration upon Scotland by international recruitment agencies as a source of skilled manpower especially in the construction, engineering and oil industries. These agencies have recruited manpower for economic and infrastructural developments in many countries of the Middle East. Skilled manpower which was unavailable in the indigenous labour

Table 2.16 Destination Regions of Professional/ Managerial Occupation Emigrants, UK and Non-UK Citizens, 1980-88

	% by Destination	
	UK CITIZENS	NON-UK CITIZENS
Scotland		
Old Commonwealth	21.3	19.5
New Commonwealth	8.9	14.3
Other Africa	7.3	4.5
E.E.C	20.8	11.8
Rest of Europe	6.2	12.5
U.S.A	11.1	24.8
Middle East	20.4	6.8
Other	4.0	5.8
	100.0	100.0
Greater London		
Old Commonwealth	23.8	26.8
New Commonwealth	16.7	16.2
Other Africa	3.9	2.7
E.E.C	20.2	19.3
Rest of Europe	5.0	7.9
U.S.A	13.4	16.4
Middle East	12.1	4.9
Other	4.9	5.8
	100.0	100.0

source : unpublished IPS data

markets. It is interesting to note in the Scottish context that, while Old Commonwealth and New Commonwealth destinations were of decreasing overall importance throughout the 1980's, destination regions such as the Middle East, EEC and USA were of relatively increased significance.

For skilled non-UK citizen emigrants (most of whom were presumably return migrants to their own countries) Old Commonwealth locations, the USA and the EEC countries

were the most popular. In the Scottish situation, almost one quarter of non-UK emigrants indicted a move to the USA, this being indicative of the strong economic links between these two countries.

Destination patterns of non-UK emigrants from Greater London were somewhat different, with a much decreased level of importance of the USA as a destination, and evidence of important migration links between the capital city region and Old Commonwealth and EEC countries.

Immigration (including return migration) of UK citizens to Scotland was dominated by two origin areas (EEC and Old Commonwealth countries), while the numbers of UK migrants entering Greater London tended to be more equally balanced between a number of origin areas (Table 2.17). This suggests that Greater London's more pervasive involvement in SIM may be due to its 'core' and 'world city' status.

The largest proportion of non-UK immigrants to Greater London originated from Old Commonwealth countries, while New Commonwealth countries were the origin areas for the largest proportion of Scotland's non-UK citizen immigrants. Of lesser importance proportionally, but displaying interesting differences between the two regions was the contribution which the countries of the Middle East, other Europe and USA made as origin areas for immigration of non-UK citizens.

Table 2.17 Origin Regions of Professional/Managerial Occupation Immigrants, UK and Non-UK Citizens, 1980-88

	% by origin	
	UK CITIZENS	NON-UK CITIZENS
Scotland		
Old Commonwealth	23.1	13.4
New Commonwealth	17.3	29.1
Other Africa	6.9	6.8
E.E.C	24.9	9.0
Rest of Europe	3.6	1.2
U.S.A	9.0	19.7
Middle East	11.5	8.9
Other	3.7	11.9
	100.0	100.0
Greater London		
Old Commonwealth	16.5	28.0
New Commonwealth	21.0	16.3
Other Africa	11.0	4.1
E.E.C	15.2	12.0
Rest of Europe	5.0	7.7
U.S.A	14.2	14.7
Middle East	9.4	3.9
Other	7.7	13.3
	100.0	100.0

source : unpublished IPS data

2.6 Conclusions

A main conclusion of this discussion is that IPS data is useful in providing a general characterization of recent SIM patterns for the UK. Data from the 1980-88 IPS has been aggregated and used to provide details of the broad contextual basis of SIM to/from Scotland. This provides a basis on which the remainder of this study can be grounded. The use of IPS information provides evidence for the existence of the SIM phenomenon (Eg. high levels of involvement of professional/managerial occupations in

contemporary international migration patterns, and the transient nature of many of these international moves), and provides details of the characteristics of these skilled movers with regard to gender, age, profession and countries of destination and origin.

A further conclusion is that, using IPS data, significant differences were seen to exist in the characteristics of the skilled international migration systems of Scotland and Greater London. Differences could be seen in the net inflow/outflow patterns of SIM in these two regions. Contrasts between the two areas also existed when immigration and emigration rates for SIM were considered. While Scotland shows high emigration rates for skilled UK citizens, non-UK citizens were much less involved in skilled immigration and emigration to this region than was the case for Greater London. Differences noted between Scotland and Greater London extended into other characteristics of SIM, including contrasts in the proportions of previous migrations to and from the UK, and proportions involved in different professional categories. Lesser differences between the two regions were noted with regard to gender, age and countries of destination and origin of the skilled migrants.

A study of IPS data for SIM in the case of Greater London was included in this discussion for several reasons. Firstly, it provided a comparison and contrast with the SIM context of Scotland. IPS data at sub-national

level identifying great differences in the SIM occurring within Britain.

Secondly, it presented the opportunity to ask whether differences in the data presented by the IPS represent two totally different systems of SIM. It has been a contention throughout this discussion that the SIM patterns noted from IPS data represent the utilization of different channelling mechanisms for international migration (the main focus for this study) and that therefore different explanations for the patterns will be required (with much of the IPS data corroborating such a view). Of course the two regions represent very different types of economy and labour market. The data is consistent with the view of Greater London as the economic 'core' of the UK, while Scotland can be described as at the 'periphery' of the UK and indeed of Europe. Such differences in size, population, history, labour market, economic and world situation requires that these areas behave very differently in terms of amounts and character of SIM.

Interpretation and explanation of the SIM phenomenon from IPS data is, however, very difficult. The form and purpose of the IPS does not seek to explain but to record the contemporary migration patterns of the UK. While a level of interpretation of results is possible, such interpretation is based upon an a priori theoretical or explanatory basis.

Further evidence of, and a search for explanation of the SIM patterns of Scotland therefore required the

researcher to identify and exploit other information sources.

Chapter 3 Research Methodology

3.1 Introduction

This study seeks to make a distinctive contribution to international migration research and theory by investigating the multi-faceted nature of the system of mechanisms which operate to facilitate and control the international movement of a specialized migrant group - skilled personnel. This is done through the application, extension and adaptation of a 'migration channels' framework.

Traditional explanations of the international migration patterns of the relatively unskilled (discussed extensively in Chapter 1) have not proved particularly adequate in explaining the international mobility of the most skilled elements of the population. Zolberg (1989) has argued that there is a need to constantly revise conceptual models in relation to changing social realities. Miles (1990 p297) identified an aspect of contemporary social reality as "large scale, international migrations of people whose managerial and technical work is more highly rewarded and whose migration is not defined as politically and ideologically problematic by the state". The concept of migration channels provides an original framework for analysis of international labour migration and the contemporary historical and geographical contexts of international skill transfer.

The concept of migration channels is founded upon the observation that fewer and fewer international migrants

themselves directly obtain jobs, work permits or residence visas, but are regulated and manipulated by intermediate agencies (Eg. intra-company transfers, international recruitment agencies). Identification and analysis of migration channels is therefore important since they play a key role in explaining which persons are 'selected' for migration, and, how a highly skilled international migration system is controlled and directed.

The main aims of this study were described in Chapter 1, but are worthy of brief reiteration :- a) to apply, extend and adapt a migration channels framework to the historically and geographically specific context of Scottish skilled international migration, b) to assess the nature of 'selectivity' represented by various channelling mechanisms with regard to the characteristics of the migrants involved with them, and the international migration and employment history of these individuals, c) to assess the importance and effect of concepts of career and career advancement upon the skilled international migration of individuals involved with all channels.

Thus migration channels are of importance at a theoretical level, but at a practical level present major methodological problems since a full census of all migrants would be needed to establish a sampling frame for research surveys. In the absence of such a frame, surveys remain at best partial and at worst biased. Evaluation of the survey methodology employed to tackle the research

aims, as outlined above, requires examination of the partiality or bias of the resultant data.

3.2 Research Design

Previous research into SIM has used a number of sources of primary information and data collection techniques. Large multinational company (MNC) employers have been used as a source of information in the past (Salt 1987a, Beaverstock 1990), providing a means of contact with expatriate employees. Such studies have investigated the internal labour markets of these MNC's as channelling mechanisms for SIM, and have linked moves to the career path of the individual.

Contact with smaller and medium sized companies has also been utilized (Findlay and Garrick 1990) as a means of studying the role of smaller companies with temporary overseas contracts as a channelling mechanism. Findlay and Stewart (1986) investigated the activities of international recruitment agencies as a means of contact with expatriates. The agencies involved were asked to send questionnaires to clients (thus identifying and investigating this channel).

In order to investigate the overall importance of these various channelling mechanisms in a Scottish context, and to identify 'other' diverse channels for skilled international migration, it was felt that the previous approaches to primary data collection were inappropriate, since each specialized data source concerned only one particular channel type. In order to

obtain a more comprehensive view of the channelling or control of SIM, a more general source of data, allowing access to many types of migrant was required.

A number of data sources were considered, of which two proved successful. The main source of contact with international migrants for this study resulted from information provided by international removal firms. Two of the largest international removal companies in Scotland agreed to co-operate with this project, providing the names and addresses of all their clients who had moved into or out of Scotland during the period 1985-1989. The managers of these companies estimated that they control between them more than 60 per cent, and perhaps up to 70 percent of all international removals from Scotland. That these companies were willing to release sensitive and confidential information of this type was in itself a measure of the importance placed upon research into skilled international migration by these firms. Four smaller international removal companies were contacted but declined to take part in the research.

It was decided that a self-administered postal questionnaire survey of migrants would prove the 'best' method of data collection. This decision was based upon a number of interrelated factors. The dispersed nature of the migrant respondents to be contacted meant that telephone or personal interviews with respondents was impractical. The nature of the information source resulted in easy access to the names and addresses of international

migrants (both in Scotland and abroad). Postal questionnaire collection of the data meant that information could be collected within a reasonable time scale. Mail surveys are also a cost-effective alternative to telephone surveys and face-to-face interviews (Hochstim 1967, Dillman 1978, 1983).

Studies in non-geographical fields have indicated that mail surveys are a feasible alternative to interviews in many cases (Graetz 1985, Goyder 1985, Koening et al 1977). However, geographic texts discussing choice of survey administration method still view mail surveys as an inferior option, to be used only if no other method is viable (Golledge and Stimson 1987). It is argued that this was the case with this research. Indeed, mail surveys have some inherent limitations - the difficulties in finding representative samples with current updated names and addresses, a high non-response rate among people with lower education levels, a reliance upon the reading skills of the respondents, and difficulties in question wording and handling of certain types of questions (Dillman 1983).

A secondary source of contact with international migrants (covering all UK, not only Scotland) was established through discussions with specialist expatriate magazines and newspapers. The editor of an international expatriate magazine (entitled Home and Away) co-operated with a request for assistance, inserting 5000 loose-leaf questionnaire inside the monthly magazine.

Problems relating to the research design are further discussed in Section 3.5 - examining the reliability of the sources and data collected.

3.3 Questionnaire Design

3.3.1 Use of Multiple Questionnaires

Three separate but broadly similar questionnaires were designed, in order to allow for the varying data sources utilized and the complexity of migrant 'types' responding. Examples of each are included as Appendices 1 - 3.

Questionnaire 1 was intended for completion by those identified from the international removal company data as moving into Scotland - return migrants and foreign immigrants. The questionnaire was to be completed by the head of household, and returned using an enclosed pre-paid envelope.

Questionnaire 2 was mailed to those identified from removal company data as leaving Scotland - Scots emigrants and those foreign migrants who had lived and worked in Scotland and who had returned to their own country, or had moved on to other overseas employment. This questionnaire was of a much shorter length due to problems of international mailing costs. Pre-paid return of these questionnaires was not possible, and the costs of return were therefore bourne by the individual respondents.

Questionnaire 3 was designed for inclusion in the expatriate magazine, directed to UK emigrants and those

who had lived and worked in the UK previously. The cost of return of this questionnaire was also the responsibility of the respondents.

The main problem with the use of multiple questionnaires was that, while they allowed for the 'tailoring' of the questions to the particular migrant characteristics of the respondents, differences in length and subsequently in content (due to the costs of postage and method of contact utilized) resulted in discrepancies in the data collected.

3.3.2 Pilot Surveys

Pre-testing of the questionnaires was carried out on the basis of meetings and discussions with twenty international migrants who agreed to complete a questionnaire and comment upon the suitability of the questions. Only minor modifications to the questionnaires resulted from the 'pilot' survey.

3.3.3 Problems of Questionnaire Design

Consideration of the questionnaires used during this research reveal certain issues of concern regarding design (despite pre-testing of the questionnaires). The questionnaires received by the migrants contained instructions that the information required was to be provided by the 'head of household'. The use of this concept was not fully acceptable to the researcher, but provided a relatively simple method of standardizing the responses received. Head of household was used to identify the person on which the family depended for the main

source of its income. The employment of this person was therefore most likely to be the main concern of respondents relative to international movements. The labour migration experiences of other household members was therefore poorly represented.

Dissatisfaction with such terminology and conceptualization of the household was registered by only a very few respondents. This can perhaps be related to the low representation of skilled females within the respondent group (discussed subsequently). Such dissatisfaction was seemingly only registered in the few cases where a couple (married or not) moved internationally as a 'dual career' household. In the majority of cases of married couples, the male spouse completed the questionnaire without registering comment.

Questions regarding the migration and employment histories of the respondents proved awkward due to the complexity of information sought. As a result, these questions required the inclusion of many detailed instructions for the respondents, and a complex answer layout. The limited ability of postal questionnaires to handle complex questions was a major concern to the researcher. Telephone or personal interviewing techniques provide very much better facilities for the gathering of detailed and complex information, since they offer the opportunity for both the interviewer and respondent to clarify issues which they do not fully understand (a feedback mechanism not available in mail surveys). However

such an approach was clearly not feasible given the nature of the data source on migrants within which the researcher was working, and given cost and time constraints.

Further concerns were raised over the details of migration and employment history. In particular, questions relating to past behaviour relied upon accurate respondent recall. Historical details reported by respondents are effectively an edited version of their experiences, containing only what the individual remembers, or chooses to remember or report. It was considered on this basis that information relating to destination, year and length of move, and type of job were more reliable than motivational or perceptual data. However, it would prove very difficult to obtain information regarding migration or employment histories without utilizing some form of retrospective questioning. The problems outlined above could only really be resolved using longitudinal studies.

Details of current employer (type and size) raised concern with regard to the rather simplistic nature of the categorisation included in the questionnaire. This categorisation was, however, extended upon receipt of the responses to include those individuals indicating other more diverse employer types.

The interpretation of questions by respondents was difficult to gauge. Despite having done a pilot questionnaire, ambiguity remained a problem in terms of the meaning adopted by respondents in relation to several concepts used in many sections of the questionnaire. This

was true, for example, regarding channel of movement, career issues and anticipation of future movement. The complexity of the issues and concepts used were a consideration in the subsequent analysis.

The format of the questionnaires was kept as simple as possible. Thus on many issues respondents were given only a limited number of possible responses. For questions where more detail was required, or, where uncertainty existed over the type of information which may be provided, more open ended questions were included. This allowed greater freedom for each individual to answer in his/her own way, using responses not structured by the researcher.

3.4 Survey Response

The surveys involving the international removal companies were carried out between June and December 1989. 1,000 questionnaires were mailed to addresses within Scotland, and a further 1,000 to overseas addresses. Only the most recent international movers (1988-1989) were targeted with questionnaires as it was believed that there was a better chance of contacting them. With an increased lapse of time since the international move, it was believed that 'failure' to contact the migrant due to subsequent changes of address would increase.

Research suggests that 'follow-up' can assure a response rate of up to 60% in a postal survey (Feitelson 1991). Unfortunately, follow up of questionnaires was not possible due to constraints of costs and the need to

guarantee anonymity in the use of removal companies' records. The response to the surveys was, however, more than satisfactory, and in line with that achieved by many other researchers undertaking this kind of work. In total 340 responses were received from Scotland (return migrants and immigrants), and 305 from various overseas countries (emigrants). That the cost of return postage from overseas was bourne by the respondent does not appear to have significantly deterred replies.

Response rates were noted to vary only slightly between the two removal companies. Overall, some 33.8% of individuals contacted through information provided by Scotpac - P&O International Removers responded, while the response rate for Pickfords was 30.3%.

Response rates seemed to vary significantly in relation to destination countries (Table 3.1). Countries where the proportion of responses received was much less than the proportion of questionnaires mailed to emigrants included Australia, and to a lesser extent New Zealand and South Africa. The opposite situation was found for European destinations, the USA, Middle East and 'other' countries.

Explanation of these patterns may be related to a lowered level of willingness to participate in the survey amongst emigrants to Australia, New Zealand and South Africa. This may have been because of the nature of the questionnaire. The focus on careers and migration channels may well have been more meaningful for emigrants to

Table 3.1 Response Rates By Country of Destination (%)

	% emigrant respondents	% questionnaires mailed
Australia	26.2	39.7
Canada	10.8	8.6
New Zealand	5.6	9.0
South Africa	4.3	6.4
USA	17.7	12.2
EEC/Other Europe/ Scandanavia	14.4	8.4
Middle East	6.2	4.8
Other Africa	4.9	4.3
Other	9.7	6.6

Europe, the USA and the Middle East. Other surveys support the view that the salience of the survey topic is a major factor in determining whether a questionnaire is returned (Goyder 1987, Heberlien and Baumgartner 1978, Sosdian and Sharp 1980). Differences in response rate may also reflect other aspects of variation in the 'type' of individual involved in migration to different destinations.

Non-response to interviews tends to be based on issues of intrusion and privacy rather than a lack of interest (Goyder 1987). It was believed that this would not be a problem for this research survey as the anonymity of the respondent (and hence their privacy) was guaranteed (no permanent record of the names and addresses of the mailed contacts were kept). In this survey (as with other

studies) only a small percentage of questionnaires were returned as undelivered due to inaccurate addressing - 67 out of 2000. Actual non-deliveries would, however, inevitably have been much higher than mail returns (Sosdian and Sharp 1980).

The 'Home and Away' expatriate magazine questionnaire was included inside the January 1990 edition of the publication. It was agreed that 5,000 such questionnaires should be distributed, and randomly included within the magazines at the distribution centre. However, this could not be verified by the researcher, and resulted in the return of only 130 completed questionnaires - a disappointing response rate.

Subscribers to the magazine came from throughout the UK, therefore 'Scottish' migrants could only be identified from their responses. Of the 130 responses received, only 14% had 'Scottish' links, with the remainder coming from other areas of the UK (especially London and the South East). Responses from this data source were, as a result, of only limited usefulness in investigation and analysis of the aims of this research. Therefore, in subsequent analysis, the primary data is that provided from removal company questionnaires. Reference to the expatriate magazine responses is made only where it offers constructive insights or examples.

3.5 Reliability of the Sources and Data

Several problems and questions arise from the methods used to contact the international migrants. The main issue

would seem to be whether the resulting sample survey was in anyway representative. Issues regarding the reliability of the sample can be illustrated by comparison with statistics from the International Passenger Survey (IPS), the main UK data source available for studies of skilled international migration. Accordingly, certain features of the discussion in Chapter 2 will be reproduced to determine the comparable nature of the samples.

The overall sample size of the author's survey was quite large, certainly in comparison with the IPS. In 1987/88 (the two most recent years for which data were available) only 43/41 immigrant interviews and 49/40 emigrant interviews (of all actively employed) were undertaken by IPS to represent Scotland. This compares with the 340 immigrant and 305 emigrant contacts obtained by the author. Similarly, for all of the UK, the Home and Away survey resulted in 130 responses (from inclusion in only one months edition of the magazine), which contrasts very well with the 282 skilled emigrants from all of the UK interviewed by IPS throughout the whole of 1988. As the probability of sampling error is reduced as sample size increases (Sudman 1976), a method of data collection ensuring the largest number of migrant contacts is desirable.

It was considered that the main features of sample bias in the author's survey would result from the fact that only those international migrants who required the services of an international removal company could be

contacted. The sampling frame therefore systematically omits part of the population; that is, it does not give every member of the population (in this case skilled international migrants in the Scottish context) a known and equal probability of being included in the sample (Berk 1983).

The extent and direction of sample bias may be considered with further reference to IPS data. Only responses from managerial/administrative and professional status respondents within the author's survey were included for compatibility with IPS data.

Prior to contacting the international removal companies' clients it was not known whether they were actually 'skilled', or whether they could be studied as an example of the SIM phenomenon. The level of skill and experience of the migrants was only identifiable upon return of the questionnaires. However, it was believed that as skilled international migrants now account for such a large proportion of the international migration of actively employed persons, it was safe to assume the relatively skilled nature of the removal company clients.

Reference to Table 3.2 reveals the highly skilled nature of the response to the author's survey. Professional/managerial responses as a proportion of all actively employed was at lower levels in IPS data. Therefore, the contact source utilized would seem to be an effective way of contacting the most highly skilled migrants who form the focus of this study.

Table 3.2 Comparison of Skill Level - IPS Data and Authors Survey (%)

	% professional/managerial	
	IPS	Survey Sample
UK		
immigration	64.8	83.2
emigration	51.2	76.9
NON-UK		
immigration	76.8	97.2
emigration	74.6	87.7

sources : unpublished IPS data and author's survey

The level of skill of migrants was similarly a concern with regard to the use of an expatriate magazine as a contact source. This contact method allowed the researcher much less control over the migrants contacted, although the relatively skilled nature of the individuals involved could be more reliably surmised from their subscription to such a magazine. Regular features and information provided in the magazine cover taxation, conditions of employment overseas, property letting at home and abroad, overseas vacancies etc. High skill levels were confirmed for these respondents, 87.7% classified as professional/managerial.

The issue of nationality/citizenship of the migrants was examined (Table 3.3). It can be seen that the author's survey (while never claiming to provide a systematic representation of all Scottish emigration) produced a sample structure which in proportional terms was not

Table 3.3 Comparison of Nationality/Citizenship of Professional/Managerial Respondents - IPS Data and Authors Survey (%)

	immigration		emigration	
	IPS	Survey Sample	IPS	Survey Sample
UK	47.2	68.8	73.9	80.0
NON-UK	52.8	31.2	26.1	20.0

sources : unpublished IPS data and author's survey

inconsistent with the IPS data. For flows of migrants to Scotland, the sample provided by the author's survey evidenced a larger proportion of UK return migrants than foreign immigrants. IPS data revealed a greater measure of equality in the levels of UK and non-UK citizen moves to Scotland. However, from IPS statistics it is not possible to determine to what degree immigration of UK citizens represents 'British' return migration, or immigration of foreign nationals who hold a UK passport.

Table 3.4 provides information on the gender characteristics of professional/managerial migrants for IPS and survey data. The main difference would appear to be the minority response obtained from females of professional/managerial status in the author's survey, a significantly reduced level of female involvement than for IPS data. Differences in the reporting of female skilled international migration may be explained with reference to the wording of the questionnaires which form the author's survey. That responses were obtained from the 'head of household' discriminates against response by females, for

Table 3.4 Comparison of Gender of Professional/Managerial Respondents - IPS Data and Authors Survey (%)

		immigration		emigration	
		IPS	Survey Sample	IPS	Survey Sample
UK	male	67.9	97.6	66.1	88.7
	female	32.1	2.4	33.9	11.3
NON-UK	male	68.1	94.2	59.7	91.7
	female	31.9	5.8	40.3	8.3

sources : unpublished IPS data and author's survey

example, in the case of a married couple. Evidence from the survey revealed that many women were involved with international migration (Eg. they accompanied their spouse/partner abroad) although it was not possible for these women to report their occupation, or whether they would work while abroad. The migration experiences of these household members was therefore poorly represented. Responses from females and reporting of their occupation is a feature of IPS data collection, although again it is not possible to determine whether they intend to work while abroad.

Data relating to the age of professional/managerial migrants (Table 3.5) revealed that overall, respondents to the author's survey were of somewhat older age than was noted from IPS statistics. Other life-cycle characteristics of the respondents (Eg. marital status) were considered. Unfortunately, due to the unavailability of marital status information from IPS data, comparison of the two data sources could not be undertaken. However, a

Table 3.5 Comparison of Age of Professional/Managerial Respondents - IPS Data and Authors Survey (%)

	immigration		emigration	
	IPS	Survey Sample	IPS	Survey Sample
UK				
15-24 years	2.2	0.0	18.2	1.6
25-44 years	84.8	72.6	68.6	76.9
45-64/59 years	12.9	19.6	12.0	13.4
65/60+ years	0.1	7.8	1.2	8.1
NON-UK				
15-24 years	11.3	1.0	15.6	2.0
25-44 years	82.0	71.8	76.1	70.0
45-64/59 years	2.0	20.4	6.7	22.0
65/60+ years	4.7	6.8	1.6	6.0

sources : unpublished IPS data and author's survey

Table 3.6 Marital Status Characteristics of Survey Sample Respondents (%)

	immigration		emigration	
	UK	NON-UK	UK	NON-UK
single	7.1	15.5	15.0	12.0
married	89.3	79.6	78.0	78.0
other	3.6	4.9	7.0	10.0

great majority of contacts in the author's survey were married (Table 3.6).

Explanation of life-cycle characteristics of the sample structure may relate to an in-built bias in the approach against 'bachelor' status contracts relative to family migration. It would be an expectation that individuals involved in moving their household possessions

on a scale requiring a removal company would be older, and with a greater likelihood of having a family. Migrations undertaken on 'bachelor' status contracts are less likely to necessitate the services of an international removal company and are frequently undertaken by the young - a migration stream which will be recorded by IPS, but not in the author's survey.

In order to allow for comparison, the origin/ destination countries of the survey respondents were classified using the same definitions as for IPS (Table 3.7). The two removal companies who agreed to provide information were specialized in 'long haul' international moves, a specialization which was expected to have some effect on the spatial characteristics of the international migration system described. Indeed, the EEC was of much lesser significance as an origin/destination for UK migrants in the author's survey than revealed in IPS data. These shorter distance international moves may have been better catalogued had one of the smaller 'continental' removal companies co-operated with the research.

The Middle East was of lesser importance as a destination for UK emigrants who were clients of the removal firms. This may again be related to the in-built bias of this sample source against migrants moving on 'bachelor' status contracts - a contractual arrangement which is of importance in employment in the Middle East.

Equally, the importance of Middle Eastern destinations in IPS data may reflect a temporal difference

Table 3.7 Comparison of Origin/Destination Countries of Professional/Managerial Respondents - IPS Data and Authors Survey (%)

destination

	UK		NON-UK	
	IPS	Survey	IPS	Survey
Old Commonwealth	21.3	36.5	19.5	20.0
New Commonwealth	8.9	5.5	14.3	8.0
Other Africa	7.3	2.8	4.5	0.0
EEC	20.8	9.4	11.8	12.0
Rest of Europe	6.2	6.1	12.5	6.0
USA	11.1	13.8	24.8	46.0
Middle East	20.4	9.4	6.8	2.0
Other	4.0	16.6	5.8	6.0

origin

	UK		NON-UK	
	IPS	Survey	IPS	Survey
Old Commonwealth	23.1	4.7	13.4	6.5
New Commonwealth	17.3	3.0	29.1	0.0
Other Africa	6.9	1.8	6.8	1.1
EEC	24.9	3.0	9.0	8.6
Rest of Europe	3.6	5.3	1.2	2.2
USA	9.0	39.9	19.7	71.0
Middle East	11.5	16.1	8.9	3.2
Other	3.7	26.2	11.9	7.5

sources : unpublished IPS data and author's survey

in the sample structures. Due to the small size of the IPS sample (and therefore to reduce sampling error), IPS data for a nine year sequence is considered here. Thus the importance of the Middle East as a destination in the early 1980's, but its relative decline in importance in the late 1980's would not be represented by these IPS tabulations.

While representation of Old Commonwealth and New Commonwealth destinations for UK and non-UK respondents

produced a sample structure for the author's survey which was not inconsistent with the IPS data, this was not found to be the case with regard to the extent of immigration to Scotland from these regions. The importance of Commonwealth countries was revealed as of much greater significance in IPS data by comparison with the sample survey. This spatial disparity may be explained with reference to the very different purposes of the two surveys. The IPS survey (its underlying theoretical and methodological basis) was not designed as specifically suitable for the study of skilled international migration. Many political, economic and social concerns guide the present form of IPS, not least the development and extension of immigration control in 20th century Britain. As revealed in Chapter 2, smaller sampling intervals and hence more interviews are undertaken by IPS for immigrants into Britain. As Commonwealth countries are the 'traditional' origins of much immigration to the UK, more frequent interviewing of these arrivals may over represent these regions in IPS data (for example, in the case of the New Commonwealth as an origin region for non-UK professional managerial immigration to Scotland). Table 3.8 details the importance of New Commonwealth origins for all permanent settlers to the UK during 1985-1989.

The USA was, for all categories of migrant, of greater importance as an origin/destination for survey responses in the author's survey (especially non-UK responses). Spatial bias in the sample structure may have

Table 3.8 United Kingdom, Available Information on Inflows of Permanent Settlers by Nationality or Region of Origin

	1985	1986	1987	1988	1989
EEC	-	2880	2420	2470	1910
Other West Europe	-	1950	2150	2310	2240
Eastern Europe	-	390	480	840	670
Total Europe	6270	5220	5050	5620	4820
Americas	7130	6130	6360	6480	5440
Africa	4710	4000	5130	5840	6390
Asia	26090	22040	19920	21010	21960
Australia	6660	5360	5720	6190	6830
Other	4500	3890	3800	4140	3620
Total	55360	46820	45980	49280	49060
of which					
Old Commonwealth	8160	6560	6900	7380	7870
New Commonwealth	27050	22520	20860	22800	22860
Foreign	20150	17740	18220	19100	18330

(source : Home Office, Control of Immigration Statistics 1989, in SOPEMI 1990 (OECD 1991))

arisen from the nature of the two removal companies from whom addresses were obtained. These firms were both involved to some level with expatriate relocation moves - where large multinational companies pay for the relocation of employees. Many of the corporate companies involved were American based, and related to specific industrial sectors (Eg. oil and gas, computing) involved with relocations to the USA.

The employment of people who are subject to immigration control is regulated by the granting of work permits by the Department of Employment. "In the 1980's long-term work permits, specifically for those coming in (to the UK) to work but not necessarily to settle, have gone to the highly skilled : 85 percent to managers and professionals" (Salt and Ford, 1990 p336). The origin countries of immigrants granted long-term work permits (Table 3.9) evidences rather different flows from that in Home Office (Table 3.8) or IPS data. These figures illustrate patterns of skilled international migration flows to the UK which are broadly similar to those evidenced in the author's survey. For example, with regard to the importance of the USA as a country of origin.

That the IPS classifications of origin/destination country information were inappropriate for the sample survey was revealed through the significant involvement of UK respondents with 'other' locations. The importance of 'other' locations evidenced the complexity and world-wide nature of the Scottish context of skilled international

Table 3.9 United Kingdom, Available Information on Inflows of Foreign Labour : Long Term Work Permits

	1984	1985	1986	1987	1988	1989
Western Europe	13.2	11.3	8.9	7.4	12.5	13.5
USA	36.8	35.2	30.4	32.1	32.7	31.6
Canada	4.4	2.8	3.8	3.7	3.8	3.0
Australia/New Zealand	5.9	7.0	6.3	6.2	7.7	11.3
Japan	14.7	18.3	17.7	18.5	20.2	16.5
India	2.9	4.2	3.8	3.7	4.8	4.5
Hong Kong	5.9	5.6	3.8	3.7	4.8	5.3
South Africa	1.5	2.8	2.5	2.5	2.9	3.0
Malaysia	4.4	5.6	1.3	1.2	4.8	5.3
Other	10.3	7.0	21.5	21.0	5.8	6.0

(source : Department of Employment, in SOPEMI 1990 (OECD 1991))

migration. This was not true of the more 'traditional' picture of international labour migration revealed from IPS data.

To summarize on the reliability of the sample survey, and the compatibility of the survey with that of the IPS, it should be noted that previous research has shown that information regarding skilled international migration gained from the IPS was broadly compatible with information collected from other sources (Brewster 1988, Findlay and Garrick 1990, Findlay and Stewart 1986). Indeed much of the data revealing the sample structure of

the author's survey described a situation which was not inconsistent with IPS data. Some minor differences may have arisen due to the nature of the author's data source. However, where differences were visible between the author's data and the IPS, this did not always necessarily reflect bias in the author's data set, but might well have been the result of sampling errors by the IPS.

3.6 Conclusions

The main issues arising from this discussion of research methodology relate to the utilization of a previously untested data source, the representative or biased nature of the skilled international migrant contacts, and the inferences which may be drawn from the resulting data given the methodological difficulties identified. The size of the author's sample certainly compares favourably with the numbers of skilled international migrants contacted during previous skilled international migration research (Salt 1987a, Findlay and Garrick 1990, Findlay and Stewart 1986, Gould 1990). However, many of these previous studies contained a much higher level of pre-determined sampling homogeneity than was the case for this study. For example, use of a MNC as a source of communication assures that all expatriate contacts are of a relatively high skill level, work for the company during their international move and were channelled through the internal labour market of this company.

The aims of this study - linked with the application, extension and adaptation of a migration channels framework - rendered the data sources of previous studies (relating to only single channels of international migration) inappropriate. The utilization of the information sources discussed represents an innovative attempt to find a solution to a very difficult problem - ie. how to obtain information providing detailed insights into skilled international migration processes. In the context of this study, these contacts provided a useful source of information regarding the mechanisms affecting skilled moves in the Scottish context. For the purposes of the thesis, the data source proved more useful than, for example, IPS sources, or surveys carried out through MNC's or international recruitment agencies. Discussion of the sample size and structure leads to the conclusion that the data source for the main survey provides the 'best' source for the purpose of this study.

Inferences drawn at this stage about the nature of the migrants contacted and the migration system represented are tentative. More detailed examination of the data is undertaken in the rest of the thesis.

As indicated, the nature of the author's sample leaves the sample structure and inferences drawn from the results open to sampling and non-sampling errors. The context of the primary survey (with regard to sources of migrant contact and issues of questionnaire design) constitutes the 'conditioning' features of this research.

Such issues receive further comment in the data analysis section of this thesis.

Chapter 4 Personal Characteristics of Questionnaire Respondents

4.1 Introduction

This chapter serves as a general introduction to the analysis of the questionnaire responses, and can be thought of as the 'building blocks' upon which all of the subsequent analysis and discussion chapters are based. In order to develop and discuss the complex ideas and issues that are addressed during later analysis, consideration must be given first to the more basic or descriptive aspects of the data and research questions under scrutiny. Consequently, discussion is limited to a consideration of the personal characteristics of the questionnaire respondents, using information from certain key demographic questions to allow for the construction of basic descriptive migrant "profiles" or "typologies".

The personal characteristics of the respondents which receive attention can be divided into three types;

a) the country of birth of the respondent, and issues relating to country (or countries) of citizenship.

b) the demographic characteristics of the respondent and family, for example, gender, age and marital status. The size of the respondent's family (number of children, if any) and the ages of the youngest and oldest children are considered. Typologies of migrants in different respondent categories are produced by applying clustering techniques to these demographic variables. The resultant groupings of

different migrant types are illustrated and discussed.

c) the type of employment and skill level of the respondents are indicated, and compared with the type and skill level of the jobs held by the resident population of Scotland and Great Britain.

Some conclusions, relating to a consideration of the personal characteristics of the respondents will be drawn. These conclusions relate to the selectivity of international migration, with reference to the demographic, job type and job skill information obtained from the different categories of migrant contacted.

4.2 Categorisation of Questionnaire Respondents

Prior to any analysis, the questionnaire responses had to be categorized. Such categorisation was necessary to identify the different streams of movement involved with international migration to/from Scotland. The respondents were categorized into six groups (UK emigrant, USA emigrant, Other Foreign emigrant, UK return migrant, USA immigrant and Other Foreign immigrant) on the basis of the country from which their international labour migration history began. For example, a UK emigrant can be defined as an individual (living and working abroad at the time of the survey) who indicated that the UK was the place from which their first international migration for employment was undertaken. USA or Other Foreign emigrants from Scotland can be similarly defined as individuals whose experience of moving internationally in the labour

market originated outside Scotland, involved a move to Scotland for employment, and who have again moved abroad. Such a move might involve return to their origin country, or employment in another country. The definitions of UK return migrants and foreign immigrants to Scotland follow the same logic.

The numbers of each migrant category contacted were

UK emigrants	244
USA emigrants	28
Other foreign emigrants	33
UK return migrants	234
USA immigrants	86
Other foreign immigrants	20

In all further tables in chapters 4 to 8 the data relate to the researcher's own survey and no further indication of sourcing is therefore given.

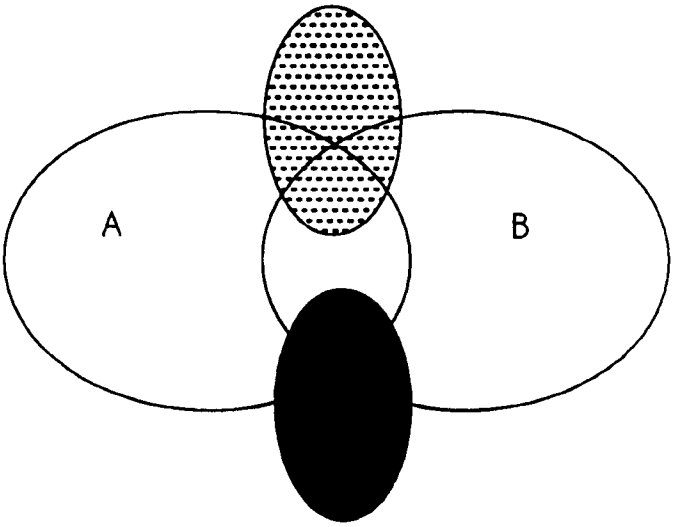
4.3 Information Relating to Country of Birth and Citizenship(s)

Figure 4.1 provides a graphical representation of the relationships between country of origin for international labour migration history, country of birth, and citizenship information. While for many individuals, the country noted as place of birth, place of citizenship and place of origin for international migration career was the same, for a small number of respondents this was not true.

4.3.1 Country of Birth

Country of birth information for the respondents is contained in Table 4.1. UK migrant categories were

Figure 4.1 Relationship Between Country of Birth, Country of Origin and Citizenship



A country of birth

B country of origin of international labour migration history

citizenship

second citizenship

Table 4.1 Country of Birth of Respondents (%)

Country	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
UK	93.4	-	3.0	97.4	-	-
Australia	0.4	-	24.2	-	-	20.0
Canada	-	3.6	9.1	0.4	1.2	10.0
New Zealand	0.4	-	12.1	-	-	10.0
USA	-	96.4	-	-	97.6	-
EEC	0.8	-	18.2	-	-	30.0
Africa	2.1	-	9.1	1.3	-	5.0
South America	-	-	-	-	-	10.0
Scandanavia	-	-	9.1	-	-	5.0
Other	2.9	-	15.2	0.9	1.2	10.0
	100	100	100	100	100	100

dominated by UK born respondents. Those individuals born abroad, but who were subsequently categorized as UK emigrants or return migrants are people who came to Britain prior to entering the labour market.

It can be seen that the USA, the EEC and Australia were the other main countries involved in the migration system under study.

4.3.2 Citizenship

Respondents were asked to indicate the country/countries of which they were a citizen. Many of the issues which may be considered with regard to citizenship are of a very complex nature, relating to an individuals perception of identity, 'belonging' and nationalism. While these are recognized to be extremely important issues, they do not fall within the focus of this study. The inclusion of a question relating to citizenship as distinct from place of birth was in order to examine the extent to which migrants were interested in gaining the citizenship of the countries in which they were living. Gaining citizenship would suggest a degree of permanence in the migrant's behaviour.

The first country of citizenship described by respondents is indicated in Table 4.2a, while countries indicated as secondary or dual countries of citizenship are detailed in Table 4.2b. It was expected, and found, that citizenship information would in large measure mirror country of birth details. Comparison of Tables 4.1 and 4.2a indicates that few respondents obtained new or

Table 4.2a Country of First Citizenship of Respondents (%)

Country	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
UK	93.1	-	3.0	98.4	-	-
Australia	0.8	-	24.2	-	-	20.0
Canada	2.5	-	6.1	0.4	1.2	10.0
New Zealand	0.4	-	15.2	0.4	-	10.0
USA	0.8	100	-	0.4	98.8	10.0
Africa	1.2	-	9.1	0.4	-	5.0
EEC	1.2	-	21.2	-	-	30.0
Scandanavia	-	-	9.1	-	-	5.0
Other	-	-	12.1	-	-	10.0
	100	100	100	100	100	100

Table 4.2b Country of Secondary/Dual Citizenship (%)

	UK emig	UK ret.mig	USA migrants	Oth.for migrants
Country				
UK	18.2	11.1	-	50.0
Australia	42.4	55.6	-	20.0
Canada	24.3	11.1	-	10.0
New Zealand	6.1	-	-	-
USA	-	11.1	-	10.0
Africa	3.0	11.1	-	-
EEC	3.0	-	-	-
Scandanavia	-	-	-	-
Other	-	-	-	10.0
	100.0	100.0	-	100.0
No. persons with dual citizenship	33	9	0	10
No. persons with citizenship of one country	211	225	114	43

secondary citizenship during their international migration history.

Two explanations may be offered for the pattern of dual/second citizenship held by 8.8% of UK migrants (Table 4.2b). Firstly, some UK emigrants indicated the UK was a secondary country of citizenship because they were born abroad, and therefore acquired foreign citizenship. They had moved to the UK, acquired dual citizenship, and then emigrated once again. This pattern applied to 2.5% of UK emigrants and 0.4% of UK return migrants. A second sequence of events was for UK citizens to have emigrated and to have adopted the citizenship of their destination country (in particular Australia, Canada and New Zealand). This latter scenario applied to 11.1% of UK emigrants and 3.4% of UK return migrants.

4.4 Demographic Characteristics of Respondents

Respondents were asked a series of questions relating to demographic issues. Information obtained relating to gender, age, marital status, number of children and ages of children is contained in Tables 4.3-4.8.

4.4.1 Gender

It was found that for all categories of migrant a large majority of respondents were male (varying from 84.8% to 95.3%), with a correspondingly lower proportion of female responses (Table 4.3). While the proportions of female responses were low (lower than levels of female response indicated in IPS data, Table 2.12), these figures do represent higher levels of female response than in some other recent migration surveys (Findlay and Stewart 1986, and Brewster 1988).

Table 4.3 shows that in the researcher's work, the proportions of female respondents was lowest amongst UK return migrants and USA immigrants. Explanation of this apparent gender bias is complex. Firstly, the questionnaire was addressed to the 'head of household', in order to try and achieve consistency and comparability of responses. For this particular study it was important that answers to the questions were given by the person upon whom the family depended for its main source of income. While the whole family unit may be involved in the decision to move abroad, ultimately one of the main reasons or considerations for the move will be the job or job prospects of the head of household. In this

Table 4.3 Gender Characteristics of Questionnaire Respondents (%)

	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
Male	86.5	85.7	84.8	94.0	95.3	85.0
Female	13.5	14.3	15.2	6.0	4.7	15.0

study (as will be discussed more fully later), the majority of respondents were married. It is not difficult then to understand why the majority of questionnaires were answered by the husband as the head of household, and key decision maker in the moving process in relation to employment issues. It would seem that women only answered the questionnaire if they were single or divorced/ separated at the time of migrating.

The lower proportions of female respondents does not mean that women were not involved in the SIM phenomenon. It does however indicate that the involvement of females was in large part in the role of spouse or partner. While females may be employed during their time abroad, their employment is often only of secondary importance, and was not the main motivation or consideration for an international move. On the whole it was only when single or divorced/separated women were involved in the phenomenon that female employment became a reason for, or, a consideration in international migration.

4.4.2 Age Characteristics

The single most important age group (Table 4.4) among UK emigrants was the 25-34 year group (48.0%), while for UK return migrants the 35-44 year group (39.3%) was of greatest significance (a similar pattern to IPS data, Table 2.14). Comparison of age data for these two categories of UK migrant suggests, as one would expect, that emigrants from Scotland were on the whole younger than return migrants to Scotland.

Table 4.4 Age Characteristics of Questionnaire Respondents (%)

	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
15-24 years	2.9	-	6.1	1.3	1.2	5.0
25-34 years	48.0	7.1	45.4	26.1	32.5	30.0
35-44 years	29.1	39.3	36.4	39.3	40.7	35.0
45-54 years	12.7	32.1	9.1	17.1	18.6	25.0
55-59/64 years	6.5	17.9	3.0	11.5	7.0	5.0
60/65+ years	0.8	3.6	-	4.7	-	-
	100	100	100	100	100	100

Age data for USA migrants showed the expected reversal of the situation discussed for UK emigrants and return migrants. The 'other foreign' migrant categories displayed more varied age characteristics. It is interesting to note that the other foreign migrant categories contained the highest proportions of respondents in the youngest age group, and the lowest proportions of older aged respondents.

4.4.3 Marital Status

The majority of respondents in all migrant categories were married (Table 4.5), although the actual proportions contained in this married group varied. The 'other foreign' migrant categories (both immigrant and emigrant) contained the lowest proportion of married respondents (65% and 63.6% respectively).

There were more married UK return migrants than was the case amongst British emigrants (85% compared to 74.2%). While USA immigrants displayed lower married proportions than did USA emigrants. These figures merely reflect the increased proportions of persons married with increased age.

Correspondingly, UK emigrants displayed an increased proportion of single status respondents (18.9%) in comparison with return migrants (9.8%). Similarly with USA immigrants (emigrants from the USA), the proportion of single respondents was higher (16.3%) than for USA emigrants (again a reflection of increased age).

Table 4.5 Marital Status Characteristics of Questionnaire Respondents (%)

	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
single	18.8	-	27.3	9.8	16.3	15.0
married	74.2	89.3	63.6	85.1	81.4	65.0
separated/divorced	4.1	7.1	3.0	4.7	2.3	15.0
unmarried couple	2.5	3.6	6.1	0.4	-	5.0
widowed	0.4	-	-	-	-	-
	100	100	100	100	100	100

Only small proportions of all migrant categories indicated other marital statuses. The separated/divorced category accounted for 15% of other foreign immigrants into Scotland. This was a much higher proportion than for any other migrant group.

4.4.4 Number of Children of Respondents

Among UK emigrants (Table 4.6), 38.1% of respondents had no children, while about one third of families (30.7%) had two children. Amongst return migrants the modal size of family was that containing two children. The generally increased family size of UK return migrants may be a further reflection of the later stage in the 'life cycle' of these individuals in comparison to UK emigrants.

The USA migrant categories displayed family size characteristics similar, in some respects, to those of the UK categories. For USA immigrants to Scotland the two child family was marginally the most popular (31.4%), closely followed by respondents with no children (30.2%). USA emigrants from Scotland, however, displayed larger family size characteristics, with much increased proportions of respondents indicating a family size of three or more children.

Information for 'other foreigners' was very different from the groups discussed above. Respondents with no children dominated, accounting for nearly half of all other foreign migrants to/from Scotland.

Table 4.6 **Number of Children of Questionnaire Respondents (%)**

	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
none	38.1	14.3	48.5	21.4	30.2	40.0
one	16.4	14.3	18.2	11.1	16.3	15.0
two	30.7	35.6	18.2	43.6	31.4	25.0
three	11.5	17.9	12.1	17.9	16.3	10.0
four or more	3.3	17.9	3.0	6.0	5.8	10.0
	100	100	100	100	100	100

4.4.5 Age Characteristics of Respondent's Children

Unfortunately it was not possible to collect information on ages of respondent's children for all migrant categories, although data was collected from respondents currently living and working in Scotland. This data was not obtained from those respondents living and working outside Scotland due to problems of length of questionnaire and costs of overseas postage.

The information available relating to children's age describes that for youngest children (Table 4.7), the most important age group was 0-5 years (pre-school age) for all the migrant categories. Return migrants, however, displayed the lowest proportion of respondents whose youngest child was 0-5 years old (36.8%).

Table 4.7 Age of Youngest Child (%)

	UK ret.mig	USA immig	Oth.for immig
0-5 years	36.8	45.0	46.1
6-9 years	20.0	16.7	7.7
10-14 years	10.8	3.3	23.1
15-19 years	13.5	16.7	7.7
20+ years	18.9	18.3	15.4
	100	100	100

From Table 4.7 it would appear that surprisingly large proportions of respondents declared their youngest children to be 15-19 years old (leaving school, at University/college, starting work) or 20+ years (with a

greater level of independence from parents). For UK return migrants and USA immigrants, over 30% indicated that their youngest child was aged 15+.

There was a considerable spread in the ages of oldest child (Table 4.8). The single most important age category for eldest children for all migrants was the 20+ age group (as expected). For each of the migrant categories, approximately 30-35% of oldest children were in this age group.

Table 4.8 Age of Oldest Child (%)

	UK ret.mig	USA immig	Oth.for immig
0-5 years	13.7	15.2	22.2
6-9 years	21.3	17.4	11.1
10-14 years	20.0	19.6	11.1
15-19 years	10.6	13.0	22.2
20+ years	34.4	34.8	33.3
	100	100	100

4.5 Migrant Typologies

The demographic information discussed above was analysed using a cluster analysis technique. The technique was used to group the respondents of each migrant category into subgroups on the basis of similarities in the combined demographic information. This allowed the researcher to identify certain migrant 'types'. Such 'typing' of respondents helps to reduce the complexity of

the data set, as well as contributing to the identification of the selective nature of the international migration process.

4.5.1 Clustering Procedure

Clustering was undertaken using the SPSSX statistical package. The categorical variables which have been described had to be made comparable in terms of the units of expression used. This was necessary in order not to give too great a magnitude of weighting to some variables over others.

The demographic variables were therefore transformed into a matrix standardized into binary code form, with the characteristic properties being treated as present or absent in the case of each variable. Clustering of these standardized demographic variables involved use of a hierarchical clustering technique, utilizing an average linkage structure for cluster construction. In average linkage clustering, each member of a cluster has a smaller average dissimilarity with other members of the same cluster than with members of any other cluster (Bijnen 1973, Hartigan 1975, Lorr 1983).

A varied number of subgroups or clusters can be identified from this procedure - from a small number of large groupings lacking in detail and refinement and containing varied types of demographic characteristics, to a large number of smaller groupings giving much more detail of migrant characteristics. Ultimately a situation can be reached where each respondent is grouped only with

those of identical characteristics, or is included in a cluster containing only itself as a member.

Guidance in determining how many clusters are needed to adequately represent the data is provided through a value known as the 'clustering coefficient'. The value of this coefficient is a measure of the distance between the two most dissimilar points of the clusters formed at each stage of the hierarchical procedure (Norusis 1985). This provides an idea of how like or unlike the clusters are. A small coefficient value indicates that fairly homogeneous clusters are being merged, while larger coefficient values indicate that clusters containing quite dissimilar members are being combined. The clustering procedure should be stopped as soon as the increase in the coefficient value between two adjacent steps becomes large. The changing value of the coefficient as the clustering procedure proceeds, determines the final number of 'types' or clusters used to describe the respondent characteristics.

4.5.2 Resulting Migrant Typologies

The resulting clusters produced from use of this technique for UK emigrant respondents are shown in graphical form in Figure 4.2. The segments of the pie chart labelled A-F represent the number of UK emigrant respondents who qualified as members of the six most important demographic types. The final segment represents all respondents whose demographic characteristics did not allow them membership of the largest groupings, and who were contained in smaller clusters.

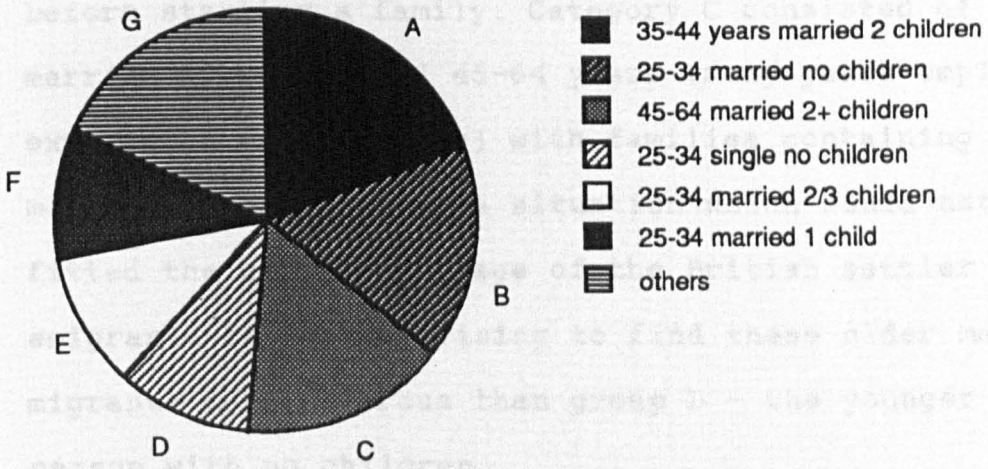


Figure 4.2 UK Emigrant Migrant 'Types'

Figure 4.2 illustrates that those respondents identified as belonging to type A were of most importance among UK emigrants (19.5%). This was a group of married migrants, with at least 10-15 years work experience (aged 35-44 years), who had two of a family. Type B (16.5%) represented younger married emigrants who had moved abroad before starting a family. Category C consisted of older married migrants aged 45-64 years (many years employment experience and training) with families containing two or more children. This is a situation which would not have fitted the classical image of the British settler emigrant. It was surprising to find these older married migrants more numerous than group D - the younger single person with no children.

The clustering procedure was repeated for all of the respondent categories, revealing highly disparate migrant types. This shows the highly varied demographic nature of the migration system. Table 4.9 shows that not only do migration flows differ in terms of their demographic character relative to other flows, but that some flows are internally relatively homogeneous, while others are not.

The overall younger nature of UK emigrants in comparison to UK return migrants is evidenced from Table 4.9, with four of the six most important UK emigrant 'types' aged 25-34 years (47%). The most important group of UK return migrants are at a very different 'life cycle' stage - aged 45 years plus, married and with a family of two or more older children (at school or left school).

Table 4.9 Largest Migrant 'Types' Identified For Each Migrant Category (%)

Migrant Types		Nunber of Clusters Identified
UK EMIGRANTS		
35-44 years, married, 2 children	19.5%	12
25-34 years, married, no children	16.5%	
45-64 years, married 2+ children	15.7%	
25-34 years, single, no children	10.3%	
25-34 years, married, 2/3 children	10.3%	
25-34 years, married, 1 child	9.9%	
USA EMIGRANTS		
45+ years, married, 2+ children	42.9%	5
35-44 years, married, 2+ children	25.0%	
OTHER FOREIGN EMIGRANTS		
25-34 years, married, 0/1 child	45.5%	3
35+ years, married, 2-4 children	33.3%	
15-44 years, married, no children	21.2%	

Table 4.9 (continued)

UK RETURN MIGRANTS		
45+ years, married, 2+ children aged 15+ years	22.2%	14
35-44 years, married, 2/3 children at school	19.2%	
35-54 years, married, 2+ children pre/at school	12.9%	
25-34 years, married/single, no children	12.0%	
USA IMMIGRANTS		
44-64 years, married, 2/3 children aged 15+ years	20.0%	12
35-54 years, married, 2/3 children at school	11.8%	
25-34 years, single, no children	10.6%	
OTHER FOREIGN IMMIGRANTS		
35-54 years, married, 2+ children at school	40.0%	4
25-54 years, married, no children	35.0%	

Similarly, USA immigrants displayed signs of a 'younger' character than USA emigrants. However, the largest USA immigrant type identified, consisted of older respondents, married, with a medium sized family of older children (not perhaps an image of a 'typical' international immigrant to the UK). Identification of the particular selectivity for this type of USA immigrant (and other migrant 'types'), raises questions relating to an explanation of the international migration processes involved.

Before moving on to consider employment type and skill level of respondents, some concluding remarks can be made regarding the consideration of demographic characteristics and the migrant typologies produced. It has been noted that respondents to the questionnaire have a varied set of demographic characteristics, with these variations picked out by the taxonomic procedure used. The assertion that international migration is selective in terms of migrant characteristics has been reinforced by the results of the clustering algorithm. The typologies produced as a result of the clustering procedure demand explanation, which cannot be found simply in terms of the citizenship of the migrants, but which must arise from an understanding of the migration process itself.

4.6 Employment Type and Skill Level Information

4.6.1 Employment Type and Skill Level of Respondents

Information concerning the types of industries in which respondents were employed at the time of completion

of the questionnaire is summarized in Table 4.10. For all immigrants to Scotland, jobs related to the energy/water sector (in particular the extraction of petroleum and natural gas) were by far the single most important. Oil and gas employment accounted for 50% of USA and 40% of other foreign immigrants. The second most important job type for USA immigrants proved to be mechanical/electrical engineering, especially the computing industry. Involvement with services employment was of secondary importance to 'other foreign' immigrants.

USA emigrant respondents displayed job type information again dominated by oil and gas (45.8%), followed by jobs in computing (25%). For other foreign emigrants, while energy/water employment was of importance, health, education and other service jobs predominated.

The situation was somewhat different for return migrants to Scotland, where no one job type was of such importance as oil and gas for the immigrant groups. Three types of employment were of almost equal significance - energy/water, mechanical/electrical engineering and health, education and other services.

UK emigrants from Scotland, as with return migrants, were not so dominated by any one employment type. Those involved in health, education and other services were of most importance, followed by employment in energy/water, mechanical/electrical engineering, building/civil engineering and banking/financial services.

Table 4.10 Employment Type Information For Questionnaire Respondents (%)

	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
agri/for/fish	2.5	4.2	3.2	1.5	-	5.0
energy/water	13.2	45.8	19.4	20.8	50.0	40.0
metal manuf/chemicals	2.9	-	6.5	1.5	1.2	-
mechanical/electrical/ instrument engineering	11.6	29.1	3.2	20.3	23.2	5.0
other manufacture	7.8	8.3	3.2	6.9	8.1	5.0
building/civil engineering	9.9	-	3.2	8.9	3.5	5.0
hotel/catering/retail	5.0	-	3.2	6.4	-	5.0
transport/communication	4.1	4.2	-	2.0	-	5.0
banking/finance	9.1	4.2	9.7	8.4	1.2	-
health/education and other services	33.9	4.2	48.4	23.3	12.8	30.0

From a consideration of employment type information, it is possible to conclude that in Scotland the labour demand circumstances for immigrants were rather narrow (Eg. the dominance of the oil and gas industry), while the labour supply characteristics of those leaving Scotland tended to be of a more varied nature, as evidenced by UK emigrants and return migrants involvement in many areas of employment.

Related to the type of job held by the respondent is the status of the job (Table 4.11). While 'type' of job refers to a description of the economic activity or industry with which the respondent is involved, job status refers to the level of skill and experience of the respondent.

USA category migrants were confined to the top two job status categories : managerial/administrative and professional occupations. Curiously 79.2% of USA emigrants were top managerial or administrative staff compared with 51.2% of USA immigrants.

'Other foreign' respondents described themselves as of lower status or skill level than USA migrants. While these 'other foreign' emigrants tended to show higher skill levels and status than for 'other foreign' immigrants, this was not so pronounced as for USA respondents.

The situation for UK emigrants and return migrants with regard to summarized job status information was very different. Both UK emigrant and return migrant categories

Table 4.11 **Employment Status Information For Questionnaire Respondents (%)**

	UK emig	USA emig	Oth.for emig	UK ret.mig	USA immig	Oth.for immig
managerial/administrative	38.9	79.2	35.5	46.5	51.2	30.0
professional	38.0	20.8	48.4	36.6	48.8	55.0
associate professional	6.6	-	12.9	6.9	-	10.0
clerical/secretarial	1.7	-	-	2.0	-	-
craft and related	10.3	-	-	5.0	-	5.0
personal/protective	2.1	-	3.2	1.0	-	-
sales occupations	0.4	-	-	1.5	-	-
plant/machine operatives	0.8	-	-	0.5	-	-
other occupations	1.2	-	-	-	-	-

contained greater percentages of 'lower' status individuals (especially craft and related occupations) than did the other migrant types.

It has been identified that all of the migrant categories contained mainly skilled and highly skilled people, with only UK migrant categories including significant proportions of lesser skilled respondents. As with the demographic characteristics of respondents, it can be stated that the data relating to employment points to the selective nature of international migration. Scotland lost and gained, through international migration, very specific forms of skill and experience. Important questions arise from a consideration of such data. What forces determine the international migration processes which shape the employment selectivity as identified? What are the development consequences of the international movement to and from Scotland of very specific types of expertise?

4.6.2 Comparison of Respondents and Resident Labour Force

The selective nature of international migration in terms of employment type is bourne out by a comparison of job information from the respondents with that collected for the whole of Scotlands' resident labour force.

The predominant importance of energy/water (oil and gas) employment for USA respondents has been referred to, but Figure 4.3 indicates that for all migrant categories (UK, USA and other foreign) the levels of involvement with these industries was far above that of the total resident

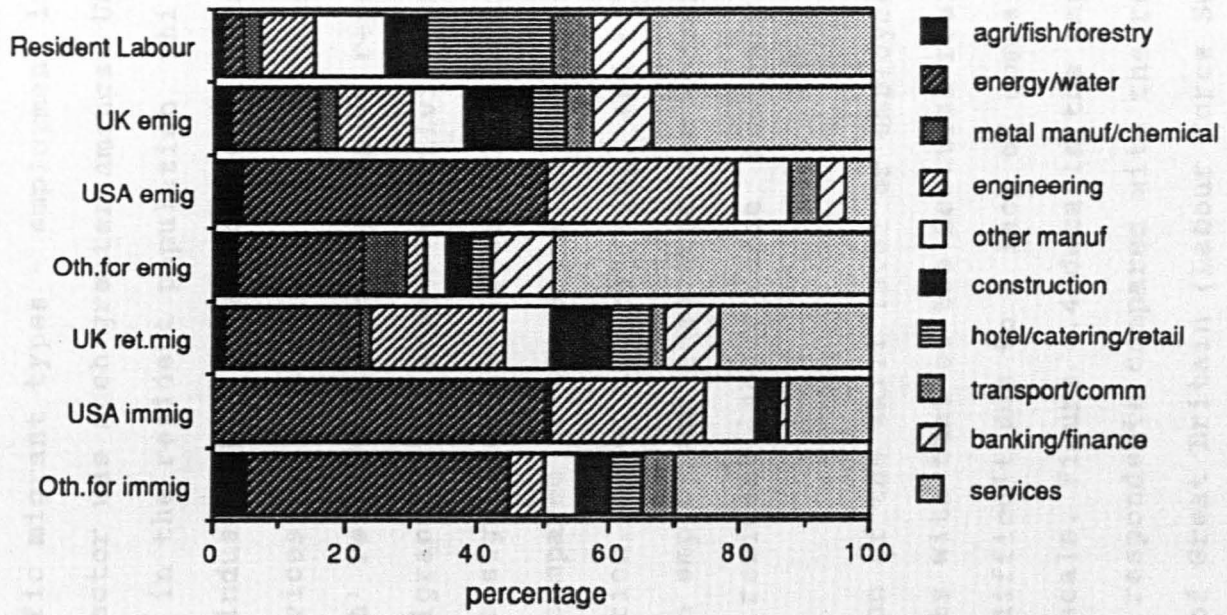


Figure 4.3 Job Type of Respondents in Comparison with Scotland Resident Labour Force

labour force of Scotland (average 3.0%). This was the only industrial activity characterized by much greater levels of importance for all migrant types compared to resident labour force.

Certain other industries were over represented amongst specific migrant types - employment in the engineering sector was much greater amongst USA and UK migrants than in the resident population, while the construction industry was of greater significance for UK migrants. Services employment was of importance amongst 'other foreign' respondents but was under represented amongst USA migrants. The economic activity which contained most significantly lowered levels of migrant involvement (compared to the Scottish labour force) was the 'distribution, hotel and catering, and retail' industry. Such employment accounted for approximately 20% of Scotland's resident labour force, but only 7% of migrants.

Comparison of the skill level or employment status of the respondents with that of the Scottish resident labour force proved difficult due to a lack of comparable data at this spatial scale. Figure 4.4 details the employment status of the respondents compared with the resident labour force of Great Britain (Labour Force Survey, Spring 1989).

While it is expected that differences exist between the Scottish and Great Britain situation with regard to employment status, use of the Great Britain data does

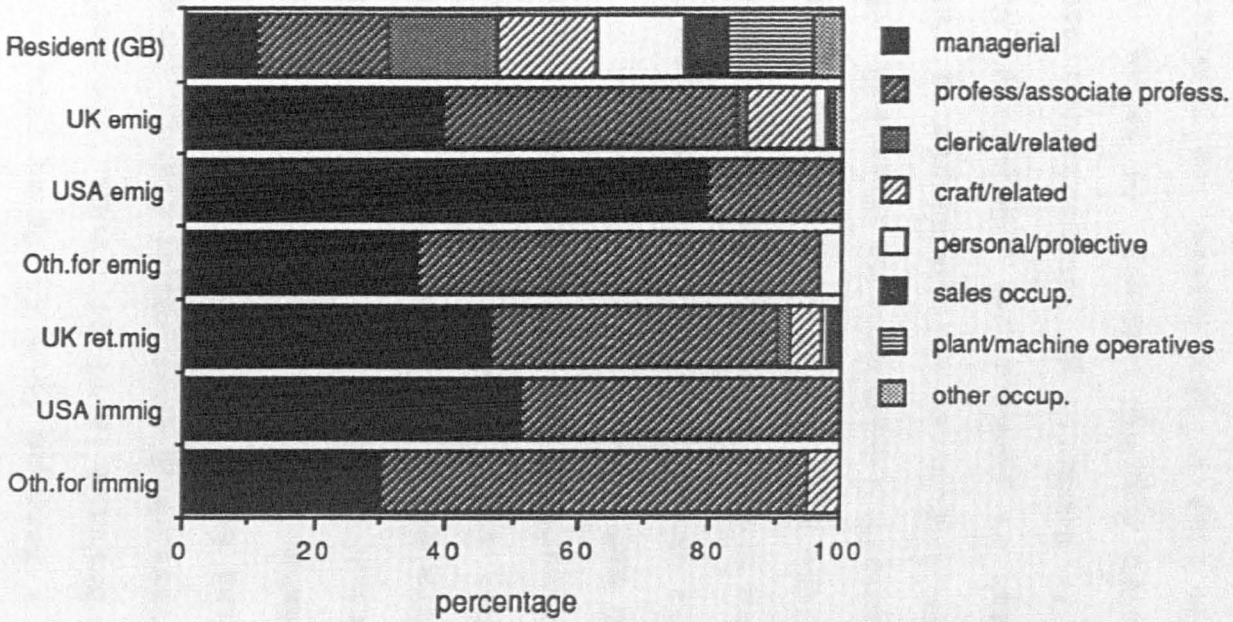


Figure 4.4 Job Status of Respondents Compared with Resident Labour Force of Great Britain

allow an overall examination of the very selective nature of the international migration occurring with regard to skill level, experience and expertise.

All respondent categories displayed much higher employment status (managerial and professional/associate professional) - ranging from 83.5% to 100% - than the average Great Britain level of 30.8%. The professional and associate professional employment status groupings of respondents were amalgamated for comparability with Labour Force Survey data. It would, however, be expected that the employment status level of the Scottish resident labour force would have been lower than that in Great Britain as a whole, further increasing the skill discrepancies noted between the migrant and resident labour forces.

4.6.3 Retired and Unemployed Respondents

Table 4.12 details information relating to those respondents who indicated that they were retired or unemployed at the time of completing the survey.

Amongst non-UK immigrants to Scotland, there were no respondents who indicated an unemployed or retired status, a situation that is perhaps not unexpected (but in contradiction to theories of international migration by some in the human capital school). Of those living within Scotland at the time of the survey, only return migrants indicated being in a position of unemployment or retirement. Unemployment was being experienced by a very small percentage of UK return migrants (3%). The nature of this unemployment could not, however, be determined from

Table 4.12 Retired and Unemployed Questionnaire Respondents (%)

	unemployed	retired
UK emig	-	0.8
USA emig	3.6	10.7
Oth.for emig	3.0	3.0
UK ret.mig	3.0	10.7
USA immig	-	-
Oth.for immig	-	-

the data available (for example, whether such unemployment was forced through inability to obtain employment at home or abroad, or a voluntary period of unemployment between international contracts).

Only 0.8% of UK emigrants indicated retired status, a percentage that matches with the 0.8% of UK emigrants who were 60/65 years of age or older (Table 4.5). It can be conjectured that these older respondents were retiring abroad to live near family or friends now resident overseas.

The situation was reversed for UK return migrants where retirement accounted for just over 10% of moves to Scotland. This large proportion indicates the older nature of some of the return migrants, whose return to Scotland equates with a retirement migration move after having lived and worked abroad for some period of time. However, Table 4.5 indicates that only 4.7% of return migrants were

of 'retirement age', suggesting that for some early retirement is occurring.

Unemployment among USA and other foreign emigrants is of a similar level to that for UK return migrants (3-4%). USA emigrants from Scotland also displayed a similar proportion of retired respondents to return migrants (10.7%). Comparison with age data contained in Table 4.5 also confirms evidence of early retirement amongst USA emigrants.

4.7 Conclusions

Only a few concluding remarks will be made in relation to the information presented in this chapter. These relate to the largely descriptive nature of the information regarding each of the migrant characteristics discussed. The description of such characteristics underlined the selective nature of international migration in terms of the demographic characteristics of the respondents and the typologies that were subsequently defined. Selectivity of employment characteristics was also evidenced.

The identification of, and nature of the selectivity described requires explanation. Although the data points to certain types of explanation, an understanding of the forces which mould international migration processes is necessary in order to achieve a real understanding of why migration has taken the forms observed in the survey.

In order to undertake such an explanation, there is need for some sort of mechanism or explanatory framework

by which to develop understanding and explanation of the migrant characteristics observed. The explanatory framework that will be used and developed throughout the rest of this thesis is the 'channels' framework. This will be used to investigate, inform and explain skilled international migration. More detailed discussion of the ideas underlying the development of the 'channels' framework and how it can be used in explanatory terms to illustrate the motors driving SIM will be given in Chapter 5.

Chapter 5 The Channels Framework for Explanation of Skilled International Migration

5.1 Introduction

Recent studies, at both macro and micro-scale level, suggest that transient movements of skilled personnel are the predominant form among contemporary international migration patterns of many countries, both in the developed and the less developed world (Salt 1984, Gould 1985, Findlay and Gould 1987, King 1986, Appleyard 1989). Established theories of international migration deal with and explain many aspects of settler migration and guest worker movement, but fail to account adequately for the international movements of skilled personnel.

Investigation of any new perspective or framework which seeks to study and explain skilled international migration must involve a consideration of several important factors. Of critical importance is an understanding of the control and organization of these international labour migrations. The mechanisms controlling and organizing such moves are of great significance in determining the final spatial, social and economic patterns of the phenomena which emerge. The impacts of a changing world economy, and the power of individual nation states in attempting to control the migration systems are equally important factors for consideration when developing a theoretical explanation of this phenomenon.

Realisation of the inadequacy of existing theoretical frameworks to deal with recent migration trends has led to a search for, and development of, new approaches to understanding international skill transfers. In seeking to do so, explanatory mechanisms appropriate to the historically and geographically specific contexts within which contemporary SIM is occurring are under development. In a British context, investigations of patterns of skilled international migration have resulted in the proposal of a migration 'channels' approach to the study of the phenomenon (Findlay and Garrick 1990).

5.2 Development of The 'Channels' Framework

The development of a channels framework as a tool for investigation and explanation of skilled international migration received some discussion in Chapter 1. The main features of this discussion are now built upon as the basis for an important part of this research.

Findlay and Garrick (1990) have developed and proposed a migration channels schema for the evaluation of international skill transfers. This framework identified "three main channels of emigration which currently mould patterns of British skilled transient movement" (Findlay and Garrick 1990 p177).

This framework is illustrated by investigation of the ways in which each of the controlling and organizing channels employ different mechanisms for migrant selection and placement, and consequently the distinctive migration patterns which each involves.

The first of the three channels identified (the internal labour market of multinational companies), has been the channel which has received most research attention. Powered by a changing world economy resulting in globalization of production, these large companies have been responsible for considerable staff transfers between countries (Beaverstock 1990, Brewster 1988, Salt 1988). The multi-branch nature of these large companies necessitates the international transfer of highly skilled workers.

Two other major channels were identified as responsible for contemporary skilled international transient migration : international recruitment agencies and small/intermediate sized firms with international contracts. The existence of these channels was promoted by somewhat different forces from those conditioning the operation of ILM's in multi-national companies. The motors of economic growth (in certain parts of the world), as distinct from those of economic development, were of key importance to these channels. Economic growth creates demand for individuals with certain specific skills - skills not immediately available within the indigenous labour forces of these countries.

Small and intermediate sized British and other "western" companies have become involved in undertaking development projects in less developed countries. Findlay and Stewart (1986) found that in order to fulfil these international contracts, these companies recruited workers

with the necessary skills and experience. Skilled migrants working for these firms were usually recruited externally to the firm and were offered temporary employment only for the period of the overseas contract.

International recruitment agencies have been employed by governments, armed forces and private organizations in less developed economies to select appropriate foreign technical, professional and managerial skills. These agencies link British skills not only with Third World labour markets, but also with those of other areas in the more developed world. Findlay and Stewart (1986) have shown that this migration channel does not only operate independently, but that smaller companies holding international contracts may perhaps use the services of international recruitment agencies to select appropriate expatriate staff.

The three channel model proposed by Findlay and Garrick (1990) for the explanation of contemporary UK emigration has distinct spatial dimensions. MNC's can be expected to make international transfers of staff from ILM's drawing mainly on the skill pools found in the core regions of the economy in which their head offices are located. Skilled migration via this channel can be expected to be heaviest from the core regions of an economy.

The selective regional nature of skilled migration organized by international recruitment agencies and through the international operation of small and medium

sized companies is, however, less easily interpreted. It appears that recruitment agencies hold certain stereotyped images of regional labour markets, thus targeting their activities when recruiting specific skills in one region of the UK rather than in another. It also seems that smaller and medium sized companies in Britain's 'peripheral' regions may be more likely to have been "forced" to look abroad for contracts as a survival strategy than similar companies in the more prosperous South East of England. Such companies therefore, may be responsible for considerable temporary international skill transfers from such peripheral regions.

This then is the level of development of the channels framework as an explanatory device. No new Grand Theory of migration has been established by the development of such a framework, but it was not the intention that this should be so. Recent research has progressed in accounting for some of the complexities of skilled international movements. It now becomes pertinent, from the author's survey results, to assess the importance of each of the three channels already discussed, and to investigate the existence of 'other' channelling mechanisms driving the SIM system.

5.3 Channels of Scottish emigration and Immigration

In the researcher's own survey, respondents were asked to indicate how they had arranged their employment abroad, with reference to their last or present migration. A number of alternative channels were listed in the

questionnaire, while respondents were free to indicate any 'other' channels which did not appear. While the majority of respondents indicated only one channel to describe the organization of their last (present) international move, a significant minority indicated involvement with two channels. Discussion will firstly focus on those respondents indicating only one channel, before considering details of individuals who indicated two channelling mechanisms.

5.3.1 Respondents Indicating One Channel

Information relating to migration channels arising from the questionnaire is given as Table 5.1. The results for the three migration channels represented in Figure 1.5 are considered first.

An international move through the internal labour market of their employer was found to be the single most important channelling mechanism, although the degree of dominance of this channel varied with migrant type. In the case of USA immigrants and emigrants, 76.7% and 92.6% of respondents respectively, indicated this channel. In this instance it would appear that Salt's ideas (1984, 1986b, 1988) are entirely bourne out. However, lesser proportions of both UK and other foreign migrant categories indicated ILM transfer as their channel of international movement. Intra-company transfer moves proved to be of least importance for UK emigrants (24.2%) and UK return migrants (43.6%). This is an indication of the greater complexity of channel type affecting UK and 'other foreign' migrant

Table 5.1 Migration Channel (% of respondents indicating only one channel)

	UK emig	USA emig	Oth.For emig	UK ret.mig	USA immig	Oth.For immig
Channel Type						
Intra-company transfer	24.2	92.6	27.2	43.6	76.7	45.0
International recruitment agencies	8.1	-	9.1	6.8	1.2	-
Companies with inter-national contracts	0.5	-	-	2.1	1.2	5.0
Family and friends	14.8	3.7	9.1	10.3	4.6	20.0
Newspaper and media	22.4	-	18.2	15.0	1.2	15.0
Government immigration organization	1.3	-	-	2.1	-	-
Other	28.7	3.7	36.4	20.1	15.1	15.0

categories.

With regard to the channelling actions of international recruitment agencies, much lower proportions of involvement with this channel were indicated (in comparison to the intra-company transfer channel). The largest degree of involvement with moves abroad through such recruitment agencies were found to be for UK emigrants and return migrants, but even here this channel accounted for only 8.1% and 6.8% of respondents respectively.

Included with recruitment agency moves are those respondents who found work abroad due to the actions of government immigration organizations (only UK emigrants and return migrants indicated this channel). These immigration organizations act as a specialized form of recruitment agency, finding employment only for those immigrants who have skills required in the particular destination country. Including these increases the proportion accounted for by international recruitment agencies to 9.4% and 8.9% for UK emigrants and return migrants respectively.

The channel representing small and intermediate sized firms with international contracts, accounts for only a very small number of all migrant types. This may be partially because the wording in the questionnaires relating to this channel was not satisfactory. Lower representation of respondents indicating international

recruitment agencies as the channel moved through may also have occurred for the same reason.

It is also possible that the data source used for this survey produced an over representation of some migration channels and an under representation of others. It may be that those migrants obtaining employment overseas through international recruitment agencies and companies with overseas contracts are less likely to move their home (spouse and children) abroad due to being employed on "bachelor status" contracts and due to the temporary nature of their employment. As a result they may also be less likely to use the services of international removal firms.

Some evidence of this under representation of the international recruitment agencies channel was provided by the author's independent analysis of the channel details provided by migrants contacted through a questionnaire in the 'Home and Away' magazine (Table 5.2). For these respondents, the activities of recruitment agencies were a much stronger force in the organization and control of international migration.

Almost one third of Home and Away respondents described their last international move for employment as arranged through the actions of such recruitment agencies. Only 13% indicated an intra-company transfer as responsible for their international movement. It can be concluded that the two sampling techniques utilized gained responses from different 'types' of respondent. The

Table 5.2 Migration Channel for 'Home and Away' Questionnaire Respondents (%)

Intra-company transfer	13.1
International recruitment agencies	29.2
Companies with international contracts	3.8
Family and friends	5.4
Newspaper and media	26.1
Other	22.4

subscribers to Home and Away magazine were involved in rather different channelling mechanisms.

Comparison of the channels indicated in Figure 1.5, and the responses obtained from both survey sources indicates the need for extension of the explanatory framework of skilled international migration, at least with regard to the Scottish situation.

Respondents not indicating any of the channels featured in Figure 1.5 were given other choices to describe how they found work abroad. Family and friends. and newspaper and media adverts were named as alternative channels.

The channelling action of information received from family and friends accounted for significant but highly variable proportions of the international moves of the migrants contacted (Table 5.1). This channel was of least importance in describing the international migrations of USA respondents. However, family and friends appeared to

be of more importance in channelling movements by UK and 'other foreign' respondents. The figures for this channel of movement were unexpectedly high, and lead to some interesting questions and considerations. What type of migrants (in terms of age and job type or status) use information from this source? Does this channel type link with lower job status or with certain job type categories? As recent research work on contemporary Irish migration to the UK has shown, kinship and informal friendship networks are powerful in channelling migration flows of less skilled people (Shuttleworth and Kockel 1990).

The channelling actions of advertisements in newspapers and other media sources also did not feature in Figure 1.5, but was included as an option in the questionnaire. Results show that varying proportions of respondents from each migrant category indicated this channel as the method by which they obtained information leading to international movement. This channel appeared to be virtually non-existent and of very little importance for USA migrants into/out of Scotland.

A very different situation was represented for UK and other foreign migrants, with 15% or more of these migrant categories indicating that advertisements had influenced their migration decisions. The proportion was highest for UK emigrants, with one quarter (23.3%) of this category using newspaper and media adverts to enable them to make international moves from Scotland.

Again certain very important issues arise from consideration of the use of adverts in the media as a channelling mechanism. For example, what does applying for employment advertised in a newspaper/magazine actually entail, and is it expected that the applicant will arrange all aspects of the subsequent international move themselves? Is the applicant actually contacting an international recruitment agency or MNC through application to such a media advertisement? What are the spatial implications of involvement with this channel?

Respondents not able to categorize their channel type as any of the pre-defined responses to this question were encouraged to indicate 'other' channels. The actual types of 'other' channel indicated will receive more detailed consideration subsequently, however it is important to note the proportions of each migrant type indicating some 'other' form of channel.

The importance of these 'other' channel types ranged from only 3.7% of USA emigrants, to 36.4% of 'other foreign' emigrants. For UK migrants, other channels accounted for 20.1% of return migrants moves, rising to 28.7% of emigrant moves. This was therefore more important than any other single channel indicated by this migrant category. USA migrants displayed a much smaller but similar pattern of response, with 3.7% of USA emigrants (potential return migrants to USA) and 15.1% immigrants (emigrants from the USA) indicating these 'other' channels.

5.3.2 Respondents Indicating Two Channels

Information contained in Table 5.3 reveals that the proportion of migrants who indicated two channels was quite small (9% of UK emigrants and 3.6% of USA emigrants). The presence of this group serves, however, as a reminder of the complex nature of SIM. These respondents indicated that their international move could only be explained in terms of a combination of the effects and actions of two channel types.

This is an important consideration. Can such international moves in fact be the result of the operation and interaction of two or more channelling mechanisms? This question is dealt with more fully later when the information, evaluation and action dimensions of the decision making process of SIM are examined.

Consideration of the information (Table 5.3) indicates that a variety of combinations of two channel types were used to describe the moves of these respondents. It can be noted that the newspaper and other media channel was of very great importance in explaining the international movement of some UK emigrants. 14 of the 21 respondents indicating this channel, identified it as one of two involved in their movement. The proportions who indicated the involvement of family and friends in some capacity as one of two channels for international movement was also high (8 of the 22 UK and USA respondents).

Table 5.3 Migration Channels of Respondents Indicating Two Channels

	UK emigrant				USA emigrant
	family & friends	govt. immig. organization	newspaper & media	other	family & friends
recruitment agencies	1	1	2		1
companies with international contracts				1	
family & friends			3	3	
govt. immig. organization				1	
newspapers & media				9	

Total number UK emigrants 21
Total number USA emigrants 1

5.3.3 Other Channels

The diversity of 'other' channels specified is shown in Table 5.4. Twenty three different other channels were indicated, although it was found that several could easily be combined or inserted in one of the previously defined channel categories. Six groups of responses were however identifiable and represent a working generalization of the responses (Table 5.5).

Table 5.4 Diversity of 'Other' Channels Indicated

- migrated with mother and father
- found work when got to destination
- contacts in the industry/professional grapevine
- on holiday in country and found job
- mail shot/wrote to employers in destination country
- applied to crown agents and was selected
- a voluntary aid worker
- emigrated permanently to destination country
- enquired personally to employer
- job arranged by university
- "up and left Scotland, disgusted by the state of it"
- transferred by UK government
- contacts by previous colleague
- returning to previous employer abroad
- church related
- visit arranged due to strong ties between universities in Scotland and abroad
- civil service move
- arrangement between Edinburgh University and US Army
- self employed, arranged own job in destination country
- Ministry of Defence transfer
- job offer at international conference
- approached by a foreign employer
- head hunted

Table 5.5 'Other' Channels of International Movement (%)

	UK emig	USA emig	Oth.For emig	UK ret.mig	USA immig	Oth.For immig
Themselves the channel	60.0	100.0	58.3	28.9	23.0	33.3
Contacts in industry	25.4	-	16.7	28.9	30.8	66.7
Professional Institutional	13.3	-	16.7	17.8	15.4	-
Church related	-	-	8.3	4.4	30.8	-
As dependents	-	-	-	6.7	-	-
Other	1.3	-	-	13.3	-	-

Several respondents defined 'themselves' as the channel. They had created the channel by initially establishing another raison d'etre for going to the country where they were subsequently employed. This included some people who had gone on holiday to the country and found a job when there, as well as those who had arranged their own job in the destination country, for example through being self-employed, or by writing enquiry letters to employers in that country. This method of moving internationally accounted for 50% or more of those who indicated an 'other' channel. This channel type was of slightly lesser importance among return migrants and both categories of immigrants to Scotland.

A considerable number of people had also moved due to pre-established contacts within their industry. For UK return migrants, the 'contacts in industry' channel was of considerable importance (28.9%) among 'other' channel respondents. This was also the case with UK emigrants (25.4%).

Of third overall importance among those indicating 'other' channels was the professional institutional channel. Such moves accounted for 13-18% of these respondents, giving evidence of the importance of inter-governmental arrangements and other institutions in controlling and directing the international movements of their professional employees.

A small number of respondents moved through church activities. Of greatest significance here were USA

immigrants to Scotland. Only a small number of UK return migrants were involved in what was labelled as a 'dependents' channel. In these cases, the respondent was not really the decision maker.

A number of 'other' non-classified responses were given. These were respondents who did not adequately specify the nature of the channelling mechanism involved. These migrants were therefore "failed" respondents in that they did not understand the question fully or refused to answer.

Combination of the channel data contained in Tables 5.1, 5.3 and 5.5 is produced as Figure 5.1. This figure uses proportionally sized bars to display the overall importance of each of the channels of movement. It should be noted that the small number of respondents indicating two channels were included with the 'other' channel category in the overall classification of respondents. These respondents have equally 'failed' to adequately specify the channel through which international movement was ultimately undertaken.

The varying degree of importance of the different channels for each of the different migrant categories is apparent. The diversity and complexity of forces accounting for SIM in the Scottish context is also evident.

It would appear that the demand for international skilled labour in the Scottish economy (especially USA migrants) is satisfied through the operation of very few

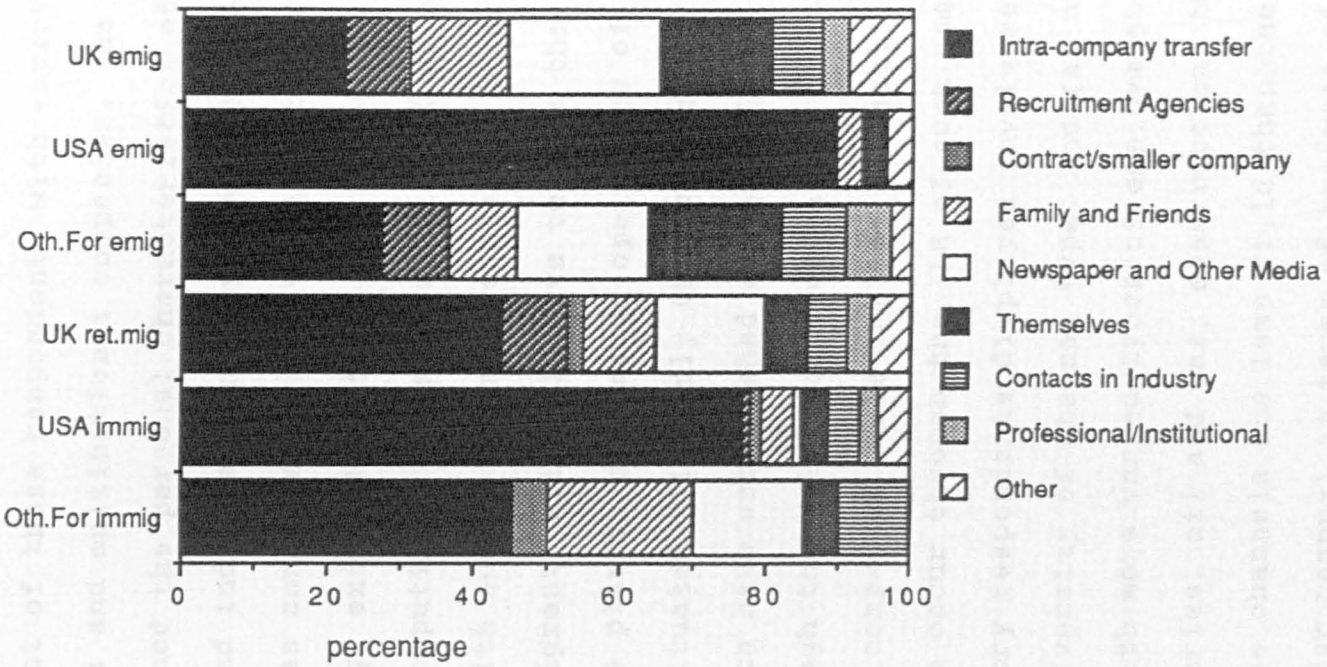


Figure 5.1 Channel of International Movement for Migrant Respondents (overall)

channels. This is evidenced by the overwhelming importance of the intra-company transfer channel for the control of the international labour migration of USA respondents into/from Scotland. The nature of this channel reflects the involvement of these respondents with employment in trans-national and multinational companies. The previous chapter examined the personal characteristics of the respondents and indicated that employment of USA respondents was concentrated in only selected economic activities (Eg. extraction of oil and gas, electrical engineering/computing). The spatial dimensions of involvement with such a channel is also of importance since these migrants will only move to/from those areas in Scotland where plants, offices or operations of the company are situated. Similarly they will come from/go to countries which have established economic links with Scotland through the multi-location nature of these large international companies. This implies the spatial control of moves which occur through the ILM of such companies.

UK category respondents displayed involvement with a far greater diversity of channel type, and (as noted previously) with more varied types of employment (Eg. service industries, oil and gas, construction, banking and finance). These channels are less rigid than the intra-company transfer channel in terms of the mode of operation, with lesser degrees of 'control' of international movement. In a spatial context, this implies the involvement of many more countries of

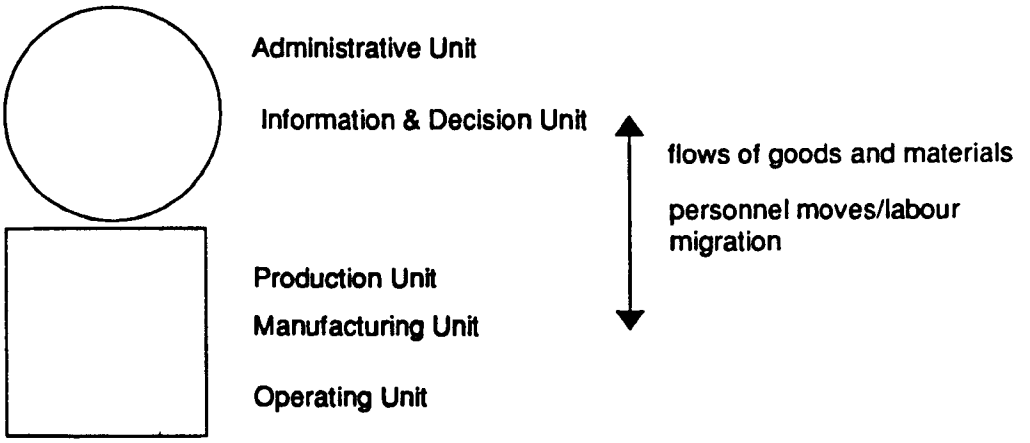
destination/origin of international movement (not tied by branch location), and movement to/from a number of Scottish regions.

5.4 Operation and Control of The Channels

Some limited explanation has been offered for the functioning of several different channel types. Figure 5.2 is a diagrammatic representation of the operation and actions of certain channels. Tornqvist (1968) viewed a firm or company as divided into administrative and production units (Figure 5.2A). The administrative unit was in control of the flows of information and decision making. The production unit of the company was concerned with manufacturing and operational activities, resulting in flows of goods and materials. It is a contention here that the administrative unit of a company would also control and operate employment functions and hence migration flows (both nationally and internationally). This theoretical division of a company can be used to develop diagrammatic representations of the geographic operation of certain channel types (Figures 5.2B-5.2F).

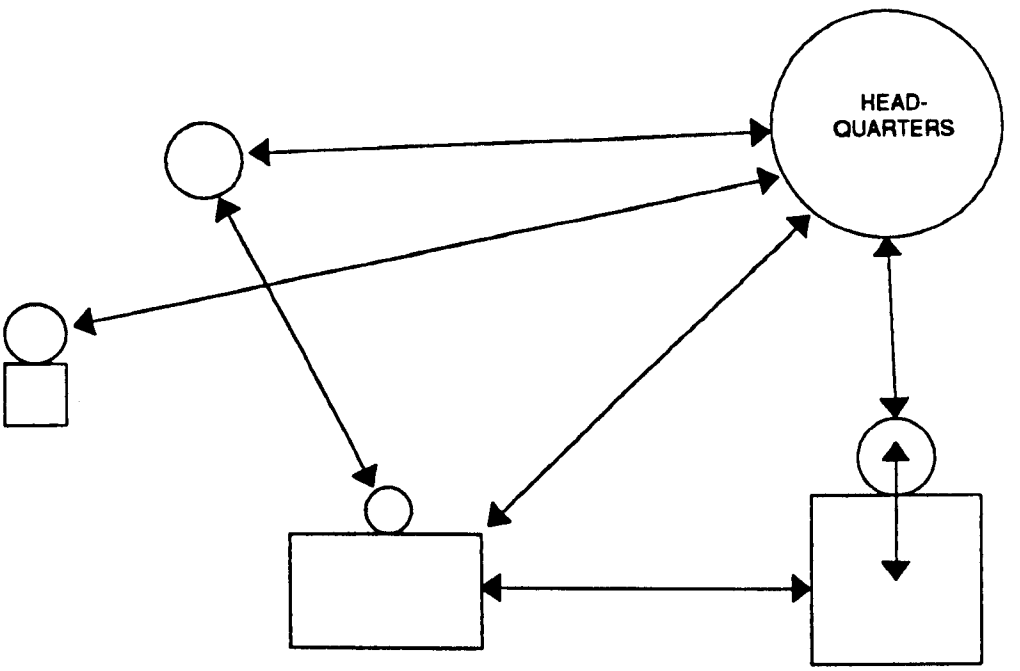
The workings of the internal labour market of a multinational company are described as Figure 5.2B. The arrows between the elements of a MNC represent transfers (some international) of personnel and information between units of the company. All the elements of the company structure are connected to the offices of the world head quarters.

Figure 5.2 A Theoretical Division of a Company



A after Tornqvist 1968

Figure 5.2 B-F Representation of Operation and Action of Certain Channels

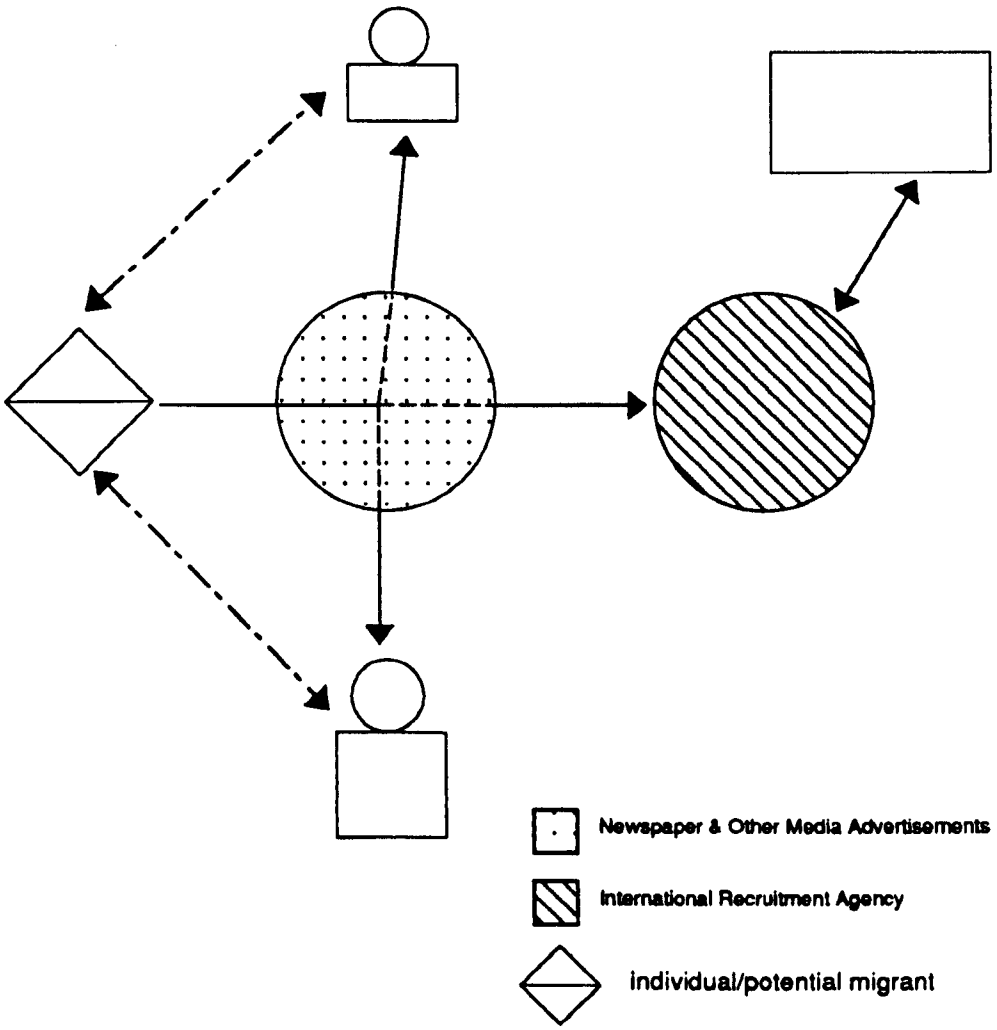


B Internal Labour Market of Multinational Company

Figure 5.2C represents the actions of newspapers and other media advertisements as enabling agents to international movement. Advertisements in newspaper and other media allow individuals of one country to contact those companies or institutions in other countries who are seeking personnel. Once contact is made, further discussion and flows of information occur between the individual and the company directly (----- lines), until the international move is arranged. This figure also illustrates that international recruitment agencies may make use of adverts in newspapers and journals to increase interest and awareness of their activities. This is a method of making contact with individuals, who are then matched up with specific employment vacancies within a company for whom the agency is recruiting.

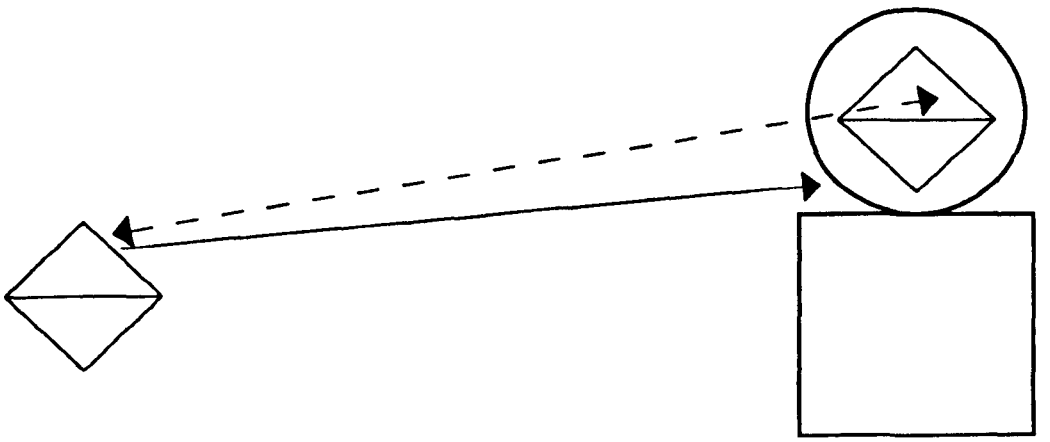
Employment arranged due to contacts within an industry or job type is shown by Figure 5.2D. An individual may have a contact within a company of another country (or indeed within the same country) who is able to arrange for them, or advise them of employment opportunities in the industry in which they are both involved. Such opportunities may be within the contacts company or some other company, in the same industry or in an industry requiring very similar skills. Information flows between the individual and the contact, and between the individual and the employer. As a result of these contacts, progress towards employment abroad is "smoothed", and a resulting international move may be

Figure 5.2 (continued)

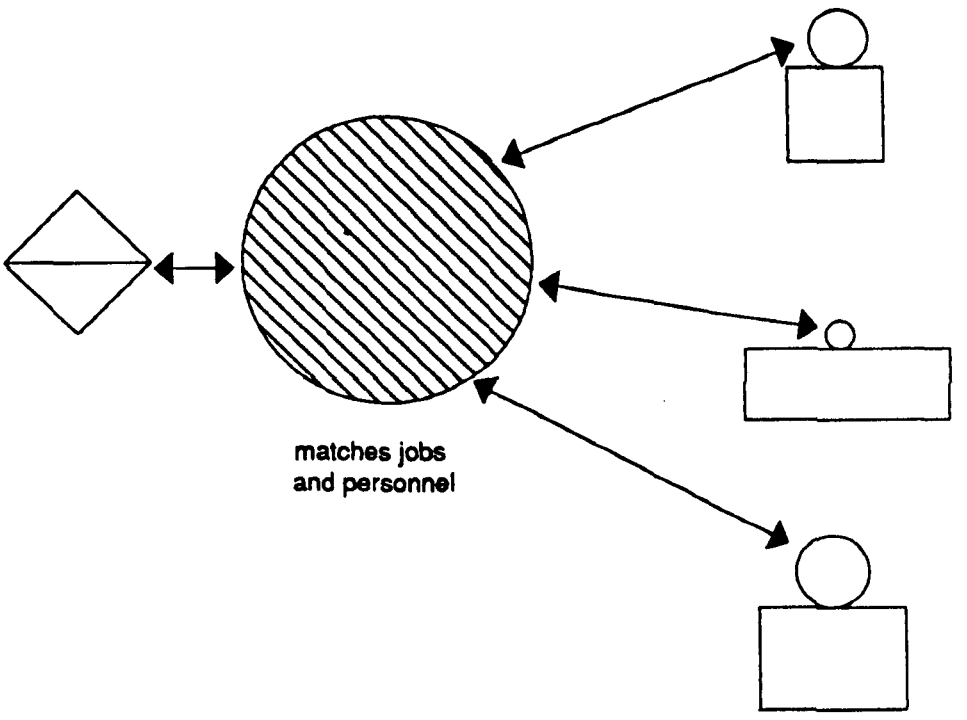


C Newspaper & Other Media Advertisements

Figure 5.2 (continued)

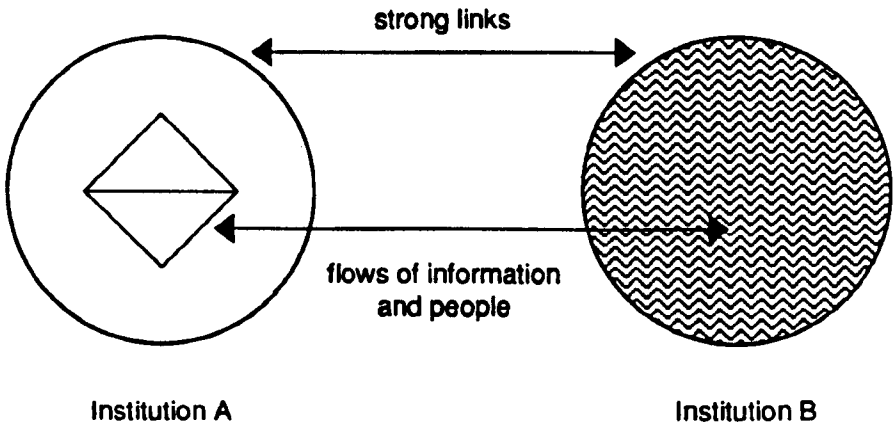


D Contacts in Industry



E International Recruitment Agency

Figure 5.2 (continued)



F Professional Institutional

undertaken.

The activities of international recruitment agencies are represented as Figure 5.2E. The main feature of importance is the filtering action of the recruiting agency. These agencies act for companies, governments or institutions in a foreign country, and match the job demands of the foreign employer with the skills supplied by individuals. This matching of job and personnel results in an international move to take up employment.

The last representation, Figure 5.2F, displays the situation where an individual of an institution in one country, may be involved in an international move to another institution in a different country. An illustration of this is the movement of a skilled individual due to strong international links between two universities. Also included within this professional institutional channel are those respondents moving internationally as a result of the operation and influence of what can be described as a very specialized ILM system. An example of this would be civil servants applying for overseas postings.

The diagrams of Figure 5.2 display only very simple operations of certain of the migration channels. Such simple visual scenarios are of use and importance, however, in prompting thought on how these channels operate and the controlling and enabling mechanisms that are involved for each.

5.5 Reliability of Channel Information

The question of the reliability of the information provided by the questionnaire respondents on the channels of their international movement is of critical importance in affecting the development and use of the channels framework for the understanding and explanation of skilled international migration. As already stated, SIM is a complex phenomenon. With regard to the complexity of the channelling question, a small proportion of respondents indicated that their international move was due to the operation of two channels, while certain other respondents can be said to have "failed" this question due to a lack of understanding or a refusal to divulge such information.

However, while the issue of channels is a complicated one, some clarity of thought is needed. Every one of the respondents moved through a channel, but, they may have :-

a) received information about an international move from one channel

b) evaluated the opportunity with respect to certain other channels

c) actually moved abroad via another channelling mechanism.

For example, contact with one UK emigrant from Scotland revealed the complexity of channel information. In the early part of his career, he had the opportunity of undertaking a two year assignment to the USA on an intra-company transfer. Later, after several career and employment changes he heard about the opportunities and

benefits of employment in the Middle East from friends and colleagues involved in the same sector of the economy (building and civil engineering). He evaluated the costs and benefits of such a move with his family, taking present employment and employer into account. He checked advertisements in a professional journal, but applied in answer to an advert placed by an international recruitment agency, and moved to the United Arab Emirates under a temporary contract as a project manager with a British company.

In terms of an answer to the channels question, clarity of thought is therefore needed both from the respondent and on the part of the researcher who will interpret the questionnaire information. The respondent whose history is presented above should answer the question by indicating either the international recruitment agency or newspaper/media channel, as this was how he actually found out about employment overseas. In general, respondents seem likely to have indicated the channel which they believe to have been of most importance for their international move. For example, while respondents will make an international move through one channel, the operation and control of other channel types may also have received their consideration, and been of very great importance to their move. The failure of respondents who indicated two channels, was to make the critical decision of which channel they actually moved through. These respondents therefore gave valuable

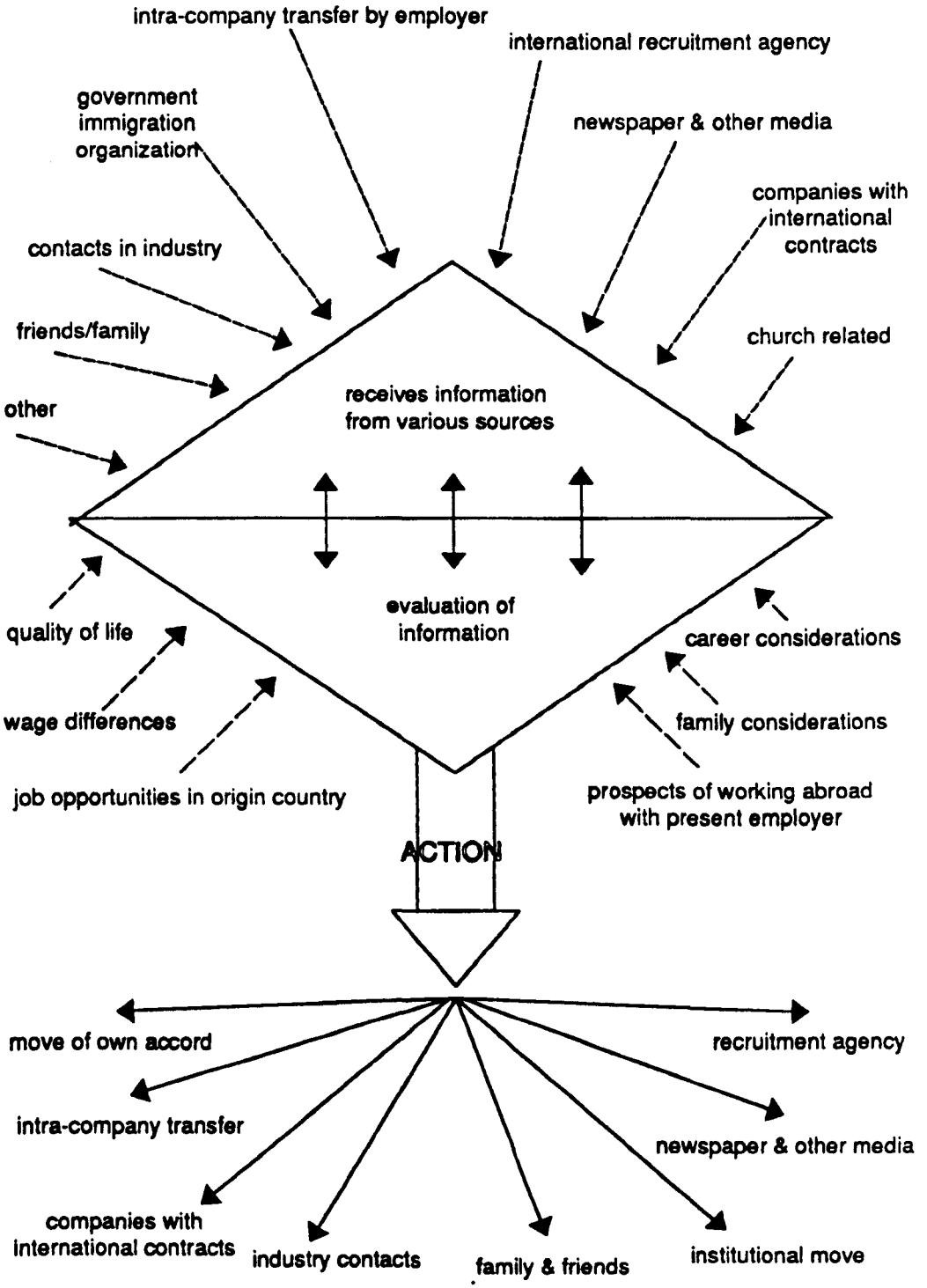
information on the two channels which influenced their international move, but did not reveal the channel which finally enabled their migration.

The channels indicated by all of the respondents and discussed previously, therefore offers an insight into the information sources, evaluation and action dimensions of the decision making processes of individuals involved in SIM. Figure 5.3 gives some indication of the processes involved in this decision making, and the array of variables that the individual may consider before undertaking an international move.

The individual receives or obtains information about moving internationally from one or a variety of sources. This information on the channels through which employment abroad may be obtained and secured are subsequently evaluated by the individual.

Many variables have to be considered and taken into account during such an evaluation process. For example, the individual may have family considerations, and must evaluate how employment abroad will effect them. Will the family also move abroad? - or - Is the employment on a bachelor status contract? What about children's education when abroad? What are the effects of such a move on spouse/partners job or career prospects? What are the prospects of the individual being able to obtain some working time abroad if they remain with present employer? What are the opportunities of obtaining a "better" job in the home country?

Figure 5.3 Information, Evaluation and Action Dimensions of Decision Making in Skilled International Migration



(source : author)

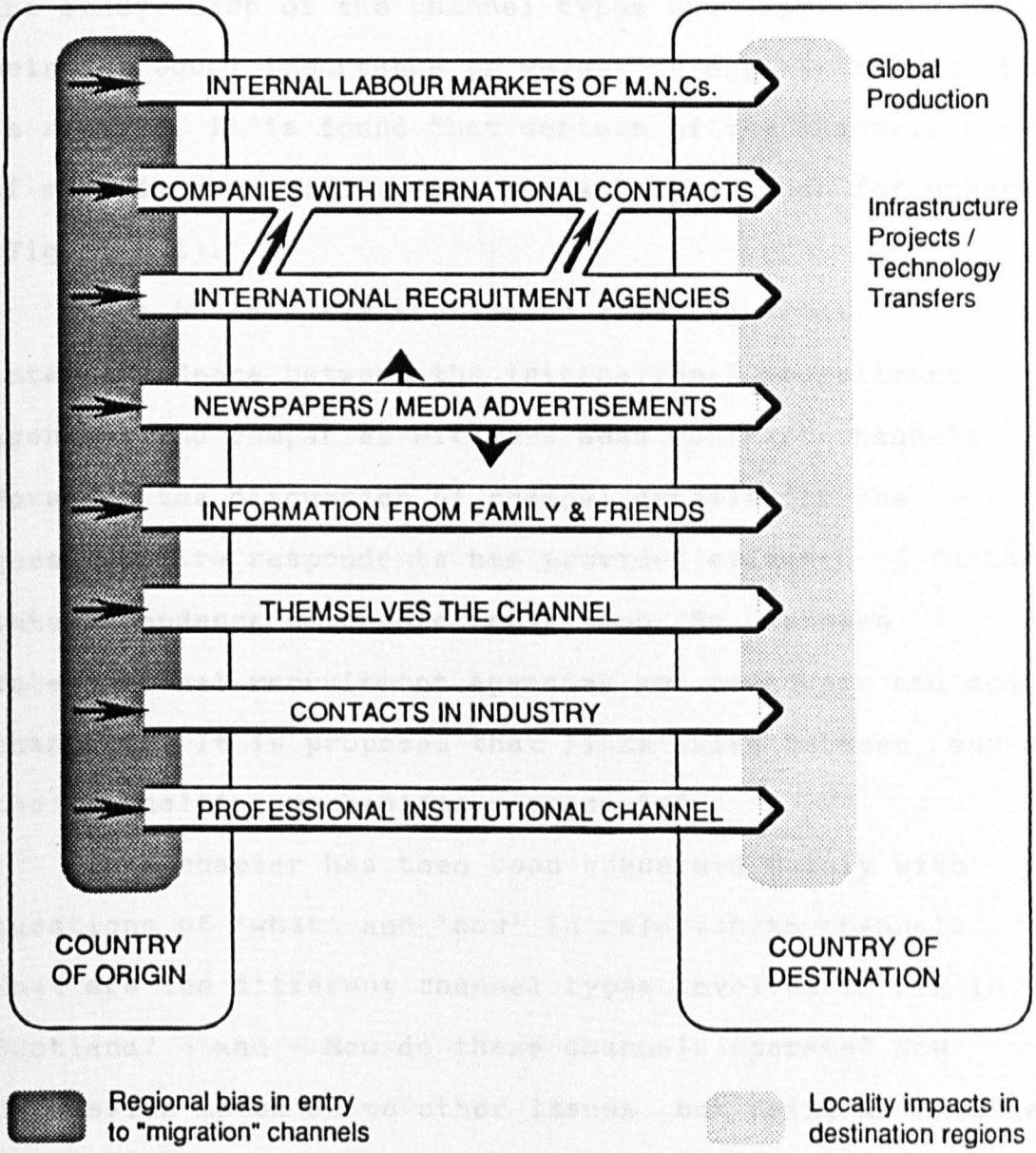
Evaluation of international opportunities therefore have to be undertaken within the constraints of considerations for family, present employer, career, etc. Contemplation of these and other factors may lead to the individual searching out and obtaining information on employment abroad via other channels. This results in a re-evaluation of the proposed international migration, again considering family and current job etc.

Ultimately, the receipt of, and evaluation of information leads to decision making in relation to an international move, and the best channel through which it should be made. Such a decision results in the action of undertaking an international move for employment. The lower part of Figure 5.3 displays the array of channel types through which the international moves of the respondents to this survey were accomplished.

5.6 Conclusions

One of the main conclusions of this chapter must be the general validity of the channels framework for the explanation of skilled international migration. Examination of the information supplied by the questionnaire respondents in this survey has revealed the complex nature of migration channels. The channels identified by the respondents included several new or previously 'unidentified' channel types. These channels are shown in schematic form in Figure 5.4. This figure is a development and extension of the previous channels framework of Findlay and Garrick (1990) shown as Figure

Figure 5.4 The Mechanisms "Channelling" Skilled International Migrants



1.5.

However, it should be noted that the channel types identified in Figure 5.4 are not of universal applicability for all of the migrant types identified in the study. Each of the channel types are represented as being of equal importance or weight in explaining SIM, but in reality, it is found that certain of the channels are of more importance for some migrant types than for others (Figure 5.1).

Also the diagram represents some degree of interdependence between the international recruitment agencies and companies with overseas contract channels. However, the discussion of channel details for the questionnaire respondents has provided evidence of further interdependence of channel operation (Eg. between international recruitment agencies and newspaper and media channels). It is proposed that links exist between many of the channelling mechanisms represented.

This chapter has then been concerned mainly with questions of 'what' and 'how' in relation to channels. What are the different channel types involved in SIM in Scotland? - and - How do these channels operate? Now discussion moves on to other issues, but using an extended channels framework (Figure 5.4) as the explanatory mechanism for understanding the results. The 'what' and 'how' questions asked of the channels will now be used to answer 'why' questions about the other variables and responses to the questionnaire.

Chapter 6 Using A Channels Framework To Achieve an Understanding of the Selectivity of Migrant Characteristics

6.1 Introduction

Discussion in Chapter 4 concluded that the demographic characteristics of the survey respondents were diverse, and that distinctive forms of selectivity in these characteristics could be identified for the different migrant types. Information in Chapter 5 indicated the different channelling mechanisms for the international moves of the various types of migrant. Discussion here, follows on from these two themes. The main focus of attention is the relationship between the different channelling mechanisms and the spatial selectivity of respondent characteristics. This is achieved by investigating how homogeneous or heterogeneous are these channelling mechanisms, with regard to certain personal, employment, and locational characteristics of the migrants.

6.2 Personal Characteristics of Respondents

6.2.1 Gender

Table 6.1 contains information on the overall importance of the gender of respondents by channel type, while Figure 6.1 A-J summarizes gender details for each channel and migrant type. While the overall dominance of male respondents to the survey is indicated, interesting gender differences appeared to exist between the channels. The chi square test was utilised as a means of identifying

Table 6.1 Gender Characteristics by Channel Type (%)

	Male	Female
Intra-company transfer	96.6	3.4
International recruitment agency	91.3	8.7
Temporary job for company with overseas contract	87.5	12.5
Family and friends	92.8	7.2
Newspaper and other media	84.2	15.8
Themselves the channel	82.0	18.0
Contacts in industry	79.5	20.5
Professional institutional	95.2	4.8
Church related	100.0	0.0
Other channels	73.5	26.5

Chi square Test Results

X^2 calculated value = 38.03
critical tabulated value for 9 x 2 table,
8 degrees of freedom = 26.12
H_o rejected 99.9% confidence

the statistical significance of the gender differences noted. Some aggregation of the data was necessary for application of this statistical technique. The null hypothesis (H_o) postulated that there was no statistically significant relationship between channelling mechanisms and the gender of the respondent. The chi square analysis provided a measure of the aggregate difference between observed frequencies and those expected under H_o. The greater the calculated chi square value (X^2), the less likely that H_o is correct.

Comparison of the calculated chi square value with the critical value for this statistic (at the appropriate degrees of freedom) established the rejection level for the null hypothesis. The relationship between channelling

mechanisms and gender was found to be statistically significant, accepted at the 99.9% confidence level.

Those channels most dominated by male respondents appeared to be the intra-company transfer channel (96.6%), and the more specialized form of this type of move which occurred when professional individuals moved through institutional channels (95.2%). The observed level of female involvement with the intra-company transfer channel (3.4%) was found to be much lower than that expected from the chi square calculation (9.8%). International moves channelled by church or religious mechanisms were, not surprisingly, 100% male dominated.

A much higher level of female response was indicated for the 'other' channel category - observed 26.5%, expected 9.8% - accounting for the operation of a variety of poorly specified or unspecified channels. The variation in type of channelling mechanisms included in this 'other' category may indicate an explanation for the high level of female involvement, as may the inclusion of channelling mechanisms described as "dependant" and "moved with husband's job" (see Chapter 5). Those respondents moving internationally due to 'contacts within industry' (20.5%), or, who were 'themselves the channel' (18.0%), or, who made use of 'newspaper and other media sources' (15.8%) also contained significantly large female populations.

Details of gender and migrant type for those respondents moving through the internal labour market of their employing company (Figure 6.1 A), indicate that this

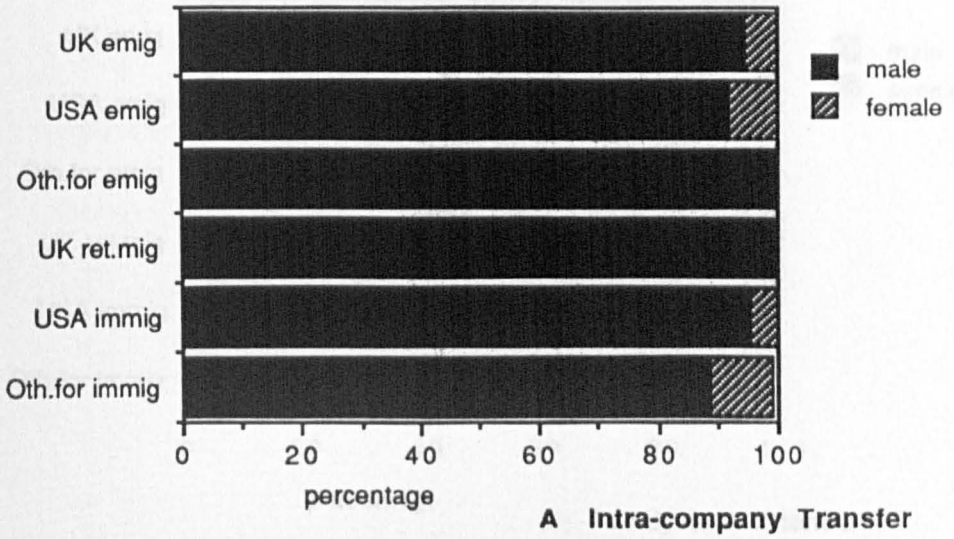
mechanism of movement was of single greatest importance for both USA immigrant and emigrant males and females. This underlines the importance of this channel for USA migrant moves (as indicated in Chapter 5) for both genders.

The operation of international recruitment agencies as a channel for international movement again evidences the dominance of male responses (Figure 6.1 B). Amongst female migrants, only those from the UK were involved in movement through this channel, with involvement of UK emigrant females (14.3%) proportionally greater than for UK return migrants (4.8%).

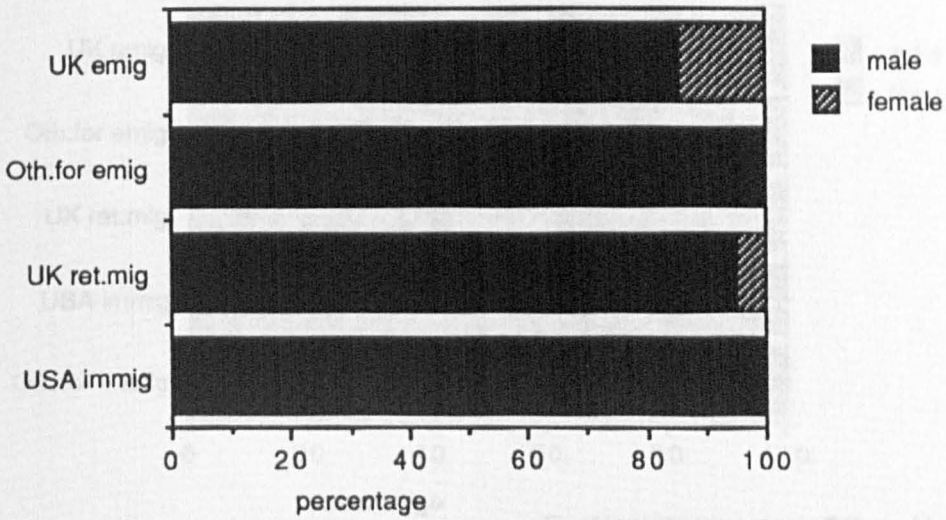
With regard to the 'newspaper and other media' channel (Figure 6.1 E), it appeared that a much greater proportion of UK emigrants were female (20%), than UK return migrants (8.6%) - similar to the situation found for gender in the international recruitment agencies channel. While other foreign immigrant and emigrant groups displayed high levels of female involvement with this channel type (33.3% and 16.7% respectively), actual numbers were very small.

In summary, it appears that there were differences in the overall involvement of males and females with the different migrant channels under study. This becomes especially clear when channels are studied in relation to different migrant types. It is significant, for example, that the research discovered that the channels accounting for the highest proportions of female respondents were the

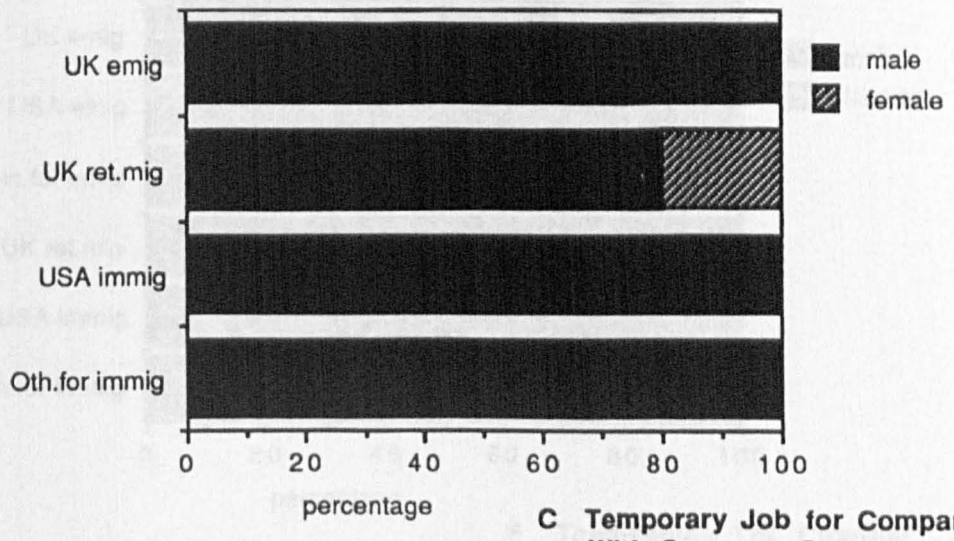
Figure 6.1 A-J Gender by Channel Type and Migrant Type



A Intra-company Transfer

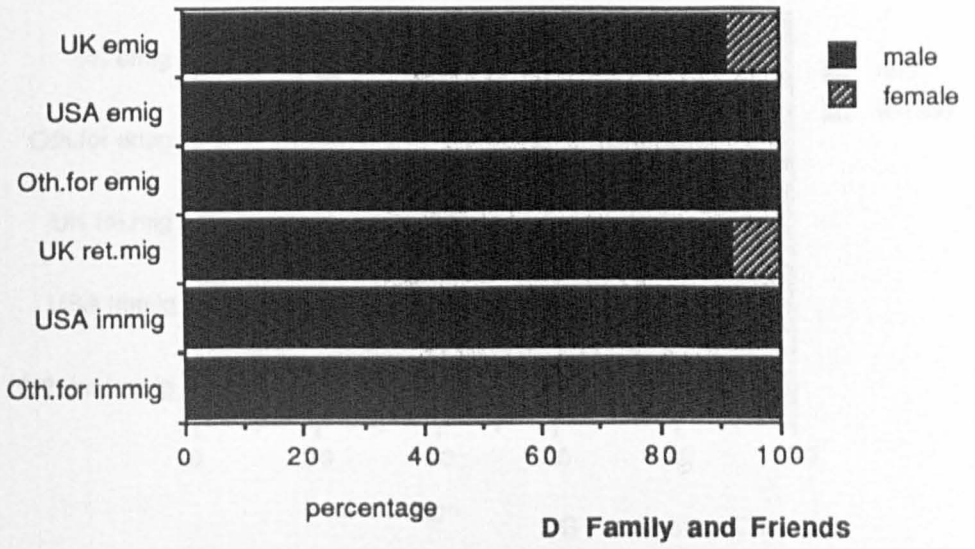


B International Recruitment Agency

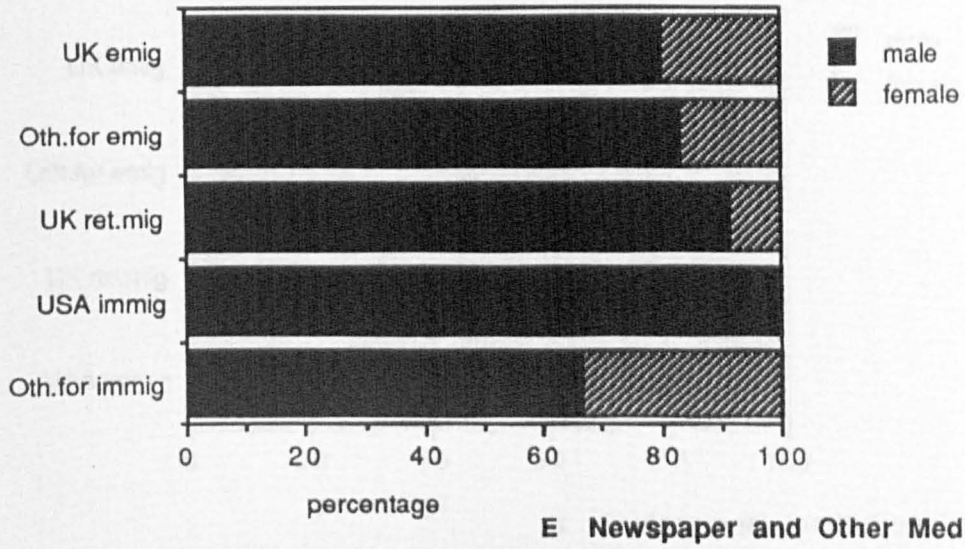


C Temporary Job for Company With Overseas Contract

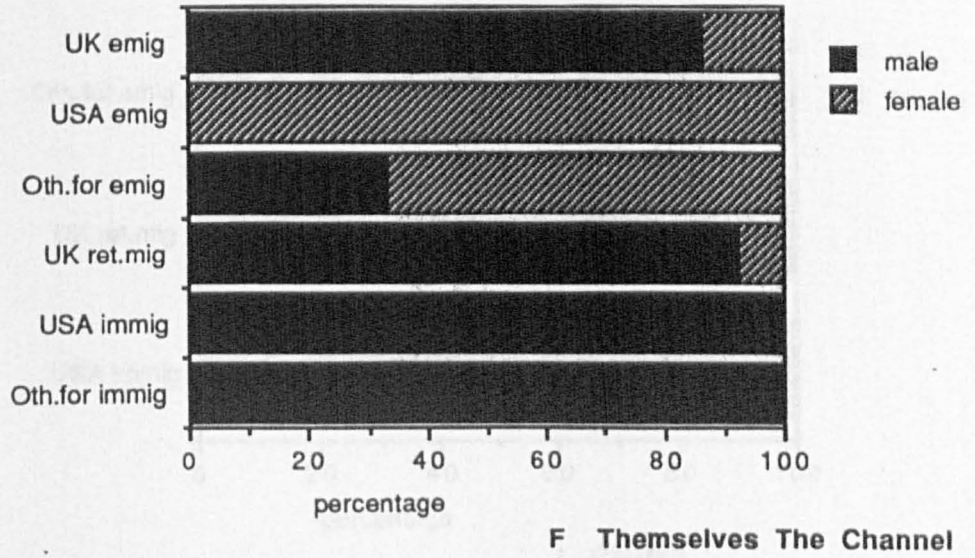
Figure 6.1 (continued)



D Family and Friends

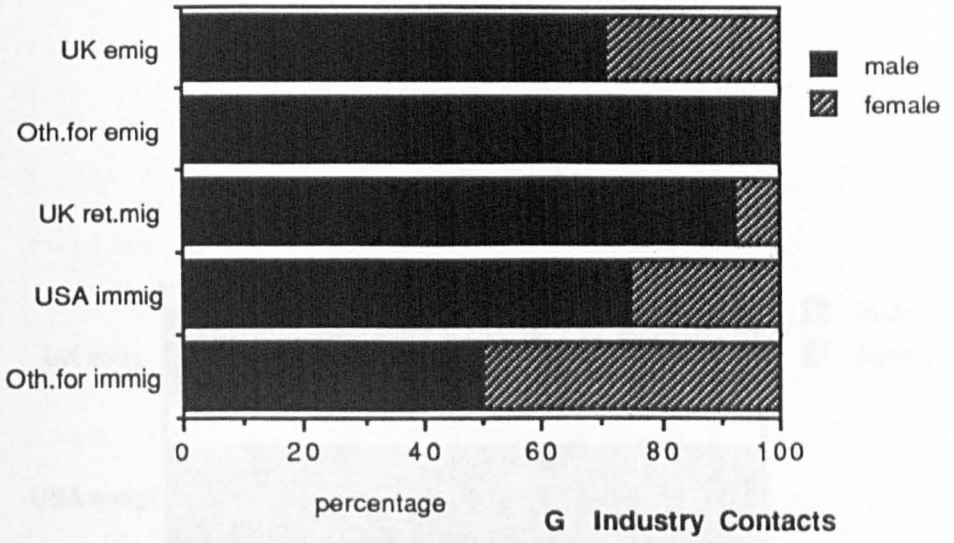


E Newspaper and Other Media

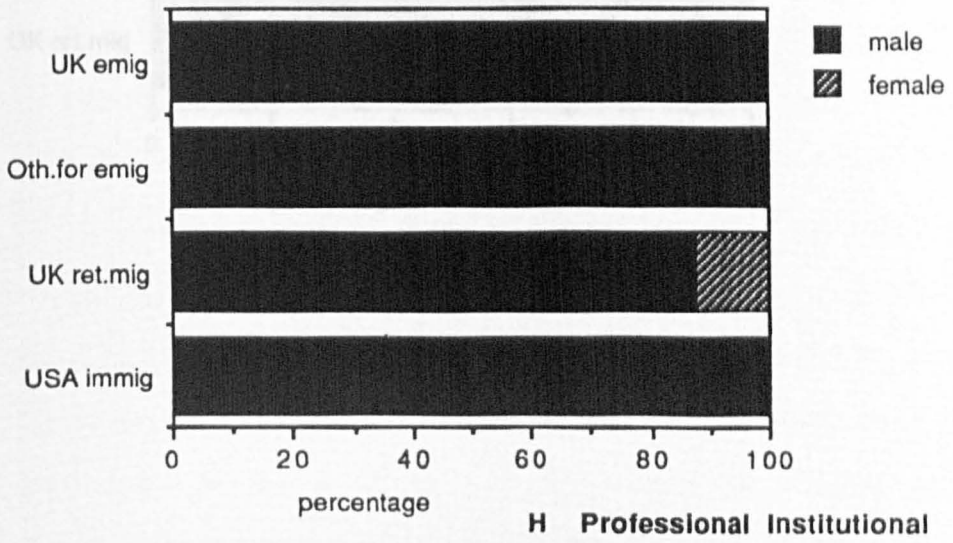


F Themselves The Channel

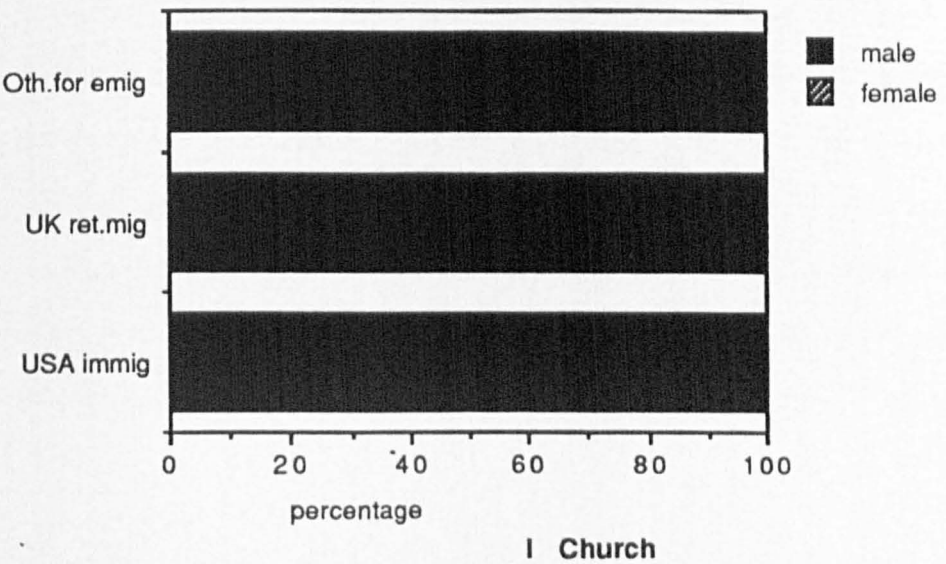
Figure 6.1 (continued)



G Industry Contacts

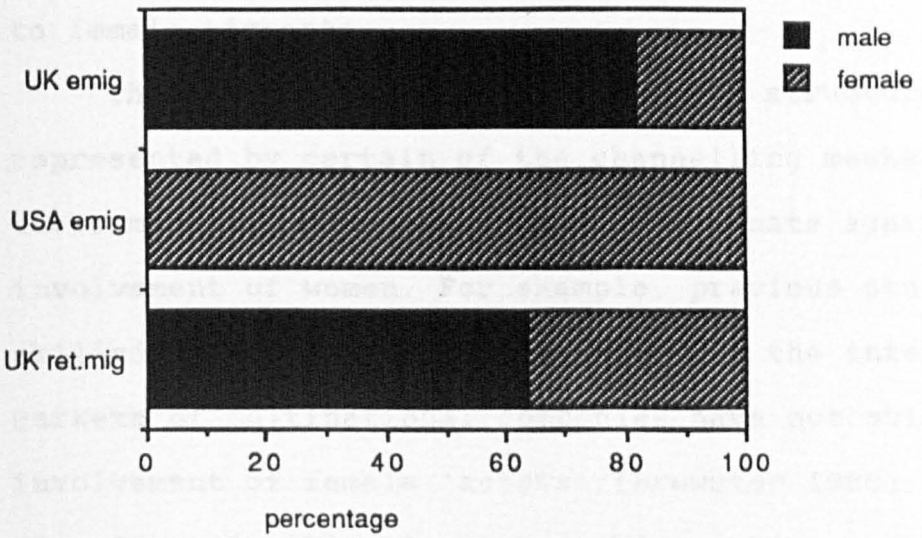


H Professional Institutional



I Church

Figure 6.1 (continued)



J Other Channels

very ones which have received least research attention or which were difficult to classify. This may well be because these channels are less rigid and more varied in their mode of operation. It is precisely the varied nature of these mechanisms which has on the one hand discouraged research, while on the other hand making them attractive to female migrants.

The employment and organizational structure represented by certain of the channelling mechanisms, and their mode of operation would discriminate against the involvement of women. For example, previous studies of skilled international migration within the internal labour markets of multinational companies have not evidenced the involvement of female 'actors' (Brewster 1988).

Overall, these large companies employ many women, but only very low proportions of females are employed at more senior levels in the organization. Within the company hierarchy, there are certain threshold levels of employment above which international movement occurs (members of the 'core' employee group, Atkinson 1985a, 1985b). As women are less likely to be promoted to such levels, they will be much less likely to be eligible for overseas postings. Such employer discrimination may also be backed up by discrimination abroad, for example, in certain destination countries (Eg. Middle East) where it may not be culturally acceptable for women to deal with male colleagues.

Marital factors and family ties also affect the eligibility of employees for international assignments. For example, it may be considered that the female spouse of a male employee is more likely to cooperate with a move overseas as her employment is of secondary importance. A single female employee similarly would be more eligible for employment overseas than her married counterpart, due to difficulties with her husband's career and the prospects of her starting a family.

However, such features of female employment are changing. With the development of policies for equal opportunities in employment, 'dual career' households, and the extended single status of many women. This may mean that women become more involved as active actors in international movement through this company channel.

Similarly, international recruitment agencies have been identified as mainly involved with certain types of employment (Findlay and Stewart 1986, Gould 1990), for example, engineering/technology. Such employment is not traditionally viewed as 'female'. The access of women to this channel is barred on the basis of control by those (employers, governments etc) seeking certain specialist skills. Use of phrases such as 'bachelor status' further reveals the lack of female migration through this channel. However, there was some evidence (Findlay 1988) of female skilled international migrants employed in health care services moving through this channelling mechanism.

Higher levels of female involvement with 'other ' channels, contacts in industry, the newspaper and other media, and those who were themselves the channel are indicative of the lesser degree of discrimination against women entering these channels.

6.2.2 Age

Overall data relating to the age characteristics of respondents and their channel of movement (Table 6.2) reveal , that the individuals selected are old enough to have acquired the necessary skills, but not so aged as to be unadaptable or incapable of coping with the stresses of international movement. The key feature to note from Table 6.2 is the relatively younger or older nature of the migrants involved with each of the channelling mechanisms. For example, the largest proportions of 45-54 year olds were found amongst those moving through their contacts in industry (20.5%), as a result of the actions of family and friends (18.8%), on intra-company transfers (18.1%), and amongst those who were themselves the channel (18.0%). Further evidence of the 'older' nature of some respondents (55 years +) was found for the church, international recruitment agency, and professional institutional channels.

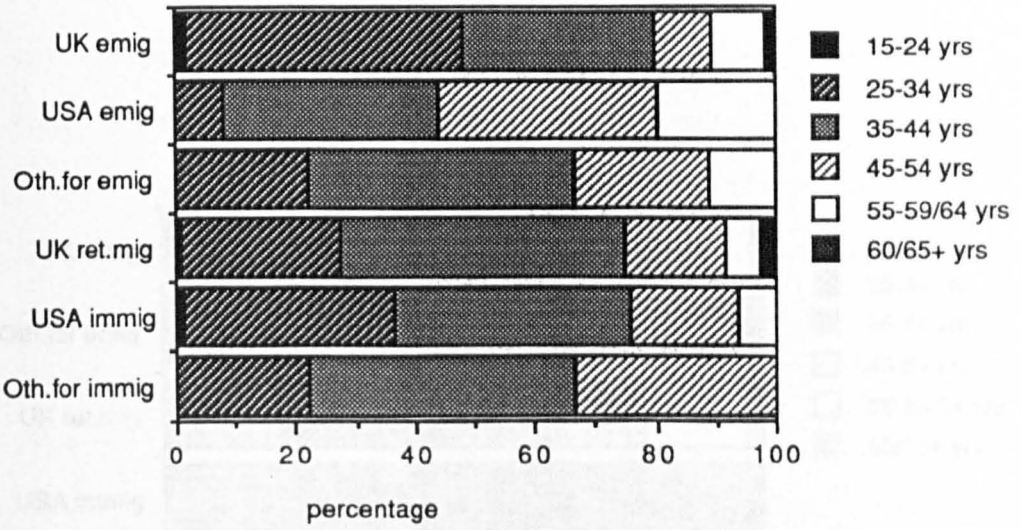
It was not possible to carry out chi square analysis of age data due to the number of empty cells. Aggregation of the data to allow for calculation of an X^2 value resulted in the loss of a great deal of the detail.

UK migrants appeared to cover a wider range of age

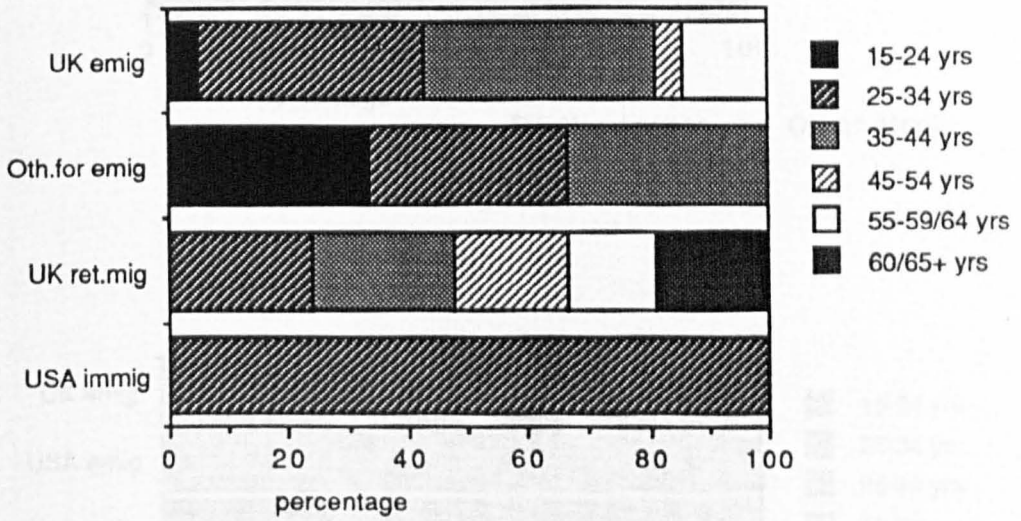
Table 6.2 Age Characteristics by Channel Type (%)

	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	60/65+ yrs
Intra-company transfer	1.1	30.6	40.8	18.1	7.9	1.5
International recruitment agency	4.3	32.6	30.4	10.9	13.0	8.7
Temporary job for company with overseas contract	-	37.5	50.0	12.5	-	-
Family and friends	-	39.1	30.4	18.8	7.2	4.3
Newspaper and other media	2.1	44.2	31.6	10.5	9.5	2.1
Themselves the channel	6.6	42.6	29.5	18.0	1.6	1.6
Contacts in industry	-	33.3	35.9	20.5	10.3	-
Professional institutional	4.8	28.6	42.9	4.8	19.0	-
Church	-	14.3	28.6	14.3	42.9	-
Other channels	5.9	44.1	23.5	17.6	8.8	-

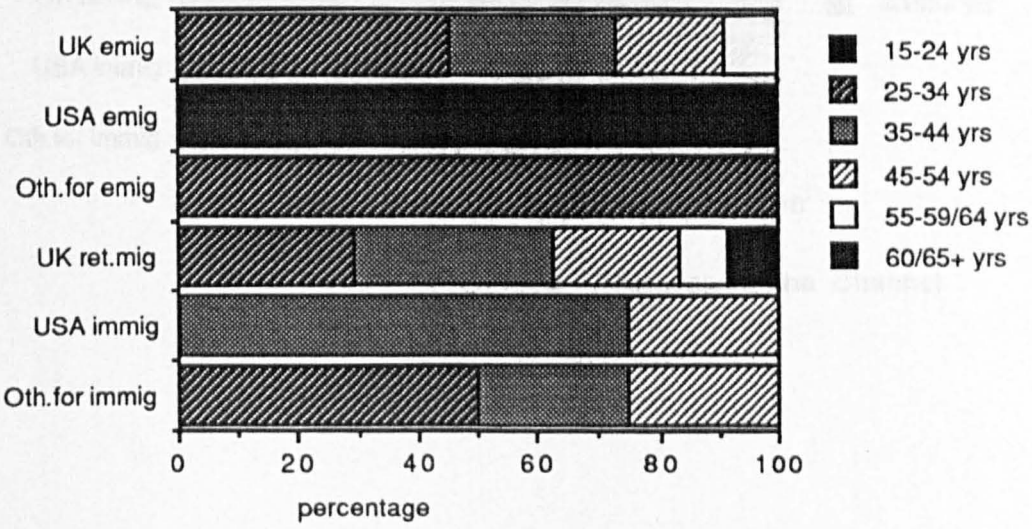
Figure 6.2 A-E Age by Channel Type and Migrant Type



A Intra-company Transfer

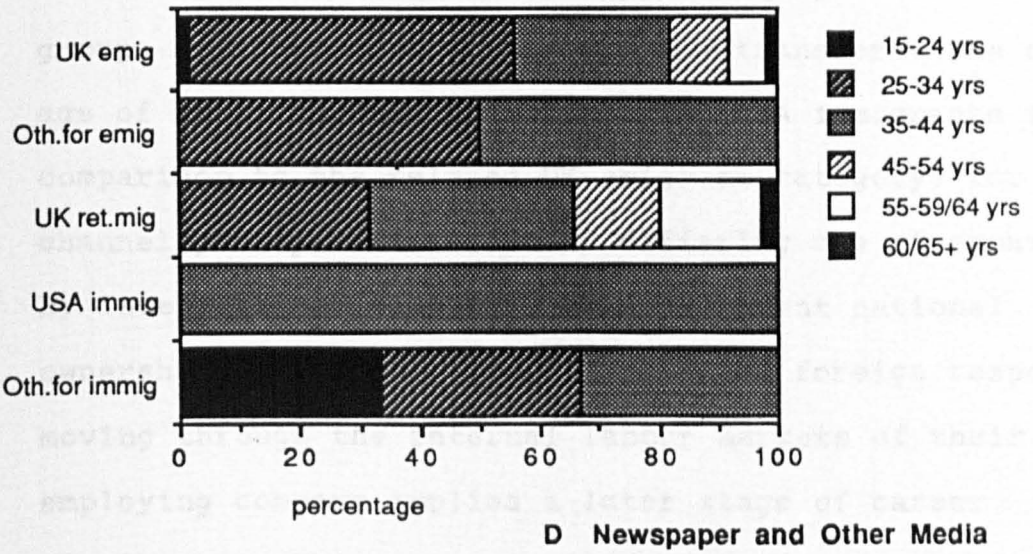


B International Recruitment Agency

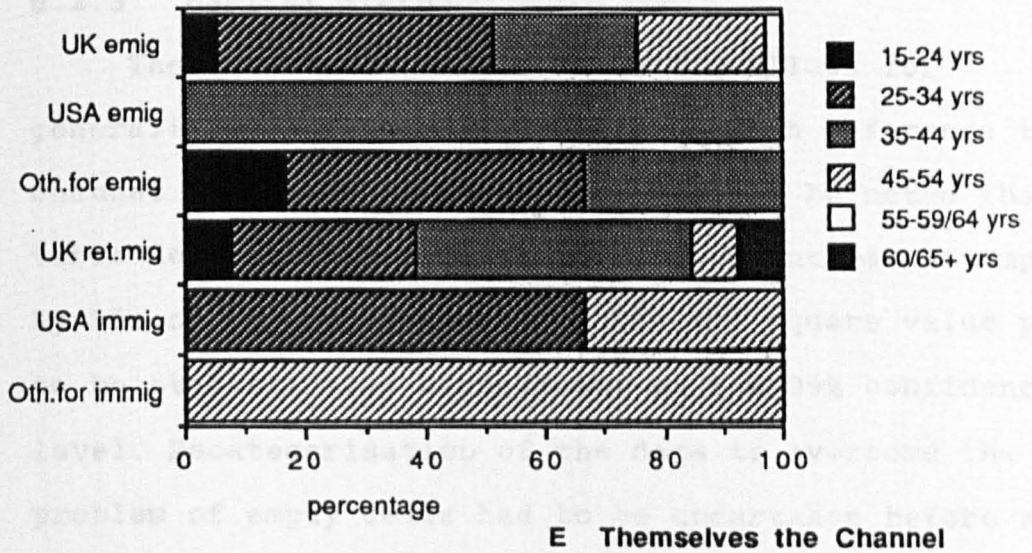


C Family and Friends

Figure 6.2 (continued)



D Newspaper and Other Media



E Themselves the Channel

categories than did other migrant groups, regardless of the channel through which they were moving (Figures 6.2 A-E). Regarding USA and other foreign migrant categories, one particular point stands out from the data. That is, these migrants were more likely to belong to older age groups if involved in intra-company transfers. The older age of other foreign and especially USA immigrants (in comparison to the related UK emigrant category) for this channel perhaps indicates the differing use of expatriates by international companies with different national ownership or control. The older age of foreign respondents moving through the internal labour markets of their employing company implies a later stage of career development. This suggests the existence of certain relationships between age, migrant type, career, migration history, differing policies of MNC's etc.

6.2.3 Marital Status

The data contained in Table 6.3 allows for generalization about marital status with reference to channel of movement. However, it should be noted that the table does not describe whether a migrant was accompanied by his or her spouse/partner. The chi square value proved to be statistically significant at the 99% confidence level. Recategorisation of the data to overcome the problem of empty cells had to be undertaken before an X^2 value could be calculated - using married/single/other marital status categories.

Married respondents were the largest group for all

Table 6.3 Marital Status Characteristics by Channel Type (%)

	single	married	separated	divorced	unmarried couple	widowed
Intra-company transfer	10.6	86.0	1.1	1.1	1.1	-
International recruitment agency	15.2	80.4	-	2.2	2.2	-
Temporary job for company with overseas contract	12.5	75.0	12.5	-	-	-
Family and friends	11.6	81.2	-	5.8	1.4	-
Newspaper and other media	21.1	70.5	1.1	4.2	2.1	1.1
Themselves the channel	19.7	67.2	1.6	8.2	3.3	-
Contacts in industry	28.2	64.1	2.6	2.6	2.6	-
Professional institutional	9.5	90.5	-	-	-	-
Church	-	100.0	-	-	-	-
Other channels	17.6	67.6	-	11.8	2.9	-

Chi square Test Results

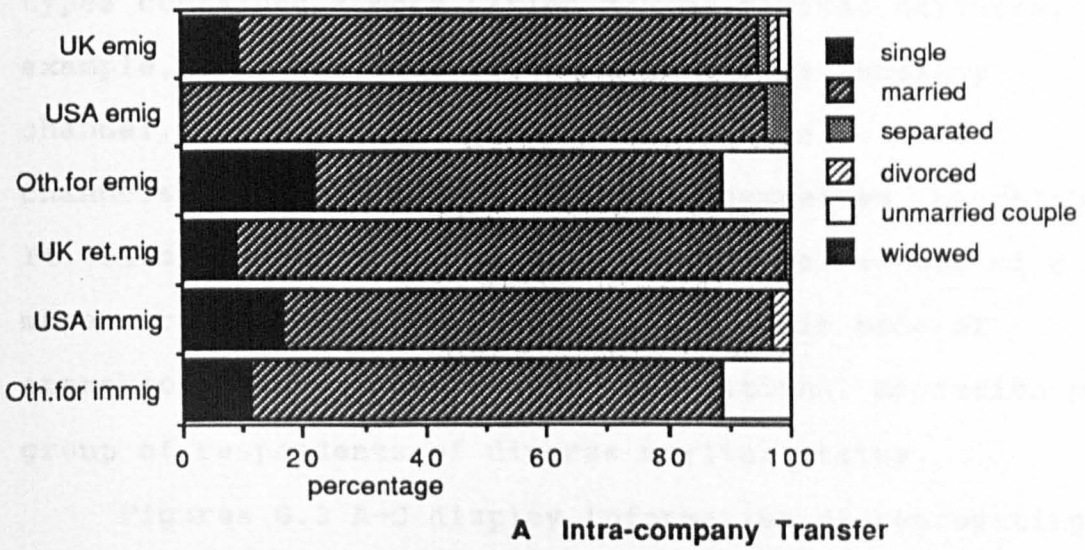
X^2 calculated value = 30.84
critical tabulated value for 8 x 3 table,
14 degrees of freedom = 29.14
H_0 rejected 99% confidence

channel types, although the proportions varied considerably. For example, those respondents indicating the church as a channel of movement were all married, while 90.5% of migrants moving through professional institutional channels were married. Amongst intra-company transfers 86.0% were married. Considerably lower proportions of married migrants were found amongst those moving as a result of contacts in industry (64.1%), amongst respondents who were themselves the channel (67.2%), and in the 'other' channels (67.6%).

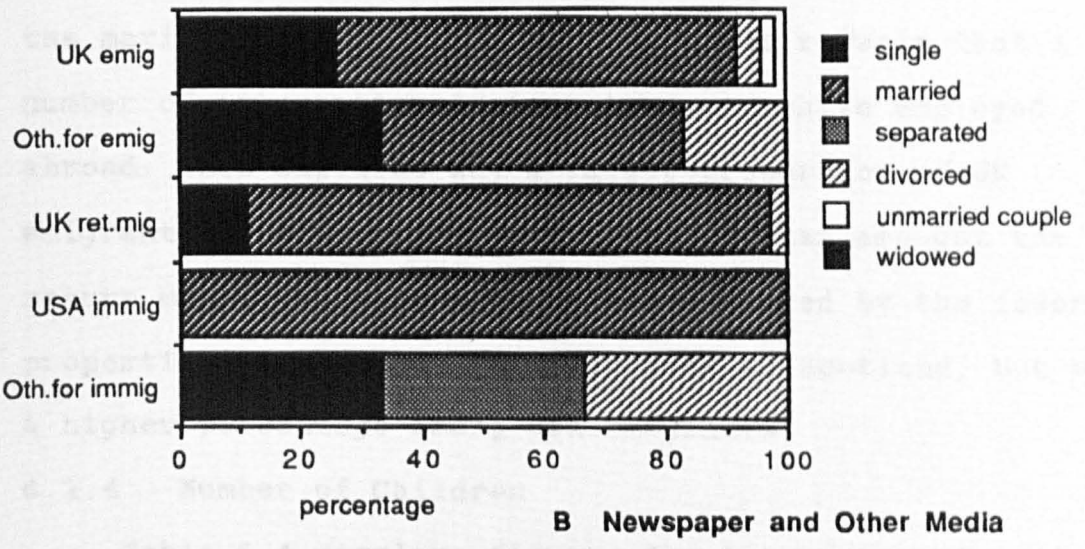
Of generally secondary importance (in proportional terms) were those respondents who indicated their marital status as 'single'. Respondents whose international move was channelled through contacts in industry contained the highest proportion of 'single' migrants (28.2%), greater than expected from the chi square analysis (14.7%). Under representation of single status was noted for respondents in the intra-company transfer channel - observed value 10.6%, expected value 14.7%.

Each of the other four marital status categories accounted for only minor proportions of the total sample. Aggregation of separated/divorced/unmarried couple/widowed respondents into an 'other' category for the chi square calculation revealed significant under representation of this group for the intra-company transfer channel - 3.3% observed, 6.4% expected - with over representation amongst 'other' channelled respondents and those who were themselves the channel.

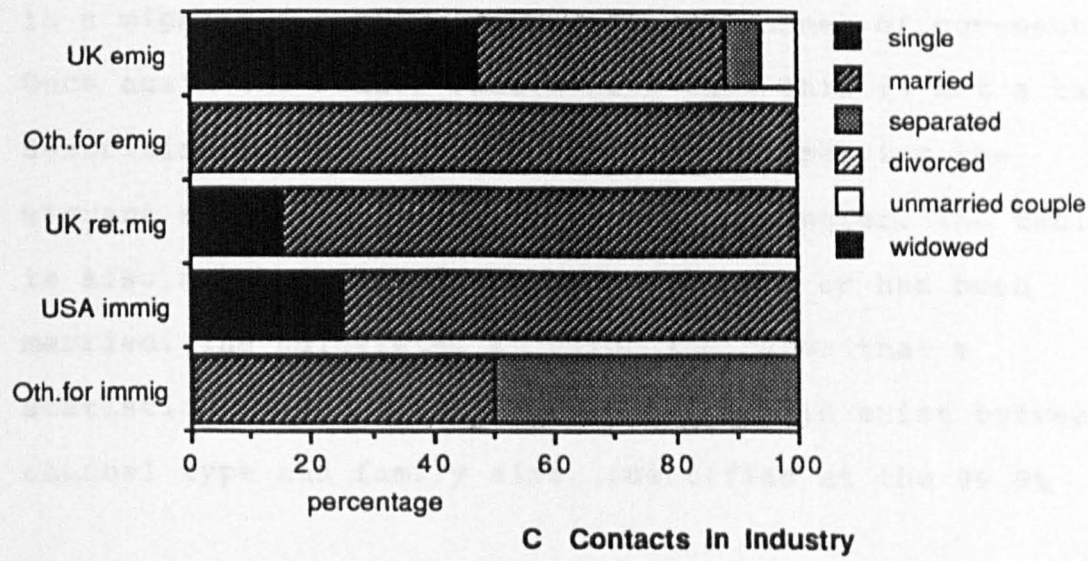
Figure 6.3 A-C Marital Status by Channel Type and Migrant Type



A Intra-company Transfer



B Newspaper and Other Media



C Contacts In Industry

Therefore, it appeared that certain of the channel types contained a more varied mix of marital statuses. For example, this was true of the contacts in industry channel, newspaper and other media channel, 'other' channels, and respondents who were themselves the channel. It would seem that as the channels themselves are of a more varied nature and less rigid in their mode of operation, they allow for the international migration of a group of respondents of diverse marital status.

Figures 6.3 A-C display information disaggregating marital status by channel and migrant type. Scrutiny of the marital status of the migrant types reveals that a number of international migrants marry while employed abroad. This explains why a larger proportion of UK emigrants from Scotland were 'single' than amongst the UK return migrants. This pattern was mirrored by the lower proportion of married USA immigrants to Scotland, but with a higher percentage among USA emigrants.

6.2.4 Number of Children

Table 6.4 displays figures for the number of children in a migrant's family classified by channel of movement. Once again the reader should note that this is not a table describing the numbers of children accompanying the migrant at the time of international transfer. The table is also not restricted to those who were or had been married. The calculated X^2 value indicates that a statistically significant relationship did exist between channel type and family size, identified at the 99.9%

Table 6.4 **Number of Children by Channel Type (%)**

	none	one	two	three	four	five+
Intra-company transfer	23.8	12.5	41.5	14.7	5.3	2.3
International recruitment agency	30.4	21.7	32.6	10.9	2.2	2.2
Temporary job for company with overseas contract	12.5	12.5	37.5	25.0	12.5	-
Family and friends	23.2	21.7	37.7	13.0	4.3	-
Newspaper and other media	36.8	11.6	29.5	20.0	2.1	-
Themselves the channel	44.3	14.8	27.9	6.6	6.6	-
Contacts in industry	41.0	10.3	23.1	23.1	2.6	-
Professional institutional	33.3	33.3	23.8	9.5	-	-
Church	14.3	-	14.3	42.9	-	28.6
Other channels	50.0	8.8	32.4	8.8	-	-

Chi square Test Results

X^2 calculated value = 56.06
critical tabulated value for 10 x 4 table,
27 degrees of freedom = 55.48
H_0 rejected 99.9% confidence

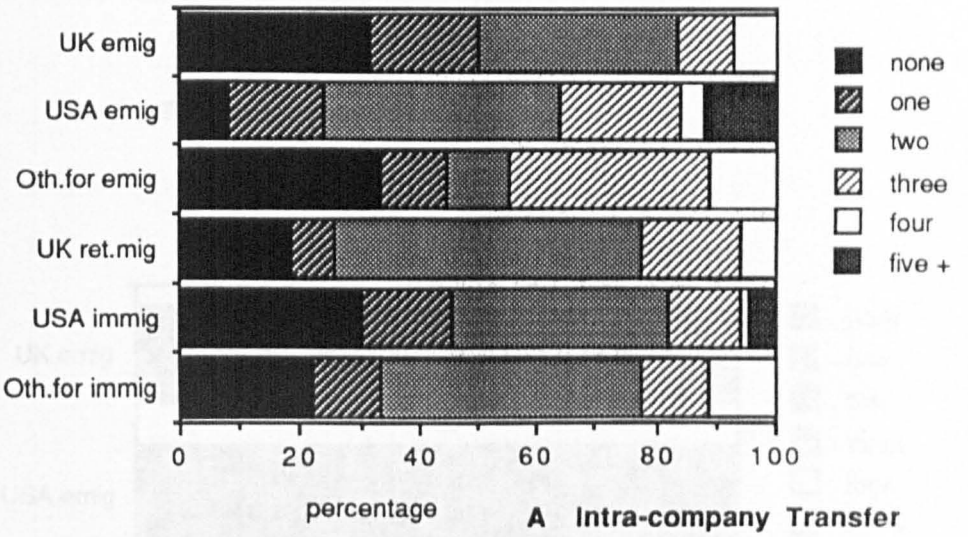
confidence level. The basis for calculation of this chi square value required aggregation of family size data to none, one, two and three or more children categories.

Respondents indicating that they had no children were the most important group in certain of the channels. For example, 'other' channels, those who were themselves the channel, moves through contacts in industry, and movers via the newspaper and other media channel. Respondents with no children in these channels were of greater importance than was expected from the chi square calculation. The intra-company transfer channel displayed lower than expected numbers of migrants with no children - 23.8% observed, 30.5% expected.

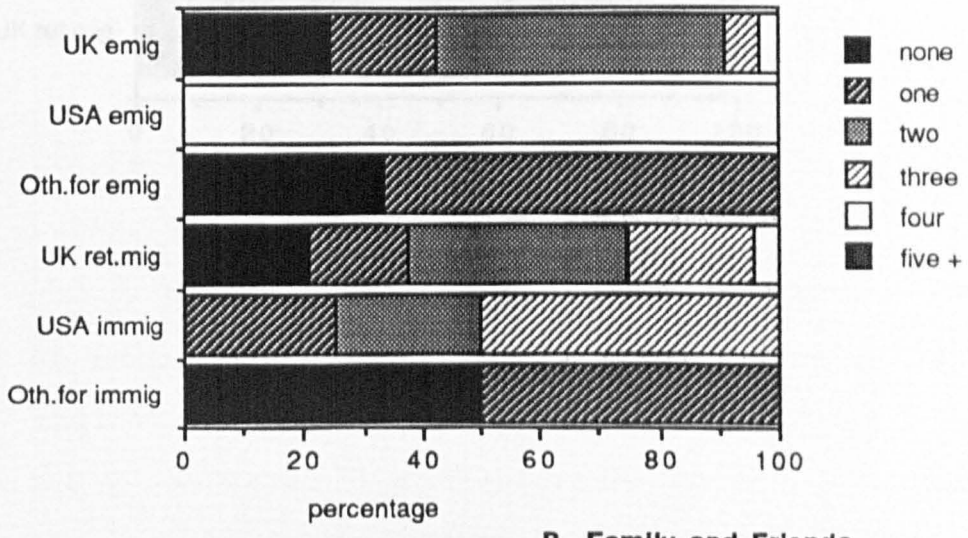
For several channels, a two child family was the modal response (intra-company transfers, family and friends, temporary jobs with small or intermediate sized firms and recruitment agencies). Other family patterns were found for certain of the channels. For example, the movement of respondents through church related channels was dominated by families containing three or more children (71.5%), possibly reflecting the later stage in the life cycle of these movers (Table 6.2).

Figures 6.4 A-D display family size information by channel, in relation to migrant type. To summarize the data, the most important feature seems to be that UK emigrants were more likely than other respondents to have no children or just one child. This inevitably reflects the age selectivity noted earlier. UK return migrants were

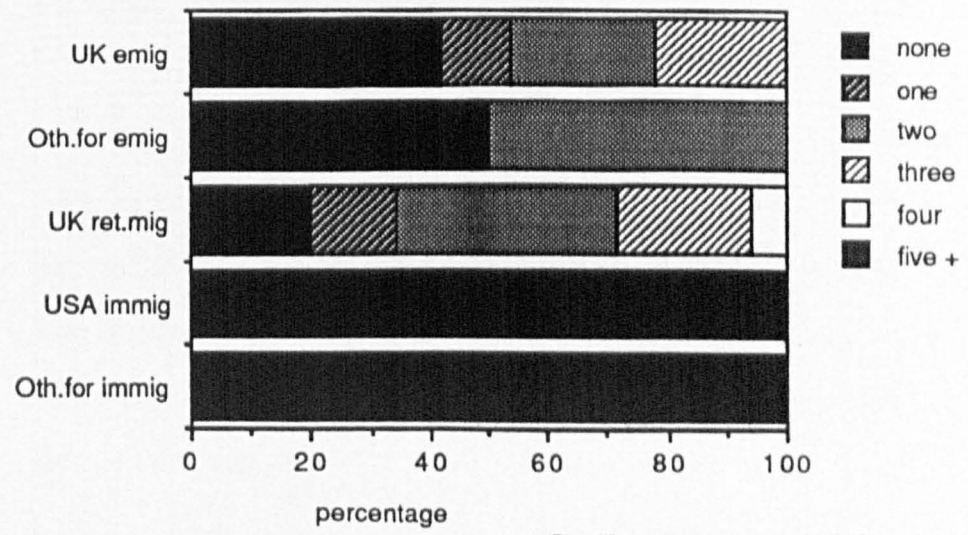
Figure 6.4 A-D Number of Children by Channel Type and Migrant Type



A Intra-company Transfer

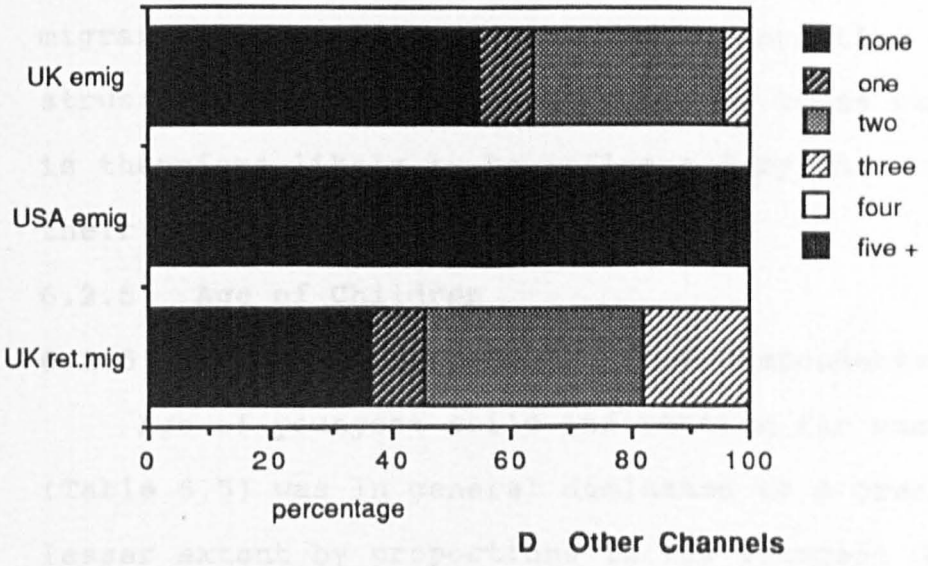


B Family and Friends



C Newspaper and Other Media

Figure 6.4 (continued)



D Other Channels

most likely to have two children, leading one to conclude that some skilled migrants became parents during the part of their lives when they were involved in employment abroad. This gives rise to some children having a different country of birth to that of their parents. This ties in with the earlier conclusion that many skilled migrants marry while abroad. Family formation and structure for a significant number of these skilled movers is therefore likely to be influenced by the context of their foreign experience.

6.2.5 Age of Children

6.2.5.1 Age of Youngest Child of Respondents

Age of youngest child information for each channel (Table 6.5) was in general dominated to a greater or lesser extent by proportions in the youngest 0-4 year age group. However, for certain channels only low proportions of youngest children in this pre-school age group were indicated (for example, 'other', and newspaper and other media channels). For these channels the proportions of respondents at a child bearing stage - increasing the size of their family - were quite low.

Proportions of youngest children at school age were of most importance for respondents moving through the 'other', and newspaper and other media channels. Varying proportions of respondents in each of the channel types indicated their youngest child as being of this 'at school' age, and hence the child rearing stage of family development.

Table 6.5 Age of Youngest Child by Channel Type (%)

	0-4 yrs	5-9 yrs	10-14 yrs	15-19 yrs	20+ yrs
Intra-company transfer	39.0	19.9	11.8	15.4	14.0
International recruitment agency	33.3	16.7	5.6	16.7	27.8
Temporary job for company with overseas contract	66.7	-	-	33.3	-
Family and friends	57.7	15.4	-	7.7	19.2
Newspaper and other media	25.0	28.6	10.7	10.7	25.0
Themselves the channel	50.0	12.5	25.0	-	12.5
Contacts in industry	46.7	6.7	6.7	13.3	26.7
Professional institutional	33.3	11.1	-	22.2	33.3
Church	50.0	-	25.0	-	25.0
Other channels	-	42.9	14.3	14.3	28.6

Chi square test results

X^2 calculated value = 22.56
critical tabulated value for 10 x 3 table,
18 degrees of freedom = 28.87
accept H_0

Of interest are the relatively high proportions of respondents indicating the two oldest (15-19 and 20+ years) age groups for their youngest children. Children of these ages have achieved varying degrees of independence from parents, and indeed may not actually be involved with any international move undertaken by parents (Eg. professional institutional and international recruitment agency moves). The chi square test proved that channel type differences were not of a statistically significant nature. Nevertheless the detail of the data was of interest.

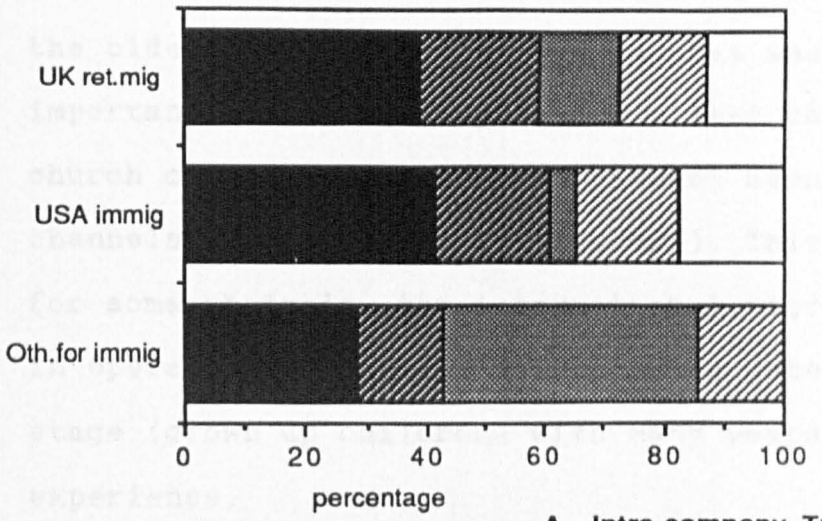
Information on age of children was only obtained from those questionnaire respondents living within Scotland. Figures 6.5 A-C list age of youngest child by migrant type for the channels which display the most interesting features of the migration system.

It might perhaps have been expected that USA and other foreign immigrants would have children of younger ages. This supposition was upheld for certain of the channels. However the younger nature of immigrant families was not fully evidenced in the intra-company transfer channel - the most important channel for these movers. Indeed, UK return migrants moving through this company channel displayed overall evidence of a younger family age.

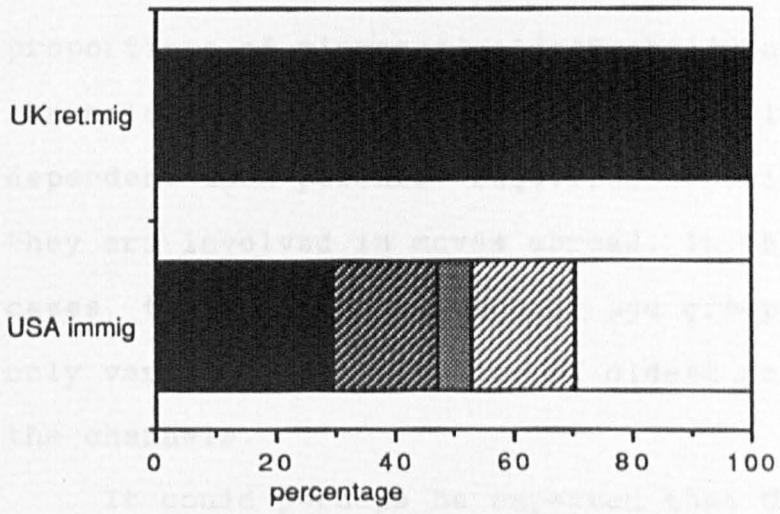
6.2.5.2 Age of Oldest Child

As with age of youngest child, the chisquare test for age of oldest child was not of statistical significance

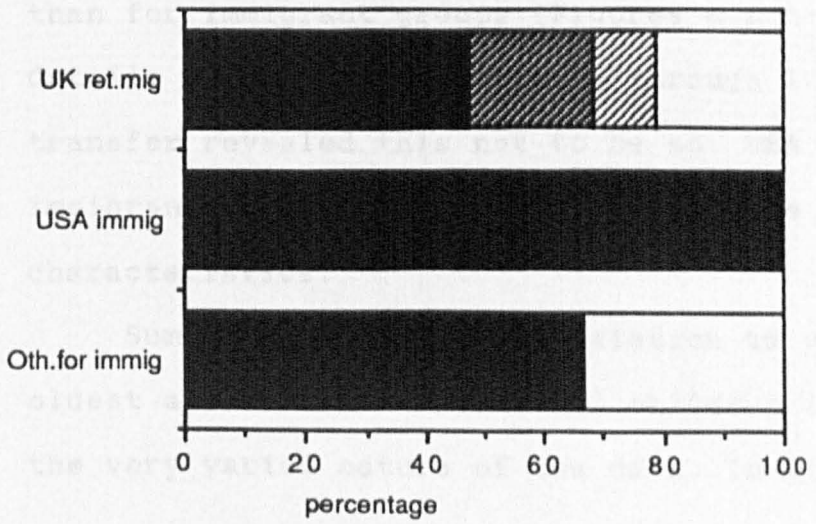
Figure 6.5 A-C Age of Youngest Child by Channel Type and Migrant Type



A Intra-company Transfer



B International Recruitment Agency



C Family and Friends

(Table 6.6). Aspects of the differences between channels were of some interest. For certain of the channels it was the oldest age group (20+ years) that was of most importance in describing age of oldest child (for example, church channelled moves, recruitment agency, 'other' channels, and contacts in industry). This indicates that for some channels, the international migration processes in operation select individuals at a later life cycle stage (grown up children) with many years of employment experience.

School age children accounted for the largest proportions of migrants' oldest children for those channels not mentioned above. These children are more dependent upon parents, requiring school facilities if they are involved in moves abroad. In the majority of cases, the youngest pre-school age group accounted for only very small proportions of oldest children for each of the channels.

It could perhaps be expected that UK return migrants would display evidence of older family characteristics than for immigrant groups (Figures 6.6 A-C). Reference to details for individuals moving through intra-company transfer revealed this not to be so. USA and other foreign immigrants in this channel displayed the oldest family characteristics.

Summarising details in relation to youngest and oldest age of the respondents' children is complex due to the very varied nature of the data. Inevitably the data

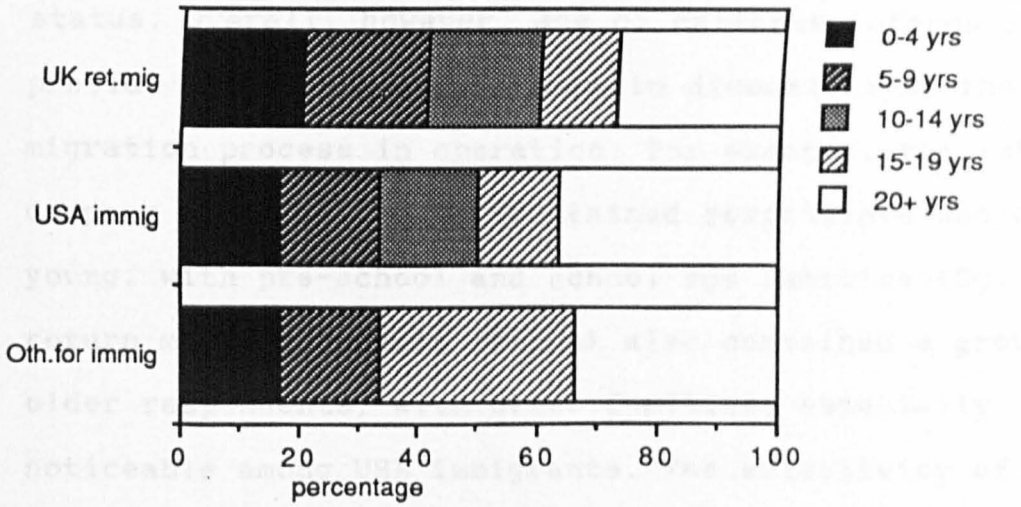
Table 6.6 **Age Oldest Child by Channel Type (%)**

	0-4 yrs	5-9 yrs	10-14 yrs	15-19 yrs	20+ yrs
Intra-company transfer	19.2	19.2	17.5	14.2	30.0
International recruitment agency	7.7	23.1	15.4	-	53.8
Temporary job for company with overseas contract	-	40.0	20.0	20.0	20.0
Family and friends	11.1	22.2	33.3	-	33.3
Newspaper and other media	4.3	17.4	21.7	17.4	39.1
Themselves the channel	28.6	-	42.9	-	28.6
Contacts in industry	7.7	23.1	7.7	15.4	46.2
Professional institutional	-	40.0	20.0	20.0	20.0
Church	20.0	20.0	-	-	60.0
Other channels	-	16.7	33.3	-	50.0

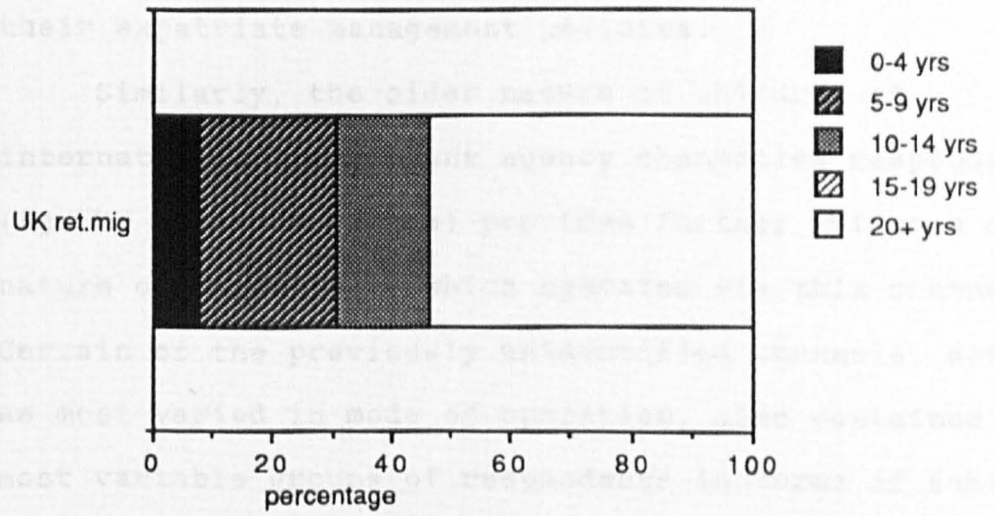
Chi square test results

X^2 calculated value = 11.42
critical tabulated value for 7 x 3 table,
12 degrees of freedom = 21.03
accept H_0

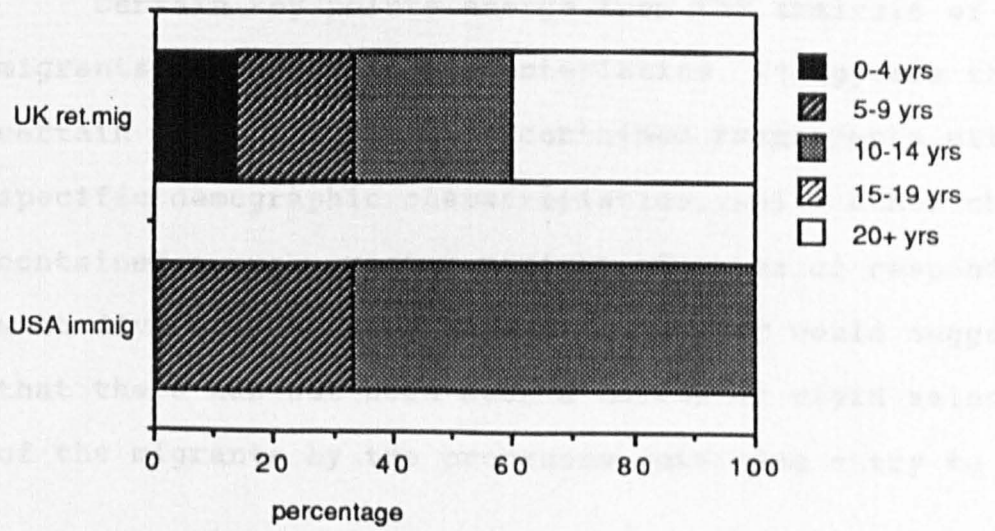
Figure 6.6 A-C Age of Oldest Child by Channel Type and Migrant Type



A Intra-company Transfer



B International Recruitment Agency



C Family and Friends

reflects the ages of the respondents and their marital status. Overall, however, age of children information does provide useful details of certain dimensions of the migration process in operation. For example, the intra-company transfer channel contained respondents who were young, with pre-school and school age families (Eg. UK return migrants). This channel also contained a group of older respondents, with older families, especially noticeable among USA immigrants. The selectivity of respondent through this channel may reflect varied national control of these international organizations and their expatriate management policies.

Similarly, the older nature of children of international recruitment agency channelled respondents (Eg. UK return migrants) provides further evidence of the nature of selectivity which operates via this channel. Certain of the previously unidentified channels, described as most varied in mode of operation, also contained the most variable groups of respondents in terms of family age and structure.

Certain key points emerge from the analysis of migrants' demographic characteristics. It appears that certain migration channels contained respondents with very specific demographic characteristics, while other channels contained a much greater variety of types of respondent with diverse characteristics. The latter would suggest that there has not been such a narrow or rigid selection of the migrants by the processes governing entry to these

particular channels. For example, the nature of the mechanisms allowing for the international movement of those involved with newspaper and other media sources are not well understood, but can be said to be of a varied nature. Similarly, the personal characteristics of these individuals were very diverse. Those channels which are more rigidly defined, in terms of conditions of entry and mode of operation, largely contained respondents whose demographic characteristics reflected the greatest selectivity. For example, the intra-company transfer channel contained a predominance of respondents who were of a more uniform and easily definable nature in terms of their demographic characteristics (Eg male, married, 25-44 years old, 2 children of pre-school or school age). Differences, however, do not exist solely between channels. It has been seen that the personal characteristics of respondents also varied within channels in relation to migrant type.

6.3 Employment Characteristics of Respondents

6.3.1 Introduction

The employment type and job status characteristics of the respondents received brief consideration in Chapter 4, where it was concluded that differences existed between the migrant types. Further understanding of the employment situation is obtained from an inclusion of information relating to the channels of international movement. This discussion will also consider the type and organizational structure of the respondents' employer, and how these

employer characteristics vary by channel of movement and migrant type. Employment data is then classified using the Weaver Crop Combination, and mapped. This was done to reveal aspects of the spatial impact of migration on regional labour markets.

6.3.2 Employment Type

Details of employment type (Table 6.7) reveal the existence of significant differences between the channels. Some aggregation of the data was necessary for utilization of the chi square statistical technique. The very high X-value calculated emphasises the importance of such employment variations.

The majority of channels were dominated to a greater or lesser degree by one type of employment. In the case of the intra-company transfer channel, for example, energy and water industries were of greatest significance (44.3%). More detailed examination revealed that almost all company channelled respondents in energy and water industries were employed in activities related to the extraction of petroleum and natural gas.

This predominance of employment in energy and water industries for company channelled moves was noted for all migrant types (Figure 6.7 A), although foreign immigrants displayed highest degrees of involvement (64.3% and 66.7%), with UK return migrants the least involved (34.0%). The importance of oil and gas employment in Scotland helps to explain why the intra-company transfer channel was of most importance to the migration system

Table 6.7 **Employment Type by Channel Type (%)**

	0	1	2	3	4	5	6	7	8	9
Intra-company transfer	0.4	44.3	3.2	24.3	9.8	3.9	1.2	1.2	8.2	3.5
International recruitment agency	5.1	10.3	-	7.8	10.3	15.4	5.1	-	23.1	23.1
Temporary job for company with overseas contract	-	25.0	-	-	-	-	-	12.5	12.5	50.0
Family and friends	3.1	10.9	-	18.8	6.3	10.9	17.2	3.1	1.6	28.1
Newspaper and other media	2.3	3.4	1.1	10.2	4.5	10.2	4.5	2.3	5.7	55.8
Themselves the channel	-	6.9	-	12.1	6.9	13.8	6.6	5.1	5.2	41.4
Contacts in industry	2.6	13.2	5.2	2.6	5.2	5.2	2.6	2.6	5.2	55.6
Professional institutional	16.7	5.6	11.1	-	-	-	-	-	-	66.7
Church	-	-	-	-	-	-	-	-	-	100.0
Other channels	3.2	9.7	-	12.9	3.2	16.1	3.2	12.9	6.5	32.3

0 agriculture, forestry, fishing
1 energy and water
2 extraction and processing of non-energy producing minerals; chemical industry
3 metal manufacture; mechanical, electrical and instrument engineering
4 other manufacturing industries
5 building and civil engineering
6 distribution/hotels/catering
7 transport and communication
8 bank/finance/business services
9 health/education/other services

Table 6.7 (continued)

Chi square Test Results - Table 6.7

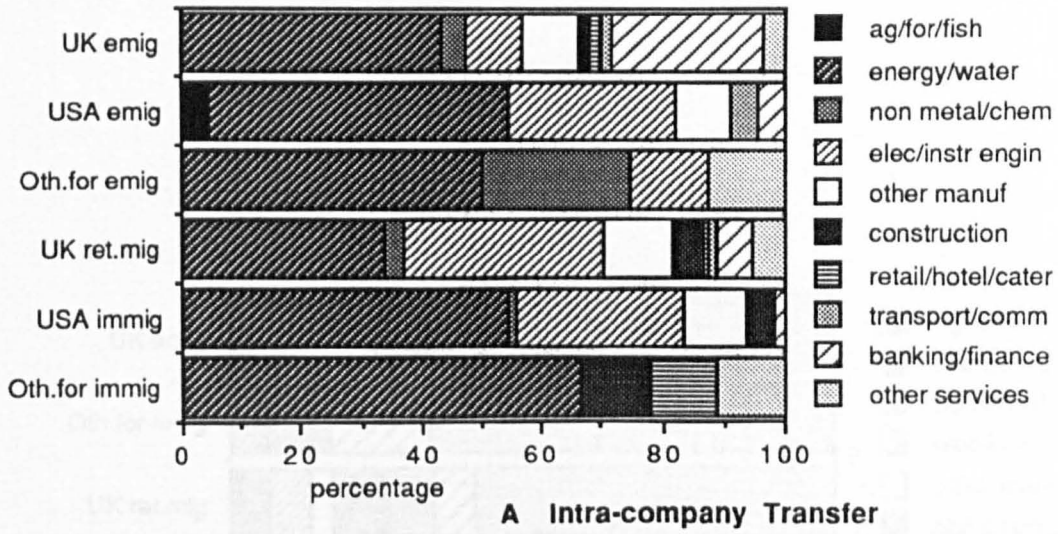
X^2 calculated value = 251.86
critical tabulated value for 6 x 7 table,
30 degrees of freedom = 59.70
H_o rejected 99.9% confidence

being studied. If Scotland did not have oil and gas industries, the percentage of international moves accounted for by company transfers would decrease from 42.1% to 28.8%.

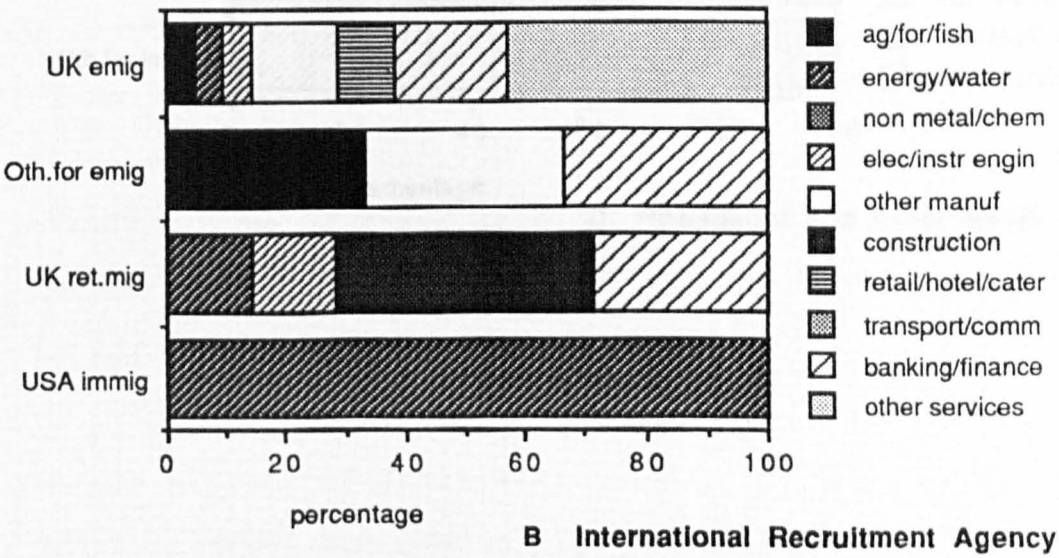
Of secondary importance for respondents transferred by their company were activities categorized as 'metal manufacture, mechanical, electrical and instrument engineering' (24.3%). Within this category, 'office machinery and data processing' (computer manufacture) employment featured as most important. However, for UK emigrants in this channel (Figure 6.7 A) employment categorized as involving 'banking and financial services' was of secondary importance. Other employment categories accounted for much smaller proportions of intra-company transfers.

In other channels where one employment type dominated (Eg. church, professional institutional, newspaper and other media, contacts in industry channels, and those who were themselves the channel), the most important economic activity involved proved to be 'health, education and other services'. For certain of these channels, the very definition of the channelling mechanism and their mode of operation was linked to particular jobs, and therefore the

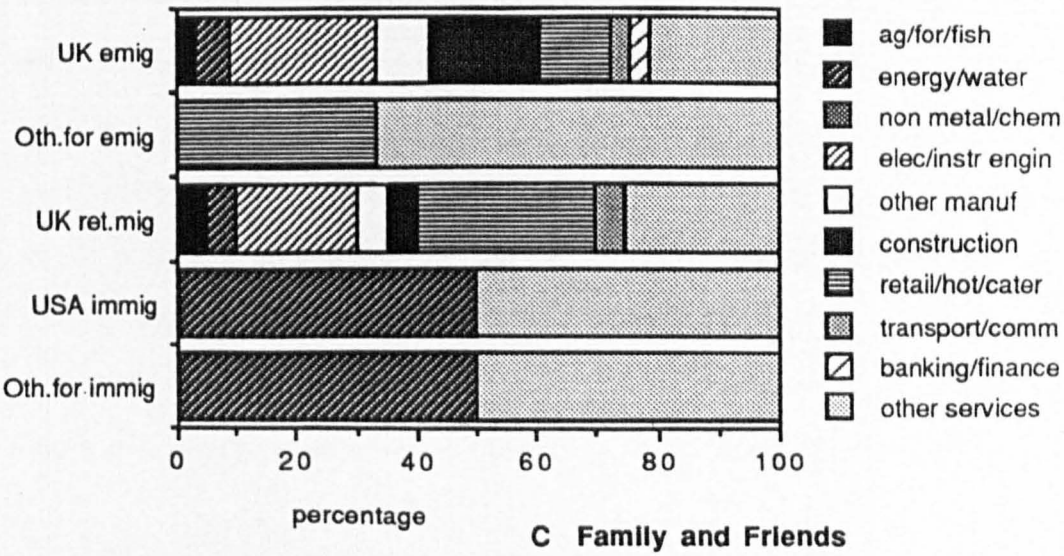
Figure 6.7 A-D Employment Type by Channel Type and Migrant Type



A Intra-company Transfer

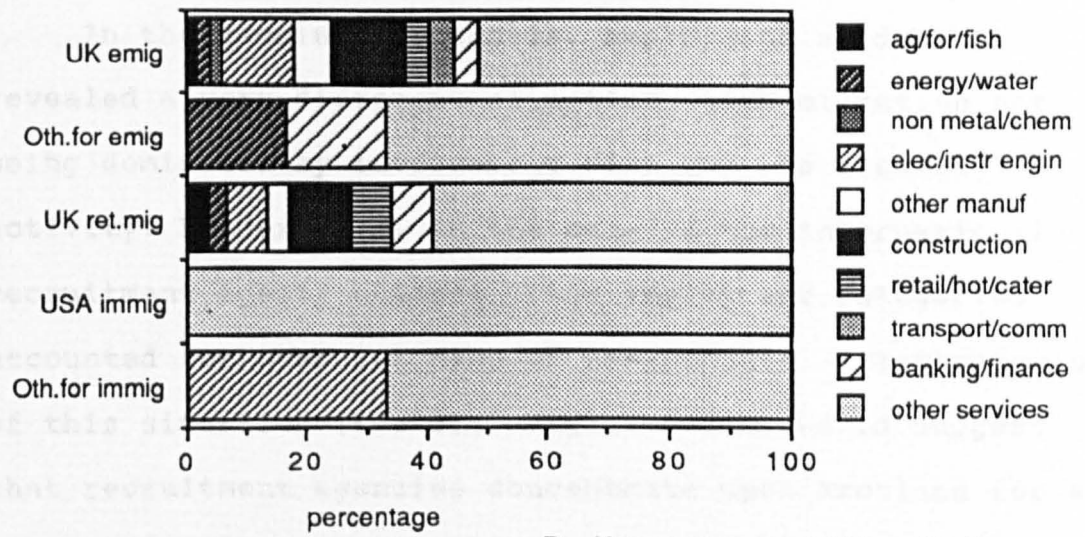


B International Recruitment Agency



C Family and Friends

Figure 6.7 (continued)



D Newspaper and Other Media

predominance of service employees in these channels was to be expected (Eg. clergy in the church channel, and school and university teachers in the professional institutional channel). Education employment also proved an important feature of newspaper and other media, and contacts in industry channelled moves.

In the remaining channels, employment evidence revealed a very different situation, with migration not being dominated by involvement with any one economic activity. For example, in the case of the international recruitment agency channel, five employment categories accounted for over 10% each of respondents. Interpretation of this situation (see also Figure 6.7 B) would suggest that recruitment agencies concentrate upon Scotland for a specific type of employment skills (Eg. medical and other health services, banking and financial services and building and civil engineering).

The employment situation for respondents moving due to the actions of family and friends was similar to that of the recruitment agency channel, in that they were involved with a mix of job type. Of greatest importance was service employment (particularly medical and other health services) and involvement with metal manufacture and mechanical engineering (different types of employment within this category to those for intra-company transfers).

Figures 6.7 A-D revealed that UK category respondents were of most importance in defining the employment

characteristics of the previously unresearched channels, and that these channels contained the greatest variety of employment type. However, it is not because these individuals were British that they were using previously unidentified channels, but because the bulk of the sample were British. The main feature regarding migrant type to emerge from this discussion would be that foreign migrants (especially those from the USA) were much less involved with 'other' channels (than intra-company transfer), and were employed in a more restricted range of employment types. In comparison, UK respondents were involved with employment in many different sectors of the Scottish economy and with many channels of movement. However, within each channel type, it was also possible to distinguish employment patterns (Eg. international recruitment agencies).

6.3.3 Occupational Status

The chi square value detailed for Table 6.8 inferred the existence of statistically significant differences in job status characteristics between the channels. Calculation of this chi square statistic was dependent upon aggregation of the job status information into managerial/administrative, professional and 'other' categories.

Respondents making company moves were identified as of highest employment status, with the greatest proportion of managerial/administrative employees (62.4%). The expected level of this employment status for this channel

Table 6.8 Job Status by Channel Type (%)

	1	2	3	4	5	6	7	8	9
Intra-company transfer	62.4	34.9	2.3	0.4	-	-	-	-	-
International recruitment agency	55.3	31.6	-	-	10.5	-	-	2.6	-
Temporary job for company overseas contract	37.5	50.0	12.5	-	-	-	-	-	-
Family and friends	34.4	25.0	4.7	3.1	21.9	6.2	3.1	1.6	-
Newspaper and other media	23.9	50.0	10.2	3.4	10.3	-	1.1	-	1.1
Themselves the channel	24.1	37.9	19.0	1.7	8.6	5.2	-	-	3.5
Contacts in industry	28.9	63.2	5.3	-	2.6	-	-	-	-
Professional institutional	44.4	55.6	-	-	-	-	-	-	-
Church	16.7	-	-	-	-	-	-	-	-
Other channels	25.8	41.9	6.5	6.5	9.7	3.2	3.2	3.2	-

1 managerial/administrative
2 professional occupations
3 associate professional and technical occupations
4 clerical/secretarial
5 craft and related
6 personal and protective service occupations
7 sales occupations
8 plant and machine operatives
9 other occupations

Table 6.8 (continued)

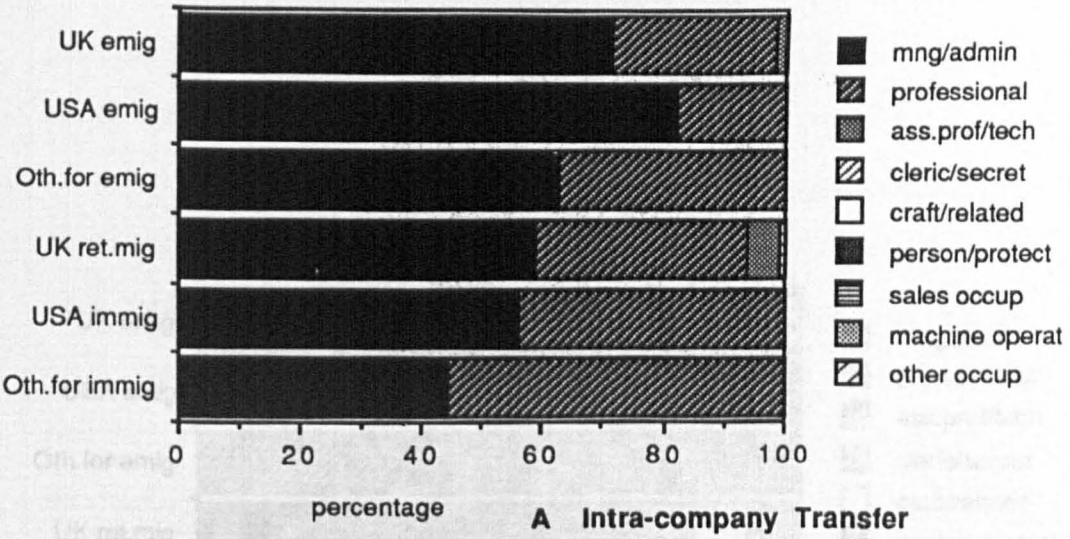
Chi square Test Results - Table 6.8

X^2 calculated value = 137.26
critical tabulated value for 9 x 3 table,
16 degrees of freedom = 39.29
H_0 rejected 99.9% confidence

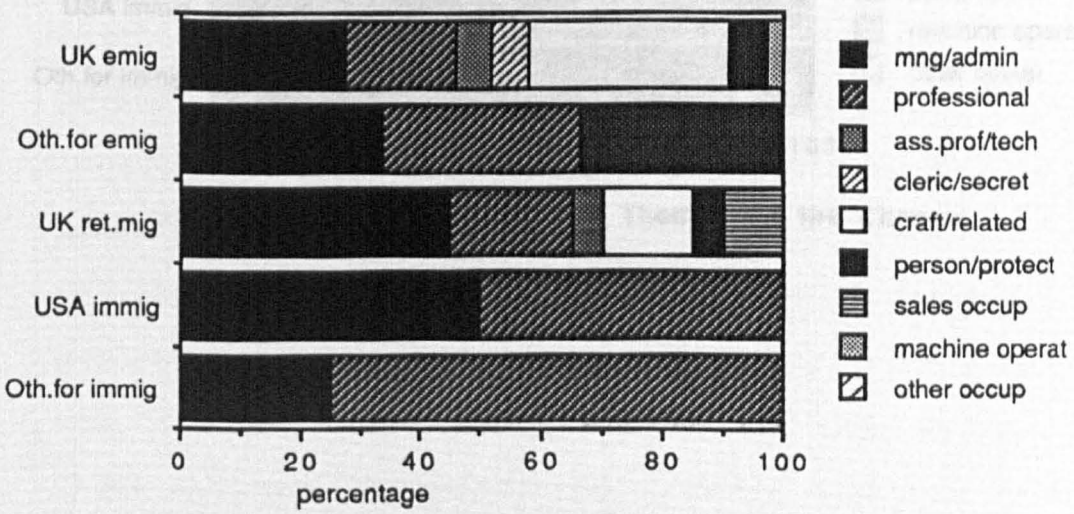
was 44.3%. A more detailed breakdown of the managerial/administrative status category revealed that 'production managers in mining, construction or energy industries' were of most importance (not surprising considering that the majority of respondents in this channel were employed in oil and gas industries). Professional status engineers and technologists were of second importance in this company channel - again related to the main employing industries.

Figure 6.8 A (company moves) reveals that overall, emigrants from Scotland of all migrant types were of higher job status than immigrants and return migrants. The key comparison here being that of the job status of UK emigrants vis a vis foreign immigrants. It is significant that UK migrants leaving Scotland were of a higher skill status than USA or other foreign emigrants leaving their origin countries (and moving to Scotland). This suggests that, at the time of the survey, employers were transferring only very highly skilled UK employees from Scotland. The lower status of return migrants may provide evidence of the branch plant or 'peripheral' nature of much MNC involvement in Scotland - top jobs at higher status within large companies may only be available

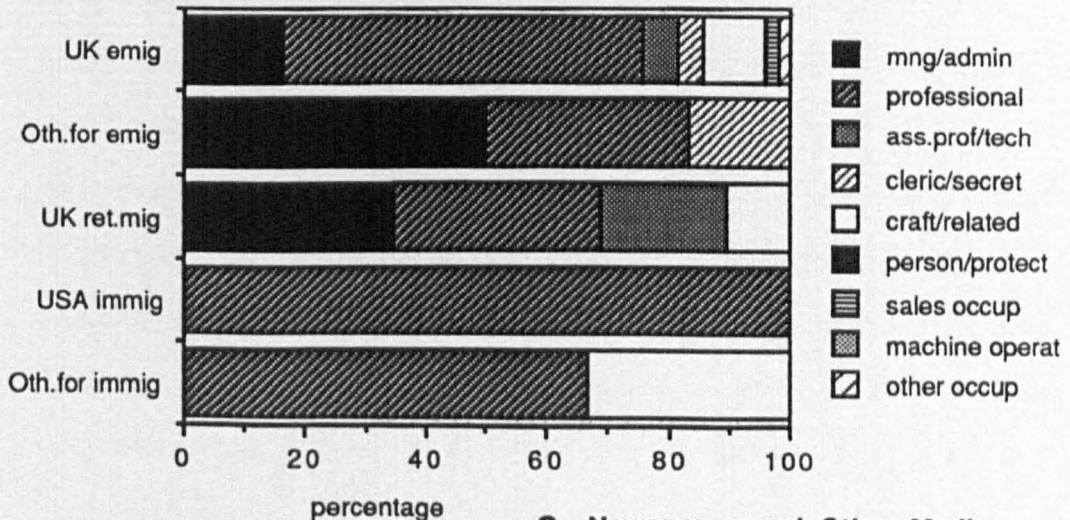
Figure 6.8 A-D Occupational Status by Channel Type and Migrant Type



A Intra-company Transfer

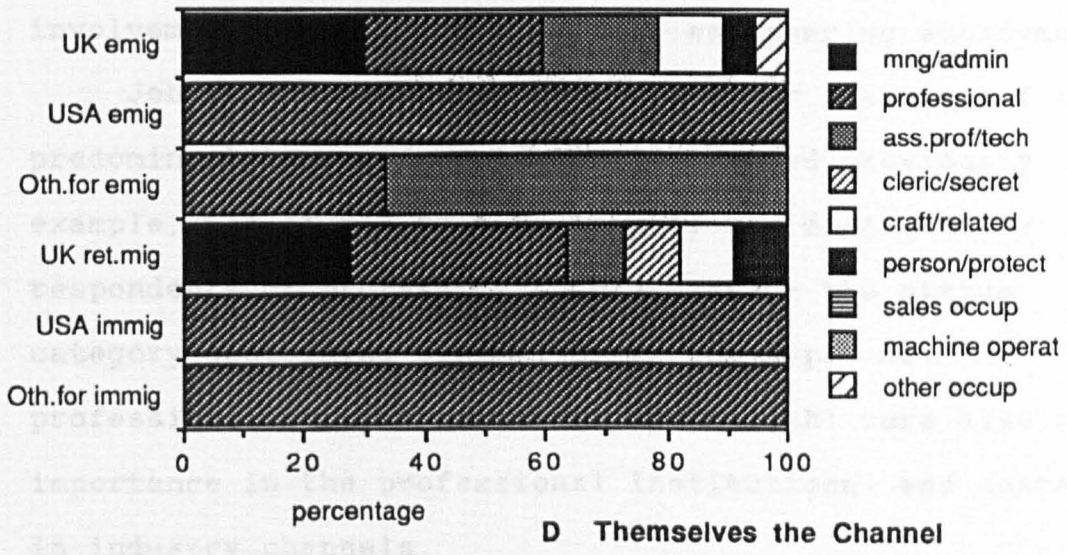


B Family and Friends



C Newspaper and Other Media

Figure 6.8 (continued)



D Themselves the Channel

overseas for Scottish employees.

In the case of the international recruitment agency channel, while 53.1% of respondents were of the highest employment status, some 10.5% were employed at a much lower status level - craft and related occupations. The importance of these occupations can be related to involvement in building and civil engineering employment.

Job status similarly confirms other features of the predominant types of employment discussed previously. For example, the church related channel was dominated by respondents of professional occupation - the status category containing clergy. Different types of professional occupation (teaching, health) were also of importance in the professional institutional and contacts in industry channels.

Each of the remaining channel types displayed evidence of lower job status, especially for the family and friends (observed 40.6%, expected 16.2%) channel, and those who were themselves the channel (observed 37.9%, expected 16.2%). Figures 6.8 B and D reveal that many respondents of lower employment status were British emigrants. This feature may seem paradoxical when related to Figure 6.8 A (intra-company transfer channel), where UK emigrants were of higher employment status than return migrants. This reveals the distinct nature of these channels in their mode of operation. Movement through the internal labour market of an employing company allows only for movement of a relatively homogeneous group of highly

skilled personnel. Levels of homogeneity of employment status were also noted for certain other channels (Eg. professional institutional, contacts in industry). The more varied channels, with less rigidly defined modes of operation and entry allow for the movement of skilled and an element of less skilled migration. It may be assumed that these lesser skilled respondents were undertaking a more permanent international move since they feature less among streams of UK return migrants.

In summary, it would appear that the operation of channelling mechanisms were, to a greater or lesser degree, selective in the job type and status of the migrants experiencing a move through each. The most selective channels in terms of the job type and status of the respondents were the intra-company transfer, church, professional institutional and 'contacts in industry' channels.

6.4 Employer Characteristics

6.4.1 Type of Employer

Categorisation of employer revealed that there were significant variations between the channels. This was supported by inferential statistics (Table 6.9 ; Figure 6.9 A-C).

Summarizing data with respect to employer type it appears that while a majority of respondents were employed by private firms, there also existed a significant degree of government sector employment among respondents of all channels (except intra-company transfer) and all migrant

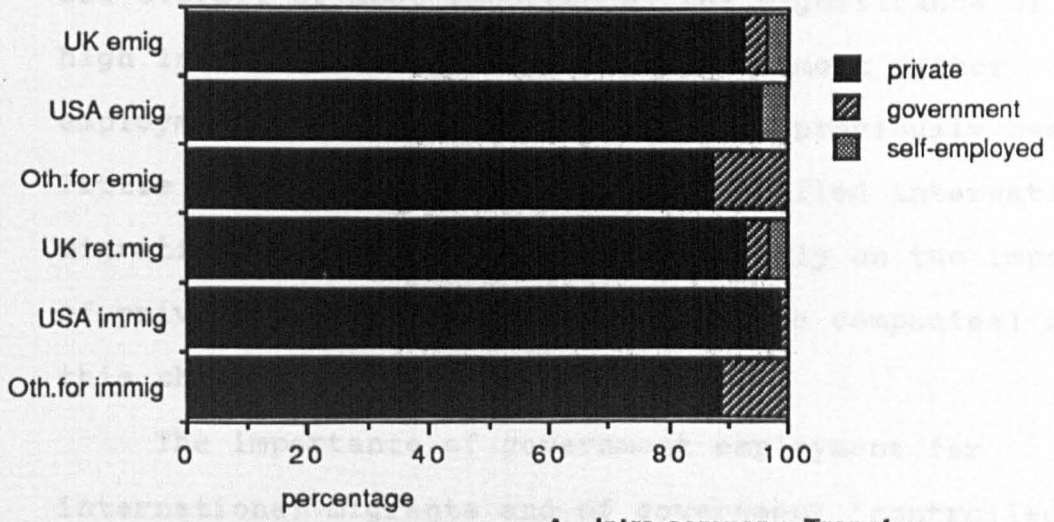
Table 6.9 Type of Employer by Channel Type (%)

	private companies	government sector	self-employed	family & friends	others
Intra-company transfer	94.1	3.5	2.4	-	-
International recruitment agency	61.5	20.5	12.8	-	5.1
Temporary job for company with overseas contract	75.0	12.5	12.5	-	-
Family and friends	59.4	17.2	14.1	6.3	3.1
Newspaper and other media	40.9	45.5	9.1	-	4.5
Themselves the channel	60.3	29.3	10.3	-	-
Contacts in industry	34.2	47.4	15.8	-	2.6
Professional institutional	11.1	83.3	5.6	-	-
Church	-	16.7	-	-	83.3
Other channels	61.3	25.8	6.5	-	6.5

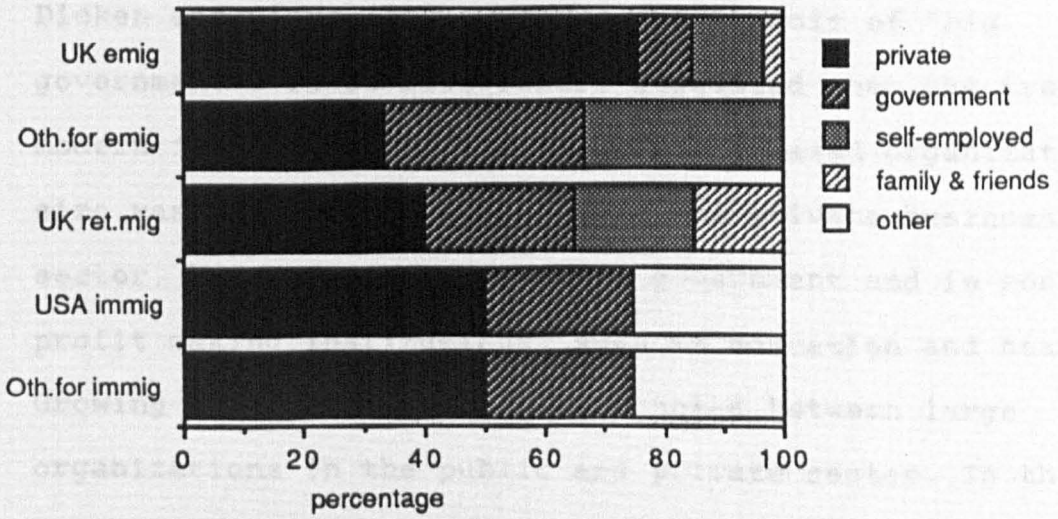
Chi square Test Results

X^2 calculated value = 216.31
critical tabulated value for 8 x 4 table,
21 degrees of freedom = 46.80
H_0 rejected 99.9% confidence

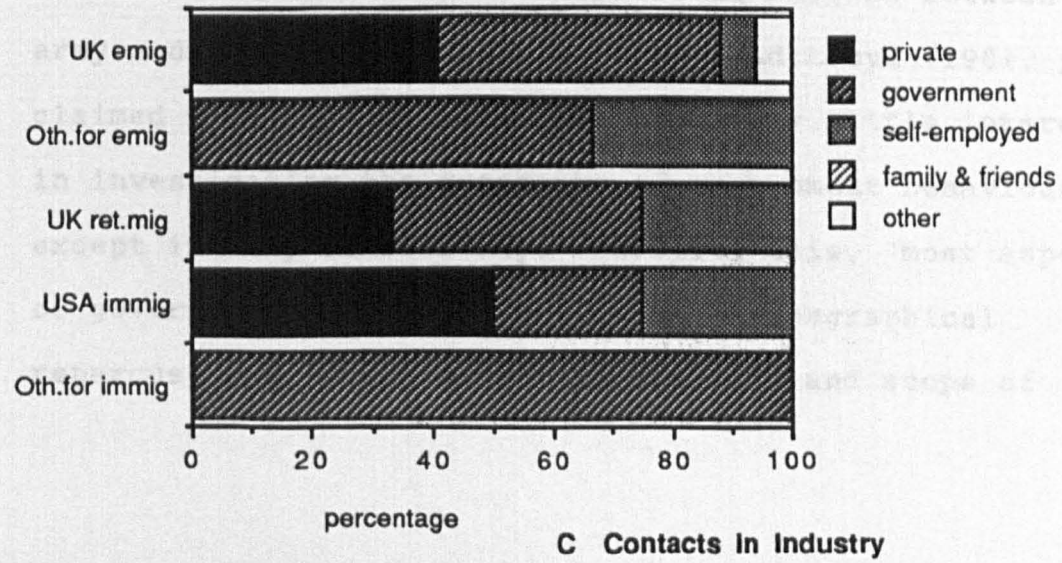
Figure 6.9 A-C Type of Employer by Channel Type and Migrant Type



A Intra-company Transfer



B Family and Friends



C Contacts in Industry

types. Indeed for certain channels, government employment was overall of most importance. The significance of such high levels of involvement with government sector employment (in the UK and abroad) has previously been little considered by research into skilled international migration, which has concentrated mainly on the importance of private firms (especially very large companies) for this phenomena.

The importance of government employment for international migrants and of government 'controlled' channels of movement, can be linked to discussion by Dicken and Lloyd (1981) regarding the role of "big government". These researchers suggested that the trend in modern industrial society towards increased organizational size was by no means confined to the private business sector, but was also evident in government and in non-profit making institutions, such as education and health. Growing linkages have also been noted between large organizations in the public and private sector. In this study for example, links have been noted between universities in various countries, as well as between the army and university sectors. Dicken and Lloyd (1981, p81) claimed that "geographers have been very little interested in investigating the geography of government behaviour except in very limited ways". Despite this, "most aspects of government behaviour have enormous geographical repercussions, particularly as the size and scope of

government organizations have increased so markedly" (ibid, p82).

The increased 'size' and functions of government in modern societies require the employment of an increased number and variety of skilled people. The international movement of government employees through the operation of professional institutional, newspaper and other media, 'contacts in industry' and among those who were 'themselves the channel' for their move, reflects the extended nature of government employment in many countries. While international links between government organisations (as implied in the professional institutional and contacts in industry channels) were used to facilitate the movement of skilled personnel, employment of newspaper/other media, and international recruitment agency channelled respondents would also suggest that governments actively seek out the skills and experience required within their organizations in an international context (Eg. for employment in health, teaching, aid organizations)

6.4.2 Organizational Structure of Employer

Respondents who indicated private company employment were also requested to give some indication of the organizational structure of their employer. This structure was defined in terms of the spatial organization of employment and 'size' of their employer. Details of the definitions of structure included in the questionnaire and the responses received are contained in Table 6.10. The

Table 6.10 Organizational Structure of Employer by Channel Type (%)

	(1) multi-national	(2) trans-national	(3) national local	(4) regional local
Intra-company transfer	83.8	14.6	0.8	0.8
International recruitment agency	37.5	25.0	25.0	12.5
Temporary job for company with overseas contract	33.3	16.7	33.3	16.7
Family and friends	28.9	18.4	23.7	28.9
Newspaper and other media	30.6	27.8	13.9	27.8
Themselves the channel	37.1	25.7	14.3	22.9
Contacts in industry	23.1	38.5	15.4	23.1
Professional institutional	-	100.0	-	-
Other channels	36.8	36.8	15.8	10.5

(1) large multinational business/company - offices/branches in many countries
(2) transnational business/company - offices/branches in a few countries
(3) large local business/company - offices in one country
(4) small local business/company - offices in one region of a country

Chi square Test Results

X^2 calculated value = 152.38
critical tabulated value for 7 x 4 table,
18 degrees of freedom = 42.31
H_0 rejected 99.9% confidence

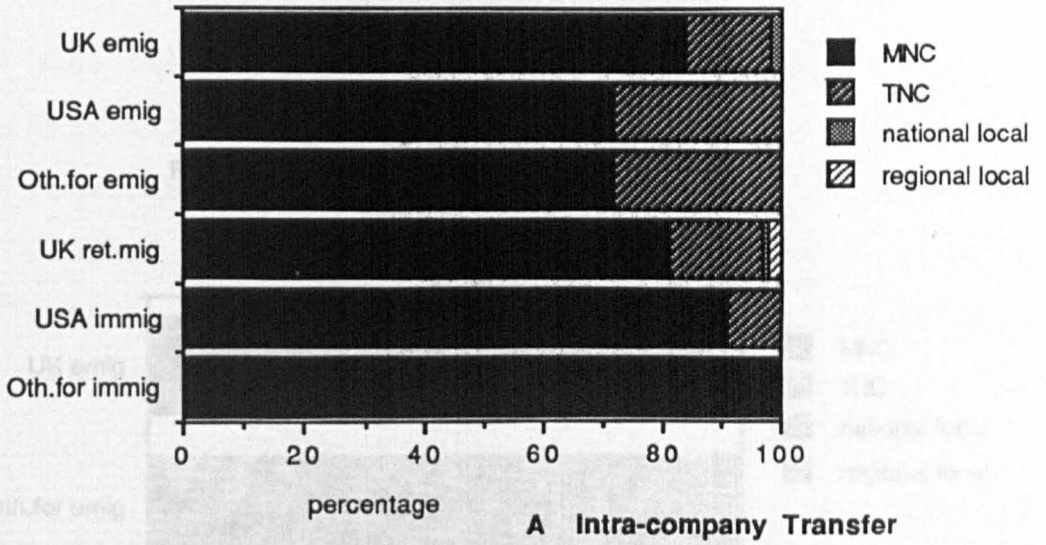
calculated X^2 value indicates that the null hypothesis should be rejected and that a statistically significant association exists (by inference) between organizational structure and migration channel type.

The highest concentration of employment with one mode of employer organization was found for intra-company transfer channelled moves. 83.3% of these respondents were employed by multinational companies. The main organizational feature of this employer structure was the existence of offices/branches in many countries. The multi-location nature of these companies necessitates the movement of skilled personnel internationally. Figure 6.10 A reveals that the highest level of involvement with multinational companies was among foreign immigrants transferred to Scotland. The lowest level of MNC involvement was for other foreign emigrants from Scotland, where trans-national companies (of a less extensive international nature) were of much increased importance as an employer.

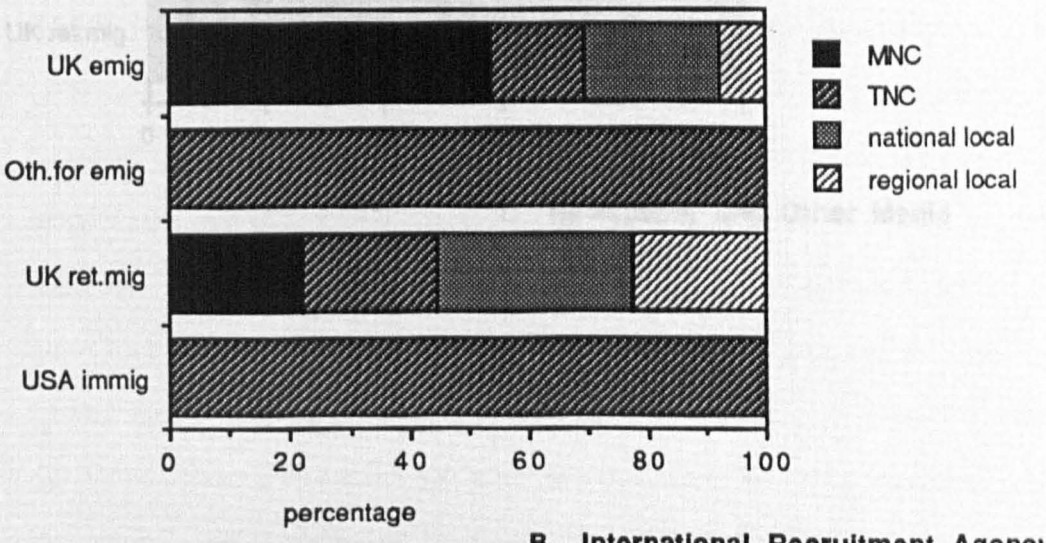
Involvement with local national or regional firms ('parochial' employers) was found to be most significant amongst respondents moving through previously undefined or unresearched channels - family and friends, newspaper and other media, contacts in industry channels, and for those who were themselves the channel.

In the case of UK emigrant respondents who moved through the actions of family and friends (Figure 6.10 C), employment abroad in these 'small' companies was of great

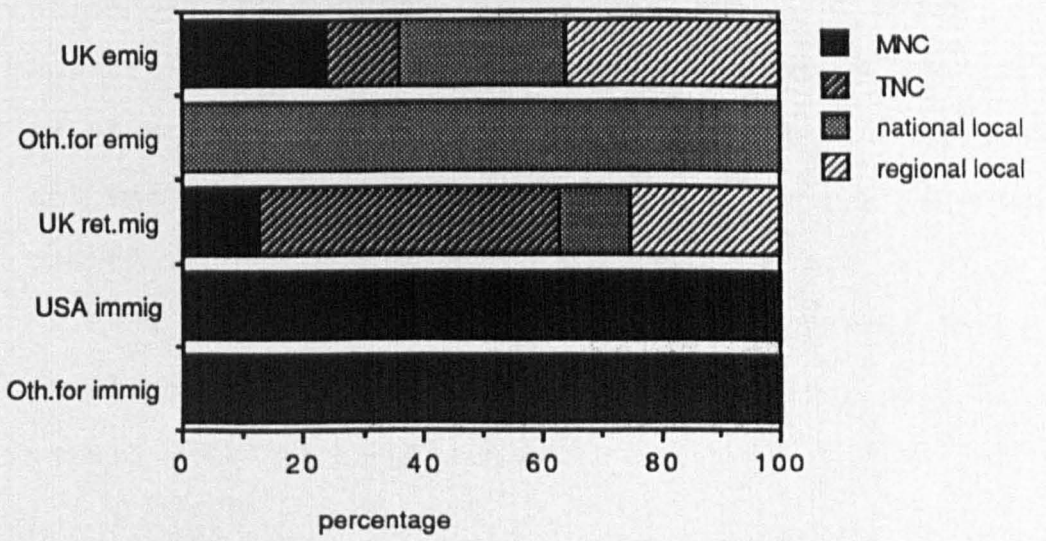
Figure 6.10 A-D Organizational Structure of Employer by Channel Type and Migrant Type



A Intra-company Transfer

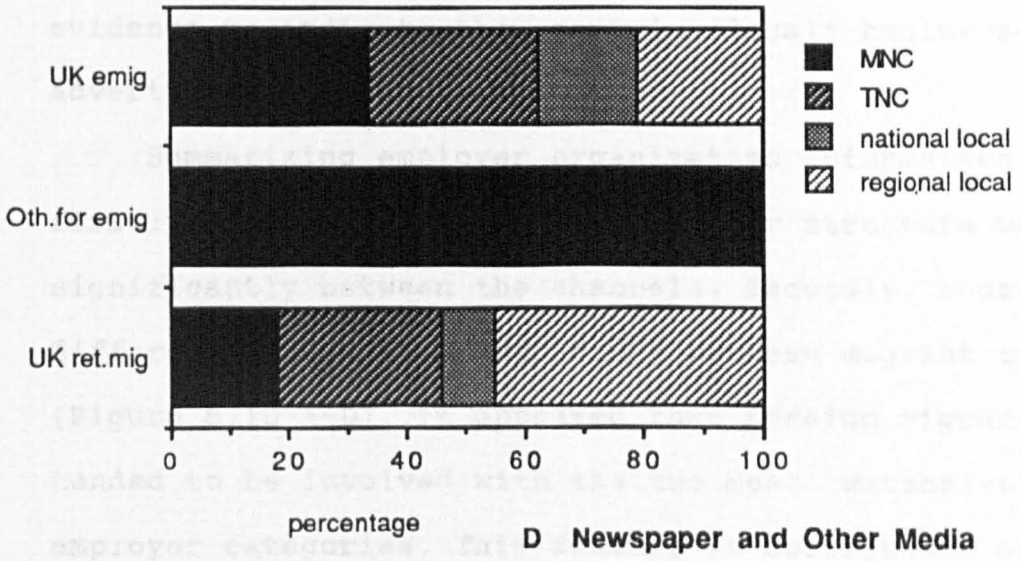


B International Recruitment Agency



C Family and Friends

Figure 6.10 (continued)



D Newspaper and Other Media

importance. Employment within the organizational structures of these companies abroad would perhaps have been difficult to arrange without the aid of family and friends. It may seem unlikely that these 'smaller' local companies would advertise internationally for employees. However, Figure 6.10 D would seem to provide contradictory evidence to indicate that certain 'local' businesses do advertise internationally.

Summarizing employer organization information : firstly, it would appear that employer structure varied significantly between the channels. Secondly, regarding difference in employer structure between migrant types (Figure 6.10 A-D), it appeared that foreign migrants tended to be involved with the two most 'extensive' employer categories. This feature is descriptive of the extent and nature of involvement of 'international capital' in the Scottish economy - for example, the importance of 'branch plant' sites. The greatest variety of employer structures was found for UK respondents. However, it is important to state that this is a function of the survey context. A key question was whether involvement with 'other' employer structures and channel types was particularly the case for Scottish emigration, and was a hallmark of Scotland's 'peripheral' economic position.

No easy answer can be offered to this question. As previously discussed, this survey is one of only a few to examine skilled international migration in a varied

employment and organizational context. The survey was not based solely upon responses obtained from expatriate employees moving internationally through the internal labour markets of their employing company, but tried to provide a picture of the complexity of the Scottish skilled international migration system. Future research in other 'peripheral' regions of the UK, and in other countries may help to provide an answer to this key question.

It is suggested, however, that the proportions of skilled international migrants involved in 'other' channels and in 'other' employer structures are much higher than would be expected in the 'core' UK economic region - the South East. In this core region, international migration through company channels would predominate to a greater extent. The 'desire' for international migration (of employees and employers) would meet through the operation of this channelling process. In the Scottish context, 'desire' for international migration cannot be fully met through operation of this company channel. The more restricted nature of MNC involvement in the Scottish economy (certain employment/industrial sectors, certain company functions) and hence the more restricted access to this channel, prompts individuals to consider a range of 'other' channels and employer types by which they can fulfil their desires for international mobility.

6.5 In Search of Generalization : An Application of The Weaver Crop Combination to Migration Data

The Weaver Crop Combination method was used by the researcher to explore the relative geographical importance of four migration variables : channel type, employment type, employer type and the organizational structure of employer. This was done on a regional basis for migrant flows into Scotland and for destination countries for outward flows from Scotland.

Weaver (1954, 1956) proposed a method of analysing the relative local importance of agricultural activity, but his method can easily be adapted to use with migration data. The method employed is to compare the proportions of an observed distribution with a series of hypothetical distributions in order to establish which one most closely approximates to the observed data. The best fit solution is obtained by calculating the sum of squares of the difference between each category of a hypothetical and observed distribution. The most accurate approximation is shown by the smallest sum of squares. A worked example using the researcher's survey data for UK return migrants to Edinburgh is given in Table 6.11.

Weaver (1954) originally used this index to classify agricultural land use, as did Thomas (1963) who subsequently modified the technique. Smith (1969) used this combination technique to map 'one industry' and 'two industry' towns in north west England.

Table 6.11 A Worked Example of the Application of Weaver Crop Combination Method - Employer Type Characteristics of UK Return Migrants to Edinburgh.

Percentages of each employer type :-

private	48.4
government sector	29.0
self-employed	19.4
other	3.2

1 employer dominance				
hypothetical	100 .0	0.0	0.0	0.0
observed	48.4	29.0	19.4	3.2
d	51.6	71.0	19.4	3.2
d^2	2662.6	5041.0	376.4	10.2
total d^2	8090.2			
2 employer dominance				
hypothetical	50.0	50.0	0.0	0.0
observed	48.4	29.0	19.4	3.2
d	1.6	21.0	19.4	3.2
d^2	2.6	441.0	376.4	10.2
total d^2	830.2			
3 employer dominance				
hypothetical	33.3	33.3	33.3	0.0
observed	48.4	29.0	19.4	3.2
d	15.1	4.3	13.9	3.2
d^2	228.0	18.5	193.2	10.2
total d^2	**449.9**			
4 employer dominance				
hypothetical	25.0	25.0	25.0	25.0
observed	48.4	29.0	19.4	3.2
d	23.4	4.0	5.6	21.8
d^2	547.6	16.0	31.4	475.2
total d^2	1070.2			

Thus the 3 employer combination provides the lowest deviation and therefore may be regarded as the best fit.

Figure 6.11 illustrates details of the Weaver Crop Combination indices as calculated for UK emigrants from Scotland, indicating the country or area of the World in which they were living and working (with one circle representing each of the four variables being examined). In terms of the index of channel type, it can be noted

Key to Figures 6.11, 6.12, 6.13, 6.14, 6.15, 6.16

Channel of Movement

- Intra-company Transfer
- Recruitment Agency
- Company with Contracts
- Family and Friends
- Newspaper and Other Media
- Themselves the Channel
- Contacts in Industry
- Professional Institutional
- Other Channels

Employment Type

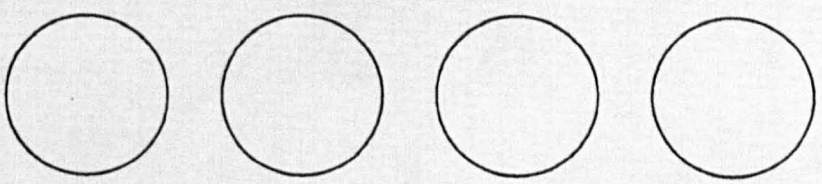
- Agriculture, forestry, fishing
- Energy and water
- Non-metal manuf/chemical prod
- Metal manuf, mech/elec/inst eng
- Other manuf
- Construction
- Retail, hotel,catering
- Transport/communications
- Banking/finance, business serv
- Other services

Type of Employer

- Private Sector
- Government Sector
- Self - employed
- Family and Friends
- Other employer

Employer Organizational Structure

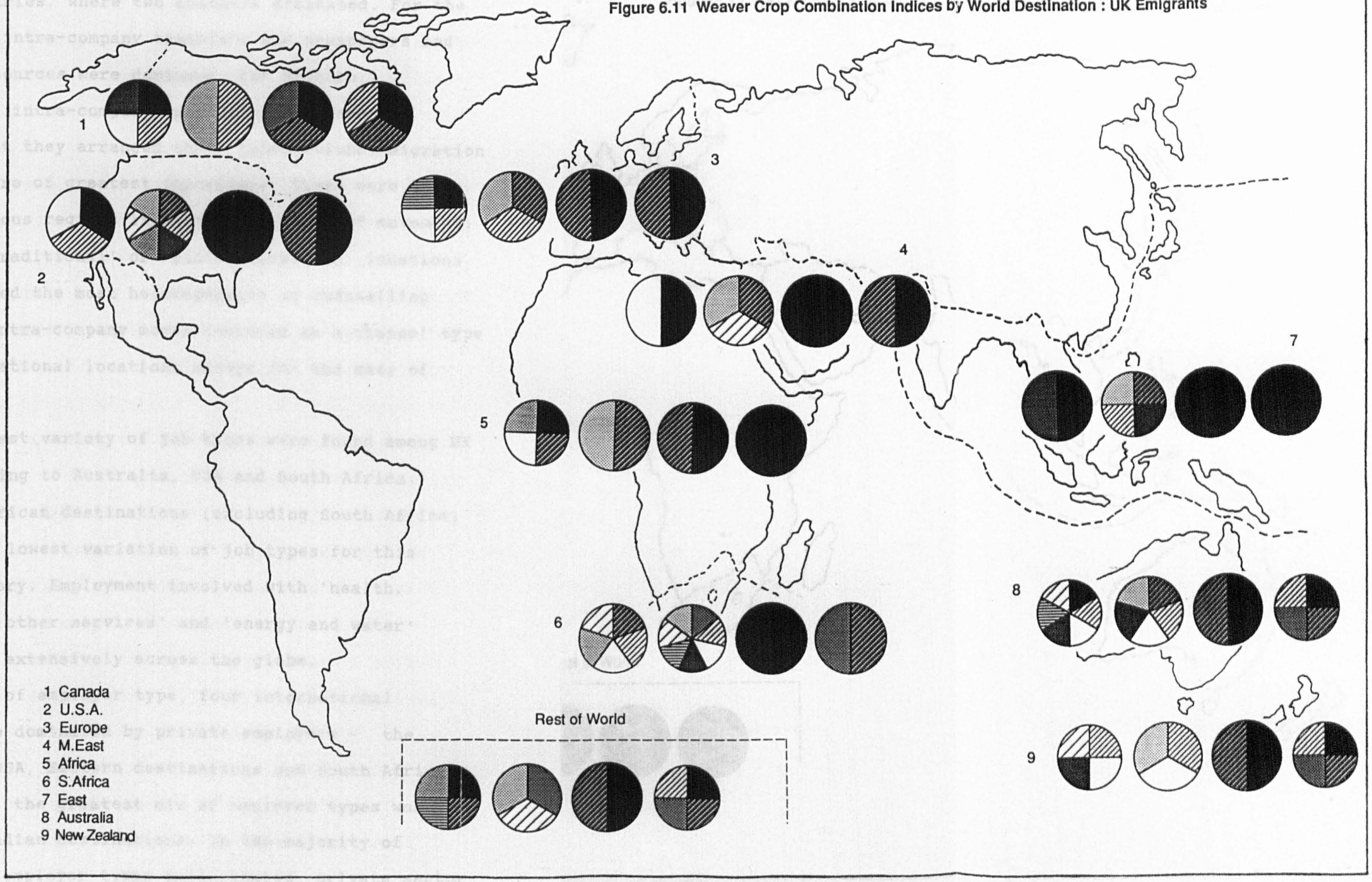
- MNC
- TNC
- national local
- regional



Channel | Employment Type | Employer Type | Organizational Structure of Employer

1 : 110 000 000

Figure 6.11 Weaver Crop Combination Indices by World Destination : UK Emigrants



that the greatest variety was for respondents moving to Australia. The least variation in channels of movement was found for respondents moving to the Middle East and Eastern countries, where two channels dominated. For the Middle East, intra-company transfers and newspapers and other media sources were dominant. For Eastern destinations, intra-company transfers and those who indicated that they arranged their international migration themselves were of greatest importance. These were the most homogeneous regions in terms of channel of movement. It was the 'traditional' or 'old commonwealth' locations which displayed the most heterogeneity of channelling mechanisms. Intra-company moves featured as a channel type to all international locations except for the case of South Africa.

The largest variety of job types were found among UK emigrants moving to Australia, USA and South Africa. Canada and African destinations (excluding South Africa) displayed the lowest variation of job types for this migrant category. Employment involved with 'health, education and other services' and 'energy and water' featured most extensively across the globe.

In terms of employer type, four international locations were dominated by private employers - the Middle East, USA, Eastern destinations and South Africa. In comparison, the greatest mix of employer types was found for Canadian destinations. In the majority of locations two employer types predominated, private sector

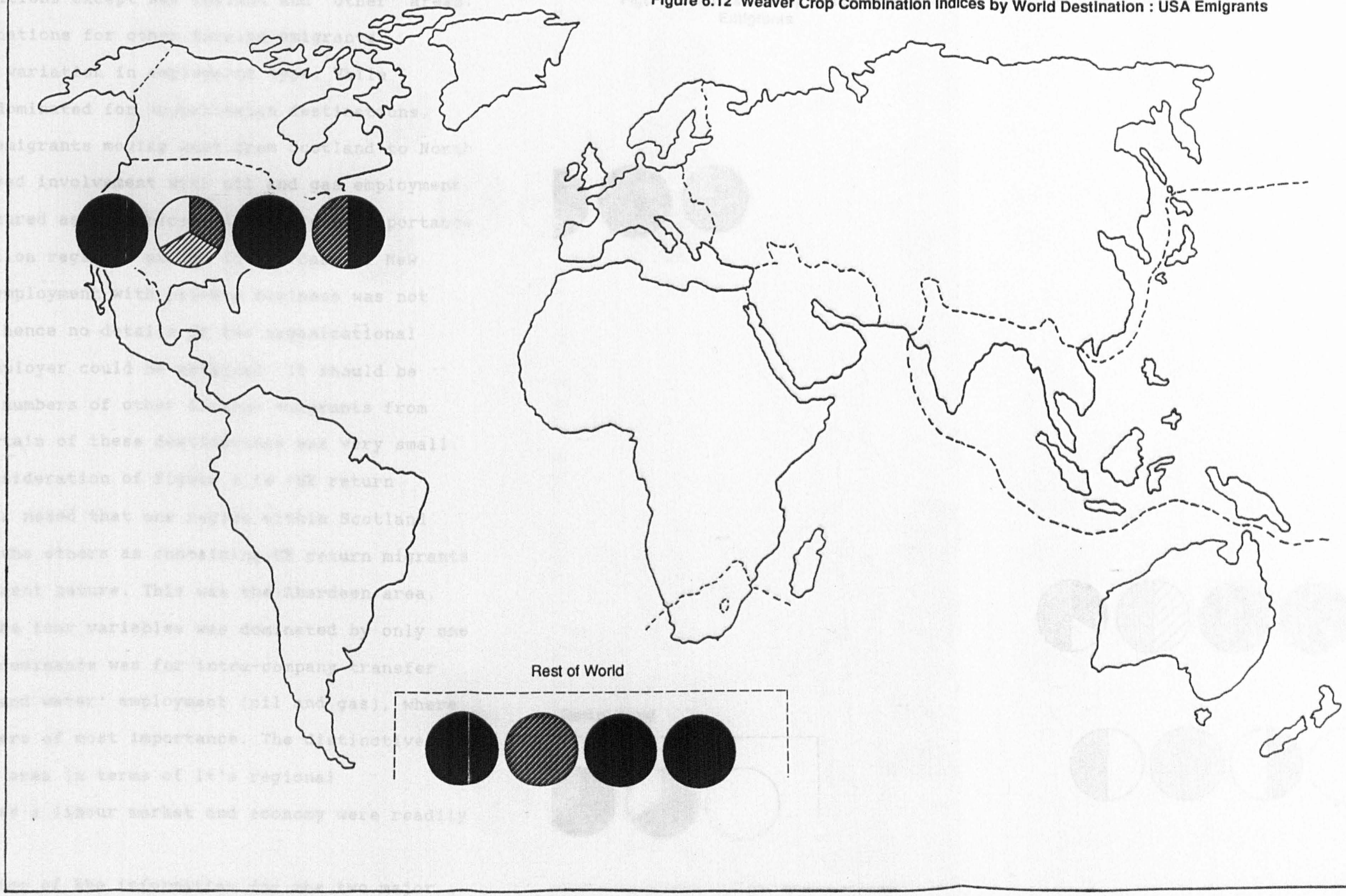
and government sector employment. The global nature of government employment further evidences it's importance, and the need for research into this type of international employment.

Privately employed UK emigrants moving to Eastern and African countries were mainly employed in MNC's, while all other areas of the world showed more variety of employer organization characteristics. South Africa was the only destination area of no importance for MNC employers, here TNC's and local companies were of most importance.

With regard to USA emigrants from Scotland, Figure 6.12 indicates that only the USA featured as an important destination area (82.1% of USA emigrants), implying that on the whole, USA emigrants from Scotland could also be categorized as return migrants to the USA. It can be seen that only intra-company transfers were of any importance as a channel for these return moves, and that employment was concentrated in three job sectors - oil and gas, computing and other manufacturing industries. Private employment with MNC's or TNC's was shown to be of most importance for USA emigrants. Regarding those USA emigrants who moved abroad to a country other than the USA, it was found that these respondents overall appeared to be of a more homogeneous nature than USA return migrants. These emigrants were involved only with intra-company transfers, in oil and gas employment, through the internal labour markets of multinational companies.

1 : 110 000 000

Figure 6.12 Weaver Crop Combination Indices by World Destination : USA Emigrants



For other foreign emigrants (Figure 6.13), Australia was the destination displaying most variety in channel of movement. Intra-company transfer moves were of importance for all destinations except New Zealand and 'other' areas. European destinations for other foreign emigrants displayed most variation in employment type. While 'services' predominated for Australasian destinations, other foreign emigrants moving west from Scotland to North America displayed involvement with oil and gas employment.

MNC's featured as an employer structure of importance in all destination regions, except in the case of New Zealand where employment with private business was not indicated, and hence no details of the organizational structure of employer could be obtained. It should be noted that the numbers of other foreign emigrants from Scotland to certain of these destinations was very small.

From a consideration of Figure 6.14 (UK return migrants) it was noted that one region within Scotland stood out from the others as containing UK return migrants of a very different nature. This was the Aberdeen area, where each of the four variables was dominated by only one category. This dominance was for intra-company transfer moves, 'energy and water' employment (oil and gas), where MNC employers were of most importance. The distinctiveness of the Aberdeen area in terms of it's regional specialisation as a labour market and economy were readily distinguished.

Consideration of the information for the two major

1 : 110 000 000

Figure 6.13 Weaver Crop Combination Indices by World Destination : Other Foreign Emigrants

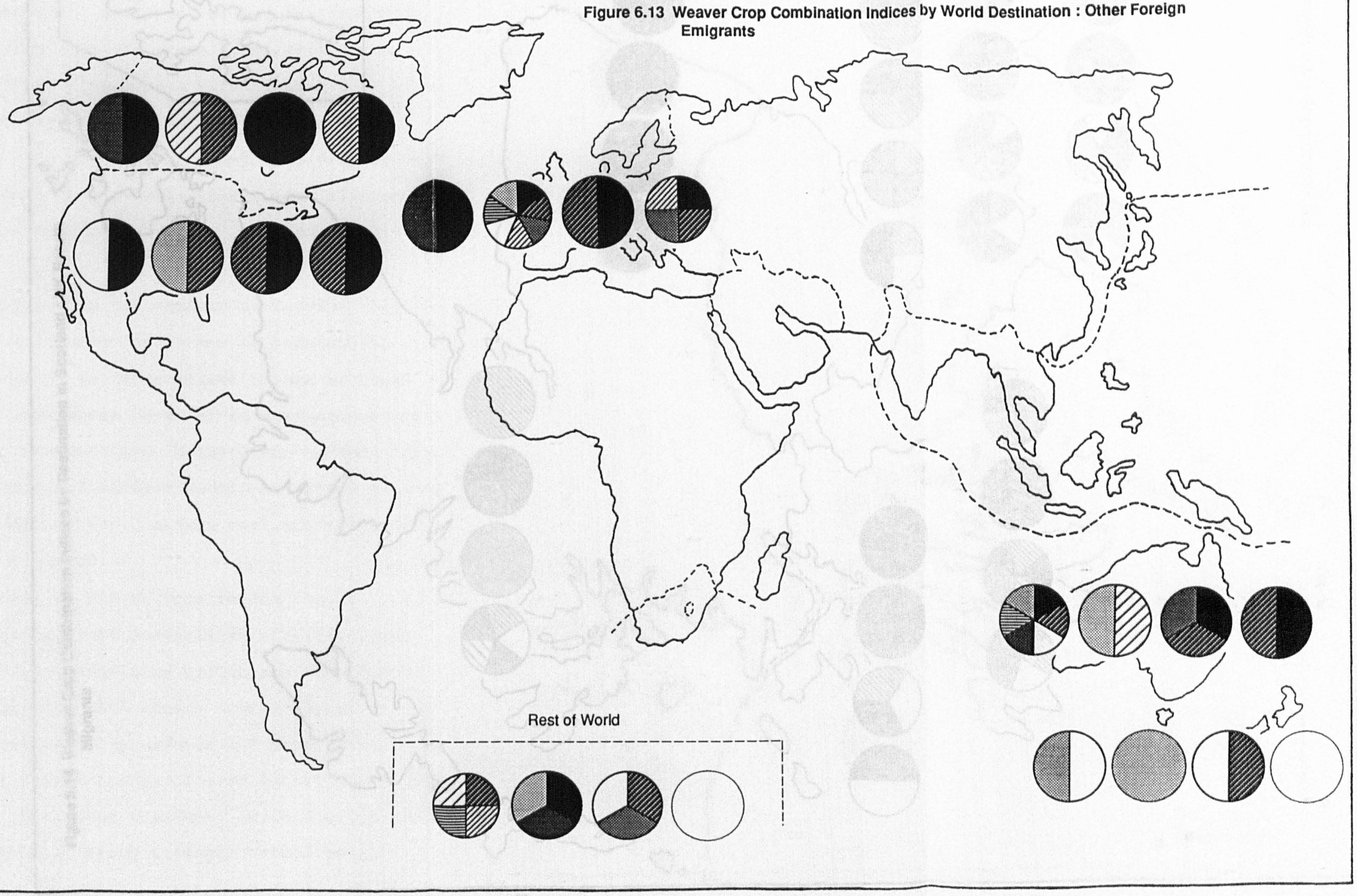
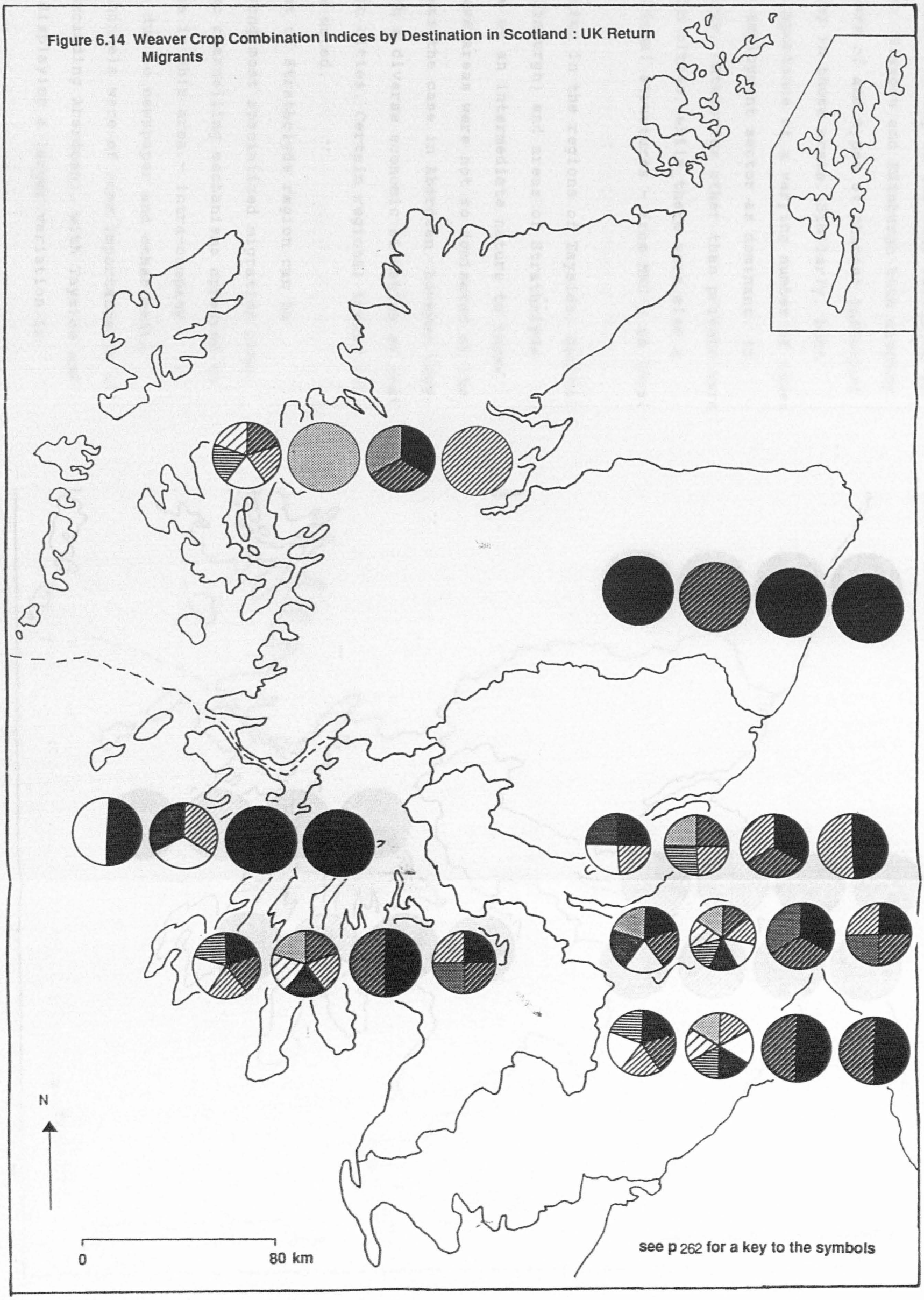


Figure 6.14 Weaver Crop Combination Indices by Destination in Scotland : UK Return Migrants



see p 262 for a key to the symbols

cities of Scotland reveals that these do not display the same degree of dominance by any of the four variables as is found in Aberdeen. Glasgow and Edinburgh both display variety in the numbers of and types of channel indicated by respondents living in these areas. Similarly, both cities display the importance of a varying number of types of job, with no one employment sector as dominant. In terms of employer type, categories other than private were of importance in both cities, while there were also a variety of organizational structures - from MNC's to local regional firms.

Respondents living in the regions of Tayside, Central & East (excluding Edinburgh) and areas of Strathclyde outside Glasgow were of an intermediate nature to those described above. These areas were not so dominated by one economic sector as was the case in Aberdeen, however they were also not of such a diverse economic situation as that found in the two main cities. Certain regional trends or specialisms could be noted.

Overall the rest of Strathclyde region can be described as the second most specialized migration zone (after Aberdeen). Two channelling mechanisms appeared to be of most importance in this area - intra-company transfers, and moves due to newspaper and other media sources. These two channels were of some importance in all areas of Scotland (excluding Aberdeen), with Tayside and Central & East both displaying a larger variation in channel type.

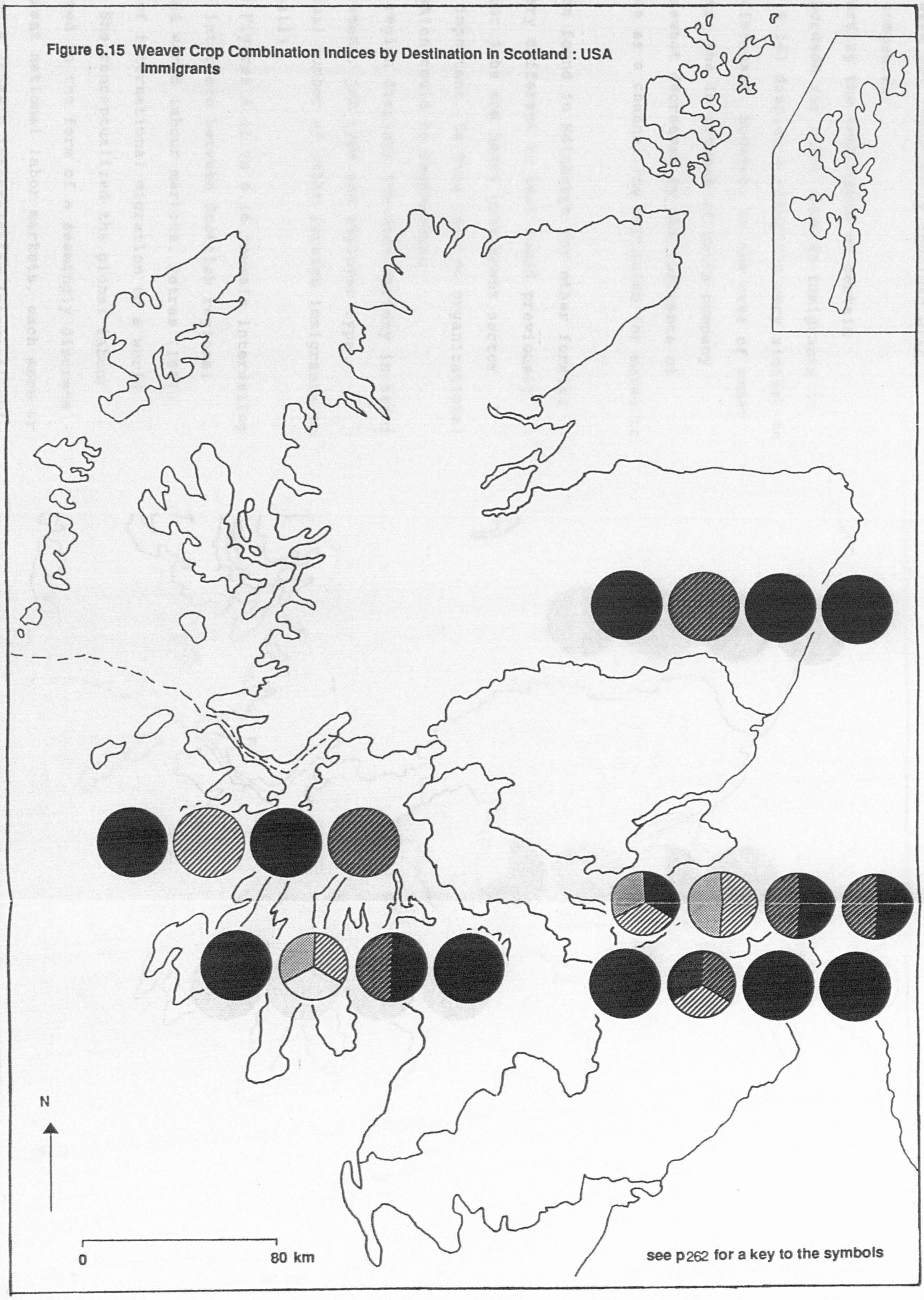
Contrasting Figure 6.14 (UK return migrants) with Figure 6.11 (UK emigrants) it would appear that UK emigrants overall displayed less homogeneity of behaviour than return migrants.

Weaver Crop Combination indices for the variables in the case of USA immigrants to Scotland are displayed as Figure 6.15. The first feature to notice from this map is that the indices for Aberdeen for this migrant type are identical to those for UK return migrants. Again employment in 'energy and water' (oil and gas) dominated, as did the channelling actions of intra-company transfers. Private employment was the norm for USA immigrants to Aberdeen, mainly involved with large MNC's.

A similar pattern of single dominance was displayed for the rest of the Strathclyde area for USA immigrants, although it was 'electrical and instrument engineering' (computer manufacture) employment that was of most importance, within transnational companies. It is interesting that computing employment was of importance in each of the Central Lowland areas of Scotland.

The intra-company transfer channel was dominantly of importance in four of the areas featured in Figure 6.15, only in Edinburgh were other channels of movement of any real importance. Employment with private companies dominated USA immigrants employment in all areas of Scotland excluding Glasgow and Edinburgh (where government sector employment was also of some importance). USA

Figure 6.15 Weaver Crop Combination Indices by Destination in Scotland : USA Immigrants



see p262 for a key to the symbols

immigrants were mainly found to be employees within MNC's and TNC's, they were not importantly involved with 'smaller' local companies.

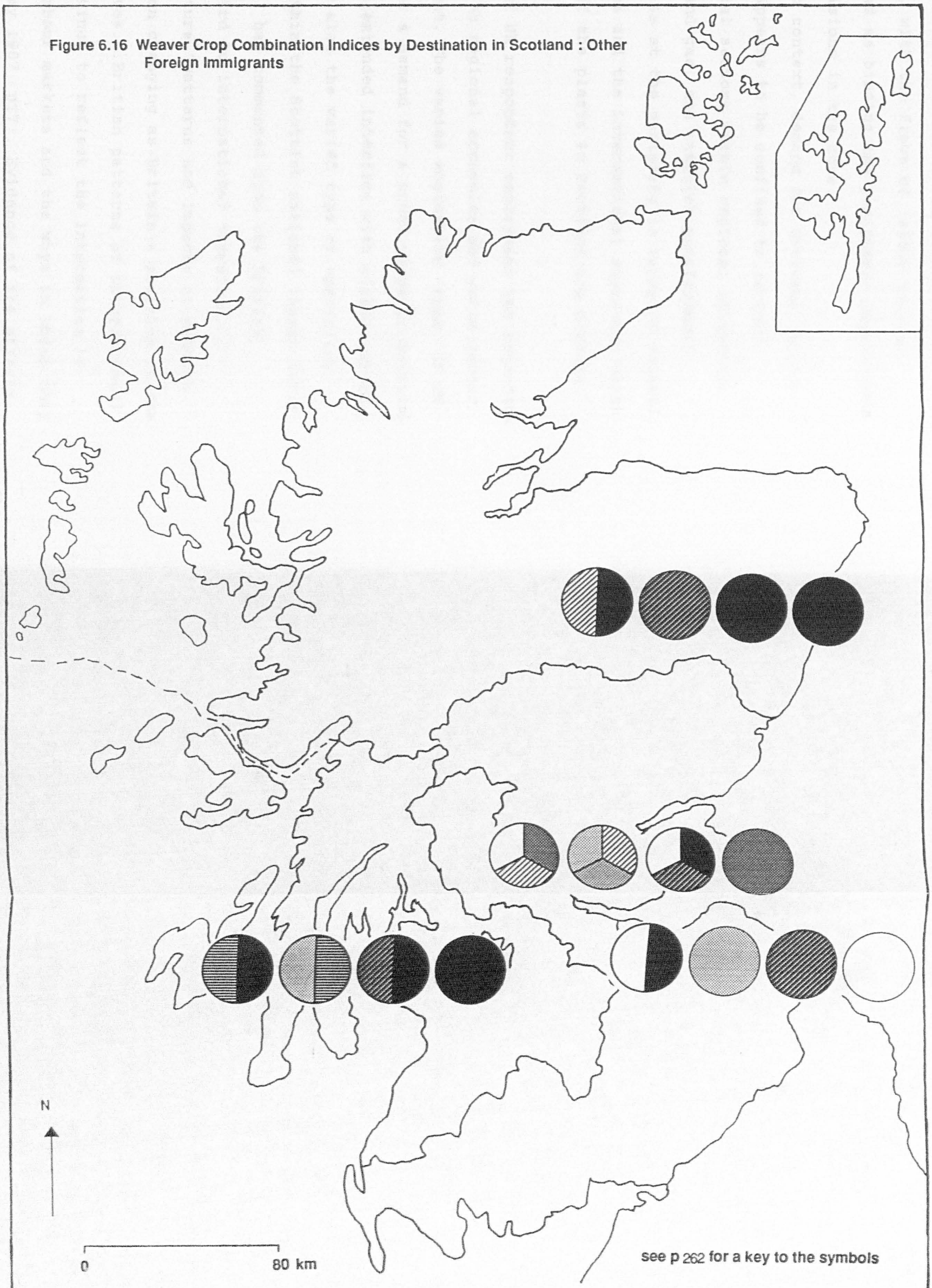
Details regarding the importance of certain enterprises in Aberdeen for other foreign immigrants to Scotland (Figure 6.16) display a situation very similar to that previously discussed. However, in the case of other foreign immigrants, the importance of intra-company transfers was somewhat decreased by the influence of family and friends as a channelling mechanism for moves to this area.

The situation found in Edinburgh for other foreign immigrants was very different to that found previously, with service sector jobs and hence government sector employment being important. In this case no organizational structure information could be represented.

The Tayside region displays the most variety in terms of channel of movement, job type and employer type (although the actual number of other foreign immigrants to this region is small).

Reference to Figures 6.11 to 6.16 reveals interesting details about the interface between Scottish regional economic trends and world labour markets. Petras (1981) linked the study of international migration to a world economy approach. She conceptualized the global labour market as "segmented in the form of a seemingly discrete set of very different national labor markets, each more or less regulated, and a loosely interrelating international

Figure 6.16 Weaver Crop Combination Indices by Destination in Scotland : Other Foreign Immigrants



see p 262 for a key to the symbols

labor market" (Petras 1981, p48). Core states within the world economy were described as having more power to control migration, with the flows of labour between countries described as binding the peripheral populations to events and decisions in the core.

In a Scottish context, demand for overseas skills (especially USA) appears to be confined to certain important industrial sectors within regional economies, for example, oil and gas, and computer manufacture. However, Scotland is at the periphery in terms of control of these industries and the international migration which results, as many of the plants in Scotland are foreign owned.

In the case of UK respondent employment the interface between the Scottish regional economies and world labour markets is different. The varied employment 'type' of UK respondents reveals a demand for a broad range of Scottish skills abroad - an extended interface with global labour markets. Revealing also the varied type of specialist skill available within the Scottish national labour force.

Findlay (1987) has commented upon the British situation with regard to international migration, indicating that future "patterns and impacts of British migration will go on changing as Britain's position in the world economy evolves...British patterns of international migration will continue to reflect the interaction of local and global labour markets and the ways in which they are linked" (Findlay 1987, p17). Evidence of the effects

of Scotland's position in the world economy upon skilled international migration patterns have been graphically provided. Linkage of local and global labour markets occurs through the control of entry to, and mode of operation of the various channelling mechanisms.

6.6 Conclusions

If consideration is given to all the information presented on migrants' personal and employment characteristics, it is possible to draw some general conclusions. A main conclusion relates to the positive validity of a channels framework for investigation of these characteristics. The main focus of this discussion was defined as the relationship between the different channelling mechanisms and respondents' characteristics. Channels are selective in the nature of the migrants who gain entry to them and are moved internationally. This was evidenced by the highly significant chi square values calculated. Thus channel of international movement is an important consideration in an understanding and explanation of the characteristics of questionnaire respondents.

A second conclusion would be that certain channels (Eg. intra-company transfer) operate to select individuals with more homogeneous personal and employment characteristics. Such information also provided details of bias in entry to certain channels, for example, in terms of gender, employment type and status. Such homogeneity is linked to the nature and definition of the mode of

operation and control of this channel. For example, most company channelled respondents proved to be of young age, married, with two children of pre- or school age. However, the existence of a smaller group of respondents (older, married, children at an age where they are independent of parents and hence not involved with the international move), provided evidence that the processes which define this migration system may vary. Related to the varied national ownership of the companies, expatriate management policies, and employee career development policies.

Other channels, especially those previously unresearched, proved to allow for the international migration of a heterogeneous group of respondents. Investigation and explanation of these characteristics provided further details of the nature of these more varied channels.

It was revealed that channel type was also strongly linked with migrant type. Interpretation of an individuals' personal and employment characteristics required a consideration of both channel and migrant type.

A further key question considered here was related to the 'Scottish' context of the survey, and whether the identification of relatively high levels of involvement with 'other' channels was evidence of Scotland's 'peripheral' position. It was suggested that this was the case, although further research of a similar nature in other 'core' and 'peripheral' areas would further evidence

the links between economy and involvement with various channels of international movement.

The graphical representation of data provided by the Weaver Crop indices allowed for characterisation of the Scottish economy in terms of its regional labour market specialisms. One of the main features of this discussion was the very specialized nature of the regional labour market in the Aberdeen area, and the very different nature of the links between this region and the global economy in comparison with the links of other Scottish regions.