COMPOSITIONS AND DESTINATION CHOICE PATTERNS OF CANADIAN IMMIGRANTS: AN ANALYSIS BASED ON THE PUBLIC USE SAMPLE OF THE 1981 CENSUS

By

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ABSTRACT

The major objective of this study was to assess the dependencies of the destination choice patterns of Canadian immigrants on six explanatory factors: ethnic origin, period of immigration, education, class of worker, occupation and income. A multivariate logit model was used to evaluate the relative importance of these factors.

Before this main objective was determined, the entry process of the immigrants in this study was analyzed. Five time periods were chosen for this examination: pre-1946, 1946-1960, 1961-1966, 1967-1977, and 1978-1981, each corresponding to a major event in the history of immigration and immigration policy. The immigrants who arrived in Canada during these five time periods were analyzed for the six explanatory factors in order to determine the effect of the changes in immigration policy on the characteristics of the immigrants entering the country.

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CHAPTER ONE

INTRODUCTION

Immigration is a very important topic in Canada today as it has been for many years. All Canadians are a product of an immigrant somewhere along the line in Canada's history. We do not, however, have a good understanding of who these immigrants are, what characteristics they have and where they end up locating. This study concentrates on answering these questions.

Chapter Two gives an overview of the existing literature on immigrants in Canada and relays the need for research in the area of the destination choice of Canadian immigrants. It also helps to understand the hardships immigrants face in adapting to Canada and the differences in adaptation among certain ethnic groups. The attitudes toward immigrants in Canada are also discussed as there are opposing positions among the Canadian population itself.

A description of the characteristics of the Canadian immigrant population is included in Chapter Three. These characteristics are ethnic origin, education, class of worker, occupation and income. The question asked in this chapter is whether the immigrant population has changed over time, and if so what role did the different

changes in the Immigration policy since 1946 have on these changes?

Chapter Four then describes the destination choice pattern of the immigrants in Canada at the provincial level. This chapter also includes a description of the destination choice pattern for each specific characteristic involved in this study leading to a good understanding of the type and quality of immigrant population each province in Canada receives.

Chapter Five describes the clustering procedure used to prepare the data for the logit analysis performed in Chapter Six. This analysis helps to determine which characteristics of the immigrant population play the largest role in determining their destination choice pattern.

The final chapter provides a brief summary of both the entry process and destination choice of the immigrants in Canada in 1981. Also included in this chapter is a summary of the results of the logit analysis performed to determine the explanatory factor or factors which helped to best explain the destination choice pattern of Canadian immigrants.

Chapter Two

An Overview and Literature Review

2.0 Introduction

In order to understand the need for information on the destination choice patterns of immigrants in Canada and the factors which may lead to the choice of these locations, a review of the existing literature in the area of Canadian immigration is needed. Quite a few studies have been done in order to determine what characteristics the immigrants entering Canada have, there is, however, a lack of research on their destination choice. As a result, this chapter is intended not only to give a background understanding of the existing research but also to show the need for research in the area of destination choice of immigrants in Canada.

This chapter first deals with the changing socio-economic composition of immigrants in terms of their ethnic origin, educational attainment, occupational status and income. Next an analysis of the literature which has been done to date on the destination choice patterns of immigrants is discussed. An overview of the adaptation of immigrants once they have arrived in Canada in terms of status attainment among specific ethnic groups is then

analyzed. Finally, the attitudes of Canadians toward immigrants and immigration policy in light of unemployment rates and population growth experienced in Canada is discussed.

2.1 The Composition of Canadian Immigrants

It has become apparent that the composition of immigrants in terms of their ethnic origin has changed over the years. Coinciding with this are changes in terms of educational attainment, occupational status and income. The differences found between these groups may be a result of many factors, some of which are dealt with below.

The traditional source countries of immigrants to Canada were historically from the United Kingdom, France, United States and Western European countries. At the time of the first census in 1871, the Canadian population was mainly British and French with 61.2 percent and 31.4 percent, respectively. If the British were taken individually, no one group was larger than the French. The British were comprised of 20.4 percent English, 16.0 percent Scottish, 0.2 percent Welsh, and 24.6 percent Irish. German and Dutch origins comprised the largest proportion of the remaining population with 5.9 and 0.9 percent respectively. Other groups, each representing less than 1.0 percent of the national population, were Swiss,

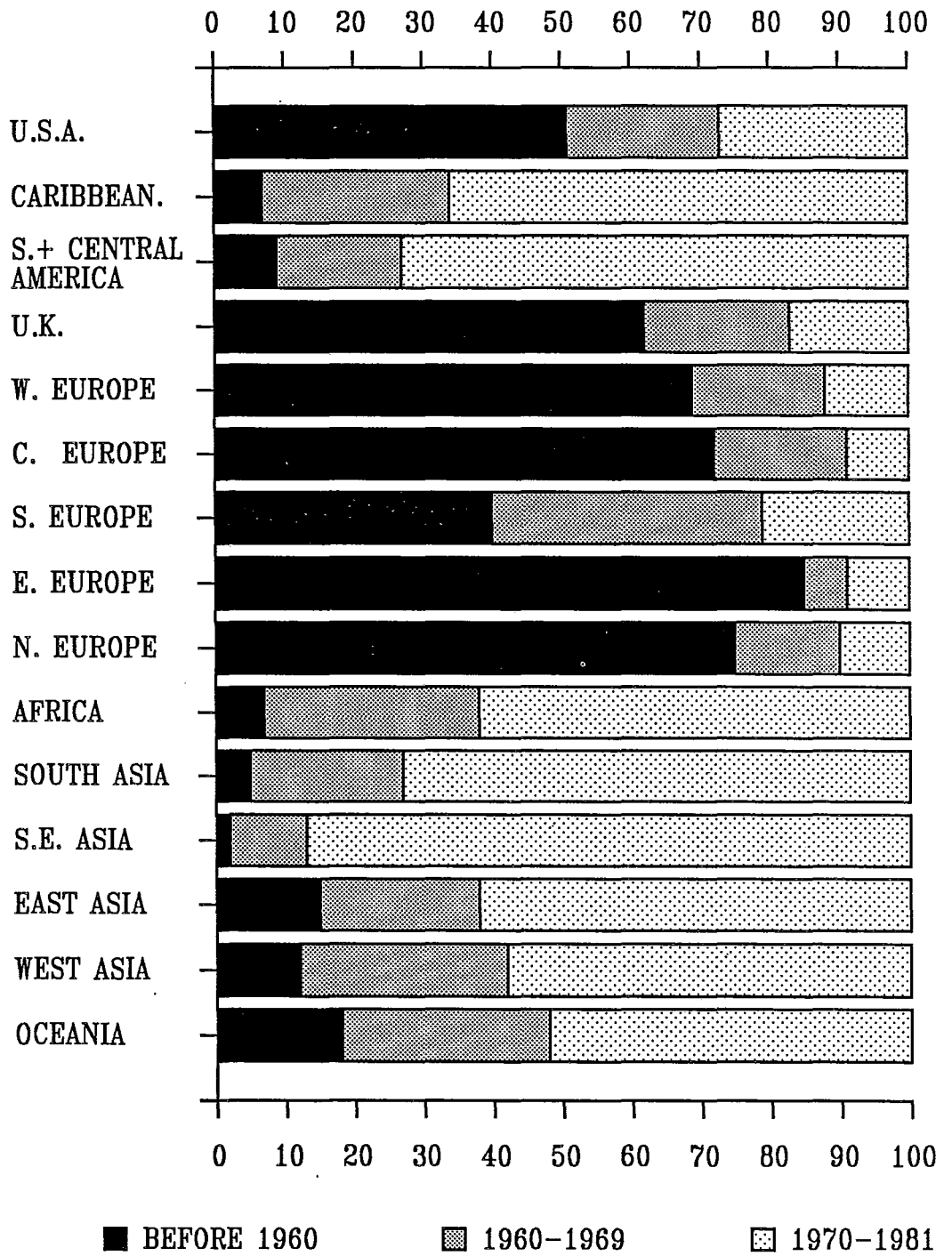
Italian, Spanish, Portuguese and other nationalities (Census of Canada, 1870-71).

Figure 2.1 shows clearly the shift from a more traditional immigrant influx to a non-traditional one. Before 1960, the immigrants who entered into Canada were mainly from the U.K. and Europe, with very small proportions coming from other countries. The Southern Europeans were the only European immigrants to have a larger proportion of their immigrant population enter Canada after 1960. Since the early 1970's Asian and Latin American countries became the new source of immigrants to Canada. These new source countries are referred as non-traditional source countries (Beaujot, 1986; Passaris, 1986).

These largely Third World non-traditional source countries of Canada's immigrant population started to make their way into the ten leading source countries of immigrants since the late 1960's (Passaris, 1986). Employment and Immigration Canada publishes data on the number of immigrants entering the country each year. In Table 2.1 it can be seen that in the earlier years the countries where most immigrants came from were predominantly Western European countries, the United States and Britain. In the 1960's Southern European countries,

Figure 2.1

Immigrant population by Period of Immigration and Place of Birth, Canada, 1981



Source: Beaujot, Basavarajappa and Verma, Income of Immigrants in Canada, 1980, Statistics Canada Forthcoming

TABLE 2.1 THE TEN LEADING SOURCE COUNTRIES OF IMMIGRATION TO CANADA, SELECTED YEARS

Rank	1951	1960	1968	1973	1979	1981	1982	1983	1984
1.	Britain	Italy	Britain	Britain	Vietnam	Britain	Britain	U.S.A.	Veitnam
2.	Germany	Britain	U.S.A.	U.S.A.	Britain	U.S.A.	U.S.A.	India	Hong Kong
3.	Italy	U.S.A.	Italy	Hong Kong	U.S.A.	India	Poland	Hong Kong	U.S.A.
4.	Netherlands	Germany	Germany	Portugal	Hong Kong	Vietnam	India	Vietnam	India
5.	Poland	Netherlands	Hong Kong	Jamaica	India	China	Hong Kong	Britain	Britain
6.	France	Portugal	France	India	Laos	Hong Kong	Vietnam	Poland	Poland
7.	U.S.A.	Greece	Austria	Philippines	Philippines	Philippines	Philippines	Philippines	Philippines
8.	Belgium	France	Greece	Greece	Portugal	Poland	Germany	Haiti	El Salvador
9.	Yugoslavia	Poland	Portugal	Italy	Jamaica	Haiti	China	Guyana	Jamaica
10.	Denmark	Austria	Yugoslavia	Trinidad	Guyana	Portugal	Guyana	El Salvador	China

Source: Canada Employment and Immigration Commission, Annual Report, various years.

especially Italy were entering the top ten source countries. From 1968 onward, however, there has been an emergence of non-traditional source countries such as Hong Kong, India, China, Vietnam, the Philippines and other Third World Countries.

The major contributing factors to this trend have been suggested as being: (i) a declining fertility rate in European countries, (ii) high fertility levels in Third World countries, (iii) the improved economic positions and job prospects in traditional European countries, and (iv) the change in Canada's immigration policy to one which is universalistic in nature and does not base admission on ethnic origin but on qualifications such as education, vocational training, occupational demand and other factors (Passaris, 1986).

Not only are the sources of immigration shifting, recent immigrants are now very diverse in their ethnic backgrounds. In a 1984 study done by Statistics Canada, on the 1981 census population, it was found that approximately "80 percent of the immigrants who had arrived before 1961 were from just 10 countries. But for the 1971-81 decade, the ten leading countries accounted for just 57 percent of the immigrants who had come during those years" (Statistics Canada, 1984:9).

In terms of education, "the most recent immigrants tended to be the best educated" (Statistics Canada, 1984:18): only 7 percent of the immigrants who had arrived before 1961 had a university degree while in the 1971-81 decade 15 percent of the immigrants were degree holders. This situation is suggested to have stemmed from the immigration policy change to the points system of immigrant selection in 1967. In order to have enough points to enter the country most immigrants had to be quite well educated.

Moreover, in the Immigration Act of 1976 (which took effect in 1978), greater emphasis was placed on technical training and occupational demand in Canada and less weight was placed on the general education of potential immigrants. This is confirmed by Basavarajappa and Verma's 1985 study. They used a 20 percent sample of the 1981 census to compare characteristics of those immigrants from the United Kingdom and Asia to the Canadian-born population and found that "the more recent the period of immigration, the lower the percentage of immigrants with university level education," where more recent immigrants are interpreted as immigrants who entered the country between 1976 and 1979 (Basavarajappa and Verma, 1985:99). They conclude that although immigrants from the United Kingdom have the highest average income (greater than

the native born Canadians), those immigrants from Asian countries were closing the gap as the 1980's approached.

In terms of differences in education and countries of origin, Richmond and Verma (1978b) found that those immigrants from the United States, United Kingdom, Western Europe, Asia and some other non-traditional source countries were generally well educated and highly qualified.

Parai (1974), analyzed the occupational status of immigrants in terms of their intended occupation at the time of arrival in Canada. He found that the proportion of immigrants who were intending to enter technical employment increased from 4.3 percent for those who entered before 1950 to 28.7 percent for those entering between 1967-71. For those same periods he also found that the proportion of unskilled labourers decreased from 40 percent to 13.5 percent. He further noted that there was often a discrepancy between the intended occupation of an immigrant and the occupation actually obtained in Canada. This point will be elaborated on later in the chapter.

Richmond and Verma (1978b) analyzed the occupational status of immigrants in terms of ethnic origin. Their principle conclusion was that ethnic groups who had higher education also tended to have higher occupational statuses.

They found that immigrants from the United States, United Kingdom, Western Europe, Asia and some non-traditional source countries like the Caribbean had a considerably higher occupational status than those from Italy and other Southern European countries. Their research also suggests that in the 1970's immigrants from Asia and other Third World countries had higher proportions in the higher status occupations such as the professional and semiprofessional occupations than in the earlier periods.

In terms of income, Statistics Canada (1984) found that the average 1980 incomes of immigrants were higher than that of the native-born population. The immigrants who arrived in Canada before 1971 were found to have a higher proportion in the high income category of greater than $25,000 than did both the native-born population and the immigrants who had arrived after 1971.

Richmond (1979) analyzed the 1971 census data in order to see how the immigrant population in Canada fared in terms of being in the low income group. He found that in 1971, 19 percent of all Canadian families were below the low income line as defined by Statistics Canada for 1971. For the pre-1946 immigrants, 23.9 percent were below the low income line, 22.3 percent of the 1966-71 arrivals were also below this line. However, immigrants arriving between

1946-65 had below average proportions under the low income line. He noted that the high proportion of the pre-1946 immigrants in the low income category was partially due to the aging factor. The high proportion in the low income group for the most recent immigrants in this study is partially due to the recency of their arrival, many have not yet been able to establish themselves or find a job (Basavarajappa and Verma, 1985; Manpower and Immigration, 1974c; Richmond, 1967; Richmond, 1981; Boyd et al, 1985).

Differences in many characteristics are observed between immigrants of different nationalities as well as immigrants who entered Canada at different time periods, perhaps some of these differences can be explained by their location in Canada.

2.2 Destination Choice of Immigrants

The literature which is available on the destination choice patterns of immigrants in Canada is not very detailed and most do not analyze the patterns of immigrants belonging to different ethnic groups.

Hawkins (1972), using the Manpower and Immigration data for the post-war years up to 1970 on the intended destination of immigrants briefly describes their destination choice pattern. She notes that more than half of Canada's post-war immigrant population intended to

settle in Ontario, whereas Quebec was the second most preferred destination, albeit with a much lower share than Ontario. She also notes the low numbers of immigrants with the Atlantic Provinces being the intended destination and emphasizes the problem of regional disparity, thus suggesting that something must be done in order to attract immigrants to these eastern provinces. Clodman and Richmond (1981) suggest, however, that the disparities between the Atlantic provinces and the rest of Canada had decreased, Quebec on the other hand continues to contribute to total unemployment much more than the Atlantic provinces, the Prairies and British Columbia combined.

In a study on the labour force experiences of Canadian immigrants, Samuel and Woloski (1985) describe the destination patterns of immigrants as a whole and compare the economic experiences of the immigrants in different regions. Of the immigrants who entered the country in 1979, 52.6 percent were destined for Ontario, 21 percent went to the Prairies (including the Northwest Territories), 15.5 percent to British Columbia (including the Yukon), 8.4 percent to Quebec and 2.4 percent to the Atlantic Provinces.

In terms of the economic experiences of the immigrants in each region, Samuel and Woloski (1985) found

that those immigrants who resided in the Atlantic Provinces and Quebec experienced higher than the national average number of weeks of unemployment. During the 1979-1982 period, however, there were high unemployment rates in those regions which tend to explain this finding. Immigrants in British Columbia also experienced higher than the average number of weeks of unemployment for the 1981 and 1982 periods only. In another similar study it was also found that "immigrants who settled in the Prairie Provinces experienced the least unemployment" (Canadian Immigration and Population Study, 1974:27).

When earnings were compared between immigrants in each region for the 1980-82 period, the high income category was considered to be those earning $15,000 or more while immigrants belonging to the low income category earned below $5,089. Samuel and Woloski (1985) found that both the Atlantic Provinces and Ontario had consistently high proportions of their immigrants in the high income category for all three periods. Quebec and British Columbia had the highest proportions of immigrants in the low income category with 44 percent of Quebec's immigrants in 1980 earning below $5,089 (Table 2.2).

In a Statistics Canada (1984) study of the 1981 census, there is a brief description of the destination

TABLE 2.2 INSURABLE EARNINGS OF IMMIGRANTS BY REGION OF RESIDENCE, 1980-1982 (1981 Constant Dollars)

	1980				1981				1982			
Region of Residence	0-5089	5089-10,000	10,000-15,000	15,000+	0-5089	5089-10,000	10,000-15,000	15,000+	0-5089	5089-10,000	10,000-15,000	15,000+
Atlantic	21.9	42.2	12.5	23.4	22.7	28.8	30.3	18.2	24.1	31.0	19.0	25.9
Quebec	44.1	28.6	16.8	10.5	18.6	37.9	29.1	14.4	33.6	23.4	26.2	16.8
Ontario	32.2	26.8	21.7	19.3	20.7	25.6	26.9	24.7	23.6	25.1	28.2	23.1
Prairies*	24.1	30.7	29.7	15.4	15.4	22.9	35.7	26.0	24.3	24.9	29.9	20.9
B. C.**	32.0	28.8	24.2	15.0	22.3	24.3	30.7	22.7	31.8	21.4	26.3	20.6
Total	31.2	28.4	23.3	17.1	19.7	26.9	29.7	23.7	25.8	24.4	28.0	21.8

* including the Northwest Territories
** including the Yukon

Source: Samuel, T. J. and B. Woloski 'The Labour Market Experiences of Canadian Immigrants.' International Migration, Vol. 23, 1985, p. 235

choice pattern of immigrants by province. They found that 52.4 percent of the immigrants settled in Ontario, 13.6 percent in Quebec, 2.0 percent in the Atlantic provinces, 3.8 percent in Manitoba, 2.2 percent in Saskatchewan, 9.4 percent in Alberta, 16.3 percent in British Columbia and 0.1 percent in both the Yukon and the Northwest Territories respectively (Statistics Canada, 1984:11). This finding corresponds to the findings of both Hawkins (1972) and Samuel and Woloski (1984).

Very few studies deal with the destination choice of immigrants, however, throughout these studies it has become apparent that immigrants have a higher percentage than native-born Canadians settling in urbanized areas rather than rural areas (Basavarajappa and Verma, 1985; Burnley and Kalbach, 1985). Burnley and Kalbach (1985) researched the levels of urbanization of immigrants in a comparative study between Canada and Australia. The research was based on the 1971 census data from Statistics Canada and statistics from the 1971 Census of the Commonwealth of Australia. Burnely and Kalbach (1985) found that immigrants tend to locate in urban areas in higher proportions than do the native-born populations in both countries. Also noted is the trend of immigrants migrating towards the largest cities, which leads to greater cultural

diversity in these larger urban areas. There was a higher level of cultural diversity found in Canada than in Australia, which reflects a greater overall ethnic diversity. Basavarajappa and Verma's (1985) study supports this by noting that nearly 97 percent of all Asian immigrants live in metropolitan and other urban areas, whereas the corresponding figure for the Canadian-born population is 75 percent.

The distribution of individual birthplace groups by city size was also studied by Burnley and Kalbach (1985). They note that there is a significant difference between pre-war and post-war settlement patterns. For the pre-World War II immigrants in Canada, the Central and Eastern European immigrants helped to settle the Prairies, therefore settling in a rural environment. While after the War, immigrants of these origins settled in the large urban centers. The Italians in Canada, however, have consistently shown a preference for large cities.

Once these immigrants have arrived in Canada and settled in either a rural or urban area, their adaptation to their new country is their next step.

2.3 Economic Adaptation of Immigrants

The economic adaptation of immigrants upon arrival to Canada has been studied quite extensively. Differences

in economic adaptation have been found to be related to differences in ethnic background and length of residence in Canada.

Many studies have found that immigrants from the U.K., the U.S., and Australia are better off economically than those from Southern Europe, Asia and Latin America (Manpower and Immigration (1974c), Richmond (1967), Samuel and Woloski (1985)). Boyd (1985) found that birthplace in the U.S., the U.K., or Northern or Western European countries lead to an occupational advantage compared to those of Southern and Eastern European countries.

Basavarajappa and Verma (1985) in their comparison of the Canadian-born population to immigrants from the U.K. and Asia found that immigrants from the U.K. had higher proportions in the professional and managerial occupations as well as higher incomes than both of the other two groups. However, Asian immigrants had slightly higher incomes than did the Canadian-born population. Basavarajappa and Verma (1985:104) conclude that;

> "the slightly higher incomes of the Asian immigrants compared with those of the Canadian-born population may well be due to the urbanization and metropolitization effect as incomes in metropolitan and urban areas tend to be higher than in rural areas."

In terms of the class of worker of the immigrant

population, Basavarajappa and Verma (1985:100) have found that excluding the recently arrived immigrants, the Asian and U.K. immigrants had higher proportions self-employed than did the Canadian-born. They have also found;

> "as length of residence increases, the employed and self-employed proportions for both Asian and U.K. born immigrants ... increase. For both sexes this increase is higher for the Asians than for the U.K. born immigrants."

Although some immigrant groups may have economic advantages over the Canadian-born population, these advantages take time to be acquired. Richmond (1967) found that immigrants who had been in Canada for three years or less had, on average, lower incomes than the Canadian-born population, while those immigrants who had resided in Canada for six years or greater had an economic advantage over Canadians. Richmond also found that education is a key variable in immigrant adaptation, having positive effects on occupational achievement and income. Orstein and Sharma (1983) have also found that education is an important determinant of successful adaptation.

Manpower and Immigration (1974c) found from a three year longitudinal survey of the 1969 cohort of immigrant arrivals that length of residence plays a role in economic adaptation. In the first six months, 22 percent of the sample was below the low income line. By the third year,

however, only four percent of the sample was below this line.

All immigrants, upon their first arrival in Canada, need some time for adaptation. However, this adaptation period may be longer for some than for others. The first three to five years in Canada involve adjustment problems for immigrants -- particularly those immigrants who do not speak either of the official languages and who belong to the so-called 'Visible Minority' (Richmond, 1981). This was reported by Richmond (1981) who conducted a 1970 survey in Toronto on the basis of which he states that there has been a continuous lack of recognition of immigrants' non-Canadian qualifications, as well as consequent underemployment and under-utilization of their skills (Richmond, 1981). Since the education and training of some immigrants may not be recognized in Canada, new immigrants must upgrade their education once they are in Canada, or accept a position which does not utilize them to their maximum potential (Boyd et al, 1985). Immigrants from the U.K., the U.S. and Australia usually have an educational background and training acceptable to Canadian employers and hence have better employment opportunities upon arrival to Canada. Not only do these 'traditional' immigrants have an education which is recognized, they usually have a

mother tongue of either English or French so, once in Canada, they do not need to spend time learning the language well enough to make them employable. This is not the case for many other ethnic groups. Furthermore, "... compared to citizens, immigrants are less likely to be granted interviews and offers of employment from an employer" (Parlin, 1976:58).

Stewart and Hyclak (1979) concluded that discrimination against particular groups has been a major contributing factor to differential economic performance among ethnic groups. Concurring with this, Whyte (1984) found that the most successful adaptation involved those with higher education, lighter skin colour, women and those with longer residences in Canada.

In 1977, Canadian Parliament passed the Human Rights Legislation, prohibiting discrimination based on race, national or ethnic origin, colour, religion, age, sex, marital status, physical handicap, and conviction for which a pardon has been granted. Canada is in firm support of the Equality of Opportunity Principle. Theoretically then, we should not see discrimination of this kind taking place. However, this does not help those immigrants whose education is not accepted in Canada and who cannot speak a national language and need to spend valuable time updating

their education and language (Basavarajappa and Verma, 1985).

Discrimination against immigrants mostly stems from individual's ideas and attitudes toward the effect of immigration on their lives personally. These attitudes may sometimes be falsely based or come about through misunderstandings.

2.4 Attitudes Toward Immigrants and Immigration Policy

Views on the importance and relevance of immigration vary a great deal from individual to individual throughout Canada. Issues such as the unemployment rate and population growth are of interest to Canadians when they think about immigration and the number of immigrants allowed to enter Canada.

The effect of immigration on unemployment has been a major concern to Canadians for many years. There are those who see immigration as having a complementary effect on the labour force by entering the labour market to fill unwanted jobs or to bring capital to start new businesses. The opposing view sees immigration as non-complementary or competitive. This view sees immigrants as entering the country with skills which equal those of Canadians and can displace the existing labour force workers (Clodman and Richmond, 1981).

Those who see immigration as having a complimentary effect on the labour force see immigration decreasing the unemployment rate in three ways (Clodman and Richmond, 1981). First, if immigrants are guaranteed employment upon entering Canada, the size of the labour force increases in comparison with the number of unemployed, thus, decreasing the unemployment rate. Second, those industries which hire immigrants because of labour shortages or because they have the specially required skills will be revived as a result of this immigrant labour. In turn, these industries may then prosper and create new jobs, which may decrease the unemployment rate. Third, immigrants who are entrepreneurs enter the country with money to invest in new businesses, creating new jobs, and thus decreasing the unemployment rate. In support of this last point, Employment and Immigration Canada publish Annual Reports which contain figures on the number of entrepreneur or self-employed immigrants entering the country, the number of jobs which are intended to be created and the total funds invested. For the 1980-82 period, 3291 immigrant entrepreneurs were admitted to Canada, bringing with them $1.1 billion worth of investment and creating almost 8,000 new job opportunities for Canadians (Passaris, 1984). These numbers are quite impressive and tend to prove the

relevance of this view. However, Passaris (1984) dealt only with entrepreneurial immigrants so, generalizations should not be made.

The opposite view, which sees immigration as competitive gains greater support at times of economic lows. Labourers generally believe that immigrants take jobs away from the native born. It has been documented that "lower income, unskilled, or uneducated Canadians -- those most vulnerable to unemployment -- are those most opposed to immigration ..." (Clodman and Richmond, 1981:3). Many also believe that immigrants are exploiting our welfare system. When immigrants enter the country and become unemployed, they raise the unemployment rate just as if they displaced a native born worker. The incidence of unemployment is supposedly much higher among immigrants. This lends support for those who think immigrants are exploiting our welfare funds.

Porter (1965) believes that Canada has relied too heavily on immigrant skills and has not adequately educated Canadians with the skills needed to support the current and forecasted employment opportunities available in Canada. Passaris (1984:95) also adds to this by stating "as a result of inadequate labour forecasting and manpower training programmes, the Canadian labour market continued

to be dependent on immigrant labour in order to fill certain essential industrial and high-technology job vacancies." Research has been done, however in the area of immigration and unemployment. These studies tend to find that immigration does not have a significant effect on unemployment. Economists using simulation techniques have found that, for every increase in immigration of 40,000 there is a rise in the unemployment rate of only one quarter of a percentage point (Marr, 1976). Richmond sums these findings up by stating that "even very substantial increases in the level of immigration have only a marginal impact on gross unemployment levels" (Richmond, 1984:244).

Another issue raised by the Globe and Mail, June 16, 1987 is that Canada's population needs to grow larger in order to meet the challenges of the next century. The opposing argument states that Canada's population should not grow very fast because of limited resources and the national debt (Globe and Mail, November 24, 1987). The first argument to be discussed here advocates the increasing of immigration levels. One main issue which has been raised many times is the fact that the average age of Canada's population is increasing and without the help of the immigration of younger working age people the needs of elderly Canadians cannot be met (Beaujot, 1985; Samuel and

Woloski, 1985; Passaris, 1986). The ensuing consequences of pension demands and medical and social service demands may be too much for our economy to handle. As the people born in the baby-boom reach retirement age, they may outnumber those of the working age who support them, leading to many problems of support for all of the services the older generation needs.

Passaris (1986) notes that at the current time the total fertility rate of 1.7 is below the replacement level, net immigration levels are relatively low, and that if the current trend continues, Canada's population will begin to decline soon after the turn of the century which would accentuate the aging of the population.

An article in the Globe and Mail shows the necessity of immigration by stating that;

> "immigration may help to bail the country out. Historically, more than half the immigrants to Canada have been between 15 and 35, and their fertility rates are slightly higher, so they will contribute more to the population's natural increase than native-born Canadians" (Globe and Mail, June 16, 1987)

Not only do immigrants help in terms of fertility levels,

> "a larger pool of workers, will only strengthen Canada's international competitiveness, helping to bridge the gap between abundant natural resources and limited human ones that has kept Canada an economic under-achiever."

The article concludes by stating;

> "on one hand, it is magnanimous of Canadians to share what they have with newcomers; on the other, they would be helping to ensure the prosperity of their children and grandchildren. Open the gates" (Globe and Mail, June 16, 1987).

However, should we open the gates to immigration? There are those who argue against this and feel that "Canada must get better, not bigger" (Globe and Mail, November 24, 1987). This article states that "Canada's immigration policy is left over from the period when bigger was assumed better" (Globe and Mail, November 24, 1987). This article conveys the feeling that the growing population of Canada has polluted the air, stripped the forests and impoverished the soil. Canada cannot get better this way. As far as the author of this particular article is concerned, the size of a country's population is becoming less important, it is the most innovative and flexible producers who are doing well. As an example he states that

> "...in terms of per capita income (excluding oil exporters), Canada is the sixth-largest with its population of more than 25 million. If the United States is left out, the average population of the top 19 nations is only 24 million" (Globe and Mail, November 24, 1987).

Thus, showing that the nations doing well economically are not necessarily the largest in terms of population, so why should Canada grow bigger? "Canada has basically reached

the point that it's population should be stable" (Globe and Mail, November 24, 1987). In a survey (which is not described in the article) the author says that 65 percent of the Canadians in the survey think that the population should grow no larger, only 25 percent of this sample feel immigration should exceed 50,000 a year, and that public support for the environmental protection agency is at an all-time high.

2.5 Summary

It has become apparent in the literature reviewed above, that the changing composition of the immigrant population has not been fully researched in terms of the effects of changing immigration policies. Furthermore, the literature which is available on the destination choice of immigrants in Canada is not very detailed and most do not analyze the destination choice of immigrants by ethnic origin.

The main purpose of this paper is to fill these gaps in the literature with a more indepth study of the changing character of the immigrant population and the destination choice of these immigrants.

Chapter Three

Changing Composition of Canadian Immigrants

3.0 Introduction

The data used in this study was taken from Statistics Canada's Public Use Sample (PUS) tapes. The PUS contains microdata with each record representing a person enumerated on June 3, 1981, the official date of the census. Records from the long-form census questionaires which are received by 20 percent of the total population, are randomly sampled so that approximately 10 percent of all individuals who filled out the long-form are included in the PUS. Therefore, about two percent of the total Canadian population make up the database (Statistics Canada Public Use Sample Tapes User Documentation, 1981).

The primary purpose of this chapter is to determine whether the characteristics of Canada's immigrants have changed over time. Certain events in Canada's history may have played a role in changing the characteristics of immigrants entering the country. These events are speculated as being World War II which ended in 1945, the switch to a non-discriminatory immigration policy in 1962, the use of the 'points system' of immigrant selection in 1967 and finally the move to the new Immigration Act of

1976 which was implemented in 1978.

The immigrants in Canada in 1981 will be analyzed for six factors: ethnic origin, sex, education, class of worker, occupation and income, by their period of immigration to Canada. Five periods of immigration have been designated for this study, each representing one of the events mentioned above. These periods are pre-1946, 1946-1960, 1961-1966, 1967-1977 and 1978-1981. The period 1961-1966, starts with the year 1961 instead of 1962, when the non-discriminatory immigration policy took effect, because Statistics Canada separated the data into specific time periods which made it impossible to start that period with the year 1962. Note that the following characterizations are based on the assumption that mortality levels and the propensities of leaving Canada again do not vary much with respect to the relevant factors.

3.1 Ethnic Composition

Of the many immigrants who have entered Canada it is interesting as well as important to determine the ethnic composition of these immigrants and how their composition has changed over the years. In this thesis the ethnic origin of an immigrant may not reflect the country from which they immigrated to Canada from, but rather the origin

of their ancestry.

The British immigrants in Canada are the most numerous with 30.3 percent of the total immigrant population in Canada in 1981 (Table 3.1). The Other Single Response (OSR) category holds the second largest percentage of immigrants with 15.8 percent. This OSR category includes all of the ethnic origins which are not listed in the table as long as they are single origins not multiple such as British and German. These multiple responses are included in the Other Multiple Response (OMR) category. The Italian immigrants have the third largest proportion of Canadian immigrants with 10.3 percent.

This generalized breakdown of the ethnic origin of immigrants in Canada, does not show a clear picture in terms of the changes which have occurred over time to the ethnic composition of immigrants in Canada. Therefore, an analysis of the ethnic composition over time will follow.

Beaujot (1986) and Passaris (1986) suggest that Canada's immigrants have changed over time from **traditional** source countries to **non-traditional** source countries. The traditional source countries are considered to be Britain, France and other Western European countries. While the non-traditional source countries are Asia, Latin America and other Third World countries. During the transition

TABLE 3.1 ETHNIC COMPOSITION OF CANADIAN IMMIGRANTS

ETHNIC ORIGIN	TOTAL	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81
BRITISH	30.3	53.7	27.7	29.0	25.7	20.1
FRENCH	3.0	4.0	2.1	3.1	3.4	3.2
AFRICAN	2.8	0.1	0.3	2.1	6.0	4.5
CHINESE	5.5	0.6	1.9	2.9	8.9	17.2
CROATIAN	2.0	0.9	1.9	2.5	2.6	0.9
CZECH	0.9	1.8	0.5	0.2	1.2	0.8
DUTCH	3.9	1.2	9.1	2.2	1.4	1.7
GERMAN	7.1	7.9	13.0	6.0	2.9	2.4
GREEK	2.4	0.3	2.0	5.4	3.1	0.8
ITALIAN	10.3	2.1	17.2	21.4	5.8	1.8
JEWISH	2.4	4.1	2.3	2.1	1.9	2.4
HUNGARIAN	1.6	1.9	2.9	1.0	0.6	0.4
POLISH	2.5	3.3	4.2	2.2	1.1	1.3
PORTUGUES	3.6	0.0	1.1	6.2	6.5	3.0
SCANDNVN	1.6	4.5	1.7	0.8	0.7	0.8
UKRANIAN	2.0	6.8	2.5	0.6	0.3	0.3
OSR	15.8	5.3	7.9	9.8	24.5	35.3
BRITFRE	0.3	0.3	0.2	0.3	0.4	0.3
BRITOTH	1.5	1.0	0.9	1.5	2.2	1.8
FREOTH	0.3	0.1	0.2	0.2	0.4	0.5
BRFROTH	0.2	0.0	0.1	0.2	0.3	0.4
OMR	0.2	0.1	0.1	0.2	0.2	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Definitions for these ethnic categories can be found in Table A14

from traditional to non-traditional source countries, the Southern European immigrants provided a substantial proportion of Canada's immigrants. Once the number of more traditional immigrants started to decrease, the number of Southern European immigrants increased and then tapered off again following the increase in non-traditional immigrants (Passaris, 1986).

The same pattern is seen in this study. The British comprised of 53.7 percent of all pre-1946 immigrants in Canada, after World War II this proportion dropped dramatically. In the 1946-60 period the proportion of British immigrants decreased by about one half to 27.7 percent. This proportion continued to decline (with a slight exception during the 1961-66 period) until it reached a low of 20.1 percent in the 1978-81 period.

The time of mass French immigration must have occurred before the realm of this study as there were only four percent of all pre-1946 immigrants of French origin. This value remained relatively constant over the years hovering around the three percent mark.

German immigrants in Canada had a 7.1 percent share of the total immigrant stock in 1981. The 1946-60 period encountered the highest proportion of German immigrants with 13.0 percent of that periods immigrants.

As suggested by Passaris (1986), Southern Europeans started entering the country once smaller proportions of the more traditional immigrants were entering. A large proportion of Italians entered the country in both the 1946-60 and 1961-66 periods with 17.2 percent and 23.6 percent of all immigrants entering Canada during those two time periods respectively. The Italians seemed to gain in numbers as the British lost. However, this Italian influx decreased in the two subsequent periods, making way for the influx of more non-traditional immigrants.

The entry patterns of both the Chinese immigrants as well as those immigrants who belong to the OSR category show that they differ from those of the Western and Southern European ethnic groups.

The Chinese immigrants made up 5.5 percent of all immigrants in Canada in 1981, however, most of these immigrants arrived after 1967. Before 1946 only 0.6 percent of all immigrants were Chinese. This proportion climbed slowly from that point, but blossomed from 1967 onward. Chinese immigrants accounted for 8.9 percent of all immigrants who entered in the 1967-77 period and 17.2 percent of those who entered in the 1978-81 period.

The OSR category is a pool of many different ethnic groups which were not specified in the 1981 census.

Although immigrants from the United States are included in this category, many are from Asian, Latin American and other Third World countries. In the pre-1946 period only 5.8 percent of all immigrants were in this OSR category. This proportion increased gradually until the 1967-77 period when it climbed drastically to 24.5 percent, and again rose to 35.3 percent of all immigrants entering the country in the 1978-81 period. In 1981, 15.8 percent of the total immigrant population belonged to this OSR category.

The increase seen in both the Chinese and OSR categories after 1967 seem to be a result of the change in the immigration policy to the points system of immigrant selection. After 1967 it can be seen that there are very large jumps in the proportion of immigrants who are not only in the OSR and Chinese categories but also African immigrants who increased from 2.1 percent of the 1961-66 immigrants to 6.0 percent of the 1967-77 immigrants.

3.2 Sex Composition

Some questions which may be asked about the composition of immigrants are: Has the sex ratio changed over the years? If so, were there more males arriving in the earlier periods and a more female dominant immigrant population entering in the latter periods? In order to

answer these questions, the sex ratios at the time of entry were computed for each time period and the results are shown in Table 3.2.

The sex ratio is computed by

$$\frac{\text{Number of Male Immigrants}}{\text{Number of Female Immigrants}} \times 100$$

In order to get an accurate picture of the sex composition of the immigrants who entered the country during the five time periods, the actual numbers of both male and female immigrants at the time of entry (rather than the immigrants surviving to fill out the 1981 census questionnaires) are examined, because females tend to outlive their male counterparts, thus creating in the census a very female dominant immigrant population for the earlier periods of entry.

In Table 3.2 the sex ratios based on the figures at the time of entry show that in the two earliest periods there was a definite male dominant immigrant population in Canada with 120.6 for the pre-1946 immigrants and 121.4 for the 1946-60 immigrants. A sex ratio of 120.6 means that for every 100 female immigrants who entered the country during that time period approximately 121 males entered. After 1960, however, more female than male immigrants started to enter the country with a sex ratio of 97.9 for the 1961-66 period, 96.2 for the 1967-77 period and 95.7

TABLE 3.2 SEX COMPOSITION OF CANADIAN IMMIGRANTS FOR THE FIVE TIME PERIODS

ETHNIC ORIGIN	<1946	1946-60	1961-66	1967-77	1978-81
		Composition at Time of Entry			
No. Male*	1532267	1144398	342696	516015	229941
No. Female*	127091	942386	350837	536293	240203
Sex Ratio*	120.6	121.4	97.7	96.2	95.7
		Composition at 1981 Census			
Sex Ratio	84.0	105.0	98.0	98.0	93.0

* source from Canada Year Book, various years

for the 1978-81 period. What these values show is that in the earlier time periods more men entered Canada than women, mostly as a result of the labour they could provide Canada. The female domination of the immigrant population only started after the non-discriminatory policy took effect and more women started to enter the country as dependents rather than labour force workers.

If the 1981 data was used to determine the sex ratio of the immigrant entrants, the picture created would have been distorted as can be seen in the bottom row of Table 3.2. The sex ratio of 0.84 for the pre-1946 period only reflects the fact that women live longer than men and therefore, more women lived to fill out the 1981 census than did the men.

3.3 Educational Composition

For the examination of the remaining characteristics of immigrants in Canada, only those who were twenty years of age and older as well as not attending school are included. The immigrants who meet these requirements will give a more realistic picture in terms of the highest level of schooling achieved, occupation, income etc., because they are more likely to be established once they have finished school and reached the age of twenty.

In Table 3.3 the education levels of immigrants

TABLE 3.3 EDUCATIONAL COMPOSITION OF IMMIGRANTS ENTERING CANADA IN EACH TIME PERIOD (IN PERCENTAGES)

HIGHEST LEVEL OF SCHOOLING	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81
		ELEMENTARY AND SECONDARY			
GRADE <5	13.6	7.7	9.4	7.8	10.7
GRADE 5-8	34.5	20.8	18.5	13.0	14.0
GRADE 9-13	24.4	21.4	19.2	17.1	19.1
SSGD	5.6	9.2	10.5	10.4	11.5
TRADES CERTIFICATE	3.2	5.1	4.6	3.6	2.6
		NON-UNIVERSITY			
WO TRADES CERT	4.1	4.7	5.4	4.9	4.3
WITH TRADES	3.8	9.5	8.5	9.1	7.5
OTHER NON-UNIV	3.6	7.0	7.4	9.2	7.9
		UNIVERSITY			
WO CERTIFICATE	1.6	2.7	2.3	3.5	4.2
WITH CERTIFICATE	2.2	4.1	4.3	6.3	5.4
BACHELORS +	3.4	7.9	9.9	15.2	12.8
TOTAL	100.0	100.0	100.0	100.0	100.0

arriving during different time periods is shown. The column on the far right of the table shows the educational achievement of the total immigrant population in Canada in 1981. From this column we can see that the majority, 63.1 percent, of the immigrant population have some elementary and secondary education, with 49.8 percent having not acquired their Secondary School Graduation Diploma (SSGD). The remaining 37 percent of the immigrant population had received some form of post-secondary education with 19.9 percent receiving a variety of non-university education and 16.8 percent acquiring a university education of some sort.

When the educational attainment of the immigrants entering Canada at different time periods is examined, it can be seen that over time, educational levels have changed quite drastically. The most extreme difference was the improvement in education seen between immigrants entering the country before 1946 and those entering in the 1946-60 period. For those immigrants entering Canada before 1946, 81.3 percent had only an elementary and secondary school education, however, this proportion dropped more than 20 percent to 64.2 percent of the 1946-60 immigrant entrants.

The level of education obtained by the 1961-66 entrants was similar to the immigrants who entered in the previous period, with a slight shift toward higher

education shown by a decrease in the proportion with elementary education and an increase in the proportion acquiring a university education.

The 'points system' introduced in 1967 seems to have had a substantial effect on the level of education of the immigrants entering the country in the 1967-77 period. The proportion of immigrants receiving only an elementary or secondary education decreased 10.0 percent from the previous period to 51.9 percent,, while those immigrants obtaining a university education increased 8.5 percent from the 1961-66 period to 25.0 percent.

The Immigration Act implemented in 1978 also shows its impact on the educational achievement of immigrants entering the country during the 1978-81 time period. This Act placed less emphasis on the level of education of immigrant entrants and more on skills, technical training and occupational demand. The overall education of immigrants entering after 1978 is higher than the pre-1967 immigrants but decreased slightly from the 1967-77 immigrant entrants. The proportion of immigrants with an elementary or secondary school education increased to 57.9 percent from 51.9 percent in 1967-77, the proportion of immigrants who received non-university and university educations decreased by approximately three percent each.

This decrease in the level of education of immigrants in the 1978-81 period reflects the fact that less emphasis was placed on education in the 1976 Immigration Act. However, the data does not show an increase in immigrants with trades certificates at either the elementary or non-university levels, in fact the proportions of immigrants in these categories decreased. Therefore, the technical skill obtained by immigrants must have been achieved through experience and not school education.

The same temporal pattern holds true for both male and female immigrants shown in Appendix Tables A1 and A2 of Appendix A. Male immigrants, however, show much higher educational achievements then do female immigrants. For each time period, with the exception of the pre-1946 period, male immigrants have more than 10 percent less of their population in the elementary categories than do women. In the pre-1946 period men had approximately five percent less with only elementary educations than did women.

3.4 Class of Worker of the Immigrant Population

The class of worker of the immigrant population is an important issue when considering the need for immigration in Canada. If immigrants are self-employed, thus investing in the Canadian economy, employing Canadian

workers and easing the burden of unemployment, they are greatly desired. Wilson and Portes (1980) emphasize that Canada has encouraged entrepreneurs who not only help Canada but help themselves. However, if immigrants add to the unemployment of the country or take jobs away from the skilled Canadians, their entrance is frowned upon. The Immigration Act implemented in 1978 tried to solve the latter problem by considering the occupational demand in Canada before selecting immigrants.

What will be examined here is the proportion of immigrants in Canada in 1981 who were self-employed and the time period in which they entered the country. A problem which arises when doing this, however, is that many of the pre-1946 immigrants were retired in 1981. In Table 3.4 it can be seen that 72.1 percent of all pre-1946 immigrants belong to the Not Applicable (NA) category. In this NA category are those immigrants who had not worked since January 1, 1980 and inmates. Therefore, it includes retired immigrants as well as those who are unemployed. Considering the age in 1981 of the pre-1946 immigrants, a large proportion are likely to be retired. This creates a problem when trying to determine the class of worker, and occupational composition of those immigrants who entered before 1946. Therefore, only the post-1946 immigrant

TABLE 3.4 COMPOSITION BY CLASS OF WORKER FOR EACH TIME PERIOD (IN PERCENTAGES)

CLASS OF WORKER	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81	TOTAL
N.A.	72.1	26.3	18.4	16.2	29.0	30.1
			WORKING CLASS			
PAID WORKER	22.2	63.4	73.0	76.2	67.1	61.8
UNPAID FAMILY	0.3	0.4	0.3	0.3	0.2	0.3
SUB-TOTAL	22.5	63.8	73.3	76.5	67.3	62.1
			SELF-EMPLOYED			
SE INCORP ($\leq$5)	0.3	0.9	0.6	0.7	0.4	0.7
SE INCORP (>5)	0.8	2.9	2.6	1.8	0.7	2.1
SE UNICORP ($\leq$5	3.3	3.7	3.0	2.9	1.7	3.2
SE UNICORP (>5	1.0	2.4	2.1	1.9	0.9	1.9
SUB-TOTAL	5.4	9.9	8.3	7.3	3.7	7.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

arrivals will be examined for the class of worker of immigrants in Canada as well as occupational compositions in the following section.

For each of the post-1946 periods there are also large proportions of immigrants in the NA category, although not nearly the proportion of the pre-1946 period. Of the 26.3 percent of the 1946-60 immigrant entrants, a large proportion may also be retired, while the remainder is composed of unemployed immigrants or inmates. In the following two periods the proportion of immigrants in the NA category decreases substantially to 18.4 and 16.2 percent respectively. In the 1978-81 period, however, there is a sharp increase in the proportion of immigrants in the NA category, reaching 29.0 percent. This is the highest proportion next only to the pre-1946 immigrants. This substantial proportion of immigrants in the NA category for the 1978-81 period may correspond to a significant increase in refugee immigrants.

The immigrants who arrived during the 1946-60 period had the largest proportion of self-employed in comparison to the immigrants who arrived during the other three time periods. The proportion self-employed decreased gradually among the immigrants who arrived during the periods following the 1946-60 period. The 1978-81

immigrants have the lowest proportion self-employed, only 3.7 percent of the immigrants who arrived during this period were self-employed in 1981.

What is also shown in Tables A3 and A4 is the fact that their are more women than men in the NA category with 42.8 percent of the female immigrants and 17.0 percent of the male immigrants. The most reasonable explanation for this would be, many female immigrants stay at home to be housewives and raise children.

In Table 3.4, there are four self-employed categories, two of which include self-employed immigrants whose business is incorporated and two categories have businesses which are unincorporated. For both the incorporated and unincorporated categories one employs five or more people (>5) while the other employs less than five people (≤ 5).

Of the 1981 total immigrant population, 7.9 percent are classed as self-employed (13 percent of the working immigrant population). Of this 7.9 percent, one half employ at least five people. There is a higher proportion of male immigrants, than female immigrants who are self-employed. In Tables A3 and A4 it can be seen that 12.4 percent of all male immigrants were self-employed, while only 3.4 percent of the female immigrants were self-

employed in 1981.

3.5 Occupational Composition

The occupational composition of immigrants in Canada is an important aspect in Canada's economic growth and well being. This is reflected in the 1976 Immigration Act in which more emphasis is placed on the occupational demand of the country when selecting potential immigrants. The changes in Canada's occupational needs over time may be reflected in the composition of the immigrants who entered the country in different time periods.

As mentioned in section 4.4, there is a problem with the number of people in the NA category for the pre-1946 period. Therefore, only the post-1946 periods will be discussed.

In 1981 only 70 percent of the total immigrant population in Canada were working, with the other 30 percent in the NA category. Of this 70 percent, 18.1 percent were employed in professional occupations, 25.7 percent in the lower tertiary occupations, 2.4 percent in primary occupations and 23.4 percent in secondary occupations (Table 3.5).

There are three occupations which tend to dominate in terms of the number of immigrants employed in them, clerical, machining and service. These three occupations

TABLE 3.5 OCCUPATIONAL COMPOSITION OF CANADIAN IMMIGRANTS FOR THE FIVE TIME PERIODS (IN PERCENTAGES)

	TIME PERIODS					
OCCUPATIO	<1946	1946-60	1961-66	1967-77	1978-81	TOTAL
N.A.	72.1	26.3	18.4	16.2	29.0	30.1
			PROFESSIONAL			
MANAGRIAL	3.3	8.1	7.3	6.7	3.6	6.5
SCI&MATH	0.6	3.1	3.9	4.9	4.4	3.4
SOC SCI	0.4	1.0	1.0	1.0	0.6	0.9
TEACHING	0.8	3.2	3.7	3.9	1.7	2.9
MEDICINE	1.0	2.7	3.9	5.1	2.8	3.3
ARTISTIC	0.4	1.2	1.2	1.3	1.4	1.1
SUB-TOTAL	6.5	19.3	21.0	22.9	14.5	18.1
			LOWER TERTIARY			
CLERICAL	4.3	11.4	12.6	14.5	10.9	11.2
SALES	3.3	6.0	6.0	5.4	4.0	5.2
SERVICE	3.7	9.2	11.0	11.2	12.7	9.3
SUB-TOTAL	11.3	26.6	29.6	31.1	27.6	25.7
			PRIMARY			
FARMING	3.1	2.3	1.4	1.3	2.1	2.0
OTH PRIM	0.3	0.6	0.3	0.4	0.4	0.4
SUB-TOTAL	3.4	2.9	1.7	1.7	2.5	2.4
			SECONDARY			
PROCESSNG	0.7	3.0	3.4	3.7	3.5	2.9
MACHINING	2.4	10.5	13.9	14.3	15.6	11.0
CONSTRUCT	1.3	6.0	6.5	4.8	2.6	4.7
TRANSPORT	0.8	1.8	1.7	1.6	0.9	1.5
OTH OCC	1.4	3.5	3.7	3.9	3.8	3.3
SUB-TOTAL	6.6	24.8	29.2	28.3	26.4	23.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

combined account for 31.5 percent of the immigrant population or almost one half of the working population.

The largest proportion of immigrants (11.2 percent) work in clerical or related occupations. Over the years, clerical occupations became more popular with immigrants as can be seen by the increasing proportion of immigrants in this occupation in each period. However, in the 1978-81 period this proportion dropped quite substantially from 14.5 percent in the 1967-77 period to 10.9 percent in the 1978-81 period. This recent decline can be explained as follows.

First,the Immigration Act of 1976, which was implemented in 1978, placed more emphasis on the occupational demand in Canada than in previous years. Since Canada may have had a large number of clerical workers of it's own and there was not a great demand for immigrants in the clerical field. Second, in place of typewriters and filing cabinets, there has been a move towards computers for word processing and file management. Word processing allows a secretary to be more efficient and quick, thus allowing them to do the work of more than one person using a typewriter. As well, files can be stored in the computer and alphabetized, thus decreasing the need for as many file clerks.

The growth in the employment of immigrants in the machining occupations from 10.5 percent in 1946-60 to 15.6 percent in 1978-81 is not surprising as this industry experienced great expansion after World War II. The steel and auto industries are only a few of the industries included in the machining field, the number of people employed in these two occupations alone is quite substantial.

There is quite a difference between the occupational structures of male and female immigrants (Tables A5 and A6). For male immigrants, the largest proportion (37.0 percent) are employed in secondary occupations with professional occupations also accounting for a large proportion (23.1 percent). For female immigrants, 32.0 percent are in lower tertiary occupations which is almost half of the total working population, and only 13.3 percent of the women were in professional occupations.

Boyd (1975) reported that female immigrants are employed predominantly in 'female occupations'. This is also reflected in this study, where one third of working immigrant women are employed in clerical and related occupations.

3.6 Income Composition

The total income an immigrant receives is a good indication of how well they are faring in Canada. The income distribution of Canadian immigrants is shown in Table 3.6. The data is also separated for different periods of arrival. Since the income reported is that which was obtained from January 1, 1980 to January 1, 1981, only those immigrants who arrived in Canada before 1981 are included as a full year had not yet elapsed for the immigrants who arrived in 1981, and income from their previous place of origin is not included. Also, the data is again restricted to those 20 years and older and not attending school.

The income level of <0 represents those immigrants receiving no income or having negative income. It can be seen that 78 percent of all immigrants had an income below $20,000 in 1981, the majority of which have an income of $5,000 to $9,000 (21.4 percent) or $10,000 to $19,999 (27.0 percent). A small percentage, 8.0 percent, had an income of $30,000 or more.

There are differences in income levels of immigrants who arrived in Canada during different time periods. The pre-1946 period shows the lowest percentage of immigrants with no income at all, and the highest percentage earning an income between $1 and $9,999.

TABLE 3.6 INCOME COMPOSITION OF IMMIGRANTS IN FIVE TIME PERIODS (IN PERCENTAGES)

	TIME PERIODS					
INCOME ($)	<1946	1946-60	1961-66	1967-77	1978-80	TOTAL
< 0	3.8	10.8	11.4	12.1	29.8	11.0
1 - 4,999	26.4	16.9	15.7	15.2	27.2	18.5
5,000-9,999	39.9	16.9	16.9	18.0	17.6	21.4
10,000-19,999	17.9	27.7	31.0	32.0	16.8	27.0
SUB-TOTAL	88.0	72.3	75.0	77.3	91.4	77.9
20,000-29,999	6.6	17.8	16.2	15.0	5.5	14.2
30,000-39,999	2.8	6.0	5.2	4.8	2.0	4.8
40,000+	2.6	3.8	3.6	2.8	1.2	3.2
SUB-TOTAL	12.0	27.6	25.0	22.6	8.7	22.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Individuals from Hutterite colonies were assigned zero incomes because of response problems (Statistics Canada Public Use Sample Tapes User Documentation, 1981).

Perhaps the old age pension most people in Canada receive after the age of 65 accounts for the lowest percentage with no income in this period, as many of the immigrants in this period may well be 65 or older.

The 1978-80 immigrant entrants show the bleakest income structure of all five time periods. One third of them received no income in the 1978-80 period, another 27.2 percent received less than $5,000. They also show the smallest proportions receiving more than $20,000. Basavarajappa and Verma (1985) have an explanation which may account for this finding. They have found that many immigrants, upon first arrival to the country, have a difficult time adapting to the country and finding a job, partly due to language barriers and racism. By 1981, the immigrants in this period were only in the country for at most four years, while the immigrants in the other time periods have a longer time to establish themselves or reach their maximum potential. Another explanation is that, as a consequence of the 1976 Immigration Act, a higher proportion of immigrants arrived as dependents rather than independent immigrants. However, the low income level of the most recent immigrants is partly due to the fact that many of the immigrants who arrived in 1980 had not yet been in the country for a full year, thus showing a lower income

level.

A similar temporal pattern is seen for both the male and female immigrants if the data is separated by sex. However, as can be seen in Tables A7 and A8 the income level of male immigrants is much higher than female immigrants for each time period. Only minimal proportions of female immigrants receive an income of $20,000 or more while male immigrants have a much higher proportion in these higher income categories.

3.7 Summary

The composition of immigrants has changed over the five time periods, as was shown in this chapter. The ethnic origin of Canada's immigrants has changed from the north to the south in a global sense as was suggested by Hawkins (1976). The contributing countries have changed from the traditional source countries such as Britain, France, Germany and other Western European countries to the non-traditional source countries such as China, and many other Third World countries. This change seems to have occurred as a result of the racial bars being lifted in 1962 and even more drastically from the introduction of the 'points system' in 1967. No longer did the nationality of an immigrant affect their selection to come into the country.

There has been a shift from a male dominated immigrant population to a female dominated one since 1961, partially due to the allowance of immigrants entering a dependents.

Immigrants who entered the country during the five time periods also show differences in terms of education. Post-1946 immigrants show a drastic improvement in educational achievement then do pre-1946 immigrants. The introduction of the 'points system' in 1967 led to an immigrant population with higher educational levels during the 1967-77 period. In 1978, however, the new Immigration Act placed less emphasis on the level of education of an immigrant. This is reflected by the lower education of the 1978-81 immigrants than those who entered in the 1967-77 period. Male immigrants are more highly educated then are their female counterparts with males having 10 percent less of their population with only an elementary education.

There were more than 72 percent of the pre-1946 immigrants in the NA category for both class of worker and occupation, therefore, only the post-1946 immigrants were dealt with for these two factors.

Eight percent of the total Canadian immigrant population was self-employed in 1981. Immigrants who arrived between 1946 and 1977 had a much higher proportion

in the self-employed categories than did the 1978-81 immigrants, perhaps as a result of the time lag which is incurred by recent immigrants. When an immigrant first arrives in the country there are language, cultural and racial barriers which they need to overcome before they can reach their full potential. There is a higher proportion of male immigrants than female immigrants who are self-employed. Male immigrants have 12.4 percent self-employed compared to 3.4 percent for female immigrants.

The three occupations employing the majority of Canada's immigrants are clerical, machining, and service, accounting for 31.5 percent of the immigrant population (almost one half of the working immigrant population). Machining and service occupations show a growth still in process in the 1978-81 period.

Women immigrants tend to be employed in the so called 'female occupations', with one third of the working immigrant women employed in clerical occupations. The occupations which hold the most male immigrants are machining and managerial occupations.

In order to examine the income of immigrants in Canada, only those who entered the country before 1981 were examined in order to have an accurate yearly income.

The majority, 78 percent of the total immigrant

population in 1981 earned less than $20,000 a year. The income level of immigrants tends to increase with the length of residence in Canada, except for the pre-1946 immigrants who may have a large proportion retired. Almost one third of the immigrants who entered the country between 1978-80 earned no income at all during the January 1980-81 period, with 91.4 percent earning less than $20,000. This low income incurred by 1978-80 immigrants entrants may be due to the fact that they had not established themselves completely by 1981 and also to the fact that many refugees entered the country during this time. Male immigrants consistently showed a higher income level than did female immigrants.

The results shown in this chapter tend to confirm that the characteristics of immigrants have changed over time. There is a drastic difference between the characteristics of immigrants in the pre- and post-war periods, many of the changes in the post-war period seem to be due to immigration policy changes.

Chapter Four

Destination Choice Patterns

4.0 Introduction

Canada's immigrants have a wide range of characteristics. Not only are they very diverse in their ethnic origins, they also have great differences in their education, class of work, occupation and income as was shown in the previous chapter. The main issue of this chapter is the location of these immigrants in Canada. Do certain ethnic origins choose to live in specific provinces? Do higher class immigrants such as the well educated, high income earners locate in one area of the country while the lower class immigrants cluster in another area? Does one province attract more self-employed immigrants than another? In other words, do some provinces benefit more from immigration than others? Questions such as these are important in determining whether immigration helps or hinders the regional disparity found in Canada today.

This chapter will first explain the destination choice pattern of Canadian immigrants in terms of the province they were residing in on June 3, 1981. From this information, the proportion of immigrants each province

receives can be compared to the provincial proportion of the total Canadian population in order to determine which provinces receive their 'fair share' of immigrants and which do not. Once this has been completed, the characteristics of each province's immigrants are then examined in order to compare the characteristics of immigrants among the provinces. The characteristics used are the same as in the previous chapter: ethnic origin, education, class of worker, occupation and income. Yukon and the Northwest Territories are merged with the smallest province, Prince Edward Island, in the Public Use Sample by Statistics Canada. All descriptions of P. E. I. and the Atlantic region in this thesis are somewhat affected by the geographically nonsensical merger.

4.1 Provincial Shares of the Immigrant Population

The bottom row of Table 4.1 shows the total population share of each province in 1981, while the row directly above shows the proportion of the immigrant population in each province in 1981.

A province is said to have received its fair share of the immigrant stock if it shares the same proportion of the immigrant population as it does the total Canadian population.

Only Ontario, British Columbia and Alberta received

TABLE 4.1 DESTINATION CHOICES OF IMMIGRANTS IN DIFFERENT ETHNIC GROUPS (IN PERCENTAGES)

ETHNIC ORIGIN	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
CHINESE	0.3	0.3	0.5	0.5	6.2	42.0	2.6	2.2	12.5	33.1	100.0
GERMAN	0.1	0.2	0.7	0.3	6.0	43.9	8.1	5.0	14.9	20.8	100.0
DUTCH	0.1	0.5	1.3	0.5	2.2	54.8	3.8	1.8	15.8	19.2	100.0
JEWISH	0.2	0.0	0.8	0.2	36.9	49.1	4.2	0.3	3.9	4.5	100.0
GREEK	0.0	0.0	1.0	0.3	32.9	56.1	1.4	0.8	2.3	5.2	100.0
AFRICAN	0.1	0.0	0.5	0.1	18.9	65.0	2.9	1.1	7.1	4.3	100.0
ITALIAN	0.1	0.0	0.2	0.1	22.3	66.6	1.3	0.3	3.2	6.0	100.0
PORTUGUESE	0.1	0.0	0.2	0.1	14.3	69.5	4.1	0.3	3.1	8.2	100.0
CZECHOSLOVAKIAN	0.0	0.1	0.4	0.0	11.0	53.0	4.7	2.0	11.7	17.0	100.0
BRITISH	0.5	0.4	1.9	1.2	6.1	54.1	3.3	2.2	9.9	20.3	100.0
HUNGARIAN	0.0	0.3	0.7	0.2	11.2	57.5	2.2	3.2	11.5	13.2	100.0
POLISH	0.1	0.1	0.4	0.2	11.2	61.0	6.6	3.4	9.6	7.5	100.0
CROATIAN	0.1	0.1	0.2	0.3	6.3	70.5	2.2	0.5	7.6	12.2	100.0
FRENCH	0.2	0.2	1.2	3.3	69.3	13.8	1.6	0.8	3.6	6.0	100.0
FRENCH AND OTHER	0.0	0.0	1.0	0.5	50.5	29.5	2.9	0.5	5.2	10.0	100.0
SCANDINAVIAN	0.3	0.6	0.9	0.7	2.5	22.7	6.0	10.2	21.0	35.2	100.0
UKRAINIAN	0.0	0.0	0.2	0.0	7.5	44.2	14.2	8.4	17.5	8.1	100.0
OSR	0.2	0.2	0.7	0.4	15.9	49.9	4.2	1.4	9.9	17.2	100.0
BRITISH AND FRENCH	1.4	0.9	3.7	2.8	22.8	39.1	1.9	1.9	6.0	19.5	100.0
BRITISH AND OTHER	0.3	0.3	2.5	1.3	7.8	45.5	2.9	2.7	12.3	24.3	100.0
BRIT,FRENCH,OTHER	1.4	1.4	1.4	3.4	11.0	38.6	2.1	2.8	16.6	21.4	100.0
OMR	0.0	0.8	0.0	0.0	20.5	47.5	7.4	0.0	13.1	10.7	100.0
TOTAL	0.2	0.2	1.0	0.7	13.6	52.5	2.8	2.1	9.5	16.4	100.0
TOTAL CANADIAN	2.3	0.8	3.5	2.7	26.4	35.4	4.2	4.0	9.2	11.3	100.0

more than their fair share of the immigrant population, with all of the remaining provinces receiving less than half of their share. Ontario receives more than one half of all immigrants who enter Canada (52.5 percent), while holding only 35.4 percent of Canada's total population. British Columbia has 11.3 percent of Canada's total population, while receiving 16.4 percent of the immigrant population. Alberta maintains an almost even state with 9.2 percent of the total Canadian population and 9.5 percent of the immigrant stock.

The remaining provinces all receive less than their fair share of Canada's immigrant population. The second most populous province in Canada, Quebec, had 26.4 percent of the Canadian population in 1981, while only 13.6 percent of the immigrants located there. All of the Atlantic provinces as well as Manitoba and Saskatchewan were disadvantaged in terms of receiving their immigrant population share in 1981.

4.2 Ethnicity and Destination Choice

Table 4.1 also shows the proportion of immigrants in each ethnic group who were located in each province in 1981. From this table it can be seen that no two ethnic groups have the same destination choice pattern. However, certain ethnic groups may have similar patterns.

Ontario can be seen as the favorite location among most ethnic groups. The Croatian, Portuguese, Italian and African groups have 65.0 percent or more of their respective immigrants located in Ontario. However, all ethnic groups that include some French in them have lower proportions locating in Ontario. The French, French-and-Other, British-and-French, and British-French-and-Other categories all have well below the 52.5 percent average for the total immigrant population residing in Ontario. The Scandinavians also show a below average proportion entering Ontario with 22.7 percent.

Besides the domination of Ontario in the destination choice of immigrants, three major patterns can be identified. One shows the domination of the western provinces along with Ontario, another shows the domination of both Ontario and Quebec, while another pattern still shows the domination of Ontario but a more dispersed destination choice pattern among the remaining provinces.

Immigrants of Chinese, German and Dutch ethnic backgrounds tend to have quite large proportions located in both B. C. and Alberta while a lower than average (immigrant population average) amount located in Ontario, with a slight exception for the Dutch who have 54.8 percent located on Ontario. The German immigrants show a clear

picture of this pattern with 14.9 percent residing in Alberta, and 20.8 percent in B. C. whereas the expected share of immigrants was 9.5 percent for Alberta and 16.4 percent for B. C. The proportion of German immigrants entering Ontario is below average at 43.9.

The immigrants of Jewish, Greek, African, Italian and Portuguese ethnic backgrounds tend to choose Quebec as their second choice instead of the west. Most of the immigrants in this group have above the 52.5 percent average locating in Ontario, with the exception being the Jewish who have 49.1 percent. The Greek immigrants show a good example of this location pattern. The Greeks in 1981 had 56.1 percent of their population in Ontario, and a substantial 32.9 percent in Quebec. The westward bound Greeks were in very small numbers with only 2.3 percent in Alberta and 5.2 percent in B. C.

The next pattern which is apparent involves the Czechoslovakian, British, Hungarian, Polish and Croatian ethnic groups. These immigrants generally show a greater than average proportion located in Ontario, with the remaining being relatively evenly distributed among other provinces. The Hungarian immigrants are a typical example of this with 57.5 percent of their population located in Ontario, 11.2 percent in Quebec, 11.5 percent in Alberta

and 13.2 percent in B. C.

As mentioned earlier the French immigrants have a large proportion (69.3 percent) entering Quebec and only 13.8 percent residing in Ontario. The French-and-Other ethnic group also has a similar pattern to the French with 50.5 percent in Quebec and 29.5 percent in Ontario.

The Scandinavian immigrants show a very definite westward orientation with more than half of their population residing in either Alberta or B. C.

In order to get a full picture of ethnicity and destination choice Table 4.2 will be examined. The data in Table 4.2 shows the ethnic composition of each province's immigrant population. Each province, with the exception of Quebec, has a dominance of British immigrants, with the dominance being strongest in the Atlantic provinces.

Quebec shows a very surprising ethnic composition with Italian and OSR immigrants accounting for more of Quebec's immigrant stock than the French immigrants. The OSR immigrants account for 18.4 percent and Italian immigrants account for 16.9 percent of the Quebec population, while only 15.5 percent of Quebec's immigrant stock is of French origin.

New Brunswick's immigrant population has approximately the same proportion of French immigrants as

TABLE 4.2 ETHNIC COMPOSITIONS OF IMMIGRANTS IN DIFFERENT PROVINCES
(IN PERCENTAGES)

ETHNIC ORIGIN	PROVINCES										
	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
CHINESE	5.8	6.1	2.6	4.0	2.5	4.4	3.7	5.7	7.3	11.2	5.5
GERMAN	2.6	5.0	4.5	3.6	3.1	6.0	15.2	17.0	11.3	9.1	7.1
DUTCH	1.6	7.7	5.0	3.1	0.6	4.1	3.9	3.3	6.6	4.6	3.9
JEWISH	1.6	0.0	1.8	0.8	6.6	2.3	2.6	0.4	1.0	0.7	2.4
GREEK	0.0	0.0	2.3	1.0	5.8	2.6	0.9	0.9	0.6	0.8	2.4
AFRICAN	1.6	0.6	1.3	0.4	3.9	3.5	2.1	1.5	2.1	0.7	2.8
ITALIAN	2.1	1.1	1.5	1.2	16.9	13.1	3.4	1.6	3.5	3.7	10.3
PORTUGUESE	1.6	0.6	0.6	0.6	3.8	4.7	3.9	0.5	1.2	1.8	3.6
CZECHOSLOVAKIAN	0.0	0.6	0.4	0.0	0.7	0.9	1.1	0.9	1.1	1.0	0.9
BRITISH	60.5	48.6	55.6	53.9	13.7	31.2	26.2	31.8	31.8	37.5	30.3
HUNGARIAN	0.0	2.2	1.0	0.4	1.3	1.7	0.9	2.4	1.9	1.3	1.6
POLISH	0.5	1.1	1.0	0.6	2.1	2.9	4.4	4.0	2.6	1.1	2.5
CROATIAN	0.5	0.6	0.4	0.8	0.9	2.6	1.1	0.5	1.6	1.5	2.0
FRENCH	2.6	2.8	3.7	14.6	15.5	0.8	1.3	1.1	1.1	1.1	3.0
FRENCH AND OTHER	0.0	0.0	0.3	0.2	1.0	0.2	0.2	0.1	0.2	0.2	0.3
SCANDINAVIAN	2.1	3.9	1.4	1.5	0.3	0.7	2.5	7.6	2.5	3.4	1.6
UKRAINIAN	0.0	0.0	0.4	0.0	1.1	1.6	7.3	7.7	3.6	1.0	2.0
OSR	12.1	14.4	11.3	8.4	18.4	15.0	17.5	10.6	16.4	16.5	15.8
BRITISH AND FRENCH	1.6	1.1	1.0	1.2	0.5	0.2	0.1	0.2	0.2	0.3	0.3
BRITISH AND OTHER	2.1	2.2	3.7	2.9	0.9	1.3	1.2	2.0	2.0	2.3	1.5
BRIT,FRENCH,OTHER	1.1	1.1	0.3	1.0	0.2	0.1	0.1	0.2	0.3	0.2	0.2
OMR	0.0	0.6	0.0	0.0	0.2	0.1	0.3	0.0	0.2	0.1	0.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

does Quebec. Although 53.9 percent of New Brunswick's immigrant stock is British, 14.4 percent is French. New Brunswick, however, has the lowest proportion of OSR immigrants with only 8.4 percent.

German immigrants are more important in the western provinces. Of the total immigrant population, 7.1 percent was German in 1981. Manitoba, Saskatchewan, Alberta and British Columbia all have above average proportions of their migrant stocks being German, with 15.2, 17.0, 11.3 and 9.1 percent respectively.

Ukrainian immigrants account for large proportions of Manitoba's and Saskatchewan's immigrant populations, compared to the proportion at the national level. These proportions are 7.3 percent in Manitoba, 7.7 percent in Saskatchewan, and only 2.0 percent at the national level. Ukrainian immigrants are well known for their grain farming which forms the landscape of Manitoba and Saskatchewan.

4.3 Education and Destination Choice

Education is an important factor in immigration and destination choice. It would be preferable for a province to receive more highly educated immigrants in order to decrease their unemployment and increase their economic position.

Table 4.3 shows the educational composition of the

TABLE 4.3 EDUCATIONAL COMPOSITION OF CANADIAN IMMIGRANTS WHO ARE NOT ATENDING SCHOOL AND ARE 20 YEARS AND OLDER IN DIFFERENT PROVINCES (IN PERCENTAGES)

HIGHEST LEVEL OR SCHOOLING	PROVINCES										
	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
ELEMENTARY AND SECONDARY											
GRADE <5	1.6	3.0	1.7	3.5	13.0	9.1	11.2	14.9	7.6	6.7	9.1
GRADE 5-8	11.0	13.4	12.8	17.7	22.3	21.1	24.7	32.9	18.1	16.0	20.4
GRADE 9-13	13.4	18.7	23.3	20.9	14.1	20.5	22.1	18.4	23.1	23.2	20.3
SSGD	3.9	3.7	9.6	10.6	11.3	9.4	6.6	4.7	6.8	9.5	9.2
TRADES CERTIFICATE	3.1	6.7	4.3	4.3	3.5	4.5	4.1	2.6	4.0	3.7	4.1
SUB-TOTAL	33.0	45.5	51.7	57.0	64.2	64.6	68.7	73.5	59.6	59.1	63.1
NON-UNIVERSITY											
WO TRADES CERT	2.4	3.0	3.0	2.4	4.8	4.8	4.7	3.2	4.8	4.8	4.7
WITH TRADES	11.0	14.2	8.5	6.5	6.4	8.0	7.2	5.6	9.4	9.7	8.1
OTHER NON-UNIV	7.1	11.9	7.9	10.6	4.8	7.6	5.8	4.9	7.7	7.7	7.1
SUB-TOTAL	20.5	29.1	19.4	19.5	16.0	20.4	17.7	13.7	21.9	22.2	19.9
UNIVERSITY											
WO CERT	3.9	3.7	2.4	3.0	3.0	2.5	2.4	1.1	3.1	3.5	2.7
WITH CERTIFICATE	7.1	9.7	7.3	5.7	4.7	4.1	3.7	3.5	4.4	5.5	4.5
BACHELORS +	35.4	11.9	19.2	14.7	12.0	8.6	7.5	8.0	11.1	9.8	9.6
SUB-TOTAL	46.4	25.3	28.9	23.4	19.7	15.2	13.6	12.6	18.6	18.8	16.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

immigrants in each province with the far right hand column designating the proportion of the total immigrant population in each specific educational category. Note also that the immigrants accounted for in this table are twenty years of age and older and are not attending school.

It is surprising that very high proportions of the Atlantic province's immigrants are well educated. In fact, each of the four Atlantic provinces (Newfoundland, P. E. I. and the Territories, Nova Scotia, and New Brunswick) receives a below-average proportion of immigrants with only an elementary education. These provinces have a well above average proportion of university educated immigrants. Newfoundland especially has very highly educated immigrants with 35.4 percent of all it's immigrants with a bachelor's degree or higher and 46.4 percent with some form of university education.

Quebec seems to have a slightly bimodal structure to its immigrants education. Quebec's immigrant population has well above the expected proportion of immigrants in the two lowest education categories (less than grade 5 and grades 5-8). The proportions of Quebec's immigrants in these two categories are 13.0 and 22.3 percent, compared with the national averages of 9.1 and 20.4 percent. Quebec does, however, show an above average proportion of

immigrants with a university level education as well, with 19.7 percent receiving some form of university education compared with the average of 16.8 percent.

Ontario receives approximately average proportions for each educational category. However, for the university categories, Ontario does show slightly below average proportions.

Manitoba and Saskatchewan receive above average proportions of low educated immigrants. Saskatchewan had 32.9 percent of all it's immigrants in 1981 with an education of grades 5-8. Both of these provinces have below average proportions with university level educations.

Alberta, in general, receives higher than expected proportions of immigrants with a non-university and university level education. For example, 11.1 percent of Alberta's immigrants have a bachelor's degree or higher. For the elementary and secondary education categories, only the immigrants having an education of grades 9-13 are in higher than average proportions with 23.1 percent, the average being 20.4 percent.

British Columbia's immigrants tend to have slightly higher education levels than the total immigrant population as can be seen by the lower proportion in the elementary education categories and the higher proportion in the non-

university and university categories. Again, the grade 9-13 education category has an above average proportion with 23.2 percent which is similar to Alberta's.

In summary, the Atlantic provinces do not seem to be disadvantaged in terms of the education of the immigrants who choose to live there. In fact the Atlantic provinces seem to be the most advantaged in terms of the education of their immigrants. Therefore, although the Atlantic provinces receive below their share of immigrants, the immigrants they do receive are relatively well educated. Quebec seems to have a bimodal educational structure with higher proportions in the lower and higher education categories. Ontario's immigrants have a slightly lower education level than the total immigrant population, although Manitoba and Saskatchewan hold the highest proportion of immigrants with an elementary and secondary level education. Alberta and B. C. seem to have a slightly higher educated immigrant population than the total immigrant population with higher than average proportions in the non-university and university categories. These same patterns can be seen in Table A9, which shows the distribution of immigrants in each education category among the provinces.

4.4 Class of Worker and Destination Choice

Self-employed immigrants may be beneficial to the province of their destination's economy as well as Canada's economy as a whole. They invest money, create employment and start new innovative businesses and markets. Therefore, each province in Canada would want and need the self-employed immigrants. Again only those immigrants twenty years and older who are not attending school are considered.

The Atlantic provinces, again surprisingly enough have a higher than expected proportion of immigrants in the self-employed categories. The Atlantic provinces do not receive many immigrants, but proportionately they are advantaged in terms of self-employed immigrants. Of the total immigrant population 7.9 percent were self-employed in 1981 (Table 4.4). For the Atlantic provinces, only New Brunswick does not exceed this proportion. The proportion self-employed for each Atlantic province is, 10.2 percent for Newfoundland, 14.2 percent in P. E. I. and the Territories, 8.8 percent in Nova Scotia and 7.1 percent in New Brunswick. P. E. I. and the Territories have a very high proportion of immigrants who are self-employed but the largest proportion of these are in the SE UNICORP (≤ 5) category which stands for an unincorporated business which employs less than five people. Many of the immigrants in

TABLE 4.4 COMPOSITION OF IMMIGRANTS BY CLASS OF WORKER IN DIFFERENT PROVINCES (IN PERCENTAGES)

CLASS OF WORKER	PROVINCES										
	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
N.A.	18.2	18.8	35.3	39.3	29.8	28.0	36.5	48.7	29.3	33.2	30.1
WORKING CLASS											
PAID WORKER	70.9	66.4	55.6	53.7	62.8	64.5	56.5	39.1	60.3	57.8	61.8
UNPAID FAMILY	0.7	0.7	0.3	0.0	0.3	0.3	0.2	0.4	0.5	0.3	0.3
SELF-EMPLOYED											
SE INCORP (≤5)	0.7	0.7	0.0	0.3	0.7	0.5	0.5	0.6	1.1	1.0	0.7
SE INCORP (>5)	2.7	2.0	1.6	1.0	2.0	1.9	1.8	1.5	2.7	2.5	2.1
SE UNICORP (≤5)	3.4	8.1	3.8	3.8	2.7	2.9	2.9	7.8	4.1	3.3	3.2
SE UNICORP (>5)	3.4	3.4	3.4	2.0	1.8	1.9	1.5	1.8	1.8	1.9	1.9
SUB-TOTAL	10.2	14.2	8.8	7.1	7.2	7.2	6.7	11.7	9.7	8.7	7.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

this specific self-employed category may be associated with the fishing and farming industry in P. E. I.

Both Ontario and Quebec had 7.2 percent of their immigrants in the self-employed category in 1981. This is slightly below the expected value of 7.9 percent for the total immigrant population. Manitoban immigrants, however, have the lowest proportion self-employed with 6.7 percent.

The remaining western provinces enjoy relatively high proportions of self-employed in their immigrant stock. Saskatchewan has the highest proportion of self-employed for these western provinces with 11.7 percent, many of which again belong to the SE UNINCORP ($\leq$5) category. Farming, both grain and cattle, must account for a vast majority of the immigrants in the SE UNINCORP ($\leq$5) category as many farmers are classed as self-employed and may hire a few people to help run the farm. Alberta and B. C. have 9.7 and 8.7 percent of their immigrant population self-employed, most of which are also in the SE UNINCORP ($\leq$5) category, which in Alberta may be grain farmers or ranchers. In B. C. the SE ININCORP ($\leq$5) immigrants may be involved in the fishing industry.

It should also be noted that although Saskatchewan received a high proportion of self-employed immigrants, it, like the Atlantic provinces, received only a small

proportion of immigrants. Therefore, the findings for these provinces should be understood as being based on small numbers.

The point which is clearly made by this examination of the class of worker of Canadian immigrants and their destination choice is the fact that the Atlantic provinces again do well for themselves. Not in terms of the number of immigrants they receive but the fact that, of the immigrants they do receive, a substantial proportion are self-employed.

Table A10 shows the distribution of immigrants in each Class of Worker category residing among the provinces. The results shown in this table are similar to those already discussed, while giving a different perspective than those seen in Table 4.4.

4.5 Occupation and Destination Choice

In the 1976 Immigration Act, more emphasis was placed on the occupation of an immigrant. It is interesting to see, therefore, which occupational categories immigrants in each respective provinces are in. Remember once again that only those immigrants who are not attending school and are twenty years and older are in Table 4.5.

The proportion of immigrants in each occupation for

the total immigrant population is seen in the far right hand column of Table 4.5. From this we can see that most of the immigrant population were in clerical, machining or service occupations in 1981. However, the proportion of immigrants in each occupational category does vary greatly for each province.

Newfoundland seems to receive immigrants in very prestigious occupations. The three occupations which dominate for Newfoundland are medicine (15.5 percent), teaching (12.8 percent), and managerial (10.1 percent). Coinciding with this almost one half of Newfoundland's immigrants have professional occupations.

The two categories which hold the most immigrants in P. E. I. and the Territories are clerical and service occupations with 10.1 and 11.4 percent. The number of immigrants in clerical occupations is relatively normal in comparison to all other provinces. Most provinces have approximately 10 percent with the exception of Newfoundland, Manitoba and Saskatchewan. The 5.4 percent of P. E. I.'s immigrant population in the Other Primary category is large in comparison to all other provinces. The explanation for this may be the fishing industry which is relatively large in P. E. I. The substantial 6.0 percent in transport occupations for P. E. I. is also quite

TABLE 4.5 OCCUPATIONAL COMPOSITIONS OF IMMIGRANTS IN DIFFERENT PROVINCES (IN PERCENTAGES)

	PROVINCES										
OCCUPATION	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
N.A.	18.2	18.8	35.3	39.3	29.8	28.0	36.5	48.7	29.3	33.2	30.1
						PROFESSIONAL					
MANAGERIAL	10.1	7.4	6.9	4.8	7.0	6.5	4.9	5.3	7.3	6.1	6.5
SCIENCE AND MATH	5.4	3.4	4.3	4.3	3.3	3.5	1.5	2.0	4.7	3.0	3.4
SOCIAL SCIENCE	1.4	4.0	1.3	1.3	0.9	0.8	1.0	0.9	1.0	1.0	0.9
TEACHING	12.8	6.0	5.0	6.0	4.3	2.6	2.2	2.7	2.7	2.9	2.9
MEDICINE	15.5	2.0	6.2	3.3	3.0	3.1	4.6	3.3	3.4	3.4	3.3
ARTISTIC	1.4	0.7	1.2	0.8	1.5	1.1	0.8	0.6	0.8	1.0	1.1
SUB-TOTAL	46.6	23.5	24.9	20.5	20.0	17.6	15.0	14.8	19.9	17.4	18.1
						LOWER TERTIARY					
CLERICAL	6.8	10.1	10.1	9.6	9.8	12.5	8.5	5.3	10.6	10.5	11.2
SALES	4.1	2.7	5.3	4.0	5.5	5.2	3.8	3.8	5.3	5.6	5.2
SERVICE	8.1	11.4	7.6	8.1	9.2	9.0	8.7	8.6	10.9	10.0	9.3
SUB-TOTAL	19.0	24.2	23.0	21.7	24.5	26.7	21.0	17.7	26.8	26.1	25.7
						PRIMARY					
FARMING	0.0	4.7	2.4	1.8	0.8	1.7	2.3	7.3	3.7	2.2	2.0
OTHER PRIMARY	2.7	5.4	0.9	1.0	0.2	0.2	0.2	0.7	0.7	1.1	0.4
SUB-TOTAL	2.7	10.1	3.3	2.8	1.0	1.9	2.5	8.0	4.4	3.3	2.4
						SECONDARY					
PROCESSING	2.0	1.3	1.0	2.0	3.2	3.1	2.4	0.7	1.7	3.4	2.9
MACHINING	2.0	7.4	3.7	6.5	14.8	12.4	14.0	4.0	7.1	7.0	11.0
CONSTRUCTION	2.0	5.4	3.5	3.5	3.0	4.8	4.4	3.5	6.6	5.1	4.7
TRANSPORT	3.4	6.0	2.6	1.5	1.5	1.5	1.4	0.8	1.7	1.5	1.5
OTHER OCCUPATIONS	4.1	3.4	2.6	2.3	2.2	3.9	3.0	1.8	2.5	3.1	3.3
SUB-TOTAL	13.5	23.5	13.4	15.8	24.7	25.7	25.2	10.8	19.6	20.1	23.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

noticeable as only 1.5 percent of the total immigrant population were in this occupation in 1981. This may be a result of the fact that P. E. I. is an island and the Territories are very far north, therefore, transportation is a definite necessity in order for these two areas to survive economically.

Nova Scotia and New Brunswick have quite diverse occupational structures with the largest proportions (10.1 and 9.6 percent) in clerical occupations, both just slightly below the average of the total immigrant population. All of the Atlantic provinces lack in the processing, machining and construction occupations.

Quebec on the other hand has a substantial proportion of it's immigrants in machining occupations (14.8 percent). Quebec does, however, lack in construction occupations.

Ontario has a very bimodal occupation structure with 12.5 percent of it's immigrants in clerical occupations and 12.4 percent in machining occupations. Ontario does hold a slightly below average proportion of immigrants in the professional occupations with 17.6 percent.

Manitoba and Saskatchewan seem to have lower proportions in most occupational categories resulting from

high proportions in the NA category. For Manitoba, machining is the dominant occupation (14.0 percent). Saskatchewan has a very high 7.3 percent in farming which is not surprising as both grain farming and ranching are large industries in Saskatchewan.

Alberta and B. C. seem to have an occupational structure similar to the total immigrant population with slight advantages in the primary occupations due to farming and fishing.

Therefore, once again, the Atlantic provinces receive the more prestigious immigrants as can be seen by the large proportions of Atlantic immigrants in professional occupations. This finding is not as noticeable in Table A11, as the proportion of immigrants entering the Atlantic provinces is so small, it is hard to differentiate whether they are at an advantage or not.

4.6 Income and Destination Choice

The income of immigrants in Canada varies greatly just as the income of native Canadians vary. In which provinces, however, do the immigrants with high incomes reside and in which province do low income immigrants locate?

Newfoundland again receives immigrants who seem to be for the most part the cream of the crop. In Table 4.6,

TABLE 4.6 INCOME COMPOSITION OF IMMIGRANTS IN DIFFERENT PROVINCES
(IN PERCENTAGES)

	PROVINCES										
INCOME ($)	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
< 0	11.8	6.0	14.4	14.4	13.5	11.7	9.4	6.9	11.6	11.0	11.6
1 - 4,999	15.7	23.9	21.9	25.8	19.9	17.0	26.8	25.4	17.5	18.5	18.4
5,000 - 9,999	9.4	11.2	19.7	24.2	19.3	21.0	22.5	30.6	22.1	21.9	21.2
10,000 - 19,999	18.1	25.4	23.5	15.8	26.9	28.6	26.3	21.6	24.5	23.7	26.8
SUB-TOTAL	55.0	66.5	79.5	81.2	79.6	78.3	84.0	84.5	76.7	75.1	78.0
20,000 - 29,999	22.0	23.1	10.6	12.8	12.4	14.6	9.9	8.5	13.4	15.8	14.1
30,000 - 39,999	10.2	7.5	6.2	4.6	4.6	4.4	3.1	3.7	6.4	5.7	4.8
40,000+	12.6	3.0	3.8	2.4	3.4	2.8	2.1	3.4	4.7	3.4	3.1
SUB-TOTAL	44.8	33.6	20.6	19.8	20.4	21.8	15.1	15.6	24.7	24.9	22.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Individuals from Hutterite colonies were assigned zero incomes because of response problems (Statistics Canada Public Use Sample Tapes User Documentation, 1981).

the income structure of each provinces immigrant population is shown. It can be seen that Newfoundland's immigrants have the highest proportion in the three highest income categories with 44.8 percent earning $20,000 or more. The total immigrant population has only 22.0 percent earning this same amount. Newfoundland also has the smallest proportion of immigrants earning less than $20,000 with 55.0 percent whereas the total immigrant population has 78.0 percent earning less than $20,000.

P. E. I. and the Territories also have a larger proportion of immigrants in higher income classes than do the other provinces. P. E. I. has the second lowest proportion (66.5 percent) with an income of less than $20,000 and also the second largest proportion (33.6 percent) with income of $20,000+.

Quebec and Ontario both have income structures relatively similar to the total immigrant population with approximately average proportions in each income category.

Manitoba and Saskatchewan have very high proportions of their immigrants in the lowest income categories with 84.0 and 84.5 percent earning less than $20,000. Both of these provinces have the lowest proportions earning above $30,000 with 15.1 and 15.6 percent respectively.

Alberta and B. C. have income compositions similar to that of the total immigrant population with slightly above average proportions in the high income categories.

The results here show that not all of the Atlantic provinces are disadvantaged in terms of the income earned by their immigrants. Although New Brunswick has a relatively high proportion in the low income categories, Newfoundland shows the best income structure of all of the provinces with almost one quarter of it's immigrants earning over $30,000. The western provinces do not show a high income structure, although Alberta and B. C. do have a slightly higher than average proportion in the high income categories. Again the distribution of immigrants in each income category among the province's is shown in Table A12.

4.7 Summary

Overall, the conclusions drawn through the examination of the destination choice patterns has found that Ontario receives much more than it's fair share of immigrants, with over 50 percent of all Canadian immigrants. British Columbia and Alberta are the only other provinces which receive more than their fair share of immigrants. When the immigrants are separated into ethnic groups, three destination choice patterns become apparent. One shows the domination of the western provinces along with Ontario,

another shows the domination of both Ontario and Quebec, while the third shows a more dispersed pattern, with Ontario still being the dominant destination. French immigrants show the most concentrated destination choice pattern, with 70 percent locating in Quebec, although the Italian and OSR immigrants represent a higher proportion of Quebec's immigrant population. New Brunswick also has a high proportion of their immigrants being of French origin.

Among the provinces receiving very small shares of immigrants, the Atlantic provinces have done quite well in terms of the quality of their immigrants. Manitoba and Saskatchewan, however, seem to do relatively poorly, receiving the lower class immigrants for each factor.

Chapter Five

Cluster Analysis Based on Destination Choice Patterns

5.0 Introduction

The purpose of this chapter is to give a brief explanation of the clustering procedure used on the six explanatory factors in this study in order to reduce the number of distinctions within each factor. For example, ethnic origin has 22 distinctions and education 11, these large numbers of distinctions need to be reduced for three reasons:

(1) the limitation of the number of explanatory factors allowed into the statistical model used in the following chapter as well as the computer time needed to include all cases

(2) an explanation of the destination choice pattern of immigrants in Canada involving all of the distinctions for each explanatory factor would be confusing as well as cumbersome

(3) the number of immigrants included in some categories may become quite small when spread over a large number of cells, deeming them unreliable, therefore, it will be less likely to find misleading results.

Although the clustering procedure is not based on a test of statistical significance, it does help to get a rough picture of the grouping within factors. As a result, Cluster Analysis was chosen to group distinctions together

on the basis of the similarity in destination choice patterns. This grouping takes place by comparing the dissimilarity indexes for each pair of distinctions and grouping those with small indexes.

For simplicity, the explanation of the procedure carried out to compute the dissimilarity index as well as the cluster analysis will be described in detail for the Ethnic Origin explanatory factor only.

5.1 Dissimilarity Index

The dissimilarity index is a form of proximity measure which is computed by comparing the proportion of immigrants of each ethnic origin residing in a province to the proportion of immigrants of different ethnic origins living in the same province. The dissimilarity index is in the form:

$$\sum_{i=1}^{10} |Eij - Eik|/2 * 100 \qquad (1)$$

where Eij is the percentage of immigrants of ethnic origin j living in province i, and Eik is the percentage of immigrants of ethnic origin k living in Province i (Cheung and Liaw, 1986). The resulting dissimilarity matrix for Ethnic Origin is a 22 x 22 matrix shown in Table 5.1.

5.2 Cluster Analysis

The cluster analysis groups the distinctions (i.e.

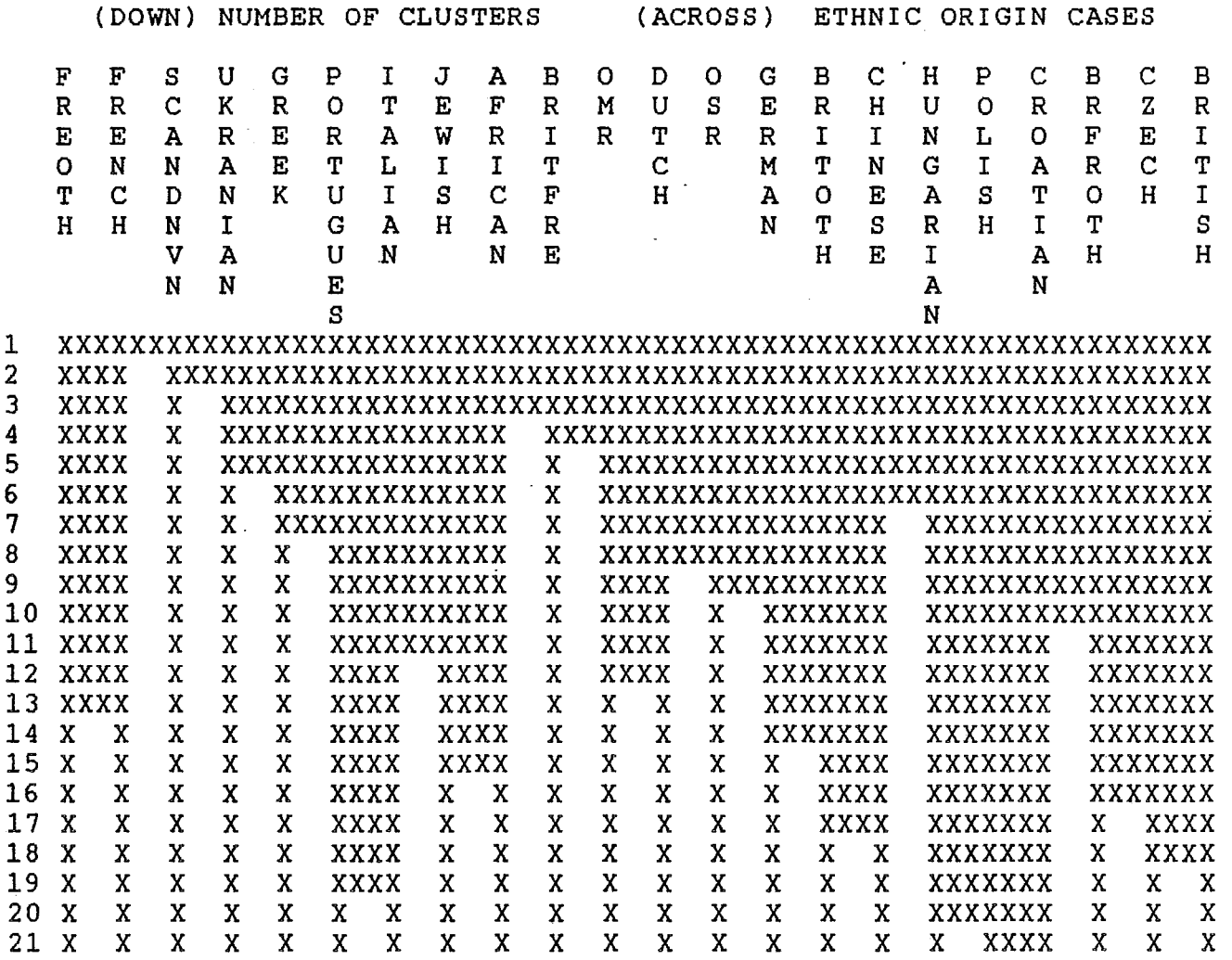
TABLE 5.1 DISSIMILARITY MATRIX FOR THE 22 ETHNIC ORIGIN CATEGORIES

ETHNIC ORIGIN	BRI	FRE	AFR	CHI	CRO	CZE	DUT	GER	GRE	ITL	JEW	HUN	POL	POR	SCN	UKR	OSR	B&F	B&O	F&O	BFO	OMR
BRITISH	0	72	23	11	13	8	20	16	32	28	15	12	12	24	36	27	15	22	12	63	8	18
FRENCH	72	0	57	74	71	73	77	72	46	60	62	76	71	66	74	73	62	62	72	11	71	76
AFRICAN	23	57	0	32	16	25	42	34	13	11	9	22	17	15	56	20	21	30	34	48	28	37
CHINESE	11	74	32	0	22	12	15	11	38	37	24	21	21	32	26	34	15	25	8	64	15	17
CROATIAN	13	71	16	22	0	14	32	25	29	15	10	6	3	12	46	19	20	28	24	62	17	27
CZECHOSLOVAKIAN	8	73	25	12	14	0	20	15	32	28	18	12	13	25	38	28	17	26	14	64	9	16
DUTCH	20	77	42	15	32	20	0	15	48	47	34	28	31	42	33	44	23	27	13	67	22	12
GERMAN	16	72	34	11	25	15	15	0	41	40	27	25	24	35	29	30	14	22	10	62	18	17
GREEK	32	46	13	38	29	32	48	41	0	17	21	34	29	24	62	28	28	37	40	36	34	44
ITALIAN	28	60	11	37	15	28	47	40	17	0	14	21	17	7	61	22	26	34	39	50	31	41
JEWISH	15	62	9	24	10	18	34	27	21	14	0	15	11	12	48	21	14	25	26	52	19	29
HUNGARIAN	12	76	22	21	6	12	28	25	34	21	15	0	7	16	47	23	23	31	22	66	15	21
POLISH	16	71	17	21	3	13	31	24	29	17	11	7	0	14	46	19	20	27	23	62	15	27
PORTUGUESE	24	66	15	32	12	25	42	35	24	7	12	16	14	0	56	18	24	30	34	55	27	36
SCANDINAVIAN	36	74	56	26	46	38	33	29	62	61	48	47	46	56	0	56	36	40	30	64	38	38
UKRAINIAN	27	73	20	34	19	28	44	30	28	22	21	23	19	18	56	0	30	40	35	62	31	37
OSR	15	62	21	15	20	17	23	14	28	26	14	23	20	24	36	30	0	17	15	52	16	17
BRIT AND FRENCH	22	62	30	25	28	26	27	22	37	34	25	31	27	30	40	40	17	0	20	55	18	27
BRIT AND OTHER	12	72	34	8	24	14	13	10	40	39	26	22	23	34	30	35	15	20	0	62	15	15
FRENCH AND OTHER	63	11	48	64	62	64	67	62	36	50	52	66	62	55	64	62	52	55	62	0	62	65
BRIT,FRENCH,OTHER	8	71	28	15	17	9	22	18	34	31	19	15	15	27	38	31	16	18	15	62	0	18
OMR	18	76	37	17	27	16	12	17	44	41	29	21	27	36	38	37	17	27	15	65	18	0

ethnic origins) with the closest proximities together, it then combines the two nearest clusters to form a new cluster. The program then recomputes the proximities between existing clusters and the new cluster. This process continues until all distinctions have been combined in one cluster. This process results in a hierarchy of cluster solutions which range from one overall cluster to as many clusters as there are distinctions. Clusters which are at the higher levels can contain several lower-level clusters. Within each level, however, each distinction belongs to only one cluster (SPSSX User's Guide, 1986).

From the clustering procedure a verticle icicle plot results showing the clustering process (Figure 5.1). It can be seen in Figure 5.1 that the Ethnic Origins are grouped into as many as 21 clusters (bottom row) to as few as one all-inclusive cluster containing all 22 Ethnic Origins (top row). Since the purpose of this procedure was to narrow down the number of distinctions used for Ethnic Origin, the icicle plot was examined to find the smallest number of clusters which made 'geographical sense' meaning ethnic origins from the same areas of the world being grouped together. The clustering at the seventh level of the icicle plot seemed to fit the criteria the closest. These seven clusters, shown in Table 5.2, reflect the

FIGURE 5.1 VERTICAL ICICLE PLOT FOR ETHNIC ORIGIN CATEGORIES



Note: The 21 distinctions shown here correspond to those defined in Table A14.

Table 5.2

CLUSTER ANALYSIS RESULTS FOR ALL IMMIGRANTS IN CANADA, 1981

Group Names	Distinctions
Ethnicity	
BRITISH - EASTERN EUROPEAN	British (Croatian, Serbian, Yugoslavian) Czechoslovakian Hungarian Polish (British, French and Other)
FRENCH	French French and Other
CHINESE-GERMAN	Chinese German Dutch British and Other Other Single Response Other Multiple Response
SEUROPE	(African, Caribbean, Haitian) Greek Italian Jewish Portuguese
SCANDINAVIAN	Scandinavian
UKRAINIAN	Ukrainian
BRITFRENCH	British and French

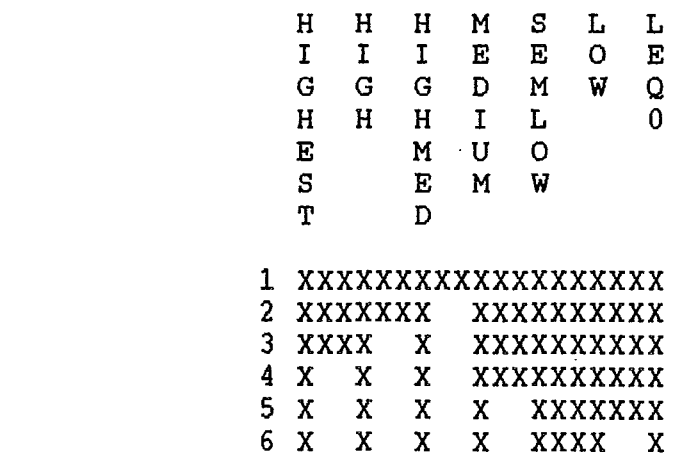
destination choice pattern determined in Chapter 5. The BRITISH-EASTERN EUROPEAN cluster shows the more dispersed destination choice pattern, the CHINESE-GERMAN cluster choose Ontario and the west, while the SEUROPE (Southern Europe) group choose Ontario and Quebec.

This clustering procedure was then performed on each of the remaining five explanatory factors. The criterion for choosing the number of clusters to use are slightly different for these factors, however, as there can be no geographical pattern to them as in Ethnic Origin. For these explanatory factors, the smallest number of clusters which show some sort of hierarchical order are chosen. For example, the icicle plot for Income is shown in Figure 5.2. There are seven income distinctions shown in the raw data. If three clusters are chosen the income levels are grouped in hierarchical order, with the three groups representing high, medium and low income levels. The cluster grouping for each factor is shown in Table A13.

5.3 Cluster Analysis for Males Only

Male immigrants in Canada have a higher probability of having a job then do females. In order to get an accurate picture of the statistical analysis in the following chapter, only the male immigrant's destination choice pattern will be analyzed, because it is less likely

FIGURE 5.2 VERTICLE ICICLE PLOT FOR INCOME CATEGORIES



Note: The seven distinctions shown here correspond to those defined in Table A14.

that there will be missing values for such factors as class of worker and occupation. As a result it was relevant to determine whether the clustering procedure in the preceding section of this chapter holds the same for only the male immigrant population.

The dissimilarity index was determined for only the male immigrants in Canada and the cluster analysis for all five explanatory factors was performed. The resulting icicle plots for each factor were examined and similar results to those found earlier were the outcome. Therefore, the statistical analysis in the following chapter will be performed only on the male immigrants in Canada and the explanatory factors will be grouped in the same form as is shown in Table A13.

Chapter Six

Logit Analysis of Destination Choice Patterns

6.0 Introduction

In chapter four a description of the destination choice patterns of the Canadian immigrants in 1981 was given. Each explanatory factor was examined individually and the destination choice pattern was viewed only in the context of each separate factor. This chapter on the other hand will analyze the destination choice pattern of immigrants in Canada in the context of all six explanatory factors simultaneously.

The multivariate model is described first, then the statistical significance of each explanatory factor is analyzed separately to see how large a role they play in the destination choice pattern of immigrants. Last, the results from the final run of the model which included all six explanatory factors are discussed and the factors which play the largest role in explaining the destination choice pattern of immigrants are determined.

6.1 Statistical Model

In order to account for the distribution of Canada's immigrants across the country, a polytomous logit

model was used. The logit model was chosen for the specific purpose that it allows the effects of one factor on the destination choice pattern to be analyzed in the context of all other factors (Maier, 1986). To simplify description, this model will be described with the inclusion of only one explanatory factor, in this case ethnic origin. Let d(i,j) represent the expected value of D(i,j) which is province j's share of immigrants of ethnic group i. The model is in the form:

$$d(i,j) = Exp(Z(i,j)) \Big/ \sum_{j'=1}^{10} Exp(Z(i,j') \qquad (2)$$

where;

$$Z(i,j)=\sum_{j'=1}^{10} A(j')*X(i,j,j')+\sum_{j'=1}^{10}\sum_{i'=1}^{7} B(j',i')*X(i,j,j')*Y(i,j,i') \qquad (3)$$

A(j') is an unknown parameter associated with province j'; B(j',i') is another unknown parameter associated with province j' and ethnic group i'; X(i,j,j') is a dummy variable assuming the value of one when j=j'; and Y(i,j,i') is another dummy variable assuming the value of one when i=i'. It should be noted that this model has too many parameters to yield unique estimates, this is solved by choosing a certain province as the **referent province** and a certain ethnic group as the **referent category** and setting the associated parameters to zero.

6.2 Application of the Model

The form of the model given in equations (2) and (3) was used for six separate explanatory factors: ethnicity, education, period of immigration, class of worker, occupation and income. For each explanatory factor, a referent category was chosen.

Before any of the explanatory factors is included into the model, only the dummy variables representing the provinces are included in the model. The model is then run with only these nine variables (Newfoundland was the referent province). The result from this referent run is then used to compare all following runs in order to see how much more of the destination choice pattern can be explained by the addition of explanatory factors into the model.

Before the model was run for each of the explanatory factors, interaction terms between the provinces and the variable were selected to be included in the model. In order to explain the process of selecting the interaction terms and the running of the model to get the final result, one explanatory factor will be used to follow through these steps. This factor will be ethnic origin.

The ethnicity explanatory factor has seven categories, each category consists of immigrants of either

one ethnic origin or a group of ethnic origins, whichever the cluster analysis grouped them into. Of these seven ethnic groups the group termed BRITISH-EASTERN EUROPEAN was chosen as the referent category, thus leaving the number of interaction terms available to enter the model at 54 (9 provinces x 6 ethnic groups). It would have been a very tedious process as well as time consuming (both personal time and computer time) to include all 54 interaction terms only to delete those which were not significant. Therefore, a crosstabulation of the provinces by the ethnic groups was performed and analyzed in order to choose those interaction terms most likely to be significant in the model. The interactions which corresponded to the shares substantially above or below those of the referent category were chosen. Those interactions which corresponded to a share above that of the reference share would be expected to have a positive coefficient resulting from the model, and those below the reference share would be expected to have a negative coefficient. Thirty interaction terms were chosen using this method.

Once the interaction terms were chosen they were included into the model along with the provincial dummy variables. The results from this run of the model were examined and all non-significant interactions were deleted

from the model (for the purposes of this study the t-ratio with a magnitude of less than 2.0 was deemed insignificant). The model was then run with only these significant interaction terms. This procedure continued until all remaining interaction terms were significant. It should be noted that the nine provincial variables remain in the model at all times whether they are significant or not.

This same procedure is carried out for the remaining five explanatory factors and the coefficients and t-ratios from the model are shown in Tables 6.1 and 6.2. The first row of both Tables 6.1 and 6.2 show the Run Number of the model. Run1 shows the results of the reference run; Run2, the inclusion of the ethnic origin interaction terms; Run3, education; Run4, period of immigration; Run5, class of worker; Run6, occupation and Run7, income. The remaining columns in both tables represent the simultaneous inclusion of two or more explanatory factors to the model. Therefore, Run8 is the result of the model with both the Ethnic Origin and Education interaction terms; Run9 shows the effects of the addition of the Period of Immigration terms to the model in Run8; Run10 adds the Class of Worker interaction terms; Run11 adds the Occupation interaction terms and Run12 is

TABLE 6.1 COEFFICIENTS FROM THE MULTINOMIAL LOGIT MODEL ON THE IMMIGRANTS IN CANADA IN 1981

	RUN1	RUN2	RUN3	RUN4	RUN5	RUN6	RUN7	RUN8	RUN9	RUN10	RUN11	RUN12
PEINWT	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074	-0.074
NS	1.181	1.181	1.181	1.181	1.181	1.147	1.181	1.181	1.181	1.181	1.148	1.149
NB	0.634	0.551	0.634	0.634	0.634	0.634	0.634	0.551	0.551	0.551	0.551	0.551
QUE	3.881	3.165	3.980	3.234	3.881	3.993	4.090	3.259	2.752	2.769	2.901	3.086
ONT	5.229	5.021	5.229	4.556	5.229	5.163	5.325	5.024	4.475	4.492	4.463	4.543
MAN	2.449	2.262	2.449	2.449	2.449	2.449	2.701	2.260	2.242	2.243	2.242	2.513
SASK	1.799	1.751	1.799	1.799	1.572	1.582	1.896	1.751	1.754	1.541	1.510	1.510
ALB	3.495	3.325	3.495	3.495	3.425	3.421	3.495	3.322	3.048	3.251	3.195	3.186
BC	4.007	3.922	3.779	4.007	4.007	4.007	3.918	3.802	3.776	3.777	3.784	3.707
NB*FRENCH	--	2.144	--	--	--	--	--	2.144	2.124	2.124	2.109	2.109
QUE*FRENCH	--	3.382	--	--	--	--	--	3.375	3.376	3.376	3.418	3.408
MAN*CHINESE	--	0.357	--	--	--	--	--	0.364	0.416	0.414	0.416	0.400
ALB*CHINESE	--	0.366	--	--	--	--	--	0.372	0.424	0.407	0.419	0.436
BC*CHINESE	--	0.228	--	--	--	--	--	0.222	0.271	0.270	0.274	0.300
QUE*SEUROPEAN	--	2.024	--	--	--	--	--	1.978	1.917	1.922	2.025	1.978
ONT*SEUROPEAN	--	1.191	--	--	--	--	--	1.170	1.108	1.113	1.117	1.091
QUE*SCANDINAVIAN	--	-1.910	--	--	--	--	--	-1.920	-1.881	-1.868	-1.779	-1.767
ONT*SCANDINAVIAN	--	-1.420	--	--	--	--	--	-1.426	-1.385	-1.373	-1.341	-1.335
MAN*UKRAINIAN	--	1.181	--	--	--	--	--	1.190	1.083	1.090	1.106	1.082
SASK*UKRAINIAN	--	1.299	--	--	--	--	--	1.305	1.179	1.092	0.947	0.961
ALB*UKRAINIAN	--	0.678	--	--	--	--	--	0.687	0.580	0.575	0.575	0.596
BC*UKRAINIAN	--	-0.671	--	--	--	--	--	-0.651	-0.753	-0.747	-0.734	-0.712
QUE*BRITFRENCH	--	1.639	--	--	--	--	--	1.615	1.616	1.161	1.612	1.582
QUE*GRADE9-13	--	--	-0.373	--	--	--	--	-0.325	-0.323	-0.323	-0.327	-0.344
BC*GRADE9-13	--	--	0.307	--	--	--	--	0.203	0.199	0.198	0.198	0.212
QUE*NONUNIV	--	--	-0.652	--	--	--	--	-0.523	-0.534	-0.536	-0.605	-0.574
BC*SOMEUNIV	--	--	0.676	--	--	--	--	0.482	0.501	0.499	0.480	0.481
BC*UNIVERSITY	--	--	0.377	--	--	--	--	0.163	0.189	0.186	0.166	0.112
QUE*POST1946	--	--	--	0.708	--	--	--	--	0.569	0.549	0.517	0.515
ONT*POST1946	--	--	--	0.736	--	--	--	--	0.614	0.593	0.543	0.541
ALB*SELFINC	--	--	--	--	0.402	--	--	--	--	0.415	0.356	0.321
SASK*SELFEMP	--	--	--	--	1.213	--	--	--	--	1.138	0.566	0.554
ALB*SELFEMP	--	--	--	--	0.388	--	--	--	--	0.305	--	--
QUE*PRIMARY	--	--	--	--	--	-1.804	--	--	--	--	-2.013	-1.979
ONT*PRIMARY	--	--	--	--	--	-1.296	--	--	--	--	-1.270	-1.265
QUE*FARMING	--	--	--	--	--	-0.960	--	--	--	--	-0.670	-0.736
ONT*FARMING	--	--	--	--	--	-0.247	--	--	--	--	--	--
SASK*FARMING	--	--	--	--	--	1.873	--	--	--	--	1.432	1.463
ALB*FARMING	--	--	--	--	--	0.650	--	--	--	--	0.613	0.636
QUE*CONSTRUCTION	--	--	--	--	--	-0.674	--	--	--	--	-0.967	-0.958
ALB*CONSTRUCTION	--	--	--	--	--	0.276	--	--	--	--	0.454	0.483
NS*HEALTH	--	--	--	--	--	0.891	--	--	--	--	0.839	0.780
ONT*HEALTH	--	--	--	--	--	-0.316	--	--	--	--	-0.312	-0.281
SASK*HEALTH	--	--	--	--	--	0.723	--	--	--	--	--	--
ONT*MACHINING	--	--	--	--	--	0.305	--	--	--	--	0.305	0.285
QUE*MEDINC	--	--	--	--	--	--	-0.367	--	--	--	--	-0.321
MAN*MEDINC	--	--	--	--	--	--	-0.414	--	--	--	--	-0.430
SASK*MEDINC	--	--	--	--	--	--	-0.407	--	--	--	--	--
BC*MEDINC	--	--	--	--	--	--	0.288	--	--	--	--	0.278
QUE*HIGHINC	--	--	--	--	--	--	-0.588	--	--	--	--	-0.431
ONT*HIGHINC	--	--	--	--	--	--	-0.503	--	--	--	--	-0.337
MAN*HIGHINC	--	--	--	--	--	--	-0.811	--	--	--	--	-0.825
GOODFIT	0.00	0.22	0.01	0.01	0.01	0.04	0.02	0.23	0.24	0.25	0.28	0.29

TABLE 6.2 ADJUSTED T-RATIO RESULTS OF THE MULTINOMIAL LOGIT MODEL ON THE IMMIGRANTS IN CANADA IN 1981

	RUN1	RUN2	RUN3	RUN4	RUN5	RUN6	RUN7	RUN8	RUN9	RUN10	RUN11	RUN12
PEINWT	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
NS	6.1	7.0	6.1	6.4	6.3	6.4	6.2	7.1	7.3	7.4	7.7	7.8
NB	3.0	3.0	3.0	3.2	3.1	3.3	3.1	3.0	3.1	3.2	3.4	3.4
QUE	22.8	21.0	23.3	16.9	23.2	25.3	24.0	21.6	15.8	16.1	18.0	19.1
ONT	30.9	34.0	30.9	26.1	31.6	32.8	31.8	34.1	29.4	30.0	31.8	32.5
MAN	13.9	14.2	13.9	14.5	14.2	15.0	15.2	14.2	14.7	14.9	16.0	17.5
SASK	9.9	11.0	9.9	10.3	8.6	9.2	10.3	11.0	11.5	10.0	10.5	10.5
ALB	20.4	21.9	20.4	21.2	20.3	21.5	20.6	22.0	22.7	22.6	23.8	23.9
BC	23.5	26.2	21.8	24.5	24.0	25.4	23.2	25.0	25.8	26.2	28.2	27.7
NB*FRENCH	--	5.6	--	--	--	--	--	5.6	5.8	5.9	6.3	6.3
QUE*FRENCH	--	31.7	--	--	--	--	--	31.7	32.9	33.4	35.7	35.8
MAN*CHINESE	--	3.9	--	--	--	--	--	4.0	4.7	4.7	5.1	4.9
ALB*CHINESE	--	6.3	--	--	--	--	--	6.4	7.6	7.4	8.1	8.5
BC*CHINESE	--	4.8	--	--	--	--	--	4.7	5.9	5.9	6.5	7.1
QUE*SEUROPEAN	--	29.8	--	--	--	--	--	29.1	29.1	29.6	32.9	32.2
ONT*SEUROPEAN	--	21.8	--	--	--	--	--	21.4	20.0	21.3	22.7	22.3
QUE*SCANDINAVIAN	--	-4.6	--	--	--	--	--	-4.6	-4.7	-4.7	-4.8	-4.8
ONT*SCANDINAVIAN	--	-9.4	--	--	--	--	--	-9.5	-9.6	-9.6	-10.0	-10.0
MAN*UKRAINIAN	--	5.4	--	--	--	--	--	5.4	5.1	5.2	5.7	5.6
SASK*UKRAINIAN	--	5.0	--	--	--	--	--	5.1	4.8	4.4	4.0	4.1
ALB*UKRAINIAN	--	3.9	--	--	--	--	--	4.0	3.5	3.5	3.7	3.9
BC*UKRAINIAN	--	-2.9	--	--	--	--	--	-2.8	-3.4	-3.4	-3.6	-3.5
QUE*BRITFRENCH	--	4.2	--	--	--	--	--	4.2	4.3	4.4	4.6	4.6
QUE*GRADE9-13	--	--	-4.8	--	--	--	--	-4.6	-4.7	-4.8	-5.2	-5.5
BC*GRADE9-13	--	--	4.3	--	--	--	--	3.2	3.3	3.3	3.5	3.8
QUE*NONUNIV	--	--	-5.5	--	--	--	--	-4.7	-4.9	-5.0	-6.1	-5.8
BC*SOMEUNIV	--	--	5.5	--	--	--	--	4.4	4.8	4.8	5.0	5.0
BC*UNIVERSITY	--	--	6.6	--	--	--	--	3.2	3.9	3.9	3.7	2.5
QUE*POST1946	--	--	--	6.6	--	--	--	--	5.4	5.3	5.3	5.3
ONT*POST1946	--	--	--	10.7	--	--	--	--	9.9	9.7	9.4	9.4
ALB*SELFINC	--	--	--	--	3.1	--	--	--	--	3.8	3.5	3.2
SASK*SELFEMP	--	--	--	--	8.0	--	--	--	--	8.9	3.9	3.8
ALB*SELFEMP	--	--	--	--	4.5	--	--	--	--	4.1	--	--
QUE*PRIMARY	--	--	--	--	--	-5.0	--	--	--	--	-6.1	-6.1
ONT*PRIMARY	--	--	--	--	--	-7.1	--	--	--	--	-8.1	-8.1
QUE*FARMING	--	--	--	--	--	-4.9	--	--	--	--	-4.1	-4.5
ONT*FARMING	--	--	--	--	--	-2.1	--	--	--	--	--	--
SASK*FARMING	--	--	--	--	--	10.2	--	--	--	--	8.5	8.7
ALB*FARMING	--	--	--	--	--	4.6	--	--	--	--	6.0	6.3
QUE*CONSTRUCTION	--	--	--	--	--	-7.3	--	--	--	--	-12.0	-11.9
ALB*CONSTRUCTION	--	--	--	--	--	3.4	--	--	--	--	6.6	7.1
NS*HEALTH	--	--	--	--	--	2.3	--	--	--	--	2.6	2.5
ONT*HEALTH	--	--	--	--	--	-2.6	--	--	--	--	-3.1	-2.8
SASK*HEALTH	--	--	--	--	--	2.2	--	--	--	--	--	--
ONT*MACHINING	--	--	--	--	--	8.2	--	--	--	--	9.6	9.0
QUE*MEDINC	--	--	--	--	--	--	-5.8	--	--	--	--	-6.1
MAN*MEDINC	--	--	--	--	--	--	-3.4	--	--	--	--	-4.6
SASK*MEDINC	--	--	--	--	--	--	-2.4	--	--	--	--	--
BC*MEDINC	--	--	--	--	--	--	5.3	--	--	--	--	6.5
QUE*HIGHINC	--	--	--	--	--	--	-7.4	--	--	--	--	-6.3
ONT*HIGHINC	--	--	--	--	--	--	-9.4	--	--	--	--	-7.7
MAN*HIGHINC	--	--	--	--	--	--	-5.3	--	--	--	--	-6.9
GOODFIT	--	0.22	0.01	0.01	0.01	0.04	0.02	0.23	0.24	0.25	0.28	0.29

the final run of the model which includes all six explanatory factors as the Income interaction terms are added to the model. In each of Run8 to Run12 the same process of deleting those terms which become insignificant from the model was carried out. Only in Runs 11 and 12 did some interaction terms need to be dropped for the multiple variable model, these are shown by the dashed lines in those two columns on both Tables 6.1 and 6.2.

A Goodness of Fit measure was computed for each run of the model in order to show how well the model explained the destination choice pattern of immigrants in Canada. This measure is in the form:

$$1 - \frac{\text{Log of Likelihood of Specific Run}}{\text{Log of Likelihood of Run1}}$$

and the results are shown in the bottom row of Table 6.1 and 6.2. Of the six explanatory factors, ethnic origin explained the destination choice pattern better than the other five explanatory factors as can be seen by the Goodness of Fit of 0.22. The closest explanatory factor to this is occupation which has a Goodness of Fit of 0.04. The combination of explanatory factors does help to explain the destination choice of immigrants better than the single factor runs with a Goodness of Fit of 0.29 for Run12. However, ethnic origin plays the largest role in the explanation of the destination choice pattern.

6.3 Examination of the Multivariate Result

A detailed examination of the interaction terms remaining significant in the final run of the model, Run12, will be included in the following sections of this chapter. The order in which they will be examiend are the order in which they appear in Tables 6.1 and 6.2.

6.3.1 Ethnic Origin

For those immigrants of French origin, NB*FRENCH and QUE*FRENCH with the t-ratios of 6.3 and 35.8 are the only significant interactions, thus showing that immigrants of French origin tend to choose the 'French' provinces of Canada. Quebec is well known for it's French culture so it is not surprising that French immigrants choose to live there. New Brunswick has a very high percentage of the French immigrants as well, with 14.6 percent of all French immigrants in Canada.

There are three significant interaction terms corresponding to the CHINESE-GERMAN (CHINESE for short) ethnic group. There are several ethnic origins included under this heading, all of which are stated in the preceding chapter. MAN*CHINESE, ALB*CHINESE and BC*CHINESE are the three significant interaction terms with t-ratios of 4.9, 8.5, and 7.1, respectively. These interactions

point to the fact that the immigrants included in the CHINESE-GERMAN category tend to prefer Western provinces.

The immigrants combined in the SOUTHERN EUROPEAN ethnic category show a strong preference for both Quebec and Ontario with QUE*SEUROPEAN and ONT*SEUROPEAN having t-ratios of 32.2 and 22.3 respectively. Scandinavians on the other hand have negative interactions with both Quebec and Ontario with t= -4.8 for QUE*SCANDINAVIAN and t= -10.0 for ONT*SCANDINAVIAN.

The Ukrainian immigrants in Canada show a definite western preference, although, not for B.C. The MAN*UKRAINIAN (5.6), SASK*UKRAINIAN (4.1) and ALB*UKRAINIAN (3.9) interaction terms are all positive while the BC*UKRAINIAN (-3.5) term is significantly negative. This destination choice pattern may be a result of the fact that Ukrainians are known for grain farming which is in abundance in Manitoba, Saskatchewan and Alberta, whereas British Columbia's farming is geared more toward fruit farming.

Quebec also receives more than it's fair share in immigrants of the British and French multiple origin category. The French origin must have a stronger pull in that combination.

6.3.2 Education

The most noticeable fact about the interaction terms which remain significant for Education is the fact that they all deal with either Quebec or British Columbia. Quebec shows a negative relationship with immigrants who have medium-low and medium education levels. QUE*GRADE9-13 and QUE*NONUNIV have t-ratios of -5.5 and -5.8 respectively, suggesting that the immigrants who choose Quebec as a destination have education levels at both extremes. B.C. has more than it's fair share of those immigrants with a medium-low education with BC*GRADE9-13 having a t-ratio of 3.8. B.C. also receives more than it's share of immigrants in the higher education groups, with BC*SOMEUNIV, (t=5.0) and BC*UNIVERSITY, (t=2.5) being the significant interactions.

6.3.3 Period of Immigration

Immigrants who entered the country after 1946 show a greater preference for Quebec (t=5.3) and Ontario (t=9.4) than do the pre-1946 immigrants which were used as the reference category. This finding is not surprising as many pre-1946 immigrants settled in the west in search of cheap land. Also many of these immigrants may have entered the country during the depression and received Government Land

Grants out west. In the post-1946 period industries such as the auto, steel and mining industries started to flourish in Ontario and Quebec thus leading to job opportunities in that area of the country.

6.3.4 Class of Worker

The western provinces of Saskatchewan and Alberta attract more self-employed immigrants than those of other classes, as can be seen by the positive t-ratios of 3.2 and 3.8 for ALB*SELFINC and SASK*SELFEMP. The interaction term ALB*SELFEMP was significant in the individual run (Run5) however, when added to the larger model it became insignificant and had to be dropped from the model.

6.3.5 Occupation

For occupation, twelve interaction terms were significant in the individual run, however, two became insignificant when added to the larger model. Both Quebec and Ontario show negative interactions with the occupation category PRIMARY, this coincides with the division of occupations among the provinces as both the western and eastern provinces are known for their primary industries. The western provinces in Canada have the Pulp and Paper and Oil industries to name a few, while the fishing industry is large in the east, Ontario and Quebec are known more for

Secondary and Tertiary industries.

Quebec also shows a negative interaction with FARMING with a -4.5 t-ratio. Included in this FARMING category are Horticulture and Animal Husbandry, all of which Quebec has little opportunities in. Saskatchewan and Alberta on the other hand have large farming and ranching industries which may account for SASK*FARMING and ALB*FARMING having positive t-ratios of 8.7 and 6.3 respectively.

Immigrants with occupations in the construction industry tend to ignore Quebec but head for Alberta. The QUE*CONSTRUCTION interaction has a largely negative t-ratio of -11.9 which shows that, of the immigrants in Canada who are in the construction industry, only a small proportion (less than Quebec's fair share) choose Quebec. Alberta draws more than it's fair share of construction working immigrants, ALB*CONSTRUCTION has a t-ratio of 7.1. This finding can be explained by the fact that Quebec is a province which is growing very slowly while Alberta, especially in the late 1970's was growing very rapidly. Between 1976 and 1981 Quebec's population grew approximately three percent, while Alberta over the same period grew approximately 13 percent (Statistics Canada, Cat. No. 92-906, 1981). As a result Alberta's construction

industry expanded with the need for new housing and businesses to support the larger population, while Quebec's construction industry did not experience the same demand.

Nova Scotia tends to attract more than it's fair share of immigrants in Medicine and Health occupations, while Ontario attracts less than it's fair share. The t-ratios for these two interactions, NS*HEALTH and ONT*HEALTH, are low but still significant at 2.5 and -2.8 respectively. SASK*HEALTH did show a significant positive relationship in the individual run, however, when added to the larger model it had to be dropped due to insignificance.

Ontario shows an advantage in the MACHINING occupational category, with a t-ratio of 9.0. This occupation category not only includes Machining occupations but product fabricating and assembling, repair occupations, processing occupations and occupations in the fields of Art, Literature and Recreation. Once the combination of occupations included in this category are examined, we can understand why Ontario has a positive interaction with this category. The steel and auto industry may account for the immigrants in the Machining, fabricating, assembling, repairing and processing occupations, while Ontario, especially Toronto, has many job opportunities in the

Artistic and Literary fields.

6.3.6 Income

The last explanatory factor to be examined is Income, which was separated into three categories; LOW ($0 - $19,999), MEDIUM ($20,000 - $29,999) and HIGH ($30,000 +). The LOW income category was used as the referent category in the model. Quebec shows a negative relationship with both the MEDIUM and HIGH income categories (t=-6.1 and -6.3 respectively) suggesting that many of Quebec's immigrants have incomes in the LOW income category. Manitoba also shows negative relationships with the two higher income groups. The ONT*HIGHINC interaction term is also negative showing that Ontario is lacking in immigrants receiving incomes of $30,000 or more. The only positive income interaction term is BC*MEDINC with a t-ratio of 6.5, showing that British Columbia has more that it's fair share of immigrants in the MEDIUM income category. No province showed an over abundance of immigrants in the HIGH income category.

6.4 Summary

As mentioned earlier Ethnic Origin explains the destination choice pattern of immigrants in Canada much better than does any of the other five explanatory factors.

In the single-factor runs of the model, Ethnic Origin had a goodness of fit of 0.22 while the variable which explained the destination choice pattern the second best was Occupation with a goodness of fit of only 0.04.

When all of the explanatory variables were included in the logit model the explanation improved over that which was obtained by Ethnic Origin alone, the goodness of fit was 0.29.

Perhaps due to the very small number of immigrants found in the Atlantic provinces, the multivariate analysis neither confirms nor denies the finding in Chapter Four that immigrants in these eastern provinces are mostly of higher quality.

CHAPTER SEVEN

CONCLUSION

7.0 The Main Purpose

The main purpose of this study was to fill the gap in the existing literature on immigrants in Canada. Therefore, the changing characteristics of Canadian immigrants was examined in the context of changes in Canadian immigration policy. The destination choice of the Canadian immigrants was also examined in detail with a statistical procedure determining the factors which help to best explain the destination choice of these immigrants.

7.1 The Changing Composition of Canadian Immigrants

Canada has seen a drastic change in the characteristics of the immigrants entering Canada since World War II. The most noticeable change has been in terms of ethnic origin which has shifted from the more traditional British and Western European origins to the Eastern European and Third World origins.

The British and Western European immigrants were the main sources of immigrants to Canada up until approximately the 1960's when the Southern European such as the Italians started to enter the country in large numbers.

In 1962 the racial bars to immigration were lifted which led to this shift in the origin of immigrants. The most drastic change in the characteristics of Canadian immigrants can be attributed to the introduction of the 'points system' of immigrant selection in 1967. This led to a drastic increase in the number of Third World immigrants entering Canada.

Along with the changes seen in the ethnic origins of immigrants there has also been changes in other characteristics such as education. The level of education of immigrants who entered Canada after 1967 was also seen to increase over immigrants who entered the country before this time with 25 percent of the 1967-77 immigrants obtaining a University degree or higher, approximately 10 percent above the proportion of both the 1946-60 and 1961-66 immigrant entrants. The 1976 Immigration Policy did lead to a small decrease in the proportion of immigrants with University degrees, however, resulting from less emphasis being placed on education and more on occupation and skills in this new policy.

Changes were seen in the other characteristics examined in this study, however, they do not seem to be linked with changes to the Canadian Immigration policy, but rather to the establishment of themselves in the country.

For example, the income of immigrants who had resided in Canada longer was higher than those who had entered the country in later periods.

7.2 The Destination Choice Patterns

Ontario is the province who gains the most in terms of the number of immigrants who choose to reside there. Ontario receives over fifty percent of all immigrants who enter Canada. British Columbia and Alberta are the only other provinces receiving more than their fair share of immigrants.

When the immigrants are separated into ethnic groups, three destination choice patterns become apparent. One shows the domination of the western provinces along with Ontario, another shows the domination of both Ontario and Quebec, while the third shows a more dispersed pattern, with Ontario still being the dominant destination. Of all of the ethnic groups, French immigrants show the most concentrated destination choice pattern, with 70 percent locating in Quebec.

Although the Atlantic provinces receive a very small proportion of immigrants, the immigrants they do receive are of very high quality in terms of the characteristics such as education, class of worker, occupation and income.

Manitoba and Saskatchewan also receive very small proportions of immigrants, however, the immigrants they receive tend to be the lower class immigrants for each factor.

7.3 Multivariate Results

The results of the Logit model show that of the six explanatory factors included in this study, ethnic origin explain the destination choice pattern of Canadian immigrants better than any of the other five factors. The goodness of fit measure of 0.22 for ethnic origin alone is only 0.07 smaller than the goodness of fit of all explanatory factors combined.

Immigrants included in the CHINESE-GERMAN ethnic group tend to prefer the western provinces with significant interaction terms associated with Manitoba, Alberta and British Columbia. Immigrants of Southern European origin show a strong preference for both Quebec and Ontario. Scandinavian immigrants do not show a strong preference for certain provinces, however, they do have negative interactions with both Ontario and Quebec. The Ukrainian immigrants prefer every western province except British Columbia with positive interactions for Manitoba, Saskatchewan and Alberta and a negative interaction for British Columbia. The French immigrants prefer both Quebec

and New Brunswick with very high proportions of French immigrants residing in each of these two provinces.

7.4 Further Research Ideas

A suggestion for further research would be to look at the destination choice pattern of immigrants at the Census Metropolitan Area (CMA) level. The purpose of this would be first, to determine whether immigrants prefer residing in a CMA as opposed to smaller cities and towns and if so, which ethnic groups locate in which CMA. Second, to determine whether the ethnic origins which are grouped together in terms of their provincial destination choice would still be grouped together in terms of the CMA destination choice.

There were problems incurred in this study resulting from the inaccuracy of the 1981 census in reflecting the characteristics of immigrants who entered the country in earlier decades. For immigrants who entered Canada before 1946, a larger proportion of male immigrants died before filling out the 1981 census. Furthermore, in studying the occupations and incomes of these early immigrants, many were retired, thus, not giving accurate information on their characteristics when they were in the labour force. In order to solve this problem, data may be obtained from Statistics Canada and Employment and

Immigration Canada for earlier years which may give more accurate information on these immigrants closer to their time of entry.

Another suggestion would be to group the Atlantic provinces together in order for them to have a larger sample size. If the sample for the Atlantic provinces was larger perhaps some of the results seen in Chapter Four would show up in the statistical model.

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APPENDIX A

Supplementary Data and Definitions

TABLE A1 EDUCATIONAL COMPOSITION OF FEMALE IMMIGRANTS WHO ENTERED CANADA DURING THE FIVE PERIODS (IN PERCENTAGES) A1

HIGHEST LEVEL OF SCHOOLING	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81	TOTAL
			ELEMENTARY AND SECONDARY			
GRADE <5	13.9	9.0	11.8	9.9	13.4	10.8
GRADE 5-8	35.2	22.1	19.8	15.0	15.7	21.9
GRADE 9-13	26.7	25.4	21.8	18.8	20.1	23.1
SSGD	6.4	12.0	12.9	12.4	13.0	11.2
TRADES CERTIFICATE	1.2	2.0	2.4	2.0	1.4	1.9
SUB-TOTAL	83.4	70.5	68.7	58.1	63.6	68.9
			NON-UNIVERSITY			
WO TRADES CERT	4.7	5.4	5.8	5.3	4.7	5.3
WITH TRADES	2.6	6.2	5.9	7.1	5.8	5.7
OTHER NON-UNIV	4.1	7.5	7.3	9.9	8.0	7.5
SUB-TOTAL	11.4	19.1	19.0	22.3	18.5	18.5
			UNIVERSITY			
WO CERTIFICATE	1.2	2.2	2.3	3.0	3.5	2.3
WITH CERTIFICATE	2.1	3.2	3.9	5.3	5.0	3.7
BACHELORS +	2.0	5.0	6.1	11.3	9.1	6.6
SUB-TOTAL	5.3	10.4	12.3	19.6	17.6	12.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A2 EDUCATIONAL COMPOSITION OF MALE IMMIGRANTS WHO ENTERED CANADA DURING THE FIVE TIME PERIODS (IN PERCENTAGES) A2

HIGHEST LEVEL OF SCHOOLING	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81	TOTAL
			ELEMENTARY AND SECONDARY			
GRADE <5	13.2	6.5	6.8	5.5	7.5	7.4
GRADE 5-8	33.7	19.5	17.2	10.8	11.9	18.8
GRADE 9-13	21.6	17.5	16.5	15.4	17.8	17.5
SSGD	4.6	6.5	8.0	8.3	9.8	7.1
TRADES CERTIFICATE	5.6	8.0	7.0	5.2	4.0	6.5
SUB-TOTAL	78.7	58.0	55.5	45.2	51.0	57.3
			NON-UNIVERSITY			
WO TRADES CERT	3.5	4.0	4.9	4.4	3.8	6.1
WITH TRADES	5.3	12.7	11.2	11.2	9.6	10.7
OTHER NON-UNIV	3.0	6.6	7.6	8.5	7.8	6.7
SUB-TOTAL	11.8	23.3	23.7	24.1	21.2	23.5
			UNIVERSITY			
WO CERTIFICATE	2.1	3.1	2.3	3.9	4.9	3.2
WITH CERTIFICATE	2.3	4.9	4.8	7.4	5.8	5.2
BACHELORS +	5.0	10.6	13.8	19.4	17.3	12.8
SUB-TOTAL	9.4	18.6	20.9	30.7	28.0	21.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A3 COMPOSITION OF FEMALE IMMIGRANTS IN EACH TIME PERIOD BY CLASS OF WORKER (IN PERCENTAGES)

CLASS OF WORKER	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81	TOTAL
N.A.	81.3	41.4	30.5	26.6	41.6	42.8
			WORKING CLASS			
PAID WORKER	16.5	54.0	65.3	69.1	56.5	53.4
UNPAID FAMILY	0.4	0.7	0.5	0.4	0.2	0.5
SUB-TOTAL	16.9	54.7	65.8	69.5	56.7	53.9
			SELF-EMPLOYED			
SE WO INCORP	0.1	0.3	0.3	0.3	0.2	0.3
SE WITH INCORP	0.2	0.8	0.9	0.8	0.1	0.7
SE WO UNICORP	1.0	1.8	1.7	1.8	1.0	1.6
SE WITH UNICOR	0.4	1.0	0.9	0.9	0.4	0.8
SUB-TOTAL	1.7	3.9	3.8	3.8	1.7	3.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A4 COMPOSITION OF MALE IMMIGRANTS FOR EACH TIME PERIOD BY CLASS OF WORKER (IN PERCENTAGES)

CLASS OF WORKER	TIME PERIODS <1946	1946-60	1961-66	1967-77	1978-81	TOTAL
N.A.	61.1	12.0	5.9	5.3	14.8	17.0
				WORKING CLASS		
PAID WORKER	29.0	72.3	81.0	83.5	79.0	70.4
UNPAID FAMILY	0.1	0.1	0.1	0.1	0.2	0.1
SUB-TOTAL	29.1	72.4	81.1	83.6	79.2	70.5
				SELF-EMPLOYED		
SE WO INCORP	0.6	1.4	0.9	1.1	0.7	1.1
SE WITH INCORP	1.6	4.9	4.3	2.9	1.4	3.5
SE WO UNICORP	6.0	5.4	4.4	4.2	2.5	4.8
SE WITH UNICOR	1.7	3.8	3.4	2.9	1.4	3.0
SUB-TOTAL	9.9	15.5	13.0	11.1	6.0	12.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A5 OCCUPATIONAL COMPOSITION OF FEMALE IMMIGRANTS FOR FIVE TIME PERIODS (IN PERCENTAGES)

	TIME PERIODS					
OCCUPATIO	<1946	1946-60	1961-66	1967-77	1978-81	TOTAL
N.A.	81.3	41.4	30.5	26.6	41.6	42.8
			PROFESSIONAL			
MANAGRIAL	1.0	3.7	4.0	3.4	1.6	3.0
SCI&MATH	0.0	0.6	0.7	1.3	0.9	0.7
SOC SCI	0.4	1.1	1.0	1.2	0.7	1.0
TEACHING	0.8	3.5	3.4	3.8	1.9	3.0
MEDICINE	1.5	4.0	5.5	7.3	3.8	4.7
ARTISTIC	0.3	1.0	0.8	1.1	1.2	0.9
SUB-TOTAL	4.0	13.9	15.4	18.1	10.1	13.3
			LOWER TERTIARY			
CLERICAL	5.4	18.5	20.1	22.5	15.5	17.3
SALES	2.5	5.6	5.6	4.6	3.6	4.6
SERVICE	3.8	9.9	12.8	12.3	13.3	10.1
SUB-TOTAL	11.7	34.0	38.5	39.4	32.4	32.0
			PRIMARY			
FARMING	1.2	1.5	1.1	1.1	1.2	1.3
OTH PRIM	0.0	0.1	0.1	0.1	0.0	0.1
SUB-TOTAL	1.2	1.6	1.2	1.2	1.2	1.4
			SECONDARY			
PROCESSNG	0.3	1.3	2.3	2.0	1.7	1.5
MACHINING	0.8	5.7	9.3	9.6	10.0	6.7
CONSTRUCT	0.0	0.2	0.3	0.3	0.1	0.2
TRANSPORT	0.1	0.3	0.1	0.1	0.2	0.2
OTH OCC	0.4	1.6	2.5	2.7	2.6	1.9
SUB-TOTAL	1.6	9.1	14.5	14.7	14.6	10.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A6 OCCUPATIONAL COMPOSITION OF MALE IMMIGRANTS FOR FIVE TIME PERIODS (IN PERCENTAGES)

	TIME PERIODS					
OCCUPATIO	<1946	1946-60	1961-66	1967-77	1978-81	TOTAL
N.A.	61.1	12.0	5.9	5.3	14.8	17.0
			PROFESSIONAL			
MANAGRIAL	6.1	12.3	10.7	10.1	5.9	10.1
SCI&MATH	1.4	5.5	7.2	8.7	8.4	6.2
SOC SCI	0.3	1.0	1.1	0.9	0.5	0.8
TEACHING	0.7	2.8	4.0	3.9	1.3	2.9
MEDICINE	0.5	1.6	2.1	2.7	1.7	1.8
ARTISTIC	0.5	1.4	1.6	1.5	1.7	1.3
SUB-TOTAL	9.5	24.6	26.7	27.8	19.5	23.1
			LOWER TERTIARY			
CLERICAL	2.9	4.6	5.0	6.1	5.8	4.9
SALES	4.3	6.4	6.5	6.2	4.4	5.9
SERVICE	3.6	8.6	9.1	10.0	12.0	8.5
SUB-TOTAL	10.8	19.6	20.6	22.3	22.2	19.3
			PRIMARY			
FARMING	5.3	3.2	1.7	1.5	3.0	2.8
OTH PRIM	0.5	1.1	0.5	0.8	0.8	0.8
SUB-TOTAL	150.8	111.8	57.2	59.8	98.8	93.6
			SECONDARY			
PROCESSNG	1.2	4.6	4.5	5.4	5.4	4.4
MACHINING	4.3	15.1	18.7	19.2	21.9	15.5
CONSTRUCT	2.9	11.4	13.0	9.5	5.5	9.4
TRANSPORT	1.7	3.2	3.4	3.1	1.7	2.9
OTH OCC	2.6	5.3	4.9	5.1	5.2	4.8
SUB-TOTAL	12.7	39.6	44.5	42.3	39.7	37.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A7 INCOME COMPOSITION OF FEMALE IMMIGRANTS IN THE FIVE TIME PERIODS (IN PERCENTAGES)

	TIME PERIODS					
INCOME ($)	<1946	1946-60	1961-66	1967-77	1978-80	TOTAL
< 0	6.5	21.0	20.7	20.9	43.7	19.4
1 - 4,999	34.7	26.6	22.9	22.0	28.7	26.5
5,000-9,999	41.5	22.0	23.1	24.2	17.1	26.2
10,000-19,999	13.2	23.7	26.8	26.9	9.1	22.1
SUB-TOTAL	95.9	93.3	93.5	94.0	98.6	94.2
20,000-29,999	3.1	4.2	4.6	4.5	0.9	4.1
30,000-39,999	0.7	1.6	1.3	1.5	0.3	1.3
40,000+	0.3	1.0	0.6	0.6	0.2	0.4
SUB-TOTAL	4.1	6.8	6.5	6.6	1.4	5.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Individuals from Hutterite colonies were assigned zero incomes because of response problems (Statistics Canada Public Use Sample Tapes User Documentation, 1981).

TABLE A8 INCOME COMPOSITION OF MALE IMMIGRANTS IN THE FIVE TIME PERIODS (IN PERCENTAGES)

	TIME PERIODS					
INCOME ($)	<1946	1946-60	1961-66	1967-77	1978-80	TOTAL
< 0	0.7	1.2	1.8	2.8	13.2	2.2
1 - 4,999	16.6	7.7	8.2	8.0	25.3	10.2
5,000-9,999	37.9	12.0	10.5	11.5	18.2	16.4
10,000-19,999	23.5	31.6	35.3	37.4	25.8	32.0
SUB-TOTAL	78.7	52.5	55.8	59.7	82.5	60.8
20,000-29,999	11.5	29.9	27.9	26.2	10.7	24.6
30,000-39,999	5.0	10.8	9.6	8.9	4.1	8.8
40,000+	4.9	6.8	6.8	5.2	2.6	5.8
SUB-TOTAL	21.4	47.5	44.3	40.3	17.4	39.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: Individuals from Hutterite colonies were assigned zero incomes because of response problems (Statistics Canada Public Use Sample Tapes User Documentation, 1981).

TABLE A9 DESTINATION CHOICE OF CANADIAN IMMIGRANTS IN EACH EDUCATIONAL CATEGORY (IN PERCENTAGES)

HIGHEST LEVEL OR SCHOOLING	PROVINCES										
	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
ELEMENTARY AND SECONDARY											
GRADE <5	0.0	0.1	0.2	0.2	18.9	52.4	4.8	3.7	7.7	11.9	100.0
GRADE 5-8	0.1	0.1	0.6	0.5	14.6	54.5	4.7	3.7	8.3	12.9	100.0
GRADE 9-13	0.1	0.2	1.2	0.6	9.2	53.0	4.2	2.1	10.6	18.7	100.0
SSGD	0.1	0.1	1.1	0.7	16.4	53.8	2.8	1.2	6.9	16.9	100.0
TRADES CERTIFICATE	0.2	0.4	1.1	0.6	11.4	57.4	3.8	1.4	9.1	14.6	100.0
NON-UNIVERSITY											
WO TRADES CERT	0.1	0.1	0.7	0.3	13.7	53.4	3.9	1.6	9.5	16.7	100.0
WITH TRADES	0.3	0.4	1.1	0,5	10.5	51.9	3.4	1.6	10.8	19.6	100.0
OTHER NON-UNIV	0.2	0.4	1.1	0.9	9.0	55.8	3.1	1.6	10.1	17.7	100.0
UNIVERSITY											
WO CERT	0.3	0.3	0.9	0.7	14.3	47.8	3.5	0.9	10.5	20.8	100.0
WITH CERTIFICATE	0.3	0.5	1.7	0.8	14.1	48.3	3.2	1.8	9.2	20.2	100.0
BACHELORS +	0.8	0.3	2.1	0.9	16.5	47.1	3.0	1.9	10.7	16.7	100.0
IMMIGRANT SHARE	0.2	0.2	1.0	0.6	13.3	52.7	3.9	2.3	9.3	16.4	100.0

TABLE A10 DESTINATION CHOICE OF CANADIAN IMMIGRANTS IN EACH CLASS OF WORK (IN PERCENTAGES)

CLASS OF WORKER	PROVINCES										
	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
N.A.	0.1	0.1	1.2	0.8	13.4	49.0	4.6	3.5	9.1	18.2	100.0
WORKING CLASS											
PAID WORKER	0.3	0.2	0.9	0.5	13.8	55.0	3.5	1.4	9.1	15.4	100.0
UNPAID FAMILY	0.5	0.5	0.9	0.0	13.1	52.6	2.8	2.8	13.6	13.1	100.0
SELF-EMPLOYED											
SE INCORP (<5)	0.2	0.2	0.0	0.2	14.0	41.0	2.7	2.0	16.0	23.7	100.0
SE INCORP (>5)	0.3	0.2	0.8	0.3	13.0	48.0	3.4	1.6	12.3	20.2	100.0
SE UNICORP (<5)	0.2	0.6	1.2	0.7	11.3	48.1	3.5	5.3	12.1	17.0	100.0
SE UNICORP (>5)	0.4	0.4	1.8	0.6	12.6	53.1	3.1	2.1	9.1	16.8	100.0
IMMIGRANT SHARE	0.2	0.2	1.0	0.6	13.5	52.7	3.8	2.2	9.3	16.5	100.0

TABLE A11 DESTINATION CHOICE OF CANADIAN IMMIGRANTS IN EACH OCCUPATIONAL CATEGORY (IN PERCENTAGES)

	PROVINCES										
OCCUPATION	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
N.A.	0.1	0.1	1.2	0.8	13.4	49.0	4.6	3.5	9.1	18.2	100.0
						PROFESSIONAL					
MANAGERIAL	0.3	0.3	1.1	0.4	14.6	52.9	2.8	1.8	10.4	15.5	100.0
SCIENCE AND MATH	0.3	0.2	1.3	0.7	13.3	53.7	1.7	1.3	12.9	14.5	100.0
SOCIAL SCIENCE	0.3	1.0	1.5	0.8	14.1	47.3	4.1	2.1	10.5	18.3	100.0
TEACHING	1.0	0.5	1.7	1.2	19.6	46.5	2.9	2.0	8.6	16.1	100.0
MEDICINE	1.0	0.1	1.9	0.6	12.6	49.5	5.3	2.2	9.6	17.1	100.0
ARTISTIC	0.3	0.1	1.1	0.4	18.2	54.1	2.7	1.2	6.9	15.1	100.0
						LOWER TERTIARY					
CLERICAL	0.1	0.2	0.9	0.5	11.8	58.4	2.9	1.0	8.8	15.3	100.0
SALES	0.2	0.1	1.0	0.5	14.2	52.8	2.7	1.6	9.4	17.5	100.0
SERVICE	0.2	0.3	0.8	0.5	13.3	51.0	3.5	2.0	10.9	17.5	100.0
						PRIMARY					
FARMING	0.0	0.5	1.2	0.5	5.4	45.5	4.3	7.8	16.8	17.9	100.0
OTHER PRIMARY	1.3	2.7	2.0	1.3	5.6	28.9	1.7	3.3	14.3	38.9	100.0
						SECONDARY					
PROCESSING	0.2	0.1	0.4	0.4	14.7	55.8	3.1	0.5	5.4	19.5	100.0
MACHINING	0.0	0.1	0.3	0.3	18.2	59.0	4.8	0.8	6.0	10.4	100.0
CONSTRUCTION	0.1	0.3	0.8	0.4	8.5	54.1	3.5	1.6	13.1	17.7	100.0
TRANSPORT	0.5	0.9	1.8	0.6	13.7	50.9	3.4	1.1	10.2	16.8	100.0
OTHER OCCUPATIONS	0.3	0.2	0.8	0.4	9.1	61.9	3.4	1.2	7.2	15.6	100.0
IMMIGRANT SHARE	0.2	0.2	1.0	0.6	13.5	52.7	3.8	2.2	9.3	16.5	100.0

TABLE A12 DESTINATION CHOICE OF IMMIGRANTS TO DIFFERENT PROVINCES
(IN PERCENTAGES)

	PROVINCES										
INCOME ($)	NFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALB	BC	TOTAL
< 0	0.2	0.1	1.3	0.7	15.5	52.8	3.1	1.3	9.3	15.6	100.0
1 - 4,999	0.2	0.3	1.2	0.8	14.4	48.9	5.7	3.2	8.9	16.5	100.0
5,000 - 9,999	0.1	0.1	1.0	0.7	12.1	52.0	4.1	3.3	9.7	16.9	100.0
10,000 - 19,999	0.1	0.2	0.9	0.4	13.4	56.3	3.8	1.8	8.9	14.5	100.0
20,000 - 29,999	0.3	0.4	0.8	0.5	11.7	54.8	2.7	1.4	12.5	18.5	100.0
30,000 - 39,999	0.4	0.3	1.3	0.6	12.7	48.2	2.6	1.8	13.9	19.6	100.0
40,000+	0.8	0.2	1.3	0.5	14.3	46.4	2.6	2.5	4.7	17.6	100.0
IMMIGRANT SHARE	0.2	0.2	1.0	0.6	13.3	52.7	3.9	2.3	9.3	16.4	100.0

Note: Individuals from Hutterite colonies were assigned zero incomes because of response problems (Statistics Canada Public Use Sample Tapes User Documentation, 1981).

Group Names	Distinctions
Education	
LOW	Less than Grade 5 Grade 5-8 SSGD Trades Certificate or Diploma
GRADE 9-13	Grade 9-13
NONUNIV	Non-university -- with other certificate or diploma
SOMEUNIV	University -- without certificate, diploma or degree
UNIVERSITY	Non-university -- without trades certificate or other non-university certificate or diploma Non-university -- with trades certificate or diploma University -- with certificate or diploma University -- Bachelors degree or higher
Period of Immigration	
PRE1946	Pre-1946 immigrants
POST1946	1946-1960 immigrants 1961-1966 immigrants 1967-1977 immigrants 1978-1981 immigrants
Class of Worker	
UNPAID	Unpaid family worker
PAID	Paid Worker

SELFINC	Self-employed incorporated
SELFEMP	Self-employed
<u>Occupation</u>	
PRIMARY	Other primary industries
FARMING	Farming Horticulture Animal Husbandry
CONSTRUCTION	Construction trades
HEALTH	Medicine and Health
TEACHING	Teaching and related
MACHINING	Machining, product fabricating, assembling and repair Processing Other Occupations Artistic, literary, recreational
SOCIALSCIENCE	Occupations in Social Sciences and related Service Sales Occupations in Natural Sciences Transport and equipment operating Clerical and related Managerial, Administration and related
<u>Income</u>	
LOWINC	$0 - $19,999
MEDINC	$20,000 - $29,999
HIGHINC	$30,000 +

Table A14

Definition of Income Cluster Variables

Cluster Name	Definition
LEQ0	Less than or equal to $0
LOW	$1 - $4,999
SEMLOW	$5,000 - $9,999
MEDIUM	$10,000 - $19,999
HIGHMED	$20,000 - $29,999
HIGH	$30,000 - $39,999
HIGHEST	$40,000+