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**Characterization and Explanation of the 1996-2001 Inter-CMA
Migration of the Second Generation in Canada**

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CHARACTERIZATION AND EXPLANATION OF THE 1996-2001 INTER-CMA MIGRATION OF THE SECOND GENERATION IN CANADA

Lei Xu*

Abstract:

Based on the primary micro data files of the 2001 Canadian census, I investigated the 1996-2001 internal migration patterns of the 2nd generation, in comparison to those of the 1st, 1.5, and 3rd + generations. In the descriptive analysis, I found that the overall out-migration rate increased monotonically with an increase in generation status. However, with the exception of Toronto, Vancouver and Calgary, the CMA specific out-migration rate generally decreased with an increase in generation status. In terms of in-migration, Toronto, Vancouver, and Calgary were the predominant destinations for all generations. In the multivariate analysis, I found that the different generations were subject to the effects of the same set of explanatory factors -- labor market factors, ethnic similarity factor, and personal factors. Compared to the first generation immigrants, the second generation was less dependent on ethnic communities and more sensitive to the changing spatial economy of the CMA system.

Keywords: internal migration, second generation, immigrants, Canada

JEL classification: R230, F220, O150, J110

Résumé :

En nous appuyant sur les micro-données du recensement canadien de 2001, nous examinons les tendances migratoires des immigrants de seconde génération en les comparant à celles de la première, la première et demie et de la troisième génération et plus entre 1996 et 2001. L'analyse descriptive suggère que le taux global des migrations de sortie a augmenté de façon monotone avec l'augmentation statut des générations. Cependant, à l'exception de Toronto, Vancouver et Calgary, les taux de migration de sortie dans les régions métropolitaines ont généralement baissé avec l'augmentation du statut des générations. En termes de migrations d'entrée, Toronto, Vancouver et Calgary étaient les destinations premières de toutes les générations. Dans l'analyse multivariée, nous avons déterminé que toutes les générations étaient affectées par ensemble de facteurs d'explicatifs communs – le marché du travail, les similitudes ethniques et les facteurs personnels. En comparaison aux immigrants de première génération, la seconde génération était moins dépendante des communautés ethniques et plus sensible aux variations de l'économie spatiale de la région métropolitaine de recensement.

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1. Introduction

Immigrants are an important and fast growing component of the Canadian population. According to the 2001 census, there were 5.45 million immigrants, representing 18.5% of the total population in Canada. The significant role played by immigrants is not only in terms of the magnitude, but also in terms of their spatial distribution at the time of landing as well as the redistribution through post-immigration relocation. Immigrants are very unevenly distributed in Canada; they are increasingly concentrated in large urban areas. For example, in 1991, around 66% of all immigrants landed in Canada during the previous 10 years lived in the three largest Census Metropolitan Areas (CMAs): Toronto, Montreal, and Vancouver. By 2001, this proportion increased sharply to 74%. In comparison, these three CMAs shared 26% and 27% of native-born individuals in 1991 and 2001, respectively. The long-term distributional impact of immigration can be even more substantial, because not only the immigrants themselves but also their children settle disproportionately in large CMAs. In Toronto, for example, immigrants, the second generation (i.e. immigrants' Canadian-born children) and the native-born represented 52%, 22%, and 26% of the total population aged 15 or over in 2001, respectively¹ (Schellenberg, 2004).

The spatial distribution of immigrants and second generation is by no means static. Within a few years of landing, the internal mobility level of immigrants is

¹ According to Schellenberg (2004), among persons aged 15 to 29, 64% of second generation resided in Toronto, Montreal or Vancouver in 2001. When focusing on those aged 30-54 (and thus eliminating young children who lived with their immigrant parents), there were still as large as 47% of second generation resided in the top 3 CMAs in 2001.

generally high², often leading to a further concentration in distributional pattern (Liaw and Xu, 2005). Many Canadian and U.S. studies have examined the post-landing migration patterns of immigrants and often compared them to the migration patterns of the native-born (Newbold, 1996; Lin, 1998; Ram and Shin, 1999; Rogers and Henning, 1999; Trovato, 1988). However, research on migration of second generation has been very limited in the literature³, mainly due to lack of proper migration data on the second generation. The 2001 Canadian Census opened up a research opportunity as it is the first census since 1971 that contains a “Generation Status” variable derived from the information on birthplaces of the parents of each respondent. Based on the primary micro data files of the 2001 Canadian Census, this research mainly focused on the characterization and explanation of the 1996-2001 inter-CMA migration of the Canadian second generation aged 25-44. Our study contributes to the literature with two new elements. First, we not only investigate the inter-CMA migration pattern of the second generation, but also compare the spatial pattern and underlying reasoning with those of other generations. By doing so, we gained some insights into how the second generation differed from their immigrant parents, from their counterparts who landed in Canada as immigrant children, and from the native-born in terms of migration behavior. Second, we used CMAs as our basic geographic unit, which enabled us to discover detailed patterns of migrants’ sensitivity to the spatial changes

² Regardless of duration of stay in Canada, however, immigrants as a whole were found to be less mobile than the native-born Canadians (Lin, 1998). The mobility of immigrants tended to decrease with duration in Canada (Ram and Shin, 1999).

³ Contemporary empirical studies on second generation have been largely centered on assimilation (Boyd, 2002; Portes, et al., 2005; Portes and Zhou, 1993; Perlmann and Waldinger, 1997) and economic integration (Borjas, 2001).

in economic conditions, particularly employment opportunities among different local labor markets⁴ (Liaw, et al, 1986). Furthermore, by focusing on the CMAs, there are more destination alternatives in the choice set for migrants to choose from.⁵ The relatively large number of choices available leads to greater variation in accessibility in the migration system, and makes results from multivariate analysis more robust and convincing.

2. Data

Our data on the 1996-2001 inter-CMA migration of the second generation come from a multidimensional tabulation drawn from the primary micro data files of the 2001 Canadian Census. The dimensions of the tabulation include: 1) five-year age groups (25-29, 30-34, 35-39, 40-44)⁶, 2) gender (male, female), 3) educational attainment (less than high school, high school graduation, college graduation, Bachelor's degree, above Bachelor's degree) , 4) official language ability (English

⁴ Most Canadian empirical research studied on the interprovincial or interregional migration pattern, which might have masked the dynamics of movement within a province or region. Earlier Canadian studies on interprovincial migration sought to relate migration behavior to labor market factors and revealed that immigrants tended to move towards Ontario and B.C., especially when the province(s) experienced relatively rapid employment growth (Edmonston, 2002; Liaw and Xu, 2005). However, as CMA is a better representation of local labor market than province, using CMA as geographic unit would be more appropriate. This is particularly important when the primary focus of research is to explore migrants' responsiveness to changes in economic opportunities among different local labor markets.

⁵ For example, the Canadian CMA system is composed of 27 CMAs, so there would be 26 destination choices available for an individual who decide to depart from the CMA of origin. At the provincial scale, however, a potential interprovincial migrant has only 9 alternatives in his choice set. Moreover, because migration decision process is largely subject to the effect of economic opportunities and the effect of ethnic similarity and because Ontario and B.C. are the two economically strong provinces with large, well-developed ethnic communities, it would be difficult to separate the two effects and to assess their relative importance.

⁶ We choose individuals aged 25-44 because this is the primary labor force age group.

only, French only, both English and French, neither English nor French), 5) ethnicity (British, German, Ukrainian, Chinese, Indian, Filipino, Italian), 6) CMA of residence in 1996, and 7) CMA of residence in 2001. Because we are interested in the comparison of migration patterns of the second generation with that of other generations, we requested such multidimensional tabulation from Statistics Canada for each generation under consideration.

According to the derived variable “Generation Status” from the 2001 Census, the 1st generation is referred to as the immigrants (i.e. the foreign-born); the 2nd generation are individuals born in Canada with at least one parent born outside of Canada; and the 3rd+ generation (i.e. the native-born Canadians) are those born in Canada to two Canadian-born parents. We further subdivide the 1st generation immigrants into the 1st and 1.5 generation based on “age at immigration”. Among all immigrants who landed in Canada before 1996, those aged 19 or younger at the time of landing are considered as 1.5 generation while those aged 20 or older at landing are defined as the 1st generation immigrants.⁷

In addition to the multidimensional tabulations from the primary micro data files of the 2001 Canadian Census, we employ the 1996 and 2001 Canadian Census Profile Tables⁸ to generate various socioeconomic indicators as place attributes to be used in our multivariate analysis (discussed in section 3 and 4). As the boundaries of

⁷ Both 1.5 and 2nd generations are immigrant children. The latter were born in Canada and certainly went through the Canadian education system whereas the former were born abroad but received some or all of their education in Canada.

⁸ These Census Profile Tables (at census tract level) were obtained via Canadian Census Analyser at CHASS (Computing in the Humanities and Social Sciences, University of Toronto).

some CMAs have changed between 1996 and 2001, we have made necessary adjustments so that the 1996 and 2001 data correspond to the same geographic scope.

3. Methodology

The methodology employed in this research can be subdivided into two parts. The first part is a descriptive analysis to characterize the overall patterns of inter-CMA migration of the second generation in Canada. Various descriptive indices are applied and compared among the 1st, 1.5, 2nd, and 3rd+ generation. In order to measure the propensity to leave and move into a CMA, out- and in-migration rates⁹ are defined by dividing the number of out- and in-migrants by the corresponding at-risk population. Net-migration rates are also computed for each CMA to represent the net gain or loss of migrants. In addition, out-, in- and net migration volumes are used to provide a concrete picture of the migration flows.

The second part is a multivariate analysis to explain the migration patterns characterized in the first part. The observed migration behavior can be analyzed with a two-level nested logit model. A potential migrant with personal attributes s and residing in CMA i is considered to make a choice within a two-level choice framework. At the upper level, the potential migrant chooses to depart (and thus become an inter-CMA migrant) or to stay in the current CMA of residence. His propensity to depart is represented by a departure probability $P(s, i)$. At the lower

⁹ An in-migration ratio is also calculated for each CMA. It is computed by dividing the number of in-migrants by the population stock in a given CMA. In comparison, in-migration *rate* is calculated by using the number of people in the rest of CMA system (the at-risk population) as the denominator. In this chapter, our discussion on in-migration will mainly focus on in-migration *rate*, because it is a better indicator of a CMA's attractiveness than in-migration ratio.

level, the inter-CMA migrant chooses a specific destination in the choice set (the remaining CMAs in the system). A set of destination choice probabilities, $P(j / s, i)$ for all j not equal to i , are used to represent the propensities to make the destination choices. Based on a set of reasonable assumptions, these probabilities then become functions of observable explanatory variables in the following two sub-models (Kanaroglou et al., 1986; Liaw, 1990).

Destination Choice Sub-model:

$$P(j|i,s) = \frac{\exp(b'x[j,i,s])}{\sum_{k \neq i} \exp(b'x[k,i,s])} \quad j \neq i \quad (1)$$

where $x[j, i, s]$ is a column-vector of observable explanatory variables; b' is a row-vector of unknown coefficients.

Departure Sub-model:

$$P(i,s) = \frac{\exp(d+c'y[i,s]+u*I[i,s])}{1+\exp(d+c'y[i,s]+u*I[i,s])} \quad (2)$$

where $y[i, s]$ is another column-vector of observable explanatory variables; d , c' and u are unknown coefficients, with u being bounded between 0 and 1; and $I[i, s]$ is the so-called inclusive variable defined as:

$$I[i,s] = Ln\left(\sum_{k \neq i} \exp(b'x[k,i,s])\right) \quad (3)$$

Assuming that the migration behaviours of all persons in the same cell of the multidimensional migration tabulations depend on the same set of $P(i, s)$ and $P(j/i, s)$, we estimate the unknown coefficients in equations (1) and (2) sequentially by the maximum quasi-likelihood method (McCullagh, 1983; Liaw and Ledent, 1987).

The best specification of the model is defined as the specification with all the

explanatory variables statistically significant (i.e. those whose t-ratios have a magnitude of at least 2.0) and substantively sensible.

The goodness of fit of a given specification of a sub-model is to be measured by

$$Rho-square = 1 - L_g / L_o, \quad (4)$$

where L_g is the maximum quasi-log-likelihood of the given specification and L_o is the corresponding quantity of the null specification (i.e. the destination choice sub-model with $b' = 0$ or the departure sub-model with $c' = 0$). It is important to note that the upper bound of Rho-square is much less than 1.0 so that a value of 0.2 may indicate a very good fit (McFadden, 1974).

4. Explanatory Factors

Guided by a few theories and previous empirical findings, we choose to employ the following factors that may attract or dissuade immigrants from settling in particular CMAs.

1) Labor market factors

The human capital investment theory considers migration as a form of investment to increase an individual's productivity of human resources, and to maximize the present value of future income stream (Sjaastad, 1962, p83). Potential migrants, no matter the 1st, 1.5, 2nd or 3rd+ generation, may appraise the costs (e.g., moving costs, rents, physic costs) and returns (e.g., incomes, employment opportunities, education and training) of migration and decide to do so if the present

value of the benefits is larger than that of the costs. Based on this theory, we use the following factors¹⁰:

Income, defined as a CMA's average employment income earned by full-time full-year workers based on the 1996 census. If the potential migrant is male, then the CMA's male average employment income is applied; otherwise, the female average income is used.

Employment growth, defined as the 1996-2001 5-year employment growth rate in percentage.

Unemployment rate, defined as the unemployment growth rate during the year prior to the date of 1996 census. Empirical evidence has shown that young adults tend to move from places with relatively high unemployment rates to places with relatively low unemployment rates (Liaw and Frey, 1996). However, compared to employment growth rate, unemployment rate is more likely to have a weaker explanatory power (Newbold and Liaw, 1994), to be statistically insignificant, and to even have a "wrong" effect in interprovincial migration (Liaw, 1990)¹¹. In this study, we seek to discover the effect of unemployment rate at the CMA level.

Employment size, defined as the log of employment size of a CMA. Employment size is often considered as a proxy of population size, a control factor

¹⁰ On the cost side, we applied the average *rent* and average house-owner's major *payments* in our multivariate analysis. However, both factors turned out to be statistically insignificant in the destination choice model as well as in the departure model. Therefore, these factors were dropped out of the best specification.

¹¹ One possible reason is that a low unemployment rate in an economically weak province is a *result* of large outflows of young adults. Another possible explanation is that potential migrants may be more prone to remain in high unemployment provinces (e.g. Atlantic provinces) due to the generous unemployment insurance benefits provided there.

without which the effects of other factors cannot be assessed properly. Here we classify it as a labor market factor because a labor market with large employment base can provide relative large amount of employment opportunities created by the great number of turnovers of jobs.

In light of the human capital investment theory, the income, employment growth and employment size are expected to have a positive effect in our destination choice model and a negative effect in the departure model. Unemployment rate is expected to have an opposite effect.

2) Ethnic similarity

The ethnic enclave theory assumes that ethnic communities have social, cultural, and economic resources that can assist their co-ethnic members in many ways – ranging from providing various services in familiar ethnic language to creating employment opportunities that are unavailable in the external labor market (Li, 1992; Wang, 1999). Furthermore, strong ethnic enclaves and social networks can directly reinforce parental authority (Djajic, 2003). The reinforcement of immigrant parental authority is important in the sense that parental values of “hard work” and “achievement” can be emphasized and the downward assimilation of 2nd generation can be prevented to a large extent.

Studies on the first generation immigrants have shown substantial evidence for the attractiveness of pre-existing ethnic communities (Liaw and Xu, 2005; Newbold, 1999). In this research, we are particularly interested in querying if the 1.5, 2nd and

3rd+ generation are also subject to the impact of ethnic communities. In order to examine to what extent ethnic attraction affects inter-CMA migration of different generations, we use *Ethnic similarity* as an explanatory factor. Ethnic similarity for ethnic group e in CMA_i is defined in terms of “ethnic quotient” - the ratio of the share of ethnics e by CMA_i to the share of total population by CMA_i ¹². This variable is then interacted with the corresponding ethnicity dummy variable. An advantage of using this “ethnic quotient” measure (rather than the simple proportional measure) is that the magnitude of the estimated coefficient of the interaction term can shed light on the relative attracting and retaining power of ethnic communities: the higher the value of coefficient, the stronger the ethnic effect¹³.

3) Personal factors

¹² More specifically, *ethnic similarity* is calculated in the following way:

$$S_{e,i} = (p_{e,i}/p_e) / (P_i/P)$$

Where $S_{e,i}$ = ethnic similarity for ethnic group e in CMA_i

$P_{e,i}$ = Population of ethnic group e of CMA_i

p_e = Total population of ethnic group e of the CMA system

P_i = Population of CMA_i

P = Total population of the CMA system

For *ethnic similarity*, a value of 1 or bigger indicates a more than “fair” share of co-ethnic population, probably networked into large ethnic communities.

¹³ The simple proportional method (i.e. percentage share of population of CMA by an ethnic group) is not a good measure for the *relative* size of ethnic communities. As some ethnicities (e.g. British, Chinese) had much greater shares of CMAs’ population in general than other ethnicities (e.g. Filipinos), the estimated coefficients of *ethnic similarity* would not be comparable among different ethnicities (e.g. British vs. Filipinos). Nonetheless, it is noteworthy that the proportional measure is better than the sheer size of ethnic population in a multivariate context. The latter represents the absolute size of ethnic communities, which often strongly correlates with the size of the CMA and presence of amenities and economic opportunities.

Dummy variables representing certain personal attributes (e.g. education, age, and gender) are useful to discover selectivities in migration behavior. On the one hand, the dummy variables can be introduced independently in the departure model to explore the general selectivity with respect to personal attributes such as educational qualification (Liaw, 1990; Liaw and Frey, 1996; Liaw et al, 1998). On the other hand, interaction terms between labor market (or ethnic) variables and personal attribute dummy variables can show the selective effects of labor market (or ethnic) factors. For example, Liaw and Frey (1996) found that the attraction and retention effect of income was particularly strong on the better educated interstate migrants during 1985-1990. In our research, we investigated the possible selectivities by using both independent dummies and interaction terms.

4) Distance to destination

The conventional *distance* variable, defined as the natural log of distance between the origin and destination CMA, represents the costs of migration. It is expected to have a negative effect on the destination choice decision (Liaw, et al, 1998).

5) Coldness

Coldness, defined as the average annual number of degree days below 18°C, is used in our study to represent the quality of the physical amenity of a CMA. It is

expected to show a positive sign in the departure sub-model and a negative sign in the destination choice sub-model (Frey, et al, 1996).

6) French language ability

In line with our earlier studies on initial destination choices and post-landing relocations of first generation immigrants (Liaw and Xu, 2005; Xu and Liaw, 2003), we expect that the 2nd generation (together with 1.5 and 3rd+ generation) with *French Language Ability* are more likely to choose a CMA in Quebec and less likely to leave *Quebec* (particularly *Montreal*) if already residing there (Kaplan, 1995; Liaw et al, 2002).

7) Other factors

We also use a set of dummy variables representing specific CMAs. The interaction terms between the place-specific dummies can help discover the close ties or bonds between certain CMAs (e.g. the large exchange of migrants between Toronto and its nearby Hamilton and Oshawa).

5. Empirical Findings

5.1 Descriptive Analysis

In this section, we report the overall 1996-2001 out-, in- and net migration patterns of the second generation aged 25-44 (Table 1), compared with those of 1st

(Table 2), 1.5 (Table 3), and 3rd+ (Table 4) generations as well as the total (Table 5)¹⁴.

The salient features are summarized as follows.

5.1.1 Out-Migration

First, the overall out-migration rate for the 2nd generation turned out to be 7.6% (Table 1) during the 5-year period, which was higher than the 1st generation (5.2%, Table 2) and 1.5 generation immigrants (6.5%, Table 3), but lower than the 3rd+ generation (9.5%, Table 4). The out-migration rate for all generations was 7.9% (Table 5). These overall out-migration rates can not reflect well the underlying migration propensities of the four categories of individuals, mainly because the 1996 concentrations in Toronto and Vancouver differed substantially (being greatest for the 1st generation and the smallest for the 3rd + generation), and because Toronto and Vancouver had very strong retention power on all four categories of residents. It is also noteworthy that the overall out-migration rates might also be affected by the age composition of different generations. For example, compared with other generations, the 1st generation had a higher percentage of individuals in relatively old age groups, which might contribute to the lower overall out-migration rate.¹⁵

Second, although the overall out-migration rate increased monotonically with an increase in generation status, the CMA-specific out-migration rates were generally *higher* for the 1st and 1.5 generation than the 2nd generation, which were in turn higher than the 3rd+ generation in general, with the exception of Toronto, Vancouver and

¹⁴ Note all the volumes (in persons) in these tables were rounded to the nearest 0 or 5.

¹⁵ The proportional distributions among the 25-29, 30-34, 35-39 and 40-44 age groups were as follows -- 15%, 25%, 30% and 30% for the 1st generation; 28%, 26%, 25% and 21% for the 1.5 generation; 32%, 26%, 22% and 19% for the 2nd generation; and 30%, 26%, 23% and 21% for the 3rd + generation, respectively.

Calgary. This finding is consistent with Edmonston's finding (2002) that with the exceptions of Ontario, B.C., and Alberta, the 1986-1991 interprovincial out-migration rates were higher for immigrants (who landed during 1971-1985) than the Canadian-born. In fact, the 1st generation (and 1.5 and 2nd generation to a lesser extent) had extremely low out-migration rates from Toronto, Vancouver, and Calgary.¹⁶ The large, extensive, well-developed ethnic communities in Toronto and Vancouver may help explain the strong power of the two CMAs to hold onto immigrants (and the 2nd generation to a lesser extent)¹⁷. The very strong economic growth of Calgary helped make its out-migration rates of all four categories of individuals low. The fact that Calgary's out-migration rate was highest for the 3rd+ generation was mainly due to the fact that many of them were previous in-migrants who were born in the rest of Canada (i.e. the so-called "non-natives"). Such non-natives are known to have very high propensities to make repeat migration either back to the place of birth or onward to a "greener pasture" (Liaw, 1990; Newbold and Liaw, 1994). In economically disadvantaged CMAs, however, immigrants' out-migration rates were exceptionally high, and the difference in out-migration rates among the generations was particularly large. For example, in the case of St. John's, the out-migration rate was as high as 48.1% for the 1st generation, 24.3% for the 2nd generation, and as low as 12.6% for the 3rd + generation.

¹⁶ For example, there were only 2.4% of 1st generation immigrants moving out of Toronto during 1996-2001. 4.7% and 9.1% of 2nd and 3rd+ generation individuals departed from Toronto, respectively during the same period.

¹⁷ Calgary's strong retention power for the immigrants may result from the growth of ethnic population and its fast expansion of energy industry.

Third, in terms of odds ratio¹⁸, the 2nd generation had a much greater inter-CMA variation in out-migration than did the 3rd+ generation, and a much lower variation than did the 1st generation. For example, consider the contrast between Toronto (the largest CMA in Canada) and Halifax (Atlantic Region's largest CMA with a relatively weak economic power nationally). The odds of out-migration from Halifax was 17.1 times Toronto's odds for the 1st generation, 7.0 times for the 1.5 generation, 6.5 times for the 2nd generation, and only 1.4 for 3rd+ generation. In other words, the CMAs' power in retaining migrants differed the most for the 1st generation, moderately for the 2nd generation, and the least for the 3rd+ generation.

In sum, the overall out-migration rate increased monotonically with an increase in generation status. However, the 1st generation (and 1.5 and 2nd generations to a lesser extent) had very low out-migration rates from Toronto, Vancouver and Calgary, and high out-migration levels from economically weak CMAs. The variation in retention power among CMAs generally decreased with an increase in generation status.

5.1.2 In-Migration

For all generations, Toronto, Vancouver, and Calgary were the predominant CMAs of destination in the 1996-2001 inter-CMA migration. In the meanwhile, all generations had very low in-migration rates for economically weak CMAs,

¹⁸ Let $m[i]$ and $m[j]$ be the out-migration rates (in percent) of CMAs i and j , respectively. The odds ratio of the out-migration of CMA i to the out-migration of CMA j is defined as $(m[i]/(100-m[i]))/(m[j]/(100-m[j]))$.

particularly those in the Atlantic region and the Prairies. In general, the difference in in-migration rates among generations was not great. Nonetheless, in-migration rates in economically weak CMAs were higher for the 3rd+ generation than other generations. In sharp contrast, the pulling effect of Toronto was weaker for the 3rd+ generation than other generations. Calgary's attractiveness, however, was the strongest for the 3rd+ generation (with an in-migration rate of 1.46%), moderately strong for the 2nd generation (0.84%) and 1.5 generation (0.64%), and the weakest for the 1st generation (0.48%). In light of the fact that Calgary had the highest employment growth rate (4.47% during 1996-2001), our finding suggests that the 3rd+ generation were more responsive to the booming economy of Calgary than the 2nd generation, and especially the 1st generation.

5.1.3 Net Migration

With respect to the net transfer of inter-CMA migrants, the 2nd generation displayed two notable features that were shared with other generations. First, there were just a handful of net gainers: Toronto, Vancouver, Calgary plus their nearby secondary CMAs (e.g. Oshawa, Hamilton, Abbotsford, Edmonton). Among the net losers, St. John's and the smaller CMAs in Quebec had the greatest net losses. Second, the secondary CMAs near Toronto enjoyed high net migration rates. For example, with the highest employment growth rate in Ontario¹⁹, Oshawa had a net migration

¹⁹ The 1996-2001 five-year employment growth rate for Oshawa was 3.76%. It was the second highest (after Calgary) in the entire CMA system. Oshawa had the highest net migration rate for all generations. For the 1st generation immigrants, its net migration rate was 25.1%!

rate of 15.5% (Table 1). The rise of some secondary CMAs in southern Ontario might be due to the expansion of Toronto's diversified industries, particularly service and IT industries, into the surrounding CMAs.

Net migration rates also varied among different generations. Two interesting cases are Vancouver and Calgary. Vancouver's economy experienced a serious recession with relatively low employment growth in the late 1990s, therefore it is not surprising that Vancouver became a slight net loser of inter-CMA migrants during 1996-2001 (Table 5). However, its net loss of migrants were totally composed of the 3rd + generation. For other generations, Vancouver had net gains of migrants, although the net gain of 2nd generation was close to zero. While Vancouver suffered from an economic bust, Calgary's economy was booming with the expanding energy industry. For the 2nd and 3rd+ generation, Calgary was the largest net winner in terms of both volumes and rates (9.7% and 8.0% for the 2nd and 3rd+ generation, respectively). However, its net gains of migrants were moderate for the 1st and 1.5 generation. From this perspective, the migration behavior of the 2nd generation was more like that of their native-born counterpart, whereas migratory pattern of the 1.5 generation was more like that of their immigrant parents. These findings indicate that the 2nd and 3rd + generation were more sensitive to the changes in spatial economy of the CMA system.

5.2 Multivariate Analysis

After the characterization of the salient features of the overall out-, in-, net migration patterns, we now proceed to a multivariate analysis to achieve further insights.

5.2.1 Estimation Results of the Destination Choice Model

The estimation results of destination choice model for each generation are shown in Table 6.6, with the results of the 2nd generation highlighted. With a large Rho-square, each model appears to provide a good fit. All of the explanatory variables included within each model are statistically significant and have the appropriate sign. Our discussion in this section mainly focuses on the 2nd generation.

The estimated coefficients of the labor market variables are, to a large extent, consistent with what one would expect from human capital investment theory. First, the 2nd generation migrants with a Bachelor's degree or higher were strongly attracted by high income of a potential destination. It suggests that better educated migrants were more effective in using inter-CMA migration to improve their income. Second, at the CMA level, unemployment rate had a negative coefficient associated with t-ratio of large magnitude (-16.1).²⁰ Third, employment growth rate displayed a positive effect on the destination choice decision of migrants. Lastly, the positive

²⁰ This strong effect of unemployment rate may indirectly support the idea that CMA is a good proxy of local labor market. As mentioned earlier in the chapter, CMA might be a better geographic unit (than province) for studying the impact of the changing labor market conditions on migration behavior.

estimated coefficient of employment size (0.94) with a t-ratio of very large magnitude (51.4) implies that the migrants were very strongly subject to the pulling effect of a large labor market.

The estimation results are also consistent with the ethnic enclave theory in the sense that all ethnic groups were subject to the pulling effect of ethnic communities. It is particularly interesting that not only the 2nd generation but also the 3rd+ generation were attracted by the relative size of co-ethnic population. Among the seven ethnic groups of the 2nd generation, the attraction by co-ethnics was the strongest for Chinese and British, very strong for German, moderately strong for Ukrainian and Indian, and relatively weak for Filipino²¹ and Italian²². We speculate that many Italians have already been able to fit in an occupational niche (e.g. construction occupations) in local labor market (Waldinger, 1996) and are thus less responsive to job openings provided by ethnic communities in a different CMA.

As expected, the conventional distance factor and the coldness factor had negative effects on the destination choice decision of the 2nd generation. For the 1st generation, the effect of coldness was stronger on the 40-44 age group than the younger age groups.

With respect to the effect of French language ability, 1st and 1.5 generation individuals who could speak French were more likely to choose a CMA in Quebec

²¹ Quite different from the 2nd generation, Filipinos of other generations were very strongly attracted by ethnic communities.

²² For 1st generation Italian immigrants, only the less educated (high school graduation or lower) were subject to the attraction effect of ethnic enclaves, and the effect was quite strong.

while French speaking 2nd and 3rd+ generation were particularly attracted into Montreal and Ottawa.

The interaction terms between the CMA-specific dummy variables showed the strong ties between certain CMAs. For example, a migrant from a smaller CMA in Quebec had a strong tendency to choose Montreal. Interestingly, secondary CMAs Hamilton and Oshawa had a particularly strong pull effect on those moving away from Toronto, and vice versa. Similarly, a migrant from Vancouver was strongly attracted by the nearby CMA Abbotsford, and vice versa. In addition, strong connection was shown between Calgary and Edmonton. As suggested earlier, these strong connections may largely result from the expansion and penetration of service industry from the largest CMA to the nearby secondary CMAs. Finally, there were close ties between Halifax on the Atlantic coast and Victoria on the Pacific coast, but the strong bonds existed only for the 2nd and 3rd + generation. This special tie has been noted by Liaw, et al. (1986) in their study on the metropolitan outmigration patterns of Canadian labour force entrants in 1971-1976. A possible reason might be naval personnel transfers between Halifax and Victoria, the two largest naval bases in Canada.²³

In general, the different generations were subject to the effects of the same explanatory factors. For each generation, the destination choices of the inter-CMA migration are consistent with the human capital investment theory: they were highly

²³ Canadian Forces Maritime Command (MARCOM) has the Atlantic headquarters based in Halifax and the Pacific headquarters based in Esquimalt, a municipality within the CMA of Victoria.

responsive to income and employment incentives. The estimated results are also supportive of the ethnic enclave theory. Even the 3rd+ generation were subject to the pulling effect of ethnic communities.

5.2.2 Estimation Results of the Departure Model

The best specification of the departure model for each generation is reported in Table 6.7. The estimation results for the 2nd generation are highlighted and summarized as follows.

Personal factors. First, the propensity of departure differed significantly among the three educational groups: highest for the best educated (above Bachelor's degree), very high for those with Bachelor's degree, moderately high for those with college degree, and low for the less educated. Second, age selectivity is also clearly shown: with an increase in age, the departure probability declined monotonically. Third, Italians were less migratory than other ethnic groups. Note the dummy variable Italian had a negative coefficient (-2.4), associated with a t-ratio of large magnitude (-19.2).

Labor market factors. The coefficient of employment growth rate was negative and statistically significant, implying the 2nd generation had low propensity to leave CMAs with relatively high employment growth. The retaining effects of both income and employment size were only limited to those with Bachelor's degree or higher. Furthermore, unemployment rate turned out to be statistically insignificant.

This suggests that even at the CMA level, the explanatory power of unemployment rate is still quite limited (Liaw, 1990).

Ethnic similarity factor played an important role in retaining immigrants. The interaction terms between ethnic similarity and the dummy variables representing each ethnicity had statistically significant negative coefficients. It is interesting to note that although Italians were weakly subject to the pull effect of ethnic enclaves (Table 6), they were least likely to depart from a CMA with many Italians (Table 7). The insights gained from both destination choice and departure models show a more complete picture about Italians: first, they were likely to stick to where they lived and very immobile; second, we speculate that many of them fitted in some specific occupational niches (e.g. construction occupations) in the local labor market (Waldinger, 1996); and third, when they decide to depart, they would choose a place that offers good economic opportunities, and only the less educated 1st generation immigrants were very strongly attracted to ethnic communities.

As expected, *coldness* at origin had a pushing effect, but this effect was limited to the 2nd and 1st generation only. Moreover, the *attractiveness of the rest of the CMA system*, represented by the inclusive variable, positively affected the propensity to relocate. Finally, we have found clear evidence that *French language ability* strongly enhance the retention power of Montreal: immigrants who can speak French were less likely to depart from Montreal. This is consistent with findings from earlier research on migration and language (Kaplan, 1995).

6. Conclusion

In this chapter, we have characterized and explained the 1996-2001 internal migration of the 2nd generation, with a particular focus on the comparison of migration patterns among the 1st, 1.5, 2nd and 3rd+ generations.

In our descriptive analysis, we found that the overall out-migration rate increased monotonically with an increase in generation status. However, with the exception of Toronto, Vancouver and Calgary, the CMA specific out-migration generally decreased with an increase in generation status. The variation in retention power among CMAs generally decreased with an increase in generation status. In terms of in-migration, Toronto, Vancouver, and Calgary were the predominant CMAs of destination for all generations. The difference in in-migration rates among generations was generally not large and somewhat irregular. Of particular interest is the strong attractiveness of Calgary for the 2nd and especially 3rd+ generation. With respect to net migration, the relative importance of the secondary CMAs stood out. The cases of Vancouver and Calgary suggest that the 2nd generation resembled the 3rd+ generation to a large extent in terms of the sensitivity to short-term changes in spatial economic opportunities.²⁴

²⁴ Previous studies have shown that compared with immigrants, the native-born are more responsive to short-term economic opportunities with respect to internal migration (Liaw and Frey, 1998).

In the multivariate analysis, we found that the different generations were subject to the effects of the same explanatory factors in general²⁵. Labor market factors, ethnic similarity factor, and personal factors have similar effects on the migration behavior of different generations in both destination choice process and departure process. With respect to theoretical relevance, our findings are generally consistent with the human capital investment theory in that migrants were responsive to income and employment incentives. Our estimated results also support the ethnic enclave theory in that each of the seven ethnicities was subject to the attracting and retaining effect of ethnic communities. Special attention was paid to the Italians who were least attracted but most retained by a CMA with large co-ethnic networks.

As Canada continues to receive large inflows of immigrants, research on the second generation becomes increasingly important to better understand the long-term effects of contemporary immigration. From the perspective of inter-CMA migration, the process of second generation settlement showed a promising sign in our descriptive analysis. Compared with the first generation immigrants, the second generation was less dependent on ethnic communities and more sensitive to the short-term changes in the spatial economy of Canada. This sensitivity is beneficial, because migrations in response to labor market changes can contribute to the vitality, productivity and efficiency of the economy system as well as facilitate the economic integration of the second generation into the mainstream of the society.

²⁵ While determinants of the 1996-2001 inter-CMA migration among different generations are similar, the relative importance of the explanatory factors may vary among generations. Further study is needed in regard to this aspect.

To supplement existing research on the assimilation of adult second generation in the literature (Boyd, 2002; Portes, et al., 2005; Zhou and Xiong, 2005), future studies can focus on the interplay of their migratory behaviors and the economic outcome²⁶. However, investigation in line with this idea is hampered by a lack of appropriate longitudinal data on the second generation. The Survey of Labour and Income Dynamics (SLID) by Statistics Canada provides a potentially good longitudinal data source. However, the sample size for the second generation might be small, especially when some specific ethnic groups are selected.

²⁶ Specifically, one can compare the economic status (e.g. welfare dependency, income gain or loss, employment status, and dependency on employment benefit) of the 2nd generation migrants before and after the migration, and therefore achieve additional insights into the short-term and long-term economic impacts of the migration.

References

- Borjas, G.J. 2001. *Heaven's Door – Immigration Policy and the American Economy*.
Princeton: Princeton University Press.
- Boyd, M. 2002. "Educational Attainments of Immigrant Offspring: Success or Segmented Assimilation?" *International Migration Review*, 36: 1037-1060.
- Djajic, S. 2003. "Assimilation of Immigrants: Implications for Human Capital Accumulation of the Second Generation". *Journal of Population Economics*, 16 (4): 831-845.
- Edmonston, B. 2002, "Interprovincial Migration of Canadian Immigrants",
Vancouver Centre of Excellence – Research on Immigration and Integration in the Metropolis. Working Paper Series No. 02-10.
- Frey, W. H., Liaw, K. L., Xie, Y., and Carlson, M. 1996. "Interstate Migration by the US Poverty Population: Immigration 'Pushes' and Welfare Magnet 'Pull'". *Population and Environment*, 17 (6): 491-536.
- Kanaroglou, P., Liaw, K.L. and Papageorgiou, Y.Y. 1986. "An Analysis of Migratory Systems: II. Operational Framework". *Environment and Planning A*, 18: 1039-1060.
- Kaplan, D. 1995. "Differences in Migration Determinants for Linguistic Groups in Canada". *The Professional Geographer*, 47: 115-125.
- Li, P.S. 1992. "Ethnic Enterprise in Transition: Chinese Business in Richmond, B.C., 1980-1990". *Canadian Ethnic Studies* 24: 120-138.

- Liaw, K. L. and L. Xu. 2005. "Problematic Post-Landing Interprovincial Migration of the Immigrants in Canada: From 1980-1983 through 1992-1995". *Journal of Population Studies* (Taiwan), 31:105-152.
- Liaw, K.L., Xu, Lei, and Qi, M.Z. 2002. "Quebec's Lackluster Performance in Interprovincial Migration and Immigration: How, Why, and What Can Be Done?" *SEDAP (Social and Economic Dimensions of an Aging Population) Research Paper Series No. 87; QSEP (Research Institute for Quantitative Studies in Economics and Population) Report Series No. 378*, McMaster University.
- Liaw, K.L. Lin, J.P. and Frey, W.H. 1998. "Impacts of Low-skilled Immigration on the Internal Migration of the US-born Low-skilled Persons in the United States: An Assessment in A Multivariate Context", *Journal of Population Studies* (the journal of Japanese Population Association), 23: 5-24.
- Liaw, K.L. and Frey, W.H. 1996. "Interstate Migration of American Young Adults in 1985-90: An Explanation Using Nested Logit Model". *Geographical systems*, 3: 301-334.
- Liaw, K.L. 1990. "Joint Effects of Personal Factors and Ecological Variables on the Interprovincial Migration Pattern of Young Adults in Canada: A Nested Logit Analysis". *Geographical Analysis*, 22: 189-208.
- Liaw, K.L. and J. Ledent. 1987. "Nested Logit Model and Maximum Quasi-Likelihood Method: A Flexible Methodology for Analyzing

- Interregional Migration Patterns". *Regional Science and Urban Economics*, 17: 67-88.
- Liaw, K.L., P. Kanaroglou and P. Moffett. 1986. "Metropolitan Outmigration Pattern of Canadian Labour Force Entrants, 1971-76." *The Canadian Geographer*, 30 (3): 229 - 242.
- Lin, Z. 1998. "Foreign-born Vs Native-born Canadians: A Comparison of Their Inter-Provincial Labour Mobility". *Business and Labour Market Analysis*, No. 114, Statistics Canada.
- McCullagh, P. 1983. "Quasi-likelihood Functions," *The Annals of Statistics*, 11: 59-67.
- McFadden, 1974. "Conditional Logit Analysis of Qualitative Choice Behavior" Pp. 105-142 in P. Zarembka (ed.) *Frontiers in Economics*. New York: Academic Press.
- Newbold, K.B. 1999. "Spatial distribution and redistribution of the foreign-born in the US: 1980 and 1990". *Economic Geography*, 75(3): 254-271.
- Newbold, K.B. 1996. "Internal Migration of the Foreign-born in Canada." *International Migration Review* 30: 728-747.
- Newbold, K.B and Liaw, K.L. 1994. "Return and onward interprovincial migration through economic boom and bust in Canada: From 1976-81 to 1981-86". *Geographical Analysis*, 26(3): 228-245.

- Portes, A., Fernandez-Kelly, P., and Haller, W.J. 2005. "Segmented Assimilation on the Ground: the New Second Generation in Early Adulthood." *Ethnic and Racial Studies* 28 (6): 1000-1040.
- Portes, A. and Zhou, M. 1993. "The New Second Generation: Segmented Assimilation and its Variants". *Annals of the Academy of Political and Social Science*, 530: 74-96.
- Perlmann, J. and Waldinger, R. 1997. "Second Generation Decline? Children of Immigrants, Past and Present – A Reconsideration". *International Migration Review*, 31 (4): 893-922.
- Ram, B. and Shin, Y. E. 1999. "Internal Migration of Immigrants". In *Immigrant Canada: Demographic, Economic, and social Changes*, S.S. Halli and L. Driedger, eds. Toronto, University of Toronto Press, 148-162.
- Rogers, A. and Henning, S. 1999. "The Internal Migration Patterns of the Foreign-born and Native-born populations in the United States: 1975-80 and 1985-90." *International Migration Review*, 33: 403-429.
- Schellenberg, G. 2004. "Immigrants in Canada's Census Metropolitan Areas". Catalogue No. 89-613-MIE, No. 003. Ottawa: Statistics Canada.
- Sjaastad, L.A. 1962. "The Costs and Returns of Human Migration." *Journal of Political Economy* 70S: 80-93.
- Trovato, Frank. 1988. "The Interurban Mobility of the Foreign Born in Canada, 1976-1981". *International Migration Review*, 22: 59-86.

- Waldinger, R. 1996. *Still the Promised City?* Cambridge, Massachusetts: Harvard University Press.
- Wang, S. 1999. "Chinese Commercial Activity in Toronto CMA: New Development Patterns and Impacts". *Asian Migration: Pacific Rim dynamics*, 167-198. Interdisciplinary Group for Australian Studies (IGAS), National Taiwan University, Taipei, Taiwan.
- Xu, L. and K. L. Liaw. 2003. "Explanation of Initial Destination Choices of Skilled Immigrants from Hong Kong, China and Taiwan to Canada: 1983 – 1999". *Journal of Population Studies* (Taiwan), 26: 26-70.
- Zhou, M. and Y.S. Xiong. 2005. "The multifaceted American experiences of the children of Asian immigrants: Lessons for segmented assimilation". *Ethnic and Racial Studies* 28 (6): 1119-1152.

Table 1. The 1996-2001 Inter-CMA Migration of the Second Generation Aged 25-44.

CMA	Population Size		In-Migration		Out-Migration		Net Migration		In-migration	
	1996 (Persons)	2001 (Persons)	Volume (Persons)	Ratio (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)
St. John's	1130	955	100	8.8	275	24.3	-175	-15.5	0.02	
Halifax	4760	4675	790	16.6	875	18.4	-85	-1.8	0.14	
Saint John	1060	1045	135	12.7	150	14.2	-15	-1.4	0.02	
Chicoutimi - Jonquière	45	55	15	33.3	5	11.1	10	22.2	0.00	
Québec	650	495	110	16.9	265	40.8	-155	-23.8	0.02	
Sherbrooke	230	145	20	8.7	105	45.7	-85	-37.0	0.00	
Trois-Rivières	60	55	10	16.7	15	25.0	-5	-8.3	0.00	
Montréal	57185	54935	1,180	2.1	3,430	6.0	-2,250	-3.9	0.24	
Ottawa - Hull	20800	21195	2,890	13.9	2,495	12.0	395	1.9	0.54	
Kingston	3965	3470	700	17.7	1,195	30.1	-495	-12.5	0.13	
Oshawa	9655	11150	2,485	25.7	990	10.3	1,495	15.5	0.46	
Toronto	195420	197400	11,200	5.7	9,220	4.7	1,980	1.0	3.12	
Hamilton	28940	29360	3195	11.0	2,775	9.6	420	1.5	0.61	
St. Catharines - Niagara	15740	15415	1085	6.9	1,410	9.0	-325	-2.1	0.20	
Kitchener	12250	12210	1505	12.3	1,545	12.6	-40	-0.3	0.28	
London	13115	12065	1065	8.1	2,115	16.1	-1,050	-8.0	0.20	
Windsor	10325	10240	580	5.6	665	6.4	-85	-0.8	0.11	
Greater Sudbury	3140	2800	175	5.6	515	16.4	-340	-10.8	0.03	
Thunder Bay	4225	3920	155	3.7	460	10.9	-305	-7.2	0.03	
Winnipeg	18820	18220	900	4.8	1,500	8.0	-600	-3.2	0.17	
Regina	3350	3110	205	6.1	445	13.3	-240	-7.2	0.04	
Saskatoon	3770	3365	255	6.8	660	17.5	-405	-10.7	0.05	
Calgary	26840	29445	4435	16.5	1,830	6.8	2,605	9.7	0.84	
Edmonton	25935	26055	2170	8.4	2,050	7.9	120	0.5	0.41	
Abbotsford	4260	4290	730	17.1	700	16.4	30	0.7	0.13	
Vancouver	76755	76805	4675	6.1	4,625	6.0	50	0.1	0.98	
Victoria	11725	11295	1350	11.5	1,780	15.2	-430	-3.7	0.25	
Total	554,150	554,170	42,115	7.6	42,095	7.6	20	0.0		

Table 2. The 1996-2001 Inter-CMA Migration of the First Generation Immigrants aged 25-44.

CMA	Population Size		In-Migration		Out-Migration		Net Migration		In-migration	
	1996 (Persons)	2001 (Persons)	Volume (Persons)	Ratio (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)
St. John's	405	245	35	8.6	195	48.1	-160	-39.5	0.01	0.01
Halifax	1200	975	130	10.8	355	29.6	-225	-18.8	0.04	0.04
Saint John	180	145	10	5.6	45	25.0	-35	-19.4	0.00	0.00
Chicoutimi - Jonquière	60	45	0	0.0	15	25.0	-15	-25.0	0.00	0.00
Québec	590	355	20	3.4	255	43.2	-235	-39.8	0.01	0.01
Sherbrooke	90	70	0	0.0	20	22.2	-20	-22.2	0.00	0.00
Trois-Rivières	25	10	10	40.0	25	100.0	-15	-60.0	0.00	0.00
Montréal	21880	20075	755	3.5	2,560	11.7	-1,805	-8.2	0.24	0.24
Ottawa - Hull	8250	9070	1,635	19.8	815	9.9	820	9.9	0.50	0.50
Kingston	795	655	170	21.4	310	39.0	-140	-17.6	0.05	0.05
Oshawa	1690	2115	605	35.8	180	10.7	425	25.1	0.18	0.18
Toronto	157400	159005	5,435	3.5	3,830	2.4	1,605	1.0	3.07	3.07
Hamilton	5245	5280	710	13.5	675	12.9	35	0.7	0.22	0.22
St. Catharines - Niagara	1780	1865	280	15.7	195	11.0	85	4.8	0.08	0.08
Kitchener	3520	3510	405	11.5	415	11.8	-10	-0.3	0.12	0.12
London	2210	2060	335	15.2	485	21.9	-150	-6.8	0.10	0.10
Windsor	2265	2485	480	21.2	260	11.5	220	9.7	0.14	0.14
Greater Sudbury	290	255	10	3.4	45	15.5	-35	-12.1	0.00	0.00
Thunder Bay	405	380	30	7.4	55	13.6	-25	-6.2	0.01	0.01
Winnipeg	8430	7880	215	2.6	765	9.1	-550	-6.5	0.07	0.07
Regina	865	665	50	5.8	250	28.9	-200	-23.1	0.02	0.02
Saskatoon	1235	1100	190	15.4	325	26.3	-135	-10.9	0.06	0.06
Calgary	16565	17330	1520	9.2	755	4.6	765	4.6	0.48	0.48
Edmonton	14055	13560	655	4.7	1,150	8.2	-495	-3.5	0.20	0.20
Abbotsford	3600	3530	270	7.5	340	9.4	-70	-1.9	0.08	0.08
Vancouver	78070	78495	2940	3.8	2,515	3.2	425	0.5	1.15	1.15
Victoria	3080	3020	335	10.9	395	12.8	-60	-1.9	0.10	0.10
Total	334,180	334,180	17,230	5.2	17,230	5.2	0	0.0		

Table 3. The 1996-2001 Inter-CMA Migration of the 1.5 Generation Immigrants aged 25-44.

CMA	Population Size		In-Migration		Out-Migration		Net Migration		In-migration	
	1996 (Persons)	2001 (Persons)	Volume (Persons)	Ratio (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)
St. John's	490	370	30	6.1	150	30.6	-120	-24.5	0.01	0.01
Halifax	1915	1820	310	16.2	405	21.1	-95	-5.0	0.11	0.11
Saint John	410	400	45	11.0	55	13.4	-10	-2.4	0.02	0.02
Chicoutimi - Jonquière	15	15	0	0.0	0	0.0	0	0.0	0.00	0.00
Québec	395	275	30	7.6	150	38.0	-120	-30.4	0.01	0.01
Sherbrooke	105	80	0	0.0	25	23.8	-25	-23.8	0.00	0.00
Trois-Rivières	25	15	10	40.0	20	80.0	-10	-40.0	0.00	0.00
Montréal	19150	18155	630	3.3	1,625	8.5	-995	-5.2	0.23	0.23
Ottawa - Hull	9705	10025	1,500	15.5	1,180	12.2	320	3.3	0.53	0.53
Kingston	1230	875	160	13.0	515	41.9	-355	-28.9	0.05	0.05
Oshawa	3795	4225	870	22.9	440	11.6	430	11.3	0.30	0.30
Toronto	120395	121355	5,455	4.5	4,495	3.7	960	0.8	3.13	3.13
Hamilton	9345	9670	1305	14.0	980	10.5	325	3.5	0.46	0.46
St. Catharines - Niagara	4225	4250	300	7.1	275	6.5	25	0.6	0.10	0.10
Kitchener	5370	5360	705	13.1	715	13.3	-10	-0.2	0.24	0.24
London	5005	4615	470	9.4	860	17.2	-390	-7.8	0.16	0.16
Windsor	2965	2955	200	6.7	210	7.1	-10	-0.3	0.07	0.07
Greater Sudbury	555	520	55	9.9	90	16.2	-35	-6.3	0.02	0.02
Thunder Bay	720	635	40	5.6	125	17.4	-85	-11.8	0.01	0.01
Winnipeg	8670	8360	380	4.4	690	8.0	-310	-3.6	0.13	0.13
Regina	1095	920	40	3.7	215	19.6	-175	-16.0	0.01	0.01
Saskatoon	1245	1095	100	8.0	250	20.1	-150	-12.0	0.03	0.03
Calgary	16575	17390	1765	10.6	950	5.7	815	4.9	0.64	0.64
Edmonton	13470	13305	1020	7.6	1,185	8.8	-165	-1.2	0.36	0.36
Abbotsford	2990	2995	415	13.9	410	13.7	5	0.2	0.14	0.14
Vancouver	60070	60410	2915	4.9	2,575	4.3	340	0.6	1.24	1.24
Victoria	4545	4390	495	10.9	650	14.3	-155	-3.4	0.17	0.17
Total	294,475	294,480	19,245	6.5	19,240	6.5	5	0.0	0.0	0.0

Table 4. The 1996-2001 Inter-CMA Migration of the Third+ Generation aged 25-44.

CMA	Population Size		In-Migration		Out-Migration		Net Migration		In-migration	
	1996 (Persons)	2001 (Persons)	Volume (Persons)	Ratio (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)
St. John's	24035	21845	850	3.5	3,040	12.6	-2,190	-9.1	0.09	0.09
Halifax	36335	35685	3,150	8.7	3,800	10.5	-650	-1.8	0.34	0.34
Saint John	11480	11105	500	4.4	875	7.6	-375	-3.3	0.05	0.05
Chicoutimi - Jonquière	750	670	45	6.0	125	16.7	-80	-10.7	0.00	0.00
Québec	5065	4465	365	7.2	965	19.1	-600	-11.8	0.04	0.04
Sherbrooke	1575	1285	140	8.9	430	27.3	-290	-18.4	0.01	0.01
Trois-Rivières	715	665	85	11.9	135	18.9	-50	-7.0	0.01	0.01
Montréal	44435	42925	2,570	5.8	4,080	9.2	-1,510	-3.4	0.28	0.28
Ortawa - Hull	52130	53565	6,305	12.1	4,870	9.3	1,435	2.8	0.69	0.69
Kingston	12235	11340	1,545	12.6	2,440	19.9	-895	-7.3	0.16	0.16
Oshawa	20410	22875	4,300	21.1	1,835	9.0	2,465	12.1	0.46	0.46
Toronto	169900	171275	16,865	9.9	15,490	9.1	1,375	0.8	2.13	2.13
Hamilton	40835	42660	5685	13.9	3,860	9.5	1,825	4.5	0.62	0.62
St. Catharines - Niagara	24510	24700	1820	7.4	1,630	6.7	190	0.8	0.19	0.19
Kitchener	31745	32060	3265	10.3	2,950	9.3	315	1.0	0.35	0.35
London	33870	32485	2400	7.1	3,785	11.2	-1,385	-4.1	0.26	0.26
Windsor	15615	15620	1160	7.4	1,155	7.4	5	0.0	0.12	0.12
Greater Sudbury	8925	8220	430	4.8	1,135	12.7	-705	-7.9	0.05	0.05
Thunder Bay	10565	9720	435	4.1	1,280	12.1	-845	-8.0	0.05	0.05
Winnipeg	60980	59375	2765	4.5	4,370	7.2	-1,605	-2.6	0.31	0.31
Regina	24255	23225	1520	6.3	2,550	10.5	-1,030	-4.2	0.16	0.16
Saskatoon	28740	27040	1500	5.2	3,200	11.1	-1,700	-5.9	0.16	0.16
Calgary	79580	85945	12920	16.2	6,555	8.2	6,365	8.0	1.46	1.46
Edmonton	81145	82945	7575	9.3	5,775	7.1	1,800	2.2	0.86	0.86
Abbotsford	9385	9860	1860	19.8	1,385	14.8	475	5.1	0.19	0.19
Vancouver	110690	109310	8795	7.9	10,175	9.2	-1,380	-1.2	1.03	1.03
Victoria	23555	22580	2555	10.8	3,530	15.0	-975	-4.1	0.27	0.27
Total	963,460	963,445	91,405	9.5	91,420	9.5	-15	0.0		

Table 5. The 1996-2001 Inter-CMA Migration of the Individuals aged 25-44: All Generations.

CMA	Population Size		In-Migration		Out-Migration		Net Migration		In-migration	
	1996 (Persons)	2001 (Persons)	Volume (Persons)	Ratio (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)	Volume (Persons)	Rate (%)
St. John's	26060	23420	970	3.7	3,610	13.9	-2,640	-10.1	0.05	0.05
Halifax	44205	43145	4,410	10.0	5,470	12.4	-1,060	-2.4	0.21	0.21
Saint John	13135	12700	655	5.0	1,090	8.3	-435	-3.3	0.03	0.03
Chicoutimi - Jonquière	875	790	65	7.4	150	17.1	-85	-9.7	0.00	0.00
Québec	6705	5600	480	7.2	1,585	23.6	-1,105	-16.5	0.02	0.02
Sherbrooke	2000	1590	195	9.8	605	30.3	-410	-20.5	0.01	0.01
Trois-Rivières	825	740	105	12.7	190	23.0	-85	-10.3	0.00	0.00
Montréal	142660	136095	5,120	3.6	11,685	8.2	-6,565	-4.6	0.26	0.26
Ottawa - Hull	90880	93855	12,340	13.6	9,365	10.3	2,975	3.3	0.60	0.60
Kingston	18230	16340	2,555	14.0	4,445	24.4	-1,890	-10.4	0.12	0.12
Oshawa	35550	40370	8,270	23.3	3,450	9.7	4,820	13.6	0.39	0.39
Toronto	643115	649030	38,955	6.1	33,040	5.1	5,915	0.9	2.59	2.59
Hamilton	84365	86965	10875	12.9	8,275	9.8	2,600	3.1	0.53	0.53
St. Catharines - Niagara	46260	46235	3545	7.7	3,570	7.7	-25	-0.1	0.17	0.17
Kitchener	52880	53135	5885	11.1	5,630	10.6	255	0.5	0.28	0.28
London	54195	51225	4245	7.8	7,215	13.3	-2,970	-5.5	0.20	0.20
Windsor	31170	31300	2430	7.8	2,300	7.4	130	0.4	0.11	0.11
Greater Sudbury	12910	11800	680	5.3	1,790	13.9	-1,110	-8.6	0.03	0.03
Thunder Bay	15925	14665	635	4.0	1,895	11.9	-1,260	-7.9	0.03	0.03
Winnipeg	96900	93835	4315	4.5	7,380	7.6	-3,065	-3.2	0.21	0.21
Regina	29560	27920	1875	6.3	3,515	11.9	-1,640	-5.5	0.09	0.09
Saskatoon	34990	32595	2050	5.9	4,445	12.7	-2,395	-6.8	0.10	0.10
Calgary	139570	150110	20670	14.8	10,130	7.3	10,540	7.6	1.03	1.03
Edmonton	134605	135865	11395	8.5	10,135	7.5	1,260	0.9	0.57	0.57
Abbotsford	20235	20680	3255	16.1	2,810	13.9	445	2.2	0.15	0.15
Vancouver	325590	325020	19310	5.9	19,880	6.1	-570	-0.2	1.06	1.06
Victoria	42905	41280	4780	11.1	6,405	14.9	-1,625	-3.8	0.23	0.23
Total	2,146,300	2,146,305	170,065	7.9	170,060	7.9	5	0.0		

Table 6. Estimation Results of Destination Choice Model for 1996-2001 Inter-CMA Migrants aged 25-44: the 1st, 1.5, 2nd and 3rd+ generations.

Explanatory Variables	1st Generation			1.5 Generation			2nd Generation			3rd+ Generation		
	Coefficient	t-ratio	t-ratio	Coefficient	t-ratio	t-ratio	Coefficient	t-ratio	t-ratio	Coefficient	t-ratio	t-ratio
Rho-Square	0.38516			0.3228009			0.338801			0.2770966		
Labor Market Factors												
Income	0.103	9.7	19.8	0.180	19.8	19.8	0.068	8.1	8.1	0.060	11.0	11.0
Income * Bachelor's Degree or Above	---	---	---	---	---	---	-0.246	-16.1	-16.1	-0.161	-17.2	-17.2
Unemployment Rate	-0.220	-9.3	-8.3	-0.158	-8.3	-8.3	0.031	9.4	9.4	0.037	19.3	19.3
Employment Growth Rate	0.012	2.2	13.5	0.060	13.5	13.5	0.939	51.4	51.4	0.873	75.9	75.9
Employment Size	0.856	27.6	---	---	---	---	---	---	---	---	---	---
Ethnic Similarity												
Ethnic Similarity * Chinese	0.525	13.1	27.8	1.233	27.8	27.8	0.593	10.9	10.9	0.956	6.3	6.3
Ethnic Similarity * Chinese * High School or Lower	0.337	4.4	---	---	---	---	---	---	---	---	---	---
Ethnic Similarity * Indian	0.386	7.6	19.5	0.991	19.5	19.5	0.431	6.4	6.4	0.656	2.8	2.8
Ethnic Similarity * Indian * High School or Lower	0.465	5.7	---	---	---	---	---	---	---	---	---	---
Ethnic Similarity * Filipino	0.630	8.7	12.2	1.432	12.2	12.2	0.247	2.2	2.2	1.041	2.7	2.7
Ethnic Similarity * British	0.629	8.6	---	---	---	---	0.595	18.2	18.2	0.639	33.2	33.2
Ethnic Similarity * Italian	---	---	4.3	0.504	4.3	4.3	0.229	5.1	5.1	0.215	3.3	3.3
Ethnic Similarity * Italian * High School or Lower	1.502	2.3	---	---	---	---	---	---	---	---	---	---
Ethnic Similarity * German	0.440	3.8	2.5	0.291	2.5	2.5	0.502	11.5	11.5	0.871	24.7	24.7
Ethnic Similarity * Ukrainian	0.470	3.1	---	---	---	---	0.445	6.0	6.0	0.644	20.0	20.0
Distance												
Ln(Distance)	-0.471	-32.9	-34.4	-0.490	-34.4	-34.4	-0.522	-46.2	-46.2	-0.529	-68.1	-68.1
Coldness												
Coldness	-0.073	-2.0	-8.1	-0.243	-8.1	-8.1	-0.148	-7.0	-7.0	---	---	---
Coldness * Aged 40 or over	-0.118	-2.4	---	---	---	---	---	---	---	---	---	---
French Language Ability												
Quebec * French Language Ability	1.053	8.2	11.3	1.169	11.3	11.3	---	---	---	---	---	---
Montreal * French Language Ability	---	---	---	---	---	---	0.856	8.0	8.0	1.088	13.2	13.2
Ottawa * French Language Ability	---	---	---	---	---	---	0.713	9.5	9.5	0.795	14.2	14.2
Other Factors												
Rest of Quebec to Montreal	1.847	6.9	8.5	3.469	8.5	8.5	1.764	6.4	6.4	1.745	12.8	12.8
Toronto to Oshawa/Hamilton	---	---	---	---	---	---	0.455	8.2	8.2	0.386	9.2	9.2
Oshawa/Hamilton to Toronto	1.591	2.9	6.3	1.816	6.3	6.3	0.845	4.9	4.9	0.702	6.0	6.0
Vancouver to Abbotsford	0.682	3.4	---	---	---	---	1.077	9.3	9.3	0.954	12.9	12.9
Abbotsford to Vancouver	---	---	---	---	---	---	0.872	4.5	4.5	0.657	5.2	5.2
Calgary * Edmonton	---	---	---	---	---	---	0.719	8.4	8.4	0.469	9.7	9.7
Halifax * Victoria	---	---	---	---	---	---	1.248	5.9	5.9	1.044	8.8	8.8

Table 7. Estimation Results of the Departure Model for 1996-2001 Inter-CMA Migrants aged 25-44: the 1st, 1.5, 2nd and 3rd+ generations.

Explanatory Variables	1st Generation		1.5 Generation		2nd Generation		3rd Generation	
	Coefficient	t-ratio	Coefficient	t-ratio	Coefficient	t-ratio	Coefficient	t-ratio
Rho-Square	0.126048		0.121464		0.1089802		0.066771	
Constant	-3.551	-29.3	-1.030	-8.3	-0.585	-6.6	-1.257	-25.7
Personal Factors								
Above Bachelor's Degree	2.952	16.9	1.716	20.4	1.536	14.3	1.169	15.4
Bachelor's Degree	2.439	14.2	1.329	16.9	1.157	11.0	0.833	11.4
College Degree	----	----	0.261	5.3	0.209	6.3	0.234	11.3
Aged 30-34	-0.330	-5.2	-0.283	-6.0	-0.331	-10.8	-0.437	-20.8
Aged 35-39	-0.705	-11.2	-0.724	-14.2	-0.802	-23.7	-0.973	-43.2
Aged 40-44	-0.800	-12.6	-1.013	-17.2	-1.198	-31.4	-1.317	-54.7
Italian	-1.132	-1.7	-1.979	-5.9	-2.433	-19.2	-1.064	-5.8
Labor Market Factors								
Income	----	----	-0.086	-19.2	----	----	----	----
Income * Bachelor's Degree or Above	-0.042	-9.2	----	----	-0.050	-15.8	-0.008	-3.8
Employment Growth Rate	-0.071	-15.4	-0.021	-4.7	-0.045	-15.6	-0.018	-10.4
Employment Size	----	----	-0.068	-2.2	----	----	----	----
Employment Size * Bachelor's Degree or Above	-0.233	-7.2	-0.260	-7.5	-0.270	-13.0	-0.257	-17.8
Ethnic Similarity								
Ethnic Similarity * Chinese	-0.367	-19.5	-0.501	-19.5	-0.362	-17.6	-0.287	-6.7
Ethnic Similarity * Indian	-0.316	-18.3	-0.457	-21.1	-0.253	-13.1	-0.194	-3.8
Ethnic Similarity * Filipino	-0.187	-9.7	-0.587	-17.6	-0.117	-4.7	-0.343	-5.7
Ethnic Similarity * British	-0.297	-4.2	-0.210	-4.2	-0.187	-6.6	-0.139	-9.3
Ethnic Similarity * Italian	-0.388	-1.7	-0.640	-5.6	-0.664	-15.0	-0.332	-5.4
Ethnic Similarity * German	-0.302	-7.2	----	----	-0.309	-16.8	-0.245	-12.5
Ethnic Similarity * Ukrainian	-0.201	-4.9	----	----	-0.279	-12.8	-0.205	-12.8
Coldness								
Coldness	0.218	9.0	----	----	0.058	3.7	----	----
Attractiveness of the rest of the system								
Inclusive Variable	0.428	20.7	0.496	24.4	0.760	27.6	0.292	14.9
French Language Ability								
Montreal * French Language Ability	-0.553	-5.0	-0.653	-6.8	-0.323	-5.9	-0.531	-10.1

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