

Inter-Provincial Migration in Canada: A Longitudinal Analysis of Movers and Stayers and the Associated Income Dynamics*

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Inter-provincial migration is an interesting and important topic for many reasons. First, migration obviously affects the population size, demographic composition, and social and cultural make-up of each province, thus influencing the distribution of the nation's population and some of its basic characteristics. Second, inter-provincial migration is integrally bound up with labour market opportunities and

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economic performance. People tend to move to where jobs are more plentiful and incomes higher, while the associated skill flows affect the productivity and earnings structures in both the province of origin and the destination jurisdiction, as well as the nation as a whole. Third, these movements are directly related to various social policy issues. For example, the social assistance and medicare systems are obliged to ensure the portability of benefits, but also aim to minimise the extent of migration in response to provincial differences in these programs, all in a context where these programs are under provincial control. The federally controlled unemployment insurance system faces comparable issues – needing to meet the particular needs of each province while attempting to minimise inter-provincial movements of an unwanted type (individuals moving to another jurisdiction simply because benefits are better) and encourage those which would be preferred (workers leaving depressed markets to go where their employment opportunities are better). Other programs – large and small, national, provincial and even local – involve similar issues.

Inter-provincial migration is also pertinent to a variety of more specific human resource issues. For example, migration affects the aggregate demand for government-provided/supported labour force training programs (movers might need more or less re-training than non-movers) and the distribution of this demand across jurisdictions, as well as the overall level and distribution of the benefits of these programs, which depend on local employment opportunities and where the individuals to whom these benefits are attached choose to live. Migration affects the costs and benefits of the provincially controlled education systems in similar fashion, with some provinces, for example, having a history of being net “providers” of educated individuals to other jurisdictions.

Migration is also implicated in various regulatory issues, perhaps especially regarding rules and regulations regarding professional certification and licensing, which are sometimes alleged to represent significant barriers to the free flow of citizens to where their employment opportunities are greatest or where they otherwise wish to live.

Finally – and related to all the above – the movement of Canadians across provincial boundaries is of central importance to the country’s very sense of nationhood. Presumably the more that Canadians move from one province to another, the better is national understanding and the greater the stake in keeping the country together or – alternatively – the more critical it would be to preserve the positive elements of these flows in any post-Canada set of political-economic relationships.

Given the importance of the topic, it is not surprising that there is by now a fairly extensive literature on inter-provincial migration (see following section). But despite the considerable value of these contributions, they are all limited by the lack of the sort of up-to-date broad-based longitudinal database which is most suitable for the topic. In short, inter-provincial mobility is a dynamic process, and thus requires similarly dynamic – or longitudinal – data to be fully and properly analysed.

The contribution of this paper is, then, to report the results of an empirical

analysis of inter-provincial migration based on the recently available Longitudinal Administrative Database (LAD), which has been constructed by linking individuals' tax files over time. More specifically, the longitudinal nature of the data is exploited to categorise individuals according to their migration patterns over the 1982 to 1995 period into stayers, one-time movers, returners, and multiple movers and then to address the following questions:

- ▶ What is the extent of these different types of inter-provincial mobility over this extended period of time?
- ▶ How do these dynamics vary by age, sex and province?
- ▶ How do the income profiles of movers and non-movers compare "before" and "after" moving (for those who do) and – *pari passu* – what are the effects of inter-provincial mobility on individuals' incomes? and
- ▶ How do movers compare on these same dimensions to the *incumbents* of the provinces (i.e. those people who were residents of the provinces concerned) to which they move?

In the following section, a summary is provided of the existing literature and the advantages of the LAD database for addressing the topic, thus establishing the context of the work. This is followed by a more technical discussion of the data and the samples used in the analysis. The empirical results are then presented, with the concluding section then summarizing the major findings and their implications.

The Existing Literature and Related Research

As noted above, there is by now a fair accumulation of work on inter-provincial mobility, some of a more descriptive type (i.e., tabular analysis), other more analytic (i.e., econometric). Anderson (1966), Courchene (1974), Grant and Vanderkamp (1976, 1984 and 1986), Hiscott (1987), Hou and Beaujot (1995), Lin (1995), Newbold and Liaw (1990), Osberg et al (1994), Robinson and Tomes (1982), Rosenbaum (1988, 1993), Stone (1969), Vachon and Vaillancourt (1998), Vanderkamp (1972), and Vanderkamp and Grant (1988) collectively measure gross outflows, gross inflows, net flows, and the specific province-to-province patterns of inter-provincial mobility, and analyse the basic characteristics of movers and non-movers and the associated income patterns, while Day and Grafton (1997) and Burbidge and Finnie (1999) focus on the specific case of migration related to attending university.

Econometric models which look at the determinants of inter-provincial mobility more formally, including an important sub-literature centred on the role of fiscal variables, can be found in Courchene (1970), Day (1992), Day and Winer (1994), Dean (1992), Grant and Vanderkamp (1976, 1986), Hou and Beaujot (1995), Lin (1995), Mills et al (1983), Osberg et al (1994), Robinson and Tomes (1982), Rosenbaum (1988, 1993), Shaw (1986), Vachon and Vaillancourt (1998),

and Winer and Gauthier (1982).

Literature with a focus on the effects of inter-provincial mobility on provincial wage structures and related policy issues includes Courchene (1974), Graham (1964), Rosenbluth (1996), Shaw (1986), and Vanderkamp (1988).

Finally, the relationship between migration and individuals' incomes is covered in Courchene (1974), Grant and Vanderkamp (1976, 1980, 1984), and Marr and Millerd (1980), as well as in more of a passing manner in Osberg et al (1994) and Robinson and Tomes (1982).

Virtually all of these studies are based on cross-sectional databases, with the official Population Census being the most commonly used. The clear exceptions are Courchene (1974) and the various publications by Grant and Vanderkamp, which use data of a generally similar type – tax-based longitudinal files – to those used in this study. However, these other studies cover an earlier and much shorter period of time and the underlying files were not developed to the extent that the LAD has been. The present work is, therefore, in the tradition of those earlier efforts, while exploiting the benefits of the much longer, up-to-date, and otherwise improved LAD file.

The various benefits accruing to the LAD's specific longitudinal nature and other characteristics are discussed in greater detail below, but the main advantages stem from the opportunity to follow given individuals on a year-by-year basis over an extended period of time. It is thus possible to observe the extent and direction of inter-provincial mobility from one year to another and over longer periods, to categorise individuals according to their longitudinal mobility profiles, to identify the characteristics of movers and stayers, and to analyse the effects of inter-provincial mobility on individuals' incomes by observing them before and after their moves.

In short, the sort of analysis of inter-provincial mobility presented here generally depends on beginning with a dynamically representative longitudinal database which possesses information regarding individuals' place of residence and other characteristics on a constant current basis so that all moves can be identified and properly analysed. The LAD uniquely meets these requirements for Canada.¹

This paper is one in a series on the subject by the author based on the LAD. It is derived from Finnie (1998a), which is also the source of Finnie (1999), the latter comprising an analysis of the general extent and specific directions of inter-

1. A first-generation Canadian longitudinal database, the Labour Market Activity Survey, was both too small and too short (just two years in length) for most purposes of studying inter-provincial mobility (although Lin [1995] and Osberg et al (1994) push these data to their capacity in this respect). The more recently developed Survey of Labour Income Dynamics ("SLID") currently has just two years of data available and will thus require some waiting before it is suitable for any extended analysis of inter-provincial mobility; it will rotate individuals out of the sample after just 6 years, meaning that longer-term studies will never be possible; and is small in size relative to the LAD data used here and therefore will not support the sort of detailed analysis (broken down by age, sex and province) undertaken here.

provincial migration over shorter and longer periods (without constructing the longitudinal profiles focused on here), as well as rates of out-migration, in-migration, and net migration by province and age-sex group on an annual basis. Finnie (1998b) reports the results of an econometric analysis of the individual characteristics and environmental factors associated with inter-provincial migration from one year to the next, which includes the provincial unemployment rate, whether or not the individual has received social assistance or unemployment insurance or is otherwise seen to be at a low income level, area size of residence, family status (marriage and the presence of children), and a series of year variables to pick up time trends. Finally, Finnie (1998c) exploits the longitudinal nature of the data to estimate fixed effects econometric models of the short-run effects of inter-provincial mobility on individuals' earnings, to compare movers' pre-move earnings patterns to those of individuals who did not leave the province of origin, and to analyse the integration of movers into the labour markets of their new places of residence.

The Data

The Longitudinal Administrative Database (LAD)

The Longitudinal Administrative Database (LAD), which has been constructed by Statistics Canada, is a ten percent representative sample of Canadian tax filers followed as individuals over time and matched into family units on an annual basis, thereby providing individual and family-level information on incomes, taxes, and basic demographic characteristics, including province of residence, in a dynamic framework. The first year of data for the LAD is 1982 and the file ran through 1995 at the time this project was undertaken, thus determining the period covered by the analysis.

Individuals are selected into the LAD from the complete tax filer database held by Revenue Canada by a random number generator based on Social Insurance Numbers, with records linked across years for given individuals by SIN-matching. Individuals drop out of the LAD if they become non-filers, principally because the person has a low income and is, therefore, not required to file and chooses not to do so (see below); is out of the country; or has died. New filers (young people, immigrants, etc.) automatically refresh the database in the general ratio of one-in-ten. (Individuals who change their SIN – which is not uncommon – continue to be tracked across this change.)

The LAD's coverage of the adult population is very good since, unlike some other countries (such as the U.S.) the rate of tax filing is very high: higher income Canadians are required to file, while lower income individuals have incentives to do so in order to recover income tax and other payroll tax deductions made throughout the year and, especially since 1986, to receive various tax credits. The full sets of annual tax files from which the LAD is constructed are estimated to cover from 91 to 95 % of the target adult population (official population

estimates), thus comparing favourably with other survey-based databases, even rivalling the Census of Population in this regard.

Furthermore, given that most individuals file tax forms every year, attrition from the sample is quite low, meaning that the LAD remains quite representative on a longitudinal basis as well as cross-sectionally. This is especially significant in a context where survey databases typically have greater problems locating – or, in the case of longitudinal data, *following* – individuals, especially those who move, potentially resulting in serious sampling bias in the context of any study of inter-provincial mobility.

The Principal Advantages of the Longitudinal Aspect of the LAD

The annual-based longitudinal structure of the LAD allows all inter-provincial moves which occur from one year to another to be identified over the full period spanned by the data. This represents a fundamental advantage over what is possible with cross-sectional databases (including the census), which typically collect information only on the current province of residence and (retrospectively) the one in which the individual lived at a given point in time in the past (e.g., at the previous census). This results in incomplete move profiles; in particular, individuals who move just once are not differentiated from multiple movers, while movements which are followed by a subsequent move back to the home province over the relevant period (e.g., the inter-census interval) are missed entirely.²

Cross-sectional data are, furthermore, inherently limited in the information they provide regarding the “pre-move” situation. Thus, in addition to typically generating incomplete samples/profiles of inter-provincial moves, non-longitudinal databases are severely limited with respect to the analysis which can be undertaken with whatever observations are available. For example, an essential element of this study is to analyse the average pre- versus post-move income levels of movers, which would generally not be possible with non-longitudinal data.

Finally, the large number of observations on the LAD – on the order of two million per year – allows this study of inter-provincial mobility to be conducted at a detailed level. More specifically, longitudinal mobility profiles are studied by age-sex group and province for even the smallest jurisdictions, and all of these breakdowns turn out to be critical to the analysis and interpretation of the findings.

Identifying Inter-Provincial Migration and Constructing Longitudinal Migration Profiles

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2. The LAD does in fact have similar types of problems, but to a much more limited degree. Moves which are followed by a return to the original province within a single calendar year are missed (since individuals are in the same province at both year ends), while multiple moves over the course of a single calendar year which leave the individual in a different province are not differentiated from single movements (for similar reasons).

An individual's province of residence is taken to be that in which taxes were payable – essentially where the individual was residing at year end. This variable is well-suited to the analysis because it is conceptually appropriate; tightly defined (including its residence-at-year-end specificity); and, being a key piece of information for tax purposes, is generally verified by Revenue Canada. An inter-provincial move is identified as a change in the individual's tax province from one year to another. (Vanderkamp and Grant (1988) discuss the various ways of identifying migration using other types of databases and the advantages of tax-based longitudinal data in this regard.)

Individuals were then classified into the following categories according to their longitudinal mobility profiles. "Stayers" made no inter-provincial moves from 1982 to 1995; "single movers" moved to another province and then remained there; "multiple movers" made more than one move and finished the period in a different province from that of the 1982 base year; while "returners" made any series of moves which left the person living in the original province again in 1995.

The Income Variable

The income variable used in this study is market income, thus excluding (most notably) government transfers. More specifically, it includes employment income (wages, salaries, commissions, and other employment income), self-employment income (net business income, net professional income, net commission income, net farming income, net fishing income), pension income, and other private sources of income (dividends, interest, net rental income, alimony/child support, RRSPs, limited partnerships). Capital gains are excluded due to their significant variability from one year to another.

This choice was driven, first, by necessity, as the LAD does not currently possess a consistent measure of social assistance income over the entire 1982 to 1995 period, thus precluding the use of a consistent measure of full income in all years. On the other hand, while the relationships between inter-provincial mobility and government transfers are certainly of interest, these are probably best treated as a separate subject (as planned for future work), leaving the present paper to focus on market income.

Another option would have been to use an even narrower definition of income, such as labour market earnings alone. In fact, part of the analysis was repeated using this measure, and the results were generally similar to those reported below (results available from the author, but see also the cross-tabulations in Finnie (1998c)), meaning that the issue is of no great practical importance.

All income values are expressed in constant 1995 dollars.

The Working Samples

Individuals were included in the working samples in a given year if, first, they were between 20 and 54 years of age (inclusive) in the first year of the sample (1982),

after which the sample was permitted to age. The lower age cut-off was adopted to eliminate the majority of students and other young people still living at home and to generally restrict the analysis to decision making “adults”, arbitrarily defined by the age 20 cut-off. Excluding older individuals reduces sample attrition and those individuals making the transition into retirement, a dynamic which is certainly interesting, but best left to a separate study.

Age related effects are further controlled for by breaking most of the analysis down by four groups for each sex: “Entry” (20-24 inclusive), “Younger” (25-34 inclusive), “Prime-Younger” (35-44), and “Prime-Older” (45-54), thus splitting individuals into various major phases of the life cycle.

Full-time post-secondary students are identified by procedures developed by the author based on the relevant tax deductions. They were excluded from the analysis because their decisions about where to live are generally driven by different factors than those which hold for the rest of the population and would, in any event, be better investigated using alternative data sources (see Burbidge and Finnie (1999) for an analysis of the rates of mobility associated with going to university and the early post-graduation years based on the National Graduates Survey databases.)

Finally, individuals had to be tax-filers in all years from 1982 to 1995. Some of the resulting exclusions – such as individuals who died or (perhaps somewhat more problematic) left the country – require little or no apology. The deletion of more intermittent tax filers is, however, potentially more significant, particularly if tax-filing behaviour is related to migration and the migration-income dynamic. The high rates of coverage and general representativeness of the LAD discussed earlier would, however, point to the dynamic sample exclusions being relatively benign. In any event, there is no way around this problem: if a fully longitudinal analysis is to be carried out, such longitudinal restrictions must necessarily be imposed. Finnie (1998a) includes an analysis of the effects of different sampling regimes which indicates that the qualitative findings reported here are not likely to be seriously affected by such issues.

Limitations of the LAD

Unfortunately, the LAD database lacks certain other variables which might be interesting to include in an analysis of migration, such as the individual’s level of education, occupation, industry of employment, and other characteristics related to the person’s stock of human capital and specific labour market opportunities. The work presented here should, however, stand on its own and should also provide a useful starting point for further investigations in these directions, presumably with other databases.

TABLE 1a Longitudinal Mobility Profiles, All Individuals

Province	No Moves	Single Move	Multiple Move	Move and Return	TOTAL
NF	86.8	6.6	2.4	4.2	100%

NS	88.9	5.5	2.1	3.4	100%
PE	88.5	6.2	2.8	2.8	100%
NB	89.2	5.4	2.1	3.3	100%
PQ	96.7	1.9	0.3	1.1	100%
ON	95.3	2.8	0.5	1.3	100%
MN	85.7	8.8	2.6	2.9	100%
SK	85.1	9.8	2.4	2.8	100%
AB	81.2	12.6	2.6	3.7	100%
BC	91.8	4.3	1.1	2.8	100%
TOTAL	92.6	4.5	1.0	1.9	100%

Longitudinal Migration Profiles

Longitudinal Mobility Profiles for All Individuals Taken Together

Table 1a shows the percentages of stayers and the three types of movers over the 1982 to 1995 period for all individuals taken together by province of origin (i.e., the 1982 province of residence). The vast majority of Canadians remained in their original province for the entire period covered by the data, with a full 92.6 % of all individuals never budging (as defined above) over the following thirteen years. Furthermore, an additional 1.9 % moved but then returned to the 1982 province of origin by 1995, making for a total of 94.5 % who were living in the same province in the last year of the period as in the beginning.

On the other hand, 4.5 % of the individuals represented in these samples changed their province of residence once and then stayed in that new jurisdiction through 1995. Another 1.0 % moved more than once and remained out of the original province. Taking into account the 1.9 % who moved but then returned “home”, the number of individuals who moved – single movers, multiple movers, and returners – totalled 7.4 %.

There are, furthermore, considerable differences in these patterns by province. In general, mobility rates are inversely related to a province’s population size, although Alberta is an outlier in this regard, partly due to the economic downturn which hit that province in the early 1980s. Language also played a secondary role, with Quebec and New Brunswick having lower migration rates than their population sizes alone would predict. Thus, Quebec and Ontario had the lowest percentages of movers of all types, British Columbia the next lowest rates, Alberta had the highest rates of out-migration, and the other provinces are all reasonably aligned (roughly according to population) between these lows and highs.

Thus, almost 20 % of the individuals living in Alberta in 1982 subsequently left the province, the rates for the other prairie and Atlantic provinces were in the 10 to 15 % range, while only the three largest provinces had rates below 10 % – with their population weights driving the overall national rate down to this range

as well.

The rankings of the provinces with respect to the different kinds of movers are, furthermore, broadly consistent – that is, the provinces with greater numbers of one type of mover tended to have more of the other types as well. The precise splits are, however, interesting. In the prairie provinces and Prince Edward Island, the proportion of individuals who left but then eventually returned was relatively low. Conversely, returners made up relatively high proportions of all those who left the other Atlantic provinces, Quebec, and (especially) British Columbia. Ontario was in the middle rank on this count. (A useful measure here is the proportion of returners out of all types of movers: Newfoundland: .32, Nova Scotia: .31; Prince Edward Island: .24; New Brunswick: .31; Quebec: .33; Ontario: .28; Manitoba: .20; Saskatchewan: .19; Alberta: .20; British Columbia: .34; and a national total of .26.)

Thus, when individuals left Prince Edward Island, Manitoba, Saskatchewan, or Alberta, they were more likely to be gone for good than was the case in other provinces. These (longitudinal) patterns would seem to be important to any full understanding of the different types of inter-provincial mobility which occurs; they also have various policy implications. Knowing that out-migration is more likely to result in a permanent resettlement (versus an eventual return) in some provinces than others is, for example, pertinent to various issues regarding the associated labour market dynamics, the portability of social program benefits, and even the “cultural” aspects of mobility (e.g., the effects “new” residents have on the social fabric of the province, the need for individuals to adapt to a new environment, etc.).

Longitudinal Mobility Profiles by Age and Sex

Table 1b shows the longitudinal profiles by sex. Overall mobility rates are seen to be very similar for men and women and generally repeat the provincial patterns for all individuals taken together presented above.³

Table 1c shows the migration patterns by the eight age-sex groups. The first thing to note is how the number of movers of each type generally declines with

TABLE 1b Longitudinal Mobility Profiles by Sex

Male					Female				
No Moves	Single Move	Multiple Moves	Move/Return	All	No Moves	Single Move	Multiple Moves	Move/Return	All

3. In related work, mobility rates across various specific pairs of years based on correspondingly less restrictive samples (i.e., individuals meeting the sample selection criteria the relevant pairs of years, as opposed to being continuous filers and meeting the criteria in every year covered by the analysis) showed men to be somewhat more mobile than women (Finnie 1998a, 1998b), especially for the smaller/poorer provinces, thus illustrating the moderately differential effects of imposing the stricter (more continuous) sample selection criteria for women and men.

NF	87.1	6.2	2.5	4.2	100%	86.5	7.0	2.4	4.3	100%
NS	89.2	5.2	2.2	3.4	100%	88.6	5.9	2.1	3.4	100%
PE	89.5	5.8	2.6	2.6	100%	87.5	6.5	3.0	3.0	100%
NB	89.5	5.2	2.2	3.3	100%	88.9	5.7	2.1	3.4	100%
PQ	96.9	1.8	0.3	1.0	100%	96.6	2.0	0.3	1.1	100%
ON	95.4	2.7	0.6	1.2	100%	95.3	2.9	0.5	1.3	100%
MN	86.2	8.5	2.6	2.7	100%	85.2	9.1	2.5	3.1	100%
SK	85.6	9.5	2.4	2.5	100%	84.5	10.1	2.3	3.1	100%
AB	81.6	12.3	2.6	3.6	100%	80.8	12.9	2.5	3.8	100%
BC	92.2	4.0	1.1	2.7	100%	91.3	4.6	1.1	2.9	100%
TOTAL	92.8	4.3	1.1	1.9	100%	92.4	4.6	1.0	2.0	100%

age. These differences are in many cases large, and hold not only uniformly at the national level, but in almost every case within each province as well; the few exceptions could well be explained by random variations for some of the smaller provinces, for which the sample sizes by age and sex begin to get relatively small.

The age-sex results also generally highlight the inter-provincial differences in migration rates noted above, and show that certain groups in certain provinces have quite high mobility rates indeed. Focusing on the youngest groups, for example, approximately 25 % of the Entry Males living in Newfoundland and Alberta in 1982 had moved to a different province at some point up to 1995, with most of these individuals still living elsewhere at the end of the period (especially in the case of Alberta). Mobility rates (of every type) were, in fact, generally greater than the national average for this age group in every province except Ontario and Quebec – generally representing rather sizeable flows. The female patterns are roughly similar to the males’.

Thus, while at a national level “only” 7.4 % of all individuals (males and females of all ages) moved inter-provincially from 1982 to 1995, the rates were several fold greater than this for certain age-sex groups in certain provinces (although of course lower in others). In short, while migration might be only a moderately common event in overall terms, the rates – and associated effects – vary significantly by province and age group and are thus very important for many specific groups. Furthermore, with the greatest rates holding for the youngest groups who are so obviously critical to the future development of each province – and to the nation as a whole – such substantial flows cannot but have important effects on the more affected regions in economic, social, political, and cultural terms.

TABLE 1c Longitudinal Mobility Profiles by Age-Sex Group

Male					Female				
No Moves	Single Move	Multiple Moves	Move/Return	All	No Moves	Single Move	Multiple Moves	Move/Return	All

Entry (20-24)										
NF	76.8	9.7	5.2	8.4	100%	78.7	9.6	4.3	7.4	100%
NS	82.3	7.1	4.4	6.6	100%	82.4	8.0	4.2	5.7	100%
PE	85.7	7.1	--	--	100%	81.6	10.5	--	--	100%
NB	82.7	6.6	--	--	100%	81.5	7.8	--	--	100%
PQ	95.3	2.1	0.6	2.0	100%	94.9	2.5	0.7	2.0	100%
ON	93.0	3.7	1.2	2.2	100%	92.5	3.9	1.0	2.6	100%
MN	81.0	10.3	3.8	4.6	100%	77.8	11.6	5.2	5.5	100%
SK	79.1	12.4	4.3	4.3	100%	77.0	13.4	4.3	5.2	100%
AB	74.1	16.0	4.3	5.6	100%	71.8	17.7	4.4	6.1	100%
BC	87.0	5.4	2.3	5.6	100%	85.1	6.9	2.3	5.7	100%
TOTAL	88.7	5.8	2.0	3.5	100%	87.7	6.5	2.1	3.7	100%
Younger(25-34)										
NF	86.2	6.8	2.5	4.2	100%	85.7	7.6	2.6	4.2	100%
NS	87.8	6.0	2.6	3.8	100%	87.1	6.5	2.7	3.6	100%
PE	88.9	5.6	2.8	2.8	100%	86.1	6.9	4.2	2.8	100%
NB	88.8	5.8	2.2	3.1	100%	88.0	6.4	2.3	3.3	100%
PQ	96.6	1.9	0.4	1.1	100%	96.2	2.2	0.3	1.3	100%
ON	94.5	3.2	0.7	1.6	100%	94.5	3.3	0.7	1.6	100%
MN	84.1	9.7	3.3	3.1	100%	82.8	10.8	2.8	3.6	100%
SK	83.0	11.5	2.8	2.8	100%	81.6	12.2	2.9	3.4	100%
AB	78.4	14.3	3.2	4.0	100%	78.0	14.8	3.1	4.1	100%
BC	90.0	5.3	1.3	3.4	100%	89.6	5.7	1.3	3.4	100%
TOTAL	91.4	5.1	1.3	2.2	100%	91.1	5.4	1.3	2.3	100%
Prime-Younger(35-44)										
NF	90.5	5.2	2.0	2.8	100%	90.7	5.7	1.2	2.8	100%
NS	90.8	4.9	1.8	2.6	100%	91.3	4.7	1.1	2.9	100%
PE	90.4	5.8	--	--	100%	88.9	7.4	--	--	100%
NB	91.2	4.6	--	--	100%	91.7	4.3	--	--	100%
PQ	97.5	1.6	0.3	0.6	100%	97.5	1.6	0.2	0.8	100%
ON	96.3	2.4	0.5	0.9	100%	96.3	2.4	0.3	0.9	100%
MN	87.8	7.7	2.5	1.9	100%	88.5	7.4	1.8	2.0	100%
SK	88.2	8.1	2.0	2.0	100%	88.7	7.6	1.7	2.2	100%
AB	85.8	9.6	1.8	2.8	100%	86.4	9.5	1.5	2.6	100%
BC	93.8	3.4	0.8	2.0	100%	93.6	3.6	0.8	2.0	100%
TOTAL	94.3	3.6	0.8	1.3	100%	94.5	3.5	0.6	1.4	100%
Prime-Older(45-54)										
NF	92.9	4.2	1.2	2.4	100%	92.3	4.2	1.4	2.8	100%
NS	95.1	2.8	0.7	1.7	100%	94.2	3.9	--	--	100%
PE	94.7	--	--	--	100%	94.4	--	--	--	100%
NB	94.2	--	--	--	100%	93.8	--	--	1.9	100%
PQ	97.6	1.7	0.2	0.5	100%	97.4	1.9	0.1	0.5	100%
ON	97.1	2.1	0.2	0.7	100%	97.1	2.1	0.1	0.7	100%
MN	91.5	6.1	1.1	1.6	100%	91.4	6.2	0.8	1.6	100%
SK	92.2	5.7	0.9	1.5	100%	91.6	6.0	0.6	1.8	100%
AB	88.3	8.6	1.0	2.2	100%	88.9	8.0	0.8	2.3	100%
BC	96.3	2.2	0.4	1.1	100%	95.7	2.5	0.3	1.4	100%
TOTAL	95.7	3.0	0.4	1.0	100%	95.6	3.1	0.3	1.0	100%

TABLE 1c Longitudinal Mobility Profiles by Age-Sex Group (con't)

Male

Female

	No Moves	Single Move	Multiple Moves	Move/Return	All	No Moves	Single Move	Multiple Moves	Move/Return	All
Prime-Younger(35-44)										
NF	90.5	5.2	2.0	2.8	100%	90.7	5.7	1.2	2.8	100%
NS	90.8	4.9	1.8	2.6	100%	91.3	4.7	1.1	2.9	100%
PE	90.4	5.8	--	--	100%	88.9	7.4	--	--	100%
NB	91.2	4.6	--	--	100%	91.7	4.3	--	--	100%
PQ	97.5	1.6	0.3	0.6	100%	97.5	1.6	0.2	0.8	100%
ON	96.3	2.4	0.5	0.9	100%	96.3	2.4	0.3	0.9	100%
MN	87.8	7.7	2.5	1.9	100%	88.5	7.4	1.8	2.0	100%
SK	88.2	8.1	2.0	2.0	100%	88.7	7.6	1.7	2.2	100%
AB	85.8	9.6	1.8	2.8	100%	86.4	9.5	1.5	2.6	100%
BC	93.8	3.4	0.8	2.0	100%	93.6	3.6	0.8	2.0	100%
TOTAL	94.3	3.6	0.8	1.3	100%	94.5	3.5	0.6	1.4	100%
Prime-Older(45-54)										
NF	92.9	4.2	1.2	2.4	100%	92.3	4.2	1.4	2.8	100%
NS	95.1	2.8	0.7	1.7	100%	94.2	3.9	--	--	100%
PE	94.7	--	--	--	100%	94.4	--	--	--	100%
NB	94.2	--	--	--	100%	93.8	--	--	1.9	100%
PQ	97.6	1.7	0.2	0.5	100%	97.4	1.9	0.1	0.5	100%
ON	97.1	2.1	0.2	0.7	100%	97.1	2.1	0.1	0.7	100%
MN	91.5	6.1	1.1	1.6	100%	91.4	6.2	0.8	1.6	100%
SK	92.2	5.7	0.9	1.5	100%	91.6	6.0	0.6	1.8	100%
AB	88.3	8.6	1.0	2.2	100%	88.9	8.0	0.8	2.3	100%
BC	96.3	2.2	0.4	1.1	100%	95.7	2.5	0.3	1.4	100%
TOTAL	95.7	3.0	0.4	1.0	100%	95.6	3.1	0.3	1.0	100%

The Average Age of Movers and Stayers

Tables 2a (all individuals taken together) and 2b (by sex) show a clear ordering of movers and non-movers by age (in 1982) in the expected direction: the greater the mobility, the younger the group. Thus, multiple movers tended to be the youngest group, returners come next, single movers follow this, and stayers are the oldest group. This inverse relationship between moving and age holds not only at the more aggregate level – the Canada-wide totals for men and women taken together – but also for virtually every province and sex group. These results can be interpreted within a simple benefit-cost framework: younger individuals tend to have lower moving costs (monetary and otherwise) and a longer future stream of benefits from moving, and hence are more likely to do so – the standard finding in the literature.

TABLE 2a Mean Age of Movers and Non-Movers, All Individuals

Province	No Moves	Single Move	Multiple Move	Move and Return	TOTAL
NF	34.3	31.4	29.5	30.3	33.9
NS	35.0	32.1	29.2	30.7	34.5
PE	35.0	31.8	30.1	31.5	34.6
NB	34.6	31.9	29.2	30.5	34.2
PQ	35.0	34.0	30.6	30.5	34.9
ON	35.9	33.6	30.5	31.4	35.7
MN	35.4	33.0	30.7	30.9	35.0
SK	35.3	32.0	30.1	30.9	34.7
AB	34.9	31.7	29.6	31.1	34.2
BC	36.1	32.5	30.6	31.2	35.8
TOTAL	35.4	32.6	30.1	31.0	35.2

TABLE 2b Mean Age of Movers and Non-Movers by Sex

	Male					Female				
	No Moves	Single Move	Multiple Moves	Move/Return	All	No Moves	Single Move	Multiple Moves	Move/Return	All
NF	35.8	33.2	30.9	31.4	35.5	33.8	31.0	29.0	30.1	33.3
NS	34.9	31.9	30.0	30.4	34.4	34.5	31.8	28.2	30.5	34.1
PE	35.3	31.9	31.4	31.4	35.0	34.7	31.7	29.1	31.6	34.2
NB	35.4	32.3	30.2	30.8	35.0	34.3	31.2	28.1	30.4	33.8
PQ	35.0	32.7	30.3	30.6	34.6	34.7	33.6	29.7	30.3	34.6
ON	35.3	34.5	31.5	30.6	35.2	35.5	33.2	29.7	31.1	35.4
MN	36.3	34.1	31.3	31.9	36.1	35.2	32.4	29.6	30.4	34.6
SK	35.7	33.7	31.8	31.6	35.3	35.1	31.6	29.6	30.5	34.5
AB	35.5	32.3	30.7	31.3	35.0	34.6	31.0	28.8	30.5	33.8
BC	35.2	32.4	30.3	31.7	34.6	35.6	32.0	29.9	30.9	35.3
TOTAL	36.7	33.1	31.5	31.7	36.4	35.1	32.1	29.2	30.6	34.8

The Income Profiles of Movers and Stayers

Dynamic Income Profiles of Movers and Stayers: The Principles

We now exploit the longitudinal element of the LAD to compare the dynamic income profiles of movers and stayers, with the goal being to characterise individuals by economic status and to identify the effects of moving on individuals' incomes. To do this, mean incomes in 1982 ("pre-move" for those who change province), mean incomes in 1995 ("post-move"), and the percentage change in mean incomes over the 1982 to 1995 period are shown. As noted earlier, the relevant concept is total market income – basically all non-government sources of income. All individuals, including those with zero and negative incomes, are included in the analysis. The approach adopted here is quite similar to that used in

Courchene (1974) and Grant and Vanderkamp (1976) for much shorter periods. Results are first reported based on individuals' province of origin (in 1982) and then by final province (1995) in order to look at movers as both leavers and entrants.

Cross-Cutting Biases and the Need for a Disaggregated Analysis

Tables 3a, 3b, and 3c show the relevant dynamic income profiles by migration status and province of origin. The advantage of this dynamic perspective in assessing the income effects of inter-provincial migration are immediately obvious in Table 3a, which presents the income figures for all individuals taken together (men and women of all ages). Looking at the totals for all of Canada (the bottom row), non-movers had higher average incomes than all types of inter-provincial movers in 1982, while the 1995 income figures and the associated percentage changes indicate that the income gains over this period were greater for movers than non-movers. The apparently positive effects of moving on incomes would, therefore, be underestimated by looking at second period income levels alone – precisely because the incomes of movers were generally lower than those of stayers to begin with. Marr and Millerd (1980) conduct such a set of simple “post-move” comparisons, while gracefully explaining the limitations of their approach.

There are, on the other hand, some significant differences in these patterns by sex (Table 3b). For males, the initial mean income levels of stayers were (at the national level) below those of single and multiple movers but above those of returners, while all movers' incomes rose more than stayers' incomes over time. For women, on the other hand, stayers had the highest initial income levels and the greatest income growth over time. These findings thus indicate that the characteristics of movers and stayers and the effects of moving differ in important ways by sex, and that any analysis of the income effects of inter-provincial mobility which failed to take initial income levels into account would suffer from significant biases which varied by both sex and the type of move.

Finally, the patterns also vary province and by age group (Table 3c). In short, the propensity to move and the associated income profiles are correlated with sex, province, and age, meaning that any analysis of the characteristics of movers and stayers or the effects of moving on incomes needs to be broken down along these dimensions in order to avoid confounding the “pure” relationships between incomes and moving with these related factors.⁴

4. For example, younger individuals generally have a greater tendency to move, lower income levels, and greater rates of income growth than do older ones. Hence, comparing the income profiles of movers and non-movers of all ages taken all together mixes the related age effects with the effects of moving *per se*. In particular, movers will tend to have lower starting incomes and greater increases over time simply because they tend to be younger. Similar problems arise with respect to province, with which mobility rates and income profiles are also related.

TABLE 3a Income Profiles (S1995) of Movers and Non-Movers, All Individuals (Province of Origin)

Movers	Multiple Moves		Single Move		Multiple Move		Single Move		Multiple Move		Single Move		Multiple Move	
	Return	Percentage Change	Return	Percentage Change	Return	Percentage Change	Return	Percentage Change	Return	Percentage Change	Return	Percentage Change	Return	Percentage Change
	31.6		18.4		30.9		20.7		31.3		28.2		16.2	
	5.1		-1.3		14.8		17.4							

It should be noted that the income patterns for movers reflect the amount of time they have spent in the new province(s) – in a context where income levels of course continue to evolve over time. These are, therefore, “average” (time-dependent) effects, but they nevertheless establish the general nature of the income patterns and their relative amplitudes. In a related, more technical piece, Finnie (1998c) first analyses the short-run effects of moving on earnings and then the subsequent income profiles of movers, who are found to be quickly integrated into their new labour markets.

Characterising Movers and Stayers: Initial Income Levels (for Men)

Focusing first on the detailed results for males (the first part of Table 3c), the starting year income patterns by migration category for the Entry group (20-24) vary to a significant degree by province, with no clear pattern except that those who left and then returned to the original province tended to have relatively low starting income levels than others.⁵

Clearer patterns emerge for the older groups, however. In most provinces, multiple movers tend to have had the highest starting incomes, single movers follow fairly closely on these, individuals who left and subsequently returned to their original province generally come next, and non-movers typically had amongst the lowest initial income levels. Thus, except for the youngest group, movers typically had higher starting incomes than non-movers. If inter-provincial mobility has generally resulted in income gains (see below), it would appear that these benefits have generally worked more to the advantage of individuals who were already at higher income levels to start with – a significant finding. It should also be noted, however, that in related work, Finnie (1998b) shows that these income effects are generally non-linear, and that individuals with very low income levels, as well as those collecting social assistance and unemployment insurance, are also more likely to move than are individuals at middle income levels.

There are, furthermore, two important exceptions to these income-mobility patterns: in Alberta and British Columbia, movers often (depending on the specific age group) had lower (not higher) starting incomes than non-movers. Indeed, we shall see in the results that the migration-related income patterns associated with the two western-most provinces are somewhat set apart from the other provinces in other ways as well, presumably reflecting the general effects of the particular resource bases and the atypical cyclical performances of these economies as these played out over the 1982 to 1995 period covered by the data.

5. One relatively simple yet effective means of measuring these tendencies is to rank the income levels across the four groups in a given province (for a given age group), and then survey the general pattern of rankings across the provinces. This is the primary analytical device relied upon in this section – accompanied by inspections of the rankings and specific income figures in each province in each year in order to identify any particularly interesting or important exceptions to the general tendencies.

The Effects of Moving on Men's Incomes

Looking now at the changes in income levels, inter-provincial mobility is generally associated with greater income growth for all groups of men except the oldest ("Prime-Older"). More specifically, within a given province, single and multiple movers tended to have the greatest income gains from 1982 to 1995, followed at some distance by individuals who left and returned to their province of origin, while non-movers generally experienced the smallest income gains of all – the latter interpretable as "normal" income gains. Alberta and British Columbia are again exceptions.

Inter-provincial migration would, therefore, appear to have typically been a means of economic betterment for men – even for those who eventually returned to their province of origin, presumably with new skills and experiences which lead to higher incomes than would have been the case had they never left. Furthermore, many of the effects are quite substantial, especially for the younger groups, with the associated income increases ranging up to around the 20 % mark for the Prime-Younger group, up to double this for the Younger group, and up to more than a doubling effect for the Entry group. (The effects of moving are taken to be the difference in the percentage change in incomes between stayers and the particular group of movers, such as $183.1 - 68.3 = 114.8$ % for Entry group single movers leaving Newfoundland. This is the same approach as used in the work by Courchene and Grant and Vanderkamp.)

There are important issues related to causality and sample selection to consider here, but Finnie (1998c) shows in an econometric framework that the pre-move increases in earnings from one year to another of movers were not significantly different from those of non-movers, thus suggesting that the greater income gains of movers shown here are probably largely attributable to their moves *per se*, rather than unobserved heterogeneity between movers and stayers.

There are, on the other hand, no such clear patterns for the oldest group (aged 45-54 at the beginning of the period covered, 58-67 at the end), with this different "structure" to the migration-income relationship presumably being related to the beginning of the movement into retirement.

Given the starting income patterns mentioned above, the final income levels are not surprising: 1995 incomes were generally highest for multiple and single movers, lower than this for those who left and returned, and lowest of all for stayers.

Turning now to the exceptions, as the patterns of initial incomes of those who moved from Alberta and British Columbia versus those who stayed differed somewhat from those of other provinces, so do the effects of moving on income. Specifically, the gains of the mover groups generally did not outstrip those of the stayers to the same degree they did in other provinces, and in some cases movers actually did worse than stayers, especially in Alberta. Interestingly, neither does Ontario follow the general rule – greater income growth for movers than stayers – as closely as other provinces. The exceptions thus comprise the three high income provinces where one might expect the "home grown" income opportunities

to generally be relatively attractive.

The income dynamics associated with inter-provincial mobility would thus appear to have taken somewhat different forms in the “have” and “have not” provinces. In the latter, individuals who moved generally enjoyed substantially greater income growth than did those who remained behind, thus indicating gains to migration. Putting this result alongside the finding that it was generally higher income individuals who left these provinces thus provides a picture of inter-provincial mobility representing a path to better economic fortunes with this route most available to those with higher incomes to start with (presumably reflecting certain occupation groups).

For residents of Ontario, Alberta, and British Columbia, however, these generalisations do not hold – at least not as consistently as elsewhere. Out-migration from these provinces has been less commonly the domain of those at higher income levels and generally less associated with higher income growth. For residents of these provinces, then, inter-provincial mobility seems to have been less the result of beckoning opportunities in other provinces and more a means of escaping relatively diminished economic fortunes in the current situation.

Women’s Income Profiles

The female patterns (the second part of Table 3c) are quite different from the male ones. First, female stayers tended to have higher initial income levels relative to the various mover groups than did men – often, in fact, having amongst the highest starting income levels of all. Second, when female movers’ income gains were greater than stayers’, the differences were not as great as for males, and in many cases stayers actually did better than movers, often the best of all (although there is considerable variation in the results by province and age group).

Thus, whereas moving was seen to have generally been more common amongst men with higher incomes to start with and to lead to substantial income gains as a result, women’s moves have been less concentrated amongst those at the upper income levels and have often resulted in income losses rather than gains. These results are consistent with a view of women often being “secondary” workers who compromise their own careers for the sake of their spouses’ – in turn related to their typically greater responsibility for children and other family production. These findings and the interpretation offered are consistent with the different reasons cited for moving given by men and women reported in Osberg et al (1995).

The Final Province Perspective: The Story for Men

Looking at individuals’ income profiles according to their final (as opposed to initial) province provides the alternative perspective of how entrants (as opposed to leavers) compare to non-movers and those who left and then returned to their

province of origin.

We immediately scan through Tables 4a (all men and women taken together) and Table 4b (by sex), to turn to the results by age-sex group and province, starting with the findings for men given in the first part of Table 4c. Looking first at the initial income levels in 1982, the results are consistent with those based on the province of origin seen above in that single and multiple movers tended to have (interchangeably) the highest starting incomes, followed by those who left and returned, with non-movers generally having the lowest incomes; while Alberta and British Columbia (and to a lesser degree Ontario) again provide exceptions to this rule, with stayers tending to have higher starting income levels than movers (“entrants” here) – especially for the two younger groups. (The results for stayers and returners are, by construction, exactly the same as those based on the initial province.)

Looking at the increases in individuals’ incomes over time, individuals who moved to Atlantic Canada tended to have smaller income gains over the 1982 to 1995 period than individuals who lived in those same provinces throughout (i.e., movers did worse than stayers). This presumably reflects the effects of choosing to move to a province in a region where incomes are generally lower than elsewhere (ignoring the results for the oldest group throughout this discussion for reasons previously discussed). This would include both newcomers willing to take a cut in pay for a preferred “life style”, as well as individuals returning home after making their living elsewhere and being similarly willing to accept a drop in income in order to return to friends, family, and a culture they previously knew. (The mover category would also include intra-regional migrants – those who moved from one Atlantic province to another – for whom such inter-regional effects would obviously not apply.) Meanwhile, those who left and then returned to the Atlantic provinces over the period covered by the data tended to have the greatest income gains of all, perhaps reflecting the accumulation of skills and other career advancements made during the time spent elsewhere in the country. Note that inter-provincial differences in the cost of living are not controlled for in these calculations, and also surely play a role in the observed income patterns.

Conversely, individuals who moved to Ontario (both single and multiple movers) had greater (percentage) income gains than incumbents, reflecting the obverse side of the inter-regional income patterns mentioned above – that is, the typically positive effects of moving to a province where incomes are generally high. Movers to Alberta also had greater income growth than natives, presumably for similar reasons, while the patterns were more mixed for British Columbia, the other generally high income province. The income growth patterns were somewhat more mixed for Quebec, Manitoba, and Saskatchewan – middle income provinces – but in the majority of cases entrants (as well as returners) experienced greater income growth than incumbents.

In short, the effects of moving on individuals’ incomes has depended on the province both *to* and *from* which individuals have moved in a very common sense manner: moving from a lower-income province and to a higher-income province

TABLE 4a Income Profiles (S1995) of Movers and Non-Movers, All Individuals (Final Province)

		Percentage Change		
Movers	Non-Movers	Single Move and	Single Move and	Single Move and
		Multiple Moves	Multiple Moves	Multiple Moves
Return	Return	Return	Return	Return
31.6	18.4	30.9	20.7	31.3
28.2	16.2	5.1	-1.3	14.8
17.4				

TABLE 4c Income Profiles (S1995) of Movers and Non-Movers by Age-Sex Group (Final Province) (cont'd)

		Percentage Change					
		Multiple Move		Single Move		Multiple Move	
FEMALE (20-24)	Move	Move/Return	Move/Return	Move/Return	Move/Return	Move/Return	Move/Return
		Moves	Moves	Moves	Moves	Moves	Moves
		22.3	22.3	22.3	22.3	22.3	22.3
		23.0	23.0	23.0	23.0	23.0	23.0
		--	--	--	--	--	--
		27.5	27.5	27.5	27.5	27.5	27.5
		37.3	37.3	37.3	37.3	37.3	37.3
		29.1	29.1	29.1	29.1	29.1	29.1
		10.4	10.4	10.4	10.4	10.4	10.4
		-8.8	-8.8	-8.8	-8.8	-8.8	-8.8
		32.7	32.7	32.7	32.7	32.7	32.7
		21.7	21.7	21.7	21.7	21.7	21.7
		21.2	21.2	21.2	21.2	21.2	21.2
		21.2	21.2	21.2	21.2	21.2	21.2
		24.7	24.7	24.7	24.7	24.7	24.7
		21.5	21.5	21.5	21.5	21.5	21.5
		33.9	33.9	33.9	33.9	33.9	33.9
		34.1	34.1	34.1	34.1	34.1	34.1
		38.4	38.4	38.4	38.4	38.4	38.4
		18.9	18.9	18.9	18.9	18.9	18.9
		4.3	4.3	4.3	4.3	4.3	4.3
		34.3	34.3	34.3	34.3	34.3	34.3
		26.3	26.3	26.3	26.3	26.3	26.3

FEMALE, YOUNGER (25-34)

TABLE 4c Income Profiles (S1995) of Movers and Non-Movers by Age-Sex Group (Final Province) (cont'd)

	Percentage Change									
	Multiple Move		Single Move		Multiple Move		Single Move		Multiple Move	
	Move/Return	Moves	Move/Return	Moves	Move/Return	Moves	Move/Return	Moves	Move/Return	Moves
FEMALE, PRIME-AGE (35-44)										
Non-Movers	8.5	6.2	--	46.6	31.3	6.6	10.2	32.7	14.5	8.5
Movers	6.2	--	46.6	31.3	6.6	10.2	32.7	14.5	8.5	6.2
FEMALE, PRIME-OLDER (45-54)										
Non-Movers	-19.1	-28.8	--	-39.8	-42.6	-49.5	-32.8	-40.8	-19.1	-28.8
Movers	-19.1	-28.8	--	-39.8	-42.6	-49.5	-32.8	-40.8	-19.1	-28.8

has generally been associated with income gains, while moving from a higher-income province to a lower income province has generally resulted in income losses relative to stayers.

Finally, an inspection of final income levels by migration status using the final province perspective indicates that multiple movers tended to have the highest incomes (especially for the three younger groups), followed by single movers, then returners, and stayers having the lowest levels of all. Thus, the generally higher initial income levels of movers relative to incumbents and the more mixed pattern of growth rates (lower for entrants than incumbents in Atlantic Canada, generally the reverse elsewhere) has resulted in generally higher final income levels for newcomers relative to incumbents of the provinces to which they moved.

Final Province Income Profiles for Women

The final province income patterns are again rather different for women than men. In particular, the initial income patterns of movers and stayers are once more found to be quite mixed, although stayers typically had consistently higher – rather than lower (as for men) – starting income levels from Manitoba westward. As for the changes in incomes over time, female stayers tended to have had the greatest increases (once more ignoring the oldest group which was moving into its retirement years), consistent with the story that moving from one province to another has generally tended to have had more of a disruptive influence on women's careers than the advantage it appears to have been for men.

Pulling the Evidence on Income Profiles Together

These results can now be gathered into an overall story. First, male movers have tended to be not only younger individuals, but also to have had higher starting incomes than those who stayed in their province of origin, Alberta and British Columbia excepted. Second, in the “original province” part of the analysis, moving from one province to another is seen to have generally resulted in increases in incomes – often very substantial – while income decreases were experienced for those who left the wealthier provinces (Ontario, Alberta, British Columbia). The “final province” calculations, on the other hand, indicate that the income effects associated with inter-provincial mobility have depended not only on the province *from* which, but also the province *to* which the individual moved. The effects thus generally correspond to the well-known provincial income patterns which hold across the country: moving from a lower income province and to a wealthier province has generally been associated with income gains, while moving from a higher income province and to a lower income province has been associated with a loss in income. The patterns are qualitatively similar across age groups (except the oldest) but stronger for younger individuals.

This entire story is, therefore, consistent with inter-provincial mobility being

driven to a significant degree by relative income opportunities, although “quality of life” considerations may have been more important for those who moved to the Atlantic provinces in particular. The fact that the benefits of inter-provincial mobility seem to have more commonly served individuals at higher income levels to start with would, furthermore, presumably reflect the spatial elements of various labour sub-markets. In particular, we might infer that higher income professionals have effectively faced wider labour markets which have offered greater potential advantages to moving.

Finally, this opportunity-driven migration story does not generally apply to women, for whom inter-provincial mobility has typically been less “selective” (by income level) and to have had more negative than positive income effects, thus conforming to a view of women as secondary workers who compromise their own careers in order to advance those of their spouses. Such differences would, therefore, seem to comprise an interesting and potentially important component of the general set of gender differences in labour market behaviour and the gender earnings gap in particular.

Conclusion

In this paper, the results of an empirical analysis of inter-provincial migration over the period 1982-95 based on the recently available Longitudinal Administrative Database have been reported. Individuals were first categorised according to their longitudinal migration profiles into stayers, one-time movers, multiple movers, and returners. Overall, 7.4 % of the individuals in the longitudinal samples used here moved at least once, but the rates vary greatly by province and age, with some rates reaching as high as 25 % for the youngest groups in certain provinces – sizeable movements by almost any standard.

The associated dynamic income profiles associated with each of the migration groups were then analysed. For men, moving has typically been more common at higher income levels and associated with substantial income gains, especially amongst younger individuals. The patterns are, however, quite different for males moving from the higher income provinces, especially Alberta and British Columbia, where moving has been less concentrated amongst those with higher incomes and often associated with income declines rather than gains. The income effects also vary with the destination province, with movements to higher income provinces generally resulting in income gains and movements to lower income provinces more typically associated with losses. For women, on the other hand, migration has been generally much less related to initial income levels and has more often resulted in income losses rather than gains.

The general story is, then, one of inter-provincial migration being the route to better labour market opportunities for men, particularly for those coming from the lower income provinces and moving to higher income ones, and especially in the case of younger men. Conversely, the different patterns for those moving from the

generally wealthier provinces indicate a dynamic of declining opportunities rather than the pull of better opportunities seen elsewhere. For women, the results presumably reflect – and perhaps feed back into – their generally secondary labour market role and a tendency to move due to the relocation of a spouse even when this comes at a cost to their own careers.

Thus, some new longitudinally-based evidence has been provided on the extent and effects of inter-provincial migration in Canada, with implications for our understanding of:

- ▶ This particular determinant of the nation's demographic characteristics;
- ▶ The relationship between migration and labour market opportunities and how these flows might affect the provinces' and nation's economic performance;
- ▶ How various social programs and other initiatives related to the development of the nation's human resources (e.g., education and training) might be affected;
- ▶ How any rules and regulations which impede the free flow of individuals across the land might inhibit individuals' opportunities and the flow of human resources to where their value is greatest; and,
- ▶ most generally, the role that inter-provincial migration plays in the nation's basic set of structures and behaviour which make it a social-economic union as well as a political one.

The results should, therefore, be of interest on their own terms, and also provide a useful point of departure for other future research on the topic which might be undertaken with the LAD database or other sources.

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