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MIGRATION AND THE QUALITY OF LIFE: A REVIEW ESSAY

(Accepted 20 September 1996)

ABSTRACT. This paper provides a review of the past 30 years of research on the relationships between migration or residential mobility and the quality of life broadly construed, mainly in Canada and the United States. In the final section a check-list of critical issues in quality-of-life research is given.

1. INTRODUCTION

The aim of this paper is to provide a review of the past 30 years of research on the relationships between migration or residential mobility and the quality of life broadly construed. The structure of the paper is as follows. In the next section there is a review of what is known about urban migration or residential mobility, divided into five main parts. Section 2.1 reviews demographic studies examining migration mainly as a matter of population flows from one settlement area to another. Section 2.2 is divided into three parts, examining in turn the literature regarding migration related to motives concerning the provision of public goods and services (2.2Ai), related to economic motives specified in the classical competitive model (2.2Aii), and related to quality of life motives (2.2B). Section 2.3 reviews migration studies related to benefits and costs apart from considerations of people's motives. Section 2.4 examines kinship studies and migration, and 2.5 examines the literature on developmental stages in migration. Short summaries of each section are provided along the way, as well as an overview of all these sections in Section 3. In the final Section (4) an attempt is made to list the critical issues that confront anyone interested in developing a systematic accounting scheme to measure stocks and flows in the quality of urban life.

Social Indicators Research **39:** 121–166, 1997.

2. MIGRATION OR RESIDENTIAL MOBILITY STUDIES

Generally speaking, migration or residential mobility studies may be conveniently organized around five lines of enquiry. The lines are by no means exclusive or exhaustive, but they do suggest major emphases in different studies. There are:

1. Standard demographic studies produced by government agencies like Statistics Canada and organizations with similar mandates based on relatively objective indicators telling us how many people went from where to where in certain periods, in certain family clusters, at certain ages, with certain levels of education, and so on.
2. Motivational studies trying to explain why people move from one place to another.
3. Studies of the social and economic benefits and costs involved in moving, regardless of motives.
4. Kinship studies involving migrants.
5. Studies trying to identify the developmental stages or common features of moving, migration or relocation.

Some of the salient findings from all five types of studies will be reviewed in turn.

2.1 *Demographic Studies*

In Canada, interregional population flows have typically gone from relatively economically weak to strong areas of the country. Since the 1930s that has meant migration from the Atlantic provinces, Quebec, Manitoba and Saskatchewan to Ontario, British Columbia and more recently Alberta. Since 1976 the out-flow from Quebec has increased dramatically. It hardly requires scientific analysis to identify the likely 'push factors' in every case. In Quebec, we had and continue to have the not-so-quiet revolution. In the prairies, we have depressed agricultural markets and increased concentration of farm ownership (Burke, 1987).

Hiscott (1987) examined the characteristics of employed persons who moved between Atlantic Canada and Ontario in the 1976–1981 period. Among other things, he found that, compared to people going from west to east, people going from east to west tended

to be younger, better educated and more likely to be employed in secondary industries such as manufacturing.

According to Priemus (1986), the oldest residential mobility theory (Rossi, 1955) posited migration as an effect of life cycle changes. Migration is typically more prevalent among younger people, from the late teens to early thirties (Miller, 1973; Taeuber, 1967; Zuiches, 1980). Such people are typically exploring new job opportunities and building families.

Migration is more prevalent among professional workers than managers and proprietors, and more prevalent among the latter than among labourers (Bogue, 1969). Since education is closely related to occupation, one would expect migration to increase with education, which it does (Long, 1973; Kirschenbaum, 1971). Sex does not seem to have any particular relation to migration (Zuiches, 1980). Unmarried, divorced or widowed persons are more likely to move than married people (Zuiches, 1980). The larger the family, the less likely it is to move (Zuiches, 1980).

Several researchers have confirmed the hypothesis that there is an inverse relationship between the distance between receiving and sending areas and the likelihood of moving, i.e., the farther away the place, the less likely one is to go there (Jones, 1976). Schwartz (1973) showed that the relation between migration and distance decreases as education increases.

There is also an inverse relationship between the length of residence in a community and migration (Jones, 1976), and between home-ownership, community satisfaction and migration (Zuiches, 1980). Movers are more likely to be renters than owners (Spain, 1990), and most surveyed renters would like to be owners in Australia (Thorne and Turnball, 1982), Canada (Michelson, 1977), the United States (Rossi, 1955) and France (Lassarre, 1986).

There is a direct relation between mobility and previous moving. The more one has moved, the more one is likely to move in the early stages of one's life (Demmler-Kane, 1980).

While the period from 1950 to 1970 had metropolitan areas of the USA growing more rapidly than nonmetropolitan areas, the period from 1970 to 1980 had what has come to be known as a 'nonmetropolitan turnaround' (Fuguitt, 1985). Metropolitan areas

typically have higher residential mobility rates than nonmetropolitan areas (Spain, 1990).

Trovato (1988) used 1981 census data to study Canadian interurban mobility of foreign born residents 15 years of age and older in the 1976–81 period. Five categories of urban areas were used, based on the following five population sizes: <5,000; 5,000–24,999; 25,000–99,999; 100,000–249,999; 250,000+. He found that (1) international immigrants tended to settle in relatively large urban areas with established ethnic communities; (2) immigrants tend to be more mobile than native born Canadians; and (3) interurban mobility flows tend to increase rather than decrease linguistic heterogeneity. George (1970) had earlier found that immigrants had higher levels of interprovincial migration than native born people in the 1956–61 period, and Kalback (1970) found a similar phenomenon for the early 1960s.

While immigrants tend to be more mobile than native born Canadians, Trovato also found that those with English as their mother tongue tend to be more mobile than those with French or other languages as their first language. This was similar to Stone's (1969, 1974) findings for earlier periods.

Schissel, Wanner and Frideres (1989) used a national probability sample of 989 native-born Canadians to examine their attitudes toward immigrants. Several authors were cited who indicated that in some periods of our history, as the economy declined, reports of hostility toward immigrants increased. Using 15 potential predictors, Schissel, Wanner and Frideres could explain at most 23% of the variance in attitudes toward immigrants. The potential predictors included unemployment rates, home ownership ratios, vacancy rates, population growth, percent visible immigrants, percent of all immigrants, respondents' age, sex, income, education, mother tongue, unemployment, interaction with unemployed, religiosity and authoritarianism. The most salient indicator of the general state of the economy in this set is the unemployment rate, which had no statistically significant impact on attitudes. The most influential predictor was the population growth rate, about which the authors speculated that

> Under conditions of rapid growth, indigenous populations likely perceive greater competition from immigrants, regardless of the reality. It is this perception of competition, which may then be translated into negative attitudes toward new-

comers, that is probably more important as a determinant of prejudice than the presence or absence of concrete conditions of competition (p. 303).

Summary of section 2.1

The demographic studies reviewed in this section provide a clear picture of a typical migrant, not only in Canada but apparently around the world. Compared to average citizens of any country, migrants are typically younger, better educated, employed in secondary industries or professions, unmarried or relatively recently married, with relatively fewer children, and renters rather than home-owners. In Canada, most interprovincial migration goes to Ontario, British Columbia and Alberta from other provinces.

2.2 *Motivational Studies*

For over two thousand years people have been interested in discovering typical motives for migration and useful strategies to motivate people to move from one place to another.

From the fourth century B.C., Greek physicians began to immigrate to Rome. Most were adventurers, and at first were strongly resented by Romans.... As the special needs of the empire mounted, resentment softened and 'pull' factors were created to increase the inflow of Greek doctors.... Special inducements were granted to attract as many Greek physicians as possible. In 46 B.C., Julius Caesar extended the highly valued right of Roman citizenship to all free-born Greek physicians residing on Roman territory. Doctors were free from taxation, spared the obligations of military service and public office, and were not required to accept lodgers. In brief, the Romans created powerful incentives to stimulate the immigration of doctors from Greece.... What was produced in Alexandria is a matter of historical record. It is said that most of the best works in science and philosophy from 300 B.C. to 500 A.D., having a bearing on present developments in these fields, could be traced to Alexandria.... But most important for the purposes of this study ..."All the brains producing them in Alexandria seem to have come from somewhere else." ...Very few native Egyptians or even Alexandrian-born Greeks are among the names of known scholars and scientists. (Michalos, 1981, p. 47)

Although there is typically more migration from Canada to the USA than the reverse, in the period from 1964 to 1974 the trend was turned around. More people moved North than South. The popular press was flooded with suggestions about Americans' motives for moving to Canada. For example, a 1973 Business Week article claimed that

Canada is a natural 'elsewhere'. As the newcomers describe it, Canada is close, its language is the same and its way of life is similar to that of the United States. By contrast, it is largely free of crime, crowding, pollution, and tension that overwhelmed them in the United States. With a land mass slightly bigger than that of the United States and a population only a tenth as big, Canada seems more manageable and comprehensible to the immigrants. (Michalos, 1980, p. 49)

A year later U.S. News and World Report reported that

Americans living in Canada cite these attractions: The cities are cleaner and safer than in the United States. The country is growing fast, and offers many job opportunities. It's still a land with a frontier spirit, and vast stretches of nearly uninhabited terrain.... Canada is close, inexpensive to get to and also to leave if living conditions don't measure up to expectations. There's little cultural 'shock'. For example, English is spoken everywhere throughout the country. (Michalos, 1980, p. 49)

Apparently the author of the report did not know about the four million unilingual Quebecers.

There is no need to emphasize all the elements in these passages regarding supposed motivations for migration since the fourth century B.C. As current research is reviewed, the common elements will be readily recognizable.

2.2A *Primarily economic motives*

Broadly speaking, economists have addressed the issue of migration from two points of departure, both of which assume the classical competitive model of rational action. I will review research related to the two perspectives in turn.

2.2Ai *The Tiebout hypothesis: A special case of the classical model.*

According to classical theory (e.g., Samuelson, 1954), pure public goods and services may be distinguished from those that are private by either of two characteristics. Pure public goods and services are nonexclusive in the sense that nonpurchasers cannot be excluded from enjoying them, and they are nonexhaustive in the sense that using them does not imply using them up. National security is a standard example of a public good displaying the property of nonexclusiveness. If the nation is secure from foreign aggression, then every resident can enjoy that security whether or not they pay for it in taxes. Knowledge is a standard example of a public good displaying the property of nonexhaustiveness. It can be used forever, by any number of people at the same and different times. In the case of

private goods, on the other hand, in a market or mixed economy those who do not pay for them usually cannot enjoy them and using them usually implies using them up. Consumer goods like cars, electric hair dryers and beer are standard examples.

Because nonpurchasers cannot be excluded from pure public goods, classical theory assumed that no market could be developed for them. However, in 1956 C.M. Tiebout published a seminal theoretical paper in which he argued, among other things, that local public goods and services (e.g., schools and education, hospitals and health care, welfare services, parks and public safety facilities) might be differentially accessible across different geographic areas and political jurisdictions. In that case, a market-like mechanism might be developed in which people chose to live in one or another jurisdiction after calculating the expected utility or net payoff resulting from their choice, and elected and/or other official managers of jurisdictions would allocate public revenues in the interests of maintaining the most desirable, cost-effective local quality of life and attracting the most desirable in-migrants.

What is typically referred to as the Tiebout (1956) hypothesis in the economic literature,then, is something like this: Individuals or households choose to live in communities or jurisdictions that provide the maximum benefit of public goods and services at the minimum cost, assuming all other things are roughly equal. The remaining paragraphs of this section are devoted to a review of the results of operationalizing and testing this hypothesis in a variety of different ways. In a typical study, costs are usually operationalized by some annual total or per capita tax figures for some jurisdictions (cities, counties, CMAs, SMSAs), benefits are operationalized by some public expenditure figures, and migration preferences are operationalized by some in-migration or out-migration figures. The most frequently employed mathematical technique is ordinary least squares regression, using one or more equations.

Cebula (1979) provided an excellent review of the literature up to 17 years ago (most of which was American), dividing all the research into single- and simultaneous-equation studies. In single-equation studies, migration figures are explained by regressing them on tax and expenditure figures, while in simultaneous-equation studies at least one additional equation is constructed in which, for example,

taxes or expenditures are explained by regressing them on migration figures. That is,simultaneous-equation studies are used to test the hypothesis of a reciprocal relation or bi-directional causality between migration and fiscal policy variables.

One of the earliest policy variables studied was welfare, operationalized as some sort of government assistance expenditures or welfare benefit levels. Gallaway, Gilbert and Smith (1967) found no significant relationship between total interstate migration and welfare benefit levels for the American states in the 1955–1960 period. Similarly, Sommers and Sutis (1973) found no significant relationship between net interstate migration and welfare differentials in the 1950–1960 period, and Cebula, Kohn and Gallaway (1973–74) found none for SMSAs in the 1960–1970 period.

DeJong and Donnelly (1973) examined the net migration of young (aged 25–29) nonwhite people to American SMSAs in the 1950–1960 period, using county levels of aid to families with dependent children (AFDC) as a predictor or explanatory variable. Although they did find that differential AFDC levels were positively related to net migration rates as predicted, they rejected the conclusion that the aid levels were a direct cause of the nonwhite migration. They assumed, with some evidence, that people migrated to relatively dense population centres in search of work and the relatively high aid levels were simply a by-product of their migration. As we will see below, there is now considerable support for such an interpretation from survey research undertaken by sociologists. Unfortunately, most economists and sociologists are oblivious to the literature in the other's discipline.

Kohn, Vedder and Cebula (1973) studied the impact of AFDC benefit levels on gross interstate migration in the 1965–1970 period for whites and nonwhites separately. They found white migration positively related to relatively lower welfare level states, and nonwhite migration positively related to relatively higher welfare level states. They assumed that these differences were the result of the fact that higher proportions of nonwhites than whites were recipients, and vice-versa for tax payers.

An alternative interpretation of their results is at least as plausible. According to Cebula (1979, p. 75), 'high property-tax areas tend (on average) to be high welfare [benefit level] areas as well. Moreover,

low property tax areas tend (on average) to be low welfare [benefit level] areas'. Thus, Kohn, Vedder and Cebula's figures might be the result of the fact that relatively more whites move to areas where there are relatively few welfare recipients and, therefore, relatively low perceived need and aid levels, and vice-versa for nonwhites. As we will see below, there is evidence indicating that American whites live wherever they can afford to live, but nonwhites are often constrained to live in mixed or mainly nonwhite areas. Consequently, the latter areas have relatively more heterogenous populations, probably with more welfare recipients, more perceived need and higher benefit levels. Sommers and Suits (1973) also examined separately the net in-migration to states of black families and white families for the 1950–1960 and 1960–1970 periods. For the earlier period, there was a positive relationship between the net in-migration of black families and relatively high AFDC levels, but there was no relationship in the later period. For white families in the earlier period there was no relationship between AFDC levels and net in-migration, but in the later period there was a positive relationship between relatively low AFDC levels and net in-migration. To muddy the waters even further, when Cebula and Schaffer (1975) reanalysed the data for the 1960–1970 period, they found a positive relationship between in-migration and AFDC levels for black families (contrary to Sommers and Suits), but the same relationship between relatively low AFDC levels and net in-migration found by Sommers and Suits.

Glantz (1974) examined the impact of relatively high welfare benefit levels on the in-migration of poor people into American metropolitan areas in the 1965–1970 period, and found the former positively related to the latter. Vedder and Cooper (1974) found a similar relationship in their investigation of nineteenth century intercounty migration between England and Wales.

Cebula (1974a) studied net in-migration into American SMSAs in the 1965–1970 period using property taxes, AFDC levels and nonwelfare expenditures as predictors. For whites, he found that relatively low welfare and property tax levels predicted in-migration but nonwelfare spending was unrelated. For nonwhites, he found that relatively high welfare and nonwelfare spending predicted in-migration but property taxes were unrelated.

Kahn (1977) used the same data-set as Cebula (1974) and a simultaneous-equation approach and found a positive relationship between white in-migration and relatively low welfare levels, and between nonwhite in-migration and relatively high welfare levels, essentially replicating Cebula's results.

Cebula (1979, p. 75) concluded his review of single-equation studies by writing that

> The literature reviewed thus far seems to indicate that inter-area welfare level differentials may well exercise a perceptible *positive* impact on various groups of migrants, particularly the poor (both whites and nonwhites). Although a few studies argue to the contrary, the general finding seems to be that, *ceteris paribus*, such groups are strongly attracted to the prospect of higher welfare benefits.

Cebula then offers the following warning to policy makers.

> To the extent that state and local governments try to pay for growing welfare costs with increased taxes (e.g., property taxes), they induce the economically better-off persons (and private firms) to relocate elsewhere. This clearly erodes their tax base.... The state and local governments are then confronted by a financial dilemma: rising expenditures on the one hand and depressed capacity to elevate taxes on the other. The only options open to them are increased federal grants and/or increased borrowing; in the latter case, fiscal crises such as that experienced by New York City may become inevitable (pp. 75–76).

Before moving on to the rest of Cebula's review, it will be worthwhile to comment on his reasoning so far. As I hinted above, his inference from taxation and expenditure statistics to migration statistics involves a fundamental non-sequitur. Cebula and most of the economists reviewed here assume that their analyses are revealing people's preferences, in particular, preferences for relatively high welfare benefit levels by the poor and for relatively low levels by the better off. In the absence of any other information, these are certainly reasonable assumptions. However, because a person's place of residence provides a complex bundle of goods and services, it is impossible to isolate the primary motivator using the highly aggregated secondary data sources used in all these studies. In fact, when people (researchers and others) list the things that are important and satisfying to them about their communities, neighbourhoods and dwellings, they never mention such things as AFDC and other welfare spending, and seldom even taxes. Similarly, as we will see below, when people give reasons for moving and reasons for locating in one place rather than another, they never mention things like

welfare spending. On the contrary, at the top of their lists are jobs, friends, family and the quality of life. Indeed, single-parent mothers often report that they move in order to find more acceptable housing and environmental conditions for their children, in spite of the fact that they know the first casualty of their move will be their local welfare benefits. Thus, although the aggregated statistics used by the economists are consistent with their hypotheses, they are also consistent with the alternative hypotheses that say people move in search of jobs, housing, and so on. More importantly, the more direct evidence from social surveys clearly indicates that these economists' conclusions about people's motives for moving are misleading. They are exactly analogous to assuming that cigarette smoking reveals a preference for lung cancer or stained fingers because the latter are highly predictable from the former. There is almost as much direct evidence indicating that people prefer work over welfare as there is that they prefer clear lungs to cancer (Michalos, 1982, pp. 49–55). So, there is something very anomalous about studies that continue to neglect such direct evidence in favour of ambiguous aggregate studies.

As indicated earlier, economic studies based on simultaneous equations assume some sort of reciprocal causation between migration and fiscal variables. Cebula and Kohn (1975) used a simultaneous-equation approach to study state gross migration in the 1965–1970 period. For whites, they found that relatively high welfare payments predicted high out-migration, but such migration had little impact on welfare payments. For nonwhites, they found that relatively high welfare payments predicted high in-migration and the latter also predicted the former. So, considering welfare payments, they found a reciprocal relation for nonwhite but not for white migrants. Relatively high property taxes predicted low white in-migration but little impact on nonwhite in-migration. Nonwelfare spending was found to be 'a relatively insignificant determinant of migration'. The latter finding differs from Cebula's (1974a) study of inter-SMSAs migration cited above showing that nonwelfare spending predicted nonwhite in-migration for the same 1965–1970 period.

Chao and Renas (1976) used a three-equation model to study American inter-SMSA migration in the 1960–1970 period. They

found that welfare differentials did not predict white migration, but white in-migration negatively influenced welfare levels.

Kahn (1977) used a two-equation model to study net migration to municipalities in the Netherlands in the 1960–1967 period. As expected, he found mutual influence between growth rates of per capita welfare levels and in-migration.

Liu (1977) used a four-equation model to study migration among American SMSAs in the 1960–1967 period. His findings indicated that relatively high local government expenditures predicted relatively high in-migration.

Cebula (1978) studied inter-SMSA migration in the 1960–1970 period in the United States using a two-equation model, and found that migration and per capita income growth are mutually influential. Regarding the prediction of migration, he found that 85% of its variation was explained by relatively high income growth, low property taxes and high spending on public education. Regarding the prediction of high income growth on the other hand, he found that 71% of its variation was explained by relatively high migration and low property taxes. Unfortunately, all the property tax figures were inflated because they were a combination of residential and relatively higher commercial property taxes. Presumably the relative significance of property taxes would have been lower if their size had not been inflated.

Following his review of simultaneous-equation studies, Cebula (1979) notes that most of all the studies he examined focused on some sort of welfare variables as predictors and ignored 'such factors as public education expenditures, property tax levels, highway and health expenditures, the general (average) level of state plus local taxes, and so forth' (pp. 79–80). Such concentration, he noted, precludes any sort of benefit/cost analysis regarding the mix and impacts of state and local policies. We just do not know, for example, how much of any local expenditures were funded by nonresident commuters paying income and sales taxes. The absence of studies dealing with the impact of living costs on migration is another serious deficiency.

Ellson (1980) examined migration between central-city areas and suburbs in 50 American metropolitan areas for the 1960–1970 period. His predictors included local per capita expenditure/revenue

ratios and income levels, and his results indicated that the Tiebout hypothesis was confirmed by middle income households but not by upper income households. But there was a caveat regarding the impact on middle income households. In areas with declining central cities, 'fiscal differentials appear to be an effect of the decentralization [out-migration] process rather than a determinant', while the opposite is true for metropolitan areas with expanding central-city populations (pp. 208–209). That is, in response to a significant out-migration, urban officials try to make central-cities more attractive, which requires an increase in expenditures. On the other hand, as central-cities expand, their expansion leads to greater expenditures. So, whether central-cities are expanding or contracting, the result seems to lead to greater expenditures. The difference is that in the expanding case, revenues are typically increasing too.

Islam and Rafiquzzaman (1991) employed a bivariate analysis which showed that property taxes and inter-municipal migration mutually influenced each other in Canada in the 1940–1984 period, and a multivariate analysis which showed that while property taxes predict migration, the reverse is not necessarily true. Unfortunately, these analyses were problematic. Altogether, three predictor variables were employed, namely, average property tax payments, yearly local government expenditures and median values of single, detached owner-occupied houses. Property taxes were combinations of 'real property, personal, business and poll taxes collected by various municipal governments'. So, the first problem is that their property tax variable is inflated (besides being conflated). Second, they used a sequential estimating procedure that makes differential and dubious use of time lags between the various predictors and the dependent variable, migration flows. While it is certainly plausible to experiment with such lags in order to allow time for change, the strategy also increases the possibility that discovered measured relationships are the result of increasing the apriori chances of discovery; e.g., finding no relation between this year's figures for two variables, one compares this year's figures on one with next year's figures on the other, then with the year after that, and so on. In brief, the procedure capitalizes on chance. Allowing a five-year lag for each predictor to reveal some influence on the dependent variable, as these authors did, was tantamount to giving their hypothesis

many more chances to reveal a significant relationship. On the basis of the information given in their article, it is impossible to know exactly how many more chances of success their strategy created for their hypotheses. Nevertheless, for example, in the bivariate case their strategy allowed them to explain 92% of the variance in migration figures using one appropriately lagged combination of their predictors, and 94% of the variance in property tax figures using another appropriately lagged combination of their predictors, including migration figures (p. 627, Table 1, equations 2 and 9). In the multivariate case, they were able to explain 70% of the variance in migration flows, but unable to significantly explain property taxes.

Earlier I cited demographic studies showing that most of the interregional migration in Canada since the 1930s has been toward Ontario and British Columbia. In a review of the country's shelter costs in the 1981–1986 period, Bird (1990) showed that those two most popular receiving areas typically have the highest shelter costs in the country. The costs aggregated in Bird's analysis include payments for utilities, municipal services and mortgages, property taxes and rent, depending on whether the dwelling is owned or rented. In 1986, Newfoundland had the lowest average shelter costs for homeowners and New Brunswick had the lowest costs for tenants. Of course, neither province was a magnet for migrants. Clearly, high shelter costs (for whatever reason) are not typically a major push factor behind residential migration any more than low shelter costs are a major pull factor.

If one examines (1) real per capita property taxes (local and provincial property taxes combined), (2) property taxes as a share of provincial personal disposable income, or (3) consolidated provincial and local government revenues as a share of provincial personal income for Canada's provinces in the 1969–1986 period (Smith, 1990, pp. 304, 318, 327), one gets a more direct test of Tiebout's hypothesis and finds just what was found regarding overall shelter costs. That is, overwhelmingly migration is from the relatively low taxed Maritime provinces to the relatively high taxed provinces of Ontario and British Columbia. Interestingly enough, the Maritime provinces' consumption taxes are typically much greater than those of Ontario and British Columbia, relative to property taxes (Smith, 1990, p. 322). Thus, since consumption taxes are notoriously

regarded as the most unfair of all taxes, one could say that the migration flows are clearly away from provinces with relatively unfair tax regimes and toward provinces with relatively fair regimes.

Following clearly in the Tiebout tradition, Courchene (1981) posited a 'transfer-dependency hypothesis' according to which, for example, equalization payments to the Atlantic provinces subverted market forces that would induce out-migration to higher income provinces. On the contrary, Boadway and Flatters (1982) argued that greater inefficiencies would result if no attempt was made to equalize fiscal capacity of provinces. Winer and Gauthier (1983) and Mills, Percy and Wilson (1983) tried to throw some empirical light on the dispute by examining interprovincial migration in the 1951–78 and 1961–78 period, respectively. They concluded that both sides were right. Shaw (1985) gave a fairly detailed summary of the dispute and concluded that, among other things, 'too much is being made of too little evidence' (p. 42). Because I was persuaded by Shaw's analysis, I have not given these studies more space.

In what is called a 'standard Newtonian gravity model', 'spatial flows between two points ... [are] ... proportional to the product of the origin area trip generation capacity and the destination area trip attraction capacity, whilst being inversely related to the intervening distance' (Twomey, 1987, p. 1394). Trip generation and attraction capacities are usually operationalized as population sizes. Lycan (1975) reviews eight studies providing some support for one or another variant of such a model. Although the model is essentially demographic rather than economic, I mention it now because it was used in combination with the Tiebout hypothesis.

Twomey (1987) combined this sort of model with Tiebout's hypothesis regarding fiscal variables to explain migration patterns among four counties in the northwestern part of England based on 1981 figures, with remarkable success. In each county, over 90% of the variation in migration was explained by his predictors. The latter included an index score formed by the difference between the expenditure/tax ratios of sending and receiving counties.

Summary of Section 2.2Ai. In broad strokes, the studies reviewed here of the Tiebout hypothesis showed about 23 (72%) confirmations and 9 disconfirmations. So, it is fair to say that there is more

evidence for than against the hypothesis. However, as indicated in the text, although the hypothesis has predictive validity, it is doubtful that it reveals people's preferences for settlement areas with relatively high or low provisions of public goods and services, especially welfare benefits. Since areas of expanding economic opportunities are typically also areas with expanding provisions of public goods and services, the fact that people migrate to such areas is not conclusive evidence that they are migrating in the interests of obtaining such goods and services. Indeed, the next two sections indicate that the cases for alternative hypotheses are more persuasive.

2.2Aii *The classical competitive model: General case.* According to the classical competitive model of migration, it is assumed that there is full employment, perfect knowledge of employment opportunities, no barriers to migration, an abundance of workers homogeneous in skills and tastes, and competition is therefore perfect. In such a world people would migrate to change jobs directly in response to wages offered in receiving and sending areas. As one might have expected, since the real world is considerably different from that assumed in the classical model, the fit between predictions from the model and actual events is far from perfect.

In an excellent review article on migration, Ritchey (1976) summarizes the results of many studies of the model as 'inconclusive'. Courchene (1970) found the predicted positive association between rates of migration flows and earned income between Canadian provinces. Vanderkamp (1971) noted that since earnings levels of sending areas would tend to be lower than those of receiving areas, the former would create some sort of a barrier to migration. Relatively poor people can't just pick up and move to greener pastures. Among the costs of relocation, Ritchey (1976, p. 366) mentions

> (a) earnings foregone during migration and settlement; (b) losses in liquidation of assets, e.g., a home; (c) transportation costs for people and possessions; (d) invested pensions; (e) uncertainty about income prospects due to lack of information; (f) immediate psychic costs of moving; and (g) the difference in psychic income associated with sender and receiver areas, e.g., kinship interaction.

Taking account of some such barriers, Vanderkamp also found support for the classical model regarding movement among Canadian provinces in the 1947–1966 period. Other researchers

failed to confirm the hypothesis; e.g., Beals, Levy and Moses (1967), Iden and Richter (1971) and Trott (1971). Data in the USA for the 70s involving the nonmetropolitan turnaround typically failed to support the hypothesis; McCarthy and Morrison (1979), Beale and Fuguitt (1978).

The classical model would lead one to expect that unemployment in the sending area would be directly related to out-migration and inversely related to in-migration in the receiving area, but again the evidence is mixed. Rabianski (1971), Cebula and Vedder (1973) found confirming evidence, Courchene (1970) found mixed evidence, and Lowry (1966) found disconfirming evidence. In testing these hypotheses, besides using measures of unemployment as the predictor variable, researchers used employment, labour force participation, employment change and average weeks worked to measure jobs available (Ritchey, 1976, p. 371).

Considering migration flows among Canadian provinces, McInnis (1971) found that the relation between migration and earnings decreases as age increases, increases as eduction increases and is not systematically related to occupational status. If one thinks of migration as a kind of investment in human capital, then one might expect migration to decrease with age since the fewer working years one has left, the smaller the expected value from increased investments in one's human capital. In fact, support for a general human capital approach to migration has been found; e.g., Bowles (1970), Wertheimer (1970). Indeed, the profiles of typical migrants sketched earlier are certainly consistent with the human capital model.

Shulman and Drass (1979) found that 43% of their sample of in-migrants to Hamilton moved because of jobs. As predicted by the human capital model, occupational motives declined in importance as the age of the migrant increased.

Although Statistics Canada's Labour Force Survey does not usually look for reasons for people's migration, information was obtained for those migrating between 1981 and 1984. Fifty-eight per cent of those moving from the Atlantic provinces to Ontario cited employment-related reasons such as employer initiated transfers, relocation to a new job or simply relocating to look for work. Only 48% of those moving in the opposite direction cited such reasons.

The second most frequently cited reason for moving was the pull of family and friends in the receiving region. Twenty-one per cent of those moving east cited such reasons, compared to 14% moving west (Hiscott, 1987).

Williams, Jobes and Gilchrist (1986) studied a random probability sample of 390 recent migrants to the Gallantin Valley of Montana, and found that 61% of them moved for job-related reasons.

Sell (1983) analyzed national data on migration in the United States for the 1973–1977 period and found that about two-thirds of the migrants moved for job- or employment-related reasons.

A number of researchers have explored the impact of immigrants from foreign countries on the earnings and job opportunities of natives in the receiving country. An excellent review article by Borjas (1989) indicated that several studies using United States census data showed that 'A ten percent increase in the number of immigrants reduces the native wage by at most one half of one percentage point' ... and ... 'the immigrant wage by at least two or three percent' (p. 481). Presumably the relatively greater impact on immigrant wages is a result of the limited job opportunities for the latter.

According to Long and DeAre (1980), most relatively short-distance, within community, moves are made for reasons related to families, neighbourhoods and housing, while most relatively long-distance, between community, migration is employment-related.

The most comprehensive and recent Canadian application of a combination of the classical competitive and Tiebout models was published by Shaw (1985). He examined migration patterns for 17 Census Metropolitan areas in four time periods, 1956–61, 1966–71, 1971–76 and 1976–81. Results of his regression analyses were reported by indicating percentages of variance explained in his dependent migration variables, and by noting whether each predictor had both an expected positive or negative influence (plus or minus sign) and statistical significance (at a 0.01 level). Aggregating all his data for the 1956–81 period, he found his predictors explained 64% of the variation in migration flows. Only 9 (35%) of 26 regression coefficients had both an expected sign and were statistically significant. The significant variables included those for distance, language, employment in receiving area, education in sending area, housing

starts in receiving area, federal grants in receiving area, lack of snow in receiving area, percent females in labour force of receiving area, percent immigrants in receiving area. In brief, this list of significant predictors tells us that educated people and immigrants tend to gravitate to economically expanding areas, which is what one would expect given the fact that most migration is job-related.

Although Shaw claimed that by comparing his pre-1971 to post-1971 figures he was able to show that 'fiscal variables such as unemployment insurance and federal equalization grants are partially responsible for crowding out the influence of more "traditional" labour market variables on migration' (p. 117), I do not think his numbers warrant this conclusion. If one looks at the relative impact of the six fiscal variables in the pre- and post-1971 regressions (Table 4.7, p. 115), one finds three significant predictors in each time period. Shaw's conclusion is based on his limited analysis using only a subset of his total set of predictors, because he thinks the limited analysis somehow reveals the real impact of the fiscal variables on migration. On the contrary, I think the limited analysis is simply a misspecified equation indicating a set of relationships which in fact do not exist in the real world. In the fully specified model, fiscal variables are not more important pre- than post-1971. (It is, of course, trivially true and required no analysis to prove that if grants and unemployment insurance were negligible they could have only a negligible impact.) In any case, all the figures are very small indeed. For example, nominal wages in a sending area might be able to explain as much as 4 tenths of one percent of migration rates, and vice-versa, while 2 per cent of migration rates might be explained by nominal wages in the receiving area and vice-versa. Percent of immigrants in a receiving area has the greatest association with in-migration, followed by distance between areas and the percent of females in the labour force of the receiving area.

Summary of Section 2.2Aii. In this section, about 16 (73%) of the studies confirmed the hypothesis that migration is generally in the direction of relatively expanding economic areas with greater employment opportunities and higher incomes. The most comprehensive Canadian study combined this general hypothesis with Tiebout's and found that features of receiving areas were much

more influential than features of sending areas. In particular, the most significant predictors of migration included a receiving areas's employment opportunities, housing starts, federal grants, lack of snow, percent of females in the labour force and percent of immigrants. In general, the greater the distance between two areas, the lower the levels of migration.

2.2B *Quality of life motives*

Since the evidence supporting the economic mobility models is a bit mixed, many researchers have turned to an examination of motives that are broader. The turn is understandable and the research has been fruitful, but its limitations are and were predictably mixed. In his excellent review article, Fuguitt (1985, p. 270) wrote that

> economists continue to argue the 'chicken-egg' question of whether people follow jobs or jobs follow people.... This research has provided evidence that both processes are at work and so opens the door to suggestions that amenity-based, or noneconomically motivated, migration may result in increased economic opportunities.

That is, people may be motivated to move for some reason that is not economic, but find some economic advantage in moving.

Several authors have discussed the reciprocal relationships between spatial and social distance; e.g., Spain (1990); Massey, Condran and Denton (1987); Leiberson (1963, 1980); Massey and Mullan (1984). Massey, Condran and Denton (1987) cite several studies indicating that one's place of residence not only reflects one's past social and economic achievements, but also one's prospects for advancement, access to jobs, health risks, risks of single parenthood, risks of criminal victimization, public services, taxes, housing costs and schools. 'Ecological theory', they wrote,

> postulates that spatial mobility is a natural concomitant of social mobility. With rising social status – as measured by education, income, and occupational status – groups attempt to improve their spatial position in urban society by selecting neighbourhoods with richer resources and more amenities, areas more consistent with their enhanced status. In economic terms, a move to a new neighbourhood by an upwardly mobile family may be considered to be an investment in real capital (a house), in human capital (children's education), in productivity (improved health and safety), or in psychic satisfaction (neighbourhood status). Families expect to reap future returns from these investments in terms of capital gains, intergenerational mobility, higher earnings, or greater prestige (p. 33).

Priemus (1986, p. 34) summarized the view from one direction succinctly in his 'iron law of the housing market' according to which 'the (economically) stronger parties in general manage to take possession of the better dwellings and the weaker parties have to be satisfied with the worse dwellings'.

Duncan and Newman (1975) distinguished 'productive moves' which were intended to improve family earnings from 'consumptive moves' which were intended to improve residential or community environments. Examination of results of several national surveys in the USA found that most moves were consumptive moves (Duncan and Newman, 1975; Roistacher, 1974). It should be emphasized, however, that differences in the wording of key survey items showed marked differences in results. In particular, when questions were phrased in purely attitudinal ways (e.g., 'Would you prefer to live elsewhere?') about 35% responded positively, but when questions were phrased in terms of behavioural intentions (e.g., 'Do you expect to move in the near future?') about 25% responded positively. After reviewing several studies relating satisfaction to expectations or aspirations, Michalos (1980a) reported at best mixed results connecting expectations to satisfaction but eleven studies successfully connecting aspirations to satisfaction.

Using the 1983 Annual American Housing Survey ($N > 35{,}000$), Spain (1990) found that the 'strongest or second-strongest predictor of quality' in the housing unit of a recent mover was the quality in the previous unit. For example, the best predictor of the value of one's current housing unit was the value of one's previous unit.

The presence of relatives and friends in a receiving area increases information, decreases the cost of obtaining information, creates a psychic benefit (assuming one likes to be near relatives, which of course is not true for many people), and could provide financial and other kinds of social support benefits. Pack (1973), Cebula, Kohn and Vedder (1973) found that in the United States the percentage of population that is black can be used as a surrogate for friends and relatives in studies confirming the positive association between migration and contacts in the receiving area. Greenwood (1970), Tarver and McLeod (1973) found that migrant stock (the presence of people in the receiving area who are from a given sending area) can also be used as a surrogate measure in migration/contacts research.

In a small study of Newfoundland migrants to Hamilton, Ontario, Martin (1974) found that

> 67 percent of the upper class and 22 percent of the middle class respondents moved to Hamilton without knowing anyone there. Every one of the lower-ranking migrants had such a contact in the receiving area, however. In 15 percent of the cases this was a spouse or a friend from Hamilton; in an overwhelming 85 percent of the cases it was a Newfoundland relative or friend now living in the receiving area (Martin Matthews, 1980, p. 50)

Shulman and Drass (1979) found that 88% of their sample had 'preexisting ties' to Hamilton. Thirty-nine percent of these people had a prearranged job, and 73% had ties to friends or relatives.

There is evidence that a temperate climate can attract some kinds of migrants; e.g., Greenwood and Cormely (1971) and Cebula (1974) found that white Americans were attracted by such a climate. The presence of institutions of higher education in receiving areas have been shown to attract migration by Sahota (1968) and Greenwood (1969), and to retard migration from sending areas by Sahota (1968) and Beals, Levy and Moses (1967).

Pollution, health services, crime rates and housing stock have also been related to migration in the expected directions; Cebula and Vedder (1973), Pack (1973).

Zuiches and Fuguitt (1972), Fuguitt and Zuiches (1975), Fredrickson et al. (1980), Howell and Frese (1983) showed that a majority of migrants in the United States were motivated by preferences for particular kinds of housing and communities.

Lansing and Mueller (1967) showed that people expressing preferences for a move were four times more likely to move than those without such preferences.

Speare (1974) hypothesized that residential satisfaction would be an intervening variable between individual and residential characteristics on the one hand and migration on the other. He showed that duration of residence, home ownership, room crowding and age of household head did influence mobility through their impact on residential satisfaction. Similar hypotheses were confirmed by Sonnefeld (1974) and White (1974).

Kirschenbaum (1983) examined a relatively small American sample to explain willingness to move, satisfaction with neighbourhoods and satisfaction with one's apartment. Satisfaction with one's apartment was most influential in explaining willingness to move

(inversely), appropriateness of apartment size was most influential in explaining satisfaction with one's apartment, and perceived suitableness of a community for rearing children was most influential in explaining satisfaction with neighbourhood.

Shulman and Drass (1979) had 20% of their sample moving to Hamilton for better housing, including cheaper housing, 14% to be near to family and friends, 6% to be in a familiar, clean or otherwise attractive city. The movers were often willing to pay the price of greater commuting time in exchange for generally superior housing.

Lassarre (1986) examined the motives of 120 low- and middle-class families who moved to Evry, Ville Nouvelle, France, and found that the most frequently mentioned reason (32%) was an increase in family size. She found no relationship between the reasons for moving and family income. Eighteen months after the families had moved into their new homes, she found that only three households expressed any regrets regarding difficulties making payments. Indeed, the reported regrets made it clear that the movers had been relatively careful in their choice of dwellings (size, price and location), but had failed to take adequate account of the surrounding environment; e.g., noise, public maintenance, traffic safety and congestion.

A couple years after the publication of Fuguitt's 1985 review, Adamchak (1987) published results of a provocative survey calling into question some of the research on which Fuguitt's conclusions were based. One of the most important studies reviewed by Fuguitt examined migration in 75 nonmetropolitan counties in the North Central Region of the United States (Williams and Sofranko, 1979). Adamchak's main purpose was to compare his results to the North Central results.

Adamchak studied 321 residents and 394 migrants into 13 nonmetropolitan turnaround counties in Kansas in 1981–1982. If a county was located within a Standard Metropolitan Statistical Area, migrants from it were regarded as metropolitan migrants, and those from outside such areas were regarded as nonmetropolitan migrants. While previous research had typically shown that metro-origin migrants moved to nonmetropolitan areas for quality of life or environmental reasons rather than job-related reasons, Adamchak found 'no significant difference existed between metro and nonmetro migrants in ranking employment-related reasons as most important

(53.7 and 59.7 percent, respectively). The North Central study found a significant difference; 24.4 percent of metro and 46.4 percent of nonmetro migrants moved for employment-related reasons' (pp. 113–114). Although both metro- and nonmetro-migrants were primarily motivated by job-related considerations, secondarily the former were more motivated by quality of life considerations than the latter. Adamchak suggested that the main difference between his findings and those of the North Central study was the result of the fact that 'The North Central project included amenity-rich counties that attract a certain type migrant, particularly the retiree and the associated service multipliers. That project had a total of 30.6 percent age 60 and over, whereas the Kansas turnaround project had just 14.6 percent' (p. 116).

Currie and Hallie (1989) used their Winnipeg and Edmonton Area Studies surveys for 1981 to examine migration patterns for each city in the 1976–81 period. Since Winnipeg grew by only 8% in the 1971–81 decade while Edmonton grew by 33%, it was an opportunity to compare relatively rapid and slow growth communities. Throughout the decade Winnipeg had more out-migration than in-migration. So all of its growth was the result of a net gain of births over deaths. There were 57 and 119 in-migrant respondents, respectively, to Winnipeg and Edmonton. In both cities, compared to average Canadians, migrants were relatively younger, better educated and employed in professional and managerial occupations. Thirty percent of migrants to Edmonton were married with both partners employed full time, compared to 9% of migrants to Winnipeg. Fifty-nine percent of migrants to Winnipeg cited job-related reasons for moving, compared to 44% of migrants to Edmonton. Family reasons and educational opportunities were the second and third most frequently mentioned reasons for moving to both cities. At most 20% of respondents gave only economic reasons for moving, which is why the authors cited 'mixed motivations for migration' in the title of their article. Examining later Area surveys in both communities, it was found that about 50% of migrants to Winnipeg in the 1976–1986 period were return migrants, compared to 30% for Edmonton. In the latter case, the highest percentage of return migrants, 41%, showed up in the 1983–86 period of severe economic distress. Apparently a lot of people 'go home' when things get rough.

In 1987 the author of this literature review was commissioned to undertake a survey of 1400 residents of several Ontario cities in order to determine the relative importance of various quality of life and economic variables on residential migration decisions. While the exact identity of the cities and the data cannot be revealed, the general results are worth reporting. Because both open-ended and closed-format types of questions were used in the survey, it is likely that few salient concerns of respondents could have been missed. Following the research of Williams and McMillen (1980), Roseman (1977), Quigley and Weinberg (1977) and Speare (1974) questions concerning the decision to move were separated from questions concerning the decision regarding where to move.

Responses to open-ended questions indicated that:

- The most frequently mentioned reasons movers gave for leaving their last place of residence were that they wanted a nicer house or they changed jobs, in that order.
- The most frequently mentioned reasons for locating in their present residences were that they wanted a nicer house, to be closer to work or more reasonable housing costs.
- The most frequently mentioned reasons for people planning to move were that they wanted a nicer house or were changing jobs.
- Those who already planned to move to a particular place most frequently mentioned its nearness to work or the attractiveness of the house.
- The most frequently mentioned reason for people planning to stay where they were was that they just had a nice house.
- Things that would be most important to people if they were planning to move included the availability and quality of community facilities, distance from work, a nicer house and the quietness of the community.
- The best things about living in the various communities according to all respondents included the friendliness of neighbours, proximity to retail facilities, physical attractiveness of the community, its quietness, and proximity to community facilities, parks and recreation.
- The worst things about living in the various communities included the physical unattractiveness of the community, poor

public transportation, lack of good medical facilities, traffic congestion, lack of retail stores and high taxes.

Thus, high taxes were the least salient of all the features that residents regarded as the worst things about living in their various communities, and taxes apparently had no noticeable impact on migration decisions unless they were somehow rolled into considerations of general housing costs and therefore failed to reach a threshold of independent visibility.

We used closed-format, 7-point Likert-type questions to measure importance and satisfaction, with 1 = not at all important, 7 = very important, and 1 = very dissatisfied, 7 = very satisfied. The questions were oriented around four areas of concern, namely, distances between places of residence and other places, features of dwelling units, features of neighbourhoods and features of wider communities. Responses indicated that:

- For the group as a whole, if people were going to move, the distances that would be most important are those from their own and their spouse's work, police and fire protection, medical services and retail facilities.
- Highest levels of satisfaction were reported for distances to police and fire protection, medical services, retail facilities, and work.
- Considering dwellings, privacy, costs, maintenance needs and total floor space would be most important if they were going to relocate.
- Highest levels of satisfaction with dwelling features were reported for their age, type of heating, style and floor space.
- Considering neighbourhoods, if people were going to move they would assign the highest levels of importance to safety from crime, crowding, neighbourhood up-keep, quietness and street maintenance.
- Highest levels of satisfaction with neighbourhood features were reported for police and fire protection, neighbourhood image, friendliness of people, neighbourhood up-keep, safety from crime, retail facilities and parkland.
- Considering communities, if people were planning to move then highest levels of importance would be assigned to such community features as crime rates, environmental quality, community

quality of life, housing costs, community image, crowding and traffic congestion.

– Highest levels of satisfaction with community features were currently received from the general quality of community life, relatively low violent crime rates, medical facilities, property crime rates, community stability and community image.

When people changed residences they tended to improve their level of satisfaction obtained from distance to work relatively more than they improved their levels of satisfaction for any of the other 8 distance items.

On average, respondents matched or improved their distances condition in 6 out of 9 items by moving. In baseball, that would give them a batting average of 0.670.

In the case of house characteristics, they matched or improved their condition in 5 of 8 items, batting 0.630. Although privacy was their most important item, their biggest improvement came in total floor space, which was only ranked fourth in importance.

So far as neighbourhoods were concerned, although safety from crime ranked first and neighbourhood up-keep ranked second in importance, the biggest gain in satisfaction came from the images of the neighbourhoods involved, which was only sixth in importance. Regarding improvements in neighbourhood features following a move, on average people had a batting average of 10/18 or 0.560.

As far as wider communities were concerned, violent and property crime rates were most important, and biggest improvements were made in satisfaction with property crime rates and the general community quality of life.

On average people matched or improved their condition on 15 of 19 items, for an incredible batting average of 0.790.

The four items on which they lost ground were environmental quality, violent crime, traffic congestion and housing costs.

Considering evidence regarding distances, dwellings, neighbourhoods and communities, non-movers are relatively more satisfied with their residences than movers; so, the former tend not to move and the latter tend to move.

The satisfaction levels of current movers is higher than that of movers in their previous residences on most items regarding distances, dwellings, neighbourhoods and communities.

Therefore, we have clear evidence that the quality of life as subjectively experienced strongly influences people's decisions to move or not move. More precisely, we have evidence that people tend to move in order to improve the quality of their lives in a variety of specific respects, and they tend to achieve their goals for the majority of those respects. So far as one aspect of this research is concerned, namely, neighbourhood satisfaction, these results are consistent with those found from a 1981 Canadian national sample (Tepperman, 1988). They are also consistent with American results reported by Fernandez and Dillman (1979), Sell (1983), Williams, Jobes and Gilchrist (1986).

Although none of the data-sets in these studies was analyzed for reciprocal causality, most research indicates that human beings live in highly interactive systems in which environments and experiences are continually constructed and reconstructed (Michalos 1991, 1991a, 1993, 1993a). So it is practically certain that some internal adjustments regarding desires, priorities, expectations and so on are partially responsible for the increased levels of satisfaction reported by movers in their new residences.

On the basis of satisfaction scores for 18 community features, for non-movers 76% of the variance in scores for general satisfaction with the quality of life in a community was explained, for movers in their previous residences 79% was explained, and for movers in their current residences, 70%. The 18 community features included the quality and quantity of schools, parks, medical facilities, community activities, community facilities, cultural facilities, commercial/entertainment, retail, crowding, environmental quality, violent crime rate, property crime rate, job opportunities, traffic congestion, quality of roads, community stability, housing costs and image of the community.

In order to explore people's motives for moving before their move actually occurred, Winchie and Carment (1989) surveyed 362 males who had applied for immigrant visas at the Canadian High Commission in India in 1979 and 1980. On average, the group was fairly high powered. The mean age was 31 years. Seventy-three percent

had some university training, 37% had graduate degrees, and 86% had occupations characterized as skilled, clerical or professional.

> Overall, career reasons, that is lack of opportunity for advancement in job or profession and lack of suitable employment, were the most important reasons given for emigrating in terms of both importance and overall frequency.... Contrary to econometric studies... which assert the primacy of monetary factors in migration, inadequate income and earning money for family responsibilities played only a minor role in impelling the respondents to emigrate (p. 100).

In answering the question 'What would you expect to gain by immigrating to Canada?', career-related benefits were usually mentioned. Still, the most frequently cited reason for choosing Canada as a destination was the presence of relatives and friends here. For this group, then, the decision to move and the anticipated benefits of moving were career-related, while the presence of friends or relatives here served as facilitating and directing factors.

Summary of Section 2.2B. Results from the studies reviewed in this section provide substantial evidence that people tend to move in order to improve the quality of their lives in a variety of specific respects, and they continue to move until they achieve their goals for the majority of those respects. The most frequently reported motives for moving are job-related, including searching for jobs and for locations closer to jobs. The presence of family, friends, people of the same ethnic or racial group are attractions at the receiving site. The likelihood of a more satisfying house, neighbourhood and community are also attractions. Other attractions include mild climate, low pollution, low crime rates, good health services and good educational facilities. In the single survey reviewed here that distinguished reasons for leaving somewhere, reasons for moving to a particular house, reasons for planning to move and reasons for picking a particular area, it was found that job-related and house-related responses were the top two given for each reason. Several studies showed that one's satisfaction with a dwelling, neighbourhood and/or community served as a mediating variable between one's own characteristics and one's stated intention to move and/or actual migration behaviour.

2.3 *Benefits and Costs Studies*

One of the first sociologists to explore the benefits and costs of migration was Robert E. Park (1928). Park coined the phrase 'marginal

man' to characterize people who lived frequently physically on the edges of towns (like hoboes), or socially and economically between classes or other groups of people. He had been a newspaper reporter, worked with Booker T. Washington at the all black Tuskegee Institute and was a marginal man himself. He saw and described the physical, social and psychological isolation of the migrants as well as the incredible potential for growth and development resulting from new mixtures of resources, especially human resources. His natural inclinations and accumulated evidence motivated his own research strategies and the Chicago School of Sociology for the first third of this century. What was called sociological research in Chicago in its golden age was interdisciplinary or transdisciplinary. It was migrant marginalists like Park studying a wide variety of other migrant marginalists in a metropolitan area that was virtually exploding in that period.

Landis and Stoetzer (1966) concluded that relocation is generally positive for all members of families, since it is usually based on economic advancement (a new job) and tends to cultivate independence, self-reliance and adaptability.

Jones (1973) documented the disruptiveness of relocations for wives especially and families to some extent, including the loss of self-identity and self-esteem following isolation in unfamiliar social and physical surroundings. But she also reported that some wives seem to overcome the disruptions fairly rapidly, suggesting that there must be some management mechanisms. For women with careers, career plans or goals, relocation can be devastating. Such results are reported in Martin (1974), Hunt and Butler (1972), Weissman and Paykel (1972), and Seidenberg (1972).

Among the management mechanisms, one should include the presence of friends and relatives in the receiving area, as suggested above (Jones, 1976; McAllister, Butler and Kaiser, 1973).

The more one moves, the less one tends to socialize, and socialization in formal organizations tends to be more curtailed than informal socialization. Married women who have made multiple moves are less likely to be employed, and if they are employed at all they are most likely to be employed part-time (Demmler-Kane, 1980).

There is an abundance of research showing that job satisfaction increases with increases of worker participation in decision-making

and goal setting involving their own work. (Michalos, 1986, 1993). Similarly, migration researchers have found that people who move voluntarily tend to become more satisfied with their new home and community than people who move involuntarily (Dienstag, 1972; Seidenberg, 1972; Jones, 1976). Since marital satisfaction is also known to increase with increases in communication (Michalos, 1986, 1991a), there is a clear message to any couple even remotely thinking about moving, namely, talk about it. As indicated above, we know that the relatively uneducated tend to move less than the relatively educated. The former also tend to be less articulate, less communicative and more directive when they plan and execute moves, which creates relatively more stress and problems for all concerned (Schwarzweller, Mangalam and Brown, 1971).

Although most of the migrants studied by Williams, Jobes and Gilchrist (1986) moved for job-related reasons, as indicated earlier, most of them had the same or less income as a result of the move. 'One of the most surprising findings of this analysis,' the authors wrote, 'is the lack of association between income change, marital status, family satisfaction with the move, or whether the move was made primarily for job or nonjob reasons.... the fact that income did not increase as a result of the move was not related to a single other variable in the analysis' (pp. 639–640).

Tepperman (1985) re-analyzed data from the December 1980 monthly Labour Force Survey of Statistics Canada regarding migration to Alberta in the 1979–1980 period. He found that most men moved to Alberta to find a job or a better job, while most women moved as a result of their spouse's or parents' move. Labour force participation and employment increased for both men and women, but men more frequently changed from part-time to full-time work while women more frequently changed in the opposite direction. So, migration widened sexual differentiation at work. 'At least in the short run,' Tepperman wrote, 'the benefit gained by migrant men was proportional to the benefit lost by migrant women, perhaps even by their own spouses. Thus, migration may not so much increase total household benefits as re-assign the benefits from wives to husbands' (p. 53). Since 79% of the occupational change did not involve any upgrading or downgrading, he characterized the change as mostly 'a game of musical chairs'.

2.4 *Kinship Studies*

Perhaps the first great migration study of this sort was that of Thomas and Znaniecki (1927) on the Polish immigrants to Chicago. The work was very short on theory, very long on pages and very personal, since it was based on hundreds of letters of immigrants to and from friends and loved ones. The hopes, fears, frustrations and accomplishments expressed in these letters are reproduced in two massive volumes.

Litwak (1960) claimed that modern communications technology had tended to reduce the disruptive impact of migration on family ties, but most research has documented some disruption. Jones (1976) found that migrants who were most satisfied with their new surroundings were likely to have had relatives or friends already living in the area. Working class people and relatively young people are more likely than professional people to move to receiving communities already inhabited by family members, and to have chain migrations of immigrants from the same family or sending area (Tilly, 1965; Choldin, 1973; Tilly and Brown, 1968).

Just as the presence of family and friends in a receiving area can attract migrants, their presence in a sending area can retard migration. Lansing and Mueller (1967) found that migration out of an area was four times more likely for people without relatives in the area than for people with relatives in the area.

2.5 *Developmental Studies*

Martin Matthews (1980) studied the lives of 123 married women who moved with their spouses to the CMA of Hamilton, Ontario from other areas in Canada at least 35 miles away. Her particular concern was to examine 'the wife's role in and response to her moving career'. The 'career' was divided into four stages called 'decision-making, planning, relocation and settling-in'. The wives who were extensively interviewed had not lived in the CMA within the preceding five years and were interviewed within a year of their move. She found that although the women had little control over the decision to move, they had

> substantial control over what they consider to be the 'mundane' tasks which comprise the planning and relocation stages. During the settling-in stage, however, most women play the key role in establishing the home and making the move successful for their families. Thus many women feel responsible for the success of a moving career which they had little role in initiating.

The relocations meant different things to husbands and wives, and were experienced in different ways. Most wives felt the move was more difficult for them than for their husbands. In many cases the husbands went on ahead weeks or months before the wives and children. Many wives regarded this sequencing as the 'most difficult and disruptive stage of the moving career'. The particular stage of their family life cycle also had an impact on their experience. For those who had just become, were about to become mothers or whose children were going to school for the first time, relocation was especially stressful. Since people's own personal identity and self-worth is to some extent a reflection of their social networks, insofar as the networks are disrupted, people's perceptions of and feelings about themselves become disrupted. While husbands typically are joining a new team by invitation and therefore have at least provisional socio-economic status in a relatively explicit social network represented by their new job, wives are moving into a relative vacuum compared to what they are leaving and to what their husbands are moving into. To complicate matters even more, because women are socialized to regard their problems as personal rather than public, political and structural, they tend to regard their problems with relocation as some sort of personal defect. They feel guilty, personally inadequate and generally a drag on the family, and of course frequently have this view of their performance reinforced by their husbands. Weissman and Paykel (1972) also document this unfortunate scenario.

Christiansen-Ruffman (1976) identified five stages of what she called 'the newcomer career'. These included 'the preamble, moving-in, settling-in, feeling-comfortable and feeling-accepted'. Martin Matthews' first stage includes Christiansen-Ruffman's first two stages.

Summary of Sections 2.3, 2.4 and 2.5

Broadly speaking, the studies reviewed in the previous three sections attempt to assess the benefits and costs of moving to migrants and families, regardless of their motives for moving. The latter two sections are a bit more focused on women and families. Some studies showed that there were economic improvements, but others showed not only no improvement but even some deterioration in economic status. In particular, several studies showed that migration is typically a very different experience for husbands, wives and families

in the same household. Wives especially in migrating families are typically left with the responsibility of arranging the details of actually moving out of one place and into another, and for looking after the personal, day-to-day needs of family members. All of this is consistent with the enormous literature indicating that women in general and wives in particular do most of the reproductive labour in virtually all societies (Michalos, 1991a). More often than husbands, wives tend to suffer serious disruptions in their self-esteem, self-identity, socialization and careers. They tend to have more guilt and more feelings of inadequacy. Those who move involuntarily and without consultation are the most severely injured.

3. OVERVIEW OF MIGRATION STUDIES

Compared to average citizens of any country, migrants are typically younger, better educated, employed in secondary industries or professions, unmarried or relatively recently married, with relatively fewer children, and are renters rather than home-owners. In Canada, since the 1930s most interprovincial migration has been to Ontario, British Columbia and Alberta from other provinces.

Motivational studies of migration undertaken by economists usually begin with an abstract model that assumes people's behaviour reveals their preferences. The closer actual behaviour comes to matching predicted behaviour, the more persuasive the case for the imputed preferences becomes. Motivational studies undertaken by sociologists usually begin with survey research in which direct questions are put to people regarding their reasons for moving or not. While sociologists sometimes claim that the economists' method can at best have predictive validity and economists sometimes claim that the sociologists' method uses small samples and lacks substantive theory, the fact is that both disciplines have provided worthwhile insights into the relationships between fiscal policy variables, migration and the quality of life.

There is evidence from economic literature indicating that people migrate toward areas with relatively good provisions of public goods and services; e.g., good social security safety nets, educational facilities, clean and safe streets. However, because areas with expanding provisions of public goods and services are typically also areas

with expanding economic opportunities, the fact that people migrate to such areas is not conclusive evidence that they are migrating primarily in the interests of obtaining such goods and services.

The most comprehensive Canadian study found that features of receiving areas were much more influential than features of sending areas. In particular, the most significant predictors of migration included a receiving area's employment opportunities, housing starts, federal grants, lack of snow, percent of females in the labour force and percent of immigrants.

There is evidence from survey research indicating that people tend to move in order to improve the quality of their lives in a variety of specific respects, and they continue to move until they achieve their goals for the majority of those respects. The most frequently reported motives for moving are job-related, including searching for jobs and for locations closer to jobs. The presence of family, friends, and people of the same ethnic or racial group are attractions at the receiving site. The likelihood of a more satisfying house, neighbourhood and community are also attractions. Other attractions include mild climate, low pollution, low crime rates, good health services and good educational facilities. In the single survey reviewed here that distinguished reasons for leaving somewhere, reasons for moving to a particular house, reasons for planning to move and reasons for picking a particular area, it was found that personal job-related and house-related responses were the top two given for each reason. Several studies showed that one's satisfaction with a dwelling, neighbourhood and/or community served as a mediating variable between one's own personal characteristics and one's stated intention to move and/or actual migration behaviour.

Survey research has also shown that while many migrants do get their desired economic improvements, others not only fail to get an improvement but even have some deterioration in economic status. In particular, several studies showed that migration is typically a very different experience for husbands, wives and families in the same household. Wives especially in migrating families are typically left with the responsibility of arranging the details of actually moving out of one place and into another, and for looking after the personal, day-to-day needs of family members. More often than husbands, wives tend to suffer serious disruptions in their self-esteem, self-identity,

socialization and careers. They tend to have more guilt and more feelings of inadequacy. Those who move involuntarily and without consultation are the most severely injured.

4. CRITICAL ISSUES IN QUALITY-OF-LIFE MEASUREMENT

On the basis of the fairly extensive literature review just presented, it is possible to list some of the most salient critical issues related to migration and the quality of life. Anyone constructing a system of social indicators of the quality of life with the aim of integrating them into a social reporting or accounting system to monitor changes in the quality of people's lives will have to address these issues. The success or failure of one's system will be determined by how well or poorly one carries out this set of tasks.

4.1 *Settlement/Aggregation Area Sizes*

The size of the community, settlement or aggregation area to be used in quality of life studies is crucial. Roughly in descending order of size, there are international communities (e.g., member countries of the United Nations, OECD, Latin America, Africa), countries, regions within countries, provinces/states, counties, Census Metropolitan Areas (CMAs)/Standard Metropolitan Statistical Ares (SMSAs), cities/municipalities, suburbs, central cities, neighbourhoods, dwelling units (single family detached houses, condominiums, apartments). The dynamics of change within aggregations of various sizes can affect comparative studies across space and time. Further, very often one has some sorts of data for certain aggregations but not for others. For example, one might want to examine municipality water or air pollution but the only relevant data applies to broad watersheds or air catchment areas. Even if one ignores international applications, there are 10 possibilities left. How many of these should be considered?

4.2 *Time Frames*

Some data are only collected at 10 year census intervals, some at five, some yearly, some monthly and some only sporadically. The selection of some time frames may be a matter of convenience, while others may have important substantive consequences. For examples,

in developed countries one can usually count on a broad array of Vital Statistics (e.g., births, deaths, life expectancy figures) and National Income and Product Accounts statistics (e.g., Gross National Products, balance of trade, government expenditures) on an annual basis. However, one cannot usually count on seeing annual health status reports (e.g., levels of bed disability, obesity, chronic disease) or natural resource reports (e.g., depletion of forests, fisheries, fossil fuels). One's ability to perceive significant changes and to intervene in any particular system may be increased or decreased by how timely one's information is. How frequently should data of a certain duration be collected to be included in a system of quality-of-life measures?

4.3 *Population Composition*

Supposing one picks some particular settlement areas, one then has to decide how, if at all, to classify the population in the area. One often wants population statistics by age, sex, education, language, occupation, employment, incomes, marital status, family status and religion. Except for sex, which has two categories, the other groups may be divided on average at least five times. Which divisions should be used?

4.4 *Domains of Life Composition*

Having fixed the area and characterized a population demographically, one must then decide which domains of life have an important impact on the quality of one's life. At least 13 possibilities immediately come to mind: health, finances, job, family, friends, living partner, education, recreation, housing, transportation, government services, human-made and natural environments. Research has shown that some of these domains have typically greater impact on well-being than others, and of course each domain may be usefully subdivided. For example, the domain of natural environments includes air, land and aquatic environments. Each of the latter have stocks and flows of assets and liabilities. What should be the focus?

4.5 *Indicator Selection*

The issue here concerns exactly which set of objective and subjective indicators should be used to measure this or that aspect of the

quality of life? Gauthier (1987) reported the results of a survey of nearly one thousand clients who received some assistance from the Canada Mortgage and Housing Corporation Residential Rehabilitation Assistance Program in 1981. The basic aims of the program are to improve substandard housing units, extend the useful lives of buildings and generally aid residents in maintenance. Objective and subjective indicators of program success were used and, among other things, Gauthier claimed that

> The most conclusive finding of this analysis and of the literature in general is that the level of client satisfaction for a particular program is only indirectly related to his/her objective conditions and to real results of the program's actions.... Moreover, the lack of stability in the measurement of satisfaction over time makes its use difficult; a particular measurement taken at the time of program activity will be more positive than a measurement taken later (p. 250).

How, then, should subjective and objective indicators be selected and integrated?

4.6 *Measurement Scales*

Objective and subjective indicators can be constructed with ordinal, interval and ratio scales, with single item scales or multi-item indexes, with standardized or relatively ad hoc scales. If one operationalizes subjective well-being or quality-of-life as life satisfaction or happiness, there are at least two dozen standardized tests that might be used (Michalos, 1991). If one operationalizes quality-of-life as health care professionals are inclined to do, there are at least a different two dozen standardized tests (Michalos, 1993a). Which scales should be used?

4.7 *Decision Makers*

Different decision makers often make very different decisions about what domains of life are most important to monitor, for which people, with what indicators, scaled in what way, over what period of time, and so on. At a minimum a planner or planning consultant must work closely with his or her management team in order to reach agreement on the basic building blocks of one's system. It is, of course, possible to construct focus groups with different sorts of people represented. The crucial point here is that there must be agreement on who is to be in the decisive set of decision makers to approve the final research

product before a thorough search is launched to identify relevant available indicators. Who is in this set?

4.8 *Quality of Life Model*

Whatever indicators are selected to be used in some operational model, decisions still have to be made about the functional form or aggregation function of the model. Most researchers use multiple regression techniques, with single equations or simultaneous equations. Alternatively, many researchers do not aggregate statistics at all, and work with profiles of the quality of people's lives. What model or models should be used?

4.9 *Distributions*

While most researchers work with some measures of central tendency (means, medians or modes), measures of distribution, variation and inequalities are very important. At a minimum, one would want to know how evenly distributed the good and bad things in life are for visible minorities, handicapped people and women. What other groups should be given special attention?

4.10 *Distance Impacts*

The last critical issue I would mention for anyone interested in measuring the quality of life arises from this question: Where does a person live? Unfortunately, there is no simple answer. There is an abundance of evidence indicating that people live primarily in their own heads. The gaps between virtually all features of what researchers might call their 'objective circumstances' and their perceived circumstances are usually quite substantial. But ignoring this familiar problem, there is the more subtle and much less researched problem regarding the fact that people's living space is usually much grater than the town, suburb, city or even metropolitan area containing their home. For example, living in Guelph, Ontario, one enjoys the theaters at Stratford (30 miles from Guelph), Niagara on the Lake (80 miles from Guelph), Hamilton (26 miles) and Toronto (50 miles). For serious health problems, one uses the MacMaster University hospitals in Hamilton, or those of London (130 miles) or Toronto. Toronto's zoo, science museum, arena, art and history museums, restaurants and shopping areas are frequently

used by Guelphites. The provincial parks at Elora (12 miles) and Rockwood (7 miles) are also used by people in Guelph. There are a dozen universities within a 90 minute drive, with interlibrary loan systems connecting most of them.

So far as I know, no one has been able to adequately address this problem. How should one define place of residence so that it captures the real living space of a population? In the absence of a generally accepted answer to this question, research on migration from one place of residence to another is bound to be inconclusive.

Finally, then, if one simply multiplies some of the options mentioned above by others, one can get a rough idea of the magnitude of the problem facing quality-of-life researchers. Consider: 10 size options, 5 time options, 11 population categories, 13 life domains, 2 indicator types, 7 scale types, 2 model types = 200,200 combinations!

Thus, to make a very long story short, long before anyone gets to the notoriously difficult evaluative decisions regarding what is good or bad about this or that phenomena or statistic, one must make many evaluatively-loaded decisions about the best (most useful, important, cost-effective, policy-relevant, etc.) data to gather. Decisions regarding the latter may be regarded by some analysts as descriptive and technical, but since there is no rule book about how to make them, it would be more accurate to say that they require evaluative judgments (Michalos, 1992). A considerable amount of confusion exists in the research literature simply because many people make many different judgments about basic building blocks.

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