# GEOGRAPHICAL MOBILITY AS A SOCIAL INDICATOR: AN INTERNATIONAL COMPARISON

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A great many people look upon social indicators simply as measures of the fundamental characteristics of a society, with an emphasis on trends in these measures. Such a broad concept raises the question of how to conceptualize and then measure these "fundamental characteristics." Ask any demographer to identify the basic demographic variables, and he or she will immediately answer that these are fertility, mortality, and migration. Of the three, fertility and mortality have been given extensive coverage in reports on social indicators that have been prepared by statistical offices in different countries.

In fact, the volumes on social indicators usually give numerous measures of fertility and mortality and include data from other countries in order to facilitate international comparisons of fertility and mortality. But no report on social indicators has ever included a measure of geographical mobility that can be compared with other countries. The reason for the lack of international comparisons of geographical mobility is simple: in countries that collect such statistics, migration is usually operationally defined as movement that crosses the boundary of some administrative area that seems convenient for the purposes of data collection.

The result is that we have statistics on movements between counties in the United States, between gemeinden in Germany, between parishes (församlingar) in Sweden, between boroughs and other local areas in England, and between local administrative areas in a number of other countries. The problem is that these areas vary greatly in size, shape, and significance from country to country and no one has devised a least common denominator that will enable one to compare moves between local areas in different countries. A great many statisticians, geographers, and other social scientists have worked on this problem without solving it. Indeed, the problem may never be solved.

An alternative that has been used in an earlier study [1] is simply to count all moves and not just those that involve crossing the arbitrary boundaries of local administrative areas. In a sense, the most basic measure of geographical mobility is the count of all moves from one residence to another during a specified interval of time. This measure represents the total amount of geographical mobility taking place in a country and can be almost universally applied.

The remainder of this paper evaluates recent developments in the production of data on residential mobility in different countries. The con-

clusion of the paper points out some important international differences in social structure that may be reflected by different levels of geographical mobility.

### Residential Mobility

Data on residential mobility can rather easily be obtained with census or survey questions of the type: "Did you live at this address one year ago (or five years ago), on (date)?" The answer is either "yes" or "no." In the United States data of this type have been available since 1948, and at least seven other countries now collect and publish statistics on residential mobility.

The resulting data (shown in Table 1 at the end of the paper) confirm what most people have long suspected but could not prove: people in the United States really do change residence more frequently than Europeans. But the interesting result from the new data is the demonstration that Canadians and Australians change residence as frequently as Americans do. A frequently cited statistic is that about 20 percent of the U. S. population moves in one year. When we exclude movement from abroad, this figure is reduced to 18.6 percent and compares with about 11 or 12 percent in Great Britain and Japan, 9.1 percent in Taiwan, and 4.3 percent in Ireland. Over a five-year period, over 45 percent of the U. S. population changes residence at least once, and this figure is about the same in Canada and Australia. About 36 percent of the populations of Japan and Great Britain move in five years.

Because of differences in coverage and in processing of data, great significance should not be attached to small differences. Some of these small differences in census practices can be corrected for by adjusting U.S. data (see [3]). Furthermore, some of the differences implied in Table 1 represent differences in age structure; Britain, for example, has a very old population relative to Japan's. The differences arising from the varying age compositions can also be taken into account [3]. Finally, small differences can also arise from the fact that the oneyear data for the United States and Australia are derived from surveys, whereas the other data come from censuses or large samples of population taken in connection with censuses.

When all these considerations are taken into account the big picture remains: that industrialized nations vary much more in terms of residential mobility than in terms of almost any of the usual variables that are included in reports of social indicators. Certainly the differences among countries shown in Table 1 are many times

greater than the fertility or mortality differentials which receive so much attention. In fact, in very few ways do industrialized nations differ to a greater degree than in terms of the geographical mobility of their populations.

One should note that the length of the interval over which mobility is measured makes an important difference, for the longer the interval, the smaller the differences among countries will appear. A long interval tends to mask the effect of repeat moves.

In spite of large differences, several interesting regularities appear in the geographical mobility patterns in the different countries. In each country the rate of moving is high among young children. The rate reaches a low point around age 15 or 16 and then rapidly rises to a peak around age 22. In the United States this peak represents a mobility rate of around 50 percent; that is, about 50 percent of Americans can be expected to change residence between their twenty-second and twenty-third birthdays. After this peak is reached, rates of moving steadily decline with age, except for a small increase in the rate around age 65.

An important point to take note of is the tendency for differences among countries to be least at the ages when mobility is highest. That is, there are almost universal forces which cause children to leave their parental home in their late teens to go to work, to go away to continue their education, or to get married. At any rate, differences among countries in terms of residential mobility are least between the late teens and the late twenties.

#### Number of Moves in a Lifetime

Rates of moving at each age allow us to calculate the probable number of moves a person can expect to make in a lifetime. The methodology is discussed in [3]. The rates shown in Table 1 imply that an average resident of the United States, Canada, or Australia probably makes 12 to 13 moves in a lifetime, compared with about 8 moves per person in Great Britain, 7 moves per person in Japan, 6 moves per person in Taiwan, and 3 or 4 moves in a lifetime for an average resident of Ireland.

From these data, one can see that in the high-mobility countries—the United States, Canada, and Australia—a person probably makes between three and four times as many moves in a lifetime as the average resident of Ireland. Once again, one can see that differences in levels of geographical mobility are far greater than most other demographic, social, and economic differences ordinarily noted in reports on social indicators.

The differences can be highlighted even more dramatically than the comparisons made above. Of the 12 or 13 moves an average American, Canadian, or Australian makes in a lifetime, about three will be made as a child moving with one's parents. This figure is nearly equal to the number of moves

an average resident of Ireland will make in a lifetime.

The low rate of residential mobility in Ireland cannot be attributed to Ireland's being a rural country. Controlling for this factor, we still find very low rates of residential mobility in Ireland. We may note that although the rate of moving for Ireland as a whole is about 5.1 percent (including movers from abroad), the rate is highest--7.5 percent--in Dublin county, which is a reasonable approximation to the metropolitan area of the city of Dublin. In metropolitan areas of the United States, the annual rate of moving sometimes reached 30 percent around 1970.

Hence, the general differences among the countries in Table 1 indicate a degree of differences that roughly applies to both the metropolitan and nonmetropolitan parts of countries, even though the metropolitan areas have higher rates of residential mobility than the nonmetropolitan areas.

Another way of standardizing for the effect of differences in population composition is to examine rates of moving specific for occupation. These data are not yet available for 1970, but 1960 data [2] for the United States, Canada, Great Britain, and Japan indicate that the high-mobility countries have the highest rates at each occupational level. If the 1970 data were available, they would show that white-collar workers in each of the countries expect to move more frequently than other workers.

#### Long- and Short-Distance Moves

The differences in rates of residential mobility imply higher rates of movement over both short and long distances. That is, the higher rates of residential mobility in the United States, Canada, and Australia reflect a greater propensity to move short distances as well as a greater propensity to move long distances.

This conclusion is possible because the countries that collect statistics on residential mobility divide moves into those within and those between different administrative areas--e.g., counties and states in the United States. From this and other evidence we know that the volume of migration within a country varies inversely with the size of the areal units used to measure migration. And we can show that the areal units used in the United States (counties or states) are larger than the areal units used in other countries and also indicate a higher rate of migration in the United States.

This process can be extended to compare rates of migration in the United States with rates of inter-area movement in European countries. The process is simply to show that rates of inter-county or inter-state migration in the United States are higher than rates of migration in other countries in spite of the fact that the U.S. counties or states are larger than the areal units used in other countries to measure migration.

With this process, we cannot, however, be certain of the degree of difference among countries in the propensity to engage in short-distance as compared with long-distance movement. For the countries shown in Table 1, we can be reasonably certain that the high rates of residential mobility in the United States, Canada, and Australia reflect a higher propensity to move short distances as well as long distances. We make these observations partly to point out that geographical size of a country has relatively little to do with explaining the rate of residential mobility, for the high rates of residential mobility in the United States, Canada, and Australia reflect high rates of moving over short as well as long distances.

#### Trends in Geographical Mobility

Many persons seem to insist that a statistic can be considered a social indicator only if trend data are available. Data on residential mobility were first collected in 1948 in the United States and in 1960 and 1961 in Canada, Great Britain, and Japan. These data are shown in Table 2, along with the 1970 or 1971 figures. Because of differences in tabulation practices, we had to limit the 1960-70 comparisons to persons 15 years old and over, and for this reason the 1970 data in Table 2 are slightly different from the figures in Table 1.

The data clearly show stability in the rates of residential mobility in Canada and Great Britain. Residential mobility has increased in Japan, from a one-year rate of 9.5 percent in 1960 to 12.8 percent in 1970. This rise in residential mobility in Japan in the 1960's appears to be part of a gradual increase in internal migration that has been underway since the early 1950's. This increase in the volume of geographical mobility within Japan is associated with continued industrialization and movement of population from agricultural occupations.

The data in Table 2 may indicate the beginning of modest declines in the rate of residential mobility in the United States. Both the one-year and five-year comparisons show small decreases in the rate of residential mobility of the U.S. population.

The rate of migration within the United States increased greatly around the time of World War II (see [2]), but the annual data indicated no significant year-to-year changes in rates of moving over short- or long-distances between 1948 and the late 1960's, where there appeared some evidence that rates of moving might be declining. The apparent decline indicated in Table 2 is small, however, and difficult to interpret.

For the four countries that had data on residential mobility in 1960 and 1970 the differences have decreased. The convergence has been brought about as the lowest rate (in Japan) rose and the highest rate (in the United States) declined slightly.

#### Some Explanations

What do the United States, Canada, and Australia have in common that gives them a high rate of internal migration? There is no obvious answer to this question. If enough countries collected statistics on residential mobility, one could undertake multivariate analyses whereby the rate of moving could be correlated with a host of other national characteristics like those routinely published in the United Nations <u>Demographic Yearbook</u>. Because of the limited number of countries currently providing data on residential mobility, elaborate multivariate approaches are not possible, and we can only rely on ad hoc explanations of the observed differences.

Surely part of the explanation of high rates of migration in the United States, Canada, and Australia is the fact that each is a "nation of immigrants" and has attracted the geographically mobile segments of the populations of other countries. The effect of current immigration on rates of geographical mobility in the three countries is small, for even when we exclude movers from abroad, the United States, Canada, and Australia have high rates of geographical mobility.

High rates of internal migration in these countries may indicate a long-run dynamic built into populations which are almost entirely descended from long-distance migrants. Most persons in the United States, Canada, and Australia either crossed an ocean themselves or are descendents of persons who crossed an ocean. Past mobility may generate future mobility because of the exposure (direct or vicarious) with diverse places. Such knowledge about earlier migrations can make the possibility of mobility seem more readily apparent to potential movers. In a sense, Americans, Canadians, and Australians learn about mobility simply through knowledge of their ancestors.

We do know that persons who have moved once are likely to move again, and this effect may persist across generations. Hence, currently high rates of internal migration in the United States, Canada, and Australia may indicate the intergenerational transmission of a propensity toward migration.

Another characteristic shared by the United States, Canada, and Australia is a history dominated by a frontier that needed to be settled. Each country has taken measures like the Homestead Act in the United States to encourage settlement of the frontier. Each has also sought to exploit resources that were abundant but widely scattered. Throughout much of their history, the United States, Canada, and Australia have considered themselves underpopulated, and each has adopted policies to encourage persons to move to developing regions. These effects, too, may extend across generations.

A third characteristic of the United States, Canada, and Australia is that successive waves of settlement established numerous urban centers that were widely separated. Today each country has an urban structure that is not clearly dominated by one metropolis. Instead, numerous metropolitan areas in each country compete for industry and migrants, and this competition may keep the overall migration rate high. The decentralized urban pattern creates a diversity of regional markets, and many corporations in the United States have a practice of repeatedly moving their executives and managers from place to place in order to provide exposure to the many regional centers in which big corporations operate.

In these ways, sheer geographical size may contribute to a high rate of internal migration simply by offering more places to move to. But geographical size of a country has less explanatory power in accounting for rates of shortdistance movement, and the United States, Canada, and Australia have high rates of short-distance movement as well as high rates of long-distance migration. Of course, it is possible that longdistance and short-distance moves are mutually reinforcing, so that a readiness to move long distances and a history of such movement is conducive to frequent short-distance movement. In other words, the short-distance mobility rate in the United States, Canada, and Australia may be high partly because these countries have high rates of long-distance migration, but these relationships cannot be statistically demonstrated.

We are thus left with the somewhat unsatisfactory conclusion that the United States, Canada, and Australia have high rates of short- and longdistance moving now because they have had high rates in the past. And they probably had high rates in the past because they were immigrant countries that attracted the geographically mobile element of European populations. These populations and their descendants have participated in successive waves of internal movements that established numerous regional population centers which have competed for migrants and thereby kept the level of mobility high.

## <u>Implications</u>

If rates of geographical mobility are a social indicator, what are they indicating? A tendency in recent years has been to look upon geographical mobility as a force producing alienation and the breakdown of community structure. This theme appears in Alvin Toffler's Future Shock, which asserted that increased geographical mobility was part of the onrush of events which people were unable to adjust to. This theme is even more forcefully stated in Vance Packard's A Nation of Strangers, published in 1972 and long on the best-seller list. The same theme has appeared in subsequent books hypothesizing an increase in loneliness, including Ralph Keyes' We, the Lonely People (1972) and Suzanne Gordon's Lonely in America (1973).

There is little evidence to support such assertions simply because residential mobility rates are not increasing in the United States. On the contrary, they are probably beginning to

decline. If the absence of an increase in rates of residential mobility were more widely known, perhaps there would be less of a tendency to link residential mobility with presumed increases in alienation or loneliness.

We should note, however, that high rates of residential mobility can affect the degree of participation and involvement in community activities. Some evidence to this effect was produced when in November 1974 the Census Bureau included for the first time a question on residential mobility and migration in its voting supplement to the Current Population Survey. The data [4] showed that persons who had recently moved were less likely to have registered and less likely to have voted than persons who had not moved.

The data from this survey showed that the higher-than-average rate of moving among persons in their early twenties explained part (but not all) of the lower-than-average voting rate among persons at this age group. If it is true that the proportion of eligible voters who actually vote is lower in the United States than in the democracies of Western Europe, then part of the explanation may be that at any given moment a larger proportion of the United States population consists of persons who are newcomers to a place. In these and other ways, residential mobility may influence age patterns of participation and differences among countries.

#### References

- [1] Long, Larry H. "On Measuring Geographic Mobility," <u>Journal of the American Statistical Association</u> 65 (September, 1970), pp. 1195-1203.
- [2] Long, Larry H. "Migration Differentials by Education and Occupation: Trends and Variations," <u>Demography</u> 10 (May, 1973), pp. 243-258.
- [3] Long, Larry H. and Celia G. Boertlein, The Geographical Mobility of Americans: An International Comparison. U. S. Bureau of the Census, Current Population Reports, Series P-23, No. 64, U. S. Government Printing Office, 1976.
- [4] U. S. Bureau of the Census. <u>Current Population Reports</u>, P-20, No. 293, "Voting and Registration in the Election of November 1974," U. S. Government Printing Office, 1976.

TABLE 1. Percent of Population Residentially Mobile in Seven Countries: Around 1970

Country	Percent moving in one year <sup>l</sup>		Percent moving in five years <sup>2</sup>	
	Including movers from abroad	Excluding movers from abroad	Including movers from abroad	Excluding movers from abroad
Australia	(NA)	15.7	51.4	48.4
Canada	(NA)	(NA)	46.6	44.3
Great Britain	11.8	11.1	37•2	35.9
Ireland	5.1	4.3	(NA)	(NA)
Japan	12.0	12.0	35.9	35.8
Taiwan	(NA)	9.1	(NA)	(NA)
United States	19.2	18.6	47.0	43.2

NA Not available.

TABLE 2. Percent of Population Residentially Mobile in Four Countries: Around 1960 and 1970

•	1960	1970
ONE-YEAR INTERVAL		
Great Britain Japan United States	11.9 9.5 19.9	11.6 12.8 18.7
FIVE-YEAR INTERVAL		
Canada Great Britain United States	46.0 36.2 49.5	47.0 36.6 46.3

Note: Data refer to persons 15 years old and over and include movers from outside the countries.

 $<sup>^{\</sup>mathrm{l}}$  Persons one year old and over.

 $<sup>^{2}\</sup>mathrm{Persons}$  five years old and over.