REPEAT MIGRATION, INFORMATION COSTS, AND LOCATION-SPECIFIC CAPITAL

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It is well-known from previous research that recent migrants often migrate again. This paper seeks to illuminate several possible mechanisms that might give rise to this association. The effect of previous migration on subsequent migration appears to be largely due to the fact that the consequences of one move often become the cause of the next and that people tend to return to places they recently left. The concepts of location-specific capital (assets that are more valuable in their current location than they would be elsewhere) and information costs provide powerful explanations for the patterns of multiple movement disclosed in the longitudinal data used in this study.

REPEAT MIGRATION, INFORMATION COSTS, AND LOCATION-SPECIFIC CAPITAL*

Introduction

Recent migrants often promptly migrate again. Goldstein (1958) called attention to this fact 20 years ago, and subsequent research (e.g., Van Arsdol et al., 1967; Lansing and Mueller, 1967; Morrison, 1971; Navratil and Doyle, 1977) has confirmed a strong correlation between past (especially recent) migration and the propensity for further migration. This paper suggests several mechanisms that may account for this association: (1) People who migrate frequently may find it easier and cheaper (monetarily or psychologically) to move again than those who seldom or never move (a "learning-by-doing" effect). (2) The consequences of one move may become the cause of another, as when a family's dissatisfaction in a new locale induces a subsequent "corrective" move, perhaps back to a former locale. (3) Personal attributes (such as occupation and level of education) or psychological traits (e.g., chronic discontent or wanderlust) may render a person more responsive to the lure of opportunities elsewhere. Finally, (4) the paucity of location-specific capital (assets that are more valuable in their current location than they would be elsewhere) that recently arrived migrants have accumulated at the new destination may make it easier for them to move again. The challenge to the demographer is to detect any systematic pattern in subsequent migration propensities according to the number, recency, and outcome of previous moves, and interpret them in relation to these possibilities.

The findings presented here shed new light on repeat and return migration and offer support for all these interpretations: The effect of previous on subsequent migration is largely due to the fact that the consequences of one move often become the cause of the next, and that people tend to return to places they recently left. In sorting out these effects, as well as the traditional influence of personal attributes, the concepts of location-specific capital and information costs help explain the patterns of multiple movement disclosed in our data, as well as those found in other research.

The next section discusses an extended human capital model of migration in which the concepts of location-specific capital and information costs figure importantly. Using this framework, hypotheses about repeat migration are then derived and tested with longitudinal data from the University of Michigan Panel Study of Income Dynamics. Following sections describe the data and sample and present cross-tabular and regression tests of the hypotheses. The concluding section summarizes the findings and discusses their implications for policy and future research.

Theoretical Framework

The human capital model, applied to migration, views the prospective migrant as a person making an investment (Sjaastad, 1962). The decision to migrate is based on the expected benefits and costs (pecuniary and nonpecuniary). With perfect information and perfect foresight, the investor would always correctly weigh the advantages and disadvantages in deciding whether and where to move.

These stringent assumptions, of course, hardly accord with the realities of misinformation and lack of foresight that pervade much migration behavior (Lansing and Mueller, 1967). Information is not costless and uncertainty is a fact of life. Thus, people weigh the advantages and disadvantages of migrating as they perceive them, subject to the limited information they have available. Like migration, information-gathering is an investment, an activity that entails costs and benefits. A potential migrant will only invest in "search" as long as he or she feels the benefits outweigh the costs. This is why many potential migrants may consider only one or a few destinations, perhaps just those where they have friends and relatives. These considerations highlight the first important concept used in this analysis: *information costs*.

The other important concept is *location-specific capital*, which is a generic term. It may refer to such diverse things as home-ownership; job-related assets such as an existing clientele (of, say, a well-regarded doctor or plumber), seniority, specific training, or a nonvested pension; knowledge of an area; friendships; and indeed any factor that "ties" a person to a particular place. Such "assets" are

costly (or impossible) to replace or transfer to another locality. The potential transaction cost of replacing them or the losses in their value are costs of moving. Thus, the more location-specific capital a family possesses in its current locality, the less likely the family should be to leave, other things being equal. (Both the "location-specific capital" and "imperfect information" concepts have their sociological counterparts. Neighborhood or community integration, socio-economic bonds (Speare, Kobrin, and Kingkade, 1979), and vested interests (Ter Heide, 1963) are sociological analogs of location-specific capital: They stress the idea that social ties people build up in an area over an extended time period deter them from leaving. Sociologists also emphasize how social relationships tend to bias the spatial search process, rendering previous places of residence attractive to prospective migrants. They cite survey research (e.g., Lansing and Mueller, 1967) showing that the typical migrant considers only a narrow range of alternative destinations, and depends heavily on friends and relatives as sources of information. The result is a strong tendency to move to places where the migrant already has friends and relatives, perhaps passing over "strange" places that may hold more abundant economic opportunities.)

In this paper we do not attempt to measure quantity or quality of information or of location-specific capital directly. Rather we use the concepts of imperfect information and location specific capital to shed new light on typically found relationships between past and current migration and to explore some new relationships. Six hypotheses stated below are considered:[1]

Hypothesis 1

Since the amount of location-specific capital people accumulate is likely to be positively correlated with their length of residence in a place, *length of residence should be negatively associated with the propensity to migrate.* This hypothesized relationship will be reinforced by two other linkages: (1) If the initial move proves to be an unwise investment in human capital (because of imperfect information or imperfect foresight), the person is likely to see the light reasonably soon--

within a year or two, not ten or twenty--and make another "reinvestment" in migration relatively soon. (2) If the population is heterogeneous (and certain people are "intrinsically" more migration prone than others), there will be proportionally more "movers" in the class of individuals who have lived in their residence only one year compared with longer duration (e.g., see Clark and Huff, 1977, and references therein). (This is discussed further in Hypothesis 6.)

Hypothesis 2

We hypothesize "a learning-by-doing" effect whereby *the propensity to migrate should be positively related to the number of previous moves, controlling for the recency of the last move.* People who have migrated before may be more adept at collecting and processing migration-relevant information. Having had prior experience in choosing a destination, they should have more information than do persons who have not migrated recently about opportunities in other places (including places where they lived before). Accordingly, we expect the information costs of repeat moves, expecially return moves, to be lower than those of new moves.

Hypothesis 3

Return migrants should be less likely to move again than migrants who have moved equally often but always to a new location. This is because the migrant who returns to an area reacquires some location-specific capital there that nonreturn (multiple) movers to that area cannot readily possess. Indeed, the return move may well indicate that the payoff to the initial move failed to offset the costs of giving up previous location-specific capital or that opportunities elsewhere fell short of expectations. The disappointed migrant, then, may be less anxious to try another move than is the satisfied migrant.

Hypothesis 4

Since dissatisfaction with the outcome of one move may prompt another, *people who are unable to find (acceptable) jobs following one move should be more prone to migrate again than persons apparently satisfied with their post-initial-move jobs.*

Some moves inevitably turn out to be unwise investments in human capital, since migration decisions are typically based on limited, imperfect information.

Hypothesis 5

Most previous migrants retain some location-specific capital in former places of residence and have more information about conditions in those places than in places where they have never lived. Thus a person who has migrated before should be strongly predisposed, when moving again, toward some former place of residence because of both the location-specific capital there and the low information costs of a potential return move. Therefore, we hypothesize that *a sizable fraction of repeat migrants return to a place of previous residence.*

Hypothesis 6

The effects of past migration on subsequent migration hypothesized in 1 through 4 above should decrease but not disappear when personal characteristics (e.g., education and occupation) likely to be associated with lower information costs or less location-specific capital are directly controlled. Certain types of people, such as the highly educated and those in highly skilled occupations, may process information more efficiently and have access to more information as well since they operate in geographically extensive labor markets. Therefore, their information costs of migrating should be lower and their probabilities of migration in all periods should be higher than those of persons with higher information costs. It is also possible that, owing to their geographical markets, such people (e.g., college professors) may build up less location-specific capital in their jobs. However, since not all relevant characteristics related to information costs and location-specific capital are observable, we do not expect the effects of past migration on subsequent migration to disappear when measurable personal characteristics are controlled, because those previous migration measures are also correlated with unobservable characteristics related to information costs and location-specific capital.

Data and Sample

The data with which these hypotheses are tested derive from the first five

years (1968-1972) of the University of Michigan's Panel Study of Income Dynamics (PSID), an ongoing longitudinal survey of about 5000 families (Survey Research Center, 1972). The sample used here comprises 1952 white couples living in the United States whose marriages were intact in 1971 and 1972. (Full technical details are given in DaVanzo, 1976b.)

The dependent variables are dichotomous variables indicating whether the family migrated between 1971 and 1972 (defined by comparing residence information for the last two of the five years). We used the final year as the migration interval in order to retain the maximum number of preceding years--1968 to 1971--over which independent variables referring to earlier migration experience could be defined. This allows examination of sequences of moves. Three types of previous and subsequent migration are considered: interdivisional, interstate, and intercounty. (In Table 1, we also show intracounty moves for informational purposes only.)

The above hypotheses are examined first with data cross-tabulated to show subsequent migration rates by types of previous migration experience. We then report results of regression analyses (in which a number of factors were controlled simultaneously) and whose results allow more rigorous tests of these hypotheses.

Cross-Tab Results

Table 1 confirms what other studies have found: that previous migrants are considerably more likely to move again than are those without recent migration experience. Columns (4) and (5) show a dramatic disparity: Over a sixth (17.6%) of previous (1968-1971) interdivisional movers repeated their action in 1971-1972, whereas only 1 percent of the sample without such experience made interdivisional moves. The same pattern prevails for the shorter-distance moves, although the relative difference between 1971-1972 migration rates of recent migrants and new migrants diminishes somewhat as the average distance moved decreases. Nevertheless, for each type of move the difference between the 1971-1972 migration rate of recent migrants and of new migrants is highly significant statistically. Note that, for each definition of

Table 1

RECENT MIGRATION AS AN IMPETUS TO SUBSEQUENT MIGRATION: MIGRATION RATES IN 1971-1972 FOR A SAMPLE OF FAMILIES WITH AND WITHOUT MIGRATION EXPERIENCE DURING 1968-1971

	(1)		(2)		(3)	(4)	(5)
Type of Migration	No. and Percent of Migrants in Total Sample (N=1952)				Former Migrants Among 1971-1972 Migrants[a]	Migration Rate, 1971-1972	
	1968-1971		1971-1972			Former Migrants[b]	"New" Migrants[c]
Interdivisional	142	(7.3%)	43	(2.2%)	25 (58.1%)	17.6%	1.0%
Interstate	189	(9.7%)	54	(2.8%)	30 (55.6%)	15.9%	1.4%
Intercounty	320	(16.4%)	96	(4.9%)	52 (54.2%)	16.3%	2.7%
All moves (including intracounty)	803	(41.1%)	344	(17.6%)	277 (80.5%)	34.5%	5.8%

NOTE: The sample in this and all other tables is restricted to white couples living in the United States whose marriages were intact in 1971-1972.

[a]That is, who had made the same type of move between 1968-1971, the initial period covered by our data. Percentages are col. 3/col.2.

[b]Col. 3/col. 1.

[c](Col. 2 - col. 3)/(N - col. 1). "New" migrants are those who are new to the category, having made no such move during 1968-1971.

migration, over one-half of 1971-1972 migrants also migrated at least once between 1968 and 1971 (see col. (3)).

In the remaining tables, we examine the question of which previous migrants move again. Table 2 shows 1971-1972 migration rates by duration of previous residence and number of moves between 1968 and 1971. Hypothesis 1--that the propensity to migrate is higher the more recent the previous move--is generally supported for all three types of migration shown, as it has been in previous studies (e.g., Land, 1969; Speare, 1970; Morrison, 1971). Although the negative relationship between duration of residence and propensity for subsequent migration is somewhat erratic over the first three years' duration (for which we have annual data), subsequent categories clearly show a longer-term pattern of decline. People are significantly less likely to migrate if they have stayed in a place for more than three years, and especially if they have lived there their entire lifetime.

Table 2 also enables us to investigate the relationship hypothesized in (2) between the number of previous moves and the probability of subsequent migration. Although many of the relevant cell sizes are small, there appears to be a positive monotonic relationship, as hypothesized, between the likelihood of subsequent migration and number of previous moves for interdivisional and interstate migration when duration of residence is held constant at its shortest level.

There is one noteworthy exception, however. Families that made two previous moves are consistently *less* likely to move again than families that moved only once in the recent past for a two-year residence duration (and for duration = 1 year for intercounty migration). Families that made one previous interdivisional move, for example, have a 23% probability of moving again, contrasted to only 7.7% for those that made two moves. Families that made three former moves appear more likely to move again than families that made only one or two, but the sample sizes are too small to support valid interpretations.

Those who made exactly two previous moves have relatively low rates of sub-

Table 2

MIGRATION RATES, 1971-1972, BY DURATION OF RESIDENCE AND NUMBER OF MOVES IN RECENT PAST

No. of moves of the type listed that family made 1968-1971	Duration of Residence in 1971 Area					
	1 yr.	2 yrs	3 yrs	More than 3 yrs., but not a Lifetime[a]	Lifetime[b]	Total Sample (N=1952)
	1971-1972 Migration Rate in Percent[d]					
Interdivisional						
0	------[c]	------	------	2.5 (397)	0.6 (1413)	1.0 (1810)
1	17.1 (35)	22.9 (35)	15.4 (39)	------	------	18.3 (109)
2	17.7 (17)	7.7 (13)	------	------	------	13.3 (30)
3	33.3 (3)	------	------	------	------	33.3 (3)
Total	18.2 (55)	18.8 (48)	15.4 (39)	2.5 (397)	0.6 (1413)	2.2 (1952)
Interstate						
0	------	------	------	2.6 (507)	0.9 (1256)	1.4 (1763)
1	17.0 (53)	19.2 (47)	12.0 (50)	------	------	16.0 (150)
2	23.5 (17)	5.6 (18)	------	------	------	14.3 (35)
3	25.0 (4)	------	------	------	------	25.0 (4)
Total	18.9 (74)	15.4 (65)	12.0 (50)	2.6 (507)	0.9 (1256)	2.8 (1952)
Intercounty						
0	------	------	------	3.4 (894)	1.9 (738)	2.7 (1632)
1	19.3 (83)	14.4 (104)	17.9 (67)	-------	------	16.9 (254)
2	16.1 (31)	6.5 (31)	------	-------	------	11.3 (62)
3	50.0 (4)	------	------	-------	------	50.0 (4)
Total	19.5 (118)	12.6 (135)	17.9 (67)	3.4 (894)	1.9 (738)	4.9 (1952)

[a]Category refers to persons who have lived in the 1971 area of residence since 1968, but did not grow up there.

[b]Category refers to persons who grew up in the 1971 area of residence and have remained there since 1968.

[c]------indicates categories that are logical impossibilities.

[d]Numbers in parentheses are cell sizes (number of families at risk to make type of move under consideration.)

sequent migration (as Morrison (1971) also found in his analysis of the large Social Security Continuous Work History file). This raises the possibility that return migration (often the second in a closely spaced pair of moves) may be involved. We hypothesized in (3) that people who made multiple moves in the recent past and whose last move was a return should be less likely to move again than those who made the same number of nonreturn moves. Table 3 presents evidence on this possibility.

We see in part A of Table 3 that, of people who made two or three interdivisional or interstate moves between 1968 and 1971, those whose last move was a return are indeed less likely to migrate again than are people who were not returning. For interstate migration, for example, 8.3% of previous return migrants moved again, as compared with 26.7% of nonreturn repeat migrants. Since the majority of recent interdivisional and interstate multiple moves concluded with a return (note sample sizes in lines 1 and 2 of part A, Table 3), this seems to explain why persons who moved twice in the recent past appear less likely, on the average, to move again than are those who moved only once.

If return migrants conform to the proverb, "Once burned, twice cautious," other repeat migrants are noticeably more footloose. Persons who in the recent past made a series of interdivisional or interstate moves *that concluded with a nonreturn move* are more likely to move again than persons who made only one move in the same period. Thus, the propensity for subsequent migration can be said to increase with the number of previous moves, *except* when the most recent move was a return.

Hypothesis 3 is even more strongly supported when a family's last previous move was a return to the place where the head of the household grew up, and is therefore especially likely to have location-specific capital (e.g., friends and relatives). The subsequent migration propensities of previous returnees shown in part B of Table 3 are significantly smaller than those of previous nonreturn repeat migrants.

Table 3

RETURN MIGRATION AS A DETERRENT TO FURTHER MIGRATION: 1971-1972 MIGRATION RATES FOR FAMILIES WHO PREVIOUSLY MOVED BETWEEN 1968 AND 1971

A. 1971-1972 Migration Rates for Families Who Made Two or Three Moves, 1968-1971

Type of Migration, 1971-1972	Last Previous Move a Return to an Area Where Family Lived in 1968 or 1969?			
	Yes		No	
Interdivisional	13.0	(23)	20.0	(10)
Interstate	8.3*	(24)	26.7	(15)
Intercounty	22.2	(18)	10.4	(48)

B. 1971-1972 Migration Rates for Families Whose Head Made at Least Two Moves Since Adolescence

Type of Migration, 1971-1972	Last Previous Move a Return to Where Household Head Grew Up?			
	Yes		No	
Interdivisional	7.8***	(64)	25.6	(78)
Interstate	7.7**	(65)	18.7	(124)
Intercounty	9.1	(55)	17.7	(265)

NOTES: Numbers in parentheses are cell sizes.

Asterisks indicate that the migration rate for previous return migrants is significantly smaller than the corresponding rate for previous nonreturn repeat migrants at:

* = 10% level
** = 5% level
*** = 0.5% level

Table 4 shows how subsequent migration rates vary when classified by previous migration experience and by whether the family head was looking for work at the time of the 1971 survey. (This includes family heads who were employed or retired or in school, but claimed to be job-hunting, as well as those who were unemployed.) Whether unemployed, or employed but seeking a different job, people looking for work were significantly more likely to migrate than those who were not. Persons who migrate but fail to find acceptable employment appear especially prone to move again, as hypothesized in (4). Over a third of 1968-1971 interdivisional or interstate migrants who were looking for work in 1971 migrated between 1971 and 1972, as contrasted to less than 1% who did not have recent migration experience and were apparently content with their jobs in 1971. Persons with recent interdivisional migration experience who were looking for jobs at the time of the survey make up only 1.4 percent of our sample, but account for almost one-fourth of 1971-1972 interdivisional moves. Persons who either have recent interdivisional migration experience or are looking for jobs or both make up only 14% of the sample, but account for *almost 80%* of all 1971-1972 interdivisional moves.

Hypothesis 5 posited that repeat migrants may often be returning to a place of previous residence. Our data are consistent with this expectation: Of the repeat interdivisional migrants in our data, *over 70 percent returned to a division of previous residence.* We saw in Table 1 that the total sample (of 1952 families) includes 142 families with recent (1968-1971) interdivisional migration experience and that 25 of these migrated interdivisionally between 1971 and 1972. A total of 19, or 76 percent, of these potential return migrant families who moved between 1971 and 1972 did return to divisions where they lived in the recent past (between 1968 and 1970). The sample sizes in Table 3 also indicate a 70 percent return/repeat ratio for persons who made two or three interdivisional moves between 1968 and 1971. (We also find a 70% return/repeat ratio when we exclude families whose head was in the armed forces in 1971.)

Table 5, which is based on the sample sizes in Table 3, shows that for all three geographic units examined the return/repeat ratio is smaller when the average

Table 4

RECENT MIGRATION EXPERIENCE AND EMPLOYMENT STATUS OF FAMILY HEAD, 1971, AS INFLUENCES ON SUBSEQUENT MIGRATION

Type of Previous and Subsequent Migration	Migration Rate, 1971-1972 (%)		
	Migrated at Least Once Between 1968 and 1971	Did Not Migrate Between 1968 and 1971	Total Sample (N=1952)
Interdivisional			
Family head looking for job in 1971?			
Yes	35.7 (28)	6.6 (137)	11.5 (165)
No	13.2 (114)	0.5 (1673)	1.3 (1787)
Total	17.6 (142)	1.0 (1810)	2.2 (1952)
Interstate			
Family head looking for job in 1971?			
Yes	34.9 (32)	6.8 (133)	12.1 (165)
No	12.1 (157)	0.9 (1630)	1.9 (1787)
Total	15.9 (189)	1.4 (1763)	2.8 (1952)
Intercounty			
Family head looking for job in 1971?			
Yes	22.2 (54)	11.7 (111)	15.2 (165)
No	15.0 (266)	2.0 (1521)	4.0 (1787)
Total	16.3 (320)	2.7 (1632)	4.9 (1952)

NOTE: Numbers in parentheses are cell sizes. For each type of migration, the probability of 1971-1972 migration given that the family moved between 1968 and 1971, and the probability of migrating given that the family head was looking for a job at the time of the 1971 survey, are each significantly different at better than .001 level from the probability of migrating given the absence of that characteristic. Furthermore, the effect on subsequent migration rates of being a previous migrant is not independent of the effect of looking for a job at the time of the 1971 survey. A Cochran χ^2 statistic testing for interaction is always significant at better than .005 (except for interstate migration, where the interaction is significant at .025).

Table 5

Return/Repeat Ratios[a]

Type of migration	Repeat move 1-2 years after initial move	Repeat move after longer interval[b]
Interdivisional	70%	45%
Interstate	62%	34%
Intercounty	27%	17%

[a]Based on sample sizes in Table 3.

[b]Initial move was between adolescence and 1968.

interval of absence is longer. This evidence implies that census-type data, which define return and repeat migration by comparing places of residences at birth, five years before the census, and at the time of enumeration, seriously understate both phenomena, especially return migration, because they define return migration with respect to a very long interval of absence and furthermore do not count the apparently numerous pairs of moves that occur within the five-year census reference period (self-cancelling return moves following initial moves in the period are not even registered as moves). For example, using 1955-1960 census data, Eldridge (1965) found that one-third of all repeat interstate migrants were return migrants. This is consistent with the 34 percent interstate return/repeat ratio we find for (potential) returns to the state where the head grew up, but is considerably lower than the 62-percent figure we find for shorter intervals of absence.

The return/repeat ratio becomes smaller as the geographic unit becomes smaller. However, this may be simply because the larger the geographic unit, the bigger the "target" for potential return migrants and the fewer the alternative and intervening opportunities.

Preliminary evidence, based on relatively small samples, indicates that those whose initial moves did not live up to expectations and those with the best prospects back in the original location are the most likely to return, if they do move again. Seven of the 17 nonmilitary repeat migrants reported they were looking for work before their 1971-1972 move; six (86 percent) of these returned, providing tentative support for the hypothesis that potential returnees who are looking for work are especially likely to return. (DaVanzo and Morrison (1978) confirm this for much larger samples.) Recall that we found above that families with recent migration experience whose heads were looking for work were considerably more likely to move again than those whose heads were not looking for work. Now we see that of the potential return migrants who do in fact move, those looking for work before moving are especially likely to be return migrants (compared with persons not looking for work at the time of the 1971

survey). Inability to find employment may cause the family to become disappointed with the initial move and to return. Friends and relatives left behind may provide information about job opportunities in the potential return destination.

Which repeat movers choose to return, and which choose to move on to a new location, is a central question, but is beyond the scope of this paper. (For such an analysis, see DaVanzo and Morrison (1978) and DaVanzo (1978).) However, though the samples are very small, the data used here do provide several suggestive clues. The 12 potential return destinations to which nonmilitary families returned are characterized by positive estimates of the husband's, wife's, and family's earnings increases due to that migration,[2] whereas it is estimated that husbands and wives who did not return would have experienced reductions in their earnings on average if they had returned to the places where they lived before:[3]

Present Value For :	Chosen Places (n=12)	Places Lived In Before But Not Returned To (n=6)
Husband	$11,960	$-8,790
Wife	1,890	-460
Family	13,850	-9,250

Thus, it appears that potential return migrants who moved between 1971 and 1972 but did not return moved elsewhere because of poor earnings opportunities in the places they left behind.[4]

Regression Results

Table 6 presents regressions estimated by ordinary least squares[5] that permit more rigorous tests of the hypotheses proposed above. These equations allow us to control for various measures of previous migration simultaneously and also to hold constant other personal characteristics, such as age, education, or occupation, that may affect geographic mobility. Four specifications are presented: Specification (1) includes dummies indicating (a) the number and timing of recent moves, (b) whether multiple recent moves concluded with a return to the place where the head grew up, and (c) whether the head grew up in the area of the family's 1971 residence, and hence

TABLE 6

REGRESSION ESTIMATES OF PREVIOUS MIGRATION EFFECTS,

Dependent Variable = Interdivisional Migration

Explanatory Variables	Specification (1) Only Previous Migration Variables		(2) Eq. (1) + Employment Status Interactions		(3) Other Explanatory Variables Held Constant[a]		(4) Only Previous Migration Variables (Number of Moves and Duration of Residence Measures)	
Moved Once in Recent Past								
Moved 1 yr. ago (70-71) [M-1]	.182	(7.35)	.0647	(2.37)	.00682	(0.25)		
Moved 2 yr. ago (69-70) [M-2]	.271	(10.38)	.226	(8.68)	.182	(7.15)		
Moved 3 yr. ago (68-69) [M-3]	.235	(8.53)	.146	(5.06)	.0992	(3.61)		
Moved Twice in Recent Past								
Moved 1 yr. ago and 2 yr. ago [M-1-2]	.342	(6.38)	.317	(5.97)	.222	(4.29)		
Moved 1 yr. ago and 3 yr. ago [M-1-3]	.0811	(1.13)	.0900	(1.29)	.00379	(0.06)		
Moved 2 yr. ago and 3 yr. ago [M-2-3]	.259	(4.01)	.191	(2.98)	.0480	(0.76)		
Moved Three Times in Recent Past Moved 1, 2, and 3 Yr. ago [M-1-2-3-]	.432	(4.37)	.489	(5.03)	.339	(3.62)		
Last Prev. Mv. a Return								
Recent multiple moves ended with a Return (Mult. Mvs. Ret.)	-.0637	(-1.08)	-.125	(-2.12)	-.0435	(-0.76)		
Last Prev. Mv. a Return to Place of Upbringing (M-t·Grew up here)	-.161	(-6.04)	-.149	(-5.62)	-.108	(-4.26)		
Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0195	(-2.50)	-.0195	(-2.56)	-.0134	(-1.79)		
Moved at Least Once in Recent Past (M-t) and								
Student or Retired, Not Looking for Work, 1971	---[c]		.172	(4.77)	.197	(7.43)		
Unemployed, 1971	---		.182	(2.59)	.206	(2.56)		
Employed, But Looking for Work, 1971	---		.270	(7.81)	.187	(5.26)		
Student or Retired, But Looking for Work, 1971	---		.292	(5.56)	.376	(4.46)		
R^2 ($\bar{R}^2$)	.125	(.121)	.167	(.161)	.284	(.264)		
Number of Moves in Recent Past Moves								
One [1M]							.237	(8.57)
Two [2M]							.274	(4.88)
Two Second a Return [2M-Ret]							-.0455	(-0.82)
Three [3M]							.406	(4.63)
Duration of Residence in 1971 Location								
One Year							-.0369	(-1.13)
Two Years							.0175	(0.56)
Last Previous Move a Return to Place of Upbringing							-.164	(-6.14)
Place of 1971 Residence Same as Place of Upbringing (grew up here)							-.0195	(2.49)
R^2 ($\bar{R}^2$)							.119	(.115)

NOTE: t-statistics are presented in parentheses.

[a] The other explanatory variables included in specification (3) are: employment status (including Unemployed, Employed but looking for work, student, retired entered separately); the area unemployment rate; a measure of the potential return to migration (present value of wage differences); family income; the husband's and wife's wage rates; number of hours worked by the wife; the wife's share of family earnings; husband's and wife's age, education, occupation, and industry; and dummies indicating whether the family owns its home or has relatives nearby. For these coefficients, see DaVanzo, 1976(b).

[b] Variables are defined in Appendix Table C.

[c] --- indicates that this variable was excluded from this specification.

shows regression results analogous to the cross-tab results in Tables 1, 2 and 3. Specification (2) adds variables allowing the effect of previous migration on subsequent migration to vary by the family head's employment status in 1971, and hence allows a test of hypothesis 4. Specification (3) tests hypothesis 6 by showing how the coefficients of the variables included in specification (2) change when other migration determinants, such as age, education, occupation (see note to Table 6 for a complete list), are held constant. Specification (4) is a variant of specification (1) in which duration-of-residence and number-of-move effects are assumed to be independent and are estimated separately.[6]

Equations explaining 1971-1972 interdivisional migration for the total sample used previously are presented in Table 6. (In the Appendix, we present results which enable us to examine the sensitivity of the parameters to sample composition and geographic scale.[7])

Corresponding with the cross-tabulations presented in Tables 1 to 4, the major results in Table 6 document the following points: (1) Previous migrants are considerably more likely to move (again) than those without recent migration experience. (2) Of families with recent multiple moves, those whose last move was a return to a place where they lived before are less likely to move again than those who were nonreturn migrants to their 1971 area of residence. (In the total sample, recent return migrants [Mult. mvs.-Ret.=1] are from 4 to 12 percentage points less likely to move again interdivisionally than previous nonreturn repeat migrants. Comparable figures for interstate migration, shown in Appendix Table B, are 16-20%)). (3) Families whose head grew up in the area of 1971 residence were significantly less likely to migrate between 1971 and 1972 than those whose heads grew up elsewhere (although the size of the "Grew Up Here" coefficient is always relatively small). (4) Among previous migrants, those who returned recently to the area where they grew up are less likely to move again than others with recent migration experience (i.e., the coefficient of "M-t Grew up here" is significantly negative). (5) Previous migrants who were unemployed or looking for

a job at the time of the survey (as well as families with retired or student heads not claiming to be looking for work at the time of the 1971 survey) are substantially and significantly more likely to move than those who were employed and not looking for a different job; the coefficients of the interactions between these characteristics and recent migration experience are significantly greater than zero.

As we surmised when discussing Tables 2 and 3, we see that the probability of subsequent migration increases with the number of previous moves *when previous return moves are statistically netted out.*[8] When Mult. Mvs.-Ret, whose coefficient is usually negative and significant, is held constant, we find that persons who migrated twice in the recent past are almost always more likely to migrate again than those who migrated only once in the recent past. Note that persons who moved twice between 1968 and 1971 whose last move was a return to the area where they grew up (Mult. mvs.-Ret = M-t Grew up here = 1) are in many cases less likely to move between 1971 and 1972 than those who moved only once between 1971 and 1972 or than those who have not moved recently.[9] Because a sizeable fraction of double moves are return moves, this may explain why Morrison (1971) found in his analysis of the large Social Security Continuous Work History data file that, when age and duration of residence were held constant, those who moved twice in the recent past (eight years in his case) were significantly *less* likely to move again than those who had not previously or had moved once or three or more times. When the Mult. mvs.-Ret. and M-t Grew Up Here variables were excluded from the specifications presented here, the M-1-3 and M-2-3 coefficients were indeed negative.

Again, the hypothesis of cumulative inertia is often not supported for the three-year period 1968-1971. Families that lived in their area of 1971 residence less than one year are in general less likely to move again than those who lived there somewhat longer. Families that moved to their area of current residence 1 to 2 years ago (M-2, M-2-3, or Dur 1-2 yr) are usually the most likely to move again, perhaps indicating that recently arrived migrants are willing to allow some time for adjustment before deciding whether to move again.[10]

As hypothesized in 6, we see in Table 6 and Appendix Tables A and B that the coefficients of the previous migration variables usually become somewhat smaller in magnitude, but are still sizeable and significant, when the explanatory variables that control for personal and place characteristics that affect migration are added to the regression. In several cases (e.g., the interdivisional equation for the large subsample), the changes in the coefficients are remarkably small; this implies that unobservable characteristics correlated with mobility propensities are apparently quite important. The greatest differences between cols. (2) and (3) occur for the subsample of families with military, student, or retired heads shown in Appendix Table A, for whom the 1971-1972 move may be more "institutionally" motivated. When military status and student status are statistically controlled, the coefficients of the previous migration dummies, which are positively correlated with those statuses, become smaller and more similar to those estimated for the large subsample.

We see in Appendix Table B that the effects of previous migration on subsequent migration also vary with the average distance of the type of move under consideration. As in the cross-tabs presented earlier, the previous migration effects generally become weaker as the average distance moved becomes smaller (and the relevant geographic unit becomes smaller). The stronger effects for longer distances may be due to the fact that return migration rates (defined with respect to the population at risk, i.e., previous migrants) tend to increase with distance (DaVanzo, 1976a; Yezer and Thurston, 1976; Long and Hansen, 1977(b); DaVanzo, 1978).

Summary and Conclusions

In this paper, we have shown (as have others) that people are much more likely to migrate in a given period if they migrated in the recent past. Going beyond existing research, we have demonstrated that this effect is due largely to people's strong tendency to return to places they recently left. Among interdivisional and interstate migrants, the majority of potential repeat migrants who moved again did, in fact, return.

Families' propensities to migrate again increase with the number of previous

moves if those multiple moves were a series of nonreturn moves; however, for a given number of multiple moves, families whose last move was a return are less likely to migrate again. Thus, we have clear indications that many seemingly "chronic" migrants should not be classed among the footloose; they are people returning somewhere and the prospect of their further movement is, therefore, diminished. They clearly differ from the true "chronic" migrant, whose migration propensities remain high.

Recent arrivals unable to find acceptable employment are especially likely to migrate again and to return to places where they lived before. Many long-distance moves are return or repeat moves by families who moved previously and were unemployed or looking for work before the repeat move. Apparently, dissatisfaction with the outcome of the previous move triggered the repeat move. If this series of multiple moves was not planned at the outset, but was the result of unforeseen consequences due to unreliable (or no) prior information, certain policy implications follow. Public programs that provide job market information may discourage costly and unproductive repeated moves and improve the efficiency of migration.

The finding that recent migrants who are unable to find acceptable employment are especially likely to move again indicates that, within the subset of recent migrants, the consequences of one move are in large part the determinants of the next. This suggests that an integrated study of the causes and effects of migration, topics typically considered separately in the past but that can be combined when longitudinal data are used, should improve our understanding of the causes of repeat and return migration and the phenomenon of the "chronic" migrant.

The major findings of this study are consistent with the analytic framework used here, with its central concepts of location-specific capital and information costs. We have shown that even though particular factors may be variously more powerful in their effects on return, nonreturn repeat, or primary (new) migration, the framework itself is sufficiently general to be applicable to all three. Future research should endeavor to test the implications of this framework further by

examining direct indicators of location-specific capital and variables likely to be correlated with information costs.[11]

Inevitably, the empirical findings must be qualified. They are based on the migration behavior in a particular recent year of a sample of white families with intact marriages. The findings could well be sample- or period-specific, and their applicability to other time periods and other demographic groups must await further replication.[12] But if the findings have any degree of general validity (which is not unreasonable to assume), they suggest two major guidelines for future research: (1) There appear to be large payoffs to examining individual moves within the larger context of sequences of moves and the adjustments they reflect in people's lives. (This argues strongly for a reliance on longitudinal data of the kind used here.) (2) A theory that includes concepts of location-specific capital and information costs can offer a powerful framework for interpreting these sequences of moves.

APPENDIX TABLE A

REGRESSION ESTIMATES OF PREVIOUS
MIGRATION EFFECTS FOR TWO SUBSAMPLES
DEPENDENT VARIABLE = INTERDEPENDENT MIGRATION

Sample / Explanatory Variables	Specification (1) Only Previous Migration Variables		(2) Eq. (1) + Employment Status Interactions		(3) Other Explanatory Variables Held Constant		(4) Only Previous Migration Variables (No. Moves and Duration of Residence Effects Assumed Independent)		
Families Whose Heads are Prime-Age Civilians									
Moved Once in Recent Past							Number of Moves in Recent Past Moves		
Moved 1 yr. ago (70-71) [M-1]	.0667	(2.58)	-.0446	(-1.56)	-.0347	(-1.24)	One [1M]	.162	(6.39)
Moved 2 yr. ago (69-70) [M-2]	.247	(9.82)	.226	(9.15)	.231	(9.59)	Two [2M]	.266	(4.67)
Moved 3 yr. ago (68-69) [M-3]	.163	(6.43)	.132	(5.22)	.109	(4.41)	Two, Second a Return [2M-Ret]	-.0848	(-1.57)
Moved Twice in Recent Past							Three [3M]	.126	(1.48)
Moved 1 yr. ago and 2 yr. ago [M-1-2]	.294	(4.93)	.261	(4.41)	.238	(4.13)	Duration of Residence in 1971 Location		
Moved 1 yr. ago and 3 yr. ago [M-1-3]	.110	(1.64)	.110	(1.66)	.0811	(1.27)	One Year	-.0770	(-2.48)
Moved 2 yr. ago and 3 yr. ago [M-2-3]	.311	(5.14)	.212	(3.44)	.171	(2.81)	Two Years	.0684	(2.35)
Moved Three Times in Recent Past (Moved 1, 2, and 3 yrs, ago) [M-1-2-3])	.165	(1.72)	.160	(1.60)	.188	(1.49)	Last Previous Move a Return to Place of Upbringing	-.117	(-1.72)
Last Prev. Mv. a Return							Place of 1971 Residence Same as Place of Upbringing (Grew up here)		
Recent Multiple Move Ended With a Return (Mult. Mvs. Ret.)	-.115	(-2.03)	-.109	(-1.89)	-.0918	(-1.63)		-.0123	(-1.76)
Last Prev. Mv. a Return to Place of Upbringing (M-t·Grew up here)	-.120	(-4.78)	-.123	(-4.97)	-.114	(-4.74)	R^2 ($\bar{R}^2$)	.0859	(.0813)
Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0123	(-1.76)	-.0123	(-1.80)	-.00988	(-1.44)			
Moved at Least Once in Recent Past (M-t) and									
Unemployed, 1971	---		.275	(4.17)	.183	(2.62)			
Employed, But Looking For Work, 1971	---		.245	(7.76)	.207	(6.27)			
R^2 ($\bar{R}^2$)	.091	(.171)	.131	(.124)	.210	(.189)			

APPENDIX TABLE A (cont'd)

Sample / Explanatory Variables	Specification (1) Only Previous Migration Variables		(2) Eq. (1) + Employment Status Interactions		(3) Other Explanatory Variables Held Constant		(4) Only Previous Migration Variables (No. Moves and Duration of Residence Effects Assumed Independent)	
Families Whose Heads are Students or Retired or in Armed Forces								
Moved Once in Recent Past							Number of Moves in Recent Past Moves	
Moved 1 yr. ago (70-71) [M-1]	.320	(5.10)	.249	(3.42)	.113	(1.32)	One	.410 (4.64)
Moved 2 yr. ago (69-70) [M-2]	.301	(4.06)	.233	(2.93)	.0924	(0.99)	Two	
Moved 3 yr. ago (68-69) [M-3]	.446	(5.01)	.271	(2.37)	.186	(1.63)	Two, Second a Return	.405 (3.24)
Moved Twice in Recent Past							Three	
Moved 1 yr. ago and 2 yr. ago [M-1-2]								
Moved 1 yr. ago and 3 yr. ago [M-1-3]							Duration of Residence in 1971 Location	
Moved 2 yr. ago and 3 yr. ago [M-2-3]	.196	(1.73)	.196	(1.75)	.251	(1.99)	One Year	-.0770 (-2.48)
Moved Three Times in Recent Past (Moved 1, 2, and 3 yrs. ago [M-1-2-3])							Two Years	-.172 (-1.78)
							Last Previous Move a Return to Place of Upbringing	-.135 (-2.40)
Last Prev. move a Return								
Recent Multiple Move Ended With a Return (Mult. Mvs. Ret.)	.187	(1.30)	.0372	(0.24)	-.135	(-0.90)	Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0393 (-1.42)
Last Prev. Mv. a Return to Place of Upbringing (M-t·Grew up here)	-.261	(-3.13)	-.208	(-2.35)	-.251	(-2.95)	R^2 ($\bar{R}^2$)	.188 (.174)
Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0393	(-1.42)	-.0393	(-1.43)	-.0184	(-0.70)		
Moved at Least Once in Recent Past (M-t) and								
Student or Retired, Not Looking for Work, 1971	----		.0588	(0.72)	.238	(2.57)		
Unemployed, 1971	----		.352	(2.99)	.083	(0.62)		
Employed, But Looking for Work, 1971	----							
Student or Retired, But Looking for Work, 1971	----		.243	(1.73)				
R^2 ($\bar{R}^2$)	.188	(.171)	.212	(.189)	.405	(.334)		

APPENDIX TABLE B

REGRESSION ESTIMATES OF PREVIOUS MIGRATION EFFECTS FOR INTERDIVISIONAL, INTERSTATE, AND INTERCOUNTY MIGRATION FOR THE TOTAL SAMPLE (N=1952)

Type of Migration / Explanatory Variables	Specification (1) Only Previous Migration Variables		Specification (2) Eq. (1) + Employment Status Interactions		Specification (3) Other Explanatory Variables Held Constant	
Interdivisional Migration						
Moved Once in Recent Past						
Moved 1 yr. ago (70-71) [M-1]	.182	(7.35)	.0647	(2.37)	.00682	(0.25)
Moved 2 yr. ago (69-70) [M-2]	.271	(10.35)	.226	(8.68)	.182	(7.15)
Moved 3 yr. ago (68-69) [M-3]	.235	(8.53)	.146	(5.06)	.0992	(3.61)
Moved Twice in Recent Past						
Moved 1 yr. ago and 2 yr. ago [M-1-2]	.342	(6.38)	.317	(5.97)	.222	(4.29)
Moved 1 yr. ago and 3 yr. ago [M-1-3]	.0811	(1.13)	.0900	(1.29)	.00379	(0.06)
Moved 2 yr. ago and 3 yr. ago [M-2-3]	.259	(4.01)	.191	(2.98)	.0480	(0.76)
Moved Three Times in Recent Past (Moved 1, 2, and 3 yr. ago [M-1-2-3])	.432	(4.37)	.489	(5.03)	.339	(3.62)
Last Prev. Mv. a Return						
Recent Multiple Moves Ended With a Return (Mult. Mvs. Ret.)	-.0637	(-1.08)	-.125	(-2.12)	-.0433	(-0.76)
Last Prev. Mv. a Return to Place of Upbringing (M-t Grew up here)	-.161	(-6.04)	-.149	(-5.62)	-.108	(-4.26)
Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0195	(-2.50)	-.0195	(-2.56)	-.0134	(-1.79)
Moved at Least Once in Recent Past (M-t) and						
Student or Retired, Not Looking for Work, 1971	---	---	.172	(4.77)	.197	(7.43)
Unemployed, 1971	---	---	.182	(2.59)	.206	(2.56)
Employed, But Looking for Work, 1971	---	---	.270	(7.81)	.187	(5.25)
Student or Retired, But Looking for Work, 1971	---	---	.292	(5.56)	.376	(4.46)
R^2 ($\bar{R}^2$)	.125	(.121)	.167	(.161)	.284	(.264)

APPENDIX TABLE B (cont'd)

Type of Migration Explanatory Variables	Specification (1) Only Previous Migration Variables		(2) Eq. (1) + Employment Status Interactions		(3) Other Explanatory Variables Held Constant	
Interstate Migration						
Moved Once in Recent Past						
Moved 1 yr. ago (70-71) [M-1]	.155	(6.82)	.0893	(3.66)	.0249	(1.02)
Moved 2 yr. ago (69-70) [M-2]	.197	(7.79)	.164	(6.35)	.111	(4.35)
Moved 3 yr. ago (68-69) [M-3]	.139	(5.32)	.092	(3.44)	.0521	(1.99)
Moved Twice in Recent Past						
Moved 1 yr. ago and 2 yr. ago [M-1-2]	.392	(7.65	.354	(6.93)	.266	(5.29)
Moved 1 yr. ago and 3 yr. ago [M-1-3]	.0626	(0.78)	.0726	(0.92)	-.0122	(-0.15)
Moved 2 yr. ago and 3 yr. ago [M-2-3]	.214	(3.80)	.163	(2.91)	.112	(2.08)
Moved Three Times in Recent Past (Moved 1, 2, and 3 yr. ago [M-1-2-3])	.406	(4.19)	.388	(4.05)	.313	(3.38)
Last Prev. Mv. a Return						
Recent Multiple Moves Ended With a Return (Mult. Mvs. Ret.)	-.158	(-2.71)	-.191	(-3.30)	-.198	(-3.56)
Last Prev. Mv. a Return to Place of Upbringing (M-t Grew up here)	-.0810	(-2.91)	-.0840	(-3.05)	-.0452	(-1.69)
Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0169	(-2.08)	-.0169	(-2.09)	-.0135	(-1.67)
Moved at Least Once in Recent Past (M-t) and						
Student or Retired, Not Looking for Work, 1971	---	---	.0838	(2.40)	.122	(3.36)
Unemployed, 1971	---	---	.301	(4.23)	.132	(1.70)
Employed, But Looking for Work, 1971	---	---	.210	(5.86)	.166	(4.29)
Student or Retired, But Looking for Work, 1971	---	---	.347	(4.89)	.277	(3.11)
R^2 ($\bar{R}^2$)	.097	(.093)	.128	(.122)	.221	(.201)

APPENDIX TABLE B (cont'd)

Type of Migration Explanatory Variables	Specification (1) Only Previous Migration Variables		(2) Eq. (1) + Employment Status Interactions		(3) Other Explanatory Variables Held Constant	
Intercountry Migration						
Moved Once in Recent Past						
Moved 1 yr. ago (70-71) [M-1]	.178	(7.34)	.150	(5.80)	.0793	(3.05)
Moved 2 yr. ago (69-70) [M-2]	.125	(5.56)	.101	(4.23)	.0662	(2.79)
Moved 3 yr. ago (68-69) [M-3]	.161	(5.91)	.138	(4.91)	.109	(3.94)
Moved Twice in Recent Past						
Moved 1 yr. ago and 2 yr. ago [M-1-2]	.187	(3.79)	.165	(3.31)	.0671	(1.36)
Moved 1 yr. ago and 3 yr. ago [M-1-3]	-.0104	(-0.15)	-.0205	(-0.30)	-.118	(-1.79)
Moved 2 yr. ago and 3 yr. ago [M-2-3]	.0187	(0.43)	-.0086	(-0.20)	-.0735	(-1.71)
Moved Three Times in Recent Past (Moved 1, 2, and 3 yr. ago [M-1-2-3])	.417	(3.81)	.399	(3.64)	.207	(1.94)
Last Prev. Mv. a Return						
Recent Multiple Moves Ended With a Return (Mult. Mvs. Ret.)	.0996	(1.63)	.103	(1.68)	.111	(1.88)
Last Prev. Mv. a Return to Place of						
Upbringing (M-t Grew up here)	-.0625	(-1.86)	-.0592	(-1.76)	-.0420	(-1.28)
Place of 1971 Residence Same as Place of Upbringing (Grew up here)	-.0146	(-1.40)	-.0146	(-1.40)	-.176	(-1.68)
Moved at Least Once in Recent Past (M-t) and						
Student or Retired, Not Looking for Work, 1971	---	---	.0668	(1.80)	.0930	(2.27)
Unemployed, 1971	---	---	.237	(3.10)	.121	(1.35)
Employed, But Looking for Work, 1971	---	---	.0650	(1.74)	-.0315	(-0.73)
Student or Retired, But Looking for Work, 1971	---	---	.0908	(1.30)	-.0624	(-0.56)
R^2 ($\bar{R}^2$)	.075	(.070)	.082	(.075)	.174	(.152)

APPENDIX TABLE C

Definition of Variables in Table 6 and Appendix Tables A and B

Dependent Variables	Each Is A Dummy Variable That Equals One If:
Interdivisional migration	The family resided in a different Census division in 1972 than in 1971, zero otherwise.
Interstate migration	The family resided in a different state in 1972 than in 1971.
Intercounty migration	The family resided in a different county in 1972 than in 1971.
Explanatory Variables[a]	
M-1	The family made an interdivisional (interstate, intercounty) move between 1970 and 1971, but did not make such a move between 1968 and 1970.
M-2	The family made an interdivisional (interstate, intercounty) move between 1969 and 1970, but made no such move between 1968 and 1969 or between 1970 and 1971.
M-3	The family made an interdivisional (interstate, intercounty) move between 1968 and 1969, but did not make such a move between 1969 and 1971.
M-1-2	The family made interdivisional (interstate, intercounty) moves between 1970 and 1971 and between 1969 and 1970, but did not make such a move between 1968 and 1969.
M-2-3	The family made interdivisional (interstate, intercounty) moves between 1969 and 1970 and between 1968 and 1969, but did not make such a move between 1970 and 1971.
M-1-2-3	The family made interdivisional (interstate, intercounty) moves in all three pairs of years between 1968 and 1971 (i.e., 1968-69, 1969-70, 1970-71).

Explanatory Variables (cont'd)	A Dummy Variable That Equals One If:
Mult. mvs. - Ret.	The family made multiple moves between 1968 and 1971 (i.e., M-1-2, M-1-3, M-2-3, or M-1-2-3 = 1) and the earlier of these moves was a move away from the division (state, county) where they resided in 1971; i.e., the moves consisted of a move away and a return to the family's 1971 area of residence.
Grew Up Here	The family head grew up in the division (state, county) of his 1971 residence.
M - t (used in interactions)	The family made at least one interdivisional (interstate, intercounty) move between 1968 and 1971; equals one if any of the M-1, M-2, ..., M-1-2-3 variables above is one.
Student or Retired, Not Looking For Work (used in interactions)	The husband is not in the labor force (i.e., is retired or a student) and is not looking for work at the time of the 1971 survey.
Unemployed (used in interactions)	The husband is unemployed at the time of the 1971 survey.
Employed But Looking For Work (used in interactions)	The husband is employed but looking for another job at the time of the 1971 survey.
Student Or Retired, But Looking For Work	The husband is not in the labor force (retired or a student) but is looking for work at the time of the 1971 survey.

The following variables are used only in specification (4) of Table 6 and Table A:

1M	The family made exactly one interdivisional move in the last three years (1968-1971) (M-1 + M-2 + M-3).
2M	The family made two interdivisional moves in the last three years (=M-1-2 + M-1-3 + M-2-3).

Explanatory Variables (cont'd)	A Dummy Variable That Equals One If:
2M - Ret	The family made two interdivisional moves in the last three years and the second was a return to the place lived in before the first move.
3M	The family made three interdivisional moves in the last three years (=M-1-2-3).
Dur <1 year	The family has lived in the division of its current residence less than one year (=M-1 + M-1-2 + M-1-3 + M-1-2-3).
Dur 1-2 years	The family has lived in the division of its current residence for one to two years (=M-2 + M-2-3).

Footnotes

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1. The first two hypotheses have been tested and validated in other studies. They are presented here to show that they follow from the conceptual framework being used in this study.

2. The returns, or present value of wage gains (losses), available to the husband, wife, and family by moving to division j have been estimated for each division j, $j \neq i$ (i=division of 1971 residence) and for each husband and wife in the sample. These are based on wages imputed from wage equations (regressions of wage rates on a number of personal characteristics) estimated separately for each division. For more information, see DaVanzo (1976b), p. 86.

3. The number of potential return destinations (18) is larger than the number of potential returnees (17) because one family lived in two places (other than their 1971 location) between 1968 and 1970.

4. Long and Hansen's (1977a) regression findings regarding the differential effects of origin income on the propensities for return, repeat, and primary migration are also consistent with the hypothesis that it is those who stand to gain the most by returning who do, in fact, return.

5. All of the variables whose coefficients appear in Table 6 are dummies, but specification (3) also includes continuous variables (whose coefficients are not

reported here but appear in DaVanzo (1976b)); hence, multiple classification analysis would not be appropriate. Although several of the nice properties of ordinary least squares (OLS) do not hold when the dependent variables is dichotomous, it nonetheless gives unbiased coefficient estimates. Several of the equations have also been estimated by the more appropriate, but considerably more expensive, probit technique, and most of the results were quite similar to the OLS results presented here. Unfortunately, budget constraints precluded estimating all equations by probit.

The unobservable factors that affect migration decisions in one period may be correlated with those that affect migration decisions in other periods. Hence, the previous migration explanatory variables may be correlated with the equation's error. Unfortunately, budget limitations did not allow using the expensive statistical techniques necessary to correct for these potential simultaneity biases (e.g., Nerlove and Press, 1973). In the estimation here, we in effect implicitly assume the previous migration explanatory variables to be predetermined as of the start of the migration period under consideration.

6. Note that in specifications (1) and (4) the coefficient of a particular variable shows how the migration propensity of a typical family with that characteristic differs from that of a typical family which did not migrate between 1968 and 1971 and whose head did not grow up in the area of the family's 1971 residence. The "excluded group" for specifications (2) and (3) consists of families that did not migrate between 1968 and 1971 and whose head was employed and not looking for work in 1971 and did not grow up in the area of his 1971 residence.

7. In Appendix Table A, the same specifications shown in Table 6 are estimated for two mutually exclusive subsamples, one (of 1605 families) restricted to families whose heads were prime-age civilians and the complement (of 347 families) consisting of families whose heads were students, retired, or in the armed forces; the latter's moves are likely to be more "institutionally" determined. In Appendix Table B, we present regressions explaining *interstate* and *intercounty* migration for the total sample.

Footnotes (cont'd)

8. However, in the prime-age civilian subsample shown in Appendix Table A, those who migrated every year are less likely to migrate again than those who migrated once or twice, implying that there may be a limit to a family's tolerance for very frequent migration.

9. For recent multiple movers whose multiple moves concluded with return to the area where they grew up, one must add the Mult. Mvs.-Ret. and the M-t Grew up here coefficients to the appropriate M-1-2, etc., coefficients to determine how these families differ from families without recent migration experience.

10. Morrison (1971) found a similar result in his investigation of migration using the Survey of Economic Opportunity data: when other migration correlates were held constant, persons who lived in a county less than one year were less likely to move than persons who lived there 1 to 2 years.

11. For example, see DaVanzo and Morrison (1978) or DaVanzo (1978).

12. Also the statistical technique used here, OLS, rests on the assumption that the unobserved factors affecting migration decisions are uncorrelated over time. Future work should endeavor to test the sensitivity of the findings to using more appropriate, but considerably more expensive, statistical techniques, such as that proposed by Nerlove-Press (1973), by jointly modelling migration decisions in a number of periods of time.

a. In each regression, the previous migration explanatory variables are defined at the same geographic level as the dependent variable in that equation.

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