A Logistic Model of the Seasonal Migration Decision for Elderly Households in Arizona and Minnesota

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While most previous studies of elderly migration have investigated permanent migration using Census data, this paper employs household (micro) data from statewide surveys conducted in Arizona and Minnesota to analyze seasonal migration as an economic decision. Estimation of logistic regression models for each state indicate income and age are important determinants, whereas these variables have not proven significant in previous studies based on aggregate data. The results lead to the conclusion that seasonal migration may be an integral part of a life cycle of elderly migration.

Key Words: Economics, Logistic regression, Migration life cycle

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The life-cycle pattern of permanent interstate migration among elderly households has been well documented (from U.S. Census Bureau sources) and understood. Primarily, Northern-state elderly households whose members are in their sixties move to the Sunbelt, often in conjunction with their decision to retire. A secondary, reverse flow occurs later in life when these same households are faced with death or disability. Often, they return to their northern places of origin to be near family caregivers, thus completing a cycle of elderly permanent migration (see Litwak & Longino, 1987; Longino, 1979; Serow 1978).

Much less documented is the phenomenon of elderly seasonal migration. These are the movements of elderly households that occur each year for an extended period, or season. Given that the Census has not directly recorded this form of migration, it has been less studied and is less understood (for a survey of approaches and findings see Hogan & Steinnes, 1994; Longino, 1990; Longino & Marshall, 1990). However, it has long been established, based on surveys conducted in various Sunbelt states (e.g., Happel, Hogan, & Pflanz, 1988; Hoyt, 1954; Martin, Hoppe, Larson, & Leon, 1987; Monahan & Greene, 1982; Sullivan & Stevens, 1982; Tucker, Marshall, Longino, & Mullins, 1988), that many Northern elderly households winter in the South. These studies generally have not involved the estimation of migration models. They have tended to be descriptive analyses of the characteristics of the migrants and their general reasons for migrating (Longino, 1990). The surveys have shown the seasonal migrant population to be predominantly White, married, and retired, and to be more educated, healthier, and to have higher incomes than nonmovers among the elderly population (Longino & Marshall, 1990). Research on seasonal migration by Canadians to the United States has produced similar results (Martin, Hoppe, Marshall, & Daciuk, 1992; Tucker et al., 1988).

While most studies of elderly seasonal migrants have relied upon data from surveys conducted in particular Sunbelt states, a few studies have utilized information relating to nonpermanent resident populations derived from the 1980 Census of Population (Gober & Mings, 1984; Hogan, 1987; Hogan & Steinnes, 1993; Rose & Kingma, 1989; Steinnes & Hogan, 1992). These data on nonpermanent residents were not intended by the U.S. Census Bureau to be accurate estimates of seasonal or other forms of temporary migration, and researchers have emphasized problems with the data and the fact that the data underestimate the volume of temporary migration. Even with these limitations, the Census data represent the only nationwide data relating to temporary migration available and have been the basis of national studies of the phenomenon. In particular, these data were utilized to estimate models of elderly seasonal migration to Arizona and Florida (Hogan, 1987) and to compare models of permanent and seasonal migration flows to Arizona (Hogan & Steinnes, 1993).

The approach taken in these aggregated studies is to estimate a multiple regression model using a cross-section of states as observations. In these models, the dependent variable is a migration rate and differences between states are used as independent, or explanatory, variables. Such differences often include both physical (e.g., climate and distance) and socioeconomic characteristics. While the physical differences are often significant, the use of state averages for socioeconomic characteristics (e.g., income, age, and
education) limits the variation (between states) for these independent variables and, consequently, they often are not statistically significant. An alternative approach is to use micro data, which means that households, rather than states, are the units of observation. Such models are estimated using logistic regression procedures and have a binary (i.e., migrate or not) dependent variable, which is the equivalent of a migration rate for states. One advantage, statistically, of the micro data model approach is that there is greater variation in socioeconomic characteristics between households than between states. Hence, the micro approach, which will be used in this article, is better able to analyze the influence of socioeconomic household characteristics on the decision to migrate or not.

While both aggregated and micro data approaches have been used to analyze permanent elderly migration using Census data, elderly seasonal migration has only been modeled using aggregated data because the available Census information does not allow for a micro data approach. In this article, we will use household survey data from two states, Arizona and Minnesota, to provide such a microdata analysis of the elderly seasonal migration decision. With such data it is also possible to determine a seasonal migration rate (for the origin state). Recently, we did this using data from a statewide sample of elderly Minnesota households, and we found the seasonal migration rate to be higher than previous Census-based estimates (see Hogan & Steinnes, 1994). We employ this same sample in this article and combine it with a similar survey of elderly households conducted in Arizona. In fact, the Arizona sample indicates elderly households leave Arizona in the summer at a higher rate than elderly Minnesota households leave their state in the winter (see Hogan & Steinnes [1996] for a description and summary of each survey).

This article utilizes data from both surveys to estimate logistic models of the household seasonal migration decision. The investigation is based on an economic model of choice that considers migration to be a consumption decision on the part of the elderly household. Estimation of these logistic regression models is done for each state and compared. The results indicate, among other things, that Minnesota elderly seasonal migrants are younger than their Arizona counterparts. This suggests that seasonal migration may be an integral part of the life cycle of elderly migration.

Method

Economic Models of Migration

Following conventional economic analyses of migration behavior, the decision of elderly households to migrate is considered to be a type of consumption decision. That is, the household is hypothesized to choose between migrating and not migrating on the basis of which option will provide the greatest utility or satisfaction, within the household's budget (or income) constraint. If an option is positively linked, statistically, to some household characteristic such as education, it could be inferred that households with greater education derive greater utility from the option. On the other hand, if an option were to be positively linked to income, it could be because higher income households derive greater utility from the option or because their higher incomes allow them to purchase the option (i.e., higher income means a less binding budget constraint).

A more formal economic explanation of migration as a consumption decision has been provided by Graves and Linneman (1979). They consider migration to be any locational move, whereas most have referred to all such moves as mobility and have only considered migration to be those moves between states or urban areas. In any case, their contribution is to view the decision to move in terms of standard demand theory. Households are seen as demanding a nontraded good, which varies by location, and the decision to move is thus an attempt to reach equilibrium in the optimal location. The estimation of the Graves and Linneman model, using probit procedures, is based on household rather than locational characteristics, that is, using familiar household characteristics as explanatory variables in a binary-choice migration model. In this and other such economic models of household behavior, the researchers do not have information from household surveys that provide direct answers as to why particular choices were made. Instead, they only have information as to which choices were made and about certain household characteristics. These data are then employed in a statistical analysis to evaluate whether those characteristics are systematically related to household behavior.

While in theory economists only consider consumption decisions in terms of economic (or budget) constraints, it is possible that other constraints may also influence the decision to migrate. For example, elderly households may have health/medical constraints that limit their mobility options, including migration. Such health/medical constraints may be physical but also financial and, hence, a component of what economists refer to as the "budget constraint." An example would be health insurance coverage that is not transportable between states (e.g., a health maintenance organization [HMO]). In any case, if good health is positively linked, statistically, to seasonal migration it could be because those in good health derive greater utility from the option or because they are less constrained, physically and/or financially, in choosing the option.

Following this approach, the model we estimate posits that households choose to migrate seasonally on the basis of maximizing utility and that their decisions may be influenced by certain characteristics of the households (e.g., age, income, etc.). If we discover that a household characteristic is positively linked, statistically, to seasonal migration, we do not attempt to differentiate whether it is because such households derive greater utility from migrating or it is because they are less constrained in choosing to migrate seasonally. For us, it is simply a statistical issue as to whether a given characteristic makes an elderly household more likely (i.e., willing and/or able) to migrate.
seasonally. While the analysis will focus on the six characteristics that are common to the surveys conducted in Arizona and Minnesota, many other traits may also be important. However, we will find that two of the six, age and income, can be better analyzed with the household micro data approach than by using aggregate data methods.

The model that we employ is a single period (year) model of migration choice. Unlike some migration models that emphasize migration destinations or locations and their various attributes, we will concentrate only on the choice to migrate seasonally or not. Moreover, we will only focus on the influence of household characteristics on the migration decision.

Data

In order to estimate the model being proposed, it is necessary to collect data from households who choose (during a specified time period) to migrate seasonally as well as those who do not. While the Census Public Use Micro Survey (PUMS) records could reveal for any location (state) those who permanently migrated and those who did not, it does not provide information on those who might have seasonally migrated from a particular location. Most household data on seasonal migrants have been gathered from surveys conducted in Sunbelt destination states, which means that nonmigrants were not included.

Until recently, only one origin-based household survey concerning elderly seasonal migration had been conducted (Krout, 1983), and it was for only a single rural area of the state of New York. We have access to two more recent surveys of elderly (age 60 and over) households in Arizona and Minnesota that gathered information on seasonal migrants and nonmigrants from these two states. The Minnesota Senior Needs and Resources Study was conducted in 1988 by the Wilder Research Center in conjunction with the University of Minnesota. The Arizona data were obtained from the Arizona State University (ASU) Monthly Household Survey conducted in 1990 by the ASU Survey Research Lab. Both were statewide telephone surveys done using random digit-dialing procedures, and similar response rates were obtained in both states (69% in Arizona and 68% in Minnesota). Although not identical, each survey determined seasonal migration activity and comparable socioeconomic characteristics for each participating household.

Although some U.S. households do migrate seasonally within the borders of the same state, virtually all research on both retirement migration and elderly seasonal migration has focused on interstate moves, primarily from Northern tier states to the Sunbelt. The criteria used to define a seasonal migrant household in the two independent surveys were similar and consistent with that concept: each survey required an out-of-state stay for a minimum period of consecutive weeks (four weeks for the Arizona survey and five weeks for the Minnesota survey) during a defined season (summer for Arizona and winter for Minnesota). In contrast, the only previous origin-based survey (Krout, 1983) defined elderly seasonal migrants as those elderly households who left their homes (either in- or out-of-state) for eight weeks. Moreover, the eight weeks could be nonconsecutive and occur at any time during the year.

Based on the criteria outlined above for Arizona and Minnesota, 124 of 1,228 elderly households in Arizona (10.1%) were found to be seasonal migrants compared to 138 of 1,500 Minnesota households (9.2%). These subgroups for each state provide the basis for the binary dependent variable in the choice model of the decision to migrate seasonally. The surveys also provide household characteristics, which are the independent variables in the model. However, we will only use those characteristics that are common to both surveys.

The empirical analysis examines the influence of six factors, described below, on the seasonal migration decision.

Income. — A positive relationship between income and seasonal migration is predicted by economic theory (additional income increases demand for most goods and services), and previous studies (see Graves & Linneman, 1979; Hogan, 1987; Longino & Marshall, 1990; Steinnes & Hogan, 1992) have demonstrated a positive link between income level and the decision to migrate.

Ownership of Second Home (in the State of Permanent Residence). — A second home reflects, in part, the accumulation of housing wealth; economic theory posits that wealth positively affects the demand for most goods and services. This would suggest that (primary or second) home ownership should be positively related to seasonal migration, and previous studies (see Hogan & Steinnes, 1994; Steinnes & Hogan, 1992) have confirmed this. While this is clearly true for Minnesota, owning two homes in Arizona is not only a measure of wealth but it also provides a potential refuge from the summer heat. Thus, owning a second home may have a negative effect on the decision of elderly Arizona households to migrate seasonally. Therefore, while we expect this variable to be positive for Minnesota households, the effect for Arizona households could be either positive or negative.

Age. — A more complex relationship is hypothesized for age, with the probability of seasonal migration increasing initially as the household reaches retirement and then declining at older ages due to the increasing likelihood of poor health or other problems that would limit travel.

Marital Status. — A positive relationship is hypothesized because previous research (see Happel et al., 1988; Hogan, 1987; Longino & Marshall, 1990; Martin et al., 1987) has identified that a high proportion of seasonal migrants are married. One explanation is that seasonal migration is often tied to social activities (e.g., those in trailer and recreational vehicle parks) oriented toward couples (see Happel et al., 1988; Martin et al., 1987).
Education. – As with marital status, previous research (see Hogan, 1987; Longino & Marshall, 1990; Sullivan & Stevens, 1982) would suggest a positive relationship between education and migration. The positive relationship may reflect, in part, the link between education and lifetime earnings, which means that education serves as a proxy for income and wealth that are not measured by previous variables.

Work Status. – A negative relationship between employment and migration is hypothesized because those still working would have less leisure time and would be less able to leave the area for extended periods.

Metro Area Residence. – A negative relationship is hypothesized, as previous studies (see Happel et al., 1988; Hogan & Steinnes, 1994; Martin et al., 1987) have found that residents of rural areas are more likely to migrate seasonally, particularly those with some connection to the agricultural sector. A possible reason why metropolitan area households may not migrate seasonally is that metropolitan areas offer more indoor amenities (e.g., cultural events and shopping malls) during seasons when outdoor activities are limited due to adverse weather conditions (i.e., winter in Minnesota and summer in Arizona).

Results
Sample Characteristics

The various household characteristics to be used are listed in Table 1, along with summary statistics for the seasonal migrant and nonmigrant subgroups of each state. The names given for each characteristic in Table 1 will be used in the presentation of the estimation results in the next section of this article. For some characteristics, the sample size is reduced because of missing values and, thus, the sample for estimation of the model is also reduced (see Table 2).

We can see in Table 1 that seasonal migrants in both states tend to be married, residents of rural areas, and not working, and typically have more income and education than nonmigrants, which coincides with what others have found. Also, we find in the Minnesota sample that seasonal migrants are more likely than nonmigrants to have a second home in Minnesota, whereas this is not the case for the Arizona sample.

Examining ages, we find that Minnesota nonmigrants are older than their Arizona counterparts, which is consistent with the findings of others; permanent migrants to the Sunbelt tend to return to their Northern origins when they get very old. We can say this, in part, because seasonal migrants tend to be younger than nonmigrants in both states (see Table 1) and thus as one ages, seasonal migration becomes less likely. This can be further substantiated by Figure 1, which provides graphs of the cumulative relative frequency distributions of the seasonal migrant subgroups in each state. In particular, each graph tends to flatten for the older ages (e.g., less than 10% of seasonal migrants are over age 77 in each state).

In contrast to nonmigrants, we see in Table 1 that Minnesota seasonal migrants are younger than those in Arizona, especially when viewed in terms of household migrates seasonally.

Table 1. Summary Statistics: Elderly Household Characteristics
(by State and Seasonal Migrant Status)

<table>
<thead>
<tr>
<th></th>
<th>Arizona</th>
<th></th>
<th>Minnesota</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Household characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (mean)</td>
<td>70.48</td>
<td>70.53</td>
<td>69.18</td>
<td>71.12</td>
</tr>
<tr>
<td>Age (median)</td>
<td>71.07</td>
<td>69.94</td>
<td>69.21</td>
<td>70.26</td>
</tr>
<tr>
<td>Income (mean)</td>
<td>31,990</td>
<td>25,190</td>
<td>29,532</td>
<td>18,505</td>
</tr>
<tr>
<td>Married (%)</td>
<td>.62</td>
<td>.54</td>
<td>.75</td>
<td>.54</td>
</tr>
<tr>
<td>Second home* (%)</td>
<td>.07</td>
<td>.09</td>
<td>.15</td>
<td>.07</td>
</tr>
<tr>
<td>College attendee (%)</td>
<td>.44</td>
<td>.42</td>
<td>.41</td>
<td>.26</td>
</tr>
<tr>
<td>Working (%)</td>
<td>.04</td>
<td>.14</td>
<td>.09</td>
<td>.20</td>
</tr>
<tr>
<td>Metro resident* (%)</td>
<td>.68</td>
<td>.73</td>
<td>.38</td>
<td>.43</td>
</tr>
<tr>
<td>Sample sizeb</td>
<td>124</td>
<td>1104</td>
<td>138</td>
<td>1362</td>
</tr>
</tbody>
</table>

* These characteristics refer to the household’s status in the state of residence (i.e., Arizona or Minnesota) and not where the household migrates seasonally.

** The number of cases for some characteristics is less than the sample size because of missing values.

Notes: Model 1 Arizona, \( \chi^2 = 49.34 \) (df = 7); Model 2 Arizona, \( \chi^2 = 50.07 \) (df = 8); Model 1 Minnesota, \( \chi^2 = 64.05 \) (df = 7); Model 2 Minnesota, \( \chi^2 = 66.71 \) (df = 8).

The sample sizes are lower than in Table 1 because of missing values for some characteristics.

Table 2. Estimation Results: Elderly Seasonal Migration Decision
(Dependent variables: 1 = seasonal migrant; 0 = not)

<table>
<thead>
<tr>
<th></th>
<th>Arizona</th>
<th></th>
<th>Minnesota</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td><strong>Household characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>.01</td>
<td>.03</td>
<td>.03</td>
<td>.32</td>
</tr>
<tr>
<td>Age (median)</td>
<td>.02</td>
<td>.33</td>
<td>.02</td>
<td>.32</td>
</tr>
<tr>
<td>Income (logged)</td>
<td>.55</td>
<td>.59</td>
<td>.54</td>
<td>.55</td>
</tr>
<tr>
<td>Married (1 = yes)</td>
<td>.29</td>
<td>.32</td>
<td>.58</td>
<td>.53</td>
</tr>
<tr>
<td>Second home* (1 = yes)</td>
<td>.621</td>
<td>.62</td>
<td>.52</td>
<td>.56</td>
</tr>
<tr>
<td>College attendee (1 = yes)</td>
<td>.05</td>
<td>.07</td>
<td>.41</td>
<td>.41</td>
</tr>
<tr>
<td>Working (1 = yes)</td>
<td>.53</td>
<td>.54</td>
<td>.32</td>
<td>.34</td>
</tr>
<tr>
<td>Metro resident* (1 = yes)</td>
<td>.46</td>
<td>.47</td>
<td>.41</td>
<td>.42</td>
</tr>
<tr>
<td>Sample sizeb</td>
<td>924</td>
<td>924</td>
<td>1064</td>
<td>1064</td>
</tr>
</tbody>
</table>

* These characteristics refer to the household’s status in the state of residence and not where the household migrates seasonally.

** The number of cases for some characteristics is less than the sample size because of missing values.

Notes: Model 1 Arizona, \( \chi^2 = 49.34 \) (df = 7); Model 2 Arizona, \( \chi^2 = 50.07 \) (df = 8); Model 1 Minnesota, \( \chi^2 = 64.05 \) (df = 7); Model 2 Minnesota, \( \chi^2 = 66.71 \) (df = 8).

* \( p < .10 \); ** \( p < .05 \); *** \( p < .01 \); **** \( p < .001 \).
median age rather than mean age. The age profiles of seasonal migrants are better illustrated by the graphs of Figure 1, which show that by the 35th percentile there is a two-year age difference between the migrants of the two states. More specifically, this indicates that 35% of Minnesota seasonal migrants are under age 66, whereas 35% of Arizona seasonal migrants are under age 68. This two-year age gap continues in Figure 1 up to about the 70th percentile (i.e., age 70 for Minnesota and age 72 for Arizona). Thereafter, the gap narrows for the remainder of the distributions.

The opening and then closing of the graphs in Figure 1 suggests that Minnesota elderly migrants seasonally migrate at a younger age than do those in Arizona. While this could be because of different proclivities to migrate seasonally in the two states, it might also be the result of Northern-state seasonal migrants making permanent moves to the Sunbelt and then engaging in reverse (to the North) seasonal migration. This possibility is further supported by the tendency for seasonal migrants to be found at higher ages in Arizona than Minnesota (see Figure 1).

The comparison of the ages in the two samples is consistent with a hypothesis that permanent migration is a precursor to seasonal migration for elderly households in Arizona. We advanced this hypothesis earlier when we discovered that seasonal migrants from Arizona tend to be recent permanent migrants to Arizona from Northern states (see Hogan & Steinnes, 1994). Now we will look for further evidence to support this hypothesis in the estimation results that follow.

**Estimation Results**

The models developed have been estimated using maximum likelihood procedures. We consider two migration choices, seasonal migration versus nonmigration, and use the data from statewide surveys conducted in Arizona and Minnesota. This requires estimation of a single-equation logistic regression model for each state with the same binary dependent variable (1 = seasonal migrant, 0 = not).

The results for both states are presented together in Table 2 to make comparisons easier. It should be noted that some other household characteristics (e.g., race and different levels of education) were considered as independent variables but were not significant for either state. Asterisks in Table 2 indicate the significance of each independent variable. In addition, Chi-squared values, which test all independent variables in the model together, indicate significance at less than the .001 level for all four models in Table 2.

For the most part, the independent variables in Table 2 have the same signs (positive or negative) for the Arizona and Minnesota models, indicating that seasonal migration is chosen by similar households in both states. One exception is College Attendee variables, which is positive for Minnesota and negative for Arizona. However, the coefficients are negligible and the least significant of the results presented in Table 2. Although there is a difference in signs for Second Home, this is consistent with the hypotheses for this variable advanced earlier. Moreover, the combination of signs, positive for Minnesota and negative for Arizona, supports a possible life cycle of elderly seasonal migration we have suggested in earlier studies (see Hogan & Steinnes, 1994; Hogan & Steinnes, 1996). That is, the positive sign for Second Home in the Minnesota results may reflect the fact that those who migrate seasonally (from Minnesota) and have a second home in Arizona as the place to which they will return in the summer after they permanently migrate to the Sunbelt. On the other hand, those with a second home in Arizona would not intend to use it as part of a seasonal migration life cycle. Also, recent permanent migrants to Arizona from the North, who are prone to become seasonal migrants from Arizona in the summer (see Hogan & Steinnes, 1996), are probably less likely to have a second home in Arizona than those who have lived in Arizona for a long time. Thus, the results for Second Home confirm a possible life cycle of elderly seasonal migration activity. The results for Metro Resident, Married, and Working are more significant and are consistent with expectations based on previous studies using aggregated and micro data.

The two quantitative variables, Income and Age, are not as significant in previous studies (see Hogan, 1987; Hogan & Steinnes, 1993; Steinnes & Hogan, 1992) of seasonal migration rates (to Florida and Arizona), which are based on the analysis of aggregated Census data. One of the reasons aggregate studies are unable to find a relationship between these characteristics and migration choices (as measured by migration rates for different states) is that there is too little variation between states in the means, or medians, of these variables. Moreover, if the relationship is not linear for the micro data, it is even less likely to be found significant in an aggregated analysis.

In fact, we found there to be a nonlinear relationship for both Income and Age in each state. A linear specification of Income proved less significant than
using a logarithmic specification. Therefore, all of the results in Table 2 use the latter specification of income, which implies that the probability of migrating seasonally increases at a slower rate at higher income levels; this appears to be true for both states.

The Age variable provided the most interesting result shown in Table 2. When a linear specification, (Model 1) was used, Age proved positive but insignificant. The implication of Model 1 would be that any household over age 60 is about equally likely to engage in seasonal migration activity. However, we had found earlier (see Hogan & Steinnes, 1996) that, in fact, such activity increases into the seventies and then declines. Therefore, to capture this in our logistic regression model we added another independent variable, Age Squared, creating Model 2 which is quadratic in terms of age. Both the Age and Age Squared variables are more significant in Model 2 than when Age was used alone in Model 1. The quadratic model implies a parabolic relationship with a maximum that can be determined by differentiating (in terms of age). We have done this and found the peak age for migrating seasonally to be lower for the Minnesota sample (72.9 years) than for the Arizona sample (74.4 years).

This is consistent with a hypothesis we advanced (see Hogan & Steinnes, 1996) from our earlier findings. That is, Minnesota seasonal migrants tend to be younger than their Arizona counterparts and, therefore, they could be the same households at different stages of an elderly migration life cycle. Such a life cycle could begin with seasonal North-to-South migration, which becomes permanent (see McHugh, 1990). Once permanent residents in the South, these same households could (at older ages) become seasonal migrants to Northern states during the summer. Finally, though not considered in this article, they might return as permanent migrants to the North to be near caregivers, as others have suggested (see Litwak & Longino, 1987).

Discussion

This attempt at a formal investigation of the determinants of elderly seasonal migration, based upon individual household-level data and employing a binary choice model, identifies significant links between household characteristics and seasonal migration, which aggregate models do not. The results also confirm, for the most part, previous distinctions between the two subpopulations (seasonal migrants vs nonmigrants) that have been drawn from Sunbelt surveys.

While the information collected by the Arizona and Minnesota surveys provides valuable data on elderly seasonal migration that are not available from other sources, the shortcoming of the data is the fact that they provide limited geographic variation with respect to origin, so many potentially interesting variables relating to the characteristics of the households' origin locations cannot be considered. Incorporation of questions relating to seasonal migration into national surveys (or at least surveys incorporating a wider region) is necessary for this purpose.

This investigation does not attempt to look at the more fundamental question of what determines whether elderly households decide to become seasonal or permanent migrants, because neither survey asked questions about expectations of permanent migration nor identified permanent migrants (who would have been located in a destination state when the origin state surveys used in this paper were conducted). To find and analyze elderly households making all three migration choices (seasonal, permanent, and nonmigration) would require a national survey or inclusion of questions pertaining to seasonal migration in a future Census.

Although the results presented suggest there may be linkages between seasonal and permanent elderly migration, definitive proof will require more extensive data collection. For example, a panel study could be conducted over several years, or even a lifetime, to trace the ongoing migration decisions of elderly households. Such information would make it clearer whether seasonal migration is, in fact, an integral part of a life cycle of elderly migration as has been suggested in this paper. Until better data are collected, the exploration of elderly seasonal migration activity with available data should continue so that it is as fully understood as elderly permanent migration.

Even without a full understanding of seasonal migration behavior, the results of this study and of previous research relating to the phenomenon of elderly seasonal migration have important implications for policy makers and for U.S. society in general, particularly as the baby boom generation begins to reach retirement age in a few years. Approximately 1 in 10 elderly households surveyed were identified as seasonal migrants in the two states used in this analysis (Hogan & Steinnes, 1996), and studies conducted in Arizona, Florida, and Texas (Happel et al., 1988; Martin et al., 1987; Rose & Kingma, 1989) have identified large and concentrated seasonal populations that flock to these (and presumably other) Sunbelt states each winter. Annual flows of this magnitude have significant economic and social impacts on both the sending and receiving states (Hogan, McHugh, & Happel, 1995; Monahan & Greene, 1982).

Although this study does not attempt to quantify these impacts, the magnitude of the seasonal flows to and from some Sunbelt states may mitigate any impacts of permanent elderly migration. In particular, although Sunbelt states certainly gain from permanent elderly migration and some areas have even come to view such migration as a form of economic development (see Longino, 1995), this is at least partially offset by the reverse (South to North) seasonal migration indicated by the findings for the Arizona elderly households. For Northern states, on the other hand, the negative impacts of the outflow of elderly retirees would tend to be offset by this seasonal return flow in the summer. Clearly, any policy conclusion regarding elderly migration, such as the assessment of economic impacts, must include seasonal and not just permanent migration activity.

Public officials and nonelderly residents of some
receiving areas have also been concerned with the political impacts of an influx of elderly retirees (see Longino, 1990). Because they would be less likely to become politically involved in their “temporary” homes, even large concentrations of seasonal migrants could be expected to have little direct impact on an area’s politics.

Also, the suggestion made in this article that there may be a life cycle of elderly migration, including both seasonal and permanent moves at different stages of life, would have very definite implications for policy and practice. For example, knowing the probabilities of households making the transitions (i.e., the decision to migrate, either seasonally or permanently) would make it possible to forecast future seasonal and permanent migration flows between states.

As the leading edge of the baby boom generation begins to reach early retirement age shortly after the turn of the century, the numbers of seasonal migrants can be expected to grow rapidly, not only due to their absolute numbers but also as a result of the baby boom cohort’s wealth and higher education levels relative to previous cohorts. Given our findings, we would expect many of these same seasonal migrants to become permanent Sunbelt residents and then engage in reverse (South to North) seasonal migration activity. Such movements may be more pronounced than in the past and can be expected to have a wide variety of effects on U.S. society in the twenty-first century.

References


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