

Retirement-Age Migration to and from Oregon:
Who is still on the Oregon Trail?

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Abstract

Oregon, much like the nation, has historically had a paradoxical relationship to migration. Oregon is famous for the Lewis and Clark expedition and the Oregon Trail. It is, and always has been, greatly affected and inspired by interstate migration yet each successive generation has been less than welcoming to further migration. Today, Oregon is a desirable destination for retirement-aged migrants for its scenic beauty and mild seasons. This essay will use census data from 2000 to describe the characteristics associated with retirement-age migrants to Oregon. Multinomial logistic regression analysis is used to compare retirement-aged Oregon in-migrants with Oregon non-movers, Oregon out-migrants and non-movers and out-migrants of the states from which in-migrants to Oregon originated. In three cases, the characteristics effecting the decision to migrate are determined by comparing a migrant group population with its respective non-mover population. This essay is a useful tool for those seeking to understand the characteristics important to retirement-age migration to Oregon as well as the factors influencing the migration decision.

1. Introduction

As the baby boom generation reaches retirement-age, many policy implications have come into focus. The implications for major federal programs such as Social Security and Medicare are frequently discussed both in the media and academia. However, the impact these retirees will have on the communities in which they choose to

spend their golden years is often left out of the discussion. Those same federal entitlement programs that will be straining under the weight of the baby boom generation will also be stimulating the economies of the areas to which they migrate. Local services and medical care, on the other hand, will be serving ever larger numbers of clients putting strain on resources and infrastructure.

States have been actively courting the retirement-age migrant demographic for some time and states with substantial out-migration have pursued policies directly designed to stem the loss (Longino and Crown, 1990). New Jersey went so far as to cease their estate tax as an incentive to keep those of retirement-age from moving to higher amenity, lower tax states such as Florida.

Oregon, much like the nation, has historically had a paradoxical relationship to migration. Oregon is famous for the Lewis and Clark expedition and the Oregon Trail. It is, and always has been, greatly affected and inspired by interstate migration. Interstate migration, however, has not always been a desired phenomenon for the descendents of those that crossed the Oregon Trail. Tom McCall, Oregon Governor from 1967-1975, though himself born in another state, once said "Come visit us again and again. This is a state of excitement. But for heaven's sake, don't come here to live." (Robbins).

Bryant and El-Attar (1984) posit that the impact of elderly migration will depend on three factors: the short and long term effects due to their arrival, the characteristics of the migrants themselves and the characteristics of the areas that receive them.

The literature review will address the first criterion since much research has already been done in this area. The characteristics influencing retirement-age migrants to Oregon will be addressed by the data analysis to follow. In closing, there will be a discussion of the policy considerations for Oregon.

This study determines the relationship demographic indicators have on the odds of migration for Oregon in-migrants when compared with Oregon non-movers, Oregon out-migrants and non-movers and out-migrants of the states from which in-migrants to Oregon originated.

2. Literature Review

2.1 Characteristics of a Retirement-Age Migrant

The literature on retirement-age migration is generally consistent on the characteristics of the average migrant. Retirement-age migrants are described as wealthier, healthier, better educated and more likely to be married (Litwak and Longino, 1987; Glasgow, 1995). Longino and Biggar (1982) also included more likely to own a home, to be white and to be without employment. Glasgow and Brown (2006) also point out that the long term residents of the nonmetropolitan areas retirement-age migrants choose also bear these characteristics. This may be due to the 'long term residents' actually being migrants themselves prior to the timeframe of the study.

If there is any disagreement in the literature it is over how to classify the elderly at different life stages and what changes this has on the characteristics of elderly migrants of each classification. Litwak and Longino (1987) outline the three major types of moves for the elderly. The first type is someone who chooses a retirement residence based on desirable amenities. These migrants tend to be the young-old, still married, relatively healthy and wealthy; the classic definition of a retirement-age migrant discussed earlier. The second type of move, which occurs at the outset of chronic illness, brings them closer to family support systems. The third type of move was into institutional care. They found evidence of these types of moves in the characteristics of the migrants from the North to the Sunbelt and vice versa. While migrants moving South tended to be younger, wealthier and married, migrants to the North were more likely to be older, disabled and widowed. Frey et al. (2000) had a different but compatible classification of migrants. Primary migrants were those who moved to another state from their birth state, secondary migrants were those who moved from and to a state other than their birth and return migrants are those who moved back to the state of their birth. Primary migrants are principally seeking amenities in their new locations. In addition, Frey et al. argue that these different migrant types have different effects and that certain states are better for attracting or losing each. Litwak and Longino's first migrant type will be the focus of this paper. In doing so, these migrants could fit into any of Frey et al.'s categories.

The literature on baby boom retirement-age migration is understandably scarce since they have yet to reach retirement-age. Haas and Serow (2002), though, detail the

potential differences between past retiree migrants and the baby boom generation. The motivational factors in migration decisions, they argue, are in flux with the baby boom. Boomers may not be as financially stable in their retirement incomes as the previous generation. The increase in the numbers of buyers in the housing market due to the baby boom raised the value of homes of the previous generation. The pre-boomer generation used this increase in home values to fund their migrations and Haas and Serow doubt the ability of the boomers to do the same. It should be noted that they came to this conclusion prior to both the boom and bust in the housing market that occurred in the mid to late 2000s. They also cite a decrease in both the pervasiveness and strength of private pension plans as a limiting factor on the baby boom generation to remain mobile like their parents. Due to these and other factors they argue that even though the baby boom is significantly larger than the previous generation, the actual number of retirement migrants may not increase by a dramatic margin.

The purpose of this paper is to determine the characteristics of retirement-age migrants to Oregon to see if they fit the literature archetype of a retirement-age migrant. Based on the literature this group should be younger, wealthier, better educated, home owners, amenity seekers and married. The focus of the analysis will be on the ages at or just before the usual age of retirement. To study those beyond this age will increase the likelihood of capturing those migrating for health rather than amenity reasons.

2.2 The Decision to Migrate

Migration decisions are influenced by a series of push and pull factors (Haas and Serow, 1993). Push factors are the reasons potential migrants do not prefer their current location while pull factors are the reasons potential migrants prefer the potential destination. Examples of push factors include expensive housing, poor or extreme weather, and crime. Examples of pull factors include economic opportunities, family, and amenities. Brown et al. (1997) found that most people prefer to live in their existing environment. If they do choose to move, however, their preferences are for less dense locations. Much of the pull to move to densely populated regions is due to economic opportunities and not a desire to live in dense areas. Density of the location is a push factor but for younger adults it is generally outweighed by the pull of economic opportunity. As one approaches retirement these economic opportunities become less important. This may explain why so many retirement-age individuals move to less densely populated regions. It is not because their preferences have changed with age but that their economic circumstances have permitted them to act upon those preferences. Haas and Serow (1993) found the top two push factors for retirement migrants were poor climate and urban problems. The top two pull factors were scenic beauty and four mild seasons. Carlson et al. (1998) in their Idaho case study found that pull factors were more influential than push factors. For married couples, husbands were more likely to initiate the migration discussion but the ultimate decision was made together.

Wiseman (1980) developed one of the first models to explain the decision making process of elderly migrants. The behavioral model is linear in nature and assumes that every elderly person is a potential migrant and is constantly reassessing their current situation. He theorizes that there are a series of triggering mechanisms such as environmental incongruence or community ties that are evaluated by potential migrants that lead them to decide whether to move or stay. After the decision to move is reached, a destination is then chosen based on experience with the location, local amenities, and the proximity of friends and family. Cuba (1989) disagrees with Wiseman's assumption that elderly migrants first choose to migrate and then choose the destination. Potential migrants do not contemplate the pros and cons of a theoretical move but rather have a specific destination in mind prior to their retirement. Similar to Wiseman, he finds that migrants generally choose locations with which they are familiar and which have enticing amenities. Where migrants have taken many vacations in the past can indicate where they may choose to locate upon their retirement. Since Cuba is describing younger amenity seeking migrants, Wiseman's model may be more appropriate for old-old migrants rather than young-old migrants for whom migration for potential health reasons is a continuing assessment.

2.3 Potential Positive Impacts of Retirement-Age Migration

Retirement migration has been touted as a means to economic growth (Stallmann et. al., 1999; Fagan and Longino, 1993). Glasgow (1990) found that nonmetropolitan

counties with high retirement migration have seen comparatively high economic growth and increases in per capita income. In addition, much of the income of retired migrants was in the form of transfer payments from Medicare and Social Security which are resistant to recession. Bennett (1996) found that retired migrants volunteered at a higher rate than non-movers. He found over half of retired migrants volunteered for their new communities.

Retirement-age migration is also seen as a means of boosting tax revenues. An increase in the overall age of a population increases the state and local government revenue through higher incomes and property ownership (Serow, 2001). Income, sales and property tax revenues all increase. Some have argued that although elderly migration increases the local tax base, expenditures for services also increase, negating much of the benefits (Glasgow, 1990). To directly address this concern, Serow and Haas (1992) made a comparison between average tax revenues gained per retiree and the average cost associated with new residents. Their results showed an almost exact cancelation between the two. They argue, however, that because this calculation does not take into account the stimulative effect provided by retiree migrants' new spending, their overall effect on the economy and tax revenues is a net positive. Mullins and Rosentraub (1992) came to the opposite conclusion than the previous studies discussed here. They made the distinction between those between 55 and 65 with those older than 65. They found that the impact on state and local government services outweighed the increase in tax revenues over the long-term. As the desirable pre-retirement cohort ages they become more of a

burden on local services. As a result, Mullins and Rosentraub find fault with the short-term focus of other research.

Lastly, retirement-age migrants create employment opportunities in their new communities. Sastry (1992) studied the effects of in-migration of the elderly into Florida on the economy of that state. The influx of new residents improved the economy since they had created their wealth in another state and brought it to Florida without seeking substantial employment. This had a multiplier effect in which jobs were created to meet the demands of these new residents but also to supply those with new-found income from this employment. He estimated a .41 increase in jobs per elderly migrant. Woods et al. (1997) performed a similar analysis of the economic impact of retirement migration in three counties in both Oklahoma and Arkansas along with all of East Texas. Their estimates ranged from .28 to .58 jobs created per retired migrant with an average of .42. Deller (1995) in a simulation involving rural areas in Maine not only estimated the average change in employment per retiree (.55) but also for numerous industries. The largest increases in employment were predicted to come in the retail, government, medical and construction fields respectively. Another result of this increase in economic activity was an increase in in-migration of those seeking employment. In Florida, not all of the newly created jobs went to local residents since many went to an influx of new workers (Sastry, 1992). Retirement-age migration brings with it additional migration of the non-elderly seeking employment.

2.4 Potential Negative Impacts of Retirement-Age Migration

Not all of the literature discusses the positive impacts of retirement-age migration.

Many choose to focus on the potential strain on local services. Aday and Miles

(1982) speculated that the expectations and demands of elderly in-migrants on rural

community services may be much higher than those of the local population. Those

migrating from urban settings are used to greater access to services and may, in time,

change the way in which these rural communities operate. Longino and Crown

(1990) disagree with the notion that retirement migrants are a burden on local social

services. They claim that elderly migrants use fewer services than elderly non-

migrants.

Glasgow (1995) analyzed the service usage of elderly migrants versus local elderly

residents. Controlling for other factors, Glasgow found that migration status was not

significant in the use of public health or cultural services. Poor health, lower incomes

and higher levels of education were better predictors of public health service

utilization. Cultural programs were likely used by healthier, wealthier and better

educated elderly. These demographics perfectly align with those of elderly migrants.

Migration status had a positive and significant influence on the utilization of both

park and senior recreational services. Overall, elderly migration increases the

utilization of all these services but affects recreational rather than public health

services more intensely.

With retirement-age migration, the usage of medical services is addressed in the literature. Lee (1980) found that counties with high levels of elderly in-migration did not have difficulties with healthcare delivery. She could not be certain, however, if these counties were responding to increased demand or the migrants simply chose locations they knew could meet their medical needs. Sastry (1992) claims that since much of the cost of healthcare is paid for through inter-regional payments, healthcare of the elderly has a stimulative effect rather than acting as a burden on the local community. Bennett (1996) argues that retirement migrants would not be a drain on local medical services because in addition to Medicare they are likely to have private medical coverage.

Increases in the demands for medical services can also have positive effects. Rural areas have traditionally been hard pressed to attract qualified physicians to serve their communities. Retiree migration to these areas has the potential to alleviate this problem. Haas and Crandall (1988) surveyed rural physicians to gauge their experiences and opinions while serving increasing numbers of retired migrants. The physicians cited not only increased demands on their services but a shift in emphasis of their practices. They were spending more time managing chronic illnesses rather than curing temporary diseases. The increased clientele base provided by rural retired migrants was cited by 28% of physician respondents as one of the reasons for relocating to a rural community.

Another issue of retirement-age migration is that an increase in the population of elderly citizens can change the political landscape of a community. The elderly vote more reliably than their younger counterparts and have different priorities. Button (1992) found that in local school bond referenda age was a significant predictor of voting behavior. Elderly voters consistently opposed increased taxes for education. Communities that see a large migration of older voters can expect support for local tax initiatives to decrease according to Button. Deller and Walzer (1993), however, found that in Illinois the relative percentage of the population being retired did not have an effect on the support of school funding referenda. Retirees had a similar disdain of property tax rates as non-retirees. Retirees also favored higher income taxes over property taxes when given the choice.

3. Methods

3.1 Data

The data source for this study is the 2000 5% sample Integrated Public Use Microdata Series (IPUMS) from the University of Minnesota's Population Center (Ruggles et al.). The data was generated from the long-form of the U.S. Census and is a survey of a random sample consisting of 5% of the U.S. population. All respondents not aged 55-64 were removed from the dataset. Respondents who did not reside in the fifty U.S. states and Washington D.C. both in 1995 and 2000 were also removed from the dataset.

Migrants were defined by having resided in a different state in 1995 than the state of residence in 2000. All those sampled were between the ages of 55 and 64. In-migrants to Oregon were the primary population of interest. Four additional samples were created for comparison purposes. They are out-migrants from Oregon, non-movers in Oregon, non-movers in other states, and migrants to other states from other states.

- The first sample includes all Oregon in-migrants in PUMS for a sample size of 1,368 individuals (Oregon in-migrants).
- The second sample is comprised of a simple random sample of Oregon non-movers. The size of the sample is equal to the number of Oregon in-migrants in the first sample, 1,368 individuals (Oregon non-movers).
- The third sample includes all Oregon out-migrants in PUMS for a sample size of 1,060 individuals (Oregon out-migrants).
- The fourth sample is comprised of a stratified random sample of non-Oregon non-movers. The strata are based on the migration origin states of the Oregon in-migrants from the first sample. The sample size from each stratum corresponds to the state of residence five years ago of all Oregon in-migrants from the first sample. For example, because 597 migrants to Oregon resided in California five years ago. 597 non-movers from California were randomly chosen to comprise the sample for the first stratum. Similarly, only one non-mover from Vermont was chosen because one person from Vermont

migrated to Oregon in the first sample. The total sample size from the strata is equal to the number of Oregon in-migrants in the first sample, 1,368 individuals (non-Oregon non-movers).

- The fifth sample is comprised of a stratified random sample of non-Oregon migrants. The stratified random sampling was carried out in the same procedure as that of sample four. The total sample size is equal to the number of Oregon in-migrants in the first sample, 1,368 individuals (non-Oregon migrants).

The stratified random sampling in samples four and five was done created indirectly control for distance. There is no independent variable for 'distance from Oregon' in the model. The result of this stratified selection is a much greater number of respondents from the Western United States in both samples four and five.

Respondents living in states with high numbers of out-migrants to Oregon should have more opportunity and pull to migrate to Oregon than states with low numbers of out-migrants to Oregon. One of the aims of this paper is to compare Oregon in-migrants with those who chose not to migrate to Oregon. The alternative was to do a simple random sample of all non-Oregon non-movers and non-Oregon migrants and then attempt to account for distance. The stratified sampling method increases the relevance of the comparison of the characteristics between Oregon in-migrants, non-Oregon non-movers, and non-Oregon migrants because each sample weights for the number of individuals from that state who chose to migrate to Oregon.

3.2 The Variables

3.2.1 The Dependent Variable

Migrant Status – This is a categorical variable with the values corresponding to the five populations of interest. These populations are represented by the five samples discussed above in the data section; Oregon in-migrants, Oregon non-movers, Oregon out-migrants, non-Oregon non-movers, and non-Oregon migrants.

3.2.2 The Independent Variables

The following are the independent variables used in the model. Predictions were made based on the general characteristics of a retirement-age migrant described above in the Literature Review. Data on characteristics prior to migration was unavailable. See section 5.2, Study Limitations, for more on this limitation.

Female – This is a binary variable with zero corresponding to male and one with female. It is predicted that being female will have no correlation with Oregon out-migrants, Oregon non-movers, non-Oregon non-movers or non-Oregon Migrants when compared to Oregon in-migrants.

Married – This is a binary variable with zero corresponding to not being married and one corresponding to being married. It is predicted that being married will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that marital status will have no

correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Household Income – This is a continuous variable of household income expressed in thousands of dollars. It is predicted that household income will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that household income will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Dividend and Interest Income - This is a continuous variable of dividend and interest income expressed in thousands of dollars. It is predicted that dividend and interest income will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that dividend and interest income will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Retirement Income - This is a continuous variable of retirement income expressed in thousands of dollars. It is predicted that retirement income will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that retirement income will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Employed – This is a binary variable with zero corresponding to not being employed and one with being employed. This variable differs from traditional employment rates in that those not seeking employment are still counted among the unemployed. It is predicted that being employed will have a positive correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that being employed will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Retired – This is a binary variable with zero corresponding to not being retired and one with being retired. Retirement was defined as having at least one dollar of retirement income and not being employed. It is predicted that being retired will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that being retired will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Home Ownership – This is a binary variable with zero corresponding to not owning a home and one corresponding to owning a home. It is predicted that home ownership will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that home ownership will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Educational Attainment – This is an ordinal variable with zero corresponding to no school, one with grades 1-4, two with grades 5-8, three with some high school, four with a high school diploma, five with some college or associate’s degree, six with a bachelor’s degree, and seven with a master’s, professional or doctorate degree. It is predicted that educational attainment will have a negative correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that educational attainment will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Born in Oregon – This is a binary variable with zero corresponding to being born outside of Oregon and one with being born in Oregon. It is predicted that being born in Oregon will have a positive correlation with Oregon out-migrants and Oregon non-movers when compared to Oregon in-migrants. It is predicted that being born in Oregon will have a negative correlation with non-Oregon non-movers and non-Oregon migrants when compared to Oregon in-migrants.

African American – This is a binary variable with zero corresponding to respondent not claiming African American identity and one with respondent claiming African American identity. It is predicted that African American identity will have a positive correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that African American identity will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Asian – This is a binary variable with zero corresponding to respondent not claiming Asian identity and one with respondent claiming Asian identity. It is predicted that Asian identity will have a positive correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted that Asian identity will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Native American – This is a binary variable with zero corresponding to respondent not claiming Native American identity and one with respondent claiming Native American identity. It is predicted that Native American identity will have a positive correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted Native American identity will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

Hispanic Origin - This is a binary variable with zero corresponding to respondent not claiming Native American identity and one with respondent claiming Native American identity. It is predicted that Native American identity will have a positive correlation with Oregon non-movers and non-Oregon non-movers when compared to Oregon in-migrants. It is predicted Native American identity will have no correlation with Oregon out-migrants and non-Oregon migrants when compared to Oregon in-migrants.

3.3 The Model

The model is as stated:

$$\text{Migration Status} = \beta_1 + \beta_2 (\text{Female}) + \beta_3 (\text{Married}) + \beta_4 (\text{Household Income}) + \beta_5 (\text{Dividend and Interest Income}) + \beta_6 (\text{Retirement Income}) + \beta_7 (\text{Employed}) + \beta_8 (\text{retired}) + \beta_9 (\text{Home Ownership}) + \beta_{10} (\text{Educational Attainment}) + \beta_{11} (\text{Born in Oregon}) + \beta_{12} (\text{African American}) + \beta_{13} (\text{Asian}) + \beta_{14} (\text{Native American}) + \beta_{15} (\text{Hispanic Origin}) + \varepsilon$$

Multinomial logistic regression was performed using this model. This approach is used to isolate the individual push and pull factors affecting the migration decision rather than determine the average characteristics of a retirement-age migrant.

Difference of means tests can be performed in order to determine these results but they were not performed in this study.

The Oregon in-migrants sample was the reference category in order to facilitate the following comparisons:

- Oregon in-migrants with Oregon non-movers
- Oregon in-migrants with Oregon out-migrants
- Oregon in-migrants with non-Oregon non-movers
- Oregon in-migrants with non-Oregon migrants

Oregon out-migrants and non-Oregon migrants were used as the reference categories to facilitate the following comparisons respectively:

- Oregon out-migrants with Oregon non-movers
- Non-Oregon migrants with non-Oregon non-movers

The results of the above comparisons are presented in the results section of this paper.

The independent variables were tested for multicollinearity. No two variables were highly correlated. The multinomial logistic regression procedure in SAS automatically adjusts for heteroskedasticity so no tests were performed to account for this.

4. Results

4.1 Changes in Oregon Demographics due to Migration

4.1.1 Oregon in-migrants compared with Oregon non-movers

Table 1 demonstrates that retirement-age migrants to Oregon significantly differ from retirement-age non-movers with respect to all the independent variables except gender. Higher educational attainment, being married, being without employment, being retired and higher retirement and investment income increased the odds of being an Oregon in-migrant when compared to Oregon non-movers. Higher household income and owning a home decreased the odds of being an Oregon in-migrant when compared to Oregon non-movers. Demographically, being Asian, Native American or Hispanic increased the odds being an Oregon in-migrant when compared to Oregon non-movers but being African American decreased the odds.

Table 1: Results: Log of the odds of being an Oregon in-migrant

When compared to:	Oregon Non-movers	Oregon Out-Migrants	Non-Oregon Non-movers	Non-Oregon Migrants
Female	-0.0168 (.0186)	-0.1446*** (.0197)	-0.0446* (.0189)	-0.0205 (.0184)
Married	0.3281*** (.0200)	0.1223*** (.0214)	0.0919*** (.0210)	0.1877*** (.0200)
Household Income (in \$1,000)	-0.0023*** (.0002)	-0.0033*** (.0002)	-0.0054*** (.0002)	-0.0042*** (.0002)
Dividend / Interest Income (in \$1,000)	0.0082*** (.0006)	0.0039*** (.0005)	0.0058*** (.0005)	0.0039*** (.0005)
Retirement Income (in \$1,000)	0.0042*** (.0009)	0.0062*** (.0009)	0.0159*** (.0010)	0.0007 (.0007)
Employed	-0.4656*** (.0207)	-0.1863*** (.0217)	-0.4679*** (.0209)	-0.0787*** (.0204)
Retired	0.1750*** (.0317)	0.1212*** (.0325)	0.0515 (.0324)	0.1359*** (.0295)
Home Ownership	-0.1412*** (.0206)	-0.2005*** (.0220)	-1.0868*** (.0233)	-0.0812*** (.0203)
Educational Attainment	0.1580*** (.0074)	0.0660*** (.0078)	0.2119*** (.0073)	0.0520*** (.0071)
Born in Oregon	-1.2881*** (.0246)	-0.4057*** (.0287)	1.9089*** (.0550)	2.1593*** (.0596)
African American	-0.2018** (.0764)	-0.4057*** (.0760)	-1.7766*** (.0616)	-1.4947*** (.0601)
Asian	0.6950*** (.0644)	-0.0412 (.0535)	-0.7996*** (.0446)	-0.3129*** (.0466)
Native American	0.3268*** (.0652)	0.0841 (.0667)	-0.3228*** (.0608)	-0.1027 (.0602)
Hispanic Origin	0.3733*** (.0488)	0.3693*** (.0530)	-0.8840*** (.0393)	-0.2129*** (.0427)

Standard errors in parentheses. * p <= .05 ** p <= .01 *** p <= .001

4.1.2 Oregon in-migrants compared with Oregon out-migrants

Table 1 demonstrates that retirement-age migrants to Oregon significantly differ from retirement-age migrants away from Oregon with respect to the independent variables except for Asian identity or Native American identity. Higher educational attainment, being married, being without employment, being retired and higher retirement and investment income increased the odds of being an Oregon in-migrant when compared to Oregon out-migrants. Higher household income, and owning a home decreased the odds of being an Oregon in-migrant when compared to Oregon out-migrants. Being Hispanic increased the odds being an Oregon in-migrant when compared to Oregon out-migrants. Being African American decrease the odds. All of the variables mentioned fit the same relationship Oregon in-migrants had with Oregon non-movers. This is not surprising since Oregon out-migrants were once Oregon non-movers themselves and should have more in common with them than in-migrants. More analysis of the differences between Oregon out-migrants and non-movers is discussed in the decision to migration section of the results.

4.2 The Decision to Migrate

4.2.1 Oregon in-migrants compared with non-Oregon non-movers

Table 1 demonstrates that retirement-age migrants to Oregon significantly differ from retirement-age non-Oregon non-movers with respect to all the independent

variables except for being retired. There are some variables that follow the migrant archetype provided by the literature. Being married, higher educational attainment, higher retirement and investment income, and being without employment increased the odds of migration to Oregon. Other variables do not follow the archetype. Higher household income and owning a home decreased the odds of being an Oregon in-migrant. Being Asian, Native American, African American or of Hispanic origin decreased the odds of migrating to Oregon. Respondents who were born in Oregon were far more likely to migrate to Oregon than those born elsewhere suggesting place of birth is a substantial pull. It is unknown whether it is the place of birth itself that is the attraction or if the place of birth is correlated with the proximity of relatives. Both are likely a factor but data on state of residence of relatives were unavailable.

4.2.2 Oregon in-migrants compared with non-Oregon migrants

Table 1 demonstrates that retirement-age migrants to Oregon significantly differ from retirement-age non-Oregon migrants with respect to the independent variables except for Native American identity, Hispanic origin or gender. Oregon in-migrants fit the literature archetype for a retirement-age migrant among most of the variables better than non-Oregon out-migrants from the same states. Higher educational attainment, being married, being without employment, being retired and higher retirement and investment income increased the odds of being an Oregon in-migrant when compared to non-Oregon migrants. Higher household income, and owning a

home decreased the odds of being an Oregon in-migrant when compared to non-Oregon migrants. Being African American or Asian decreased the odds. A major difference between those who chose to migrate to a state other than Oregon and those that came to Oregon is whether they were born in Oregon. Those who were born in Oregon were far more likely to choose to move to Oregon when controlling for the other independent variables. Oregon in-migrants were less likely to be Asian or African American than non-Oregon migrants.

4.2.3 Migrant/Non-mover comparisons

Table 2 shows a side by side comparison of the three migrant/non-mover comparisons. This enables a quick comparison between the relationships each migrant group had with their respective non-migrant group. The Oregon in-migrant/non-Oregon non-mover comparison has already been discussed in section 4.2.1. The other two comparisons along with a final contrast of the three analyses with the literature follow in the next three sections.

Table 2: Results: Decision to Migrate

Migrant/ Non-mover in ()	Oregon in-migrants (Non-Oregon Non- movers)	Oregon out-migrants (Oregon Non- movers)	Non-Oregon Migrants (Non-Oregon Non- movers)
Female	-0.0446* (.0189)	0.1278*** (.0198)	-0.0241 (.0186)
Married	0.0919*** (.0210)	0.2058*** (.0213)	-0.0958*** (.0206)
Household Income (in \$1,000)	-0.0054*** (.0002)	0.0010*** (.0002)	-0.0011*** (.0001)
Dividend / Interest Income (in \$1,000)	0.0058*** (.0005)	0.0043*** (.0006)	0.0019*** (.0005)
Retirement Income (in \$1,000)	0.0159*** (.0010)	-0.0020* (.0010)	0.0152*** (.0010)
Employed	-0.4679*** (.0209)	-0.2793*** (.0218)	-0.3892*** (.0205)
Retired	0.0515 (.0324)	0.0538 (.0350)	-0.0844** (.0326)
Home Ownership	-1.0868*** (.0233)	0.0593** (.0222)	-1.0056*** (.0230)
Educational Attainment	0.2119*** (.0073)	0.0920*** (.0078)	0.1598*** (.0070)
Born in Oregon	1.9089*** (.0550)	-0.8824*** (.0243)	-0.2504*** (.0756)
African American	-1.7766*** (.0616)	0.2039** (.0760)	-0.2819*** (.0397)
Asian	-0.7996*** (.0446)	0.7362*** (.0666)	-0.4867*** (.0397)
Native American	-0.3228*** (.0608)	0.2427 (.0707)	-0.2200*** (.0599)
Hispanic Origin	-0.8840*** (.0393)	0.0039 (.0563)	-0.6711*** (.0367)

Standard errors in parentheses. * p <= .05 ** p <= .01 *** p <= .001

4.2.4 Oregon out-migrants compared with Oregon non-movers

Table 2 demonstrates that retirement-age migrants out of Oregon significantly differ from retirement-age Oregon non-movers with respect to the independent variables except for retired, Native American identity and Hispanic origin. Most of the variables follow the migrant archetype provided by the literature. Higher household and investment income, higher educational attainment, being without employment, being married, or owning a home increased the odds of migration. Higher retirement income, however, decreased the odds. In addition, being Asian or African American increased the odds of migration out of Oregon. Oregon out-migrants were more likely to have been born outside of Oregon. It is unknown whether they were returning to their place of birth, but having been born elsewhere seems to have decreased their connection to the state.

4.2.4 Non-Oregon migrants compared with non-Oregon non-movers

Table 2 demonstrates that retirement-age migrants to states other than Oregon significantly differ from retirement-age non-Oregon non-movers with respect to all the independent variables except gender. There are some variables that follow the migrant archetype provided by the literature. Higher educational attainment, being without employment, and higher retirement and investment income increased the odds of migration. Other variables did not follow the archetype. Higher household income, being retired, being married and owning a home decreased the odds of migration. In addition, being African American or Asian decreased the odds of

migration. These relationships are identical to those between Oregon in-migrants and non-Oregon non-movers with marital status being the sole exception.

4.2.5 Discussion of the migrant/non-mover relationships

The results of this study demonstrate that the archetype of a retirement-age migrant is consistent across the populations analyzed for three of the independent variables. Educational attainment, employment status and dividend/interest income were consistently predictive of retirement-age migration. Household income, retirement income, home ownership and marital status were not as consistent. In the case of Oregon, birth place was also very predictive of choosing to migrate to or leave Oregon.

4.3 Migrant Origins and Destinations

4.3.1 Oregon retirement-age In-migrant states of origin

Table 3 shows that nearly sixty percent of retirement-age migrants to Oregon came from either California or Washington. California accounted for nearly half of all migrants. The remaining forty percent were fairly distributed among the other states with close proximity states generally providing a larger percentage than distant states. States within the Pacific Northwest, Idaho and Washington, had a higher percentage of returning migrants than states further away except for Alaska. Overall, most retirement-age migrants to Oregon were not return born here.

Table 3: Top Ten Origin States of Retirement-Age Oregon In-migrants.

State	Percentage of Total Oregon In-migrants	Percentage of Oregon In-migrants from these States that were Born in Oregon
1. California	43.2%	7.7%
2. Washington	16.1%	17.6%
3. Arizona	4.2%	6.9%
4. Idaho	3.9%	18.5%
5. Nevada	3.3%	8.9%
6. Alaska	3.0%	17.1%
7. Colorado	2.9%	5.4%
8. Texas	1.8%	4.0%
9. Florida	1.6%	0.0%
10. Illinois	1.5%	0.0%
Other	18.5%	N/A

4.3.2 Oregon retirement-age out-migrant destination states

Table 4 shows that Oregon out-migrants were moving to similar states as the origin states of Oregon in-migrants. The notable difference is in the percentages of migrants to Washington and California. A quarter of out-migrants were moving to Washington with only eighteen percent moving to California. This is in stark contrast to in-migrants where California was by far the largest supplier of migrants. Arizona was also a popular destination attracting just over ten percent of Oregon out-migrants. Surprising, the vast majority of out-migrants from Oregon were not born in Oregon. Taken together with Table 4, migration to and from Oregon is primarily occurring among non-native Oregonians.

Table 4: Top Ten Destination States of Retirement-Age Oregon Out-migrants.

State	Percentage of Total Oregon Out-migrants	Percentage of Oregon Out-migrants to these States that were Born in Oregon
1. Washington	26.5%	22.0%
2. California	18.1%	11.7%
3. Arizona	10.3%	23.4%
4. Idaho	4.9%	9.4%
5. Texas	4.0%	4.7%
6. Nevada	3.5%	21.1%
7. Florida	2.9%	9.9%
8. Colorado	2.5%	11.1%
9. Montana	2.0%	9.1%
10. New Mexico	1.9%	9.5%
Other	23.4%	N/A

4.3.3 Non-Oregon retirement-age migrant destination states

Table 5 shows the states potential Oregon migrants chose to move to instead of Oregon. Top retirement-age migration states such as Arizona and Florida are prominent on the list. The migrant percentages of the destination states in Table 5 were not as concentrated as those in Table 4 or of the origin states in Table 3.

Table 5: Top Ten Destination States of Retirement-Age Non-Oregon Migrants.

State	Percentage of Total Non-Oregon Migrants	Percentage of Non-Oregon Migrants to these States that were Born in Oregon
1. Arizona	11.3%	1.9%
2. Nevada	8.1%	0.0%
3. Florida	7.2%	0.0%
4. California	6.8%	1.1%
5. Texas	6.4%	0.0%
6. Washington	4.7%	1.5%
7. Colorado	3.6%	2.0%
8. Idaho	2.9%	7.5%
9. Missouri	2.8%	2.6%
10. New Mexico	2.6%	0.0%
Other	43.6%	N/A

4.3.4 Destinations within Oregon

Table 6 shows the distribution of retirement-age migrants across super-public use microdata areas (Super-PUMAs). Migrants to Oregon moved to the rural super-PUMAs more so than metropolitan super-PUMAs. Southwest Oregon had the largest in-migration with over a quarter of the migrants. East of the Cascades had over twenty percent and the Northwest coast together with West-Central Oregon had nearly twenty percent. These are primarily the rural areas of the state. The metropolitan super-PUMAs were less attractive to in-migrants. It is possible to take an even closer look by analyzing the PUMA level to see where migrants are settling.

Coastal PUMAs and PUMAs containing and near the city of Bend were the most popular. The northern metropolitan PUMAs were the least popular.

Table 6: Super-Public Use Microdata Areas of destination within Oregon.

Super-PUMA	Percentage of Total Migrants
41300 (Southwest Oregon)	27.3%
41100 (East of the Cascades)	20.8%
41200 (Northwestern Coast and West-Central Oregon)	19.2%
41503 (Washington County)	9.0%
41400 (Yamhill, Polk and Marion Counties)	8.8%
41501 (Portland)	8.0%
41502 (Clackamas and East Multnomah Counties)	7.0%

5. Discussion

5.1 Policy Considerations

5.1.1 Attracting baby boom migrants

If the Oregon Tourism Commission, with Travel Oregon as its executive arm, wishes to compete for baby boom migrants there are two potential strategies. The first is to directly target the retirement-aged by touting Oregon's rural and coastal amenities. Given the allocation of migrants across the PUMAs, the most attractive areas of Oregon to retirement-age migrants are the coast and the Bend area. The literature,

however, suggests a different approach (Cuba, 1989). It is theorized that retirement-age migrants that move for amenity reasons, choose their desired destination far in advance of the move. They choose their location based on the places where they vacation and with which they are already familiar. If this is true then targeting the retirement-aged specifically for migration may not be effective. Instead higher tourism would also eventually increase retirement-age migration. Focusing on overall tourism marketing is likely a better method for attracting retirement migrants. The irony of Tom McCall's call for tourism, not migration, is that he was likely encouraging migration through tourism.

5.1.2 Possible implications of Oregon's tax structure

Oregon's tax structure means retirement-age migration would have a different effect on tax revenues than those of other states. Oregon's revenue streams are somewhat unique in that, with no sales tax, income taxes are the primary source of state revenue. Tax revenue would increase from any retirement-age migration, but as they leave employment, this revenue will taper off. The results of this study suggest that the odds of retirement-age migration to Oregon are decreased with higher income. Oregon out-migrants on the other hand had the opposite relationship with income. The literature suggests that the odds of retirement-age migration should be increased with higher incomes. There is a possible explanation for why Oregon out-migrants follow this pattern yet in-migrants do not. Oregon's income based tax structure is progressive in nature. A sales tax, on the other hand, is regressive.

Oregon theoretically would be more likely to attract migrants with lower incomes even though traditional retirement-age migration is that of the wealthy. A state like Florida that does not have an income tax would potentially attract wealthier migrants and much of the literature on amenity retirement migration has been focused on Florida.

Cities and counties that wish to increase retirement migration may find lowering property taxes effective. From the literature, property taxes were far more anathema to retirement migrants than income taxes (Deller and Walzer, 1993). Retirement-age migration raises property values and stimulates the economy which may offset the lower rate somewhat over the long-term. However, given the emphasis retirement migrants have placed on scenic beauty and climate, lower property taxes likely will not make up for significant deficiencies in this area (Haas and Serow, 1993). Instead, lowering property taxes may make an area more attractive over another area with comparable amenities.

5.1.3 Increased demands on services for the elderly

Demands on services for the elderly will increase in the areas of Oregon to which the retirement-aged are migrating. These are primarily the rural areas of the state. Rural areas also happen to lack the capacity for services that the metropolitan areas can provide. In the 5% sample used in this study 1,368 aged individuals 55-64 migrated to Oregon between 1995 and 2000 while 1,060 left. Whether this will increase with the potentially larger baby boom generation of migrants is unknown. Interstate

retirement-age migration, however, is not occurring in a vacuum. The Oregon baby boom non-movers are quickly approaching elderly status. In addition, this study did not cover intrastate retirement-age migration. They too are likely moving from metropolitan to rural areas and, in conjunction with interstate migrants, may place significant strain on local services. As the baby boom generation ages and migrates, an added emphasis on rural services for the elderly may be needed.

5.2 Study Limitations

There are several limitations with the approach taken in this paper. The foremost limitation with this study is the nature of the data available. In modeling the characteristics of a migrant, household income prior to migration would be of greater predictive power than household income post migration. Similarly home ownership prior to migration would have been of great value. The availability of this kind of data would have increased the predictive nature of the model. Missing this data then requires the assumption that income or home ownership prior to migration is correlated with income or home ownership post migration. Another limitation is the lack of data on household wealth. The total wealth of a household may have more predictive power than household income. This is especially true for those in retirement whose incomes are low due to voluntary unemployment and not due to low socioeconomic status. Dividend and interest income was used in the model as a substitute but household wealth would have been a more useful variable.

A measure for the proximity of relatives is missing from the model. Data of this type would be difficult to collect and define. The variable, born in Oregon, was used to identify the strength of the birthplace connection and it would likely be correlated to proximity to relatives. The extent of this correlation is unknown. In previous migration behavioral models family proximity was considered a factor (Wiseman 1980; Cuba 1989). Measuring family proximity in a study of this type, however, was not possible given the available data.

The stratified sample of non-Oregon migrants and non-movers based on the states of origin of Oregon in-migrants provided a better predictive model than a simple random sample of the nation as a whole. This, however, results in very small sample sizes from small east coast states. A single individual selected from Vermont is likely less representative of that state's retirement-age population than the almost six hundred sampled from California. This poor representation of minor migration origin states was considered necessary to prevent the loss in predictive power that would result from not stratifying the sample based on origin states. Removing states from the stratification with very low numbers of migrants to Oregon was considered but rejected.

Finally the nature of the data leaves open the possibility that the state of residence five years ago for a migrant may not be the state from which they migrated to Oregon. Five years is enough time for a respondent to have moved to an intermediary state. It is unknown what percentage of the Oregon in or out-migrants

fit into this category. Reducing the time frame would have reduced the number of respondents that traveled through an intermediary state but it would also decrease the number of respondents that would be classified as migrants. An additional question in the survey would have enabled the identification of their true origin state prior to their migration to their current state of residence.

5.3 Future Research

The independent variables in the model were chosen based on the literature and theoretical reasoning. Other independent variables not addressed in the literature were tried in the model to check their significance. However, they were not included. The squared terms of household income, retirement income and investment income were all found to be significant. A non-linear relationship between income and migration would mean that the impact of income on the odds of migration is not constant. At different income levels the overall influence on the odds of migration of additional income changes. Further research into whether there is a non-linear relationship to income and the possible reasons for it could be important.

There are many opportunities for future research into retirement-age migration to Oregon or to other states. One possible study could be the development of a survey specifically designed to address migration issues. The questions could then be phrased in a fashion to alleviate the limitations discussed in the previous section. Another possible avenue is a qualitative study. Interviews could address the factors

in the migration decision that cannot be measured by the survey data. As with any qualitative study the representative nature of a relatively small number of interviews is questionable. However, taken as a complement to a quantitative study, it could directly tackle the limitations discussed earlier.

6. Conclusion

This study has shown that odds of being a retirement-age migrant to Oregon were increased by being married, having higher retirement and investment income, being without employment, and by having higher levels of education. In addition, the odds of being a retirement-age migrant to Oregon were decreased by having higher household income and owning a home. This was consistently true across all four population comparisons.

Three variables were found to be consistently predictive of retirement-age migration in this study across the migrant populations analyzed. Higher levels of education attainment, being without employment and higher investment income consistently increased the odds of migration. In the specific case of Oregon, having been born in Oregon was a good predictor of retirement-age migration to Oregon or of choosing not to leave Oregon at retirement-age.

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