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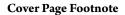
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Patterns of Interstate Migration in the Mid-2000s: Are Racial Groups Moving in Different Directions?



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Patterns of U.S. Interstate Migration in the Mid-2000s: Are Racial Groups Moving in Different Directions?

More than a generation ago, analyses of the 1970 and 1980 U.S. censuses caught social scientists' attention by revealing emerging trends in internal migration (i.e., changes in permanent residence that occur across a political boundary but within a country [Posten & Bouvier 2010]). Among those new developments were large movements from "frostbelt" to "sunbelt" states and smaller movements to non-metropolitan areas (Abbott 1981; Beale & Fuguitt 1978; Cebula 1974; DaVanzo & Morrison 1981; Long & Hansen 1975). Since then, scholars have analyzed these and other changes in internal migration (Frees 1992; Frey & Liaw 2005; Gurak & Kritz 2000; Rayer & Brown 2001; Taylor et. al 2008, White & Imai 1994). Some of these studies, especially those featured in the news media, convey the idea that the major racial/ethnic groups in the U.S. are, to a large degree, moving in different internal migration streams and thereby are redistributing themselves in patterns that reinforce or enhance their spatial separation. Further, the propensity for return migration has also been found to vary by race, with Blacks and Hispanics more likely than Whites to return to their state of origin after moving to a new state (Wilson et. al. 2009). This paper demonstrates whether, in the mid-2000s, the internal migration patterns of Whites, Blacks, Asians, and Hispanics were largely similar or divergent, and it shows how certain socio-demographic and economic characteristics of states are related to those groups' patterns of net migration.

Previous Research and Theory

William Frey's work on internal migration of U.S. racial groups (in which he asserted a "balkanization thesis") was important in suggesting two related ideas: (a) American racial groups tend to select different states as their preferred relocation destinations; and (b) some states are markedly more (or less) attractive to certain groups than others (Frey 1995a, 1995b, 1996, 1999a). In that vein, Frey (2004) and other researchers have highlighted the "New Great Migration" of

¹ We are cognizant of the large literature discussing the (in)appropriateness of using "race," "racial," and "ethnic" to refer to Blacks, Whites, Asians, and Hispanics, as well as the problems inherent in merging diverse nationalities into one of these four broad "pan-ethnic" categories. Moreover, debate exists over the meanings and relative merit of the terms "Hispanic" and "Latino/a." For convenience we refer to these groups as "racial" categories or groups and, for consistency with our primary data source (U.S. Census), we call them Whites, Blacks, Asians, and Hispanics. Also note that the people labeled "Whites" in this paper are those who classified themselves as both "Non-Hispanic" and "White" in the Census Bureau's 2005-2007 American Community Survey.

African Americans from the North to the South as a distinctive late 20th and early 21st century phenomenon (Adelman, Morett & Tolnay 2000; Berry 2000; Tolnay 2003).² An implication or hypothesis that may be drawn from this work on internal spatial mobility is that southern states are considerably more attractive to African Americans than they are to Whites, Asians, or Hispanics, who tend mainly to move elsewhere (but see Baird et al. [2008]; Singer [2004]; or Frey, Berube, Singer & Wilson [2009] for evidence that certain parts of the South have also become very attractive to immigrant Hispanics and Asians).

Hunt, Hunt, and Falk's (2008) analysis of Black and White interstate mobility between 1970 and 2000 supports the hypothesis that Black movers prefer the South more than White movers do. They found "proportionately more blacks than whites are heading south" (p. 104) and that "while blacks are now more likely than whites to be primary migrants in their move south, among those returning to the South, blacks continue to move back to their birth-state at a higher rate than whites" (p. 107). This study, however, did not address interstate mobility patterns of Asians or Hispanics.

Several recent books on new patterns of Hispanic movement and resettlement (especially immigrants) suggest that some southern states and a few in the Midwest are now popular Hispanic destinations (Ansley & Shefner 2009; Lippard & Gallagher 2010; Massey 2008; Odem & Lacey 2009; Zuniga & Hernandez-Leon 2005). Examining "push factors" affecting Latino movement, Light (2006) argues that conditions and policies in Los Angeles and perhaps other areas in California (e.g., decline in low wage jobs and reduced availability of cheap housing) have caused Latinos to avoid moving to Los Angeles or, if already there, to depart from it to other states. Moreover, some researchers show that Latinos have moved to nonmetropolitan areas of certain states to a much greater degree than have Black, White, and Asian migrants, who are much more likely to settle in metropolitan areas (Kandel & Cromatie 2004; Kandel & Parrado 2005). From these works it is easy to conclude that racial groups in the U.S. are responding to various push and pull forces in rather distinct ways and, in terms of internal migration, are going in different directions or exhibiting unique patterns.³

Reasons and Explanations for Racial Differentials in Internal Mobility

In theory, several reasons may cause racial groups to differ in their interstate migration. One is their different geographic starting points. For

² As manufacturing has declined substantially in the Northeast and Midwest, Blacks have relocated in large numbers to the South where job opportunities, lower cost of living, improved racial relations, and family ties are more plentiful (Frey 2004).

³ Push factors encourage out-migration and include deindustrialization of the Northeast and Midwest and higher cost of living in those areas. Pull factors attract people to a particular area and include job growth in the South, an improved racial climate, and family ties.

example, Asians are more concentrated in western states than are Blacks (who are more concentrated in the South). It is well known that more people move between neighboring states than from coast to coast or between regions (e.g., due to lower cost of move, accessibility of family or friends, better knowledge of conditions in adjacent states), so one would predict that most Asian and Black movers will relocate to very different sets of states. The differing geographic concentrations of Whites, Blacks, Hispanics, and Asians across the U.S., is, of course, related to the fact that the latter two groups contain a higher percentages of immigrants, and immigrants are more concentrated than the native-born in a small set of states (California, New York, Texas, Florida, New Jersey, Illinois). Therefore, to the extent that immigrants and the native-born differ in patterns of internal migration (Frey & Liaw 2005; Gurak & Kritz 2000), we would expect Hispanic and Asian interstate mobility patterns to resemble each other more than they resemble those of Whites and Blacks.

In a related vein, members of a racial group may prefer to locate in places where they comprise a sizeable percentage of the population in order to benefit from or enjoy the social support of in-group social networks or institutions (e.g., companionship, work opportunities, housing or cultural consumption options). Given the differential concentration of racial groups across states, this implies movers of different races would be drawn to different destinations. Although this idea is usually applied in research on immigrant residential patterns, Frey (1999b) extended it to the native-born and found evidence Blacks moved disproportionately to states with large Black populations, though this tendency was weaker among college-educated and middle-class Blacks and stronger among economically disadvantaged Blacks.

Another reason to expect internal migration differences among racial groups is that group members are distributed differently across economic sectors or industries, and states vary considerably in their industrial profile and the size and health of these economic sectors. Kandel and Parrado (2005) show that industrial restructuring and relocation of meat processing firms has contributed to a shift in Latino movement to nonmetropolitan areas in the Midwest and Southeast that have large meat or poultry processing plants but previously had few Latino residents (Kansas, Nebraska, Iowa, Arkansas, Alabama, Georgia, North Carolina). In addition, Census data show that a higher percentage of Blacks work in government jobs than do the other racial categories, a higher percentage of Hispanics work in construction, and a higher percentage of Asians are in professional-managerial-information industries.⁴ It seems reasonable to

⁴ See American Community Survey, 2005-2007, Population Profiles. Percentages for the racial and industrial categories listed here are as follows. Percentage of each group's workers who are government employees: Blacks 20.3%, Whites 14.5%, Asians 12.2%, Hispanics 10.0%; for

think that states in which those sectors of the economy are large or healthy would be more attractive to members of racial groups that are more concentrated in those sectors.

States also vary in amount of competition among workers for jobs in key industries and occupations. Focusing on possible job competition between immigrant and native-born workers, Frey (1999b) proposed that in areas of the U.S. that receive large influxes of low-skilled immigrant labor, native-born lowskilled workers would face lower wages and more job competition, which would stimulate them to move to other areas with more favorable economic conditions for them. If native-born Blacks and Hispanics have higher percentages of lowskilled workers than do native-born Whites (and other things are equal), then in areas with the highest percentages of immigrants one might expect higher outmigration rates among native-born Blacks and Hispanics than Whites. Frey (1999b) found, however, that native-born Black and White internal migration between 1985 and 1990 was rather similar. Black and White migration rates to particular metropolitan areas are strongly and positively correlated⁵ and both races were alike in moving from areas with high percentages of immigrants to areas with lower percentages (though this tendency seems a little stronger among Whites than Blacks).

Gurak and Kritz (2000) compared male immigrants from many nationalities as well as native-born Whites in terms of their likelihood of moving to another state. They found that groups with younger and more highly educated members exhibit higher out-movement. This may suggest that Asians (who as a group are younger and more highly educated) are most likely to move to another state, but this may be counter-balanced by the fact that they found Koreans, Filipinos, and Vietnamese are exceptions to this education pattern and that groups with high self-employment rates exhibit less migration to other states. They also found that native-born Whites and White immigrants were less likely than immigrants of color to move out of states with low or stagnant economic growth, which would imply higher levels of Asian and Hispanic than White out-migration from many states in the Northeast and Midwest. Gurak & Kritz (2000) also note that many immigrants reside in states with relatively high percentages of their own nationality, which reduces group members' propensity to move away (implying, for example, lower Hispanic than White or Asian out-migration from

construction jobs: Hispanics 13.6%, Whites 7.6%, Blacks 3.9%, Asians 2.4%; for professional-managerial-information jobs: Asians 15.4%, Whites 12.8%, Hispanics 11.5%, Blacks 11.2%.

⁵ Frey (1999b: Table 9.1) shows a few metropolitan areas are exceptions in that they attracted Blacks or Whites at very different rates: Atlanta's and Minneapolis-St. Paul's rates of net internal migration for Blacks were considerably higher than that of Whites; in Florida metropolitan areas (e.g., Ft. Myers, West Palm Beach, Daytona Beach) the rates of White net internal migration were higher than Blacks'.

Florida). Kritz, Gurak and Lee (2011: 556) add a refinement to this, finding that "college-educated immigrants were significantly less likely to leave places with relatively high compatriot availability." Their data also show that immigrants from several Asian countries have higher migration to other U.S. metropolitan areas than do those from Latin American countries, but their destination locations are not compared.

Variation among racial groups in educational level, age or stage of life, and affluence may differentially affect their ability to move away or their selection of a new state in which to reside (e.g., compared to other groups, whites are slightly older and more able to afford moving to retirement communities in the Sunbelt). Similarly, living costs and availability of low-priced housing in a state could have differential racial impacts (e.g., disproportionately larger numbers of less affluent racial groups may have difficulty remaining in or moving to states with very high cost of living or low percentages of rental housing).

Finally, it is possible that people who hold unfavorable attitudes (distrust, fear) towards certain races might move to states that have fewer residents of the groups they are uncomfortable with. Such attitudes operate at the neighborhood level, and Charles (2000) found that Asians, Hispanics, and Whites felt Blacks were the least desired neighbors. Cases of Whites "fleeing" the presence of Blacks are noted often in the literature on suburbanization (Hirsch 2006; Nicolaides & Wiese 2006). However, whether this issue is germane to interstate migration has not been researched. Social distance research suggests that feelings of racial discomfort at face-to-face or neighborhood levels are of less concern in impersonal situations, and the formal and informal mechanisms sometimes used to keep out or steer unwanted racial minority residents to other neighborhoods seem inoperative at the level of interstate residential mobility.

Based on the material cited above, we began this study expecting to document, with post-2000 data, the disparate paths America's major racial categories are taking when they make out-of-state residential moves. Since little work comparing Asian and Hispanic internal migration with Black and White internal migration has been published, we were eager to see if these groups have distinctive patterns of geographic mobility. Beyond that, we felt our contribution would be to pinpoint some social or economic characteristics of states that make them more attractive to one racial group than another (e.g., what affects group movement to other states more – the size of their group's population in another state or their group's unemployment rate in that state?). However, as we examined recent interstate migration data, it became apparent that differences in which states Blacks, Asians, Latinos, and non-Hispanic Whites are moving to (and differences in their net migration) are much smaller than we expected. In fact, the similarity of Black, Asian, Latino, and White internal migration

overshadows the differences. This seems to be a point that previous research has overlooked or not emphasized sufficiently.

Therefore, while we are still interested in differences in racial patterns of internal migration, and will comment on some that we find, most of what we demonstrate in this paper reflects powerful commonalities among groups' patterns of interstate mobility. The empirical findings presented below are divided into two sections. The first analyzes levels of White, Black, Asian, and Latino in- and out-movement to states along with each group's *net* internal migration (in-movers minus out-movers). The second section uses correlation analysis to show connections between certain characteristics of states and their net internal migration levels.

Long ago, Hauser (1969:101) succinctly summarized the widely accepted explanation for U.S. interstate mobility: "internal migratory movements are largely movements from areas of lesser economic opportunity to areas of greater economic opportunity bolstered by movements from relatively unfavorable to more favorable climates." Writing in the late 1960s he predicted the states with the highest in-migration will be California, Florida, New Jersey, New York, Arizona, Maryland, and Connecticut, while those with *greatest out-migration* will be Pennsylvania, Michigan, Kentucky, West Virginia, Mississippi, South Carolina, North Carolina, and Iowa. Hauser's predictions held true for the next decade or longer, but subsequent research has found significant changes. Evidence in this paper adds to this literature by showing some important alteration in the most and least popular states (especially when viewed in terms of net internal migration). We also discover and show that the link or correlation between interstate migration and economic variables is quite different in the South than in the North. Before presenting these findings, we describe our data, methods, and their limitations.

Data and Methods

This study of internal population mobility relies on data from the U.S. Census Bureau's 2005-2007 American Community Survey (ACS), mainly two tables accessed via the ACS website. The first table (B07004: Geographical Mobility in the Past Year by Race for Current Residence in the United States) shows internal "in-movers," in other words, for each U.S. state (and District of Columbia⁶), it provides the estimated number of people who moved from another

⁶ For ease of presentation, in this paper Washington DC is referred to as if it were a state. But since Washington DC actually is a metropolitan area, it becomes a severe outlier in correlations between internal migration and state characteristics. Therefore, in the correlation analyses of Tables 4 and 5 we exclude Washington DC.

U.S. state *into* that state in the course of a year. Each major racial group's number of "in-movers" to every state is provided in a sub-table of B07004, and we use sub-tables B (Black or African American alone), D (Asian alone), H (non-Hispanic White alone), and I (Hispanic or Latino). In this paper the term "White" refers to "Non-Hispanic Whites." The second ACS table (B07404: Geographical Mobility in the Past Year by Race for Residence One Year Ago in the United States) provides the number of "out-movers" to other states (i.e., number of people who moved *away from* that state to another U.S. state in the course of the year), with sub-tables for each racial group. For the U.S. as a whole, in this dataset, internal in-movements and out-movements balance or sum to zero (i.e., each person who changes residence across state lines is both an out-mover from one state and an in-mover to another state). Thus, internal net migration for the US is zero, but individual states' net migration vary greatly, with some having many more in-movers than out-movers (positive net internal migration) and others having many more out-movers than in-movers (negative net internal migration).

Although the ACS 2005-2007 estimates of in-movers and out-movers cover years 2005, 2006, and 2007 it is important to realize that the numbers in these tables are estimates for one year, not for the entire three-year period. In other words, the ACS estimate uses in- and out-movers from the ACS annual samples of 2005, 2006, and 2007 to create a weighted average, representing what might be called the "average year" in the 2005-2007 period.

When interpreting findings based on 2005-2007 internal migration data it is important to realize that they depict geographic movement that took place before two more recent forces started affecting internal migration: the housing mortgage crisis and recession (2008 – present) and the adoption of policies and laws in several states designed to discourage the presence of immigrants residing in the U.S. illegally. The former is believed to have reduced interstate mobility generally (e.g., by making it difficult for homeowners to sell their homes and move or by reducing new employment opportunities for people who have been laid off or are seeking to change jobs [Fletcher 2010]), while the passage of state

⁷ People who move into a state directly from another foreign country (immigrants), or from Puerto Rico or from other overseas US territories are not counted as internal migrants in these data.

⁸ People who move from a U.S. state to another country (emigrants), to Puerto Rico, or to other overseas U.S. territories are not counted in the ACS out-movement table used here.

⁹ Keep in mind, however, that 2005 was not an "average or typical" year – it saw Hurricane Katrina devastate parts of the Gulf Coast. The 2005-2007 ACS data show unusually high numbers of people (Blacks in particular) moving from Louisiana and arriving in other nearby states as a result of that hurricane.

¹⁰ These policies include increased participation by local jurisdictions in the federal "287 g" and Secure Communities programs, and legislation includes Arizona's SB 1070 in 2010 and similar laws passed in 2011 in Georgia, Utah, and Alabama.

legislation targeting unauthorized immigrants may be making certain states less hospitable for Hispanics (and to a lesser extent Asians). The actual impact of these forces should become evident in analyses of internal migration based on the 2010 Census and subsequent ACS data, but it is useful to have results from the years 2005-2007 as a baseline representing a period of relatively greater prosperity and less organized opposition to the presence of unauthorized immigrants.

Using the data described above, our goal is to discover which states are gaining (or losing) large numbers of White, Black, Asian, and Hispanic internal movers, and to learn whether certain states are disproportionately more "attractive" or "repulsive" for certain racial groups than others (e.g., is Georgia, or southern states in general, more attractive to Black movers than to movers of other races?). To answer these questions, we examined many measures of interstate mobility for each race: number of in-movers, number of out-movers, rates of in- and out-movement, net migration, ratio of in-movers to out-movers, migration efficiency, and percentage of a state's residents who are in-movers. We find net migration (number of in-movers minus number of out-movers) to be a very useful indicator, and we use it in the correlation tables in this paper. The correlation coefficients identify characteristics of states that are most strongly associated with large net changes in internal migration for each racial category.

The advantage of this approach is that it directly measures internal geographic mobility of people (of each racial category) residing in the United States. Some commentators attempt to glean this information by examining state population change over time for racial categories. However, since population change in a state is also affected by racial groups' birth rates, death rates, and arrival of immigrants from foreign countries (all of which vary considerably across races) simply looking at a state's population changes by race does not give a very accurate estimate of internal migration to or from that state. Also, as mentioned in footnotes 7 and 8, it is important to realize that in the data set analyzed here, people moving across international borders are not counted as internal migrants; in other words, immigrants arriving in a state directly from a foreign country are not counted as interstate migrants, and people who move overseas are not tabulated as interstate out-movers; however, immigrants already living in one U.S. state and moving from that state to another state in the U.S. are counted as internal migrants.

Our data and approach have some limitations. A few are inherent to the use of states as units of analysis. We agree with criticism of state-based analyses made at the end of Frey and Liaw's (2005) article, particularly that metropolitan areas represent labor markets better than states do. However, there is a well established tradition of interstate migration analysis, and more importantly, some practical and policy reasons make it useful. At the national level, political

representation in Congress is state-based, and any large population change that net internal migration brings to a state has an impact in the House of Representatives (since the number of representatives each state has is based on state population size). Moreover, certain federal funds are distributed to states based on their population size, and, at the state level, numerous state departments and policy agencies (e.g., education, employment, economic development, transportation) are vitally interested in how interstate migration affects them.

Another limitation of a data set comprised of 50 states plus the District of Columbia is statistical. Such a small number of cases severely limits multivariate analysis (i.e., restricts the number of independent variables that can be included in a multiple regression model). We have examined results of numerous multiple regression analyses, using models with five or fewer variables. Frankly they are not as revealing and interesting as are the results of the simple correlation analysis, so for that reason and due to the space constraints of an article, we omit multivariate results here and present correlations between net internal migration and states' economic, demographic, and social characteristics (Tables 4a, 4b, 5a, and 5b).

In these correlations, however, a few state outliers can mask or distort the relationship between internal migration and an explanatory variable. We examined scatterplots to see if outlier states affect the observed pattern. It became clear that the District of Columbia (better viewed as a metropolitan area than a state) was an extreme outlier and including it hindered interpretation, so we excluded it from the correlations shown in Tables 4a, 4b, 5a, and 5b. Alaska and Hawaii are, in some respects, special cases¹¹ and we also excluded them in those tables. As we analyzed correlations, in each U.S. region, between net internal migration and other variables, it was obvious that in the West, California is a severe outlier with a powerful effect. California is too important a state to simply drop from the analysis, so to help interpret the situation we show, in Table 4b and 5b, two correlation coefficients for the West: the one on the first line includes California, and the number on the lower line is the correlation for the western states excluding California. Finally, two border states, Delaware and Maryland, are less severe and less consistent outliers. They are classified as southern states by the Census Bureau, but in some respects they are more like Middle Atlantic states, and on several variables they fit more closely into the correlation pattern of the Northern states. In fact, in a few cases, including Delaware and Maryland in the South (as we do in Tables 4b and 5b) causes some variables' correlation with

¹¹ Aside from their substantial geographic distance from the 48 contiguous states, Alaska and Hawaii are among the most expensive states in terms of cost of living. Their interstate migration streams also contain relatively large numbers of military personnel and their dependents. Finally, their weather puts them at opposite extremes, with Hawaii's climate being the most attractive to migrants and Alaska's being the least attractive.

net internal migration to weaken compared to what it is for southern states without Delaware and Maryland, and we comment on this in our section on research findings.

Analysis of interstate migration data enables us to see the numbers of people of each racial category moving into and out of each state and evaluate whether some races prefer certain states much more than other races do. A limitation of state level migration data, however, is that it does not reveal possible differences among races in terms of the different parts of a state to which they move (if such differences exist). So, for example, our data may show that Texas is one of the most popular destinations of all four racial categories; but it will not be able to ascertain whether, within Texas, Black and Asian in-movers tend to go to Houston, Hispanic migrants prefer San Antonio, and high percentages of interstate White migrants choose to settle in Dallas-Ft. Worth. That would obviously require migration data at the metropolitan area level.

A final limitation in this paper is that our internal migration data come only from the 2005-2007 ACS tables B07004 and B07404 (their sub-tables for races), and these tables do not indicate individual attributes of the interstate movers (e.g., their age, sex, economic level). Therefore, we can not specify or analyze these important characteristics of movers that would be of theoretical or practical importance. In particular, several other studies (Card & DiNardo 2000; Frey 1996; Frey & Liaw 2005; White & Imai 1994; Wright, Ellis & Reibel 1997) have investigated whether states with high percentages of immigrants have elevated out-movement by native-born residents of certain racial or socioeconomic categories. Unfortunately, our data are unable to address this issue since it does not distinguish native-born internal migrants from foreign-born internal migrants, nor do these data reveal the age, educational, or economic status of the interstate movers. Our future research plans include examination of PUMS data, which provide information on individual interstate movers.

Economic, Demographic, and Social Variables

Besides data on in- and out-movers, our analysis uses variables representing characteristics of states that researchers have found to be associated with internal migration patterns. We identify these variables here.

Since economic conditions in a state affect decisions to move in or away (Cebula & Alexander 2006), we include several economic indicators. To test whether a state's overall level of economic activity is related to its internal migration level, we include the state's per capita 2006 Gross Domestic Product (GDP, from U.S. Bureau of Economic Analysis). We also test whether net

¹² This is analogous to the familiar spatial level problem inherent to segregation indexes: a segregation index based on census tract data does not measure segregation that exists within census tracts (i.e., at block or block group level).

migration is higher in states with a low unemployment rate by including overall, White, Black, Asian, and Hispanic unemployment rates for each state (from 2005-2007 ACS) in the analysis. In addition, a prevalence of certain key industries may lure migrants to a state. For example, work on the "creative class" (Florida 2002) proposes that states with large post-industrial sectors (i.e., producer services, communications-information industries, and creative professions) will be the most prosperous, and such prosperity enables those states to retain residents and attract many new migrants. To test this we construct an indicator of the relative size of states' civilian labor force employed in these industries (adding together the percentages employed in "information" industries and in "professional, scientific, management, and administrative services" and correlate it with state net internal migration.

We also include in our analysis the percentage of each state's civilian labor force employed in other major industry categories and the Forbes (Badenhausen 2006) ranking of "best states for business," (we recode this ranking so that the "best states for business" have rankings with higher numerical values) to learn whether these are associated with internal net migration. Two other economic variables utilized in our analysis are the 2006 cost of living index in each state (www.top50states.com/cost-of-living -by-state.html) and the "tax burden" on residents of each state (2006 per capita state and local taxes as a percentage of state per capita income, as reported on the Tax Foundation's website). Using these two measures we test whether, for each racial category, the more "expensive" states are losing and the less "costly" states gaining internal migrants.

Previous research suggests that non-economic variables affect internal migration patterns. An accepted principle of spatial mobility is that people generally move to areas in which there already are substantial numbers of people of similar race, and are less inclined to move to areas with few people of "their own kind." To evaluate this, we include in the analysis the 2000 population size (percentage) in each state of the four race categories. We test variables related to a state's climate (e.g., average low temperature in January as an indicator of mild/cold winters [Sperling 2010]). We also use an indicator of quality of life to see if states in which residents enjoy better living conditions have higher net internal migration. This indicator is a state's rank on Forbes (2006) quality of life index (based on school quality, health, crime, cost of living, and poverty). This ranking has been recoded so that higher numerical scores indicate better quality of

¹³ This variable has a correlation of .86 with Richard Florida's "creativity index" measured at the state level (Adiarte & Stolarick 2003).

¹⁴ Forbes "best states for business index" ranks states by taking into consideration business costs, labor availability and quality, state regulations and incentives for businesses, the state's economic climate, and growth prospects.

life. Beyond that, we check for an association between net internal migration and the size of the foreign-born population in a state, the educational level of states' residents, and states' political leaning (correlating net migration and percentage state vote for Republican candidates (the mean percentage based on results of the 2004 Presidential election and most recent pre-2005 election for each state's Governor).

Findings

In-Movement and Out-Movement Patterns of Racial Groups

Looking at patterns of interstate in-movement (Table 1, top and middle panels), it is apparent that very large numbers of White, Black, Asian, and Latino movers are going to the same states and they also closely resemble each other in the states they avoid. For each group, their lists of the ten most popular states (upper panel of Table 1) are remarkably similar; so are their least popular destination states (middle panel). Four states (FL, TX, CA, GA) appear in all four racial groups' top 10 in-migrants list, and four other states (NY, PA, NC, VA) are on three racial groups' top 10 in-migrant list. Those eight states plus two other popular states (AZ and NJ) represent the destinations of 57% of all Hispanic interstate movers, 55% of all Asian interstate movers, 52% of all Black interstate movers, but a somewhat smaller percentage (43%) of all White interstate movers. White and Asian internal migrants' choices are very similar: their ten most popular states differ on only two states (AZ and NC are on Whites' list but not on Asians', while NJ and IL are on Asians' list but not on Whites'). Whites' and Asians' lists of their ten *least* popular states also only differ on two states. These data show Blacks and Hispanics as less similar: their list of ten states with the largest numbers of in-movers differs on five states, 15 and their list of ten states with fewest in-movers differs on three states.

Table 1 about here

Table 1 also shows important *regional* patterns of in- and out-movement. Specifically, much movement in and out of Sunbelt states by all four racial groups, and more in-movement than out-movement. For instance, Texas receives the largest or second largest number of in-movers in all four racial groups, while its number of out-movers ranges from second to fifth highest for these racial groups. Among Sunbelt states, only California and Louisiana have more out-movers than in-movers. Few states in the Northeast and Midwest appear on Table 1's lists, and when they do they are more likely to be among states with the most out-movers rather than the most in-movers.

https://digitalcommons.kennesaw.edu/jpps/vol5/iss1/3

¹⁵ One of these is Louisiana, which was hit by a hurricane (Katrina) in 2005 that displaced a disproportionately large number of Blacks. Our in-mover data show some Blacks returning in the post-Katrina years, but also indicate very large numbers of Blacks who moved away from Louisiana in this period (Table 1, lower panel).

Only a few states are very popular (or unpopular) as destinations of movers from just one or two races and not the others. New Jersey is an example, relatively more popular for Asian movers (4th highest destination state) and Hispanic movers (9th highest destination state), but for Black and White inmovers it's the 17th and 24th most popular state. Alabama stands out as a state attracting a higher percentage of Black interstate migrants (12th most popular destination) than whites (23rd most popular destination), Asians (31st most popular destination), and Hispanics (35th most popular destination). To highlight states that might be much more popular destinations for one race than the others, we computed the percentage each races' total movers who went to each state. California stood out as particularly popular for Asian movers (it attracted 14.3% of all Asian interstate movers – about double the percentage of Asian movers to the next most popular states, while attracting only 5.9% of all White movers, 4.1% of Black movers, and 9.0% of all Hispanic movers). Georgia stood out as especially attractive to Blacks, luring 11.3% of all Black movers, while Georgia is the destination of just 3.6%, 3.5%, and 3.4% of all White, Asian, and Hispanic interstate movers, respectively. In comparison to these two cases, no states stood out so sharply as uniquely attractive for Whites and Hispanics.

Some facts about internal migration seem to run counter to common sense. For example, it would seem reasonable to think that if certain states attract very large numbers (or a high rate) of in-movers of a particular racial group, then those states would have relatively low numbers or rates of people of that race departing However, nothing could be further from the truth. destination states also have very high population turnover. In other words, states that have the highest numbers and rates of Whites, Blacks, Asians, and Hispanics moving in are also states with the highest numbers and rates of those groups To illustrate this with numbers of in-movers and out-movers, compare upper and lower panels of Table 1. Among Blacks, for example, Georgia has the highest number of in-migrants, but it also ranks third highest in number of out-migrants; and Texas is second in number of in-movers, and fifth in out-movers. Similarly, among Hispanics, Texas has the largest number of interstate migrants moving in, and is second highest in number of interstate migrants moving out. Indeed, as Table 1 shows, for Hispanics (and other groups too) the list of Top 10 in-migration states is strikingly similar to the list of Top 10 out-migration states. More broadly (i.e., for all 50 states and Washington DC) it is clear that states attracting high numbers of in-movers of a particular race also see large numbers of people of that race departing: the correlation between number of White in-movers and number of White out-movers is .93; the

equivalent correlations for Blacks, Asians, and Hispanics, are .76, .96, and .81, respectively. 16

Examining all states (rather than just the ten most and least popular inmover states) reinforces the conclusion that White, Black, Asian, and Hispanic internal migration patterns are similar. Correlations among these groups' *numbers* of in-movers are strongly positive (see upper number in cells of Table 2), ranging from .89 for Whites and Hispanics to .55 for Blacks and Asians. Their *rates* of in-movement are moderately positive, except for a weak correlation (.17) between Asian and Black in-movement rates (see second line in cells of Table 2).

Table 2 about here

Similarly, correlations are strong for *numbers* of out-movers (third line in each cell): .74 for Black and White out-movers; .85 for Asians and Whites; .86 for Hispanics and Whites; .66 for Blacks and Asians; .64 for Blacks and Hispanics; and .93 for Asians and Hispanics. Thus, not only do states that attract large numbers of one race also attract large numbers of the other races, but those states that see large numbers of one race leave also see large numbers of other races leave too.

Of course, looking only at numbers of in- and out-movers can be misleading (since a state with a small number of residents of a particular race cannot have a high number of out-migrants of that same race; also, a state with a very large population of a particular race might see a substantial number move away but those movers might comprise only a small portion of that states' residents of that race). Therefore, we also examined rates of in- and outmovement, using Poston and Bouvier's (2010: 171-172) definitions of in- and out-migration rates. States with high out-migration rates are usually states with relatively low numbers of a group, so even a small to moderate number of outmovers creates a high rate (e.g., Alaska, Wyoming, Vermont). As line four in cells of Table 2 shows, all groups' out-migration rates are positively correlated, with most .50 or higher. The exceptions are lower correlations between outmigration rates of Asians and Whites (.36) and Asians and Blacks (.27). ¹⁷ Aside from the influence of California (see next paragraph), this strongly reflects the unique impact of Hawaii. For Whites and Blacks, Hawaii has very high outmigration rates (second and third highest rates of all states, for those two groups respectively), and to a large extent this reflects yearly departures of military

¹⁶ We find a similar pattern for *rates* of in- and out-migration. Using Poston and Bouvier's (2010: 171-172) definitions of state in- and out-migration rates, the correlation between Whites' rates of in- and out-movement is .95; for Blacks it is .76; for Asians it is .71, and for Hispanics it is .75.

¹⁷ Interstate in-migration rates (line two in cells of Table 2), however, have weaker correlations between racial groups. But this is mainly due to the fact that denominator for these in-migration rates is the state's population of each racial group, which varies considerably across races.

personnel of those groups from Hawaii.¹⁸ On the other hand, Hawaii has the second lowest out-migration rate for Asians (i.e., Asians leaving Hawaii comprise a very small percentage of the relatively large and stable Asian resident population on Hawaii).

In general, states with high (or low) out-migration rates for one group also have high (or low) out-migration rates for other groups. There are some notable exceptions. California is one: White and Black out-migration rates are similar and a little below the median of their racial categories. Specifically, for every 1,000 Whites living in California the previous year, 26.7 moved out the subsequent year, and the Black out-migration rate is 26.4. In contrast, for Asians and Hispanics, California has the lowest and second lowest out-migration rates, respectively (both were 13.8 per 1000). In Arizona the Hispanic out-migration rate is notably lower than that of the other three groups.

A key finding by Frey and Liaw (2005) is relevant here. They found that people of a particular race are more likely to move to destination states that have large *numbers* of their race already living in it. Our data agree with this for all four groups studied: state in-migration rates for Whites, Blacks, Hispanics, and Asians correlate strongly (.80 or higher) with the 2000 number of same-race people in the state. However, when measured as a percentage of a state population we detect a slight discrepancy. For Whites, the correlation between the number (and rate) of in-migrants to a state and the *percentage* of the state that is White is negative (-.54), whereas for Blacks the correlation between inmigrants and the *percentage* of the state that is Black is positive (.62). Analogous correlations for Hispanics and Asians are also strongly positive (.71 and .87, respectively). However, Blacks, Hispanics, and Asians do resemble Whites in that they too move in smaller numbers or rates to states with high percentages of White residents. Hence the overarching similarity is that while movers of all four races relocate most often to states with large numbers of same race residents, in terms of percentage composition it is the more diverse states that are more preferred destinations (i.e., states that are "highly White" receive less internal inmigration from all four racial groups).

Summing up our analysis of in- and out-mover data, the overarching pattern is similarity across racial categories. Whites, Blacks, Asians, and Hispanics, with a few exceptions noted above, are drawn to the same set of states,

¹⁸ In recent decades more than half the migrants from the U.S. mainland to Hawaii are military personnel and their families stationed there temporarily ("Hawaii – Migration" www.city-data.com/states/Hawaii-Migration.html). Perry (2003) discovered another unique aspect of out-migration from Hawaii: from 1995 to 2000 one of the most impressive (efficient) state-to-state streams of movement in the U.S. was from Hawaii to Nevada, which Perry attributes to weakening of Hawaii's economy (especially tourism and hospitality sectors) and rapid growth in those same sectors in Nevada.

avoid similar sets of other states, and are alike in the states from which they most often depart. The correlations in Table 2 suggest that the interstate residential shifts of Hispanics and Whites and of Hispanics and Asians are most similar, while resemblances between Black and Asian interstate migration patterns are the least strong.

Net Internal Migration Patterns.

Table 2 also presents correlation coefficients among White, Black, Asian, and Hispanic net interstate migration (coefficient in line 5 of each cell). The coefficient for White and Black net migration is positive and strong (.73); so are those of Whites and Asians (.77) and Whites and Hispanics (.82). Thus, states that are growing via the net internal migration of one of these groups are also growing via net migration of the others. In addition, the correlations regarding internal net migration of Asians and Blacks (.69) and Asians and Hispanics (.69) are also positive and strong (though slightly weaker than exhibited between Whites and each of the minority groups). The correlation between Black and Hispanic net internal migration (.57) is positive but a little weaker.

Table 3 shows net internal migration of each racial group, highlighting states with highest growth or loss for each group. Consistent with data in Table 1, there is substantial overlap across races in states experiencing high or low net internal migration. For all racial groups, southern states dominate the high net migration list (though to a less extent for Asians and Hispanics). Western states of Washington, Colorado, and Oregon have strong White, Asian, and Hispanic net migration, while Arizona is high for all four groups. California, on the other hand, is notable for its extremely negative net internal migration for all races. Of all the states in the Northeast and Midwest, only Pennsylvania is on the list of 15 highest net internal migration states for more than one race (Blacks and Hispanics). At the other extreme, California and New York have massive net loss of population via internal migration of all racial groups. Michigan, New Jersey, and Illinois also have high net internal migration losses for all four groups.

Table 3 about here

Reviewing the states with the largest net gains and losses from internal migration and comparing them with the states Hauser (1969) said would be the leading in- and out-migration states (see p. 7-8 above) shows several changes. Of the states he indicated would have large migration gains, only Florida and Arizona still do; and of the states expected to have large migration losses, only Michigan has large net out-migration among all racial groups. In fact, North and South Carolina changed from high out-migration to large net increases by all races.

Migration "efficiency" is another useful measure that conveys additional information about net internal migration. Internal migration efficiency shows

how large a state's net migration gain (or loss) is, measured as a percentage of all interstate moves made into and out of a state. Whites and Asians are similar in having relatively low interstate migration efficiency in most states (median efficiency for Whites is 1.9 and -3.7 for Asians). In other words, for those two groups, in most states their net gain from internal migration is low compared to their total number of moves in or out. Migration efficiency is above 10.0 in only nine states for Whites and 12 states for Asians. In contrast, in 23 states Blacks' and Hispanics' migration efficiency is above 10.0 (median efficiency for Blacks is 7.5 and Hispanics is 7.4). This means that, quite clearly, more states are very popular sites for Blacks and Hispanics than for Whites and Asians.

Nonetheless, if we ask *which* states are the ones with highest or lowest migration efficiency, the answers are largely the same for all groups, especially Whites, Blacks, and Hispanics. For instance, Arizona has high migration efficiency for all four racial groups, while six other states (SC, NC, GA, ID, TX, NV) are high on three of the four races. Correlations among groups' migration efficiency rates are positive and strong to moderate: .69 for Whites and Blacks, .72 for Whites and Hispanics, .69 for Blacks and Hispanics, .46 for Asians and Whites, .41 for Asians and Blacks, and .42 for Asians and Hispanics. So on internal migration efficiency, Asians' patterns are somewhat distinct from the other groups. For instance, Washington is a state in which in-movement constitutes a much higher percentage of all moves among Asians than is the case for other groups, while Oklahoma exemplifies the other extreme (i.e., outmovement dominates the Asian migration flows there more than it does for Whites, Blacks, or Hispanics).

To conclude this section on net internal migration, it is useful to compare our findings with another recent analysis of White, Black, Hispanic, and Asian net internal migration. Frey and Liaw (2005) analyzed interstate mobility between 1995 and 2000 and found similarities and differences in these four races' net migration patterns. Our study uses mobility data from 2005-2007, but we should also note another important difference: Frey and Liaw's (2005) analysis is based on people aged 25-59, whereas our analysis includes people under age 25 and older than 59. The main commonality that Frey and Liaw mention is that for all four racial groups, a few southeastern states (GA, FL, and NC) are among those with the largest net migration gains, while New York, California, and Illinois are among the largest net losers of people from all four racial categories. On this, our findings concur with Frey and Liaw's. Turning to differences among the four races, Frey and Liaw (2005:218) say, "Hispanic net migration is distinguished from the other groups by its relative dispersion. Thirty-eight states have seen a net domestic in-migration of Hispanics over the late 1990s, compared to less than

¹⁹ A state's migration efficiency is equal to its: [net migration divided by (# in-movers plus # outmovers)] multiplied by 100 (Poston & Bouvier 2010: 169, 172). It can range from 100 to -100.

twenty-three states for each of the other groups." Our data suggest an interesting change in the mid-2000s. Hispanic movers no longer appear to be so unique in dispersing over a wide set of states, as Black and White movers now show a similar trend: we find that 37 states have positive Hispanic internal net migration, but 32 states also have positive Black and White internal net migration. In this regard, Asians are now the most "distinguished" group, with only 19 states having positive Asian internal net migration. In other words, in recent years Asian population growth through internal migration has occurred in a much smaller set of states than is true for the other racial categories (but, as Table 3 shows, the states where most of that Asian net migration increase is occurring are overwhelmingly the same states that are experiencing large net internal migration gains among the other races too).

Frey and Liaw (2005:218) mentioned another difference: "among whites, two of the top five gaining states are in the West surrounding California, whereas for blacks, all five top gainers were in the South . . ." Our data suggest this difference no longer holds. For both Blacks and Whites, the five states with the highest net internal migration gains are four southern states (NC, TX, GA, and FL for Whites, and GA, TX, NC, and VA for Blacks) and one western state (AZ for both races). This change towards convergence in the mid-2000s seems to be due to a sharp drop in Nevada's popularity among Whites and a rise in Arizona's popularity among Blacks. However, if one culls our data for signs of racial differences in net migration among states near California (possibly suggesting that Blacks and Whites are moving away from California in streams headed in different directions), then it is interesting to note that among Whites, Washington and Oregon rank 7th and 9th in interstate net migration, respectively (but only 16th and 33rd among Blacks), while Nevada ranks 8th among Blacks (but 27th among Whites). These somewhat discrepant patterns of Blacks and Whites for states near California do not apply to Hispanics and Asians (i.e., WA, OR, and NV are all highly ranked positive net internal migration states for Hispanics and Asians).

To enhance understanding of these patterns of net migration, the next section examines how states' economic and social-demographic characteristics are associated with White, Black, Hispanic, and Asian net migration.

Net Internal Migration and States' Characteristics

Tables 4a, 4b, 5a and 5b show how interstate net migration levels correlate with states' economic, demographic, and social characteristics. From these results, we emphasize two key points. First, reinforcing the preceding section's findings, the four racial groups are quite consistent in the way their net internal migration correlates with states' characteristics. For example, in the "lower 48" states (see Table 4a, rows 1-3), cost of living and tax burden are both negatively related to net internal migration for all racial categories, while the positive

correlation between net migration and "best states for business" in each race means that each group is growing the most via net internal migration in states with the best business environments. Also, Table 5a, rows 2 and 7 show that in the "lower 48 states" all four races are similar in that their net internal migration is weakly negatively related to state population density and positively correlated with the percentage of the state that voted Republican (based on elections for state governor and 2004 Presidential election).

Tables 4a, 4b, 5a, and 5b about here

A second conclusion is evident after comparing Tables 4a and 5a with Tables 4b and 5b, namely, net internal migration correlations based on the whole U.S. (i.e., "lower 48 states") often are misleading. One can examine the correlations within U.S. regions (see Tables 4b and 5b) for a more nuanced understanding of how interstate net migration is associated with other variables, since different patterns sometimes exist in different regions. In other words, correlations observed at the national level may obscure what is taking place within each region. In particular, it is important to recognize that correlations between state characteristics and net internal migration in the North and South often are quite different. Similarly, California is such a distinct case in the West that it is a powerful outlier, and the correlations take a rather different pattern in that region depending on whether we include California (top line in West cells of Table 4b and 5b) or exclude it (bottom line in West cells in those tables).

With those two points in mind, we now comment on the more important results of the correlation analysis. Among economic variables, one of the strongest associations is that for all four racial groups, states with low cost of living and low taxes have higher net migration than do more expensive states (Table 4a and 4b, rows 1 and 2). This pattern holds among northern and western states, however, within the South, where cost of living and tax burden are low compared to other regions, the correlations usually are weaker²⁰. This difference is more pronounced if the border states of Delaware and Maryland are excluded from the South. Thus, nationally, in terms of internal net migration, southern states benefit from their lower cost of living and lower taxes, but within regions inter-state differences in cost of living and tax levels predict internal net migration better in other regions than they do in the South.

The pattern reverses for "best business climate" – here the national positive correlations for all racial groups are stronger in the South and all but disappear in the North (line 3 in Tables 4a and 4b). This is due to the fact that

²⁰ An exception in the South is that Hispanics do show a negative correlation (-.34) between tax burden and net migration (similar to the rest of the U.S.). This is due to very high Hispanic net migration in TX and FL plus gains in SC and TN, all of which are relatively low tax burden southern states, and smaller Hispanic net migration in VA, KY, and AR, which are southern states with higher tax burdens.

Virginia, Texas, North Carolina, Florida, and Georgia (all strong net gainers via net interstate migration) rank in the top ten states in Forbes list of states with the best business climate, while Arkansas, South Carolina, Kentucky, Alabama, Mississippi, and West Virginia (mainly states with modest net internal migration) rank in the middle or at the bottom of Forbes list. Conversely, northern states inhabit the middle and lower ranks of the "best business climate" list, and this restriction in range contributes to its weak correlation with net internal migration among states in the North.

Net internal migration and states' economic structure (i.e., percentage employed in major industry sectors) show important regional differences. For the nation as a whole (Table 4a), it appears that the size of the agricultural, the professional-scientific-managerial-information, and the finance-insurance-real estate (FIRE) sectors are all unrelated to net migration of any of the racial categories. But Table 4b's columns for South, North, and West show different pictures. Opposite patterns of correlation occur in the South and North. In the South, net internal migration for Whites, Blacks, Asians, and Latinos correlates negatively with size of states' agricultural sector, but Northern states show a positive correlation between percent agricultural and net migration. In the West this correlation is almost nil when California is included, but negative (like the South) when California is excluded. Thus, patterns of in- and out-movement in the South and West are such that more agricultural states (e.g., AR, KY, MS, WY, MT) made small gains or actually lost population via net migration, while less agricultural states (SC, FL, TN, AZ, WA) had larger gains. However, among Northern states the pattern reverses: more agricultural states have higher net internal migration (e.g., IA, KS, ME) than less agricultural states (NJ, MA, CT).

An important North-South difference also appears in the correlation between net internal migration and percentage of workers in professional-scientific-managerial-information industries. In the South, states with large percentages of workers employed in that sector (e.g., VA, FL, GA) have higher net migration (for all races except Whites) than do states with smaller professional-managerial-information sectors (e.g., MS, AR, WV).²¹ But the reverse is true in the North, where the correlation is negative and states with high percentages employed in these industries have low (actually negative) net internal migration (e.g., MA, NJ, NY). In the West the correlation between percentage employed in professional-scientific-managerial-information industries and net internal migration is weakly negative, except when California is excluded and then it resembles the pattern in the South (as was the case for percentage employed in agriculture). The correlation between percentage employed in the FIRE sector and states' net domestic migration is similar to this pattern.

²¹ If Delaware and Maryland were excluded from the South, then a positive correlation occurs for Whites too (r = .40) and the correlations are even stronger for the other groups.

Remaining rows of Tables 4a and 4b give insight on how economic characteristics of states are related to net internal migration levels. As would be expected, states' net migration levels are positively related to the percentage of people in the state employed in construction (this holds in all four racial groups for the U.S. as a whole and in each region).²² This correlation probably entails two-way causation: a booming construction industry creates many new homes and businesses that bolster net migration, and where net migration is high there is likely a need for building new homes and businesses, hence a larger percentage of workers in construction. Given the general decline of most manufacturing in the U.S., it is not surprising that size of a state's manufacturing sector is not related to internal net migration, except perhaps for Hispanics and Blacks in the North, where their net internal migration was slightly higher in states with more manufacturing.

In the U.S. as a whole no association exists between states' percentage of government workers (federal, state, and local) and net internal migration of any racial category. Although Blacks are more likely than people in other racial categories to be government workers, states with larger public sectors are no more attractive to Blacks than to other races. Within regions some patterns and intergroup differences are apparent (e.g., among southern states, Whites and Hispanics have more strongly negative correlations between net migration and percentage of government workers, and in the West excluding California all groups show a negative correlation). We note, however, that in the South, Florida and Texas have low percentages of government workers and states with high percentages of government workers are Mississippi, Louisiana, West Virginia, Virginia, and Maryland, while in the West, New Mexico, Montana, and Wyoming have high percentages of government workers, and Colorado and Arizona are low. It seems likely that other characteristics of these states have more influence on their net internal migration than does the percentage of people working in government jobs.

A measure of a state's overall economic productivity (per capita Gross Domestic Product or GDP) reinforces the previous comment regarding internal net migration and regional variation. For the "lower 48" states as a whole, per capita GDP has a weak negative correlation with state net migration in all four racial groups. This result is mainly due to the fact that per capita GDP is a little lower in southern states than in northern and western states, but southern states have higher net internal migration than the other regions' states. What is more interesting, however, is the different pattern found in each region. In the South,

²² Note, however, how strong the correlation is for Hispanics in southern states (.72) and how much weaker it is for Blacks in southern states (.21). This may reflect some displacement of Blacks by Hispanics from construction jobs in the South (see Lippard 2008) coupled with expanded job prospects for Blacks in other economic sectors.

net internal migration has no, or at most a weak positive, correlation with per capita GDP for all four races (it is positive and moderate in strength if Delaware and Maryland are excluded) and the same holds for the West excluding California. However, in the North the correlation is sharply negative: states with higher per capita GDP have lower internal net migration. Clearly, the link between economic conditions and net internal migration differs in the North and South, and we elaborate on this in the discussion and conclusion.

The association between states' net internal migration and their unemployment rate is consistently negative across races. However, these negative correlations are weaker than expected (except for Whites and Asians in the North). States with lowest unemployment rates are North Dakota, Wyoming, South Dakota, Utah, Nebraska, and New Hampshire, which have other qualities that make them relatively unpopular places to live. Therefore, they have low internal net migration for all racial groups, which attenuates the national correlations. We also correlated state net internal migration of each race with that race's own state unemployment rate, but the results were very similar. Neither a race's own unemployment rate nor the general unemployment rate has a particularly strong correlation with its level of net internal migration.

We now turn to correlations between states' net migration and their demographic and social characteristics (Tables 5a and 5b). The trend for the continental U.S. is that states with smaller populations and lower population densities have higher net domestic migration. This reflects the greater popularity of sun-belt states than frost-belt states as destinations for internal migrants. However, in South and West (excluding California) the pattern for all racial groups reverses: larger denser states have higher internal net migration. The same regional difference is evident for percentage of the population living in Urbanized Areas – in the South the more urbanized states have higher net internal migration than the less urbanized states, especially for Asians and Hispanics. In contrast, in the North larger, denser more urbanized states have either negative internal net migration or only small gains.

Inspection of the correlations between net internal migration and a racial group's percentage of the state population reveals an important difference among the groups. In the South, Whites' and Blacks' net migration has almost no correlation with their group's percentage of the state population. In contrast, strong positive correlations exist between group size in southern states and net internal migration for Asians (.48) and Hispanics (.89). Clearly, Asians and Hispanics want to move to or remain in southern states that have larger

²³ Table 5b's population density correlations in the South do not show this because Delaware and Maryland are included in the South in this table. However, with those two states excluded the correlations between state population density and net internal migration are: .36 (Whites), .11 (Blacks), .32 (Asians), and .46 (Hispanics).

percentages of fellow group members (but it should be noted that, except for Texas and Florida for Hispanics, southern states' percentages of Asians and Hispanics are generally lower than many northern and western states). In the North and West, however, a different picture emerges. There White net internal migration is positively correlated with the percentage of the state that is White (i.e., "whiter" states draw and retain the most Whites). In contrast, for Blacks, Asians and Hispanics in the North the correlation is negative – these groups' net internal migration is lower in states in which they have a large presence than in states where they comprise a small proportion of the population. In fact, in the North, minority races' net internal migration is higher in states with large percentages of Whites (and in this their interstate mobility resembles that of Whites). In western states other than California, Black, Asian, and Hispanic net internal migration gains are larger in states that have higher percentages of those groups, but for Whites there is no correlation between their group size and their net migration.

The correlation between net internal migration and percentage of states' population that is foreign-born shows regional variation as well as similarity across racial groups. In the South and western states other than California the correlation is positive for all four races. In the North the correlation between percent foreign-born and all four races' net internal migration is strongly negative. California fits in with the northern pattern: New York, Illinois, New Jersey, and California all have relatively high percentages of foreign-born residents and net domestic migration for all four racial groups is very low (in fact negative). In contrast, Florida, Texas, Georgia, North Carolina, Arizona, and Colorado are southern and western states with high or moderate percentages of foreign-born residents and relatively high net internal migration for each race. The pattern described by Frey (1999b) for Blacks and Whites in the late 1980s (i.e., leaving or avoiding states with high immigrant presence) is not currently a uniform phenomenon; it is very real in northern states and California, but not in most southern or western states.

Somewhat surprisingly, educational level (measured by percentage of state's population with a bachelor's degree or higher) is very weakly and inconsistently correlated with net internal migration. The percentage of highly educated adults is lower in the South than in other regions, and at the national level a weak negative correlation (-.26) suggests that White net interstate migration is slightly higher in states with lower percentages of college-educated residents, but the correlations are weaker for the other groups. No clear regional patterns are evident in Table 5b, however, when we examined the South without border states Delaware and Maryland we obtained a positive correlation between state educational level and all four races' net internal migration (.44 for Whites and Blacks, .71 for Asians, and .40 for Hispanics).

The geography of contemporary U.S. political party strength and patterns of net internal migration correlate in the expected manner. "Red" (Republican) states, many of which are in the Sunbelt, have higher net internal migration than the "blue" (Democratic) states. The third row from the bottom in Table 5a and 5b shows this with correlations between each racial group's net interstate migration and the percent of the state's voters who chose Republican candidates. These correlations are mostly moderate in strength, but indicate the higher the percentage voting Republican, the higher net internal migration. A few negative correlations in Table 5b for the non-California western states reflect the fact that Washington and Oregon were strong net migration states and in them a majority voted Democratic, whereas several western states with the largest Republican majorities (Utah, Idaho, Wyoming) had much lower net migration.

The quality of life index in Table 5a shows no significant correlation with net internal migration in the lower 48 states. This is mainly due to the fact that despite their higher net internal migration southern states generally rank a little lower on the quality of life index. But we should note Table 5b's positive correlations for both South and North, indicating that within each region, states with higher quality of life rankings do have higher net internal migration. The negative correlations in the West are largely due to Nevada and Arizona ranking very low on the quality of life index, but nonetheless being the West's leading net internal migration states.

Finally, a climate variable (states' average low temperature in January, so higher values on this variable indicate milder winters) shows regional variation. For the country as a whole, the very weak positive correlations suggest only a slight preference for states with milder winters. In the South, the correlation between January temperature and net internal migration is strongest for Hispanics (.49), which reflects their high net interstate migration numbers in Florida. In the North, however, the negative correlations reflect the fact that within this region some colder states, like Iowa, New Hampshire, and Maine have relatively strong net migration numbers. In the West, once California is excluded, the correlations (ranging from .48 to .70 for the racial groups) suggest a fairly strong preference for warmer states.

Discussion and Conclusion

The findings reported here document a fairly consistent pattern of internal migration by people in broad "racial" categories. To say that White, Black, Asian, and Hispanic patterns of interstate mobility in the U.S. are similar does not imply that they are identical, and earlier we noted several differences and we will discuss them below. However, one important conclusion to draw from this analysis is that it does not appear that racial groups are moving away from each other, at least when we examine interstate or regional geographic mobility and

study the gross and net numbers of movers. In the mid-2000s, for Whites, Blacks, Asians, and Hispanics the states with the highest net internal migration are generally the same (and the races are similar with regard to the states in which their net migration is lowest). For all races, the states with largest net gains are concentrated in the South and to a lesser extent the Southwest. That these parts of the country are "magnets" for interstate migrants has been well known for a long time, but the fact that the pattern is so similar across races is not so widely recognized. Also, although the very large *negative* net internal migration from California, New York, Michigan, and Illinois for *all* racial categories was highlighted by Frey and Liaw (2005), it is not widely recognized in the news media or by the general public.

In addition, our correlation analysis indicates that, for the most part, Whites', Blacks', Asians', and Hispanics' levels of net internal migration are associated with state characteristics in similar ways. They all show much higher net migration in states with lower cost of living and lower tax burden (as might be expected) and their correlations on other economic variables differ very little. Even on a political variable, we find that higher net migration in the more heavily Republican states is not just "a White thing." Although the correlation between internal net migration and percent Republican is somewhat stronger among Whites (.45), net internal migration is higher in the more Republican states for other groups too (the correlations are .29 for Blacks; .25 for Asians; and .31 for Hispanics).

Kritz, Gurak and Lee (2011) investigated whether internal mobility of immigrants was more strongly affected by a desire to live in a state with many compatriots (who could supply good social support) or a desire to live in a state with a strong economy (to gain a better standard of living). They conclude that "immigrants do not see internal migration as an either/or choice between economics and social support but prefer residence places that allow them to maximize both conditions" (p. 537). We studied Whites, Blacks, Asians, and Hispanics without separating immigrants from the native-born and we used a different measure of internal migration, yet our results speak to the same issue but give a slightly different answer. We find clear evidence that economic conditions in states (particularly cost of living, tax burden, percentage employed in professional-managerial-information industries, and in the North unemployment rate) are a powerful force affecting internal migration of all four groups. On the other hand, the size of one's own group living in the state has a more varied and nuanced relationship with internal migration. In the South, where (except for Florida) Whites and Blacks are still by far the two largest groups, size of own group has almost no correlation with net internal migration for Blacks and Whites; however, it has a strong correlation for Asians (.48) and Hispanics (.89). In the West excluding California the same pattern holds for Blacks, Asians, and

Hispanics. These results are consistent with Kritz, Gurak and Lee's conclusion that both economics and social support are important. In the North, however, the pattern reverses — White net migration is strongly associated with the percent White in a state (.84), while all three other groups' net internal migration is strongly correlated in the *negative* direction with states' percentage of own-group residents. Specifically, in the North, states with large percentages of Blacks, Asians, and Hispanics (NY, NJ, IL) have low internal net migration for those groups (and Whites too), and people of color have higher internal net migration in other northern states with lower percentages of them. So in the North it seems, at least in this macro-level analysis, that economics has a stronger relationship than social support for Blacks, Asians, and Hispanics.

A familiar caveat applies to our findings. We examine "broad" racial categories, but it is certainly possible that if we had data on internal migration of subcategories (e.g., Filipino, Chinese, Vietnamese, Puerto Rican, Cuban, Mexican) then more divergent spatial mobility patterns among groups might be visible. Kritz, Gurak and Lee (2011) examined internal migration of immigrants of different nationalities from 1995 to 2000, and did find important differences among them, and it would be interesting to see if these also hold for native-born Americans of these ancestries. We encourage researchers to explore this issue.

Texas, Georgia, Florida, and Arizona are states with very high levels of net internal migration for all four races. Looking at the 48 continental states and numerous measures of internal migration, Whites and Hispanics are most similar to each other, and Blacks and Asians are the least similar. That Arizona became the state with the fifth highest Black net migration is a surprise, but it does represent one way in which Blacks' spatial mobility is coming to resemble that of other groups.

Nonetheless, some differences remain. We noted that Georgia and Alabama are more attractive to Blacks than to other groups. This is consistent with Frey and Liaw's (2005:245) "cultural constraints" explanation (i.e., "a concentration of coethnics in a state serves to retain potential out-migrants and to attract potential new migrants"). However, if that were the primary factor operating then Mississippi would also have high Black internal net migration, when in fact it shows net Black out-migration. This is due to Mississippi's weak position on other factors associated with high net internal migration in the South (i.e., it does not have a small agricultural sector and lacks a large professionalmanagerial-information sector, a good business climate, and a large and urban population). On the West Coast, Black net migration in Washington and Oregon stands out as lower than the other racial groups, and in Nevada Black net migration is higher than White net migration. These new developments provide another dimension to the interesting interstate migration patterns in western states discovered by Henrie and Plane (2007).

Two distinctive tendencies in interstate mobility pertain to Asians. One is that large net gains in Asian internal migrants are limited to a smaller set of states than the other racial categories since Asian movers remain a little more attracted to western states and less attracted to the South than are the other groups. This is consistent with the "cultural constraints" idea. Second, we found that Asian interstate migration efficiency correlates only moderately (though positively) with the other three races' efficiency (while that of the other three groups correlate with each other strongly and positively). This means that the overall magnitude and balance of Asians' movement into and out of states does not resemble that of Whites, Blacks, and Hispanics as closely as those groups match each other. Many observers have noted the very high internal diversity within the U.S. Asian population (e.g., nationality, culture, occupation, educational level, spatial concentration), and this probably accounts for much of the distinctiveness in internal migration we have noted.

We emphasize that the predominant pattern emerging from our data is the continuing preference for sunbelt states as destinations. However, our regional correlation analyses show an important but less well known new development. Two different patterns are occurring. In broad terms, the pattern in the South (especially if border states Delaware and Maryland are excluded) and the West (excluding California) seems to resemble a "classic" interstate mobility model: net internal migration is higher in the more "developed" states (i.e., those with less agricultural employment, larger urban areas, higher per capita GDP, strong business climate, more employment in professional-managerial-information and FIRE jobs, more immigrants, and better educated residents). Fifty or sixty years ago that "classic" pattern described the North too, but now northern states show a rather different, almost opposite, pattern. The larger, more urban states like New York, New Jersey, Massachusetts, Illinois, Michigan, and Ohio, with reduced manufacturing and relatively large professional-managerial-information and FIRE economies, higher percentages of immigrants, high GDP, and high taxes and cost of living all have large net internal migration losses, while some of their neighboring less urbanized states with more balanced economies and fewer immigrants (e.g., Iowa, Maine, Pennsylvania, New Hampshire, Vermont, Kansas) have net internal migration gains (albeit modest) or only small losses. It is tempting to attribute much of the interstate migration into smaller New England states to "flight" from New York and/or Boston's suburban sprawl, and Iowa's gains to industrial restructuring (e.g., in meat-packing industry), but this conclusion should wait until an analysis of state-to-state population flows can be These two different parts of the United States are on different developmental trajectories and show contrasting internal net migration patterns. In the North the more developed states show low internal net migration (negative in many cases) and the less developed states have better internal net migration

numbers. In the South, the opposite pattern holds, with the more developed states having high net internal migration and the less developed areas having low net internal migration (much of the rural and small town South have severe net outmigration). It will be interesting to continue to trace these internal migration differences, and researchers should take up the challenge of formulating policy ideas that address the varied problems and opportunities facing these regions.

Of course, alternative interpretations of the net migration patterns described here can and have been offered. Sowell (2011:A12) explains them largely as a political response: "people are voting with their feet against places where the liberal, welfare-state policies favored by the intelligentsia are most deeply entrenched." He argues that Whites, Blacks, and Asians are leaving California and northern states with high tax rates and anti-business climates (NY, MA, IL, MI, PA, and OH) in favor of states with less government regulation of business, more limited welfare programs, and fewer redistributive economic policies. No doubt some of our findings are consistent with, or overlap, Sowell's interpretation (e.g., tax burden's negative correlation with net internal migration and business climate's substantial positive correlation with net internal migration). However, a different research design and other data would be needed to adequately test his thesis. But to the extent that our data are relevant to this question, we think the correlation coefficients on key variables such as percentage of government employees and percentage voting Republican ought to be stronger than what we observe here if Sowell's thesis is to be supported. For instance, fifteen states had very large Republican majorities (59% or higher) in the 2004 Presidential election, but in only one of them (Texas) is there a large net internal net migration (all the other states have small positive or small negative net internal migration²⁴).

Some state patterns described here might be currently in transition. A recent Census Bureau (2009) report showing internal migration data indicates that between July 2008 and July 2009, Florida (previously a state with substantial positive internal net migration for all races) experienced a large net domestic outmigration (-31,179). However, that report does not specify states' net domestic migration by race. In addition, recent evidence indicates the U.S. is now experiencing a national decline in interstate migration due to the recession, more specifically the housing mortgage crisis, which has "trapped" many people who cannot sell their homes and move elsewhere (Fletcher 2010). Moreover, news media accounts suggest that two states that previously were very popular Hispanic destinations (Arizona and Georgia) have become less popular among Hispanics

²⁴ The other states with very large Republican vote majorities are Utah, Wyoming, Idaho, Nebraska, Oklahoma, North Dakota, Kansas, Alabama, Alaska, Indiana, Mississippi, South Dakota, Kentucky, and Montana.

due to severe declines in their construction industries and passage of punitive laws aimed at immigrants in the U.S. illegally.

In future research on interstate migration, we will examine social and economic characteristics of movers of each race to see how individual movers compare on those traits. Doing that might clarify why states with high inmigration also have high out-migration. If this pattern seems somewhat counterintuitive, closer examination might reveal that the large in- and out-flows in states with high population turnover is due to large numbers of young people early in their work/career history arriving, coupled with many older retired people departing. An interesting variation to check with more recent data is Frey & Liaw's (2005) results on middle-class flight from certain states or Will's (2010) related contention that California's recent migration pattern involves large outmigration of the better educated and affluent fleeing high taxes and in-movement by those with less human capital. Finally, as noted above, it will be useful to examine internal migration based on other geographic areas besides states. Beyond metropolitan areas, analysis of migration to and between the larger regional agglomerations that are growing in economic importance, such as Lang and Dhavale's (2005) ten "megapolitan" areas would be innovative and valuable.

References

Abbott, C. 1981. *The new urban America: Growth and politics in sunbelt cities*. Chapel Hill, NC: University of North Carolina Press.

Adelman, R.M., Morett, C. & Tolnay, S.E. 2000. Homeward bound: The return migration of southern-born black women 1940 to 1990. *Sociological Spectrum* 20, 433-463.

Adiarte, A.L. & Stolarick, K. 2003. The 50 states on the creativity index. *Creative intelligence* 1 (4), 1-4.

Ansley, F. & Shefner, J. (Eds.). 2009. *Global connections, local receptions:* Latino migration to the Southeastern United States. Knoxville: University of Tennessee Press.

Badenhausen, K. (2006, August 16). The best states for business, 2006. *Forbes*. www.forbes.com/lists/2006/9/06beststates_The-Best-States-For-Business_land.html

Baird, J., Adelman, R.M., Reid, L.W. & Jaret, C. 2008. Immigrant settlement patterns: The role of metropolitan characteristics. *Sociological Inquiry* 78, 310-334.

Beale, C.L. & Fuguitt, G.V. 1978. The new pattern of nonmetropolitan population change. In K.E. Taeuber, L.L. Bumpass & J.A. Sweet (Eds.), *Social demography* (pp. 157-177). NY: Academic Press.

Berry, C. 2000. *Southern migrants, northern exiles*. Chicago, IL: University of Illinois Press.

Card, D. & DiNardo, J. 2000. "Do immigrant inflows lead to native outflows?" *The American Economic Review* 90, 360-367.

Cebula, Richard J. 1974. Interstate migration and the Tiebout hypothesis: An analysis according to race, sex, and age. *Journal of the American Statistical Association* 69, 876-879.

Cebula, R. & Alexander, G.M. 2006. Determinants of Net Interstate Migration, 2000-2004. *Journal of Regional Analysis & Policy* 36, 116-123.

Charles, C.Z.. 2000. Neighborhood racial-composition preferences: Evidence from a multiethnic metropolis. *Social Problems* 47, 379-407.

DaVanzo, J.S. & Morrison, P.A. 1981. Return and other sequences of migration in the United States. *Demography* 18, 85-101.

Fletcher, M. (2010, August 1). Labor trapped in place. *Atlanta Journal Constitution*, p. A2.

Florida, R. 2002. The rise of the creative class. NY: Basic Books.

Forbes. 2009. The healthiest and unhealthiest states. www.forbes.com/2009/11/16/unhealthy-healthy-states-lifestyle.html

Frees, E.W. 1992. Forecasting state-to-state migration rates." *Journal of Business & Economic Statistics* 10, 153-167.

Frey, W.H. 1995a. The new geography of population shifts: Trends toward balkanization. In R. Farley (Ed.), *The state of the union, vol. II* (pp. 271-336). New York: Russell Sage Foundation.

Frey, W.H. 1995b. Immigration and internal migration flight from US metro areas: Toward new demographic balkanization. *Urban Studies* 32, 333-357.

Frey, W.H. 1996. Immigration, domestic migration and demographic balkanization in America. *Population and Development Review* 22, 741-763.

Frey, William H. 1999a. The new immigration and demographic balkanization: Toward one America or Two? In J.W. Hughes (Ed.), *America's changing demographic tapestry* (pp. 78-97). New Brunswick, NJ: Rutgers University Press.

Frey, W.H. 1999b. New black migration patterns in the United States: Are they affected by recent immigration? In F.D. Bean and S. Bell-Rose (Eds.), *Immigration and opportunity* (pp. 311-344). New York: Russell Sage.

Frey, W.H. 2004. "The new great migration: Blacks return to the South, 1965-2000." Research Report 02-496. University of Michigan Population Studies Center. Ann Arbor, MI.

Frey, W.H., and Liaw, K-L. 2005. "Migration within the United States: Role of race-ethnicity." *Brookings-Wharton Papers on Urban Affairs*, 2005, 207-248.

Frey, W.H., Berube, A., Singer, A. and Wilson, J.H. 2009. *Getting current: recent demographic trends in metropolitan America*. Washington, DC: The Brookings Institution.

Gurak, D.T. & Kritz, M.M. 2000. The interstate migration of U.S. immigrants: Individual and Contextual Determinants. *Social Forces* 78, 1017-1039.

Hauser, P.M. 1969. The population of the United States, retrospect and prospect. In P.M. Hauser (Ed.), *Population Dilemma*, 2nd ed. (pp. 85-105). Englewood Cliffs, NJ: Prentice Hall.

Henrie, C.J. & Plane, D.A. 2008. Exodus from the California core: Using demographic effectiveness and migration impact measures to examine population redistribution within the western United States. *Population Research and Policy Review* 27, 43-64.

Hirsch, A.R. 2006. Less than Plessy: The inner city, suburbs, and state-sanctioned residential segregation in the age of Brown. In K.M. Kruse & T.J. Sugrue (Eds.), *The new suburban history* (pp. 33-56). Chicago: University of Chicago Press.

Hunt, L.L., Hunt, M.O. & Falk, W.F. 2008. Who is headed South? U.S. migration trends in black and white, 1970-2000. *Social Forces* 87, 95-119.

Kandel, W. & Cromartie, J. 2004. "New patterns of Hispanic settlement in rural America." *Rural Development and Research Report 99.* Washington, DC: Economic Research Service, US Department of Agriculture.

Kandel, W. & Parrado, E.A. 2005. "Restructuring of the US Meat Processing Industry and New Hispanic Migrant Destinations." *Population and Development Review* 31: 447-471.

Kritz, M.M., Gurak, D.T. & Lee, M.A. 2011. Will they stay? Foreign-born outmigration from new U.S. destinations. *Population Research and Policy Review* 30: 537-567.

Lang, R.E. & Dhavale, D. 2005. Beyond megalopolis: Exploring America's new "megapolitan" geography. Blacksburg, VA: Virginia Tech Metropolitan Institute Census Report #5:01 May.

Lippard, C.D. 2008. Building inequality: Race, ethnicity, and immigration in the Atlanta construction industry. Berlin, Germany: VDM Verlag.

Lippard, C.D. & Gallagher, C. (Eds.). 2010. Being brown in Dixie: Race, ethnicity, and Latino immigration in the New South. New York: Lynne Rienner.

Long, L.H. & Hansen, K.A. 1975. Trends in return migration to the South. *Demography* 12, 601-614.

Massey, Douglas S. (ed.). 2008. New Faces in New Places: The Changing Geography of American Immigration. NY: Russell Sage.

Nicolaides, B.M. & Wiese, A. (Eds.). 2006. *The suburb reader*. New York: Routledge.

Odem, M.E. & Lacy, E. (Eds.) 2009. *Latino immigrants and the transformation of the U.S. South.* Athens, GA: University of Georgia Press.

Perry, M.J. 2003. State-to-state migration flows: 1995 to 2000. U.S. Census 2000 Special Reports. CENSR-8 (August).

Poston, D.L. & Bouvier, L.F. 2010. *Population and society*. New York: Cambridge University Press.

Rayer, S. & Brown, D.L. 2001. Geographic diversity of inter-county migration in the United States, 1980-1995. *Population Research and Policy Review* 20, 229-252.

Sowell, T. (2011, April 5). Census shows minorities voting with their feet. *Atlanta Journal-Constitution*, A12.

Sperling. 2010. Sperling's best places." 2010. www.bestplaces.net.

Tax Foundation. State and local tax burdens: All states, one year, 1977-2009. www.taxfoundation.org/taxdata/show/336.html

Taylor, P., Morin, R., Cohn, D. & Wang, W. 2008. American mobility: who moves? Who stays put? Where's home? Washington DC: PEW Research Center.

Tolnay, S.E. 2003. The African American 'great migration' and beyond. *Annual Review of Sociology* 29, 209-232.

U.S. Bureau of the Census. 2009. Texas gains the most in population." December 23.

www.census.gov/Press-Release/www/releases/archives/population/014509.html

White, M. J. & Imai, Y. 1994. The impact of U.S. immigration upon internal migration. *Population and Environment* 15, 189-209.

Will, G. (2010, January 12). Liberal policies have killed the luster of Golden State. *Atlanta Journal-Constitution* January 12: A21

Wilson, B., Berry, E.H., Toney, M., Kim, Y-T. & Cromartie, J. 2009. A panel-based analysis of the effects of race/ethnicity and other individual level characteristics at leaving on returning. *Population Research and Policy Review* 28, 405-428.

Wright, R.A., Ellis, M. & Reibel, M. 1997. The linkage between immigration and internal migration in large metropolitan areas in the United States. *Economic Geography* 73, 234-253.

Zuniga, V. & Hernandez-Leon, R. (Eds.) 2005. *New destinations: Mexican immigration in the United States.* NY: Russell Sage Foundation.

Table 1. Numbers of In-Movers and Out-Movers by Race: Most and Least Popular States

Ten States with <u>Largest Number of In-Movers</u>

Whites		Black	S	Asian	S	Hispanics		
State	Number	State	Number	State	Number	State	Number	
Florida	401,593	Georgia	118,019	California	53,668	Texas	117,320	
Texas	317,315	Texas	101,885	Texas	28,326	Florida	90,457	
California	306,569	Florida	Florida 65,145		26,824	California	80,903	
North Carolina	216,391	No. Carolina	63,085	New Jersey	19,500	Arizona	51,854	
Arizona	191,795	Virginia	51,556	Virginia	17,367	No. Carolina	33,334	
Georgia	186,409	Maryland	47,754	Florida	16,318	New York	32,792	
Virginia	183,819	California	42,779	Washington	15,611	Georgia	30,852	
Pennsylvania	181,245	Illinois	34,133	Illinois	14,308	Nevada	30,171	
New York	179,448	Pennsylvania	34,017	Pennsylvania	13,615	New Jersey	27,106	
Washington	162,057	Louisiana	33,696	Georgia 13,160		Colorado	25,677	

Ten States with **Smallest** Number of In-Movers

Whites		Black	S	Asiar	ıs	Hispanics		
State	Number	State Number		State	Number	State	Number	
North Dakota	20,204	Vermont	596	Wyoming	146	Vermont	759	
South Dakota	22,241	Wyoming	759	Vermont	326	North Dakota	969	
Vermont	22,772	Montana	821	No. Dakota	382	South Dakota	1,132	
Wyoming	24,112	N Hampshire	1,064	Montana	608	Maine	1,425	
Delaware	24,682	South Dakota	1,109	So. Dakota	643	West Virginia	1,506	
Rhode Island	24,954	North Dakota	1,221	W. Virginia	746	Montana	1,652	
Dist Columbia	27,504	Idaho	1,450	Maine	931	Wyoming	1,956	
Alaska	27,656	Maine	1,474	Delaware	1,073	N. Hampshire	2,169	
Montana	32,658	Nebraska	2,002	Alaska	1,081	Delaware	2,370	
Maine	33,094	Rhode Island	2,104	Idaho	1,197	Alaska	2,875	

Ten States with <u>Largest</u> Number of Out-Movers

Whit	es	Bl	acks	Asians	3	Hispanics		
State	Number	State	Number	State	Number	State	Number	
California	413,714	New York	94,017	California	59,410	California	174,100	
Florida	363,669	Louisiana	84,782	New York	35,354	Texas	90,584	
New York	265,575	Georgia	64,726	Texas	20,403	New York	86,625	
Texas	255,800	Florida	62,445	New Jersey	20,370	Florida	67,009	
Illinois	199,418	Texas	61,159	Illinois	16,403	Illinois	37,117	
Pennsylvania	179,198	California	59,322	Florida	14,299	N Jersey	34,744	
Ohio	178,670	Illinois	51,414	Pennsylvania	14,203	Arizona	28,576	
Virginia	172,295	Maryland	43,876	Massachusetts	13,284	Georgia	21,942	
No. Carolina	154,855	Virginia	41,201	Virginia	12,908	Colorado	21,031	
Georgia	145,636	N. Carolina	36,854	Maryland	11,846	N Carolina	20,995	

Table 2. Correlations among Racial Category's Number of Interstate In-Movers, Out-Movers, Rates of In- and Out-Movement, and Net Migrants (50 States and District of Columbia)

	Non-Hispanic Whites	Blacks	Asians
	.74 (# of in-movers)		
D1 1	.42 (in-mover rate)		
Blacks	.74 (# out-movers)	_	_
	.62 (out-mover rate)		
	.73 (net migrants)		
	.75 (# of in-movers)	.55 (# of in-movers)	
A	.51 (in-mover rate)	.17 (in-mover rate)	
Asians	.85 (# out-movers)	.66 (# out-movers)	_
	.36 (out-mover rate)	.27 (out-mover rate)	
	.77 (net migrants)	.69 (net migrants)	
	.89 (# of in-movers)	.68 (# of in-movers)	.77 (# of in-movers)
TT' '	.38 (in-mover rate)	.46 (in-mover rate)	.57 (in-mover rate)
Hispanics	.86 (# out-movers)	.64 (# out-movers)	.93 (# out-movers)
	.52 (out-mover rate)	.62 (out-mover rate)	.62 (out-mover rate)
	.82 (net migrants)	.57 (net migrants)	.69 (net migrants)

Table 3. Net Interstate Migration of Whites, Blacks, Asians, and Hispanics in the Mid-2000s

15 States with *Highest* Net Migration

Whites	3	Blacks		Asians		Hispanics	
State	Number	State Number		State	Number	State	Number
1 North Carolina	61,536	1 Georgia	53,293	1 Texas	7,923	1 Texas	26,736
2 Texas	61,515	2 Texas	40,726	2 Washington	6,863	2 Florida	23,448
3 Arizona	58,141	3 North Carolina	26,231	3 Nevada	5,505	3 Arizona	23,278
4 Georgia	40,773	4 Virginia	10,355	4 Virginia	4,459	4 Nevada	13,574
5 Florida	37,924	5 Arizona	9,925	5 Georgia	3,747	5 North Carolina	12,339
6 South Carolina	36,302	6 Alabama	8,057	6 Arizona	3,428	6 Georgia	8,910
7 Washington	26,264	7 South Carolina	7,943	7 Florida	2,019	7 Pennsylvania	8,573
8 Tennessee	23,235	8 Nevada	6,565	8 Oregon	1,818	8 Utah	6,454
9 Oregon	22,765	9 Pennsylvania	5,581	9 South Carolina	1,458	9 Washington	6,248
10 Colorado	16,449	10 Tennessee	5,335	10 North Carolina	1,377	10 Oklahoma	4,996
11 Alabama	15,980	11 Kentucky	4,405	11 Utah	809	11 Oregon	4,864
12 Arkansas	15,445	12 Arkansas	3,882	12 Colorado	712	12 Colorado	4,646
13 Kentucky	14,691	13 Maryland	3,878	13 Tennessee	711	13 South Carolina	4,391
14 Oklahoma	13,508	14 Minnesota	3,547	14 Montana	217	14 Idaho	4,278
15 Idaho	12,578	15 Florida	2,700	15 New Mexico	216	15 Tennessee	4,233

(Table 3 is continued on next page)

Table 3. continued

15 States with *Lowest* Net Migration

Whites		Blacks		Asians		Hispanic	S
State	Number	State Nu		State	Number	State	Number
1 California	-107,145	1 New York	-64,507	1 New York	-8,530	1 California	-93,197
2 New York	-86,127	2 Louisiana	-51,086	2 California	-5,742	2 New York	-53,833
3 New Jersey	-50,164	3 Illinois	-17,281	3 Michigan	-2,816	3 Illinois	-16,505
4 Michigan	-46,414	4 California	-16,543	4 Hawaii	-2,576	4 New Jersey	-7,638
5 Illinois	-40,042	5 Michigan	-13,010	5 Ohio	-2,568	5 Alaska	-4,975
6 Massachusetts	-33,964	6 New Jersey	-12,698	6 Illinois	-2,095	6 Louisiana	-3,076
7 Ohio	-32,514	7 Dist of Columbia	-10,324	7 Connecticut	-2,045	7 Michigan	-2,501
8 Louisiana	-29,476	8 Alaska	-5,935	8 Massachusetts	-1,662	8 Rhode Island	-1,698
9 Maryland	-27,665	9 Massachusetts	-4,543	9 Oklahoma	-1,649	9 Massachusetts	-1,255
10 Connecticut	-16,920	10 Wisconsin	-3,206	10 Louisiana	-1,294	10 Dist Columbia	-1,128
11 Minnesota	-13,177	11 Missouri	-2,036	11 Alaska	-1,154	11 Wyoming	-1,050
12 Alaska	-12,617	12 Connecticut	-1,912	12 Mississippi	-1,121	12 Kentucky	-378
13 Wisconsin	-9,744	13 New Mexico	-1,676	13 Iowa	-1,045	13 South Dakota	-349
14 Mississippi	-6,845	14 Nebraska	-1,576	14 Kansas	-933	14 Maine	-145
15 Indiana	-4,450	15 Ohio	-1,094	15 New Jersey	-870	15 Vermont	60

Table 4a. Correlations between States' Net Internal Migration and States' Economic Characteristics

U.S. "Lower 48" States

Variable Correlated w/ Net Internal Migration	White	Black	Asian	Hispanic
Cost of Living	56**	36*	33*	50**
Tax Burden	47**	27+	47**	38**
Best States for Businesses	.47**	.47**	.47**	.33*
% in Agriculture	.12	01	.03	.05
% Prof-Managerial-Information	20	02	.08	19
% FIRE	19	11	11	12
% Construction	.53**	.33*	.56**	.33*
% Manufacturing	01	.09	18	.01
% Government Employees	.06	02	.04	04
State GDP per capita	33*	19	11	26+
General Unemployment Rate	13	11	13	12

Notes: Correlation coefficients in **bold** are statistically significant below .10 level (two-tailed test): ** < .01; * < .05; + < .10.

South (n = 16)					N	ortn (n =	: 21)		West $(n = 11; n = 10 \text{ W/o CA})$				
Variable Correlated w/ Net Migration	White	Black	Asian	Hispani	White	Black	Asian	Hispani		White	Black	Asian	Hispanic
Cost of Living	42	12	08	10	46*	40+	37+	41+		81 **	72* .39	47 .66*	87 ** .41
Tax Burden	19	.12	30	34	51*	40+	41+	38+		31 .30	49 21	38 08	45 01
Best States for Businesses	.54*	.61*	.62*	.59*	.29	.20	.26	.17		.49 .31	.43 .18	.32 .05	.44 .22
% in Agriculture	26	40	32	22	.47*	.28	.36	.22		01 49	09 52	24 55+	.06 67 *
% Prof-Managerial- Information	.01	.29	.47+	.29	-66**	47*	49*	43*		20 .40	24 .18	05 .32	30 .34
% FIRE	.15	.18	.22	.33	46*	37+	36	38+		.04 . 68 *	.13 . 69 *	.11 .40	08 . 76 **
% Construction	.51*	.21	.55*	.72**	.53*	.33	.44*	.27		.37 .06	.64* .66*	.31 .07	.48 . 56 +
% Manufacturing	.28	.15	17	23	.15	.31	.20	.39+		07 .44	26 08	08 .15	24 .09
% Government Employees	62*	19	19	50*	03	30	19	37+		.04 36	12 - .59 +	21 51	.08 58 +
State GDP per capita	.02	.11	.24	.09	61**	49*	52*	48*		34 .03	24 .18	.05 .47	35 .12
General Unemploy. Rate	05	16	22	15	58**	35	44*	23		26 .31	37 03	02 .42	38 .15

Notes: Correlation coefficients in **bold** are statistically significant below .10 level (two-tailed test): ** < .01; * < .05; + < .10.

South is the states in South Census region but without District of Columbia; North is comprised of the states in Northeast and Midwest Census regions; West consists of states in West Census region excluding Alaska and Hawaii. Numbers in second line of West cells are correlation coefficients without California.

Table 5a. Correlations between States' Net Internal Migration and States' *Demographic and Social* Characteristics

U.S. "Lower 48" States

Variable Correlated w/ Net Migration	White	Black	Asian	Hispanic
State Population Size	40**	14	21	56**
Population Density	39**	18	26+	17
% Residing in Urbanized Areas	29*	14	.01	18
Own Group's Population Size (%)	.11	.01	15	20
% Foreign-born in State	35*	17	02	41**
% Bachelor's Degree or higher	26+	08	07	19
% Republican Vote	.38**	.35*	.28+	.32*
Quality of Life	18	.04	21	07
Average January Low Temperature	.23	.16	.25+	.05

Notes: Correlation coefficients in **bold** are statistically significant below .10 level (two-tailed test): ** < .01; * < .05; + < .10.

Table 5b. Regional Analysis: Correlations between States' Net Internal Migration and States' *Demographic and Social* Characteristics

South $(n = 16)$						North $(n = 21)$					West $(n = 11; n = 10 \text{ w/o CA})$			
Variable Correlated w/ Net Migration	White	Black	Asian	Hispanic		White	Black	Asian	Hispanic		White	Black	Asian	Hispanic
State Pop Size	.61*	.46+	.81**	.92**		80**	71**	78**	65**		84** .77**	80 ** .45	60+ .66*	94** .55+
Population Density	27	02	06	.01		45*	20	19	19		75** .61+	73 ** .28	44 .72*	87 **
% Urbanized Area	.10	.15	.46+	.48+		64**	40+	45*	35		19 .45	05 . 61 +	.15 . 64 *	25 . 70 *
Own Group's Pop Size (%)	12	15	.48+	.89**		.84**	57**	-61**	69**		.45 13	23 . 60 +	25 .92 **	35 .34
% Foreign-born	.37	.39	.65**	.78**		79**	70**	-63**	70**		56 + .42	39 .72*	14 .77**	61* .79**
% Bach Deg or higher	01	.30	.40	.18		34	21	21	24		05 .25	27 25	17 07	20 18
% Republican Vote	.56*	.54*	.38	.46+		.38+	.26	.27	.25		.25 32	.39 .10	.11 26	.39 03
Quality of Life	.23	.45+	.50*	.09		.39+	.39+	.32	.38+		18 10	29 33	48 53	22 35
Avg. Jan Low Temp	.21	08	.21	.49+		32	19	24	11		25 . 70 *	25 .48	.02 .66*	40 .65 *

Notes: Correlation coefficients in **bold** are statistically significant below .10 level (two-tailed test): ** < .01; * < .05; + < .10.

<u>South</u> is the states in South Census region but without District of Columbia; <u>North</u> is comprised of the states in Northeast and Midwest Census regions; <u>West</u> consists of states in West Census region excluding Alaska and Hawaii. Numbers in second line of West cells are correlation coefficient without California.