



Minnesota Population Center

UNIVERSITY OF MINNESOTA

The Temporal Dynamics and Stability of Black Migration to the
South, 1970-2000: New Insights on Old Trends

Jack DeWaard[†]

Department of Sociology, Minnesota Population Center, University of Minnesota

Katherine J. Curtis

Department of Sociology, University of Wisconsin-Madison

Glenn V. Fuguitt

Department of Sociology, University of Wisconsin-Madison

December 2014

Working Paper No. 2014-10

<https://doi.org/10.18128/MPC2014-10>

[†]Correspondence should be directed to:

Jack DeWaard

Department of Sociology, University of Minnesota

909 Social Sciences, 267 19th Ave South, Minneapolis, MN, 55455, USA

e-mail: jdewaard@umn.edu

Abstract

The “New Great Migration” of blacks to the South was and continues to be one of the most important demographic shifts in recent U.S. history, and refers to a black net-migration reversal in the South from negative to positive in the 1970s for the first time since before the Great Migration of blacks out of the region in the early and middle parts of the twentieth century. While prior research has told the story of the New Great Migration with respect to the size-dimension of migration flows to the South, in this paper, we take a different approach and apply a temporal lens to consider whether *more* migration to the South resulted in *more permanent* migration with respect to the amount of time that blacks could ultimately be expected to live in the region. Motivated by conceptual and substantive debates on the inherently temporal nature of migration, we summarize the temporal dynamics and stability of black migration to the South by exploiting age patterns of region-to-region migration within and across four censuses from 1970 to 2000. We document a pronounced increase in the amount of time that blacks could be expected to live in the South beginning in the 1980s, one decade after the heralded turn-around of black net-migration, due to heightened in-migration at younger ages marking entry into the labor force. This increase was particularly pronounced for persons born in the South, a finding consistent with previous research on the importance of ties to “home” during the New Great Migration.

Keywords

Temporal Dynamics • Migration • New Great Migration • South • Multiregional

Introduction

In this paper, we provide an alternative vantage point for viewing one of the most important demographic shifts in recent U.S. history, which is the “New Great Migration” of blacks to the South in the latter decades of the twentieth century (Frey 2004:1). While the prevailing narrative of this story is familiar to many and has been constructed on the basis of numerous descriptive and explanatory studies, it is ultimately a narrative that is based on a particular way of conceptualizing and measuring migration that is not exhaustive and therefore incomplete. The term, “New Great Migration,” was coined to summarize the reversal from negative to positive black net-migration that occurred in the South in 1970s and accelerated thereafter, the first such reversal on record since before the Great Migration of blacks out of the region in the early twentieth century and again after World War II (Tolnay 2003). However, because *more* migration (i.e., more in-flows than out-flows, resulting in positive net-migration) does not necessarily entail *more permanent* migration, in this paper, we ask and answer a basic, yet foundational question that has not been considered in scholarship on the New Great Migration of blacks to the South. This question concerns how long black migrants to the South could ultimately be expected to live in the region.

Drawing from early research on the inherently temporal nature of migration flows, we provide an account of the New Great Migration in explicitly temporal terms. Although our work in this paper is descriptive and represents an initial attempt to infuse consideration of the temporal dynamics and stability of migration into research on the New Great Migration, we begin by discussing several important conceptual and substantive motivations for our work. This is followed by introducing and subsequently developing a temporal measure of black migration to South, which we derive by considering the implications of the age patterning of migration to (and from) the South over the life course to summarize the amount of time (in years) that blacks could ultimately be expected to live in the region. Adopting a less rigid definition of the New Great Migration that locates its onset with respect to a pronounced shift in any demographic migration regime, not just net-migration (Frey 2004), our results date the onset of the New Great Migration in the 1980s, one decade after the heralded turn-around of net-migration in the South. Importantly, we show how our results are fully consistent with dominant explanations of the New Great Migration, which stress changing economic conditions in the North and South (Adelman et al. 2000; Kasarda 1995; McHugh 1988; Tolnay 2003), and with ethnographic research highlighting the importance of a “call to home” during this time (Stack 1996).

Background

The Prevailing Narrative of the “New Great Migration” of Blacks to the South

Beginning in the late 1960s, for the first time since the Great Migration of blacks out of the South in the early twentieth century and again after World War II, a migration reversal was unfolding, whereby blacks, especially those living in the Midwest and Northeast regions of the United States, began to migrate to the South in large numbers (Ayres 1974; Campbell et al. 1974; Long and Hansen 1975). While the region as a whole still posted negative black net-migration in 1970, by 1980, black net-migration in the South had reversed course, with the region posting positive black net-migration for the first time in the twentieth century. Between 1975 and 1980,

black net-migration in the South stood at +108,878 persons, a figure that increased by 218 percent to +346,546 persons by the year 2000 (Frey 2004; see also Frey 2001, 1998; McHugh 1987). Frey (2004:1) subsequently used this net-migration reversal to date the onset of, what he called, the “New Great Migration” (hereafter NGM) of blacks to the South, a trend that has persisted into the twenty-first century (Bilefsky 2011; DiSalvo 2012; Flippen 2014; Hunt et al. 2013).

The origins of the NGM involve many interconnected factors, and are often discussed beginning with changing economic conditions in cities in the Midwest and Northeast regions of the United States. In the latter part of the twentieth century, cities in the Midwest and Northeast that had previously attracted black migrants from the South during the Great Migration in the early and middle parts of the century began to experience rapid and pronounced economic decline (Tolnay 2003). With deindustrialization, the employment and earnings potentials of young black men, especially those in blue-collar occupations, were substantially undercut given the growing spatial mismatch between the locations of jobs and workers (Kasarda 1995). Given entrenched legacies of residential segregation in many cities in these regions, the “structural lynchpin” of racial domination in the United States (Pettigrew 1979:114; see also Massey and Denton 1993), these changes were especially damaging to the black community. Poverty rates soared, most especially among women and children (Pearce 1970), and a black underclass began to emerge (Wilson 1987).

While economic conditions in the Midwest and Northeast were deteriorating, conditions in the South were moving in the opposite direction. Fueled by economic growth in manufacturing and service industries, and aided in no small part by industrial desegregation and improvements in school quality on account of the Civil Rights Act of 1964 and the dismantling of Jim Crow, a solid middle class began to emerge and solidify (Adelman et al. 2000). Wage and poverty gaps between blacks and whites narrowed (Curtis 2011; Vigdor 2006), and cities like Atlanta began to flourish. In addition to these economic and political “pull” factors, the appeal of the South was augmented by what Stack (1996) referred to as a “call to home,” which encompasses the sets of real and/or perceived ties (e.g. to one’s place of birth, friends and family, ancestral roots, etc.) that blacks living outside of the South had to the region.

These “push” factors in the Midwest and Northeast and “pull” factors in the South induced substantial migration flows of blacks from the former regions to the latter beginning in the late 1960s, which resulted in a net-migration reversal in the South in the 1970s that only accelerated as an increasingly large number blacks from the West region of the United States began to migrate to the South in the closing decades of the twentieth century (Frey 2004). Migrants from the non-South to the South included both return and “primary” migrants, with the former defined as persons possessing concrete ties to the South (e.g., born in the South) and the latter as persons with no prior ties to the region (Tolnay 2003:210; see also Falk et al. 2004; Robinson 1990). Moreover, given the positive selection of black migrants to the South on education and human capital (Long and Hansen 1977), the NGM further contributed to the narrowing of the black-white wage and poverty gaps in the South, and to reductions in total poverty (Curtis 2011; Vigdor 2006), thereby reinforcing the South’s emergence as a regional “magnet” for blacks (Frey 2004:1).

One Narrative or Many? The Temporal Dynamics and Stability of Migration

While the above narrative provides a comprehensive portrait of the form, causes, and consequences of the NGM of blacks to the South, it is based on a limited way of conceptualizing and measuring migration. Bracketing well-documented problems with measures of net-migration (Rogers 1990), the above studies, particularly those describing trends in black migration to the South using migration flow data, point to larger conceptual issue with respect to what, exactly, migration is.

At a basic level, a migration is a transition (i.e., a “movement through space” (Roseman 1971:590)) across a defined boundary that is deemed meaningful (e.g., administratively, politically, existentially, etc.). As such, a migration is typically conceptualized as *an event*, and, correspondingly, migration flows as the accumulation of migration events. While this idea is not inaccurate, it is also not exhaustive. To see this concretely, consider, for example, how various statistical agencies determine whether (or not) a migration event has occurred. With respect to international migration, in addition to a migration transition that involves two countries, one the sending country and the other the receiving country, the transition itself must persist in time for a minimum of one year, at least according to recommendations provided by the United Nations (1998). Similar appeals to the persistence of internal migration transitions in time are found in migration statistics provided by the U.S. Census Bureau, where, in past decennial censuses, the persistence of migration in time was determined with respect to a change in a person’s usual place of residence and, in the American Community Survey, using a two-month rule.

These practices point to the need to be more explicit about the underlying temporal dynamics and stability of migration events, a concern that informed a large body of research on the so-called *axiom of cumulative inertia* in the 1960s and 1970s (Land 1969; McGinnis 1968; McGinnis and Pilger 1963; Toney 1967). Although these studies were properly concerned with what is now commonly referred to as duration dependence, they ultimately caused researchers to see migration not merely as an event, but, more exhaustively, as an inherently “temporal process” consisting of *deposits of time* in space (Roseman 1971:589; see also Conway 1980). These time deposits can be viewed with respect to a single migration event or across multiple migration events, and thus over the life course. The latter approach to conceptualizing migration informed, in part, the development of multiregional population models of migration (Rogers 1975, 1995), wherein the aforementioned deposits of time over the life course are sometimes referred to as “expected waiting times” of migration (Palloni 2001:265).

Beyond our concern with a more exhaustive conceptual definition of migration, there are also important substantive reasons for taking seriously the temporal dynamics and stability of migration. According to the Migrant Integration Policy Index, the long-term residence of migrants in receiving areas is an important precondition for the integration of migrants in receiving societies (Geddes et al. 2005; Huddleston et al. 2011; Niessen et al. 2007). Long-term residence affords migrants opportunities for socioeconomic and spatial assimilation in receiving areas (Alba and Logan 1993; Massey and Denton 1985), as well as chances for migrants and non-migrants to interact in meaningful ways. According to social disorganization theory (Sampson and Groves 1989; see also Shaw and McKay 1942), to the extent that populations in a defined place are temporally stable, exhibiting little population turnover or churning, residents

are afforded opportunities to develop ties and relationships with one another that are characterized by varying degrees of closeness (Allport 1954; Cook 1968; Pettigrew 1998; Zajonc 1968). The central idea is that these ties go a long way toward lowering inter-group bias and promoting inter-group consensus and cooperation. Social disorganization theory therefore treats the temporal stability of populations in places as one of three structural factors that promote and preserve the very “social fabric” of places (Sampson and Groves 1989:780).

The Temporal Dynamics and Stability of Black Migration to the South

Given these conceptual and substantive motivations, in this paper, we seek to break new ground and infuse consideration of the temporal dynamics and stability of migration into research on the NGM of blacks to the South. Because our work represents an initial first step toward introducing this idea into research on the NGM and demonstrating how to go about measuring these features of migration flows, as a place to start, we focus on the prevailing narrative of the NGM as a regional story that has been told using data on region-to-region migration flows (Frey 2004). Accordingly, we provide a descriptive portrait of the NGM of blacks to the South in explicitly temporal terms, with the idea that our future work and the work of others will further consider the implications of the temporal dynamics and stability of black migration to the South with respect to theoretically-implied outcomes (e.g., inter-group dynamics) at different levels of scale (e.g., regions, states, counties, neighborhoods, etc.), not to mention the temporal dynamics and stability of migration for groups other than blacks (e.g., whites, Hispanics/Latinos, foreign-born persons, etc.) within the United States. The above said, while we do not conduct any explicit hypothesis tests, we nonetheless approach the empirical portion of this paper with two expectations in mind that are derived from previous research on the NGM of blacks to the South.

Our research question is as follows: Did *more* migration to the South (i.e., more in-flows than out-flows, resulting in positive net-migration) result in *more permanent* migration in the South? As we discuss in the next section of this paper, we answer this question by considering the implications of the age patterning of migration to (and from) the South over the life course to summarize the amount of time (in years) that blacks could ultimately be expected to live in the region. Our first expectation is that the NGM of blacks to the South resulted in more permanent migration in the region to the extent that the age patterning of migration flows to the South became increasingly dominated by younger (versus older) migrants over time. While several studies of have documented growth in black retirement migration to the South during the NGM (Longino and Smith 1991), as we discussed earlier, one of the primary reasons for the NGM was deteriorating economic conditions in the Midwest and Northeast and improving economic conditions in the South (Adelman et al. 2000; Kasarda 1995; Vigdor 2006). These changes should have disproportionately incentivized potential migrants at peak working ages (e.g., those finishing formal schooling and transitioning into the labor force), as opposed to those at older ages (e.g., retirees and the elderly), to migrate to the South. Because younger (versus older) migrants have more years ahead of them yet to be lived, changes to the age patterning of migration favoring younger (versus older) migrants should ultimately have resulted in greater deposits of time accrued in the South.

Our second expectation is that the above deposits of time in the South should have been especially pronounced for persons with stronger (versus weaker) ties to the region (Stack 1996).

Although strength of ties to the South lies on a continuum, we think that potential migrants with stronger ties to the South would have experienced additional incentives to migrate to the region above and beyond what purely economic “push” and “pull” factors, as described above, would dictate. Thus, in addition to the idea that younger (versus) older age patterns of migration to the South should have contributed to greater deposits of time accrued in the region, we further expect that the age patterning of migration for those with stronger (versus weaker) ties to the South should have been especially elevated, thereby resulting in even greater deposits of time accrued in the South.

Methods and Data

A Measure of the Temporal Stability of Black Migration to the South

Building on prior research that considers the temporal dynamics and stability of migration over the life course (Palloni 2001; Rogers 1975, 1995), the key measure of interest in this paper is a conditional expectation of life in the South that summarizes the average number of years that blacks living in the non-South (i.e., the Midwest, Northeast, and West) at exact age x could be expected to live in the South beyond age x (i.e., over the remainder of their lives), $e_x^{\sim SS}$. Hereafter, we refer to this quantity as blacks’ *expected time of residence* in the South, and use this quantity to summarize the *temporal stability* of black migration to the region.

$$e_x^{\sim SS} = \frac{T_x^{\sim SS}}{l_x^{\sim S}} \quad (1)$$

where $T_x^{\sim SS}$ is the total number of person-years lived in the South (S) beyond age x that are contributed by persons living in the non-South ($\sim S$) at exact age x who migrate to the South at one or more ages above age x , and $l_x^{\sim S}$ is the number of persons living in the non-South at exact age x . In essence, the quantity in (1) summarizes the amount of time that a cohort (real or synthetic, a point to which we will return later) living in the non-South can be expected to live in the South based on prevailing age patterns of region-to-region migration (and death). Importantly, as a temporal measure of migration over the life course, this measure captures both one-time and repeat migrations (i.e., all migration spells) to (and from) the South, and thus the highly cyclical nature of migration (Conway 1980; McHugh 1987). Given our focus at the regional level, internal migrations within regions are effectively treated as non-migrations, and represent an important avenue for future research in this area that attends to the temporal stability of black migration to the South at finer levels of aggregation (DeWaard et al. 2013).

The quantity in (1) is a conditional expectation of life, and thus one component of total life expectancy (i.e., an unconditional expectation of life) for blacks living in the non-South at exact age x , $e_x^{\sim S*}$.

$$e_x^{\sim S*} = e_x^{\sim S \sim S} + e_x^{\sim SS} \quad (2)$$

where $e_x^{\sim S \sim S}$ is the average number of years lived in the non-South above age x by blacks living in the non-South at exact age x , and $e_x^{\sim SS}$ is the quantity in (1) above. As is evident in (2), we are effectively partitioning total life expectancy of blacks in the non-South at age x into two

components, years lived in the non-South and years lived in the South. The former can be viewed as summarizing the “holding power” of the non-South in temporal terms (Herting et al. 1997:268), while the latter summarizes the temporal stability of black migration to the South and is the interest in the current paper.

The Temporal Dynamics of Black Migration to the South

Following Rogers (1975, 1995), the quantities described above are derived from a multiregional population model, a diagram of which is displayed in Figure 1.

---FIGURE 1 ABOUT HERE---

The model itself works as follows. First, at exact age x , we consider a cohort living in the non-South (i.e., the Midwest (M), Northeast (N), and West (W)).

$$\mathbf{l}(x) = [l_x^M \quad l_x^N \quad l_x^W \quad l_x^S \quad l_x^D] \quad (3)$$

where each element in (3) denotes the size of this cohort in each region, such that $l_x^M = l_x^N = l_x^W \neq 0$. At exact age x , persons in this cohort have yet to migrate to the South (S) or die (D); thus, $l_x^S = l_x^D = 0$.

We then expose this cohort to a prevailing set of age-specific region-to-region migration and mortality conditions at age x , summarized in the probability matrix, $\mathbf{P}(x)$.

$$\mathbf{P}(x) = \begin{bmatrix} p_x^{MM} & p_x^{MN} & p_x^{MW} & p_x^{MS} & p_x^{MD} \\ p_x^{NM} & p_x^{NN} & p_x^{NW} & p_x^{NS} & p_x^{ND} \\ p_x^{WM} & p_x^{WN} & p_x^{WW} & p_x^{WS} & p_x^{WD} \\ p_x^{SM} & p_x^{SN} & p_x^{SW} & p_x^{SS} & p_x^{SD} \\ 0 & 0 & 0 & 0 & 1 \end{bmatrix} \quad (4)$$

Excluding the final column and row, each element in (4) denotes the risk of region-to-region migration. The final column and row represent transitions to and from death, respectively.

Finally, we repeat this process successively at each age until we have exhausted all possible ages, which, as we discuss below, is age 85+ in our data. As such, the dynamics of the model can be written as:

$$\mathbf{l}(x + n) = \mathbf{l}(x)\mathbf{P}(x) \quad (5)$$

As is evident in (5), the dynamics of the model follow a first-order Markov process, which means that the process itself is history- (or memory-) independent. Substantively, this means that age-specific migration transitions are governed solely by the transition probabilities observed at each age, as shown in (4) and calculated from our data, and not by transitions at previous ages. As this is a well-known limitation with these sorts of models, one strategy for dealing with this is to split the population into more homogenous subgroups, often by place of birth (Rogers 1995). For this reason, recalling our second expectation going into the empirical portion of this paper,

we therefore define strength of ties to the South according to whether persons were born (strong ties) or not (weak ties) in the region (Stack 1996). In this way, our second expectation with respect to the strength of ties to the South can also be viewed as a test of the underlying Markov assumption.

Using the population vectors in (3) and (5), total person-years lived in the South (i.e., the numerator in (1)), is calculated by averaging the number of persons living in the South at consecutive ages, followed by summing these averages across all ages (Palloni 2001; Rogers 1975, 1995). The quantity in (1) is then calculated by dividing total person-years lived in the South by the size of the cohort in the non-South at exact at x .

Data Sources and Innovations

While it would be ideal to use data on actual cohorts in the model detailed above, suitable data covering the 1970-2000 period analyzed by Frey (2004, 2001) and others are not available. Candidate surveys such as the National Longitudinal Study of Youth (NLSY79), the Survey of Income and Program Participation (SIPP), and the Integrated Public Use Microdata Series' Current Population Survey (IPUMS-CPS) begin too late in the observation window. While this leaves other candidate surveys like the Panel Study of Income Dynamics (PSID), these lack a sufficient sample size for our needs. The original sample size of the PSID, for example, was about 18,000 persons in 1968; however, further restricting the sample to black respondents, this number drops to less than 5,000 people, not including attrition (Sharp and Hall 2014).

For these reasons, we use microdata from four decennial censuses in 1970, 1980, 1990, and 2000, provided by IPUMS-USA Project at the University of Minnesota (Ruggles et al. 2010). A one percent sample is available for 1970. Five percent samples are available for 1980, 1990, and 2000. Recognizing that migration, especially in the context of the NGM, is often a household level process rooted in the desire to mitigate uncertainty and risk (Stark and Bloom 1985; Stack 1996), we restrict our samples to non-institutionalized household heads age 15 or older who were born in the United States and who, in the documentation for the IPUMS-USA, are listed as "black/negro." After selecting on these criteria, our starting unweighted sample sizes range from 55,220 household heads in 1970 to 501,335 household heads in 2000. Household weights from the IPUMS-USA are applied to all analyses detailed hereafter. Finally, as is evident in (3) and (4) above, in addition to age-specific migration, we also consider exits from the population in the form of age-specific mortality. These data are taken from U.S. life tables provided by the Centers for Disease Control (CDC) for the black population.

While the data described above are properly period data and thus limit us to analyzing the experiences of synthetic (versus actual) cohorts, one innovation in this paper is that we consider two types of synthetic cohorts. First, we consider *within-period* cohorts, such that we examine the temporal dynamics and stability of black migration to the South for four cohorts, one for each census period, as they are exposed to prevailing age-specific migration and mortality conditions within each census period. In this way, we arrive at period estimates of the quantities in (1), detailed earlier, that can be compared to similar period estimates of net-migration provided by Frey (2004). Second, in an effort to provide more realistic estimates of the temporal stability of black migration to the South that reflect the experiences of actual cohorts over time, we consider

across-period cohorts. This involves tracking the experiences of persons who are age 15, 25, 35, and 45 in 1965 as they migrate and die over the 35-year period between 1965 and 2000.¹ In this way, we come closer to the ideal of tracking actual cohorts by considering the fact that the age-specific risks of region-to-region migration and death change over time. Clearly, this comes with a tradeoff, which is that we can only analyze the experiences of partial (versus complete) cohorts over the 35-year period (versus over the entire life course).

A second innovation of our approach is that we incorporate uncertainty due to sampling variability into our estimates of the temporal stability black migration to the South. We do this using the following procedure. First, we estimate each and every age-specific region-to-region migration probability using an empty logistic regression model, which gives us a coefficient (specifically, a log-odds of region-to-region migration, which we subsequently convert to a probability) and a standard error. Using this information, for each probability, we then take a random draw from a uniform distribution that is ± 3 standard errors above/below the probability obtained from the logistic regression model. We then assemble these probabilities for each region-to-region pair at each age, run through the model detailed in (3)-(5) above, and calculate the quantity in (1). Finally, we repeat this process 100 times. In this way, we generate and summarize a *distribution* (versus a point estimate) of black migrants' expected time of residence in the South that takes into account uncertainty due to sampling variability.

Results

Black Net-Migration Reversal in the South

We begin in Figure 2 by displaying Frey's (2004:11) data on in-, out-, and net-migration flows in 1970, 1980, 1990, and 2000 for each of the four U.S. regions, as defined by the U.S. Census Bureau. We do so to provide a visual portrait of just how pronounced the black net-migration reversal in the South in the 1970s really was.

---FIGURE 2 ABOUT HERE---

Between 1965 and 1970 ("1970" in Figure 2), black net-migration was positive in each U.S. region but the South, and ranged from +58,774 persons in the Northeast to +127,015 persons in the Midwest. In the South, black net-migration was -287,400 persons. One decade later, by 1980, this picture was almost entirely reversed. The Midwest and Northeast regions posted negative black net-migration, ranging from -47,570 persons in the Midwest to -170,366 persons in the Northeast. In contrast, black net-migration in the West and South was positive at about +109,000 persons in each region. The Midwest and Northeast continued to post negative black net-migration through the year 2000, at which point they were joined by the West, which posted a figure of -49,647 persons. In contrast, positive black net-migration in the South accelerated after 1980, reaching +179,975 persons in 1990 and +346,546 persons in 2000.

While the South's black net-migration reversal is remarkable, especially relative to the experiences of the three other U.S. regions, what Frey's (2004) data fail to communicate is the

¹ We begin in 1965 given how the migration question was asked in the decennial census, which concerns one's usual place of residence *five years prior* to the 1970 (and each subsequent) census.

truly inter-regional, or “channelized,” nature of the NGM (McHugh 1987:174). To see this, using our data described above, we estimated region-to-region migration flows in each census period, and subsequently rescaled these so that our marginals matched those reported by Frey (2004).² These region-to-region migration flows are displayed in Figure 3.

---FIGURE 3 ABOUT HERE---

Between 1965 and 1970, out-migration flows from the South were primarily (to the tune of about 78 percent) directed to the Midwest and Northeast, as indicated by the two thick red bands extending from the South to the Midwest and Northeast in 1970 in Figure 3. As such, by 1980, it is not surprising that black migration flows from the Midwest and Northeast were the primary drivers of the South’s net-migration reversal. Of the more than 433,000 persons who migrated to the South between 1975 and 1980, more than 80 percent migrated from the Midwest and Northeast, as indicated by the thick green and blue bands, respectively, in 1980 in Figure 3. In contrast, black migration flows from the South fell by 33% between 1975 and 1980 relative to out-migration flows between 1965 and 1970. Between 1990 and 2000, the share of black migrants to the South from the Midwest and Northeast declined only slightly to 78 and 77 percent, respectively, while black migration flows from the West to the South increased slightly from 127,128 persons between 1985 and 1990 to 158,759 persons between 1995 and 2000, as indicated by the grey bands in 1990 and 2000 in Figure 3.

These patterns are fully consistent with the narrative provided earlier describing the importance of economic “push” factors in the Midwest and Northeast and “pull” factors in the South. The fact that black migration flows between regions in the non-South remained roughly constant over the 1970-2000 period further demonstrates the emergence of the South as a distinctive “magnet” for black migrants (Frey 2004:1).

Blacks’ Expected Time of Residence in the South: Within-Period Estimates

As we discussed earlier, we generate estimates of black migrants’ expected time of residence in the South as a way to summarize the temporal stability of black migration to the region. We do this by exploiting the age patterning of region-to-region migration (and death). Accordingly, in Figure 4, we begin by displaying mean age-specific probabilities of in- and out-migration to and from the South, respectively. In a multiregional context, there is no such thing as an in-migration rate or probability (Rogers 1990). Thus, the in-migration probabilities shown in Figure 4 are properly out-migration probabilities to the South averaged across the three sending regions in the non-South. In contrast, out-migration probabilities from the South are averaged across the three receiving regions in the non-South.

---FIGURE 4 ABOUT HERE---

The age patterning of in- and out-migration to and from the South, respectively, exhibits a familiar general form. Past and current research on model age patterns of migration has

² While our marginals come close, they do not exactly match Frey’s (2004) given the different samples used. In Frey’s (2004) case, he used restricted-access (16%) long-form data from each census, as opposed to publicly available samples provided by the IPUMS-USA.

consistently shown that age patterns of migration exhibit a pronounced peak at years corresponding to the completion of formal schooling and transitioning into the labor market (Preston et al. 2001; Rogers and Castro 1981). There are likewise less pronounced peaks at later ages corresponding to retirement and elderly migration. However, beyond these general similarities, the age patterns shown in Figure 4 display some important differences across census periods.

In recalling our first expectation that the NGM of blacks to the South should have resulted in more permanent migration in the region provided that the age patterning of migration became increasingly dominated by younger (versus older) migrants over time, it is clear that the age patterning of in-migration to the South became increasingly, and strikingly, dominated by those at younger ages after 1980. In the two earlier census periods, 1965-1970 and 1975-1980, the risk of migrating from the non-South to the South was highest between ages 20 and 25, topping out at around four percent. In contrast, in the latter two census periods, 1985-1990 and 1995-2000, the risk of in-migration to the South peaked around age 20 at about nine percent, respectively.

What is more is the fact that the pronounced shift in the age patterning of in-migration to the South between 1980 and 1990, while concentrated at younger ages, nonetheless occurred at all ages. Further taking into account the fact that the risk of out-migration from the South was particularly elevated between 1965 and 1970 relative to the three other census periods, it is clear that these age patterns of migration to and from the South should have resulted in greater deposits of time accrued in the region. This is confirmed in Table 1, wherein we show that black migrants' expected time of residence in the South increased over the 1970-2000 period, with the largest increase occurring between 1980 and 1990.

---TABLE 1 ABOUT HERE---

Table 1 summarizes the expected time (years) of residence in the South for a black household head who, at age 15, is living in the non-South. Between 1965 and 1970, this person could expect to live 6.28 years in the South, plus or minus about one-fifth of one year. This figure increased slightly between 1975 and 1980 to 6.77 ± 0.10 years. By 1990, this figure roughly doubled to 13.81 ± 0.20 years, and increased to 15.44 ± 0.22 years by 2000.

Since background mortality was improving over the 1970-2000 period (in the CDC life tables, black life expectancy at age 15 increased from about 52 years to 56 years), on the right side of Table 1, we display the percent of remaining years above age 15 that are lived in the South so that the estimates provided are comparable across census periods. In percentage terms, during the first two census periods, 1965-1970 and 1975 and 1980, blacks living in the non-South could be expected to live about 13 percent of their remaining years above age 15 in the South based on age-specific migration and mortality conditions in each census period. By the latter two census periods, 1985-1990 and 1995-2000, this figure doubled to 25.50 percent and 28.54 percent, respectively. Clearly, whether in absolute (remaining years) or relative (percent of remaining years) terms, the story is the same. Black migrants' expected time of residence in the South increased over the 1970-2000 period, most especially between 1980 and 1990.

In Figure 5, we go one step further and consider the number and percent of remaining years lived in the South at all ages, not just age 15. We do so because, in a multiregional context, increments in the form of in-migration can result in expectations of remaining life at age x that are greater than those at previous ages, as opposed to single- or multiple-decrement processes which dictate that expectations of remaining life must decline with age (Palloni 2001).

---FIGURE 5 ABOUT HERE---

Taking stock of the estimates provided in Figure 5, one thing is clear. Adopting a less rigid definition of the NGM that locates its onset with respect to a pronounced shift in any demographic migration regime, not just that of net-migration (Frey 2004), our results date the onset of the NGM in the 1980s, one decade after the turn-around of net-migration in the South. While this finding is not earth-shattering, it nonetheless provides a different vantage point of viewing the onset of the NGM. With respect to the age-patterning of region-to-region migration (and death) and corresponding temporal stability of black migration to the South, the former two census periods, 1965-1970 and 1975-1980, are very similar at all ages. Likewise, the latter two census periods, 1985-1990 and 1995-2000, exhibit a high degree of correspondence.

These results are consistent with our first expectation that the NGM of blacks to the South resulted in more permanent migration in the region because the age patterning of migration flows to the South became increasingly dominated by younger (versus older) migrants. In more substantive terms, this is consistent with the idea that economic “push” factors in the Midwest and Northeast and “pull” factors in the South were driving these changes under the assumption that increasingly pronounced younger (versus older) age patterns of migration to the region were dominated by labor migrants, particularly those transitioning into the labor force and in the early stages of their working-age lives. Thus, while the findings presented in Figure 5 date the onset of the NGM one decade after the net-migration reversal observed in the 1970s, they are nonetheless consistent with prevailing explanations of the causes of the NGM.

The above said, in addition to economic “push” and “pull” factors, ethnographic evidence suggests the importance of a “call to home” (i.e., to the South) during this time (Stack 1996). Accordingly, our second expectation going into the empirical portion of this paper was that black migrants’ expected time of residence in the South should have been especially pronounced for those with stronger (versus weaker) ties to the South in the form of having been born in the region. Importantly, as we mentioned in our discussion of the model used in this paper to estimate black migrants’ expected time of residence in the South, this expectation also provides an opportunity to assess the Markov assumption of history-independence that underlies the model itself. Accordingly, In Figure 6, we display similar results to those in Figure 5, but detailed separately for those born in the South and those not born in the South.

---FIGURE 6 ABOUT HERE---

As is evident, the assumption that region-to-region migration at each age is history-independent is likely violated in our model. Among household heads living in the non-South at age 15, between 1965 and 1970, those born in the South could be expected live 11.02 ± 0.52 years in the South over the course of their lives, whereas those not born in the South could be expected to

live in 1.66 ± 0.07 years in the region. Over the 1970-2000 period, these figures increased to 32.94 ± 0.65 years and 9.18 ± 0.18 years, respectively, by the year 2000. As is also evident in Figure 6, excluding the oldest ages, these differences between those born in the South and those born outside of the region hold for all ages. That said, whether among those born in the South or those born outside of the region, the earlier finding that the onset of the NGM dates to the 1980s, as opposed to the 1970s, remains supported. What changes in Figure 6, relative to in Figure 5, is simply the magnitude of blacks' expected time of residence in the South between the former two census periods, 1965-1970 and 1975-1980, and the latter two census periods, 1985-1990 and 1995-2000.

Blacks' Expected Time of Residence in the South: Across-Period Estimates

Thus far, we have shown that blacks' expected time of residence in the South, as a marker of the temporal stability of black migration to the region, increased over the 1970-2000 period on account of age patterns of in-migration to the South that became increasingly dominated by younger (versus older) migrants over time. We further showed that these patterns were particularly pronounced for those born (versus not) in the South. As *within-period* estimates that summarize the experiences of synthetic cohorts as they are exposed to age-specific migration and mortality conditions within each census period, these estimates can be compared to similar period estimates of net-migration provided by Frey (2004) and others. However, we can and should go further than this toward summarizing blacks' expected time of residence in the South in a way that more accurately reflects the experiences of real cohorts as they age across periods and are therefore exposed to age-specific risks of migration and mortality that change over time. For this reason, we conclude this section of the paper by providing *across-period* estimates of black migrants' expected time of residence in the South for four cohorts that, in 1965, were 15, 25, 35, and 45 years old. Given that our observation window ends in the year 2000, the estimates presented in Table 2 summarize black migrants' expected time of residence in the South over a 35-year period from 1965 to 2000, and thus the experiences of partial (versus complete) cohorts.

---TABLE 2 ABOUT HERE---

In 1965, a household head living in the non-South at age 15 could expect to live an average of about 3.84 years (11.50 percent) of their remaining life between 1965 and 2000 in the South. For those ages 25, 35, and 45, the corresponding figures are 3.04 years (9.48 percent), 1.82 years (6.21 percent), and 1.04 (4.20 percent), respectively. Further subdividing our sample into those born in the South and those born outside of the region, these estimates are somewhat larger and smaller, respectively. Among those born in the South, those age 15 in 1965 could expect to live slightly less than one-quarter of their remaining life between 1965 and 2000 in the South, while those at older ages (e.g., 35 and 45 in 1965) could expect to live less than 10 percent of their remaining life in the region. These differences are due to differing age patterns of migration. Fifteen year olds in 1965 were moving through peak labor force ages during the 1965-2000 period; hence, they accrue more time in the South compared to those at older ages in 1965 who are transitioning toward and into retirement. Here, as in Figure 6, these differences are especially pronounced for those with stronger ties to the South in the form of having been born in the region.

In Figure 7, we present similar figures summarizing the number and percent of remaining years lived in the South between 1965 and 2000 at all subsequent ages after ages 15, 25, 35, and 45 in 1965.³

---FIGURE 7 ABOUT HERE---

Clearly, the age patterning of black migration to (and from) the South is consequential, as is having been born in the region. Not only do younger (versus older) migrants have more years of life ahead of them that can potentially be lived in the South, these persons are also transitioning through key life course stages during the 1965-1970 period that correspond with the end of formal schooling and entry into the labor force. As we discussed earlier, these transitions were sensitive to economic changes in the Midwest and Northeast, as well to corresponding changes in the South. Moreover, those at younger ages with stronger ties to the South were especially sensitive to migrating to the South.

Discussion

In this paper, we provided an alternative vantage point for viewing the NGM of blacks to the South in explicitly temporal terms. Using a well-known but underutilized (at least in the context of the NGM) class of demographic models to generate estimates of blacks' expected time of residence in the South to summarize the temporal stability of black migration to the region, we broke new ground by infusing consideration of the temporal dynamics and stability of migration into research on the NGM. As an initial first step, we focused on the prevailing narrative of the NGM as a story that has largely (but not exclusively) been told with respect to regional "push" and "pull" factors and using data on region-to-region migration flows (Frey 2004; McHugh 1987). While our results are descriptive, they are nonetheless useful because they provide a blueprint for translating conceptual and substantive interests in the inherently temporal nature of migration into a set of quantities that can be examined and assessed empirically in this and in other contexts.

In doing so, we showed that prevailing explanations of the NGM rooted in economic "push" and "pull" factors (Adelman et al. 2000; Kasarda 1995; Tolnay 2003; Vigdor 2006), as well as in the notion of a "call to home" (Stack 1996), are consistent with a story of the NGM that, according to our results, began in the 1980s, one decade after the often-cited reversal of black net-migration in the South in the 1970s from negative to positive (Frey 2004, 2001). This is on account of the fact that the age patterns of migration to (and from) the South underwent dramatic changes between 1980 and 1990. Those at the younger (versus older) end of the age distribution became more susceptible to migration at important stages in the life course, particularly while transitioning out of school and into the labor force. This was especially so for those with stronger ties to the South, who transitioned into the labor force and, at the same time, presumably felt a stronger "pull" to the South than those with weaker ties to the region.

At a more general level, our work in this paper demonstrates the importance of taking seriously the temporal dynamics and stability of migration. The prevailing narrative of the NGM is based

³ To facilitate displaying these graphs in a single figure, we have rescaled the y-axes, which are consistent across graphs in Figure 7, but differ from the axes shown in Figures 5 and 6.

on a particular way of conceptualizing and measuring migration that is not exhaustive and therefore incomplete. A more exhaustive conceptual definition of migration is not only substantively warranted (Huddleston et al. 2011; Sampson and Groves 1989), but also has the potential to generate new insights on the NGM that are fully consistent with prevailing explanations.

The contributions of this paper, however, are not without limitations. First, as we discussed earlier, a number of issues with candidate longitudinal surveys prevent us from examining the temporal dynamics and stability of black migration to the South for real (versus synthetic) cohorts. Although we sought to come as close as possible to this ideal, examining four cohorts in 1965 as they aged over a 35-year period between 1965 and 2000, our results nonetheless describe the experiences of synthetic cohorts because we are unable to follow individuals as they actually move through time. Second, as we also discussed, the model itself used to generate estimates of black migrants' expected time of residence in the South assumes history-independence, which, as we showed in Figures 6 and 7, appears to be an unreasonable assumption. Following Rogers (1995), our approach to addressing this issue was to split our samples by place of birth, distinguishing those born in the South from those born outside of the region. While this does not necessarily solve the underlying issue with history-independence, it does get us closer to the idea that the past does, in fact, shape the future.

Going forward, we hope that future research will engage in the following tasks. First, toward validating the substantive utility of the measure of migrants' expected time of residence developed in this paper, future research should consider generating these quantities at finer levels of aggregation so as to assess their effects on theoretically-implied outcomes, including inter-group contact and relations (Sampson and Groves 1989). Second, future research should also consider the temporal dynamics and stability of the migrations of other groups to (and from) the South, including whites who also migrated to the South in substantial numbers during the period under consideration in this paper (DeWaard et al. 2013). Finally, efforts should be made to consider the temporal dynamics and stability of migration in context beyond the NGM of blacks to the South. There are number of sites that particularly ripe for these sorts of efforts that have yet to consider the inherently temporal character of migration flows, including, for example, research on so-called "new immigrant destinations" in the United States, where the dominant focus tends to be migrant stocks and migrations flows, as well as on the characteristics of places that attract and repel these flows (Kritz et al. 2011; Massey 2008).

Our hope is that our work in this paper will spark consideration and new debates on the importance of the temporal dynamics and stability of migration. As we mentioned earlier, these seeds were planted some time ago in both conceptual debates and methodological developments. The challenge, from our perspective, is in carrying these insights forward and applying them to current migration scholarship, which requires thinking outside of established paradigms, not to mention the availability and quality of migration data, which, relative to data on other demographic processes (e.g., birth and death) are notoriously poor.

Acknowledgements

This research is supported by NIH center grant #R24 HD041023 awarded to the Minnesota Population Center at the University of Minnesota and center and training grants #R24 HD047873 and #T32 HD07014 awarded to the Center

for Demography and Ecology at the University of Wisconsin-Madison, as well as by funds to Curtis from the Wisconsin Agricultural Experiment Station and the Wisconsin Alumni Research Foundation. An earlier version of this paper was presented at the annual meeting of the Population Association of America on April 13, 2013. The authors acknowledge helpful comments provided by Emily Rosenbaum.

References

- Adelman, R.M., Morett, C., & Tolnay, S.E. (2000). Homeward bound: The return migration of southern-born black women, 1940-1990. *Sociological Spectrum*, 20, 433-463.
- Alba, R.D. & Logan, J.R. (1993). Minority proximity to whites in suburbs: An individual-level analysis of segregation. *American Journal of Sociology*, 98, 1388-1427.
- Allport, G. (1954). *The nature of prejudice*. Malden, MA: Blackwell Publishing.
- Ayers, B.D. (1974). Blacks return to South in a reverse migration. *New York Times*, June 18.
- Bilefsky, D. (2011). For new life, blacks in cities head South. *New York Times*, June 21.
- Campbell, R.R., Johnson, D.M., & Stangler, G. (1974). Return migration of black people to the South. *Rural Sociology*, 39, 514-528.
- Conway, D. (1980). Step-Wise Migration: Toward a Clarification of the Mechanism. *International Migration Review*, 14, 3-14.
- Cook, S.W. (1962). The systematic analysis of socially significant events: A strategy for social research. *Journal of Social Issues*, 18, 66-84.
- Cromartie, J. & Stack, C.B. (1989). Reinterpretation of black return migration and nonreturn migration to the South, 1975-1980. *Geographical Review*, 79, 297-310.
- Curtis, K.J. (2011). U.S. return migration and the decline in southern black disadvantage, 1970-2000. CDE Working Paper No. 2011-02, Center for Demography and Ecology, University of Wisconsin-Madison.
- DeWaard, J., Curtis, K.J., & Fuguitt, G.V. (2013). Reconsidering black (and white) migration to the South: A model and measure of the temporal dynamics of migration flows. Annual Meeting of the Population Association of America, New Orleans, LA, April 11-13.
- DiSalvo, D. (2012). The great remigration: Blacks are abandoning the northern cities that failed them. *City Journal*, Summer, Manhattan Institute for Policy Research.
- Falk, W.W., Hunt, L.L., & Hunt, M.O. (2004). Return migrations of African-Americans to the South: Reclaiming a land of promise, going home, or both? *Rural Sociology*, 69, 490-509.
- Flippen, C. (2014). U.S. internal migration and occupational attainment: Assessing absolute and relative outcomes by region and race. *Population Research and Policy Review*, 33, 31-61.
- Frey, W.H. (2004). The new great migration: Black Americans' return to the South, 1965-2000. Living Cities Census Series, The Brookings Institution.
- Frey, W.H. (2001). Census 2000 shows large black return to the South, reinforcing the region's 'white-black' demographic profile. PSC Research Report No. 01-473, Population Studies Center, Institute for Social Research, University of Michigan.
- Frey, W.H. (1998). Black history month feature: Black migration to the South reaches record highs in the 1990s. *Population Today*, 26, Population Reference Bureau.
- Geddes, A., Niessen, J., Balch, A., Bullen, C., & Peiro, M.J. (2005). European civic citizenship and inclusion index. British Council and Migration Policy Group, Manchester, UK.
- Herting, J.R., Grusky, D.B., & Van Rompaey, S.E. (1997). The social geography of interstate mobility and persistence. *American Sociological Review*, 62, 267-287.
- Huddleston, T., Niessen, J., Chaoimh, E.N., & White, E. (2011). Migrant integration policy index III. British Council and Migration Policy Group, Manchester, UK.
- Hunt, M.O., Hunt, L.L., & W.W. Falk. (2013). Twenty-first century trends in black migration to the U.S. South: Demographic and subjective predictors. *Social Science Quarterly*, 94, 1398-1413.

- Kasarda, J.D. (1995). Industrial restructuring and the changing location of jobs. In R. Farley (Ed.), *State of the union: Economic trends* (pp. 215-268). New York, NY: Russell Sage Foundation.
- Kritz, M.M., Gurak, D.T., & Lee, M.A. (2011). "Will they stay? Foreign-born out-migration from new U.S. destinations." *Population Research and Policy Review*, 30, 537-67.
- Land, K.C. (1969). Duration of residence and prospective migration: Further evidence. *Demography*, 6, 133-140.
- McGinnis, R. (1968). A stochastic model of social mobility. *American Sociological Review*, 35, 413-433.
- McGinnis, R. & Pilger, J.E. (1963). On a model for temporal analysis. Annual meeting of the American Sociological Association, Los Angeles, CA, August.
- Long, L.H. & Hansen, K.A. (1977). Selectivity of black return migration to the South. *Rural Sociology*, 42, 317-331.
- Long, L.H. & Hansen, K.A. (1975). Trends in return migration to the South. *Demography*, 12, 601-614.
- Longino, C.F. & Smith, K.J. (1991). Black retirement migration in the United States. *Journal of Gerontology*, 46, S125-S132.
- Massey, D.S. (2008). *New faces in new places: The changing geography of American immigration*. New York: Russell Sage Foundation.
- Massey, D.S. & Denton, N.A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge: Harvard University Press.
- McHugh, K.E. (1987). Black migration reversal in the United States. *Geographical Review*, 77, 171-182.
- McHugh, K.E. (1988). Determinants of black interstate migration, 1965-70 and 1975-80. *Annals of Regional Science*, 22, 36-48.
- Niessen, J., Huddleston, T., Citron, L., Geddes, A. & Jacobs, D. (2007). Migrant integration policy index. British Council and Migration Policy Group, Manchester, UK.
- Palloni, A. (2001). Increment-decrement life tables. In S. Preston, P. Heuveline and M. Guillot (Eds.), *Demography: Measuring and modeling population processes* (pp. 256-273). Oxford: Blackwell Publishers.
- Pearce, D. (1978). The feminization of poverty: Women, work, and welfare. *Urban and Social Change Review*, 11, 28-36.
- Pettigrew, T.F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85.
- Pettigrew, T.F. (1979). Racial change and social policy. *Annals of the American Academy of Political and Social Science*, 441, 114-131.
- Preston, S., Heuveline, P., & Guillot, M. (2001). *Demography: Measuring and modeling population processes*. Oxford: Blackwell Publishers.
- Robinson, I.A. (1990). The relative impact of migration type on the reversal of black out-migration from the South. *Sociological Spectrum*, 10, 373-386.
- Rogers, A. (1995). *Multiregional demography: Principles, methods and extensions*. London: Wiley.
- Rogers, A. (1990). Requiem for the net migrant. *Geographical Analysis*, 22, 283-300.
- Rogers, A. (1975). *Introduction to multiregional mathematical demography*. New York: Wiley.
- Rogers, A. & Castro, L.J.. (1981). Model migration schedules. RR-81-30, International Institute for Applied Systems Analysis, Laxenburg, Austria.

- Roseman, C.C. (1971). Migration as a spatial and temporal process. *Annals of the Association of American Geographers*, 61, 589-598.
- Ruggles, S.J., Alexander, J.T., Genadek, K., Goeken, R., Schroeder, M.B., & Sobek, M. (2010). Integrated public use microdata series: Version 5.0 [machine-readable database]. Minnesota Population Center, University of Minnesota.
- Sampson, R.J. & Groves, W.B. (1989). Community structure and crime: Testing social disorganization theory. *American Journal of Sociology*, 94, 774-802.
- Sharp, G. & Hall, M. (2014). Emerging forms of racial inequality in homeownership exit, 1968-2009. *Social Problems*, 61, 421-447.
- Shaw, C. & McKay, H.D. (1942). *Juvenile delinquency and urban areas*. Chicago: University of Chicago Press.
- Stack, C. (1996). *Call to Home*. New York: Basic Books.
- Stark, O. & Bloom, D.E. (1985). The new economics of labor migration. *American Economic Review*, 75, 173-178.
- Tolnay, S.E. (2003). The African American 'great migration' and beyond. *Annual Review of Sociology*, 29, 209-232.
- United Nations. 1998. Recommendations on statistics of international migration. Statistical Papers Series M, No. 58, Rev. 1. Statistics Division, Department of Economic and Social Affairs, United Nations. New York.
- Vigdor, J.L. (2006). The new promised land: Black-white convergence in the American South, 1960-2000. *Working Paper No. W12143*, National Bureau of Economic Research.
- Wilson, W.J. (1987). *The declining significance of race: Blacks and changing American institutions*. Chicago: University of Chicago Press.
- Zajonc, R.B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology Monograph Supplement*, 9, 1-27.

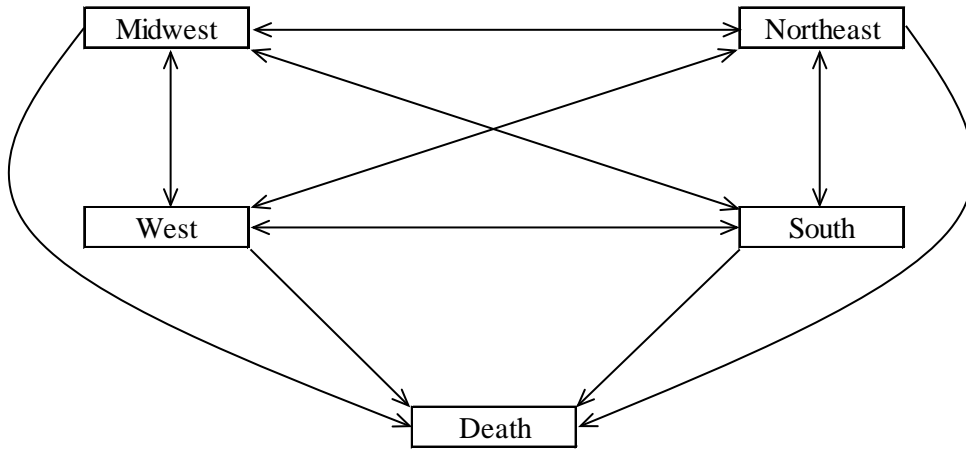
Table 1. Black Migrants' Expected Time of Residence in the South at Age 15, 1970-2000: Within-Period Estimates

Period	Remaining Years of Life Lived in South	Percent of Remaining Years of Life Lived in South
1970	6.28 ± 0.18	12.55 ± 0.48
1980	6.77 ± 0.10	12.86 ± 0.25
1990	13.81 ± 0.20	25.50 ± 0.62
2000	15.44 ± 0.22	28.54 ± 0.66

**Table 2. Blacks Migrants' Expected Time of Residence in the South by Age in 1965:
Across-Period Estimates**

Age in 1965	Remaining Years of Life Lived in South	Percent of Remaining Years of Life Lived in South
Birthplace = South or Non-South		
15	3.84 ± 0.14	11.50 ± 0.53
25	3.04 ± 0.05	9.48 ± 0.17
35	1.82 ± 0.04	6.21 ± 0.15
45	1.04 ± 0.03	4.20 ± 0.12
Birthplace = South		
15	7.44 ± 0.42	22.27 ± 1.96
25	4.26 ± 0.07	13.28 ± 0.28
35	2.48 ± 0.06	8.46 ± 0.23
45	1.31 ± 0.04	5.31 ± 0.17
Birthplace = South		
15	2.10 ± 0.09	6.29 ± 0.35
25	1.46 ± 0.04	4.54 ± 0.16
35	0.75 ± 0.03	2.57 ± 0.11
45	0.58 ± 0.04	2.41 ± 0.17

Figure 1: Transition Diagram of Region-to-Region Migration Flows and Death



Notes: Non-migration transitions (i.e., loops) are not shown, but nonetheless implied.

Figure 2. Black In-, Out-, and Net-Migration by U.S. Region: 1970-2000

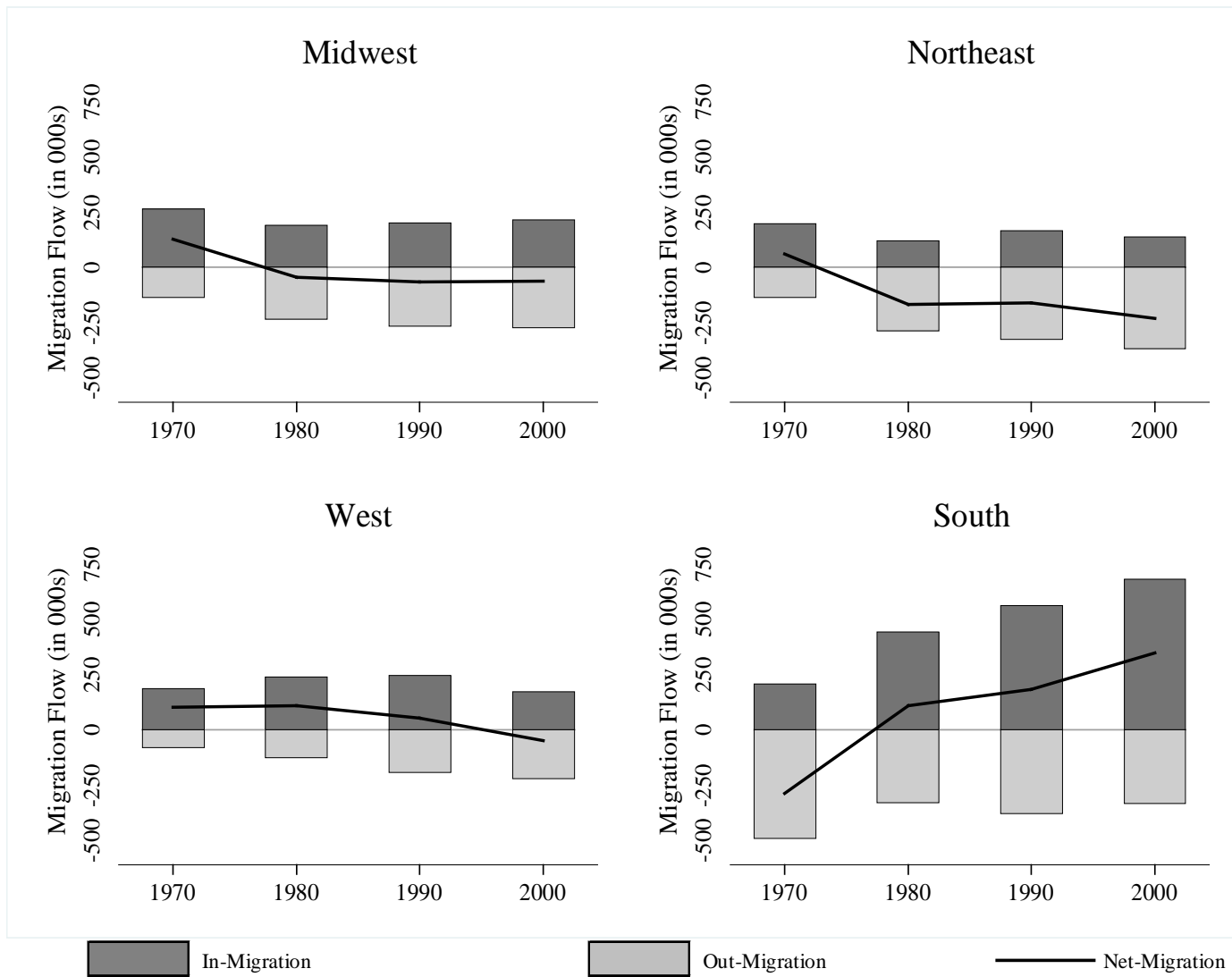


Figure 3. Black Region-to-Region Migration Flows (in 000s): 1970-2000

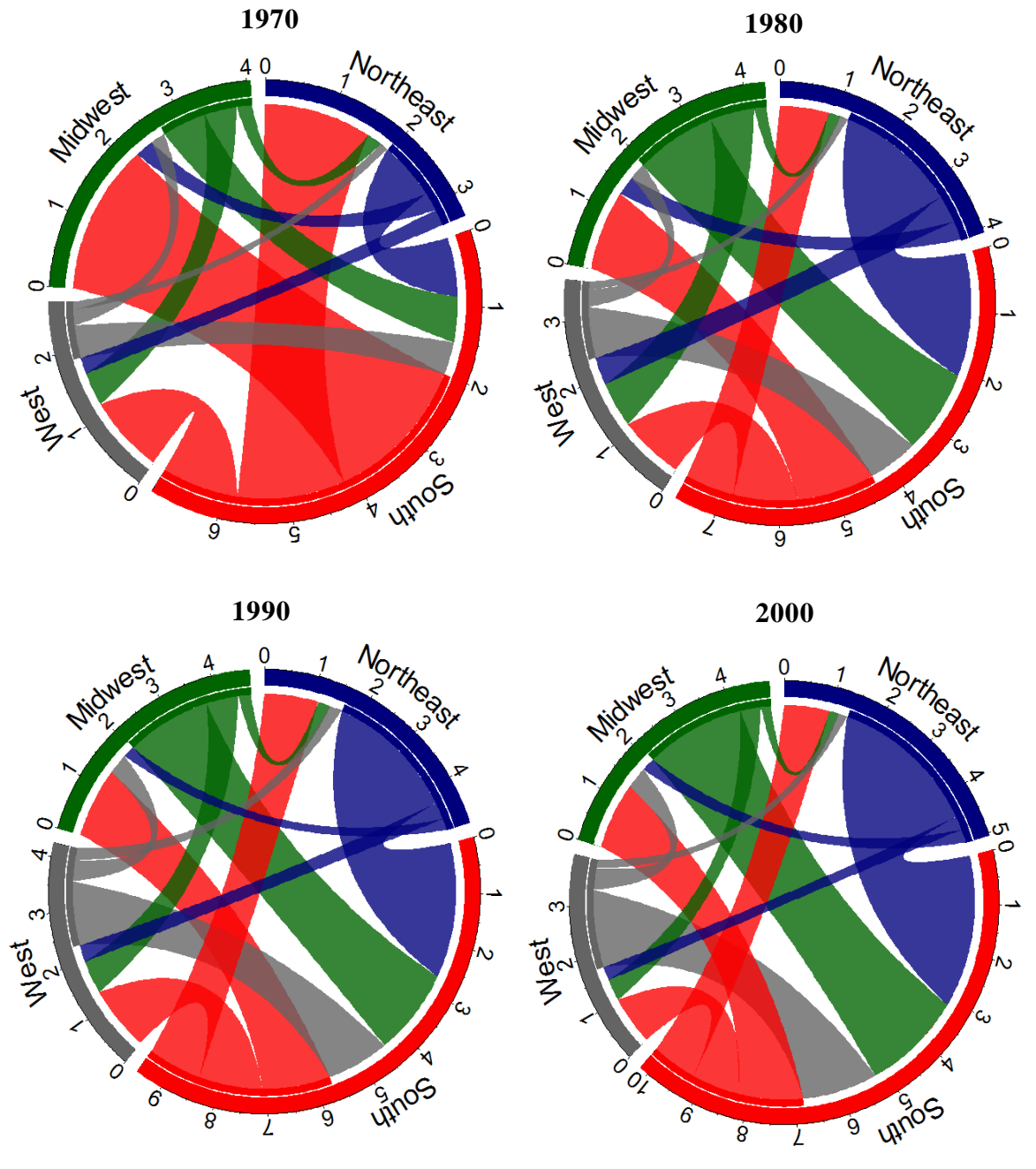


Figure 4. Age Patterns of Black In- and Out-Migration To/From the South: 1970-2000

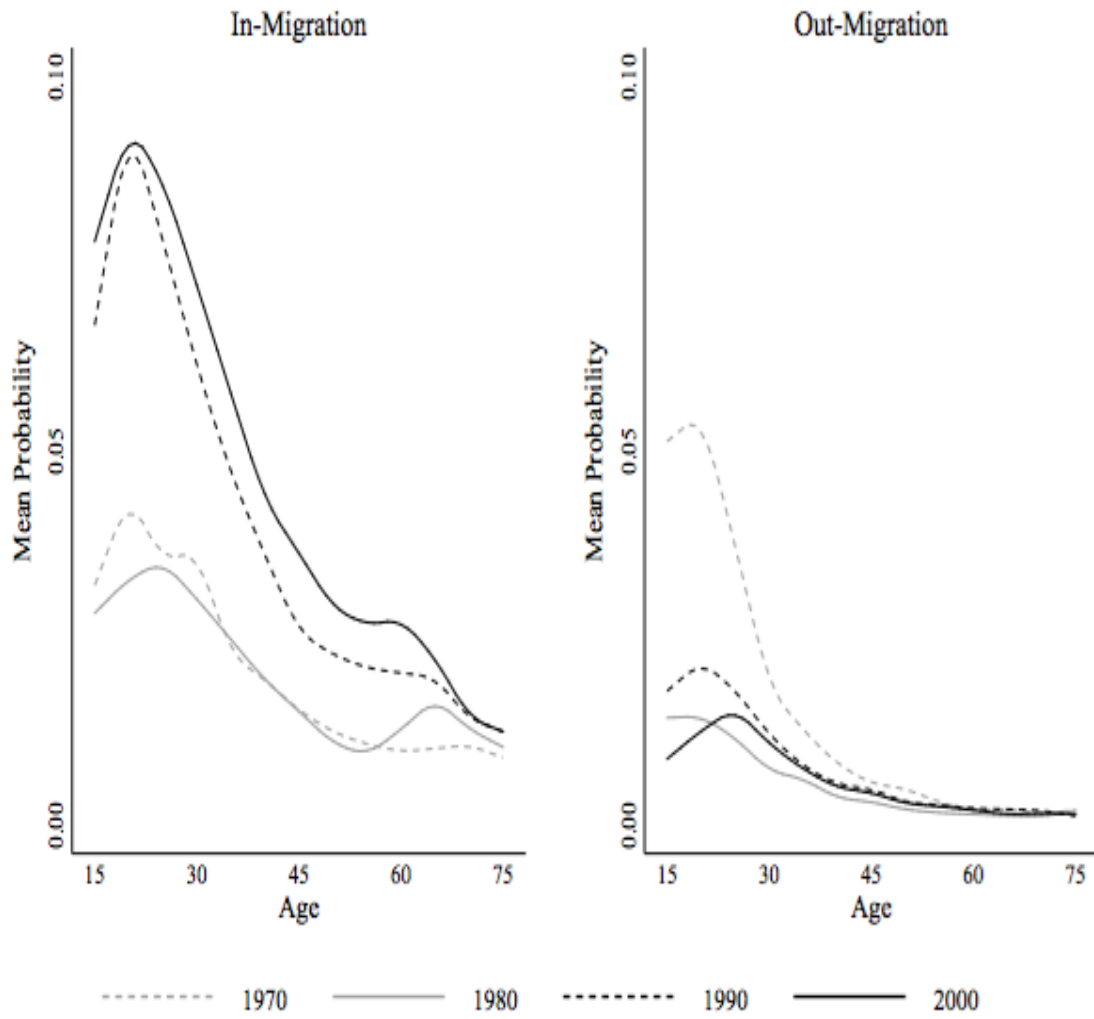


Figure 5. Blacks Migrants' Expected Time (Years) of Residence in the South, 1970-2000: Within-Period Estimates

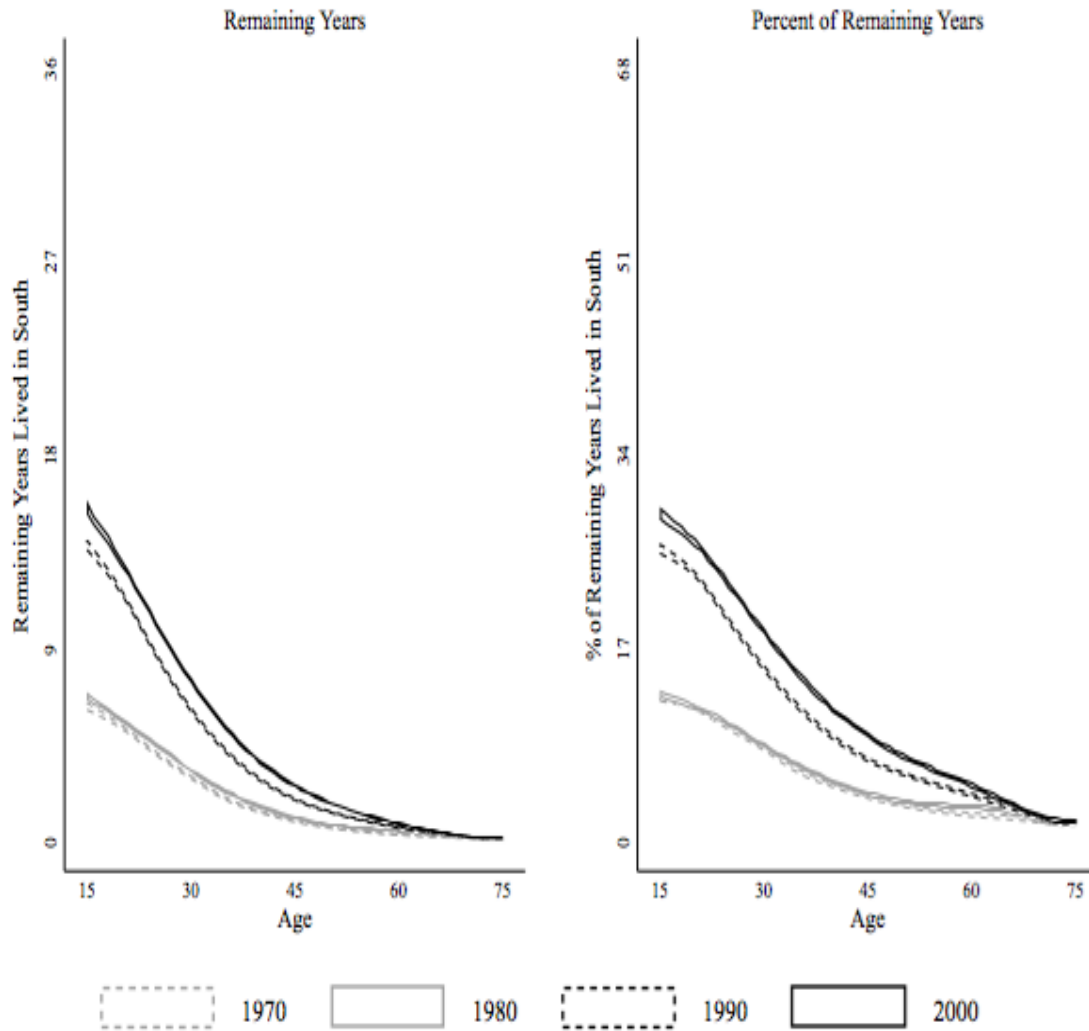


Figure 6. Blacks Migrants' Expected Time (Years) of Residence in the South by Place of Birth, 1970-2000: Within-Period Estimates

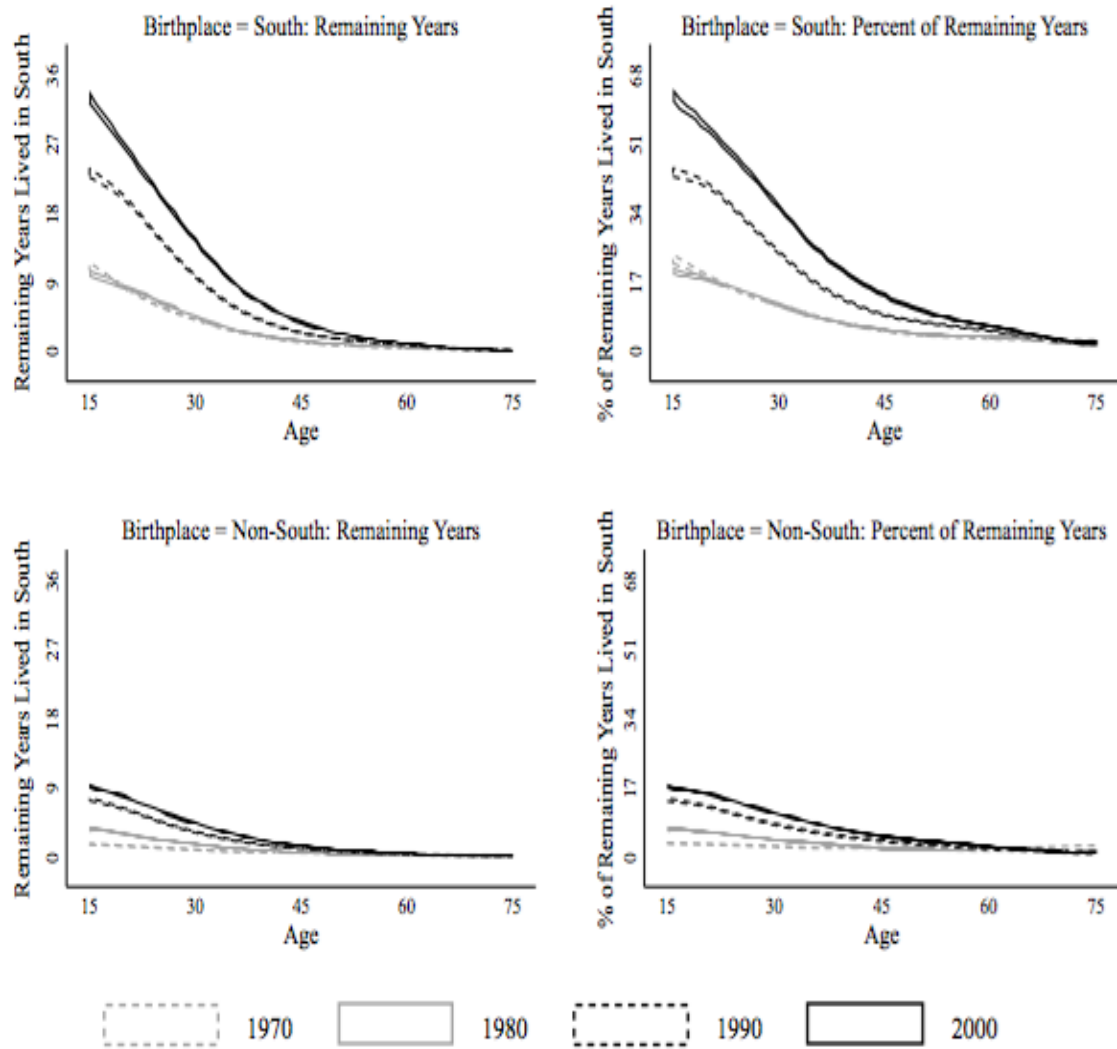


Figure 7. Blacks Migrants' Expected Time (Years) of Residence in the South by Place of Birth, 1970-2000: Across-Period Estimates

