

Measuring U.S. Interstate Mobility of the Native-born Using State of Birth Stocks: 1850 to 2010



CENTER FOR STUDIES IN
DEMOGRAPHY & ECOLOGY

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Introduction

Since the 1980s, the annual interstate migration rate in the U.S. has declined. Given the country's reputation of economic fluidity and dynamism, this trend has been cause for concern among many. However, despite formidable scholarly attention over the last decade, internal migration decline remains a puzzle.

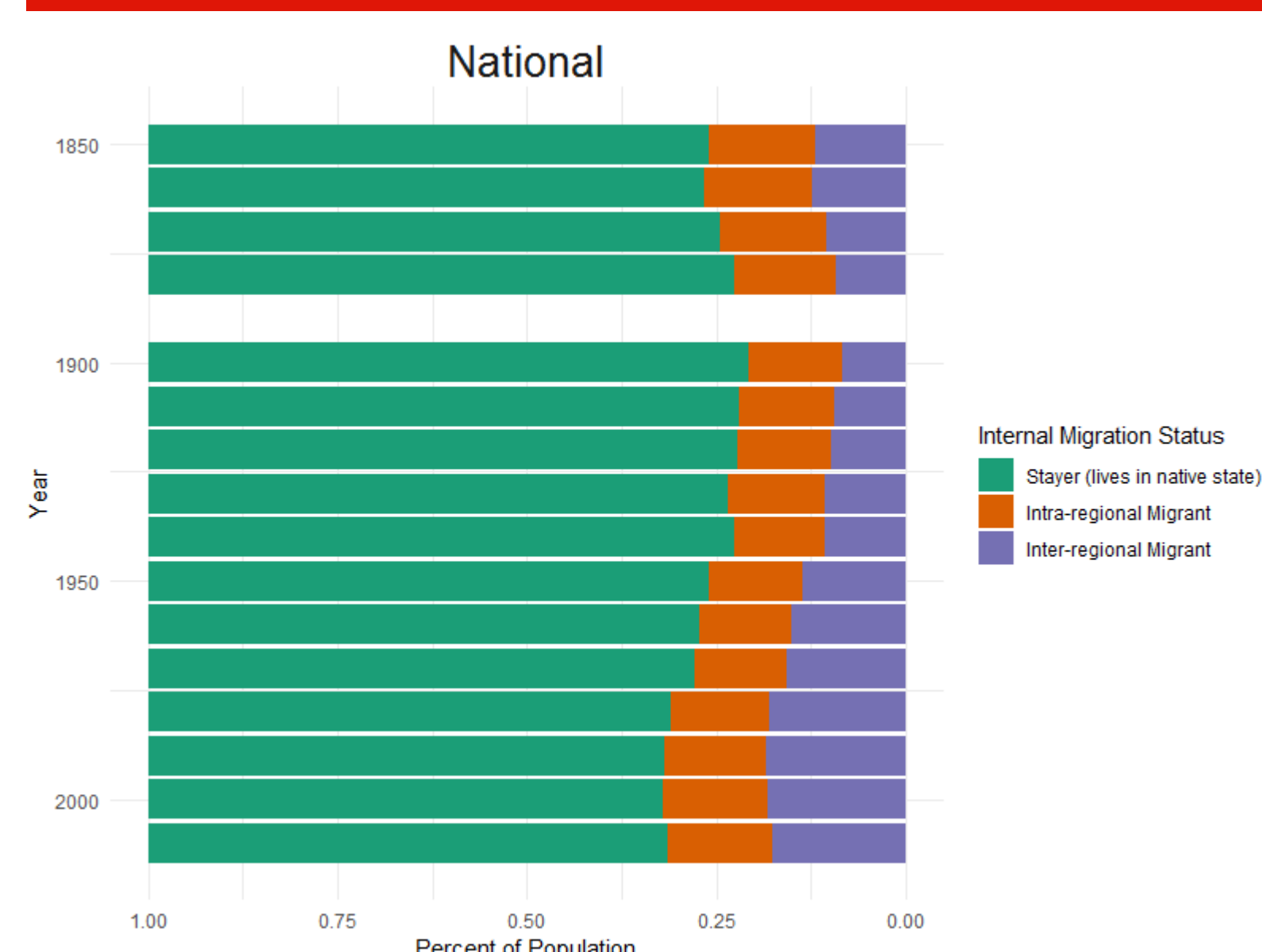
One difficulty studying migration systems is in how to interpret and assess change. When we say that internal migration in the US is decreasing, does this mean all flows are decreasing proportionately? Or, are some flows decreasing more than others? Have some flows increased over this time? How do trends in migration relate to state-level natural increase? While the answers to such questions would not provide definitive explanations of the recent down trend in U.S. internal migration, they may provide nuance that is otherwise lost.

The goal of this project is to provide historical context and detailed geographical description of the U.S. internal migration system 1850 to 2010. Using place of birth stocks for the native born, we track changes in the geographic distribution of lifetime migrants and attempt to use this information to understand the changing geography of internal migration flows.

Data and Methods

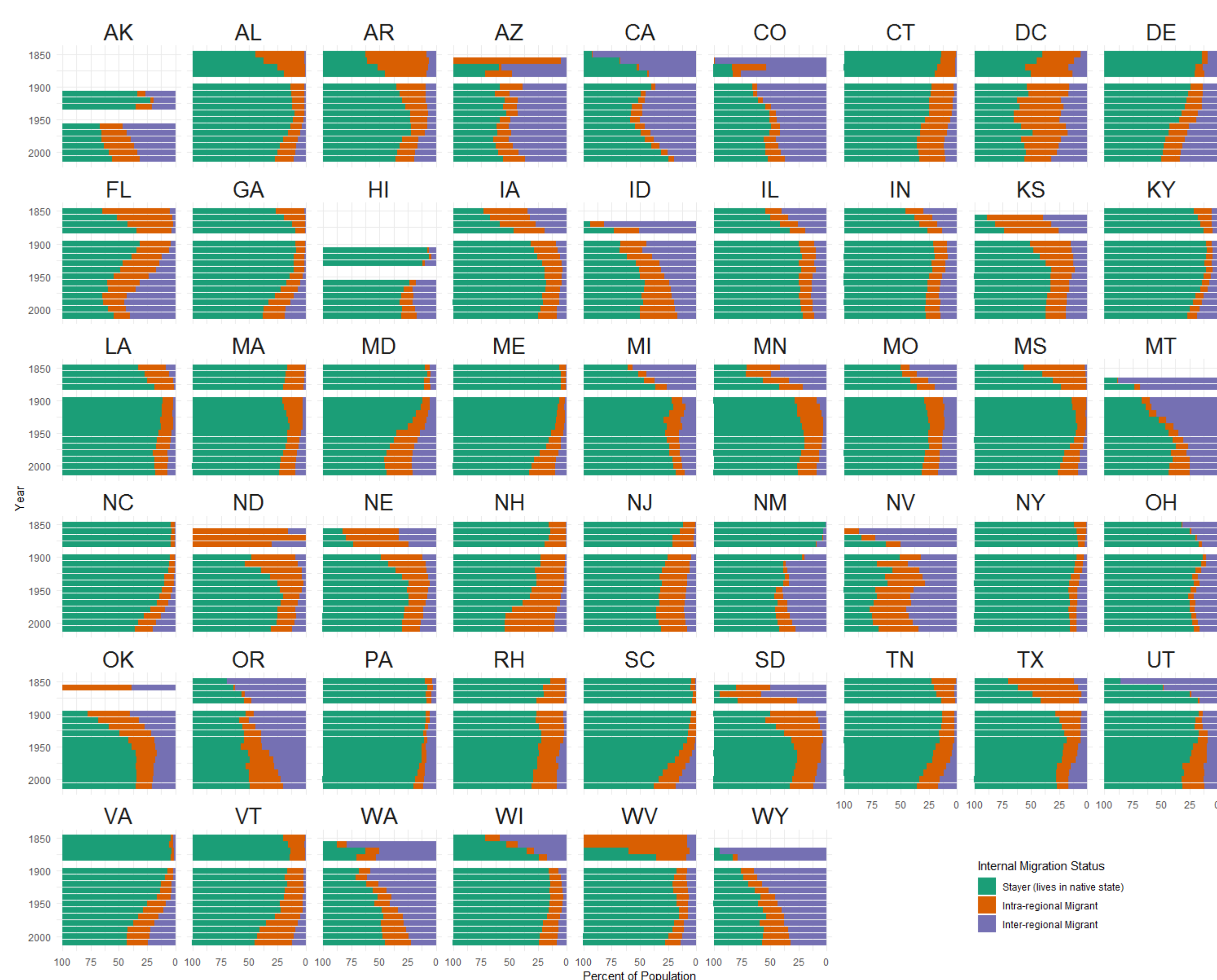
All data come from IPUMS U.S. Census microdata. They cover each decade 1850 to 2010 (excluding the 1890). Survey weights are used to estimate the native-born population in each state by state of birth, a proxy for lifetime migration. A "stayer" lives in their state of birth, while an "intra-regional migrant" moved states but remained within their Census Region of birth (Northeast, Midwest, South and West). An "inter-regional migration" moved states and changed regions. The first half of the analysis visualizes trends in stocks of internal migrants. The second half of the analysis uses a log-linear spatial model developed by Abel (2013) to estimate flows from changes to population stocks.

Stocks



Between 1850 and 2010, the percentage of the native-born population living in their state of birth has fluctuated from a high of 79.4% in 1900 to a low of 68% in 2000. As we would expect from declining internal migration since the 1980s, there is a lagged uptick in national percentage of stayers beginning after 2000.

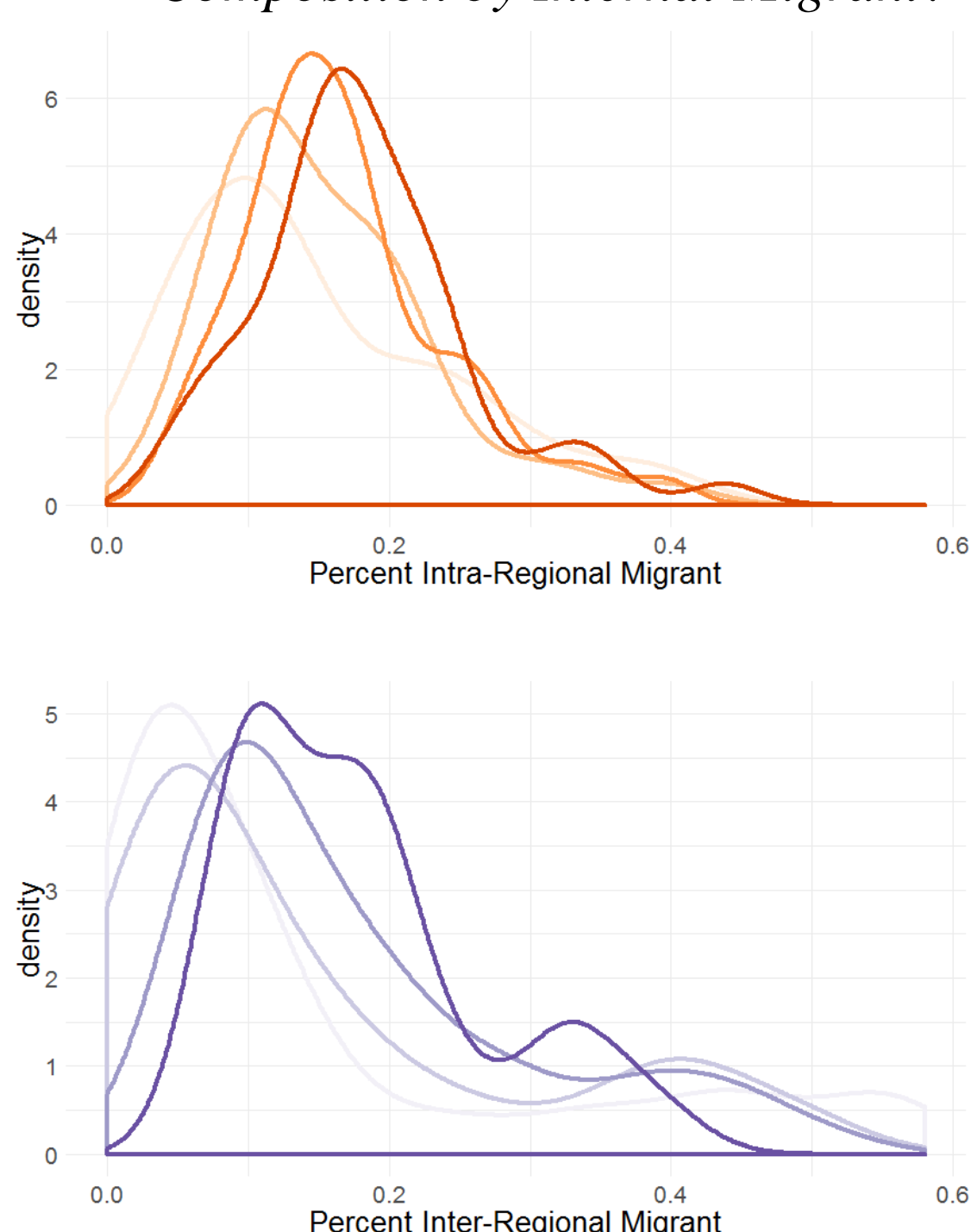
The geography of migrants is interesting. The percentage of the population that is an intra-regional migrant stays fairly stable over time (~13%), while the variation of inter-regional migration (ranging from 8.3% to 18.3%) seems to drive the ups and downs in overall interstate migration.



States vary a great deal in terms of their composition of migrants. While the patterns (above) conform to our understanding of U.S. population trends, the persistent regional differences are perhaps surprising. States in the West (CA, AZ, CO, WA, NV, etc) remain largely comprised of lifetime migrants (the exception to this being UT). However, California has notably become increasingly made up of native Californians in recent decades. Meanwhile, states in the South have are now home to a growing share of internal migrants. This appears true for just about every southern state, from well-known destinations like GA to less obvious destinations like SC and AR.

The two figures to the right demonstrate the degree to which states have converged in terms of their composition by internal migration status between 1920 and 2010. This is especially true for inter-regional migration. In the 1920s, the distribution of states by inter-regional migrant population percentage was skewed toward 0 with a long tail. In 2010, the tail has shrunk and the distribution has shifted to the right.

Are U.S. States Becoming More Alike in their Composition by Internal Migrant?



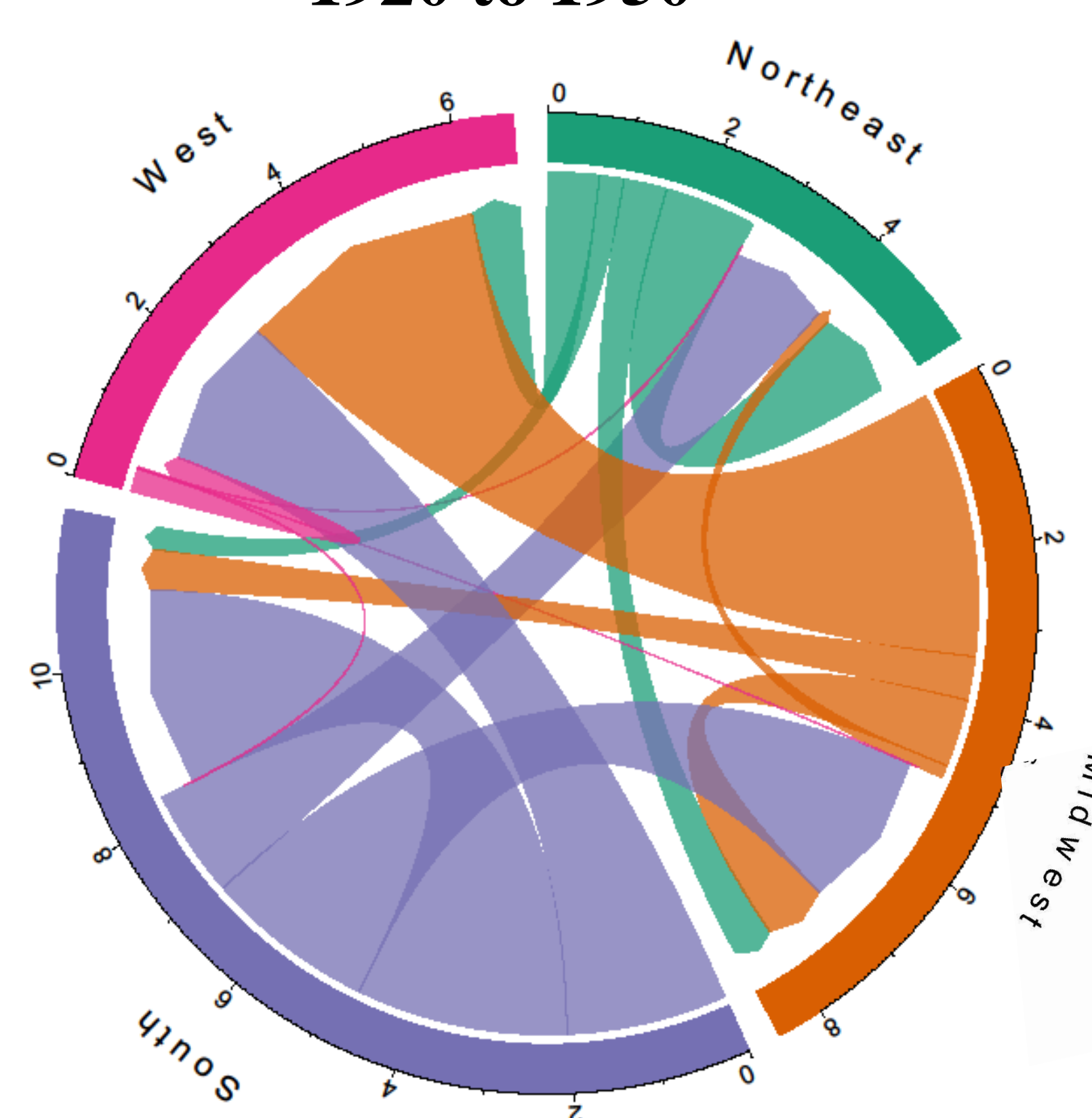
Flows

The second half of the analysis makes use of methods refined by Abel (2013) to estimate flows from sequential stock data. The expected number of migrant transitions are deduced from an iterative proportional fitting algorithm, constrained so that flow estimates add up to the total in- and out-flows observed.

For the sake of simplicity, we estimate the flows of three specific cohorts over three specific periods: (1)

individuals born 1900 to 1904 for the years 1920 to 1950, (2) individuals born 1930 to 1934 for the years 1950 to 1980 and (3) individuals born 1960 to 1964 for the years 1980 to 2010. In all three cohorts, we compare the state-level stocks at ages 20-24 and again at 50-54. Flows were estimated at the state level and aggregated to region for visualization purposes.

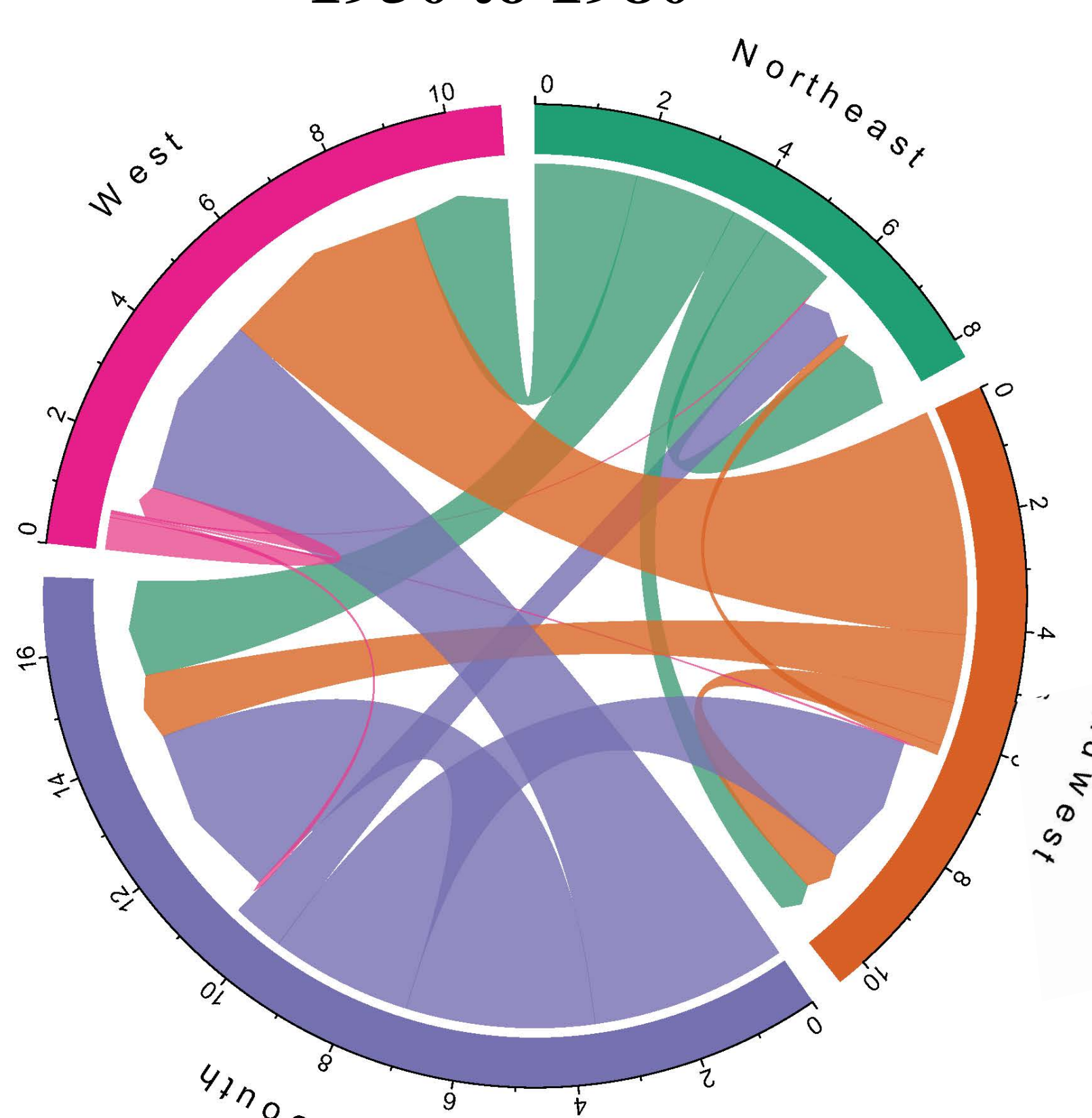
1920 to 1950



Between 1920 and 1950, the cohort selected for our analysis (born 1900-1904) exhibited the following patterns:

- Large flows from the Midwest to the West
- Large flows from the South to the Midwest and the South to the West
- Reasonably sized intra-regional flows, especially in the South but also the Northeast
- Very little out-flow from the West
- Surprisingly little in-flow to the Northeast

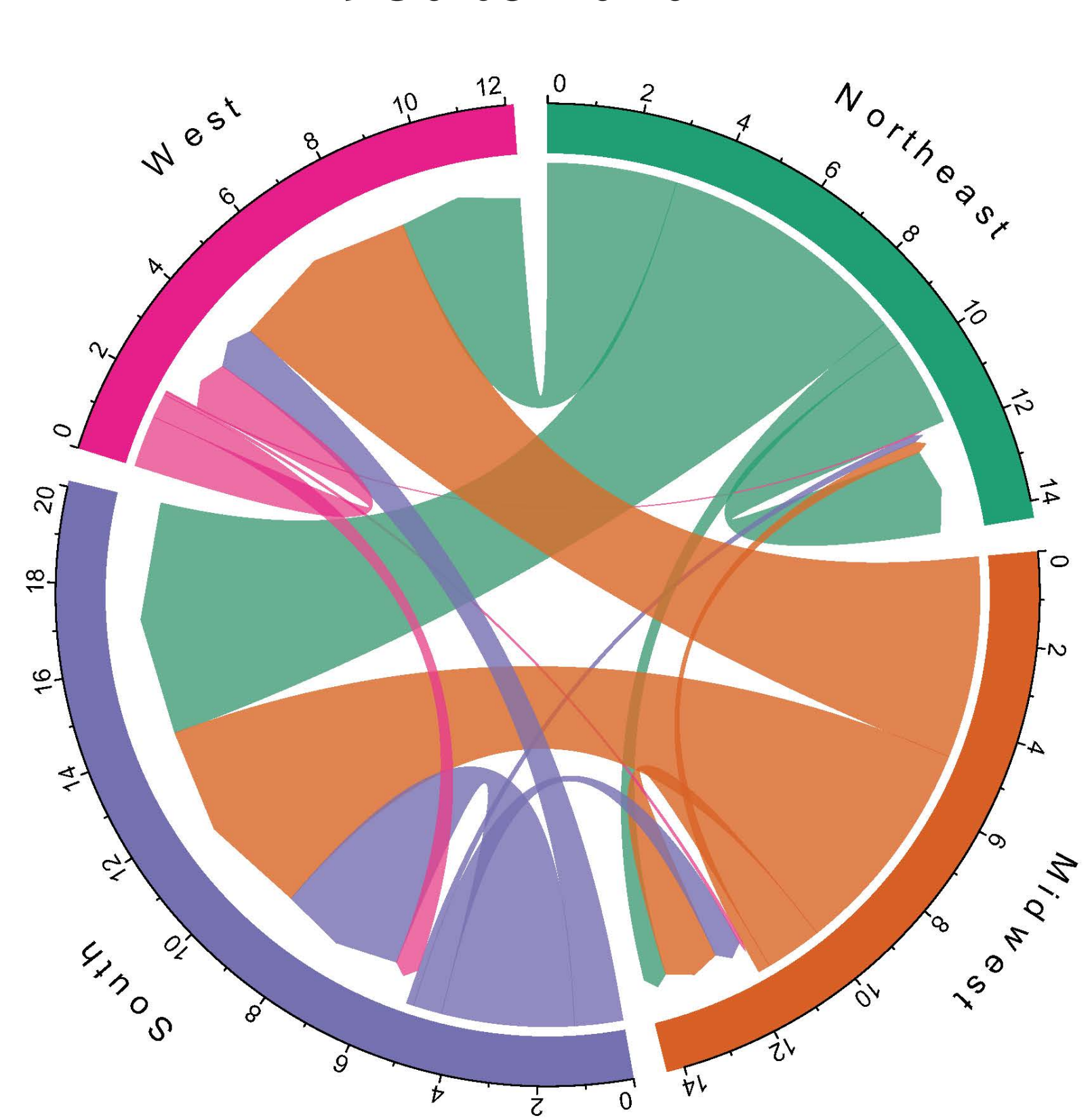
1950 to 1980



Between 1950 and 1980, the cohort selected for our analysis (born 1930-1934) exhibited the following patterns:

- Large flows from the Midwest to the West
- Large flows from the South to the Midwest and the South to the West
- Growing flows from the Northeast and Midwest to the South
- Shrinking in-flow to the Midwest and Northeast from the South
- Mostly constant intra-regional flows
- Still very little out-flow from the West

1980 to 2010



Between 1980 and 2010, the cohort selected for our analysis (born 1960-1964) exhibited the following patterns:

- Large flows from the Midwest to the West
- Much smaller flows from the South to the West or to the Midwest
- Very large flows from the Northeast and the Midwest to the South
- Still reasonably sized intra-regional flows
- Very little out-flow from the West
- Continuous out-flow from Midwest to West in all three periods

Conclusion and Next Steps

Historical narratives about internal migration within the United States include well known events like the Great Migration, Dust Bowl migration of the 1930s, and Rust-Belt to Sun-Belt migration of recent years. This research reveals two regional histories that should be explored further, one a presence and the other

an absence. The first is the historical continuity of migration from the Midwest to the West. While the inter-regional patterns of internal migration have shifted over the last 100 years, Midwest to West migration has remained among the most prominent. The second is the relative dearth of migration out of the West. Whereas other regions have waxed and waned in their relative contribution of out-migrants, the West has yet to produce many. The rapid rise of the native California population is notable and warrants more consideration.

PLEASE NOTE: As a lightning talk/poster presentation, all findings here are highly preliminary!! I have had very little time to validate the results of the flows-from-stocks models. My next steps are to validate the flow estimates with survey estimates and pursue flows-from-stocks estimation by cohort, gender and race.

Reference: Abel, G. (2013). Estimating global migration flow tables using place of birth data. *Demographic Research*, 28(18), 505-546. Data: IPUMS-USA, University of Minnesota, www.ipums.org