Changes in Migration Patterns of Agricultural Workers in the U.S.: Implications for Production and Trade

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Abstract

Migration patterns of agricultural workers in the U.S., large share of whom are undocumented, have changed in the last two decades. We document these changes across the six agricultural regions in the U.S. (California, Southwest, Midwest, East, Northwest, and the Southeast) using data from the confidential version of the National Agricultural Worker Survey work history files. Analyzing data from more than 55,000 agricultural workers and more than 250,000 job transitions (within a year) from 1989 to 2012, we show that agricultural workers have become increasingly more stationary across all six regions in the U.S. Worker migration probabilities have declined significantly – on average, the likelihood that a worker remains in the same region without migrating to other regions over the period of a year has increased over 10 percentage points over the sample period. Also, the likelihood of migrating to any other regions (during the year before the survey interview) has declined over the sample period. We investigate a number of potential reasons behind this phenomenon – for example, the changing demographic composition of the farm labor force and the more restrictive labor and immigration policies adopted across some states. The change in migration patterns may have led to a shortage of farm labor in some geographic areas, especially in high-value crops (fruits and vegetables). This may have led to a production shift towards field crops, which may alter existing U.S. agricultural trade patterns.

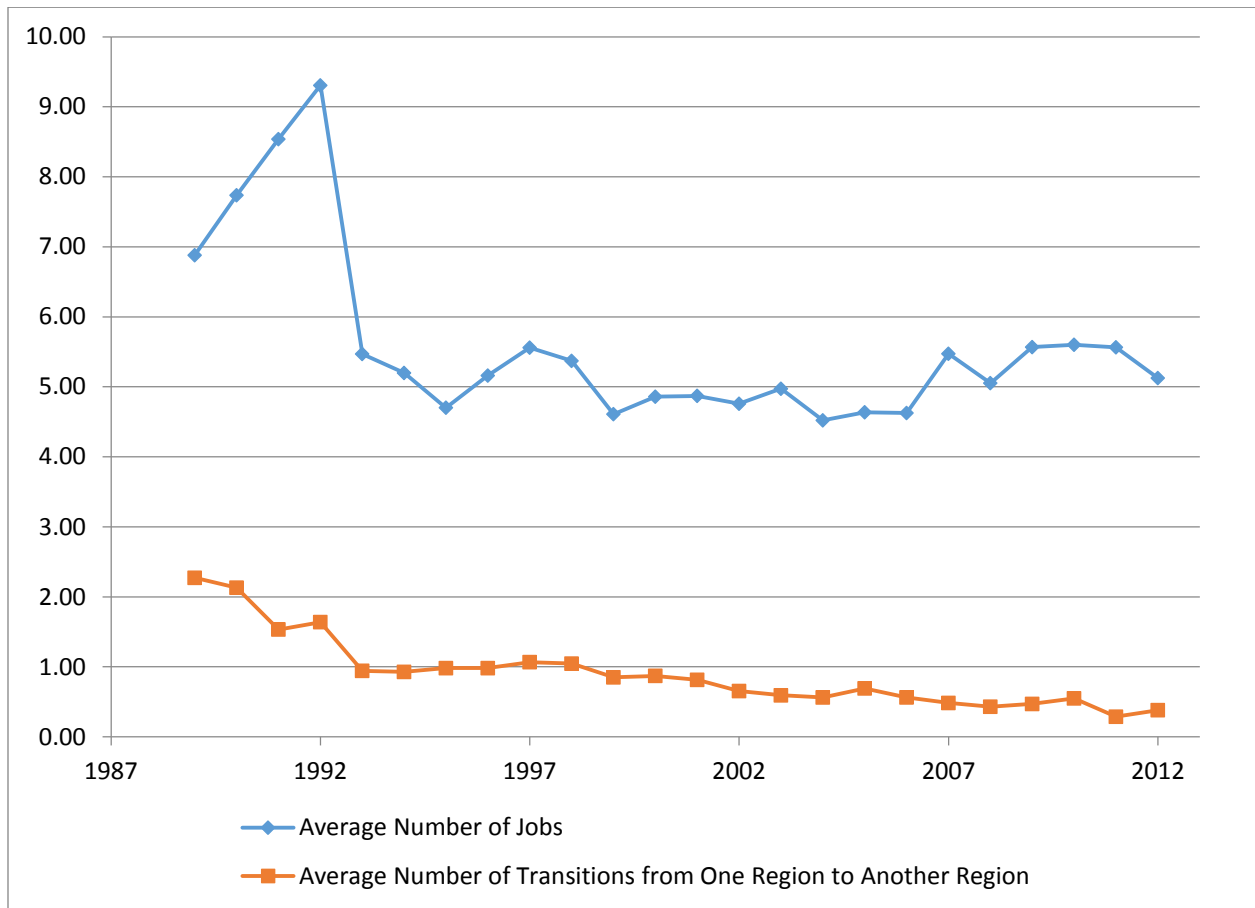**Key Words**: agricultural workers, migration patterns

JEL Classification: Q10, J43

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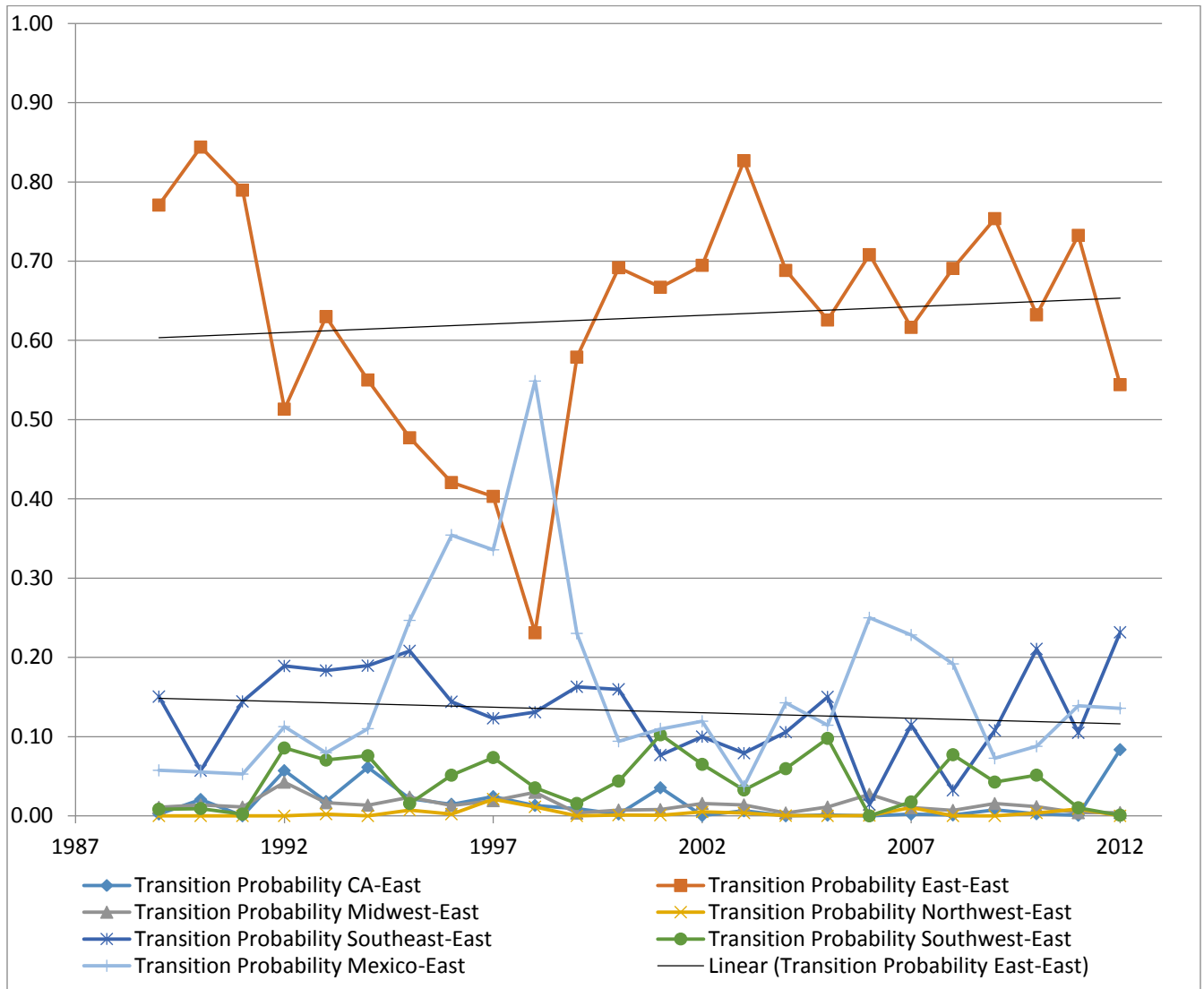
Figure 1. The Average Number of Jobs and the Average Number of Transitions for U.S. Agricultural Workers
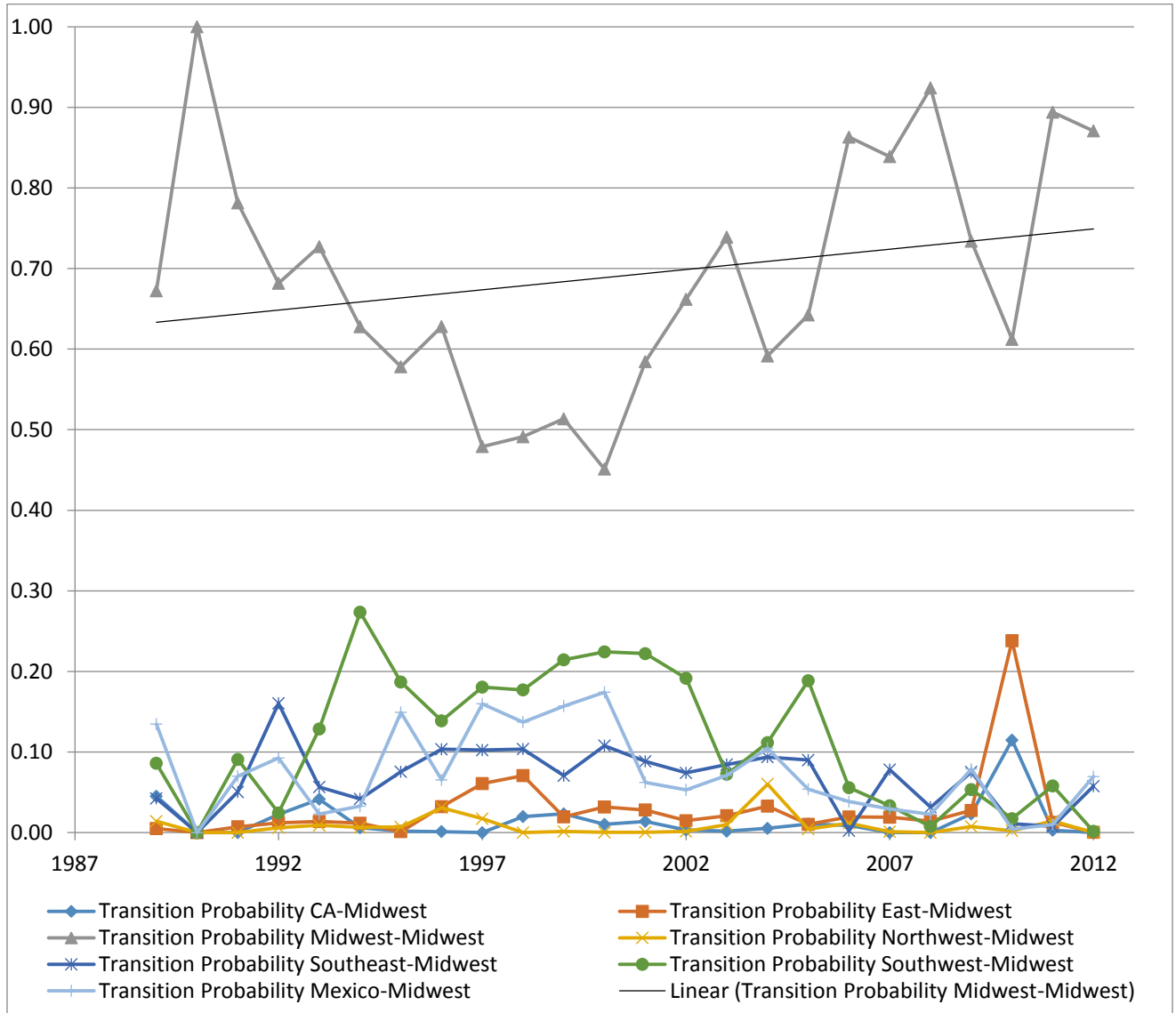
Figure 2. Transition Probabilities.   The Likelihood that an agricultural worker currently employed in California (CA) was employed in a given region in the year prior to the survey interview. For example, Transition Probability East-CA is the probability that a worker currently employed in the agricultural sector in CA was employed at a job in the East region in the 12 months prior to the survey interview.
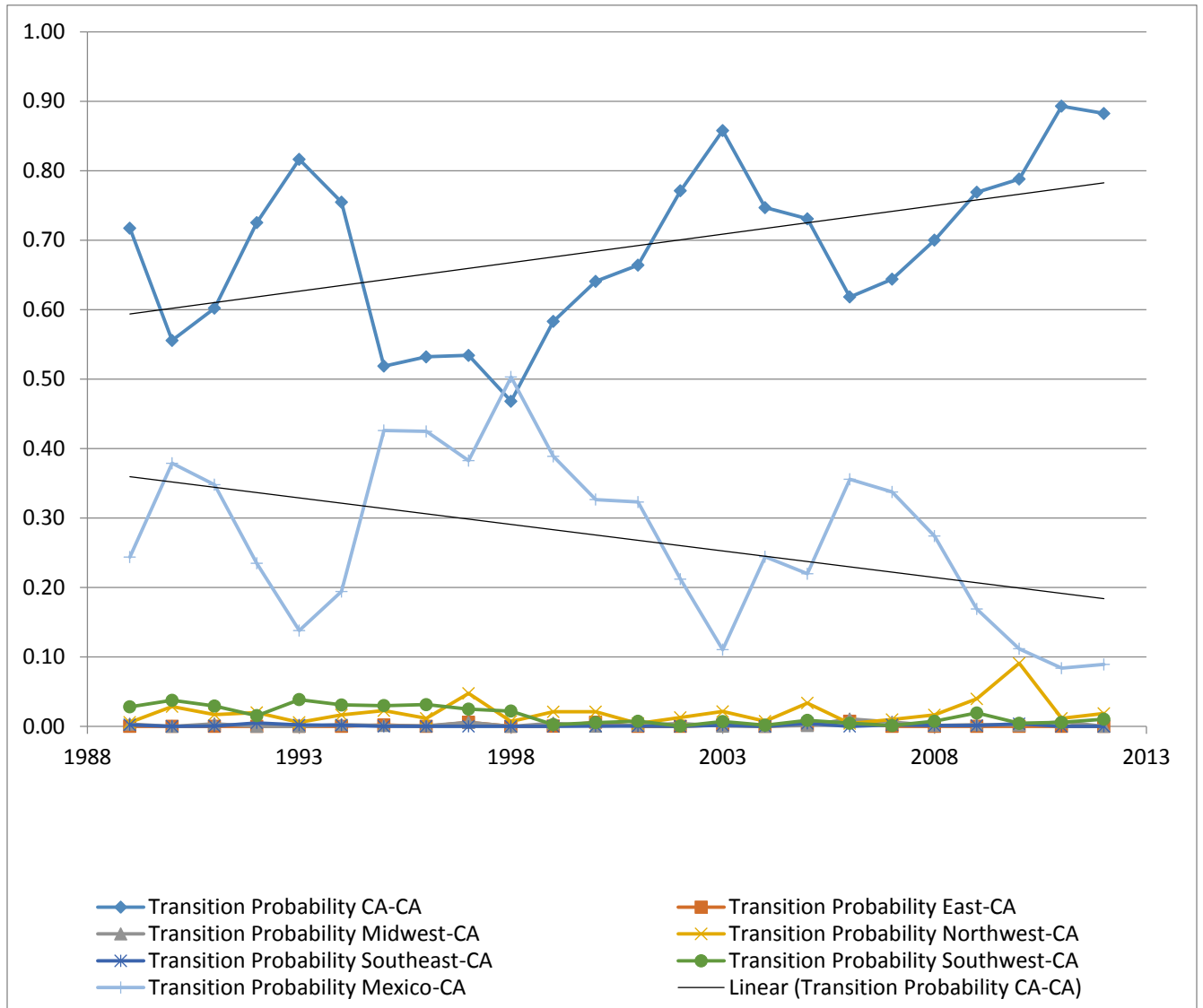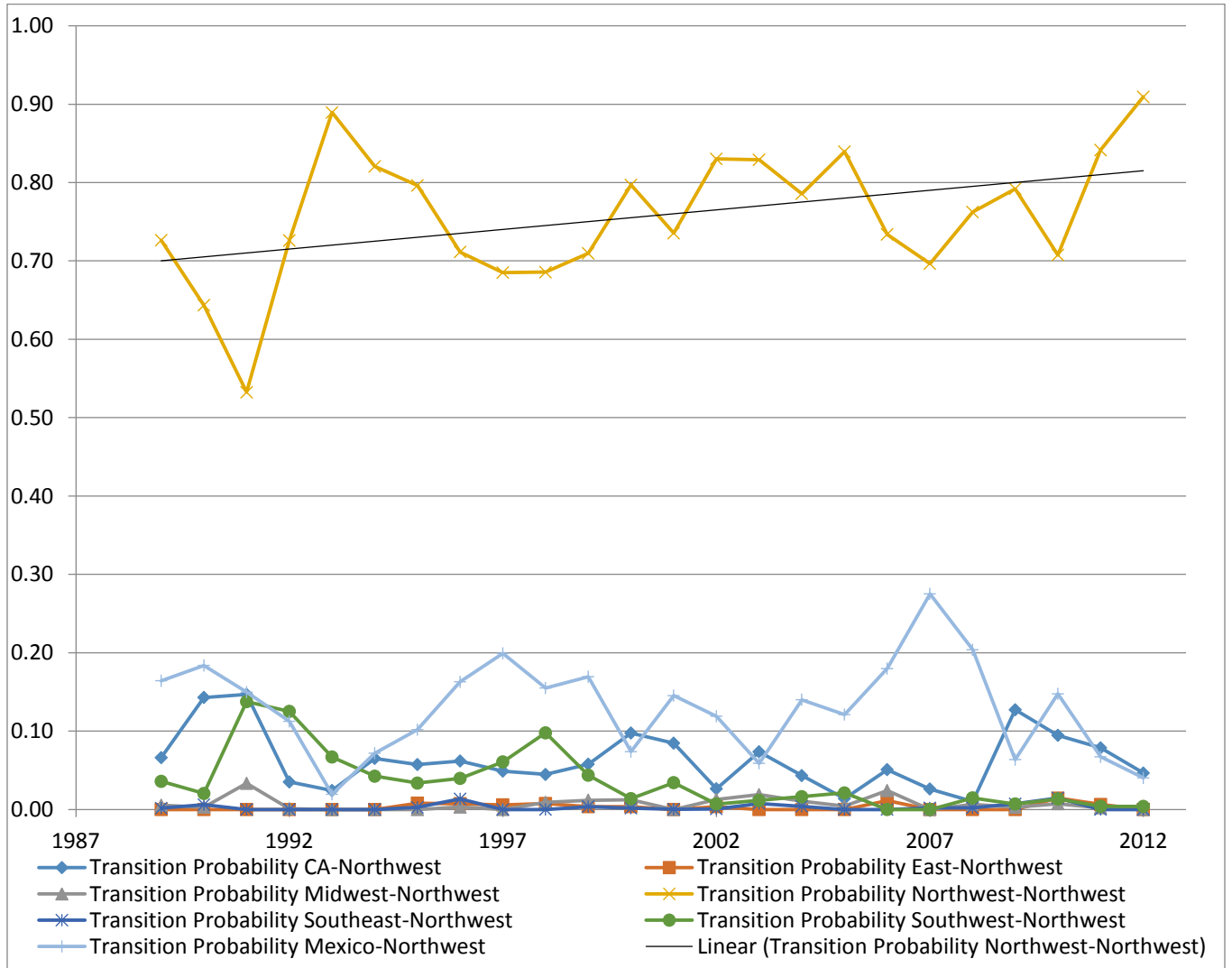
Figure 3. Transition Probabilities. The Likelihood that an agricultural worker currently employed in the East (North Carolina, Virginia, Kentucky, Tennessee, West Virginia, Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont, Delaware, Maryland, New Jersey, and Pennsylvania) was employed in a given region in the year prior to the survey interview. For example, Transition Probability Midwest-East is the probability that a worker currently employed in the agricultural sector in the East was employed at a job in the Midwest region in the 12 months prior to the survey interview.
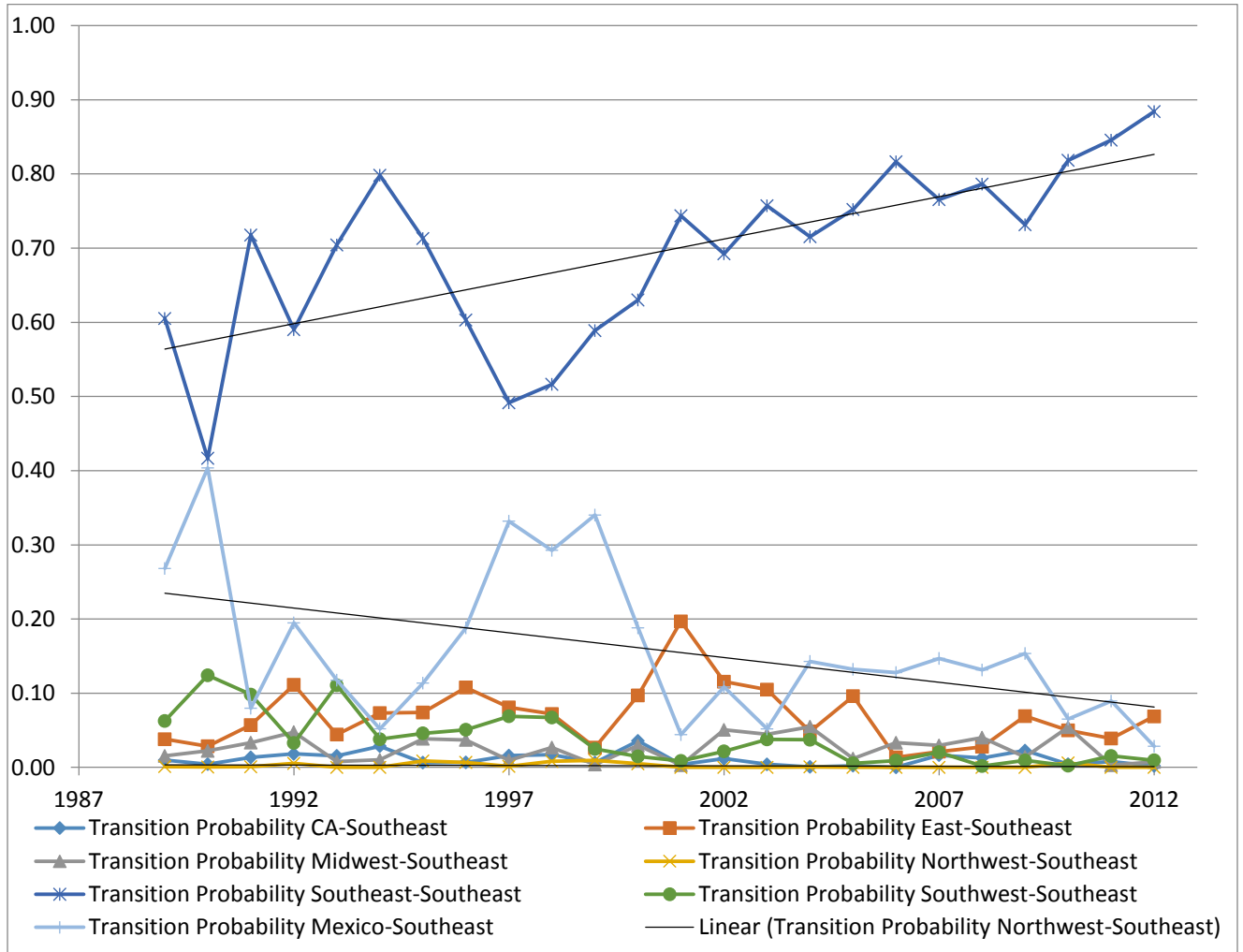
Figure 4. Transition Probabilities. The Likelihood that an agricultural worker currently employed in the Midwest (Illinois, Indiana, Ohio, Iowa, Missouri, Kansas, Nebraska, North Dakota, South Dakota, Michigan, Minnesota, and Wisconsin) was employed in a given region in the year prior to the survey interview. For example, Transition Probability CA-Midwest is the probability that a worker currently employed in the agricultural sector in the Midwest was employed at a job in CA in the 12 months prior to the survey interview.

Figure 5. Transition Probabilities. The Likelihood that an agricultural worker currently employed in the Midwest (Illinois, Indiana, Ohio, Iowa, Missouri, Kansas, Nebraska, North Dakota, South Dakota, Michigan, Minnesota, and Wisconsin) was employed in a given region in the year prior to the survey interview. For example, Transition Probability CA-Midwest is the probability that a worker currently employed in the agricultural sector in the Midwest was employed at a job in CA in the 12 months prior to the survey interview.

Figure 6. Transition Probabilities. The Likelihood that an agricultural worker currently employed in the Southeast (Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, Florida) was employed in a given region in the year prior to the survey interview. For example, Transition Probability CA-Southeast is the probability that a worker currently employed in the agricultural sector in the Southeast was employed at a job in CA in the 12 months prior to the survey interview.

Figure 7. Transition Probabilities. The Likelihood that an agricultural worker currently employed in the Southwest (Arizona, New Mexico, Oklahoma, Texas) was employed in a given region in the year prior to the survey interview. For example, Transition Probability CA-Southwest is the probability that a worker currently employed in the agricultural sector in the Southwest was employed at a job in CA in the 12 months prior to the survey interview.