Editor's Introduction to Articles on Missouri's Economic Growth

The Missouri Growth Project is an ongoing attempt by the Hammond Institute to understand the factors that may explain why Missouri's economic growth lags most other states. In the first two installments of the project, we published articles that examined the role of education and labor markets. In this edition of the *Missouri Policy Journal*, we present two more studies in the project. These studies investigate the changing demographics of the state and its non-domestic workforce to see how changes in these areas effect economic growth.

Mark Tranel, in his study "Missouri: Generation Transformation," examines the major trends in the demographic profile of Missouri's population. A snapshot of Missouri reveals a study in contrasts. The vast majority of residents live in urban areas, but land use is largely rural. Tranel's analysis reveals that there are a large number of rural towns in Missouri, a majority with between 200 and 500 residents. Missouri also ranks second in the country in number of farms. The problem is that "the population in Missouri's rural areas has been at best stable," Tranel notes, "but many rural counties in Missouri are losing residents." This may not be surprising, but it raises important policy issues: How should policy at the state level deal with communities that are shrinking? Should they be afforded the same state resources or should there be some consideration for determining how to relocate these rural residents? Neither of these are easy questions to answer, especially since "small-town life is still a prominent lifestyle in Missouri."

The shift from an agrarian economy to a more urban one is not unique to Missouri. But Missouri's urban areas are not attracting residents like other urban areas are. Moreover, Missouri's population is increasing at a slower pace relative to other states. Using 2010 Census data, Tranel points out that Missouri is the 18th most populous state, down from the 7th most populous state in 1910. He ascribes a large part of this relative decline in population to the fact that what population increase there is in Missouri stems from natural increases and not migration. In other words, Missouri—and its urban areas—are not a magnet attracting outsiders. And the data for total net migration—the migration of individuals from elsewhere in the United States and from foreign countries to Missouri less the number of Missourian's leaving the state—do not favor the state. The dynamics of net migration place Missouri as a state with one of the slowest growing populations in the country.

An outcome of this urban-rural dynamic is the fact that, as Tranel argues, "high poverty is more often a rural issue than an urban one." His analysis shows that those counties classified as "high-poverty" counties tend to be rural, tend to be concentrated in south-central Missouri, and have the characteristic of also having relatively low levels of educational attainment. For example, he finds that, using data from 2010, 56 percent of adults in rural Missouri did not complete or completed only high school, while the same is true for only 37 percent of adults in urban Missouri. In other words, adults in rural Missouri are, on average, more likely to have only a high school diploma or less compared to urban dwellers. Since it is widely known that education and income are highly correlated, this lack of education in rural Missouri is an impediment to economic growth.

The make-up of this population also is changing. Today's average Missouri resident tends to be older. The former trend is not totally inconsistent with national trends, though it's more pronounced in Missouri: The number of children and youths (aged 19 years and younger) has declined in Missouri while the number of senior adults (aged 65 and older) has increased. Nationally the data show a faster growth in senior adults relative to children, but not a negative growth in youths. Tranel also finds that the average Missourian tends to be white, with the second largest group African American. While this distribution is not wildly unlike the national averages, Missouri is much less ethnically diverse that the nation: The percent of the Missouri population that is Asian or Hispanic is lower than the national average.

These vignettes of Missouri are not of recent origin but reflect trends over the past fifty years. Missouri's population has grown slower than the national average. Its population is getting older. And while Missouri's population has become more diversified—both racially and by origin of birth—over the past fifty years, it has done so much slower than the nation. And the relocation of the population in Missouri, from rural to urban areas, Tranel notes that "the data show that Missouri maintained its rural character to a greater degree even though most of the population movement was to urban areas."

So what to make of all this? Tranel points to several issues that may arise because of these trends. One is the changing age structure of the workforce. With an aging population, fewer individuals will be "aging into" the workforce. In other words, fewer workers. If the trend of Missouri being a low-education state continues, the combination of these two forces means a less productive workforce in the future. That translates into a lower standard of living for

Missouri residents. It also translates into increased pressure on social programs, especially those for the elderly.

Adriano Udani tackles the issue of trying to explain productivity of Missouri's workforce by examining the variation in foreign labor certification across Missouri counties. His study, "The Best of Both Skills: U.S. Immigration, Work Visas, and Local Labor Shortages in Missouri," looks at how personal income and employment across Missouri counties is related to the mix of so-called high-skilled and low-skilled migrant labor. It turns out that "economic productivity in Missouri is attributed to having a mix of high and low-skilled workers, and not solely one or the other."

The distinction between "high-skilled" and "low-skilled" immigrant labor is often made by labor market certifications; that is, between H1-b and H2-b work visas, respectively. H1-b visas are for immigrants who federal authorities deem as possessing a specialty skill. This means that they work in areas requiring a college education or its equivalent, or have experience in the specific area. Workers with H1-b visa status often work in areas such as Science, Medicine and Healthcare, Education, Biotechnology, and Business Specialties. Immigrant workers with the H2-b status gain temporary admission to the United States most often to work on a one-time, seasonal, peak load or intermittent basis in the forestry, landscaping, hospitality, construction, or outdoor amusement industries. While no ceiling exists for awarding H2-b visas, there is a limited supply of H1-b visas. This has increased the competition by employers over skilled labor in recent years, particularly in metropolitan areas.

Missouri had nearly 12,700 H1-b certifications in 2016, well above the national median. In that year there were almost 2,800 H2-b certifications, also above the national median. Over the period from 2002 through 2018, the growth in the H1-b workforce in Missouri was faster than the growth of H2-b workers. These data indicate that the high-skilled workforce of immigrants in Missouri is not only larger in absolute size, but also has increased at a faster rate. Not only do the two groups have different growth dynamics, their geographical dispersion is much different. Udani finds that over the 2002-2018 period, St. Louis City has the largest proportion of H1-b workers, a little over 17 percent of the total for the state. For H2-b workers, Taney County—home to Branson—has the largest concentration of workers (about 6 percent). These figures indicate how geographically different the two classes of workers are: H1-b workers tend to be concentrated in the metropolitan areas of the state,

while H2-b workers are more spread out, tending to work in areas adjacent to cities or in more outlying areas.

This geographic pattern of foreign-labor certifications is explained in part by work skills. That is, of the H1-b certifications in 2016, computer science occupations received the most certifications, and these jobs tend to exist in metropolitan areas. "H1-b jobs," notes Udani, "are also found in higher education, research, and healthcare, which pulls them toward the areas with colleges, universities, hospitals, and health-related organizations."

How has the certification of immigrant workers affected the Missouri economy? Udani points to several results from his analysis. First, his results "dispel the notion that higher economic productivity is solely attributed to high-skilled immigrant workers." Udani's analysis indicates that "across a variety of industries, counties with the most foreign labor certifications, regardless of skill level, also had higher per capita employment." This is important, for it suggests that economically successful counties have a track record of attracting both high- and low-skilled immigrant workers. His point is that "H2-b visa holders work in industries that not only support and facilitate local commercial interests, but also take part in creating vibrant and stable communities in which Missourians—and others from outside the state—want to live."

Second, Udani argues that "political and community leaders must strive to intentionally create an immigrant workforce with a mix of skill levels, rather than exclusively recruiting immigrants in STEM fields." Attempts to stigmatize or otherwise foster a hostile environment for immigrant workers, especially those with H1-b certification, will harm the state's economic prospects. In the final analysis, Udani concludes that "to strengthen the Missouri economy in the years to come, policymakers and community leaders must strive to ensure that current and emerging regional economies have the capacity to support the welfare of immigrant workers, regardless of skills."

R.W. Hafer

Professor of Economics Director, Center for Economics and the Environment Hammond Institute Lindenwood University