Economic Growth Potentials and Race/Ethnicity in Tennessee:
Diversity and Economy

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ABSTRACT

This article establishes relationships between racial/ethnic diversity, segregation, and employment-by-industry-types in the counties of Tennessee. Using the American Community Survey and NAICS data, diversity scores, entropy indices, and location quotients for major-employment are computed for Tennessee's 95 counties. Cartographic analysis, followed by correlations, principal components and regression analyses help establish the above relationships. The north-east and west-central regions of Tennessee have concentration in primary-sectors of economy whereas counties with concentration in creative-class economy (e.g., Williamson, Davidson) have higher presence of Asians, and with greater human capital (education). Simultaneously, these are also the most segregated despite being diverse. Counties with higher diversity and higher share of African-Americans are segregated, despite having employment concentration in diverse set of industries. Enormous growth potentials exist in the sectors of education and health-care which can help Tennessee revitalize its economy.

KEYWORDS

American Community Survey, Diversity Score, Entropy Index, Location Quotients, NAICS

INTRODUCTION

Over last few decades, the American Southeast has gained in overall population and racial/ethnic diversity. This increase has been accompanied by significant growth in the share of non-Black minorities in the southeast, which also led scholars to name this region as *The New South* (McDaniel & Drever, 2009; Mohl 2003, 2007; Smith & Furuseth, 2004; Strait & Gong, 2015; Winders, 2011a, 2011b; Wilson, 2010).[1] Much of the growing diversity and economic growth in this region has happened because of the 1970s industrial restructuring in the Midwest, followed by the signing of the North American Free Trade Agreement (NAFTA) which worked to the advantage of the U.S. Southeast (Alvarez & Mossay, 2006; Cobb, 2005; Florida, 2012; Furuseth & Smith, 2006, Furuseth et al., 2015; Perreira, 2011; Sharma, 2016a; Strait & Gong, 2015). The states that gained the most from the new manufacturing and foreign direct investments include Tennessee, Alabama and the Carolinas. Several car manufacturers (foreign and domestic) shifted their production and assembly plants to the southern states (e.g., the Nissan and the Volkswagen in Tennessee, Mercedes-Benze in Alabama and South Carolina, Kia in Georgia, and Hyundai in Alabama). The economic growth attracted people

with required technical skills, which eventually attracted other types of diversity (e.g., see Florida's 2003, 2004, 2012 discussions on the three Ts and diversity).

Tennessee, one of these southern states, has also gained in its racial/ethnic diversity, even though a large share of its diverse population resides in major urban areas such as Nashville, Memphis, Knoxville, Chattanooga, and Johnson City. Tennessee is interesting due to the enormous contrasts in racial/ethnic diversity as one goes from east Tennessee (very white) to west Tennessee (very diverse), along with wide variations in rural versus urban landscapes. While scholars have suggested that vibrant economy is essential for attracting diverse population and vice-versa (Florida, 2003, 2004; Sharma, 2016a), it remains to be explored which economic sectors, in particular, are associated with gain (or loss) of racial/ethnic diversity and entropy/segregation. Prior research has suggested over-representation of Asians in professional and technical occupations, for Hispanics in craft service and labor industry, and for African Americans in office/clerical work (Coe et al., 2012, Table 14.1, p. 438). These could potentially explain varying levels of diversity in Tennessee's urban as well as rural counties that shape its economic (and social) landscapes and vice-versa. Further, the cultural, historical and socio-economic attributes of Tennessee and the U.S. Southeast are quite different from other regions of USA.

This paper examines the relationships between concentration of employment in major industries in the counties of Tennessee and their racial/ethnic diversity and segregation, using county as the scale of analyses. This paper answers two important questions: What types of industries associate with greater (or lesser) levels of racial/ethnic diversity and segregation in the counties of Tennessee? What industries/economic sectors have a potential for growth? To answer these questions, I follow the widely accepted methods of correlations, principal components and regressions analyses to answer the first question. Subsequently, I also use visual analyses of industry-based employment location quotients and the diversity and segregation maps to further explain these relationships. Finally, a simple ranking analyses of county-scale location quotients for employment in major industries provide clear perspectives into the second question.

I use the mid-year of American Community Survey (ACS) five-year (2008-2012) estimates data as a point-in-time analyses of these relationships. By doing so, I empirically utilize Florida's (2003, 2004, 2012) *Creative Class* theory to explore these relationships i.e., how well the relationships between county-scale diversity, segregation and employment concentration in specific industry-types within Tennessee get explained due to their variation in human capital assets (education serves as a proxy for human capital assets), ACS estimates data are used to compute diversity scores and Theil entropy indices[2] for all the 95 counties of Tennessee. The location quotients are computed for employment-by-major industries, using the data from the North American Industry Classification System (NAICS) for 2008-2012. Later I conduct a cartographic analysis of industry-based employment location quotients, diversity and intermixing, followed by correlations, principal components and regression analyses to explore the relationships between these statistics. This analysis also identifies the regions within Tennessee with potentials for future economic growth – useful information for investors and regional economic planners. Eventually, this analysis might be conducted for the entire southeastern region or the entire U.S. However, this paper specifically takes a case-study approach by focusing on Tennessee only.

The rest of the paper follows in four sub-sections. The literature review summarizes major literature linking economy and diversity in the Southeast, using the theories of the *creative class* and *human capital* that explains and links the region's economic growth. Research design discusses the study area, data sources and the methodology. Analysis discusses major findings from cartographic analyses of diversity, intermixing and employment patterns, followed by the results from the principal components and regression models. It also summarizes the broad patterns of concentration of employment-by-major industries, and the scope for investments to improve the state's economy. Finally, the conclusion highlights the important contributions of this research.

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