

# Foreign Direct Investment within the Southeastern United States: Micropolitan Statistical Areas and the Labor Force

W. Frank Thompson, Jr., [wfthompson@troy.edu](mailto:wfthompson@troy.edu)

## Abstract

Since 2000 three of the five foreign-owned automotive assembly plants locating within the United States were placed within the Southeastern United States (Reid 2014). Other companies have moved production back to the United States to address demand flexibility within the supply chain while reducing inventory costs and lead times (McIvor 2013, Holweg & Helo 2014). The site location process, important to the companies and communities within this region, involves numerous factors and decisions. Marketing communities as potential sites for foreign investment involves understanding the company's needs. For companies, it is about the supply chain; for communities it is about jobs. For both the focus is product development. The nonmetropolitan communities provide potential locations thereby strengthen the supply chains for these companies and reducing costs. Proximity to like industries, interstate systems, and labor force are three factors companies state are important during the site selection process, with labor force being paramount (Adams 2016, Klier & McMillen 2008). Have these factors truly affected these supply chain decisions? What does the work force in the Southeastern United States offer that has attracted these investments and how can communities identify and address work force deficiencies to build community marketability?

In 2003 the Office of Management and Budget (OMB) introduced the designation the micropolitan statistical area helping to distinguish between metropolitan statistical areas and smaller areas that also have a population core (Brown, Cromartie & Culcsar 2004). Micropolitan statistical areas are a county/parish with one community with a population greater than 10,000 but less than 50,000 and adjacent territory that has social and economic ties to the core community (OMB 2013). Micropolitan statistical areas are different from the other two statistical areas recognized by the OMB. Metropolitan statistical areas have at least one core community with more than 50,000 population and the same adjacent integration requirements. Non-core based statistical areas are counties/parishes without a core community (OMB 2013).

Academic research on micropolitan statistical areas is limited (Davidsson & Rickman 2011). There have been studies of micropolitan statistical areas within individual states but few studies with a regional scope. A review of literature found

little research on micropolitan statistical areas with regards to international trade and supply chain development. The preferences of Japanese manufacturing have resulted in companies locating within smaller cities (Reid 2014). This research focuses on the smaller cities comprising micropolitan statistical areas within Southeastern United States. The Southeastern United States has been defined in a variety of combinations including simply an area centered on Chattanooga (Adams 1902) and in more current literature and sources ranging from nine to fourteen states (e.g., Birmingham & Avise 1986, Ingle 2007, Glaeser & Tobio 2008, National Geographic 2017). This paper incorporates the 12-state region as reported by the United States Bureau of Economic Analysis (2017). The twelve states are listed in Table 1.

The Southeastern United States includes 150 Micropolitan statistical areas comprised of 192 counties/parishes (U.S. Census Bureau 2013). Table 1 presents the distribution of the micropolitan statistical areas in the Southeastern United States and the number of counties/parishes within the micropolitan statistical areas. While counties/parishes may not be ideal for urban and rural research, they are the smallest units for which comparative data are regularly available (Isserman 2005). Preliminary analysis of the region can be accomplished using existing data.

**Table 1: Micropolitan Statistical Areas in the Southeastern United States**

State	Micropolitan Statistical Areas	Number of counties/parishes within Micropolitan Statistical Areas
Alabama	9	10
Arkansas	14	17
Florida	7	7
Georgia	23	28
Kentucky	15	26
Louisiana	8	9
Mississippi	18	26
North Carolina	24	28
South Carolina	7	8
Tennessee	16	20
Virginia	4	5
West Virginia	5	8
<b>Southeastern US</b>	<b>150</b>	<b>192</b>

Source: U.S. Census Bureau, State-based Metropolitan and Micropolitan Statistical Areas Map, 2013.

This study addresses labor force, an important consideration for foreign investment and companies relocating to the United States (Deller, et al. 2001). An area's labor force is considered somewhat a fixed asset and can only be judged on the current situation (Zhang, Kinnucan & Gao 2016). Assessing the local labor force is

imperative for those marketing smaller communities with their recruitment efforts focusing on companies for which the labor force provides the best match for the locating companies' requirements (Jacobs 2012). This study also focuses on the importance of locating in proximity to other like companies. These multi-national corporations look to optimize production networks while securing access to local resources (McDermott 2014). International corporations may locate close to each other but they do not want to compete for labor (Reid 2014). The Southeastern United States has been successful in developing a multi-national corporation based automotive industry.

This planned study focuses on the micropolitan statistical areas in the Southeastern United States, incorporating secondary data from the years 2010 to 2016. Labor analysis will compare factors previously identified as important to multi-national companies such as unemployment rates, age, and wage rates (Kaneko and Nojiri 2008, Belderbos, Olffer and Zou 2011, Vias 2011). Additional variables utilizing census data will follow the method used by Klier and McMillan (2008) and include population density, education, and manufacturing employment levels. The study will incorporate data from credible information sources available for researching micropolitan statistical areas such as the US Census Bureau such as County Business Patterns and from the Bureau of Economic Analysis Regional Economic Information System (Lin, Chen & Kawamura 2016, Adams 2015 and Isserman 2005).

The presence of interstate highways and the proximity to other automotive manufacturing facilities will be included in comparing micropolitan statistical areas (Adams 2016, Klier & McMillen 2009). The study will also include the location of foreign automotive manufacturing firms within the Southeastern United States micropolitan statistical areas during this time period and compare these locations to the local labor markets.

## **References**

Adams, B. (2016) The employment impact of motor vehicle assembly plant openings. *Regional Science and Urban Economics*, 58 (May). p. 57-70.

Adams, C. C. (1902) Southeastern United States as a center of geographical distribution of flora and fauna. *The Biological Bulletin*. 3 (July). p. 115-131.

Belderbos, R., Olffen, W. V., and Zou, J. (2011) Generic and specific social learning mechanisms in foreign entry location choice. *Strategic Management Journal*. 32 (12). p. 1309-1330.

Benhabib, J. & Spiegel, M. M. (1994) The role of human capital in economic development: Evidence from aggregate cross-country data. *Journal of Monetary Economics*, 34. p. 143-173.

- Birmingham, E. & Avise, J. C. (1986) Molecular zoogeography of freshwater fishes in the Southeastern United States. *Genetis*. 113 (4). p. 939-965.
- Brown, D. L., Cromartie, J. B. & Kulcsar, L. J. (2004) Micropolitan areas and the measurement of American urbanization. *Population Research and Policy Review*. 23 (4). p. 399-418.
- Davidsson, M. & Rickman, D. S. (2011) U.S. Micropolitan Area Growth: A spacial equilibrium growth analysis. *The Review of Regional Studies*. 41 (2,3). p. 179-203.
- Deller, S. C., Tsung-Hsui, S. T., Marcouiller, D. W., English, D. (2001) The role of amenities and quality of life in rural economic growth. *American Journal of Agricultural Economics*. 83 (2). p. 352-363.
- Glaeser, E., & Tobio, K. (2008) The rise of the sunbelt. *Southern Economic Journal*. 74 (3). p. 630-643.
- Holweg, M., & Helo, P. (2014) Defining value chain architectures: Linking strategic value creation to operational supply chain design. *International Journal of Production Economics*, 147 (B). p. 230-238.
- Ingle, W. C. & Cohen-Vegel, L., & Hughes, R. (2007) The public policy process among Southeastern states: Elaborating theories of regional adoption and hold-out behavior. *The Policy Studies Journal*. 35 (4). p. 607-628.
- Isserman, A.M. (2005) In the national interest: Defining rural and urban correctly in research and public policy. *International Regional Science Review*. 28 (4). p. 465-499.
- Jacobs, A. J. (2012) Collaborative regionalism and foreign direct investment: The case of the Southern automotive core and the 'New Domestic'. *Economic Development Quarterly*. 26 (3). p. 199-219.
- Kaneko, J. & Nojiri, W. (2008) The logistics of just-in-time between parts suppliers and car assemblers in Japan. *Journal of Transport Geography*, 16 (3). p. 155-173.
- Klier, T. & McMillen, D. P. (2008) Clustering of auto supplier plants in the United States: Generalized method of moments spatial logit for large samples. *Journal of Business & Economics Statistics*. 26 (4). p. 460-471.
- Lin, J., Chen, Q. & Kawamura, K. (2016) Sustainability SI: Logistics cost and environmental impact analyses of urban delivery consolidation strategies. *Networks & Spatial Economics*. 16 (1). p. 227-253.
- McDermott, Michael C. (2014) Interstate competition in the US South for South Korean auto investments: A US perspective. *Asia Pacific Business Review*. 20 (1). p. 153-173.

McIvor, R. (2013) Understanding the manufacturing location decision: The case for the transaction cost and capability perspectives. *Journal of Supply Chain Management*. 49 (2). p. 23-26.

National Geographic. United States Regions. <https://www.nationalgeographic.org/maps/united-states-regions>. Accessed on June 14, 2017.

Office of Management and Budget (2013) Revised delineations of metropolitan statistical areas, micropolitan statistical areas, and combined statistical areas, and guidance on uses of delineations of these areas. OMB Bulletin No. 13-01.

Reid, N. (2014) The geography of Japanese direct investment in the U.S. automotive sector: A review of the state of knowledge and some ideas for future research. *Geographia Polonica*. 87 (3). p. 383-400.

United States Bureau of Economic Analysis (2014) Percent Change in Real GDP by State in the Southeast Region, 2014. [https://www.bea.gov/newsreleases/regional/gdp\\_state/2015/gspSE\\_glance.htm](https://www.bea.gov/newsreleases/regional/gdp_state/2015/gspSE_glance.htm). Accessed May 1, 2017.

United States Census Bureau (2013) State-based Metropolitan and Micropolitan Statistical Areas Maps. <https://www.census.gov/geo/maps-data/maps/statecbsa.html>. Accessed June 14, 2017.

United States Census Bureau (2016). Geography Area Series: County Business Patterns-2015 Business Patterns. <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>. Accessed May 31, 2017.

Vias, A. (2011) Micropolitan areas and (counter) urbanization processes in the US. *Spaces & Flows: An International Journal of Urban & Extra Urban Studies*. 1 (3). p. 115-126.

Zhang, L., Kinnucan, H., and Gao, J. (2016). The economic contribution of Alabama's automotive industry to its regional economy: Evidence from a computable general equilibrium analysis. *Economic Development Quarterly*. 30 (4). p. 293-315.

**Keywords:** *micropolitan statistical areas, foreign direct investment, Southeastern United States, labor force*

**Relevance to Marketing Educators, Researchers and Practitioners:** This research brings attention to the micropolitan statistical areas and the potential for developing supply chains within these areas. Researchers, business supply chain professionals and community leaders can use this research to identify sites within proximity to markets providing the labor characteristics best suited for foreign companies and companies relocating to the United States. The study will identify strengths in growing communities that other communities may choose to emulate to address deficiencies thereby developing a more marketable product. One possible

area may be the importance of human capital in labor force and long-term commitment in improving the local labor force (Benhabib & Spiegel 1994).

### **Author Information**

W. Frank Thompson, Jr. is an Assistant Professor of Marketing at Troy University.

**TRACK:** Global Marketing