Noah Brannon

June 14, 2020

ECON 482 Final Project

Professor Pietrykowski

ECON 482 FINAL PROJECT

The Minneapolis-St. Paul-Bloomington MN-WI Metropolitan Statistical Area (MSA) recovered from the 2008 Great Recession and grew quite significantly. The MSA’s GDP grew over 20% from 2009 to 2018, as well as gaining hundreds of thousands of jobs from 2009 to 2018. The MSA also grew farther apart from the rest of the United States when it comes to educational attainment and Median incomes regardless of education level are higher in the Minneapolis-St. Paul-Bloomington MN-WI Metropolitan Statistical Area. However, there are still some negatives, that grew worse since the Great Recession. More whites graduate high school than blacks and more whites have a bachelor’s degree than blacks do in the MSA. Racial Segregation increased or stay the same for the MSA since 2009 as well, according to the Dissimilarity Index (which measures the demographic measure of the evenness with which two groups are distributed across component geographic areas that make up a larger area) segregation stayed at the same level since the recession.

**Introduction**

The origins of the MSA began in 1819, Fort Snelling was established by the United States at a confluence of the Minnesota and Mississippi Rivers. Two towns were founded on both sides of the fall. In the East was Saint Anthony and in the west was a city known as Minneapolis. The two cities merged in 1872 under the name Minneapolis. Some of the original industries in the Minneapolis-St. Paul-Bloomington, MN-WI MSA were saw-milling, flour industries, and hydroelectricity power plants (this MSA had the first central hydroelectric power plant in the United States). Although saw milling is no longer a leading industry today. The Minneapolis-St. Paul-Bloomington, MN-WI MSA experience its highest population growth in the 1950s and is currently having its highest population growth spurt since the 1950s. Today leading industries in the Minneapolis-St. Paul-Bloomington, MN-WI MSA is the Manufacturing industry spearheaded by 3M and Professional Business and Services industry led by UnitedHealth Group and Target Corporation, and flour milling led by General Mills is still a pretty big force in the area. The Minneapolis-St. Paul-Bloomington, MN-WI MSA does conform to the idea of location theory, which asks why economic activities are located and why. This area has always been a rich manufacturing area, with lots of natural resources like iron ore, granite, manganese, and many others. The Mississippi River also flows directly through Minneapolis as well. Minneapolis became a hub for manufacturing because of the number of natural resources the area has easy access from and to Minneapolis because of the Mississippi River. In time, industries went from saw-milling to companies like 3M, which makes a plethora of stuff we use today like band-aids.

**OVERALL ECONOMIC CONDITIONS FROM 2009-2018**

Overall, economic conditions increased in the Minneapolis-St. Paul-Bloomington, MN-WI MSA since 2009. Real GDP (total economic output) and per capita GDP both increased substantially from 2009 to 2018 in the MSA.

**(Data from the Bureau of Economic Analysis)**

The major industries that led to the highest GDP growth in the MSA were the Finance, insurance, real estate, rental, and leasing (FIRE) industry, the Manufacturing industry, and the Professional and Business services industry. The transportation, information, and wholesale trade was previously not their own industry in 2010 and were categorized into their own industry in between the period. All industries that were recorded in 2009, had their Real GDP increase by 2018.

**(Data from the Bureau of Economic Analysis)**

The Minneapolis-St. Paul-Bloomington MN-WI MSA gained over 200,000 jobs from 2010 to 2018. However, all major industries gained jobs besides the Healthcare Support occupations sector, Life, Physical, and Social Science occupations sector, and the Office and Administrative Support occupations sectors. Leading sectors by employment gain by percentage were the Personal Care and Service occupations sector and the Community and Social Services occupations sector. The sector that gained the most net jobs was also the Personal Care and Service occupations sector. (Chart on Page 4)

**(Data from the Bureau of Labor Statistics)**

These economic conditions show that the Minneapolis-St. Paul-Bloomington MN-WI MSA, as a whole, recovered from the 2008 Recession quite considerably. The data here was from the Bureau of Economic Analysis and the Bureau of Labor Statistics and showed that the Minneapolis-St. Paul-Bloomington MN-WI MSA increased both its Real GDP and Per Capita GDP substantially. Every single major industry also had an expansion of GDP growth as well. The MSA also gained hundreds of thousands of jobs, all of which are great indicators of recovery and then an expansion of economic growth from the 2008 Great Recession in the region. Regarding Economic Development: “It is quantitative with respect to the measured benefits it creates through increasing wealth and income levels, the availability of goods and services, improving financial security, and so-on. And it is also qualitative in creating greater social/financial equity, in achieving sustainable development, and in creating a spread in the range of employment and gaining improvements in the quality of life in a region.” (Stimson,2002)

**INCOME AND EMPLOYMENT**

Real Median income is a better measure of showing income per person, rather than per Capita GDP. In the Minneapolis-St. Paul-Bloomington MN-WI MSA Real Median family income was higher than the United States, as a whole regardless of education level.

**(Data from the U.S. Census Bureau)**

The Gini Index is a statistical dispersion intended to represent the income or wealth distribution of a nation’s residents and is the most commonly used measurement of inequality. The Minneapolis-St. Paul-Bloomington MN-WI MSA had a lower Gini Index score than the United States did as a whole from the years 2006-2010 and 2014-2018. Which means income in the Minneapolis-St. Paul-Bloomington MN-WI MSA is more evenly divided in the MSA among residents than it is in the United States.

**(Data from the U.S. Census Bureau)**

Now onto employment, using location quotient analysis, you can determine what occupations are basic or export-orientated occupations and which are import-substitution occupations (occupations that need to buy imports to meet regional demand). The basic or export-orientated occupations include the Management occupations sector, the Business and financial operations occupations, Computer and mathematical science occupations sector, the Architecture and engineering occupations sector, the Life, physical, and social science occupations sector, the Community and social services occupations sector, the Legal occupations sector, the Arts, design, entertainment, sports, and media occupations sector, the Personal care and service occupations and the Production occupations sector, all which had a location quotient of greater than 1. The import-substitution occupations were the Education, training, and library occupations sector, the Healthcare practitioner and technical occupations sector, the Healthcare support occupations, the Protective service occupations sector, the Food preparation and serving related occupations sector, the Building and grounds cleaning and maintenance occupations sector, the Sales and related occupations sector, the Office and administrative support occupations, the Farming, fishing, and forestry occupations, the Construction and extraction occupations sector, the Installation, maintenance, and repair occupations and the Transportation and material moving occupations. All of these sectors had a location quotient of under 1 which means they have to buy imports to keep up with regional demand. All data is from the **Bureau of Labor Statistics**. A **Shift-Share Analysis** determines what portions of regional economic growth or decline can be attributed to national, economic industry/occupational mix, or regional factors. In terms of job growth, the Minneapolis-St. Paul-Bloomington MN-WI MSA grew from 2009 to 2018. In 17/20 of the occupation sectors, job growth was positive. The three negative sectors were the Protective service occupations sector, the Life, physical, and social science occupations sector, and the Office and administrative support occupations sector. The negative job growth in these three sectors was due to a loss in occupational mix. One sector did not lose or gain any jobs that were the Sales and related occupations sector. For nine sectors including the Business and financial operations occupations, most of the job growth was due to the national share indicator, which means the sector gained most of their jobs from national trends. Other sectors like the Personal care and service occupations sector saw job growth from the occupational mix indicator, which means that. Not one sector saw most of its job growth from the regional share indicator in the MSA. All data was collected from the U.S. Census Bureau

Income and Employment were higher than United States averages in the MSA, which once again shows a strong recovery for the MSA. The Gini Index, which measures income inequality is also lower in the MSA than it is in the United States. Rising income inequality has become a major problem for the United States since the 2008 Great Recession. The MSA appears to have a better grasp on the issues. Only three major occupational sectors recorded a loss of jobs in the MSA as well from 2009-2018.

**Network Analysis**

The MSA’s leading employers, the Manufacturing sector, the Education and Health Services, the Financial Activities sector, and the Professional and Business Activities sector, do make up the majority of people who are on the Minnesota Chamber of Commerce’s Board. (See Charts on Pages 8 & 9) This is common for many large cities/regions to have most of their chamber of commerce board members to be equal or approximate to the number of people employed in an occupational sector. (de Socio, 2010)

**(Data from the Minnesota Chamber of Commerce)**

**Human Capital**

Educational Attainment in the Minneapolis-St. Paul-Bloomington MN-WI MSA showed that the MSA had more residents who have obtained an associate degree or higher than United States residents have as a whole. Also, the MSA has fewer residents that had a final level of education who had completed some college, but with no degree, high school graduate (includes equivalency), 9th to 12th grade with no diploma, and less than a 9th-grade level than the United States residents did as a whole. However, the Minneapolis-St. Paul-Bloomington MN-WI MSA does have more whites obtaining high school diplomas and bachelor’s degrees than blacks do compare to the United States as a whole, by quite a substantial margin, which is a source of inequality in the region. (See Charts on pg.10) Economic growth has typically occurred when there are higher levels of human capital. Although the studies are limited to the past few decades, even developing countries with higher levels of human capital are starting to catch up with the rest of the world. (Faggian and McCann, 2009)

**(Data from U.S. Census Bureau**)

**Innovation**

The Minneapolis-St. Paul-Bloomington, MN-WI MSA had a patent density trend that increased from every 1 patent for every 1,186 residents in 2010 compared to 1 patent for every 1029 residents in 2015. The Minneapolis-St. Paul-Bloomington, MN-WI MSA compared well compared to the United States overall when it comes to patent density, in 2015, for every patent there were 2033 residents in the United States compared to Minneapolis-St. Paul-Bloomington, MN-WI MSA in 2015, where for every patent there were 1029 residents. A link to high patent density may be the effect of a high education attainment rate.1

**(Data from U.S. PATENT AND TRADEMARK OFFICE)**

**Diversity**

The index of dissimilarity is a demographic measure of the evenness with which two groups are distributed across component geographic areas that make up a larger area. The Dissimilarity Index grew for 3/6 of the racial pairings in Hennepin County, Minnesota, (the county for Minneapolis) from 2010 to 2018, but by not much. One pairing the White-Asian pairing remained the same at .5. This means racial segregation increased in the county for those racial pairings in that period, which includes the White-Black pairing and the White-Hispanic pairing. The two racial pairings that decreased in the county were the Black-Hispanic pairing which decreased by .01 in the period and the Asian-Hispanic pairing which decreased by also .01. So, you could say in the period measured racial segregation did not move much in Hennepin County, Minnesota. (Chart & Key on Page 12)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **White-Black (1)** | **White-Asian (2)** | **White-Hispanic (3)** | **Black-Asian (4)** | **Black-Hispanic (5)** | **Asian-Hispanic (6)** |

**Key for Dissimilarity Index**

**(Data from the U.S. Census Bureau)**

**Conclusion**

In conclusion, the Minneapolis-St. Paul-Bloomington MN-WI MSA recovered from the 2008 Great Recession and expanded. Overall economic conditions in the MSA including Real GDP, and GDP per Capita increased. Real Median Income, regardless of education level was higher for Minneapolis-St. Paul-Bloomington MN-WI MSA residents then United States residents did as a whole. Hundreds of thousands of jobs were added since the recession, however, three of the twenty major occupational sectors recorded a loss of jobs since the 2008 Great Recession. The Gini index, a statistical dispersion intended to represent the income or wealth distribution of a nation’s residents and is the most commonly used measurement of inequality, decreased in the MSA from 2010 to 2018, which means income inequality decreased since the recession. Educational Attainment was higher for those residents in the MSA who have obtained an associate degree or higher more than United States residents have and as well has fewer residents that’s final level of education was: have completed some college, but with no degree, high school graduate (includes equivalency), 9th to 12th grade with no diploma, and less than a 9th-grade level than the United States residents did, which shows that the region has made education a priority, which can lead to higher income levels. Also, the Minneapolis-St. Paul-Bloomington, MN-WI MSA compared well compared to the United States overall when it comes to patent density, in 2015, for every patent there were 2033 residents in the United States compared to Minneapolis-St. Paul-Bloomington, MN-WI MSA in 2015, where for every patent there were 1029 residents. A reason for the higher patent density in the MSA could be because of the higher educational attainment in the MSA compared to the United States. However, there were still some injustices that have happened since the 2008 Great Recession. The Dissimilarity Index, which measures the evenness with which two groups are distributed across component geographic areas that make up a larger area, did not move much since the recession, which shows that the MSA stayed around at the same levels of segregation. As well as the Minneapolis-St. Paul-Bloomington MN-WI MSA does have more whites obtaining high school diplomas and bachelor’s degrees than blacks do compare to the United States as a whole, by quite a substantial margin, which is a source of inequality in the region. All data that was presented were from the U.S. Census Bureau, the Bureau of Economic Analysis, the Bureau of Labor Statistics, the Minnesota Chamber of Commerce, and the U.S. PATENT AND TRADEMARK OFFICE.

References

* Socio, Mark De. “Marginalization of Sunset Firms in Regime Coalitions: A Social Network Analysis.” *Regional Studies*, vol. 44, no. 2, 2010. doi:10.1080/00343400903095246.
* Faggian, Alessandra, and Philip Mccann. “Human Capital and Regional Development.” *Handbook of Regional Growth and Development Theories*, 2009. https://doi.org/10.4337/9781848445987.00015.
* Stimson, Robert. “Perspectives on Regional Economic Development.” *Regional Economic Development*, 2002, 1–51. https://doi.org/10.1007/3-540-34829-8\_1.