



ISSN: 1934-4244

The Auto Industry and Consumer Ethnocentrism in Michigan

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Abstract

In this study I hope to discover whether or not there are in fact signs of ethnocentrism within the automobile industry in the state of Michigan. Throughout the study I will be looking at a few different variables. One of these variables is the per capita income in the state measured on a county by county basis. I will also be noting the location of the twelve different vehicle assembly plants located throughout Michigan. A third variable is the number of car dealerships in the state. By looking at these variables in comparison to the number of vehicles registered in 2012 and whether or not they were produced by a foreign auto maker or a domestic auto maker I found that there was evidence showing that there was indeed a tendency for consumers in Michigan to own cars that were made by American auto makers.

History of the Auto Industry in Michigan

The auto industry has been around for over 100 years. In its beginnings, the majority of automobile manufacturers had begun as bicycle manufacturers. In the 1880's, bicycles had reached the peak of their popularity and this spurred inventors to start developing vehicles that were self-propelled (Dreyer 2009). The first automobiles were developed in the early 1890's. The company's that began producing cars for the public market actually produced more electric cars in the very beginning than gas powered vehicles. Once internal combustion engines were improved and no longer needed to be cranked to start, however, this trend quickly changed and the production of electric cars started to fall (Dreyer 2009).

Contrary to popular belief, the automobile industry was, in fact, not started in Michigan. By 1905, however, "Michigan had solidified its claim as the central location of the industry" (Dreyer 2009). Ford, one of the world's largest manufacturers, is still producing cars today, and was founded in Michigan in 1903 (Sugrue 2009). A mere ten years later, the moving assembly line was invented by Henry Ford. By 1924 the "Big 3" (Ford, Chrysler, and General Motors) were all headquartered in Detroit (Counts, Ronson, Spenser 1999). Even today, these three manufacturers are still producing cars in Michigan. They are, in fact, the only automobile companies that currently have vehicle assembly plants in the state. According to data compiled from Ford, General Motors, and Chrysler, the three companies employ approximately 34,445 workers in their Michigan assembly plants alone. With that in mind, one would expect a certain amount of pride among a number of Michigan residents when it comes to what they drive.

Data

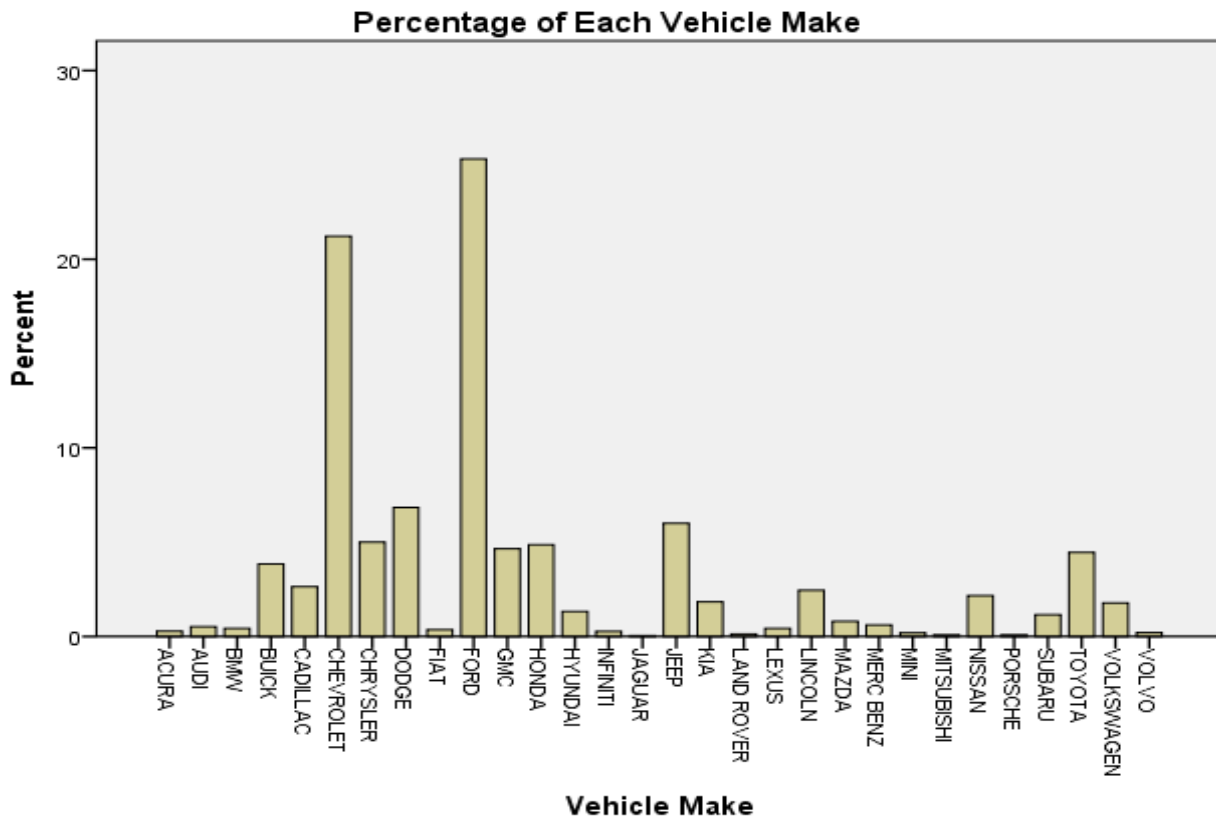
In order to find out if consumers in Michigan exhibit ethnocentric behavior when purchasing automobiles, data was gathered from a number of sources include the Secretary of State of Michigan, the Michigan Automobile Dealers Association, and numerous manufacturer websites. Information about vehicles registered in the state of Michigan was obtained from the Secretary of State and include information such as the make and model of the vehicles, the mileage of each vehicle, and which county they were registered in. I chose to only include vehicles that had 500 or fewer miles, vehicles

registered in 2012, and makes that had over 100 vehicles registered. Using information from the manufacturer websites the locations of each assembly plant in the state were found and sorted subsequently by county. Using the data provided by the Michigan Automobile Dealers Association the number of car dealers and whether they sell primarily foreign or domestic branded cars was determined.

Findings

By analyzing the data I hoped to see if there was any indication of consumer ethnocentrism in the auto industry in Michigan. In 2012, there were approximately 367,237 vehicles registered that fit the criteria of having 500 miles or less and having the make be represented by 100 or more vehicles in the state. This narrowed the number of makes down to 30. By examining these vehicles I was able to see the percentage each make held in the overall pool of registered vehicles. What I found was to be expected. According to the data Ford and Chevrolet represented the two highest percentages with a staggering combined percentage of 46.5% of the total vehicles registered. Figure 1 below illustrates each make’s percentage.

Figure 1



As seen in the above figure, foreign makes have very little representation in Michigan.

Seeing this trend, I wanted to look at the location of the vehicles to see if there was a correlation between where the assembly plants are located and the number of domestic branded cars registered there. I found that the assembly plants in Michigan are located in Wayne County, Ingham County, Oakland County, Genesee County and Macomb County. Figure 2 shows the per capita income and populations of these counties compared to Michigan taken from the 2010 census.

Figure 1

County	Per Capita Income	Population
Genesee	\$22,458	425,790
Ingham	\$23,883	280,895
Macomb	\$26,524	840,978
Oakland	\$36,138	1,202,362
Wayne	\$22,125	1,820,584
Michigan	\$25,135	9,883,640

From this information it can be expected that counties like Macomb, Oakland, and Wayne would have higher numbers of vehicles registered simply because of their size in comparison to the state and the other counties. That being said, what I found was not surprising. The ratio of domestic makes to foreign makes, however, was unexpected. In Figure 3 you can see the breakdown of domestic and foreign cars in each of the abovementioned counties.

Figure 2

	Domestic vs. Foreign		Total
	Domestic	Foreign	
Genesee	12276	1672	13948
Ingham	4691	2827	7518
Macomb	39582	5898	45480
Oakland	65197	20946	86143
County Wayne	56480	9419	65899
Total in Michigan	286307	80930	367237

As expected, the counties with higher populations had a higher number of vehicles registered in the measured year. In Michigan, however, the ratio of foreign make per domestic make is .283 showing that for every domestic car there is less than one third of a foreign car. If you look at the state ratio as an average, you would expect each county to be similar to that number. However, for the above five counties the ratios are

as follows in alphabetical order with Genesee as the first: .136, .603, .149, .321, .167. As you can see there is quite a wide spread even in only these five counties. This could indicate a correlation between foreign vehicles and per capita income with Ingham County being an outlier. Looking, however, at six other counties (Figure 4), three with higher than average per capita income and three with lower than average per capita income, you can see that there is little correlation between income and the number of foreign versus domestic cars. This lack of correlation is even more evident when you look at counties like Alpena and Antrim that have similar per capita incomes and populations. Even though Alpena had over 100 more total cars registered in 2012, Antrim County had over 100 more foreign cars registered than Alpena. Seeing these statistics there does not appear to be a direct correlation between per capita income and the presence of foreign automobiles.

Figure 3

Higher Income	Ratio	Lower Income	Ratio
Leelanau	0.821	Delta	0.523
Livingston	0.188	Huron	0.067
Washtenaw	0.596	Van Buren	0.446

The number of dealerships might also have an effect on the number of foreign and domestic cars in Michigan. Data from the Michigan Automobile Dealers' Association indicates that there are 590 dealerships in the state. Figure 5 shows the relationship between the dealerships selling primarily domestic cars and those selling primary foreign cars.

Figure 4

	Frequency	Percent
Domestic	467	79.2
Foreign	123	20.8
Total	590	100.0

This figure makes it apparent that there are far more dealerships selling domestic cars in Michigan than there are dealerships that sell foreign cars. Of all of the dealerships in the state, the four manufacturers represented the most are Ford, Chevrolet, Chrysler and Buick. These four also happen to be members of the "Big 3".

Conclusion

After examining the data, I can conclude that there are, in fact, signs of ethnocentrism when looking at the automobile industry in Michigan. Even though there were instances

that could indicate a correlation between income and the prevalence of foreign cars in each county, those instances proved to be mere instances of chance. The location of the assembly plants showed no real correlation between the numbers of foreign branded cars versus the number of domestic branded cars. There was however a correlation between the number of dealerships and the number of cars registered. The data showed that a higher number of dealerships lead to a higher number of registered cars. That being said, the fact that there are a lot more domestic branded dealerships in Michigan reflects the number of domestic cars being purchased. The fact that there are fewer foreign branded car dealerships indicates that the market for foreign automobiles is small meaning that there is ethnocentrism in the Michigan automobile industry.

References

- Counts, G., Ronson, S., & Spenser, K. (n.d.). Detroit: The New Motor City. In Ehtics of Development in a Global Environment. Retrieved May 3, 2014, from http://www.stanford.edu/class/e297c/poverty_prejudice/citypoverty/hdetroit.htm
- Dreyer, R. (2009, July). Automotive History. In Bentley Historical Library University of Michigan. Retrieved April 29, 2014, from <http://bentley.umich.edu/research/guides/automotive/>
- Michigan Automobile Dealers Association. (n.d.). Retrieved April 26, 2014, from <http://www.michiganada.org/>
- Sugrue, T. J. (2009). Motor City: The History of Detroit. In The Gilder Lehrman Institute of American History. Retrieved May 3, 2014, from <http://www.gilderlehrman.org/history-by-era/politics-reform/essays/motor-city-story-detroit>