

The automotive industry has faced many obstacles in recent years, and one must wonder how these perceived struggles have shaped customer perception. Between the COVID-19 epidemic, various supply chain issues, and environmental concerns the industry is on shaky ground.

This analysis is centered around the consumer behavior of individuals who live, work, or attend college in the Northeast of North America, specifically the Upstate New York area. This study is in regards to their perception of the attractiveness of various automobile types (e.g., SUVs, trucks, sedans), made by the U.S.'s top 3 car manufacturers. This study will be looking at customers of varying backgrounds, and stages in the consumer lifecycle. How they perceive the current automobile market, if/how COVID has impacted the market, and their general consensus on the market as a whole.

Starting with the COVID-19 epidemic, and how it upset one of the largest manufacturing sectors in the world. The pandemic not only caused nationwide factory shutdowns that resulted in the shutdown of over 90% of U.S. automobile production. It also caused a shortage of semiconductor chips due to supply chain constraints. Though these supply chain interruptions didn't have as drastic of an impact as the factory shutdowns it still caused a prolonged disruption that affects the industry to this day. These two major production shocks caused historically low vehicle inventories, but also led to record pricing and profits as consumer demand rebounded amid scarcity of available automobiles.

Despite the rebound in the second half of the year as plants reopened and demand picked back up, leading to record pricing and profits. The amount of new U.S. cars sold declined sharply in 2020, dropping by more than 15 percent compared to 2019— the worst annual decline since 1980. Most notably in the second quarter of 2020, sales declined at levels not seen since the Great Recession. (Coffin, 11)

For example, GM, who is the largest automotive company in America, saw a 34% drop in sales, Ford recorded a 33 percent decline in sales% and Toyota reported a 35% decline in sales in the second quarter of 2020. This sales trend stayed fairly consistent throughout the year, with certain months even lower than that average, likely due to the lasting effects of the semiconductor shortage.

Car manufacturers responded to the shortage of semiconductor chips in various ways that are still impacting the car buying market to this day. Two of the methods used were either temporarily stopping or slowing production and prioritizing chips in high profit margin vehicles (aka SUVs, luxury models, etc). This impacted the consumer market as the average transaction price for new vehicles passed \$45,000 for the first time in September 2021. Due to low inventories overall due to decreased production, and a sales mix that included more expensive pickup trucks, SUVs, and luxury vehicles due to semiconductor chip utilization. Both of these factors heavily contributed to the rise in vehicle prices. As inventory decreased, demand increased dramatically as people went back to normal lives after the shutdowns caused by the pandemic. (Coffin,13)

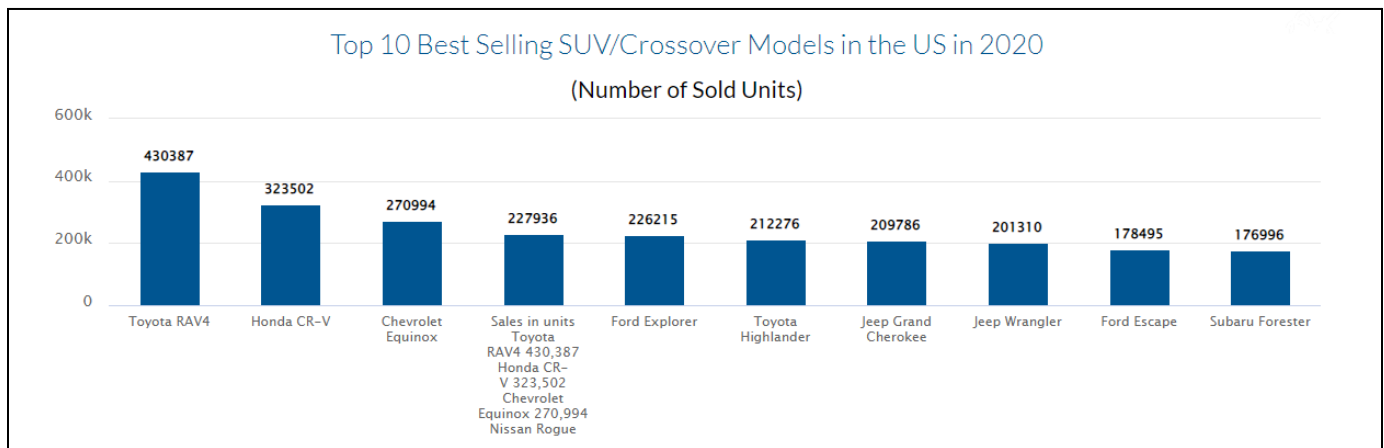
These issues compounding has made buying a vehicle in 2023 more difficult, and customers need to use higher discernment in their car buying decisions. According to JP Morgan and Chase “Rising sticker prices have dampened consumer demand for new and used cars alike, and sales have plummeted as a result. The seasonally adjusted annual rate (SAAR) of U.S. light vehicle sales is still at recessionary levels, tracking 13.5 million in September 2022.”(J.P. Morgan Chase,1)

Price inflation has not only affected the automobile industry but all sectors of consumption. Customers have less money to spend on cars and simply are not willing to pay the egregious prices. According to the CEO of CoPilot (a car search assistance application), Pat Ryan, “We’ve already seen prices start to fall on older cars and they’ll continue to ease in 2023,” In an interview with Forbes he continues on by saying “Part of the decline is due to economic uncertainty, but it’s primarily consumer resistance to those prices.” (J.P. Morgan Chase,1)

With car prices at an all time high how does consumer behavior change? What aspects of a car become paramount in the decision making process? Durability, reliability, and adaptability move further up the list of importance, as consumers look for cars that will not only last but serve their needs as much as possible. We will now examine car buying trends as it relates brand, model, and utility type to gauge if the economic stressors are impacting customer preferences. Focusing on the three most popular car brands in America: Toyota, Ford and General Motors. These three car companies made up 46.93% of the market share for automotive brands in Q4 of 2020. (Gilbert,1)

For more than 40 years the Ford F-Series has been the best-selling vehicle in the US. However, in 2019, the Toyota Rav4 surpassed it and claimed the number one spot. Followed by

the Honda CR-V, and Nissan Rogue. These light-duty vehicles are becoming more and more popular amongst car buyers due to their improved fuel consumption, range of utility and versatility. The demand for such vehicles has only risen in recent years, and the current economic climate. (Gilbert,1)



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