

“The Effect of Car Sharing on Car Sales”

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ABSTRACT

In the beginning of the 2010s, a new form of car sharing became available in Germany. This technology provides a potential substitute for privately owning a car. Hence, car sales should decrease in cities where “free-floating” car sharing becomes available, due to consumers substituting away from buying new cars towards using car sharing for their transportation needs. The providers of the new car sharing services are subsidiaries of major automobile manufacturers (BMW and Daimler). The car sharing vehicles are the newest models of the parent companies and potentially serve as advertisement for these particular models, or for the brand in general. This advertisement effect may ameliorate, or even reverse the expected decline in sales for these particular models or brands. Using a new and original dataset on monthly new car registrations by city and car model and a difference-in-difference methodology, I quantify the substitution and advertisement effects of free-floating car sharing. I find strong and robust evidence for a substitution effect in the major German cities. An additional car-sharing vehicle reduces sales of new cars by around eight per year. This result is driven by a decline in sales of small cars, while larger, more expensive and sports cars are not affected. I find positive advertisement effects for two out of the three car models that were mainly offered by the car-sharing providers during the sample period. For one the models (the MINI), the advertisement effect was large enough to lead to an increase in total sales, even though sales of comparable car models declined heavily.