

Appendix A

Results of the Hedonic Price Analysis - Additional Discussion

Fuel Type The diesel-fueled vehicles are comparably more expensive than cars with a gasoline power. This effect correspond to the expectation since a transmission effect between new and used vehicle markets is taken into consideration. On the new car market diesel-engine vehicles are priced more due to a demanding manufacturing technology. A pre-owned vehicle using diesel for an operation is almost by 22% more expensive than a comparable gasoline vehicle.

Body Type Each body shape evinces *ceteris paribus* a higher market value than a sedan, except for a compact type of small size and no sport, nor luxury appearance. A compact vehicle is therefore almost by 7% cheaper than a comparable sedan car. A small size sport vehicles (convertible and coupe) are *ceteris paribus* by approximately 23% more expensive than a sedan shape. Off-road version is almost by 18%, a large size version by 13% and station wagon shape nearly by 5% more valued by customers than a sedan car.

Make All manufactures evince an expected signs and magnitudes. Keeping other attributes fixed, for instance Audi vehicle (a luxury oriented brand) has a higher market value by almost 13% than Volkswagen. Comparable results evinced Mercedes Benz, Mini, Jaguar and Land Rover. The Volkswagen's competitors (Seat and Skoda) are *ceteris paribus* slightly cheaper (by 12.6% and 10.6% respectively). The further research oriented for the difference between domestic and imported brands (connected with an idea of affordability of spare parts) could be interesting.

Engine Power The effect of engine power on a car value is positive as expected. With additional 1 kW, a price of a used car increases by 0.5% keeping other effects fixed (similarly as proved by y Requena-Silvente & Walker 2006 for a new car). However, Kihm & Vance (2016) dealing with the German used car data concluded the increase by only 0.25%.

Engine Capacity As expected, the car attribute of displacement has a negative impact on a vehicle market price. Every liter of engine capacity lowers the market value of a vehicle by 2%. From the perspective of a customer, a high displacement value separately should represents an undesirable attribute because of an indirect impact on operating costs and emissions.

Number of Doors, Number of Seats The positive effect of seats as well as a relatively higher price of five door alternative comparing to a three door body style were proved. With every additional seat, a price of a vehicle (keeping other attributes fixed) will increase by 3%. This information is important for distinguishing between differently sized cars and cars created for different purposes (passenger and goods transportation cars) within one market segment (body shape).