

# Abstract

Car ownership levels are increasing rapidly in many developing countries. Increasing income levels allow in particular citizens of the major cities in developing countries to purchase more and larger vehicles. In Indonesia and other developing countries this trend towards more and larger vehicles appears to keep continuing despite generating various environmental, social and economic problems.

To cope with these problems and to understand future trends it is necessary to understand persons' motivations to buy cars. Therefore the prime objective of this thesis is to understand factors influencing car ownership decisions in order to predict future trends and to induce a shift to more sustainable modes.

A survey was conducted in February 2011 in Bandung, Indonesia. The targets of the survey are undergraduate students of Bandung Institute of Technology (ITB). The majority of the samples were obtained through surveys in classrooms at the end of lectures. Some additional surveys were obtained through randomly approaching students in communal areas. In total 500 complete surveys could be obtained.

The data is used to construct through Principal Component Analysis five attitudinal factors that partly explain car ownership: Symbolic/Affective, Arrogant prestige, Convenience, Comfort, and Social orderliness. These five factors along with travel behavior, the perception of public transport service quality and sociodemographic variables are used as explanatory variables in a binary logistic regression model to determine their influence on the decision to own a car. Our results suggest that primarily convenience but also arrogant prestige and social orderliness are significant determinants.

This thesis further explores the desire of non-car owner to purchase a car. Non car owners were asked about their desire to purchase a car in 5 years time after they graduate with the assumptions that they have obtained a job by then. Using the same explanatory variables as for the car ownership model, three binary logistic regression models were performed. The dependent variables are desire or not to own a car, desire to own a luxury a car or not and desire to own a luxury versus a normal car respectively. Our results show that convenience is the most significant determinant positively influencing the desire for a luxury car.

The results obtained from the thesis might be helpful especially for developing countries mainly Indonesia to design better policies to promote more sustainable travel modes.