Heterogeneity of the Accident Externality from Driving

Abstract

This paper examines the accident externality from driving in terms of loss probability and severity by using a unique individual level data set with more than three million observations from Taiwan. Two types of accident externality are respectively measured: the average number of kilometers driven per month per vehicle and the total number of speeding tickets per month. For both variables, we find significant evidence to support the existence of the accident externality. Moreover, we find that the accident externality is heterogeneous in terms of the vehicles' characteristics.

Keywords: accident externality, automobile insurance, loss probability, loss severity.
JEL classification: H23, D62, G22