

【長崎大学経済学部ディスカッション・ペーパー・シリーズ】

DISCUSSION PAPER SERIES

Faculty of Economics, Nagasaki University

No.2011-03(Jan. 2011)

An Economic Analysis of Compulsory and Voluntary Insurance

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Abstract:

This research analyzes an insurance market in which compulsory and voluntary insurance coexist. In particular, we investigate whether compulsory insurance provides an incentive to purchase voluntary insurance. The main conclusions of this article are as follows.

When only voluntary insurance exists, we find that (1) an individual has a stronger incentive to purchase insurance when his or her future utility is high, (2) whether an individual's incentive to purchase insurance becomes stronger when his or her initial wealth increases is ambiguous, and (3) an individual's incentive to purchase insurance tends to become stronger when his or her initial wealth increases if both effort levels to lower the accident probabilities of individual in the case of higher and lower insurance coverage rates are relatively high.

When compulsory and voluntary insurance coexist, we find that (1) when the compulsory insurance coverage rate is relatively low such that an individual may become personally bankrupt, introducing compulsory insurance increases the incentive to purchase voluntary insurance, (2) an increase in the coverage rate of compulsory insurance increases the incentive to purchase voluntary insurance when the compulsory insurance coverage rate is relatively low, and (3) when the compulsory insurance coverage rate is relatively high such that an individual never becomes personally bankrupt, introducing compulsory insurance does not provide an incentive to purchase voluntary insurance.

Keywords: Compulsory insurance, Voluntary insurance, Economic analysis, Incentive