

CHAPTER 6

CONCLUSION

6.1 Main Findings

The problem of adverse selection arises from asymmetric information in the automobile insurance market in that the probability of accident differs among potential customers of insurance. Each potential customer knows his own loss probability better than the insurers that sell insurance. Therefore, the objectives of this paper are to firstly, investigate whether adverse selection exists in the Malaysian automobile insurance market, and secondly, to analyze for market signaling in the given market.

Our investigations provide empirical verification that the phenomena of adverse selection is consistent with a model of equilibrium in the automobile insurance market. It also exhibits market signaling with cross-subsidization of high-risk customers by low-risk customers. For analytical purposes, we consider two large groups of otherwise identical individuals who differ only in the probability that they will have accidents. As a result, we find that the customers of different risk types self-selecting their most preferred insurance coverage at given premium rates. The low-risk types purchase partial insurance coverage while high-risk types prefer full

insurance coverage. However, the equilibrium with adverse selection does not satisfy a monotonic signaling property whereby the low-risk customers are not being compensated for selecting higher deductibles by paying a lower average premium for their insurance coverage.

On the other hand, there is also cross-subsidization of high-risk customers by low-risk customers in the Malaysian automobile insurance market.²⁴ Cross-subsidization is frequently alleged, investigated and denounced in many regulatory arenas. Although this principle is unfair in the regulatory context, nonetheless, some cross-subsidy among customers is inevitable especially under competition with imperfect information (Schmalensee, 1984). However, according to Henriot and Rochet (1987), some degree of cross-subsidization between risks could improve efficiency of the market when adverse selection phenomena occur for a given conditions and circumstances.

To summarize, we conclude that the market is consistent with the market signaling theories developed by Rothschild and Stiglitz (1976), which is based on price-quantity competition, Riley (1979, 1985), and Cho and Kreps (1987). They predicted that the equilibrium in markets with adverse selection in which signaling of hidden knowledge is possible, as through the choice of deductible, entail separating

²⁴ Riley (1983) summarized that the phenomena examined by Dahlby (1983) are entirely consistent with a model of equilibrium in insurance markets which does not exhibit any cross-subsidization of high-risk classes by low-risk classes. Besides that, he encourages the further research in the issue of whether systematic cross-subsidization is in fact common in unregulated insurance markets.

and nonlinear pricing. The evidence we present also support the alternative theory of adverse selection as suggested by Puelz and Snow (1994) that automobile insurance market entails a separating, adverse selection equilibrium and market signaling by examining the premium-deductible schedule and the demand function for a deductible, and theory of signaling with cross-subsidization as proposed by Miyazaki (1977).

In contrast, our result is inconsistent with the linear pricing equilibrium considered by Pauly (1974) and Schmalensee (1984) in which insurers engage in pure price competition, while customers separate by riskiness. In addition, the result does not support the theories of pooling equilibrium, which are proposed by Wilson (1977), Grossman (1979) and Hellwig (1987).

The problem of adverse selection originates from the insurance market and it seems inevitable in a market with asymmetric information. Therefore, the insurers try to infer as much as possible about individual accident possibilities from observable characteristics of customers that are correlated with accident experience, as the best way to mitigate such a problem (Grossman, 1979). However, to what extent this results in efficiency remains unconfirmed. Hence, there are avenues for future research.

6.2 Limitations of The Study

Time and resource constraints contributed to limitations. The study covers only 345 individuals insured in the data set. It would be more representative if collection from others insurers had been possible. Moreover, research in developing countries based on asymmetric information markets remains relatively limited. Hence, there is not much ground for fair comparison.

6.3 Conclusion

Overall, the study sheds light on the important issues of information asymmetry, confirming the existence of adverse selection and cross-subsidization.