Management Strategies for Insurance Risk to Private Health Insurance

Recently, insurers have accomplished a great deal in the sales of private health insurance, but are not systematically managing related risks. In the meantime, there has been an opinion that their total risk will increase because unexpected payments of insurance money may frequently occur due to health insurance products combined with valued policies. On the contrary, there has been another that the frequent use of medical treatment would rather control serious illnesses, leading to a decrease in medical expenses.

This report measures the total amount of risk of private health insurance constructing a stochastic risk management system, identifies what factors affect an increase in the total risk, and provides systematic risk management strategies. Specifically, incorporating the collective risk model (CRM) into the dynamic stochastic simulation and covariance-variance matrix method, this research measures the amount of risk indicating a change in the best estimates due to systematic and systemic risk.

One of our main findings is that there may exist both scale and diversification effects in a risk pool. In addition, the report suggests a performance management system using the risk-adjusted return on capital (RAROC) obtained by dividing underwriting margin by incremental TVaR (ITVaR). Further, using incremental risk capital multiplier (IRCM), we find out what risk factors increase the total risk, and then suggest effective measures to alleviate it.
Through the results so far achieved, we get the following implications: first, adopting a stochastic risk management system, we need to enhance the accuracy and minimize the arbitrariness in measuring risk. Second, insurers need to re-establish risk management policies based on profitability and sustainability rather than on external growth. Third, strategies for diversifying risk should be developed and implemented, depending upon the total amount of risk measured. Fourth, necessary is a changeover in risk management from the payment rate to risk factors increasing the total risk. Fifth, it is required to reduce insurance risk by enhancing the accuracy of pricing insurance premiums. Finally, the management need to reinforce their risk monitoring process for private health insurance.