An Analysis of the Impact of Macroeconomic Conditions on the Insurance Industry

There have been numerous studies examining the influence of economic factors on the demand for the life and non-life insurance. Hammond et al. (1967) found that the variables such as income and net worth holdings are significantly related to life insurance premium expenditures. Li et al.(2007) examined the determinants of life insurance consumption in OECD countries and found that insurance demands are influenced by inflation, real interest rates and income.

We propose and build a macro-econometric model capable of measuring the effects of various macroeconomic factors on the insurance industry and potentially generating forecasts for a core set of macroeconomic variables and insurance premiums. The model explicitly allows for the interdependencies that exist between general macroeconomic factors and the insurance industry.

We conduct several scenario-based simulations to compare model predictions under a variety of different assumptions regarding the paths of exogenous variables. If there were an increase in a foreign interest rate such as LIBOR(London Interbank Offered Rate) or in the domestic call rate, the premiums for whole life insurance and non-life insurance would take a slight dip while the premiums for savings plans and long-term non-life insurance would increase. If there were an increase in the real GDP for advanced countries (G7 countries), the premiums would increase for both the life and the non-life insurance.