INTEGRATING PROFIT SHARING IN INSURANCE SUPERVISION

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Abstract

We consider an economic model of a life group-insurance company including three economic agents: the policyholders, the shareholders, and the supervisor.

Many countries require a system of profit sharing for life-insurance companies. These have to build up provisions (reserves) for discretionary and guaranteed benefits. For a multiperiod group-insurance model with yearly renewable contracts, we analyze the flows which are connected to such a system of profit participation. In particular, the provision for discretionary benefit influences not only the requirements of the supervisor, but has also considerable impact on the premium of the policyholder and the own funds of the shareholders.

To size the economic quantities, like premium and own funds, we use the concept of risk assessments for the different economic agents. The risk assessment of the shareholders inevitably should be market-consistent, while the one of the supervisor is certainly not so.

The model is illustrated by examples and displays.

Key words and phrases: Triangle of insurance agents, economic equilibrium, provisions for discretionary and guaranteed benefit, solvency accounting.