SUMMARY

THE MARGIN OF SOLVENCY OF LIFE ASSURANCE COMPANIES

In this article the question is raised which method for establishing the margin of solvency of a life assurance company is to be used.

This margin of solvency is defined as the measure in which the company is judged to be able to hold its own.

A fairly good approximation of this margin is only possible to a certain extent, as several imponderable factors count.

Firstly the ,,margin-method" is gone into. This method has been treated by Dr J. Visser in his thesis ,,Beoordeling van het weerstandsvermogen van levensverzekeringmaatschappijen". The margin-method tries to give an idea about the yearly margin between income (Premiums and interests) and expenditure (payment, surrender values, additions to premium reserves and costs) and the likely development thereof in the near future, by eliminating the fortuitous profits and charges and in accordance with as many objective data as possible.

Actually, however, the margin--method gives an indication of the earning capacity of a company rather than of the margin of solvency.

Writer of this article is of the opinion that the method which starts from the balance position of the company is preferable.

Writer considers the 3 principal factors that have to be taken into account when establishing the margin of solvency of a life assurance company, viz.:

a. the technical reserve;
b. the extra reserve;
c. the guarantee capital.

In order to obtain an idea about the hidden reserve forming part of the premium reserve, the writer compares this hidden reserve to a so-called minimum-reserve, calculated on strict bases, and a maximum-reserve, calculated on safe bases.

The revaluation of the assets is founded upon the capitalization system, while taking as interest rate the interest used in calculating the premium reserve. This interest rate has to be lower than the average interest which is supposed to be made in future.

The intrinsic margin of solvency can now be established as the difference between the cash value of the assets and the liabilities. This difference is the amount which corresponds with the extra-reserve and the guarantee capital taken together.

Writer illustrates his views with an example and considers at the same time the difference in function of the guarantee capital and the extra reserve.

If, for a series of years, these data for establishing the margin of solvency are available, the development in time and therefore the margin of solvency in its continuous connection can be obtained.