## BASIC ECONOMIC THEORY FOR AN INSURER'S RATE OF RETURN AND FOR ITS REGULATION

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REVIEW BY WOODY R. BECKMAN

Mr. McGuinness has made another fine contribution to the actuarial literature in several respects. First and foremost, he has weaved insurance company profitability into the main stream of general economic theory. In so doing, he has opened up new avenues for research and analysis. Hopefully, this will allow other professionals to bring their training and expertise to bear on the difficult problems of insurance company profitability and rate regulation. In addition, Mr. McGuinness has set an example which should be a guideline for all actuarial papers with a comprehensive literature search and thorough documentation of references. This standard will help improve all papers and improve the content and usefulness of the actuarial literature.

Unfortunately, the paper has been written with a tight time table, with the unfortunate result that at times the paper is difficult to follow and the theme of the paper has occasional diversions into non related areas. Sometimes this digression lasts only for a sentence, but sometimes several paragraphs of unrelated material are included. I hope that additional rewrites of this paper, with the helpful input of the committee on review of papers and the authors' own careful review, will produce a good, cohesive paper that will enchance the actuarial literature.

Although the paper lists many references, I am concerned that the major study of the insurance industry profitability (The A.D Little Study of 1967) and the subsequent analyses and discussions between Mr. Plotkin and Mr. Bailey has not been utilized in this paper. This study was noted but without substantive utilization of the content.

In the section on kinds of return, the author has disected the return on investments into three components. Theoretically this segregation might be valid, but there is little justification in the practical world for this division. Insurance companies, like any other investor, select securities based on the total return including interest, dividends, expected capital gains, and tax consequences. The segregation of this return into components is theoretical and arbitrary and ignores the realities of investment strategy. The subject of investment income is dealt with in other areas of the paper and implies that rate setting should reflect the actual return on investments. Because of the diversity of insurance companies and their investment strategies, I believe it is most important to utilize a secure rate of return in the ratemaking process and to allow individual company decisions concerning investment alternatives to be independent of rates. Thus a company that is willing to undertake investment risks can do so without any benefit or detriment to the policyholder. It is inappropriate to reflect an insurance company's investment strategy in establishing rate levels. Mr. McGuinness itemizes six needs for profitability. The first three are:

A. Protection of net worth from inflation

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- B. The need for additional capacity to meet economic growth
- C. An adequate return on investment (ROI) to retain and attract capital

Unfortunately, the author has reverted to an insurance company economic theory in segregating these three factors. General economic theory encompasses the same parameters under the caption-Return on Investment. The return on investment issue was the subject of the A.D. Little study which addressed it in great detail and at great expense, but was unable to resolve the issue. Nonetheless, if the long term return on investment is adequate, this implies both the protection of net worth from inflation and an increase in capital necessary to meet economic growth.

The last three needs for profitability as indicated by the author relate to the protection of earnings from fluctuations in underwriting and investments. Again, the author has reverted to an economic theory for the insurance industry and has by-passed a more general economic theory. In no other industry is there a guarantee of profits. Because of the social implications of the insurance business, there should be requirements for insolvency regulation because of the potential severe impact on the general population. However, such concerns relate more to long term operating results and mis-management, than year to year operating losses.

There are two factors which have not been discussed in this paper which play an important role in an insurers rate of return and regulation.

- A. The relationship between premium and surplus is a key index of financial strength that is frequently reviewed by regulators. This ratio is important in the development of rate of return and insolvency considerations, and should be weaved into the economic theory.
- B. Unlike most industries, the insurance business receives a large percentage of its assets with a zero cost of capital. The insurance reserves produce a source of additional investment earnings and greatly distorts the relationship between return on equity and return on total assets. This is an area that was discussed in detail by Mr. Plotkin and Mr. Bailey ten years ago, but unfortunately no resolution has been forthcoming.

I hope that this paper can serve as a catalyst for additional analysis and research into the question of insurance company profitability. However, I am not sure that the regulation of the insurance company can ever be handled within any economic theory because of the political and social pressures. In my opinion, the only sound approach is to de-regulate insurance companies and to allow the forces of competition to limit insurance company profits and to provide a reasonably priced insurance product for the consumer.