

to tackle that one in a review. Now the efficiency of separate functions within a particular company may be measured, if the goals are clearly established; but to have *one* over-all measure for all functions applicable to companies with differing goals is asking too much.

Just so I'm not accused of being naive, let's agree that profit is a common goal. Parenthetically, most of you might prefer to qualify this goal so as to make it read, "Profit with reasonable stability." My real question, however, is "Does underwriting profit constitute a proper measure of success?"

Company A's primary interest is the production and protection of funds for the use of its investment department.

Company B has an affiliated profitable agency plant for which it must provide a market.

Company C is founded by one or more non-insurance principals to reduce insurance purchasing costs.

Is any single measure going to bespeak the efficiency of these and other insurers? I think not.

Mr. Simon's immediate predecessors in this area are Messrs. Hedges and Harwayne (citations may be found in the original paper). All were undoubtedly motivated by a common desire to cast light into a dark, or at best cloudy, area. I am sorry to report that each author with naught but honest intentions gives us results that are inconclusive at best. To the extent that some persons may have been misled by the earlier works, Mr. Simon's paper does serve as a thought-provoking counterbalance.

AUTHOR'S REVIEW OF DISCUSSIONS

It is a pleasure, indeed, to find such a lively interest taken in this paper. This did not come as a complete surprise, because it was recognized that this subject could not help but be controversial.

"The size of a company is much less important in determining its profit ratio than is the quality of its management," read the opening sentence of the news release on this paper last May. "Small, strong companies are just as prevalent as large, strong companies. At the same time, there are weak companies of all sizes," it went on. This fairly well summarizes the principal themes of the paper. The statistical aspects of the paper lend credence to these statements and tend to refute their counterparts which would be that (1) big companies are profitable companies because they are big and (2) small companies have to be protected from the competitive aspects of free enterprise because they are weak.

If we would all agree that we would not use the words "size", "strength" and "profit" because they lack precise meaning, then I would be satisfied. But since this is not the case and we do use the words in sentences similar to those you have just read, I have given them specific definitions in the paper and then measured them. Since they are usually compared—one with the other—I measured their relationship. Thus, to the person who will agree that the terms have no meaning, I will say, "We cannot argue." But to the one who uses these terms, I say "Please read my paper carefully."

It is interesting to note that Roger Kenney has referred to this paper in his column in the *United States Investor* for July 30, 1962. On page 31 he quotes

my paragraph, "The small, strong company is more than just a convenient ideal to refer to; it is a statistical reality. Conversely, the big, weak company is also present and perhaps more regulatory attention must be directed to this quarter. Now we see how badly we have been misled, because it isn't the small company that needs to be protected, *it is the policyholder*. And he needs to be protected against the financially weak company regardless of its size." Mr. Kenney then continues, "To this statement, we utter a solemn 'Amen.'"

Due to the relatively small number of cases involved in this study, no test was made of either the linearity of the regression or the homoscedasticity of the variances. If it could be shown that either of these two usual assumptions involved in the Pearson product moment correlation were not true, then we would want to investigate the data from some other viewpoints. In reviewing the table on page 51, we must bear in mind that the last column can be reproduced by other pairs of values for B and C such that $C:B^2 = 79:(.005)^2$. At the same time we must recognize that there are definite limits on our choices of C because the choice must produce reasonable results.

My reviewers have done a fine job of pointing up a number of difficulties in trying to make unequivocal statements about the interrelationship of these size, strength and profit factors in the insurance industry. It is this uncertainty that underscores the fact that we must not be deluded into blindly believing that "the bigger something is, the better it is," and that we may interchange as synonyms "*big* with *strong* and *small* with *weak*." It is all too easy to say that if all other things were equal these things would be true, and then forget that in this area, all other *things are never equal*.