some significant issues in the insurance business today, and, in any event, his ideas are different and thought-provoking. I agree with the deficiencies he has noted in the accounting and regulatory system that we have. I do not agree that the author has properly identified the basic purposes of the regulation of insurance investments nor would I agree that the author has proposed appropriate solutions to achieve the purposes that he has identified. I believe that the author has oversimplified the many facets of insurer regulation for solvency and solidity and, having done this, he attempts to ascribe too great curative powers to his solution to the oversimplified problem. However, I believe that there is merit in what the author proposes when considered in the more limited context of investment regulation. Within such a framework, his points are worthy of serious consideration.

Actuaries should, on occasion, climb down from their ivory towers and mingle with the natives struggling to keep alive in the jungle down below. Papers such as this and a caustic critique and attendant discussion serve such a purpose and thereby broaden the perspective of insurance actuaries.

DISCUSSION BY CLYDE H. GRAVES

Mr. Bailey, in his paper "Insurance Investment Regulation," has undertaken a large order. He has attempted, as he stated in his introduction, (1) to review the purpose and present method of insurance investment regulation, (2) to describe some of the shortcomings of the present methods, (3) to suggest some principles for achieving the purpose of insurance regulation, and (4) to present suggested legislation designed to remedy some of the present shortcomings.

The discussion of the purpose and present method of insurance investment regulation is much too brief. Mr. Bailey states that "The purpose of regulation of insurance investments is clearly to assure the solvency of insurers." Recently, New York, Wisconsin, as well as Michigan, have restudied the question of investment regulation and in Wisconsin and Michigan bills are currently being considered, while New York has just amended its laws to deal with investment and holding companies. In a draft on "Regulation of Investments" prepared for the State of Wisconsin Legislative Council, it is stated that the laws regulating investments of insurers have a number of objectives and it goes on to mention four: (1) To prevent management from making speculations or otherwise unsuitable investments

that endanger policyholders interests, (2) to stabilize the financial position of insurers, to prevent them from being unduly vulnerable to shifts in economic circumstances, (3) to deal with the problem of the concentration of economic power, and (4) to achieve certain social objectives. An example of number (4) is found in the New York law with reference to investments in housing projects.

There are other discussions of the purposes of insurance investment regulation to be found in the "Report of the Special Committee on Insurance Holding Companies" published by the New York Insurance Department in February, 1968 and in the Proceedings of the National Association of Insurance Commissioners. For example, in the Report of the Industry Advisory Committee to the D1 Subcommittee of the NAIC on Holding Company Legislation, presented at the December, 1968, NAIC meeting, it is stated, "The thrust of insurance department regulations should be directed primarily to the maintenance of solvency of the insurer, to the protection and fair treatment of policyholders and to the prevention of activity that might adversely affect competition within the insurance business." My point here is that there is needed a much more in-depth discussion of the purpose of investment regulation than is presented in Mr. Bailey's paper. This is needed in order to evaluate the charge Mr. Bailey makes that state regulation has failed to protect the public against insolvencies and has forced on the industry a "non-standard method of insurance accounting which obscures the true condition and value of insurers."

I do not accept as proven the charge that state regulation of investments is a failure, and I do not agree that the valuation of assets and liabilities in accordance with "generally accepted accounting principles" is necessarily better for the insurance industry and the public than "statutory insurance accounting." For discussion of this later point see the report of the Committee on Annual Statement published in the 1965 CAS *Proceedings* when it is stated that "withholding full recognition of earnings and surplus while material uncertainties remain" is a controlling principle.

Mr. Bailey's solution to all the problems of insurance accounting, reserves, Schedule P, valuation of assets and liabilities, regulation of investments, holding companies, and insolvencies appears quite simple. It is to define a minimum amount of "restricted assets" required for an insurer, to regulate the investment of these restricted assets, to permit insurers to invest any asset in excess of restricted assets as they please, and to create an insolvency fund to take care of all the insolvencies which will then occur.

The solution is too simple.

There is a need to modernize the laws regulating investments and to liberalize the investments of "surplus surplus." However, I think there should be more study given to defining surplus surplus. To say that it is surplus in excess of that which "may reasonably be required to assure solvency, effective functioning, and necessary growth," as stated in the New York Report, or that which is excess to the "surplus needed to support the insurance operation," as is expressed in the Wisconsin study, is not defining the term. How much surplus is needed to support the insurance operation? What is needed to assure solvency? How much is needed for necessary growth? Should there be a relationship between the amount of surplus and premium writings, surplus and underwriting profit? Should there be a security valuation reserve? How much surplus is needed to cover large underwriting loss, a sharp drop in the stock market, and an increased volume of business?

Mr. Bailey's definition of surplus surplus is the difference between surplus defined in accordance with generally accepted accounting principles and "restricted assets" where restricted assets is defined as an amount equal to a company's liabilities including reserves, plus an amount for contingencies, plus an amount equal to the minimum capital and surplus required by the state insurance code. The amount for contingencies is the company's underwriting gain, if any, realized for each of the two most recent accident years. Note that if a company has underwriting losses, it would have fewer restricted assets than if the company had an underwriting gain.

The value of this formula for measuring surplus surplus, if such surplus is to be completely unrestricted, requires considerable study before adoption by any state.

With reference to the insolvency fund bill attached as an exhibit to Mr. Bailey's paper, I would like to make the following comments as to its characteristics:

1) It is a *state* fund, not a federal fund.
2) It is a *post* assessment fund not requiring contributions until after an insolvency has taken place.
3) It covers all property and casualty coverages, not just workmen's compensation or automobile liability.

4) It provides for separate assessments, for workmen's compensation, automobile insurance, and "all other."
5) It provides that the assessments shall be recognized in the rate-making process.
6) It provides for a maximum assessment in any one year of one percent of net direct premiums written.
7) It provides for unpaid claims against the insolvent company, and does not cover refunds of unearned premiums.
8) It provides for a $200 deductible.
9) It provides for a Board of Governors composed of insurance companies.

Possibly the most controversial part of the insolvency bill is its extension of coverages to other than workmen's compensation and automobile liability. There will, of course, be quite a debate as to whether each state should establish an insolvency fund or whether one should be set up by the federal government. I understand a bill has just been introduced in Congress to create a Federal Insurance Guaranty Corporation — the bill being much more restrictive on industry than Dodd's bill of a few years ago.

Mr. Bailey concludes his paper by stating, "It is hoped that full discussion of this suggested legislation in conjunction with the many other proposals currently being made will contribute to solutions which will meet the objectives and eliminate the faults..... [of insurance investment regulations]." To this I agree.

DISCUSSION BY ROBERT G. ESPIE

Mr. Bailey's paper presents an interesting and comparatively novel approach to the perennial problem of assuring that insurance companies will in fact be able to carry out the promises they make to their policyholders. In fact, I would suggest that perhaps the real title of his paper should not be "Insurance Investment Regulation" but rather "Insurance Company Solvency Regulation."

The main framework of his approach may be thought of as one in which companies are allowed to prepare balance sheets according to generally accepted accounting principles with a separately-calculated test as to whether their financial position is such as to allow them to continue in business. Such an arrangement would simplify greatly the problem of pre-