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What are . . . adjusted earnings?

The term "adjusted earnings" seems to conjure up visions of mystical accounting and actuarial complexities. Essentially, however, the concept of adjusted earnings—while certainly not simple —has been the center of a mystique which is laregly unnecessary. Utilization of the adjusted earnings approach can be effected efficiently by any company, with creative and timely planning.

Perhaps some of the adjusted earnings mystique can be accounted for by the loose application of the term; specifically, the various approximations to "more realistic" earnings which did not necessarily conform with generally accepted accounting principles (GAAP). Adjusted earnings is now being used to define statutory earnings adjusted to conform with GAAP as well as approximations which do not. Because of this, a new term should be coined to define adjustments conforming with GAAP to eliminate further confusion concerning the reporting by life insurance companies.

Insurance accounting prescribed by state regulatory authorities differs from GAAP as generally applied in other industries in the following areas: (1) acquisition costs are charged in the year incurred, rather than over the expected life of the product; (2) reserves are based on conservative assumptions, rather than those most likely to occur; (3) certain assets are designated as "not admitted," rather than being included in the company's assets subject to tests of recoverability; (4) investments are stated on methods prescribed by the National Association of Insurance Commissioners, rather than all being valued at market; (5) realized and unrealized capital gains on investments are charged directly to surplus, rather than earnings; (7) the Mandatory Securities Valuation Reserve is designated as a liability, rather than as an allocation of surplus; and (8) deferred taxes are generally ignored, rather than considered in the determination of earnings.

The basic accounting principle in conflict with statutory accounting is the matching of benefit costs and expenses with revenue. A basic principle used in determining this matching is that profits cannot be anticipated and all losses must be provided for.

An increasing number of stock life insurance companies are asking CPA's for audited statements. This is due to increased investor interest in stock life companies, diversification of life companics through holding companies, increased interest of life companies in equity products, and increased interest in registering life companies' stocks on major exchanges. Because stock life companies have become more interested in audited statements and since many CPA's could give only qualified opinions on statutory accounting, the American Institute of Certified Public Accountants (AICPA) formed a committee to produce an Audit Guide to spell out the application of GAAP to life companies. The AICPA published an exposure draft of the Audit Guide in December, 1970.

Why . . . adjusted earnings?

A vital need exists for a system of reporting life company financial results to management and to investors on a realistic basis-a basis consistent with the methods used by other industries, and one which is within the guidelines of GAAP. Second, for stock life companies operating under the regulatory authority of the New York Stock Exchange, earnings reported on the basis of GAAP is a requirement! Third, it will undoubtedly be necessary for companies filing audited statements with the Securities and Exchange Commission to file on the basis of GAAP after the Audit Guide becomes effective.

Adjusted earnings obviously will not change the solvency of a company. The state regulatory authorities' requirement of solvency—as reflected in the statutory statement—is not expected to change; so the adjusted statement should have *no* effect on state regulation of a company.

The ultimate profit or loss realized on a given block of business cannot be altered by any accounting or actuarial principles, nor by any method of reserving. Changes in accounting methods can change only the *incidence* of earnings, not the total earnings over the life of a policy.

The concerns of state regulatory authorities and policyholders traditionally have been with the solvency of the company. The stringent requirements of statutory accounting fulfill this concern. The actuary traditionally has been concerned with the ultimate economic results, with his orientation being to the balance sheet. The accountant's primary concern is with a realistic representation of the incidence of earnings — wh wh

When . . . adjusted earnings?

Already a number of companies have reported earnings adjusted in accordance with GAAP to stockholders, the SEC and the NYSE. The AICPA probably will publish their Audit Guide before the end of 1971, and it could very well be effective for this year.

How . . . adjusted earnings?

Although there are several methods of adjusting reserves which will create a matching of revenue with benefits and costs, it is probable that "natural reserves" will be the recommended method of the Audit Guide.

A natural reserve is simply the accumulation of a portion of the gross premium set aside to pay future benefits and expenses as they become due, based on realistic assumptions which were used by the actuary in establishing the gross premiums originally. If these assumptions are realized exactly, profit emerges as a level percent of the gross premium (the gross premium minus the naturereserve premium). Deviations betv actual experience and expected assumptions will cause deviations in the emergence of profit.

The natural reserve can be split into two components: a natural benefit reserve and a natural expense reserve. The natural reserve premium also can be divided into these two components. A modification in the application of the natural reserve is accomplished by splitting the reserve into these two components. Under this approach, the actuary determines the natural benefit reserve and the accountant may determine the natural expense reserve (i.e., the unamortized acquisition expense which was capitalized). Consistency in these two components can be accomplished by the actuary furnishing the amortization factors embodying the same assumptions which were used to determine the natural benefit reserve.

The modified natural reserve approach has some significant advantages: (1) the benefit portion is more easily determined separately; (2) acquisition costs may determined more easily in aggrega. and, (3) the expense portion can be easily set up as an asset. The modified natural reserve approach will probably be utilized in practice more than the

Adjusted Earnings

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full natural reserve approach.

The natural reserve concept should be applied not only to individual life insurance policies, but also to non-cancellable and guaranteed renewable health insurance policies. As a matter of fact, it should be used for any insurance benefit which requires a reserve in excess of the current year's unearned premium if the adjustment is material to the total company operations.

One technique for calculating adjusted earnings is through use of a sample, often referred to as a model office. This involves selecting major plans and central issue ages which, when enlarged to represent the total insurance in force, will simulate the financial results of the entire company. After the model is constructed, a validation procedure should be used to ascertain the accuracy of the model in reproducing the actual results of the company. The model may be considered validated if it can reproduce the

npany's aggregate reserve, premium me and increase in reserve.

There are many advantages to using the model technique for adjusting earnings. First, the model is a means by which to validate assumptions which will reproduce the company's aggregate experience and insure recoverability of acquisition costs. This is particularly useful for companies which have not performed mortality and persistency studies. Second, only a limited number of factors need to be calculated. This significantly reduces the time involved-both computer time and people time. Third, after the Audit Guide is published, it is expected to change through an evolutionary process as experience and new ideas dictate. Models lend themselves to change. Fourth, many companies show earnings for previous years; the model can be effectively used for historical data where detailed information may be lacking. Fifth, having constructed a model for adjusted earnings, a company can use it for financial projections, profit analyses, and cash flow investigations.

Another technique for calculating adusted earnings is the detail approach. This method involves calculating natural reserve factors for each plan/age cell, so that the factors may be integrated into the regular valuation system.

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Niessen, A. M. and Cowen, J. L. Eleventh Actuarial Valuation of the Assets and Liabilities Under the Railroad Retirement Acts as of December 31, 1969, with Technical Supple-ment, pp. 110, December, 1970: Railroad Retirement Board, Office of the Chief Actuary.

The latest triennial valuation of the Railroad Retirement System was conducted as of Dec. 31, 1968 and this report of the actuary sets forth the chief results. A statement of the Railroad Retirement Board and Actuarial Advisory Committee is also included. The Technical Supplement contains extensive tables of annuitants' mortality, disabled annuitants' mortality, totally disabled annuitants' mortality, termination tables for spouses and disabled children, re-marriage tables, withdrawal rates and retirement rates as used for the 11th valuation. The underlying interest assumption was $4\frac{3}{4}$ %. Actuaries will find the various experience tables most useful, particularly in connection with the pension plans of railroad clients.

Selected Current Reference Data on the Railroad Retirement and Social Security (OAS-DH1) Systems, Actuarial Note No., 3-71 issued by the Office of the Chief Actuary, Railroad Retirement Board, May 1971.

This short note (four pages) presents a great deal of interesting information on the railroad retirement and social security systems for calendar year 1970. Examples of the data appearing therein are: taxable payrolls, financial operations, benefit loads, funds on hand, latest actuarial cost estimates, maximum benefit amounts in 1970, and medicare opera-

The detail approach is practical only if two basic requirements are met: (1) the modified natural reserve method (benefit and expense portions separated) is used, with the natural benefit reserve calculated in detail and the natural expense reserve calculated in aggregate (based on total acquisition costs and aggregate amortization factors); (2) cash values are already available in computer input form, such as tape or disk. (If this data is not available in "machinable" form, most companies would find it an arduous task indeed to prepare cash values at individual ages on all business being adjusted!) For participating business, dividends also would be required to be in machinable form.

There are certain definite advantages inherent in the detail approach. For example, it limits data input to the initial setup of factors; it can be integrated tions. The note includes also some interesting analytical ratios for the two systems.

Free copies may be obtained from the Office of the Chief Actuary, Railroad Retirement Board, Chicago, Ill. 60611.

Walter W. Kolodrubetz, Trends in Employee-Benefit Plans in the Sixties, in the Social Security Bulletin for April 1971.

This is one of a series of yearly articles devoted to discussions of recent developments in areas related to the social security program. The a ticle presents among other things historical data (through 1969) on coverage under all types of employee-benefit plans, employer and employee contributions, and benefit payments. A major portion of the article is devoted to private pension plans.

Virginia Reno, Preliminary Findings From the Survey of New Beneficiaries, Office of Research and Statistics, Social Security Administration,

March 1971. This study deals with men who were awarded non-disability benefits (at ages 62 and over) in the first six months of 1969. The stated purpose of the study is "to find out why people claim benefits when they do." Perhaps the most striking finding is that some 60% of all beneficiaries in this group were awarded reduced benefits at ages 62-64. One of the probable reasons for this was the trend toward liberal early retirement provisions in industrial pension plans.

Free copies are available from Office of Research and Statistics, Social Security Admin., Washington, D. C. 20201.

into the normal statement routine; and it utilizes the entire valuation file, rather than a sample. Some companies may choose to use both approaches: the detail method for major blocks of business, and the model method for old blocks of business, miscellaneous lines (such as health), or for adjusting earnings of prior years for which master files are lacking.

In summary, the mystique surrounding adjusted earnings and natural reserves can be minimized by approaching the situation creatively and allowing sufficient time for proper planning and implementation. Fringe benefits will accrue, too; adjusted earnings give management a look at *realistic* earnings (which should be refreshingly informative when compared to statutory earnings); and a model, if used, provides a valuable tool for fiscal planning.