

established companies, and an extraordinarily high interest rate in such cases may well be the resultant of caution, intelligent selection and fortunate opportunities.

ASSETS TO LIABILITIES.

4. (a) Assets to reserves or liabilities.
- (b) Security to policyholders per \$100 of liability to policyholders.

A comparison of companies on the basis of assets to reserves takes no account of the ages of the companies or the bases of reserves used, and certainly favors the young company when it has a large paid-up capital and also values its new business on the low basis allowed by the government. Then, again, the young company may have recently issued its capital stock at a high premium. (In cases where the security to policyholders is used instead of the assets in finding the ratio, the subscribed and unpaid capital also enters into the proposition.) Where the two companies under consideration have different reserve bases one valuing on, say, the 3 1-2 per cent. basis and the other on the 3 per cent., the worth of the ratio is altogether vitiated—but, as a matter of fact, the ratio has little or no value for comparative purposes under the best of conditions. Take, e.g., any one company. At the outset it may sell its capital stock at a high premium and value its business in force on the lowest basis allowed by the government. Its showing in either of the above ratios will temporarily be very good. Of course, if it pays out all the premium on the sale of capital stock in excessive commissions on its sale, has other huge organization expenses, and writes a costly new business, the reverse will be the case. When this company gets a little older, it may decide to carry the full reserve, dispensing with the modification allowed by the government on new business. It may also begin paying dividends on its quinquennial and annual dividend business, or writing a greater proportion of non-participating or low-priced insurance. The ratios as above will then be considerably lowered. If it retains a large margin or surplus, however, or writes a large proportion of deferred dividend business, and decides not to push too energetically for new business, it may, of course, show higher ratios herein than a more progressive company especially if the latter company is paying liberal profits to policyholders as they are earned.

INDICATIONS OF SOUNDNESS.

5. (a) Surplus to assets.
- (b) Surplus to liabilities.

Both these ratios generally indicate a sound position, but have much the same defects for comparative purposes as the two mentioned under (4) above. One feature which might affect the ratio considerably is the amount of contingent reserve which a company has transferred from the surplus. The practices of companies differ very greatly sometimes in this respect.

It is perhaps needless to say that the net assets should be taken. The ratio of a company might be considerably altered were no consideration given to a heavy bank overdraft, due and unpaid claims, etc., appearing in the liabilities.

EXPENSE RATIOS.

- (B) "Old companies'" ratios.
1. (a) Expenses to premium income.

(b) Expenses to total income.

(c) Expenses to insurance in force.

Expense ratios are favorites of the old companies, and they present them in peculiar lights and weird colors. "When other helpers fail and comforts flee," the old company falls back on some tricky expense rate, and it would be difficult to find one not too poor to do them reverence. They are indeed ticklish items that require careful and delicate handling. No other ratios lend themselves so readily to unfair deductions; no other ratios contain so many lurking fallacies. It is well nigh impossible to obtain an absolutely fair comparison of the expense ratios of companies, as they are affected so readily and in such a pronounced way by the various peculiarities of the business of each company. The three mentioned above are the ones most generally used. It is obvious at once from a consideration of the great proportionate cost of new business that the company doing the largest proportion of new business will, in all probability, show the highest ratio of expenses to premium income. The ratio then is a tax on the young company, or in the comparison of companies of equal age and size upon the more progressive one. Where the total income is used, the ratio is even more unfair, for we now introduce the large interest income of the old companies, upon which the expense is negligible as compared with that upon the collection of premiums.

It is easy to show by figures how a young company, getting its business actually cheaper than an old company, can yet be made to appear to be obtaining it at a greater proportionate cost.

Assume Company A has:

Business in force Dec., 1913.....	\$150,000,000
Income in year 1914—	
Premium income on old business.....	7,500,000
Interest income.....	2,500,000
Premium income on new business.....	500,000

Total income..... \$10,500,000

Its expenses are 15 per cent. of premiums on old business, and 100 per cent. of premiums on new business.

15 per cent. of \$7,500,000 is.....	\$1,125,000
100 per cent. of \$500,000 is.....	500,000

Total expenses..... \$1,625,000

Ratio of expense to income,
\$1,625,000

\$10,500,000 = 15.5 per cent.

Now take a smaller company, B, which has:

Business in force Dec. 31, 1914.....	\$10,000,000
Income in year 1914—	
Premium income on old business.....	400,000
Interest income.....	125,000
Premium income on new business.....	100,000

Total income..... \$625,000

Its expenses are 10 per cent. of premiums on old business, and 90 per cent. of premiums on new business.

10 per cent. of \$400,000 is.....	\$40,000
90 per cent. of \$100,000 is.....	90,000

Total expenses..... \$130,000

Ratio of expense to income,
\$130,000

\$625,000 = 20.8 per cent.

Thus, on the surface, it appears that Company B is run more expensively than Company A, because its expense ratio is 20.8 per cent., while A's