## TRANSACTIONS OF SOCIETY OF ACTUARIES 1950 VOL. 2 NO. 4

## DIGEST OF FORUM ON INTEREST AND INVESTMENTS

- A. In view of current economic trends and political events, what is the outlook for interest rates on life insurance funds? Has this resulted in any change upward or downward in interest assumptions used in calculating nonparticipating premiums, annuities and supplementary contracts?
- B. What new fields have been developed in recent years for the investment of life insurance funds?
- C. What is the nature and extent of the valuation problem created by direct investment (private placements) and how is it likely to be met?
- D. What are the maximum percentages of assets which properly may be invested in preferred and common stocks under present conditions? Do current inflationary trends call for some proportionate increase in common stock investments?
- E. What, if any, progress has been made in developing some system of valuation other than the December 31st market price for securities which under present rules must be carried at market?

MR. F. J. McDIARMID opened the forum with some remarks on the place of common stocks in life insurance company portfolios. He began by quoting Professor Slichter to the effect that in our present laboristic economy there are three things which we cannot have at the same time: relatively full employment, rather fully organized labor, and a stable currency—the conclusion being that a stable currency is not to be expected under present conditions. He also quoted a sentence from the London *Economist* of June 17, 1944: "Monetary history would seem to suggest that in all ages save the nineteenth century mankind has needed a steady and gentle fall in the value of money to rescue it from the mortmain of the debt it creates as it goes along."

Mr. McDiarmid pointed out that our present investment philosophy was formulated during the century of relatively stable purchasing power preceding World War I. He reviewed the conditions underlying that stability and drew the conclusion that the outlook seems to be rather clearly for further deterioration in the purchasing power of money, which has been the long term historic trend except during that exceptional period. He thought most of us would jump at a chance to settle for a steady decline in purchasing power of the dollar of 1% a year. On that basis our dollar of 1975 would be worth 78 cents and that of the year 2000 would be worth 61 cents. Putting it another way, a bond purchased to

yield 3% would in terms of real values earn only 2%. Or, assuming an inflationary rate of 2% per annum, which might be regarded as more realistic, our 1975 dollar would be worth 61 present cents and our dollar of the year 2000 would be worth 37 cents; our 3% bond would produce a real return of 1%.

The argument that life insurance contracts are payable in dollars, and so investments payable as to principal and interest at a fixed rate in dollars are entirely satisfactory to back them, may satisfy accountants and even some actuaries. However, except where premiums are largely used to pay for current protection, it is likely to have only minor appeal to policyholders who are concerned with the real purchasing power of life insurance proceeds for themselves in their old age or for their dependents. He felt that the time has come for reconsideration of investment in equities as the only way of doing for policyholders something which ought to be done.

In 1947, before nationalization considerably changed the picture, a group of the largest British life insurance companies had 16% of assets invested in stocks, the greater part being in common stocks. It seemed to him that in the light of the present inflationary outlook 10% of assets is a not unreasonable upper limit for common stock investment by life insurance companies. In order to enable companies to take advantage of such a limit, even to a partial extent, it would be necessary to change some of the present rules restricting surpluses and to get away from market value as the sole basis for common stock valuation.

He went on to suggest a valuation plan in which the initial cost of stocks would be written up or down each year by 1/5 of the difference between the book value at the beginning of the year and the market value at the end. Stocks which paid no dividend in the preceding year would be immediately written down to market and stocks on which the return represented by the present dividend was quite low might also be written down according to some rule of yield.

To indicate just how adequate common stocks are as a hedge, he stated that the mean of the 1949 high and low of the Dow-Jones Industrial Stock Average was 266% of the 1914 mean, whereas the corresponding ratio for the National Industrial Conference Board's Consumers Price Index was 222%. The average rate of depreciation of the dollar over this period as measured by the latter ratio was about  $2\frac{1}{4}\%$  per annum.

MR. D. N. WARTERS spoke on interest rates. He contrasted the prewar investment decisions, which were made in a relatively free money market, with the situation since 1939 which has seen a progressively less flexible policy of monetary management as requests of Treasury officials have been given increasing weights by the Federal Reserve. In April 1939 the Federal Reserve Open Market Committee announced that it would support the government bond market if such action should be necessary in the event of war. When war came, the system embarked on substantial purchasing operations from time to time as needed to support the prices of government bonds at par or better. Support policy has been with us ever since, and as a result interest rates, instead of rising with the increased demand for funds during the present business expansion, have been kept at a relatively low level without regard to the business cycle.

Today we have a Federal debt of about \$257 billion calling for an annual interest payment of about \$5.4 billion. Present policies of Federal debt management particularly as dictated by our changing social ideas make it impossible for us to depend on historical precedent in forecasting interest rates. The legal limit on the powers of monetary authorities is not being approached, as today's effective limitation on their actions has become their willingness to allow inflation or deflation. The Treasury and the Federal Reserve are not free agents, but are themselves prisoners of a managed economy.

Mr. Warters ascribed the lack after the war of a strongly deflationary program on the part of the Federal Reserve to the desire of the Treasury (regardless of inflationary effects) to maintain a low interest cost on the huge public debt as well as to the impact of the philosophy of a permanently full employment. The rift between the Federal Reserve and the Treasury last summer resulted in the firming of short term money rates but not the abandonment of the Federal Reserve's support of the Government bond market. Such a support policy will be one of the primary factors in keeping long term interest rates at approximately present levels.

MR. S. M. THOMPSON pointed out that as a practical matter limits to the proportion of common and preferred stocks are necessary because of the large and rapid market fluctuations which are characteristic of this type of security. The Manufacturers Life has held preferred and common stocks for many years. It has recently set a maximum limit applicable to both preferred and common stocks as a percentage of total assets based on market prices, with a limit on common stock holdings of  $\frac{2}{3}$  of the overall limit. These limits might be modified if excess of market values over book values approached zero or some impairment in basic financial strength were evidenced.

He then pointed out that the larger proportion of stocks in British life companies is to some degree due to differences in life insurance practice and to some degree due to fewer legal restrictions in the United Kingdom. In the United States companies at June 30 of this year, total stock holdings of both categories amounted to 3%. The figure for Canada at the end of 1949 was  $5\frac{3}{4}\%$ ; for Britain, it was 19%, made up of 8% in preferred and 11% in common stocks. Mr. Thompson pointed out that many British companies write other forms of insurance than life insurance. Nevertheless, the largest company, with the largest proportion of life funds, had 18.3% of its assets in stocks.

MR. C. A. SPOERL quoted figures which showed that prior to the Securities Act of 1933 private placements accounted for only 3% of the total of corporate issues. In the first few years after the passage of the Act this percentage rose to 20%; the rise has been steady, and it now stands at just over 50%. He pointed out that 90% of all these securities have been bought by life insurance companies.

The figures for the past two years in regard to two dozen of the largest companies have been published by the Life Insurance Association of America; for 1949 they are as follows:

	Holdings December 31, 1949			Acquisitions during 1949		
	Total Amount*	Direct Placements		Total	Direct Placements	
		Amount*	Percent	Amount*	Amount*	Percent
Railroad Utility Ind. and Misc	\$ 2,738.1 8,502.0 8,335.6	\$ 260.5 3,451.1 7,210.9	9.5% 40.6 86.5	\$ 103.7 1,180.8 2,062.6	\$ 23.0 592.6 1,800.8	22.2% 50.2 87.3
Total	\$19,575.6	\$10,922.4	55.8%	\$3,347.0	\$2,416.4	72.2%

NONGOVERNMENT SECURITIES

It is evident from these figures that the life insurance companies find this method of investment an attractive one. Mr. Spoerl touched briefly on the advantages of this type of financing (both advantages and disadvantages are discussed in a paper by Frazar B. Wilde presented to the American Life Convention in October). He presented the following figures as of December 31, 1949 from the Life Insurance Association of America study referred to which show that this method of financing has displaced

<sup>\*</sup> In millions of dollars.

the conventional methods to a much greater extent as regards large companies than small ones. Each group contains four or five companies.

		HOLDINGS OF NONGOVERNMENT SECURITIES				
Group	TOTAL Assets*	Total	Direct Placements			
		Amount*	Amount*	Percent		
Very large	\$27,980	\$11,045.5	\$7,284.0	65.9%		
arge	9,090	3,701.4	1,967.4	53.2		
fedium large	6,510	2,918.5	1,174.3	40.2		
Medium	2,790	997.3	256.3	25.7		
Small	2,980	710.7	174.3	24.5		

<sup>\*</sup> In millions of dollars.

On the question of valuing this type of security, the Valuation Committee of the National Association of Insurance Commissioners at present accords securities ranking equally with publicly held issues the same treatment which the public issues enjoy; on the other issues, the Committee obtains from the largest holder (or the sole holder) all the pertinent data, figures and statements (which information is kept up-to-date annually), and substitutes its own judgment for market ratings.

There have been few sore spots in the last few years and the system has worked well so far. How it would fare in a period of defaults is not clear. There would certainly be problems arising of a far graver character than any the Valuation Committee has been faced with. Just as bank examiners have weathered many storms, operating on a very similar system as regards commercial loans of banks, it is to be hoped that the present machinery will be able to cope with possible troublous periods in the future.

MR. W. M. ANDERSON gave a résumé of the current investment problems of Canadian companies. He reviewed the area of legal investments within Canada commenting particularly on the changes resulting from the 1950 revision of the law. The major areas of extension in recent years in respect of investment powers in Canada have been:

- 1. A substantially widened list of eligible revenue bonds.
- 2. The introduction of the earnings test for corporate debentures.
- 3. A revision of the common stock eligibility rule in respect of no par shares which considerably extends the eligible list.
- The recognition of excess mortgages when guaranteed or insured by government.

- 5. The addition to the eligible list of revenue real estate under strong leases.
- 6. The provisions in respect of housing developments, land assembly and rental insurance in the National Housing Act.
- The introduction of the 3% provision in respect of otherwise ineligible investments.
- Permitting amortization of federal and provincial government and government guaranteed bonds.

While the 3% provision (familiarly called the "basket" provision) was introduced two years ago as a stop-gap measure pending the general revision which occurred this year, it is significant that it has been continued. The feeling has been that to allow 3% of ledger assets to be placed in otherwise ineligible types of investments is of value in permitting limited experiment in new forms of investment, so that future changes in the investment provisions may be predicated upon actual experience rather than upon hypothetical considerations.

Mr. Anderson made the point that in Canada the investment role of the life insurance business in the economy as a whole is somewhat different from what it is in the United States. In the mortgage field, due to the very minor importance of savings and loan institutions and the fact that the banks are debarred from real estate and mortgage investment, the life insurance companies form by far the largest single group of mortgage investors, with a particularly important position in new construction. As a consequence, the great bulk of life insurance mortgage lending in Canada is done through mortgage branch offices rather than through loan correspondents, and the life insurance companies have intimate contact with and knowledge of mortgage investment conditions throughout the country. In Canada tax exemption is not a distorting factor in respect of government and municipal bonds. Accordingly, because of the resultant yields, the life insurance companies are major investors throughout this field. Such situations as these tend to produce a somewhat different investment attitude, which promotes a closer matching of company investment policy and the needs of the economy.

In Mr. Anderson's view common stocks may not prove to be much of an inflation hedge in Canada because of taxation policy and certain other considerations. At any rate, the proportion of Canadian companies' assets invested in stocks has shown no significant change in the past five years. Preferred stock holdings have increased while common stock holdings have declined both in amount and percentage-wise. He then reviewed the percentage changes in the combined Canadian portfolios since the end of the war, noting that the bond portfolios have declined from 76% to 69% while mortgage investments have risen from 8% to 16%, without, how-

ever, any significant improvement in aggregate average interest rates earned.

MR. W. A. THOMPSON advocated a change in the New York law to permit New York companies to invest in a limited way in common stocks. He believed that 33 states had statutes which permit their domestic life insurance companies to make such investments and that some of the remaining states apparently permitted it by implication. New York is one of the few states which does not permit any common stock investments by life insurance companies. He then reviewed the pros and cons of common stock investment, making it clear that he was not advocating such investments for any individual company. With respect to the valuation problem he favored following the lines proposed a few years ago by the Life Insurance Investment Research Committee. He felt that the way to let down the bars in New York State would be the passage of a so-called "Leeway" Statute-one which authorizes the purchase to a limited extent, and subject to varying restrictions, of investments not otherwise qualifying or not permitted. In the 13 states having such a statute the maximum provision is generally 5%, and this would seem a reasonable basis for enactment in New York State. It would appear highly desirable that the broadest type of limitation should be incorporated in the law and that there should be no restriction with respect to either common stocks or loans to unincorporated businesses. Thus the leeway provision, along with other possible advantages, might furnish a way by which life insurance companies could make desirable loans to small business. The "Leeway" Statute follows the doctrine of the prudent man as a responsible Trustee. It would seem, therefore, to be ideally suited to the life insurance companies and would allow the management function of the individual companies to express itself freely, with the interests of policyholders being, of course, the paramount consideration.

MR. M. R. CUETO confined his remarks to the topic on the new investment fields which have been developed in recent years. He listed housing projects, the purchase of business properties with lease-back arrangements and "jumbo" mortgage loans of nearly 100% of the property value made in some states where purchase-lease-back arrangements are not legal. When mortgages of the "jumbo" type are made it is customary to require the additional security of the pledge of a lease for a fixed period of years.

He commented on the large expansion of insurance company loans on oil and natural gas pipelines. He also mentioned the many revenue bonds secured by specific pledges for various projects such as parkways, bridges, tunnels, college dormitories and parochial schools. Mr. Cueto discussed the pioneering efforts of one company which has entered the field of purchasing freight cars and Diesel engines and leasing such equipment to the railroads. In this connection various statements have been made in the press that the 1950 Revenue Act appears to spell the end of this type of investment. It has been said that if rolling stock can be amortized in five years, as provided in the Act, on the grounds that it is directly needed in our Government's rearmament effort, tax-saving for the railroads will cancel the advantages which the present scheme offers under its rental contracts. On the other hand governmental authorities have warned to think twice about the five-year amortization provisions since corporations may wish they had some amortization credits left when they have to pay taxes six years from now.

MR. E. C. HENDERSON found one point still worthy of comment. He contrasted the somewhat favorable immediate outlook for higher interest rates with the longer pessimistic view. He is afraid that some of us may be badly fooled if we do not realize that some of the relatively high figures result from replacing low-yield government securities by issues with a more generous return. He felt that if the Federal tax continues to be based on investment income it should be treated as an investment expense for rate and other calculations. In his opinion  $2\frac{1}{2}\%$  is about the highest rate that can be justified for nonparticipating premium rates with a lower top for supplementary contracts not involving life contingencies. He did not lay down a definite rule for annuities since the interest rate is closely wedded to the mortality table assumed, but he hazarded the opinion that  $2\frac{1}{4}\%$  or even 2% would be all that could be justified.

The method proposed by a joint committee of the L.I.A.A. and A.L.C. for valuing preferred stocks was briefly described: (a) where there is a sinking fund to mature the entire issue in 50 years or less, amortize the purchase price to the maturity value; (b) all others purchased at a current yield of less than 6%, amortize the present price over a 50-year period to a price which will yield 6% at that time; (c) all others purchased to yield 6% or over, consider the cost price as the amortized value. This committee also proposed that a reserve fund be accumulated during prosperous times which could be drawn against to offset losses and market depreciation on preferred stocks defaulting during periods of stress. He felt that while this proposed method may not be the answer it is a move in the right direction.

MR. R. C. BARNSLEY reviewed the earlier attempts of actuaries to predict the future of the interest rate and concluded that notwithstanding the new factor of action by governments and central banks to control rates there seems no escape from the conclusion that interest rates cannot be forecast with any degree of assurance. He disclosed that the Great-West Life is not contemplating a change in its interest assumptions.

He went on to point out that if the public debt is increased greatly (as appears possible with the very large expenditures in prospect) without a correspondingly magnified increase in national revenues the burden of carrying the debt may become disproportionately onerous. At that time redress of this disproportionate relationship may not be possible through interest controls alone in which event resort may be had to other measures—perhaps by increasing the dollar amount of the nation's income through monetary action. He felt that we should act through all means at our disposal to criticize and restrain public inflationary practices, which would markedly impair the purchasing power of future income of insurance beneficiaries, and applauded the action of the Institute of Life Insurance in this regard.

Turning to the question of investment in common stocks, he introduced an observation made by Mr. Wendell M. Strong in 1929: "We have heard a great deal recently about the advisability of companies investing in common stocks. It is very significant to me that this comes after there has been a tremendous appreciation in the price of common stocks. We heard nothing about the advisability of such investments in the latter part of 1920 and 1921 when there was such a depression in prices that a reasonably intelligent diversified selection was almost sure to give a profit. Then common stocks were worth investing in. Whether or not they are today, I do not know; do you?" Mr. Barnsley then pointed out that Mr. Strong's question went unanswered at the time and suggested the possibility that the popularity of this topic has an unfortunate periodicity. Unless a company can persuade itself that common stocks are a good investment and that it should increase its investment therein for that reason alone, it is questionable whether the possibility of stocks providing a hedge against inflation should materially influence a company's investment policy. Inasmuch as life insurance companies generally have not seen fit to invest in common stocks up to their permitted limit, he did not think further easing of legal restrictions appeared necessary. In any event, he felt that few actuaries would be willing to assume the responsibility for saying that a need no longer exists for statutory limitations on equity investments at least in character if not in degree.

MR. C. F. B. RICHARDSON added a few observations on investment hedges. He pointed out that in a completely free economy without any Government controls and with moderate levels of taxation, it might be held that common stocks, and in addition real estate and possibly other forms of investment, would provide a better hedge against inflation than fixed interest obligations. Unfortunately, however, we do not live in an era when pure economic theories will work, nor does it seem at all likely that we ever shall again. The most powerful influences on the economy are Government controls, extremely high taxation, the colossal cost of modern war, and the growing power of labor unions—indeed, all of the forces that seem to be pushing us towards a socialistic state.

In this environment, the classical economic theories simply don't work, and it is difficult to say whether any particular type of investment would provide a good hedge against inflation. For instance, in the case of real estate we might be faced with controls not only on rents but also on the price of real estate itself. In the case of common stocks, some of the types of Government controls that would affect the results—that is, the earnings of corporations—are high taxes, allocation of materials, direct or indirect Government subsidy to industries considered essential, labor legislation and price controls. The fears of investors about the effect of such items as these are no doubt responsible for the unprecedented gap between the yield of gilt edge securities and the yield currently obtainable on common stocks. Depending on the view one takes as to the effect of these factors on future corporate earnings, common stocks might turn out to be a less efficient buffer against inflation than they might have been in the past.

In saying this, he did not wish to be construed as taking a position against the investment of life insurance funds in common stocks. Actually, he was in favor of it. But from a strictly legal viewpoint, the liabilities of a life insurance company are currency liabilities and not liabilities involving the future price level. Accordingly, the simple answer to the question of what types of investment should be utilized by a life insurance company is that investments offering the greatest security of principal to cover a currency liability should be used. However, from the standpoint of the policyholder, we are selling dollars for future delivery to cover income needs, and this is even more true today than it used to be on account of the growth of needs rather than package selling. We are selling income for future delivery to pay the grocery bill and the rent. The policyholder would doubtless like to be able to leave his widow an income which would be likely to cover her current needs in terms of material things at the time when those dollars are delivered. Unless one takes a completely defeatist attitude as to the future of common stocks versus interest obligations in our economy—that is, unless one assumes that the free enterprise system

is doomed—a good case can be made for the investment of a reasonable portion of a life insurance company's funds in assets that are likely to increase in value if the price level continues to go up. This is especially true in the case of participating insurance.

MR. G. N. CALVERT reviewed the increasing emphasis on common stocks in the portfolios of pension funds. This has been a recent development and a sudden one. Practically all of the new agreements specify the power to buy common and preferred stocks. In time this development may be expected to put a floor under the prices of high-grade stocks; it might even cause prices to advance. Mr. Calvert ascribed this development to the progressive decline in bond yields. Since pension funds are rarely invested in mortgage loans, the interest showing has been poorer than that of life insurance companies. He mentioned one recent type of pension plan which provides that 30% of the premium is to be invested in high yield stocks, with the other 70% placed with a life insurance company on a deposit administration basis.