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CURRENCY DEVALUATION AND LIFE INSURANCE

- 1. In countries in which currency has been devalued, what has been the effect upon
 - a) The economy of the country?
 - b) The life insurance business in the country?
 - c) Pension funds in the country?
- 2. To what extent have those North American life companies which operate in Great Britain, in the Caribbean, or elsewhere been affected by the 1967 currency devaluation?
- 3. What may be the impact upon Canada and the United States of devaluation of currencies in other countries?

Philadelphia Regional Meeting

DR. STUART SCHWARZSCHILD:* Speak of currency devaluation and most people think of changing the dollar price of gold from \$35 an ounce to, say, \$50, \$70, or \$100 an ounce. Despite the many problems of the international monetary system vis-à-vis the dollar, the price of gold is not the major problem. The problem is the chronic deficits in the balance of payments which the United States has been running since 1950. Changing the dollar price of gold will not correct this deficit condition.

Change in the Price of Gold

A change in the official price of gold will serve to give the United States more gold dollars with which to redeem the dollars presented to it for redemption. But this is not much of a gain. We now have 300 million ounces of gold, and a change in the official price of gold to \$70 an ounce would mean that these 300 million ounces could redeem twice as many greenbacks; but an increase in the rate of redemptions could soon exhaust the gold—maybe within six months—and this would mean that the dollar price of gold would have to be changed again. A change in the dollar price of gold could mean that those few foreign individuals who own gold could buy more American goods and services, but they could also buy more German and French goods and services, and they might do just that rather than buy relatively high-priced American goods. The remedy to the deficit in the balance of payments does not lie in changing the dollar price of gold so that we would become able by fiat to redeem more greenbacks. The remedy lies in having foreigners spend their greenbacks, their marks,

* Dr. Schwarzschild, not a member of the Society, is professor of insurance at Georgia State College. their francs, their pounds, and their lire for American goods and services rather than in either their simply holding them or spending them for the goods and services of other nations.

To get foreign holders of dollars and other currencies to want American goods, American goods and services must compete successfully with German, French, Swedish, and other countries' goods and services. Our failure to compete successfully enough is the cause of the current problem; the problem does not lie in the \$35 price for an ounce of gold.

Balance of Trade

We have had an export trade surplus for a number of years, so one might say that we are competing successfully. We are not competing successfully enough, however, to pay for the vast amount of services purchased by American tourists, to fight the war in Vietnam, to maintain foreign bases, and to conduct a world-wide charity program of foreign aid. If we are going to pay for our imports, our wars, our foreign bases, and our charity with mediums of exchange other than gold, we must increase our trade surplus or increase foreign travel in the United States. To improve our inflow of currency, we must either become more efficient and have lower wage increases or change the rates of exchange.

In this paper, when I use the term "devaluation," I mean a change in the rates of exchange rather than in the number of ounces of gold foreign bankers can get for a dollar. In fact, there is no reason that we should give foreign bankers any gold. They do not redeem their currencies with gold; they redeem them with dollars.

Rates of Exchange

The rates of exchange have been artificially set at a point where one can travel more cheaply abroad and can purchase goods more cheaply abroad. The dollar is simply not worth 4 marks, 3.62 guilders, or 8.5 shillings. If the rate of exchange were changed from 4 marks to, say, 3 marks for a dollar, the Volkswagen, which now costs \$1,800, would cost \$2,400. At that price Americans would buy Chevrolets instead of Volkswagens. Foreign countries, of course, do not want to see the rates of exchange altered to the extent that we would buy less of their goods.

It would be wonderful, of course, if we could reduce the prices of American goods and services so that, say, the Chevrolet price would be \$1,800. But that is not a realistic goal in view of the inefficiencies of the American society, the strength of union demands, the high rate of taxes, pressures for higher minimum wages, the war in Vietnam, the war on poverty, and other forces.

Other Remedies

If we are unwilling to insist on a change in the rates of exchange, we could reduce some of the inflationary push on American prices by raising taxes and by reducing private and public spending. Of course, one might say that, as long as we have full employment and Germany is willing to give us 4 marks for a dollar, why should we worry about the imbalance? When the time comes that foreigners finally agree to make us pay more dollars, we can do so. In the meantime we can continue to travel luxuriously in Europe for the cost of a second-class vacation in the United States. However, someday Germans are going to refuse to give us 4 marks for a dollar, and, when that day comes, the effect on their economy could be severe.

Gold Markets

We have now returned to a two-market system for gold. This system may persist satisfactorily. However, if our balance of payments seriously deteriorates, we may find that the central banks will decide to exchange their dollars for United States gold. We must then decide either to not sell them any gold—this is a gold embargo—or to let them buy it down to the last ounce. <u>But, in the meantime, there is little reason to buy time by</u> changing the official price of gold.

Further Measures

Of course, if peace comes in Vietnam, confidence in the United States can return, the drain of war costs can cease, and the pressure on the gold supply caused by these factors and others can subside. However, the balance-of-payment deficits will remain, although they will not be as troublesome. While we are waiting for peace, Congress should take some affirmative measure to help reduce the balance of deficit. The Special Drawing Rights approved at the recent Stockholm meeting are at least one to two years away; even when issued they will only have a slight effect on our current problem of a chronic deficit in our balance of payments. Specific measures the Congress could enact which would help to reduce the current deficit are a reduction in foreign military and nonmilitary spending, restrictions on foreign travel, and a sales tax. However, instead of these specific measures, it is more likely that Congress will enact higher income taxes and an across-the-board reduction in federal spending. While these broad actions will be helpful, they are rather like having the car overhauled in order to fix a flat tire.

D310 DISCUSSION—CONCURRENT SESSIONS

Purpose of Devaluation

The purpose of devaluation generally is to change the rates of exchange so that the goods of the devaluing country are less expensive in terms of foreign currencies and the goods of the foreign countries become more expensive in the currency terms of the country that devalues.

Making foreign goods more expensive to the country that devalues should reduce its imports, and making the devaluing country's goods cheaper to foreign countries, of course, should stimulate export. That by itself should raise the level of economic activity in the country that devalues, reducing employment and raising the gross national product. To reduce the likelihood of this higher gross national product's going primarily to the increasing of imports, the devaluing country will also usually enact higher taxes and a reduced spending budget. This is what England is doing with its 14 per cent devaluation, higher taxes, wage and price controls, and tight budget.

Effect of Devaluation

One cannot always say what the effect of devaluation will be. As in England, there are usually a number of measures enacted, so as to channelize the effect of devaluation to some specifically desired goal, whether that goal be an improvement in the balance of payments, levels of employment, or changes in gross national product.

If devaluation is not joined with restrictive monetary and fiscal policy, the devaluation is expansitory and should expand those items which expand with growth in the gross national product. Again the effect is dependent not only on the extent of devaluation but upon the elasticity of the country's import and export prices and upon the elasticity of wages. For example, if England's elasticity of imports is 2, a reduction of 14 per cent in the cost of pounds sterling due to devaluation would increase exports 28 per cent. Of course, the actual effect is not that simple, since not only does the rise in the level of employment and incomes caused by the increase in exports stimulate an increase in import demand but the increase in exports requires an increase in raw-material imports. One should not overlook the fact that the effect of devaluation on a country's exports is dependent upon the economic conditions in other countries and upon the trade policies which other countries adopt.

Effect of Devaluation on Life Insurance

With regard to the specific effects of currency devaluation on life insurance and pension funds, we need to examine the elements of the life insurance equation. *Mortality.*—The effect of devaluation upon the mortality element should be slight, except for the aberrations caused by the suicides of the central bankers and others who get caught with large dollar balances. Proper classification of central bankers as substandard risks can help in this regard.

Expenses.—Since the life insurance product does not require imported raw materials, there is little direct effect on expenses. Since life insurers are large users of human services, in the long run devaluation would have an inflationary effect on the life industry's wage costs. But since foreign trade is a relatively small per cent of the United States gross national product and since there are so many internal long-run forces causing American wage inflation, devaluation is perhaps not a major factor in the increase in wage costs.

Marketing.—This leaves marketing and finance. Unless accompanied by wage controls, higher taxes, or restrictive monetary policy, devaluation would expand incomes rapidly and thereby could increase life insurance sales. But, since devaluation for its own sake does not make much sense, particularly where a country already has full employment, the devaluation would be accompanied by higher taxes, wage controls, and restrictive monetary policy. These restrictive measures are attempts to channelize the devaluation to a trade effect and away from income and price effects. Accordingly, one might conclude that, if accompanied by measures to keep wages down, devaluation should not stimulate life insurance sales significantly in the short run.

There are so many other important variables which affect life insurance sales-for example, marriage rates, birth rates, wars, taxes, number of agents, social security levels of benefit, inflation, stock prices, and interest rates-that I do not see much of a positive effect of devaluation in the life insurance marketing equation. On the negative side, it may well be that the psychological effect of devaluation would cause people to spend more and buy less life insurance. One cannot say, of course, what the psychological effect would be. The psychological effect would likely result in continued good life insurance sales but the purchase of lower premium life insurance. This is a trend which we have been witnessing for a long, long time, but it would perhaps be accentuated by devaluation. Although most people in the industry attribute the trend toward lower premium insurance as being due to inflationary forces and the lure of the equity market, I wonder whether it may be partly related to the greater education and sophistication which higher education has brought the public. Otherwise, one cannot account for the growth of such fixed-dollar items as savings and loan shares and certificates of deposit and bonds. Also the progress of medical science in making life insurance less of a necessity reduces the increase in life insurance sales.

Investment.—Finally, we need to examine the effect of devaluation on the investment part of the life insurance equation. It is in the investment sector that I believe international monetary phenomena have had and will continue to have the greatest effect on life insurance.

Exchange gains and losses.—The effect of devaluation upon the value of a company's holdings of foreign investments and currencies is offset to the extent that the insurance company's liabilities are denominated in the foreign currency. The Federal Reserve guidelines permit a company to have 110 per cent of its foreign reserves invested abroad. Insurance regulatory authorities generally require the company to invest its assets in the same currency in which the offsetting reserve is denoted. Therefore, there is no chance for loss to the extent that a dollar of reserve is offset by a dollar asset. There is, however, an opportunity for speculative gains by purchasing foreign exchange or securities of countries that do not devalue or by selling short the currencies of countries that do devalue. However, the Federal Reserve guidelines for financial institutions and the interest equalization tax, plus other considerations, inhibit tendencies for American companies to invest their assets in currencies different from their liabilities.

Interest rates.—The effect of the international monetary muddle on interest rates is the most significant effect to life insurance companies. The Federal Reserve has followed a high interest policy in its international defense of the dollar. It has done this (1) to encourage foreigners to invest in the United States, (2) to discourage Americans from investing abroad, (3) to have foreign banks invest their reserves in dollar instruments, and (4) to restrain inflationary spending in the United States where such spending would lead to greater imports and less exports.

Therefore, as long as we remain in balance-of-payment difficulties, interest rates will undoubtedly be kept at a relatively high level. Of course, if we have a large amount of unemployment, the rules of the game could change: we might even try devaluation and low interest rates. A number of factors indicate that our balance of payments will most likely remain in deficit. Some of these factors are the reluctance of the federal government to use an aggressive tax policy; our racial problems, which require federal spending; the federal government's desire to police and to be a benefactor to the whole world; an increasing emphasis on welfare; the increasing strength of labor; and social inefficiencies. All of these elements augur for a continued internal inflationary bias. The inflationary bias encourages more imports. The major weapon being used to fight this inflation is high interest rates, and this should augur well for life insurance investment yields.

Although the need for high interest rates could be relaxed if we had a successful realignment of exchange rates, the country would still need high interest rates so as not to negate the benefits of a change in exchange rates.

Conclusion

Devaluation in terms of the price of gold is not a realistic solution to our problem. Basically, there needs to be a reduction in inflationary forces by higher taxes and lower spending, wage and price controls, greater efficiency, decreased foreign travel, decreased imports, and a reduction in our foreign give-away program. If such measures are not taken, selective changes in the rates of exchange would reverse the chronic deficits in the balance of payments. Those countries whose currencies are undervalued vis-à-vis the dollar perhaps will not agree to a change in the rates of exchange. Our problem may not be solved in the near future, and the major weapon, weak as it is, apparently will continue to be the high interest policy. Balance-of-payment difficulties do not stimulate increases in savings through life insurance, but balance-of-payment difficulties enable life insurance companies to earn high rates of interest. Of course, if pushed to the brink, balance-of-payment crises may cause trade restrictions and depressions with all the negatives that these connote.

MR. GEOFFREY N. CALVERT: Since pension funds and insurance are deeply concerned with inflation, it is useful to consider the distinction between inflation and currency devaluation.

The term "inflation" may refer to various segments of the economy and may take particular forms, such as a wage inflation, a rent inflation, or a broad cost-of-living inflation, and it may arise from various sources, such as those indicated by the terms "cost-push" inflation or "demand-pull" inflation. In a very real sense, inflation is itself one form of devaluation of the currency in relation to other elements of the internal economy.

the currency in relation to other elements of the internal economy. The term "currency devaluation," as it is generally used, refers in a more limited way to the official reduction in the value of a unit of one currency in relation to other currencies or in relation to the price of gold where the gold standard applies. It is concerned with external rather than internal trade.

To a nation which has very little trade with other nations, the effects of currency devaluation may be quite limited, but, to a nation heavily engaged in international commerce, the effects may be very large.

In both cases, imported goods or services will cost more after devalua-

tion and are therefore discouraged. Exports, however, bring in more revenue, when measured by the new currency unit, and a surge in export industries normally results from a currency devaluation.

Not only are the industries directly engaged in manufacturing goods for export placed in a better competitive position, but all those industries supplying raw materials and services to the export industries are correspondingly stimulated. On balance, the economy as a whole should be stimulated, possibly at the expense of the economies of other nations engaged in competitive export trade.

But devaluation causes its own kind of price inflation at home, namely, in the imported-goods sector, and it causes price deflation abroad in the exported-goods sector.

While stimulating the economy as a whole, it will generally also cause a rise in over-all living costs and, hence, a reduction at home in the value of the currency unit in relation to the spectrum of goods and services as a whole.

The situation causing a currency devaluation may include many elements, such as the following:

- 1. Continued cost-push inflation at home leading to inability to compete in foreign markets;
- 2. Heavily unbalanced government budgets leading to excess demand, a loss of confidence in the currency unit, and therefore a withdrawal of funds by foreigners;
- 3. Heavy outflows of currency due to capital investments made in foreign countries;
- 4. Wars;

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- 5. Heavy tourist travel abroad;
- 6. Foreign aid;
- 7. Maintenance of occupation troops and military bases abroad;
- 8. Loans to other countries;
- 9. A fall in price of principal exports, such as agricultural or mining products from small countries, where these and similar outflows and pressures are not offset, for example, by inflows due to a return of interest or profits from foreign investments, by an influx of tourists from abroad, or by other sales of commodities or services paid for from abroad, together with a high rate of net savings at home.

How else can such an imbalance be corrected?

- 1. Through the draining of demand leading to price increases at home, such as by a tax increase;
- 2. By restricting the outflow of capital for foreign investment;
- 3. Through measures to discourage foreign travel;

- 4. By withdrawal of troops and the winding-up of military operations abroad;
- 5. Through restrictions on credit, thus discouraging tendencies to expand operations too much, with resulting pressure on resources at home;
- 6. Through direct controls and restrictions on imports, wage increases, price increases, or other cost increases, thus giving inflation and hence price levels in the rest of the world time to catch up.

All of these and similar measures must be weighed against each other and against the question of devaluation of the currency.

In one way or another, each is aimed at tipping the balance of trade or the flow of money or gold in favor of the country faced with this problem. If none of them can apply and the problem continues, devaluation may be the only available remedy.

Many of the elements mentioned above were present simultaneously at the time of the recent devaluation of the British pound. Mr. E. F. Rogers, FIA, a fully qualified actuary employed by Unilever Limited, in London, who observed the scene in Britain at close quarters, wrote to me on March 24, 1968, as follows:

Devaluation is only one of several factors which will have a major influence on the British economy in the coming months, and it is not always easy to separate the effects of the various influences. The cost of living in the United Kingdom did not rise sharply in the months immediately following devaluation. It is, however, beginning to rise more sharply now as the increased cost of imports begins to take effect. Further pressure on the cost of living will result from this week's budget which is based on the political decision that the very substantial increases in taxation should take the form of indirect rather than direct taxes. Purchase tax has been substantially increased on a wide range of articles, fuel and motor vehicle taxes are up, and there has been a heavy increase in the Selective Employment Tax, which is a poll tax levied on the service industries.

The combined effect of devaluation and the budget proposals is that the cost of living is expected to rise by at least 5 per cent over the coming year, and some critics consider that this is an underestimate.

The government's aim is to hold wage increases down to $3\frac{1}{2}$ per cent so that rising prices will reduce home consumption and free resources for the export drive we need to get our balance of payments straight. It remains to be seen whether this wage limitation can be achieved. There will be determined opposition from the unions, and the government have announced that they will be introducing legislation to impose controls on pay, dividends and, to some extent, prices.

The reaction of investors has been to put increasing emphasis on equities in spite of the fact that the outlook is so disturbed and there is, as yet, little real indication that Britain has found a cure for her economic problems. There is, however, a widespread feeling that the government will be unable to control the tremendous pressure it is deliberately putting on wages, and that a burst of fairly rapid inflation is the likely outcome. If, contrary to these expectations, the government does succeed in keeping a fairly tight grip on wages, the effect on profits should be healthy, although shareholders will undoubtedly have to wait for their increased dividends. One imponderable is the extent to which price controls will restrict profits.

A number of technical factors have helped to push equity prices up. For example, the switch to Corporation Tax has made it more attractive for companies to finance expansion by loan issues rather than shares, so that the supply of new equities to the market has fallen off. Another factor is the introduction of a Capital Gains Tax which, for the moment, seems to be inhibiting sales of equities. The overall effect is that the supply of equities is unable to meet the growing demand as institutional investors switch more heavily than ever into this type of investment.

At the beginning of 1967, the *Financial Times* Ordinary Share Index was slightly over 300. It climbed fairly steadily through 1967 and immediately before the November devaluation it was fluctuating in the range 400/420. It remained slightly below 400 for the remainder of 1967 but started to climb again towards the end of January. It reached 428 early in February, then slid back to just under 400. The budget proposals have produced another sharp rise to around 420.

In the meantime, the bond market has remained consistently depressed. Long-dated government bonds yield about $7\frac{1}{4}$ per cent compared with a dividend yield on the Ordinary Share Index of under $4\frac{1}{2}$ per cent. We have for some years now been accustomed to a "reverse yield gap" between the dividend, yield on Ordinary shares and the yield on government bonds, but a relatively recent development is that the earnings yield on Ordinary shares is now well below the bond yield.

While the people in England are now facing the prospect of more rapid inflation in their living costs, we in America are presently being offered the products of British industry at lower prices. This is putting increased pressure on some segments in the United States economy, such as the aero-engine and automobile industries.

If this country were to be driven to devalue its currency, we would soon find ourselves facing the same accented inflation problems that our British counterparts are facing, and we would similarly be putting pressure on competitive industries abroad.

We have seen that currency devaluation is generally accompanied or quickly followed by (1) higher living costs in the short run, (2) shifts of relative prosperity as between industries within the economy, and (3) a lowering of esteem for the currency unit as a storehouse of value or as a medium for long-term savings.

Translating the above into practical pension planning, funding, and

investment policies, we are led to the conclusions that follow, and they apply in a situation where there is devaluation.

First of all, pension plans will become obsolete more rapidly. Careeraverage earnings plans, fixed-benefit plans, and plans not geared to living costs or current economic values will produce even more disappointing benefits than they did before.

The fixed incomes provided by most pension plans will lose their purchasing power even more rapidly, and elderly pensioners will be squeezed harder.

In the process of updating these plans, it seems likely that there will be a tendency to emphasize final-average earnings plans, variable annuities, cost-of-living pensions, and similar plans of the more recent types designed to protect the pensioner against an undue or continued loss of purchasing power in his pension.

In the investment of the pension fund assets, notwithstanding the higher yields that bonds might be providing, I think you would see increased emphasis in the direction of equity forms of investment, including common stocks (especially, in the short run at least, those associated with export industries), land and real estate, mortgages with an equity feature, leasebacks with reversion of equity at the end of the lease, and similar investments based less on pure currency values and more on economic realities.

All this would seem to indicate that the insurance industry in North America, in moving toward variable annuities, segregated funds, and now the acquisition or establishment of mutual funds, is generally moving in a direction harmonious with the best interests of its clients, since it seems that these pressures toward inflation and currency devaluation and similar problems may continue to arise from time to time as the future unfolds.

In the short run, the two-price gold system, the partial demonetization of gold, and the creation of SDR's as a supplement to gold for the settlement of international payments have provided time for this country to put its fiscal house in order.

It is to be hoped that an effective job will be done, now that we have this breathing space, so that no dollar-devaluation problems will have to be faced.

MR. CHARLES D. WILLIAMS: The American Life, with which I was associated for a good many years, is a company which specializes in foreign business. It is active in over fifty countries and writes business in some thirty currencies, many of which are in the sterling block. We had been through some earlier minor devaluations in other currencies and were anticipating and gearing up for the major sterling devaluation that finally came on November 18—a good deal later than we had anticipated. We, like other companies dealing in multiple currencies, were taking what steps we could to hedge against devaluation. I would like to cover briefly what we expected the effects to be, but I do not think anyone is really certain even now of what the long-term effects will actually be. The dust really has not settled yet.

Let me break this down into the immediate impact on surplus, the long-term effect on foreign overhead, and the effect on remittances for United States dollar or Canadian dollar overhead and profits.

First, let us take the immediate effect of devaluation on a multiplecurrency company's surplus position. Most companies that I have talked to did whatever they could under exchange-control regulations to move sterling out into dollars. Obviously, if it had been possible to convert all sterling into dollars, assets would have gone up (in sterling equivalent) by $16\frac{2}{3}$ per cent on the day the sterling devaluation took place, while liabilities would have remained as they were, thus producing a nice windfall. In practice, however, because of tight exchange control, the windfall was nowhere near as great as this. My former company, in particular, followed a basic philosophy of investing locally (to the extent that suitable investments were available) in the countries in which it did business and in their currencies, thus restricting its ability to take advantage of the potential windfall. Currency hedging can be a dangerous game if carried too far and is not the sort of thing a life company can or should take full advantage of. We, as actuaries, must take an active interest in the currency positions of our companies, devaluation being a rather unpredictable but important contingency to weigh in our analyses.

While the immediate effect of devaluation on companies which were able to hedge with other currencies may have seemed attractive, the other side of the coin is quite another story. As my associates pointed out, devaluation brings with it an increase in local operating costs. Despite wage and price freezes in the United Kingdom, devaluation is bound to produce greater long-term inflation than would otherwise be the case. In a small country like Bermuda, which is heavily dependent upon imports from the States—and the same is true to varying extents in the Caribbean—the inflationary impact is more immediate and severe. This is of concern to companies with substantial overseas administrative offices in such countries. If we take Bermuda as an example, it looks as though the cost of operations there has increased by close to 10 per cent in a matter of a few months. This overhead is in pounds sterling, so, unless sterling premium income increases proportionately, any so-called windfall that may have been produced on the date of devaluation will be dissipated through higher operating costs.

The same is true of remittances for head-office overhead in the States. Let us assume that a company required \$280,000 a year for Stateside head-office overhead and that it had permission from exchange-control authorities to remit £100,000 per year into United States dollars. That £100,000 will now only produce \$240,000—and I frankly do not know yet what attitude the exchange-control people have taken on permitting increased sterling remittances to cover fixed United States dollar costs. These remittances are frequently geared to a percentage of premium so that a company with fixed Stateside (or Canadian) overhead is going to be squeezed unless it is able to bring premium income up to the old United States or Canadian dollar equivalent quickly—no small chore for a company with a high proportion of old business on the books. Similarly, other remittances which cover reinsurance and profits are frequently geared to local premiums.

This leads to the question, "Will devaluation (with accompanying inflation) lead to higher production and thus more premium income?" Based on what early figures I have been able to obtain from one life company specializing in the international field, the answer seems to be "Yes, but not enough"—or at least "Not so far." This particular company is a "fast grower"; when its local currency figures are converted to United States dollar equivalents on the new basis for both 1967 and 1968, it appears that new business for the first two months of 1968 was 30 per cent above that of the same period in 1967. When we break this down, it appears that the increase was only 23 per cent in countries which devalued in comparison with 37 per cent in the others. Their Caribbean and Central American new business went up 43 per cent, but all attributable to nondevalued countries, the devalued ones actually decreasing slightly on a United States dollar equivalent basis. Its United Kingdom business went up 69 per cent, but its other European business more than doubled.

It is a little hard to draw valid comparisons based on this short period of time and on a company which is a particularly fast-growing one. I do conclude, however, that devaluation did produce some economic upsets, particularly in the smaller Caribbean countries which are particularly susceptible to economic swings, and at least temporarily cut into life insurance production.

MR. GEORGE F. S. CLARKE: Everybody seems to be defining his terms, so I will also. When I speak of "devaluation," I mean a downward change in the official currency rate of exchange.

To North American life insurance companies doing an international business, the devaluation of currencies has been practically a way of life during the postwar period. The 1967 devaluation was, therefore, not considered very unusual in its effects on the companies' operations. Although it was upsetting in some respects, in our company we changed our book rates of exchange on sixteen currencies, and this devaluation has been taken in its stride. In fact, it was not unexpected, as was mentioned by the last speaker.

My remarks are, therefore, directed to the effect of devaluation in general and not to the 1967 devaluation only; they are directed in particular to the effects of devaluation on a company's operations, from a head-office standpoint.

The Sun Life Assurance Company of Canada, with which I am connected, has been involved in conducting business outside North America since the 1880's. The company has business in force in thirty different currencies, although new business is now confined mainly to four currencies.

As two or three other speakers have mentioned, the main aspect of a company's operations that is affected by currency devaluation is, of course, its financial position. Regardless of whether or not the company's book currency rates of exchange are changed immediately after a devaluation, the financial effects are immediate, since the official rates are used at the year end in determining a company's financial position.

Of course, once the book rates of exchange are changed, there is a decrease in assets and the permanent effect on surplus depends on the relative amounts of assets and liabilities in the devalued currencies. If the accumulated funds or a substantial part has been remitted to Canada or the United States prior to devaluation, a substantial exchange profit would result. Conversely, if a company is overinvested with respect to a particular devalued currency, an exchange loss would result. The effect on a Canadian or a United States company's operations in a country with a depreciating currency would depend on the degree of depreciation and the relative asset and liability position.

If the assets and liabilities are matched in the depreciating currency, there are a number of possible effects, which are similar to those experienced by a local company in a similar situation: (1) Devaluation is usually accompanied by increasing costs as against fixed premiums for existing business. (2) Interest rates usually rise, resulting in losses on fixed income assets. (3) Equity assets, such as stocks or real estate, will generally appreciate. (4) Rapid depreciation soon places a company in difficulty, with expenses possibly exceeding premiums on old business.

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Slow depreciation over a period of years might give the company time to adjus (5) Cash-surrender values may be worth more currently than face amount will be later.

In the situation where the North American company has remitted accumulated funds or a substantial part to Canada or to the United States prior to devaluation, the exchange profit can be used as an offset to expense losses.

Also, in countries with numerous devaluations new business is usually terminated as a result of the political and economic instability, which is probably the reason for devaluations. As the currency continues to depreciate, efforts are made to terminate existing business by paying cash values which may be worth more than the face amount at death subsequently. There are numerous examples of business' being paid off in local currency, that is, either the cash values or the face amounts, by nominal amounts of United States dollars. Examples are China after World War II and Chile and Indonesia in the postwar period.

In other countries with irregular devaluations, or at least slow depreciation over a period—such as the United Kingdom and the Philippines—it is possible to adjust local operations to changing conditions. There has been no major change in our operations in the United Kingdom or the Philippines.

Perhaps the depreciation in Israel was not slow, from \$4.86 to the Israel pound to approximately 30 cents in fifteen years, and conditions there have been unique.

My experience there up to a few years ago was that no major change in local operations for a company was necessary, although business was conducted on a very limited range of plans. As was mentioned, there was a swing to lower premium plans, particularly to whole life, but very little term insurance. The local life companies offered exchange-linked endowment policies which were actually fully variable contracts in which the premiums, cash values, and face amounts varied with changes in the exchange rate of the Israel pound to the United States dollar.

In desperate attempts to encourage savings and to control spending, the government issued United States dollar-linked policies along with the extension of the linkage principle in other directions and the introduction of many other measures. The local companies were persuaded or prodded by the government to issue exchange-linked contracts in addition to the usual guaranteed contracts and, therefore, to invest in these linked bonds.

The few foreign companies that were doing business in Israel did not issue these variable contracts, but a British company introduced a guaranteed insurability rider which provided the policyowner with the right to buy additional insurance in the event of devaluation of the Israel pound. This rider was adopted by the Canadian company with which I was connected at that time, and, although the cash values were not improved on devaluation, the rider proved to be a good sales tool, in some respects more practical than the exchange-linked policies, when devaluation occurred. The policyholder had the option to increase his protection by paying an increased premium, although not a great many took advantage of it.

During the next to the last devaluation, in 1962 or 1963, I believe, I understand that many of the holders of exchange-linked policies made them paid up or reduced the face amount to continue substantially the same premium.

I have not had personal experience with the conduct of new business in a country with runaway inflation, since we have not done business in the larger countries, such as those in Europe, where this has occurred; our business has been in smaller countries, where we ceased new business before severe instability had taken over.

The effects of devaluation are also felt in a company's head-office operations. The extent of the effect depends upon the degree of independence given to the local operations. The one extreme is the strictly branch-office operation with similar head-office control and supervision, as exercised by a North American company over a branch in any North American city. Most of the international business of Canadian companies grew up in this way—perhaps with general agencies in some respects in contrast to branch offices—but with the usual head-office control of operations except for local sales and secretarial work. These were the days of freedom from exchange control and also the days of stable currencies. Devaluation was not a problem. The other extreme is the locally independent operation, with perhaps also legal autonomy through local incorporation, with the head office playing a minor role in the local operations.

In many respects, a fair amount of local independence and perhaps of legal autonomy is advantageous and probably necessary to do business now in some countries because of exchange control, extensive insurance legislation, immigration restrictions, and the like.

If there is not complete independence or autonomy, the head-office operations are affected by devaluation in several areas: (1) administration, (2) underwriting, (3) actuarial, and (4) agency.

1. Administration.—The extent depends on the point at which a company's records are converted from local currencies to book dollars.

2. Underwriting.—Amount limits on medical requirements, nonmedical limits, limits of retention, and so on, may have to be revised.

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3. Actuarial.—The minimum amounts and minimum premiums, rate band gradings, or policy fees may have to be revised, depending on the extent that head-office expense is involved in conducting the local operations.

4. Agency.—In agency operations, the conversion rates are used for salesproduction purposes, production bonuses, and so on, when the agency force competes for company standings on a world-wide basis.

In actual practice, the conversion rates used in underwriting, actuarial and agency matters, may not be the company's book rates of exchange, and the rates used may be changed quite independently of devaluation. However, in administration, problems are involved when the company's book rates of exchange are changed, and these book rates are usually kept very close to the official exchange rates. Some companies actually keep their basic records in book dollars. In other words, they convert the local currency to the book-dollar figure when the records are set up. Others maintain their records in local currency.

The company that converts its records to book dollars, on devaluation, therefore, has to change all its records when the currency rate of exchange is changed.

DR. CHARLES R. WHITTLESEY:* Devaluation is not the same thing as inflation, although much of the discussion has related, quite properly, to inflation. Moreover, even if we are talking about inflation, it is important to consider whether we have in mind a small amount of inflation or a great deal of it. Matters of degree and the relationships among different terms are key thoughts to bear in mind. The type of extreme inflation that we were worrying about twenty or thirty years ago is not what we are worrying about now and not what was under discussion today. That in itself is a most encouraging fact.

Because we no longer worry about extreme inflation and concern ourselves instead with an inflation of 3, 4, or, in the case of England, 6 per cent is not to say that this is not an important problem. But it is not the problem that seemed a threat only a few years ago. The fact that we have made that transition is joyous news, surely, to all of us.

Let me try to present a few ideas designed to draw together some of the things that have been said. I hope they will stick with you when you discuss events of the past month or year or events that still lie ahead.

In the first place, devaluation ordinarily refers to setting a new value on a country's currency, as England did when she lowered the pound from \$2.80 to \$2.40 or when in the 1930's the United States raised the price of

* Dr. Whittlesey, not a member of the Society, is professor emeritus of economics and finance, at Wharton School of Finance and Commerce, University of Pennsylvania. gold to \$35 an ounce. The Washington Agreement of last March did not constitute devaluation of the dollar. It constituted demonetization of gold. This is not a matter of semantics. It is of the utmost importance, as I shall try to demonstrate in a moment.

In the second place, I disagree with current terminology which describes present monetary arrangements as constituting a two-price system for gold. It is not that but, rather, a two-*markel* system. An example of a two-price (actually a multiprice) system was exchange control in Germany in the 1930's, where there were different prices for the same commodity, German marks.

That is not what we have today. Instead, we have one market which is accessible only to central banks and another market open to the play of supply and demand. The two markets are distinct. We have one market where, by common agreement, gold is valued at a conventional rate, as poker chips are valued, and is used as a counter on that basis. We have another market where gold can behave as wheat behaves, as silver came eventually to behave. In it the price can rise or fall as speculators purchase gold or as they unload supplies of gold that they bought with too great enthusiasm. It is a place where supplies of gold coming from the mines may meet an insufficient demand so that the price can go down.

The fact that we have a two-market system, in one of which gold can rise or fall as other commodities do, is highly significant.

The final point to be stressed by way of introduction is that the real "sleeper" in the measures taken in March was not the abandonment of the fixed selling price for gold, whereby gold could not rise above \$35 an ounce. It was abandonment of the fixed *buying* price. As long as the fixed buying price was maintained, speculators were protected against loss through having to sell below \$35 an ounce. Now it is possible for gold to decline below that price.

That guarantee provided a floor which helped to perpetuate and encourage speculation and to create the sort of difficulties we were in. The fact that that protection has been removed may have momentous results. It largely accounted for a substantial decline from prices paid during the period of extreme speculation.

Let me turn now to policy implications of recent monetary developments.

The Bretton Woods monetary reform of 1944 provided that currencies, through the International Monetary Fund, should be tied to gold. This action was taken over the protests of England. England had had sad experience because of the tie with gold in the 1920's and early 1930's. She did not want to be tied to gold again. The present arrangement, if it is maintained, constitutes a severing of the tie between money and gold. It is a belated acceptance of the position adopted by England in 1944 and surrendered rather reluctantly. A good many economists felt that the tie with gold was perhaps necessary in the light of public opinion in this country but that it was not a desirable monetary feature.

How has gold worked since Bretton Woods? First, all of us would agree that monetary policy has been concerned primarily with full employment and stable prices and secondarily with economic growth and the balance of payments. It has not been governed, as it was supposed to be under the old gold standard, by movements of gold. The fact that the Employment Act of 1946 committed the country to basing monetary policies on considerations other than gold signifies that severing the connection with gold has not removed a controlling factor.

Second, far from gold's being a stabilizing factor and one that gave value to our money, as the old idea was, the record clearly shows that for the past fifty years and perhaps longer gold has been a destabilizing influence. We have only to look at the events of 1929, 1933, and early this year to recognize that gold was the basis of much of the destabilization and distress that we experienced. This was true not only of the times I mentioned but of other times as well.

The tie with gold, which was adopted over England's protest and that of some other countries, compelled central banks, including the Federal Reserve, to manage not only money but gold as well. Far from simplifying the task of monetary management—the achievement of goals set before us by the Employment Act—it rendered the task vastly more difficult. We were also obliged to manage gold, subject though it was to political and emotional strain, speculation, and all the rest. That seems to me to be a fair statement of how the gold provision worked in the past. It points to some of the burdens that recent changes have reduced though not wholly removed.

Removal of the link with gold was made possible in part by the reservecreation provisions tentatively worked out at Rio and Stockholm. The Special Drawing Rights, hopefully, have established something that offers a great deal more than gold did in the way of strength and stability, for the gold provisions served to hamper monetary policy rather than help it. For many years they contributed not to the strength but to the weakness of the United States dollar, the Canadian dollar, the pound, and all the rest. This hampering, weakening influence has been lessened and something far more promising put in its place. In substance, therefore, monetary policy has been aided and not hurt by recent developments. My final topic is the monetary outlook. I may start by saying that the strength of the dollar rests not upon gold provisions but upon the policies maintained by the government and a variety of underlying factors. What we should watch is not devaluation or demonetization. It is, rather, the monetary policies of the Federal Reserve, our fiscal policies, and other processes of government and private enterprise. To suggest that they will be less effective and less enlightened than they have been in the past is a repudiation of all that we have learned and of confidence in our form of society and government.

Recent predictions of a severe decline in the value of the dollar repeat the fears of 1933. I remember very eminent people's saying that we were going to have serious inflation and describing the alarming results that would follow if we went off the gold standard at that time. The fears were not realized in 1933, or in 1949, or in 1960. It is my guess that they will not be realized now. Legal provisions relating to gold did not prevent us from having inflation during the Civil War. They did not prevent the German inflation. When the emergency came, the tie with gold was of no use at all. It was simply a first casualty of the war.

The conclusion that gold is essential to the avoidance of inflation is logical only to the extent that one can establish a governing connection between gold and monetary and fiscal policies. No such link has existed for many years. No major change, therefore, results from recent events, other than to free policy and public behavior from some of the worst of the emotional and political vagaries witnessed in recent years.

I suspect that history will show that American businessmen, trying to anticipate devaluation abroad and to take advantage of a possible rise in gold, contributed more to hurting the balance of payments than anything De Gaulle or the French did. That may include some of the actions taken by life insurance companies to protect themselves, even though, if I had been in the same position, I might have done the same thing.

Past experience with devaluation is often cited as a precedent: "It happened in 1933!" But let us look at the circumstances under which it happened then. The country was ravaged by internal strife, even worse than today. The IWW seized and held the city hall in Seattle, my home town, for a short period. We were suffering from tragic unemployment, and we actually wanted inflation, which we called "reflation." Today's conditions are the reverse of that in terms of prosperity, opposition to rising prices, and high level of employment.

Much the same can be said of conditions that prevailed abroad in famous instances of inflation. Germany, Hungary, and Greece were prostrate nations after lost wars. China, countries of Latin America, and Brazil were weak economically and torn politically or had recently undergone disastrous experiences related to war or depression. In some cases all of these conditions prevailed together.

Such precedents as these, both in the United States and abroad, are more notable for contrasts than for similarities. They imply the improbability rather than the probability of devaluation or serious inflation for the United States today.

MR. A. HENRY KUNKEMUELLER: In addition to the effect on corporate surplus and ordinary operations discussed by the panelists, currency devaluation and local inflation have a significant impact on multinational group operations. Two major considerations are plan design and financial management.

In the face of ongoing local inflation, whether or not accompanied by currency devaluation, the multinational group writer must, in cooperation with the broker and the policyholder, continually review the adequacy and suitability of the employee benefit programs provided. Benefit levels, coverage structures, and even the currencies in which the plans are written, are all candidates for periodic change. Medical, life, and pension coverages are all easily outdated by inflation. The varying impact of currency devaluation on local nationals, American expatriates, and third-country nationals must be considered.

The multinational group writer has meaningful, if limited, options as to the currencies in which funds are held under group contracts. This includes reserves, contingency funds, and earned retrospective rate credits. Alert financial management can significantly improve operating results, to the benefit of the policyholder as well as the carrier.

MR. SAMUEL ECKLER: Perhaps the one thing that I found most provocative among the many things that Dr. Whittlesey presented to us is his statement that the insurance industry should not be concerned over the small degree of inflation. And he did not say 2 or 3 per cent; he said as high as 5 per cent.

I cannot help but agree that the hyperinflation in Europe forty-five years ago would destroy the life insurance industry. I also must agree that, if I have to choose between a 5 per cent annual inflation and serious unemployment, I would obviously choose the annual 5 per cent inflation.

I would like, however, some elaboration from him on his statement that the insurance industry should not be concerned or alarmed about it, for it must mean some restructuring of products offered by the insurance industry. DR. WHITTLESEY: I agree with you. You misunderstood what I intended to say. I do not think we should settle for any continuing inflation at all. I am not willing to accept the idea that we should say that inflation is inevitable or to go along with that philosophy. I think that we should try to prevent it, and I believe that we can.

I was interested in contrasting the discussion of inflation now with that in the past. I find comfort in the difference of degree of inflation that is talked about. I do not condone or accept as desirable any inflation at all.

We had stability of wholesale prices for eight years or so, ending in 1965. That index may be more reliable than the consumer price index, which is distorted in many ways. That is the most impressive record I know of in any period in our history.

We have a reasonable hope of achieving a high degree of price stability, at least of avoiding any severe inflation. I am convinced that our best chance of avoiding inflation is to assume that we can do so. Even if we do not achieve our goal fully, we shall come nearest to it by fighting as though we could and demanding nothing less.

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DR. IRVING PFEFFER:* For the first time in many years, even skeptics in the United States have become seriously interested in the question of dollar devaluation. Devaluation can take place in a number of forms—formal devaluation, in which the central bank makes a readjustment in the exchange rate of the local currency and does this with due publication, or informal devaluation, in which the same effect is achieved by other means, one of these being inflation.

There is a wide variety in kinds of inflation—the galloping or runaway type, the serious but steady type, or the relatively mild but persistent type. All can be measured in terms of the rise per annum in the cost-ofliving index or some similar index. Another important dimension relates to the expectations people have about what is likely to happen to the rate of change in inflation, and it is this expectational factor which is far more significant than the actual rate of change.

In recent years Brazil has given us a perfect case example of what happens with runaway inflation. In Brazil the cost of living rose 53 per cent in 1962, 81 per cent in 1963, 80 per cent in 1964, 64 per cent in 1965, 40 per cent in 1966, and 24.5 per cent in 1967. The cruzeiro was officially devalued in February, 1967, and again in December, 1967. Its impact could be seen in three relevant ways: (1) the increase in gross national

* Dr. Pfeffer, not a member of the Society, is professor of insurance at the Graduate School of Business Administration, U.C.L.A. product virtually came to a stop; (2) savings in the economy dried up almost immediately; and (3) people's expectations that the currency itself would be subject to further erosion caused them to stay committed only to investments of real value or of short term.

An analysis of the insurance company portfolios in Brazil at the end of 1967 indicated that they consisted entirely of real estate holdings, common stocks, and cash. They had no bonds and no mortgages. This is a rational type of reaction. One authority wrote in *Revista de Severos:* "Individual life insurance has not developed in the last years as a result of devaluation of the currency which has occurred in Brazil and the competition it suffered from other investments, short term and at high rates of interest, which better meet the public's need in time of inflation."

A safe generalization based on the Brazilian experience would be that runaway inflation will simply leave creditors at a total loss and will be destructive of the insurance industry. The characteristic response is to get out of the commitments or to table the operation of the business temporarily.

Until last month we were on balance in a favorable trade position with other countries. Thus devaluation of their currency in effect meant that we would have an even more favorable position vis-à-vis these other countries, primarily because of the relative disparity in size. To illustrate this disparity, the gross national product of France last year was \$60 billion; ours was on the order of \$850 billion.

The second largest GNP in the free world is composed of the foreign activities of American enterprises. This GNP of American enterprises abroad last year was about \$120 billion. Our foreign commitments generate far more than the economies of all the western European countries. The answer to the question, "What is the impact of currency devaluation in a country like Britain, France, Australia, or one of the lesser countries from the standpoint of GNP?" is that it is negligible. The really severe impact would be seen if we were to have a reversal in which our currency were devalued. The patterns of international trade would be materially affected by this.

I would like to shift focus from these rather specific questions to the more general question of currency devaluation and its impact on the economy. There has been a great deal of concern over the gold standard, the threatened loss of gold and the actual loss of gold maintained by our Treasury. Much of the thinking about the whole question of the stability of the dollar and the future of our currency is based upon misconceptions about the real role of gold in present international monetary affairs.

The gold standard functioned reasonably well in earlier periods of our history. To a large degree, gold as a commodity did behave in terms of its production in keeping with a fairly elastic demand-and-supply curve in a free market in which gold production was able to be sustained relatively favorably in terms of the volume of international trade. It was possible to have adequate gold supplies to meet the needs of international trade. In recent years the new production of gold has been less than the increase in commercial and industrial use and the increase in speculative or hoarding uses of gold. We have had a net decrease in the total supply of gold in the world. In effect, we have been demonetizing gold to accommodate industrial and commercial users and hoarders.

In a situation where the basis for valuation of the currency is one that is unrelated to the growth in real incomes or the growth in GNP, that basis must be repudiated; it was, in fact, repudiated by this country in the thirties.

If we think about countries in terms of their ability to hold or to own gold, where gold is used as the standard of value, we develop a picture of exploitation which modern economists recognize in much clearer fashion than we did before World War II. In modern times we recognize that the gold standard, or the uniform use of gold as a standard of value, gives rise to cyclical unemployment in underdeveloped areas, with repercussions both politically and economically. For example, Cuba was dependent virtually exclusively on a sugar crop. In a bad season the impact of being pegged to an international gold standard meant massive unemployment in Cuba precisely because its currency was pegged in an arbitrary way. The result of a recognition, particularly during the thirties, that unemployment effects were intolerable led to political and economic changes which frustrated the use of a free-flowing gold standard. Politically we began to develop a very intense form of nationalism and autarchy in which countries were concerned with beggar-thy-neighbor policies and with self-sufficiency right across the board.

That kind of self-sufficiency prevails in most of the underdeveloped nations at the present time. For example, countries like India or Egypt would rather have steelmills than agricultural development precisely because the steelmills tend to give them greater self-sufficiency without regard to the economics that are involved. In the United States we have the same problem with respect to oil. We would rather draw oil out of Bakersfield at a cost of 10 times the per-barrel cost of oil drawn out of Kuwait or Saudi Arabia. This enormous price differential can only be explained in terms of a desire for self-sufficiency and for autarchy on the part of the United States. In economic terms the attack has been one of erection of trade barriers, currency restrictions, and the international propagation of cycles. A sneeze in Washington results in a crisis in Ottawa; this is one of the economic consequences that most nations try to fend off.

In order to dampen the magnitude of the cycles that we have had in this country, the United States pegged the price of gold at \$35 per ounce in 1934. The purpose was to liberate our economy from international movements in gold flows. In effect, it was to go off the gold standard to all intents and purposes.

In 1946, Congress defined the economic goals of the United States for the first time. These three goals became a formalized part of government policies. They were full employment, price stability, and rapid economic growth. We gave our highest priority to the maintenance of full employment. We have been relatively successful in all three areas. At the present time, employment in the United States is at the highest level in terms of available manpower that it has been in our history. The unemployment rate is well under 4 per cent, most of which is accounted for by hard-core unemployment and by technological shifts. The inflation rate in this country, which is presently about 3 per cent and threatening to rise to close to 4 per cent in 1968, is a lower persistent inflation rate than we find in most of the countries of the world, and our economic growth is relatively rapid.

However, our current budget deficit is about \$20 billion, with no tax increase of consequence clearly in sight. Our balance of payments is in a deficit position of \$3.5 billion. Our favorable trade balance is evaporating. Last month was the first month in the past five years in which we actually had a negative trade balance. Speculators have been attacking the United States dollar, and there is little doubt that international confidence in its stability has been shaken.

We do now have approval by the Western principal monetary partners of the special drawing-rights plan, which in effect adds accounts receivable to accounts payable to current assets in international transactions, thus relieving pressure on gold per se. We do have currency controls, some of which economists feel are rather unwise. We have all mainer of controls with respect to penalties on foreign investments. The end of the war in Vietnam, which has been a significant drain on our international balances (accounting for about \$1 billion of our real adverse balance), is in sight. Interest rates are at present at the highest levels that they have been in a long time. The prime rate this week was raised to 6.5 per cent, which is almost a historic new high. Government spending is under somewhat greater control, and there is evidence that we are due for some slight tax increase shortly.

These factors suggest an awareness on the.part of the government of the need to maintain a favorable position with respect to control of prices and with respect to control of the balance-of-payments deficit position.

We have had this very modest, creeping inflation ever since World War II. Logically, the position of the life insurance industry ought to be that of a rational creditor; a rational creditor in a period of the type we are describing should be shifting out of fixed-interest obligations which are pegged into obligations having a greater variable factor. The proportion of total assets of life insurance companies invested in United States government bonds is one indicator of this kind of shift. In 1945 the life insurance industry had 45.9 per cent of its total admitted assets in United States government bonds, 21.0 per cent in 1950, 9.5 per cent in 1955, and 5.4 per cent in 1960. In 1965 the percentage was 3.5. The move was clearly out of the fixed-interest, hard-bound type of security into other things, primarily mortgages. Mortgages had some equity characteristics because of prepayment penalties and the relatively short turnover period of what looked like long-term mortgage instruments.

The second aspect of this rational reaction to steady inflation has been the drive to the formation of holding companies in an attempt to escape from the investment restraints that were imposed, primarily in New York but elsewhere also, as a result of the Great Depression. The article by Guthman and Dower compared Sun Life of Canada and Metropolitan Life in terms of their portfolios and the impact of the Great Depression on their portfolios. The conclusion was that the volatility of the stock market was such that Sun Life of Canada was technically insolvent whereas the Metropolitan had come through unscathed. That kind of analysis at that time gave rise to a virtual prohibition of equity investments by insurance companies and variable investments of all kinds. Breaking the shackles of this kind of <u>outmoded legislation has</u> proved too great a burden to bear for the insurance industry; consequently, holding companies have been the logical response.

What will the holding companies do with their freedom? They will not buy United States government bonds.

How nice it would be if we could have the best of all possible worlds: price stability, minimum unemployment, and a maximum growth rate. Unfortunately we have a trade-off; the trade-off in economic terms is between price stability and unemployment. A recent study developed a function which appears to prevail in the American economy at the present time. The following tabulation illustrates the characteristics:

Increase in Consumer Price Index	Unemployment Rate
Consumer Price Index	Rate
0%	8%
4	3
6	2

As we bid up the prices of relatively unemployable labor in order to achieve the goal of total employment, we build in an inflationary pressure. The decision as to what level of unemployment is tolerable is a political decision. Our present situation is one of compromise between what would be an ideal in terms of price stability and what might be an ideal in terms of unemployment. The position we are in is determined largely by political considerations.

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It is unfortunate that the politicians and economists are not in agreement on monetary and fiscal-policy implementation. There is agreement on the theory in abstract terms, but whether the theory is relevant at a particular time and place is a matter about which politicians and economists disagree.

The "fine tuning" that has been used has produced a good deal of economic uncertainty about the stability of the American dollar. However, this fine tuning accounts in large part for the fact that we are now in the longest sustained economic expansion in our history. We are now in our eighty-seventh month of continuous expansion. If this keeps on, I will have to throw away my books on business cycles.

MR. DONALD J. LEAPMAN: My comments are directed to the effects on an overseas branch of the devaluation of the currency of the country in which the insurer's head office is situated, in particular, to our Canadian branch of a British life insurance company. One cannot, however, ignore the other side of the coin—the effect on our British company of a nondevalued Canadian branch.

The head office of an insurer usually fulfills two functions: (1) it provides central policy direction to the largely autonomous operations in various parts of the world and administers the company's "estate" (elaborated on below) and (2) it acts as the local control office for the business done in the territory in which it is domiciled.

Sterling should be regarded as our basic currency, since our ultimate shareholders are, for the most part, resident in the United Kingdom and our shares (at least, those of our parent organization) are quoted in sterling on the London Stock Exchange. Devaluation may affect our domestic sterling business in three ways.

1. Operating expenses can be expected to rise, at best gradually, probably quite rapidly, as the effect of devaluation finds its way into an increase in salaries, rents, cost of materials, and so forth. This will represent a decrease in the net value to the company of future premiums on in-force business and hence will result in an increase in the current value of the liabilities for nonparticipating contracts in force. For participating business in force, the decrease in net value of future premiums results in lower bonus or dividend loadings.

2. There may be an additional liability for past service in any "final earnings" pension plan.

3. The above items may be offset in whole or in part by the appreciation in that part of the fund which is held in equity-type investments, common stocks and real estate particularly. The proportion of life insurance funds invested in such assets in the United Kingdom has been much greater than is usual in North America. This is due perhaps to the considerable inflation which has continued in the United Kingdom since the end of World War II but also to the insurance legislation which permits each company to determine the constitution of its own investment portfolio without restriction. Also lacking are any discriminatory asset-valuation procedures, which may create an artificial preference for certain investments by reason of such procedures rather than per se.

For example, at the end of 1966 over 25 per cent of the total book value (and presumably a much higher proportion of market value) of our life fund assets were represented by common stocks. In this situation, the effect of devaluation is greatly dependent on the age of the fund and the relationship of the level of new-business writings over the past few years to the business in force. This relationship determines the value of future premiums compared to present liability. In our own case, the current liability is just over 5 times the value of future premiums. Since only the expense element, say, 12.5 per cent of the value of future premiums is adversely affected, whereas 25 per cent of the assets covering liabilities of 5 times the value of future premiums are favorably affected, the gain is likely to be much greater than the loss, and the over-all effect on the fund should be the creation of a substantial surplus which increases the "estate." The actual size of this increase in estate will depend on the ultimate degree of inflation of equity values relative to expenses, while the period during which this addition to the estate is created depends on the relative rate at which these two elements are affected by the devaluation.

The ability to invest to a high degree in equity-type assets is of prime importance in offsetting inflation resulting from devaluation. While it is uncertain how quickly common stock values will respond to such inflation (since for a time profit margins may be reduced), investments in "bricks and mortar" should respond more rapidly.

I would now like to define the "estate." This consists of the residual assets after making realistic allocation of assets to each existing territorial life fund to cover the real liability for the policies issued in that territory, including realistic dividends. This estate has, of course, been created over the past years by retaining larger reserves than are actually necessary and may be composed of undistributed surplus, the excess of market over book values of assets, contingency reserves, investment reserves of all kinds, subscribed capital and surplus, and, last but not least, the difference between the actuarial reserve used to determine the published liability and a reserve taking due account of anticipated future experience without contingency margins.

In this simple model it is really the estate which enables a company to finance the strains arising from the writing of new business. These strains are largely a result of an artificial valuation basis, since, in fact, business written should actually represent an asset at the outset (if there is an advantage in writing such business), whereas the valuation system produces a liability in excess of net moneys received. Nevertheless, without an estate the assets to finance this strain would not exist. Since the ultimate effect of devaluation on a trading nation is likely to be some degree of inflation, new-business figures should turn upward following devaluation, and a part of the increase in estate resulting from the equity investments should be earmarked to provide for this increased strain. Inevitably, a further part should be used to increase policy dividends in the devalued territory, and in consequence a part should also be available for stockholders' dividends. Thus the stockholders of a life insurance company operating in a territory in which devaluation occurs should ultimately obtain the same amelioration in respect to the currency devaluation as do the stockholders in an industrial concern, that is, the dividends should ultimately increase in proportion to the devaluation, with the market value of the stock reflecting this increase. The achievement of this enhancement would over the short term be more doubtful for life insurance company stockholders were the equity-type investment by the insurer more restricted, whether by legislation or by fear for the short-term position of the fund should market values decline. In the United Kingdom guaranteed policy values are not common, and hence short-term considerations are less important in determining investment

policy. It is more difficult to protect the policyholder against inflation if high policy values are guaranteed, since this inhibits heavy equity investment.

Let us now consider the effect of the estate on the local branch operations of the company, for example, in Canada. The total estate at any time may be represented by three asset elements-fixed-interest assets in the devalued currency, fixed-interest assets in other nondevalued currency, and equity-type assets. The fixed-interest assets in the nondevalued currency are not affected by devaluation, nor are the equitytype investments. The fixed-interest assets in the devalued currency depreciate in terms of local currency (dollars), although, as mentioned above, this may be offset by additional surplus added to the estate from equity profit in the devalued territorial fund. If the net effect is a decrease in the estate, this will represent a decrease in the "capital" available for use in new territories or in developing existing nondevalued territories. If, as seems likely in the case of United Kingdom companies with high-equity-type investments, the devaluation ultimately results in an increase in the estate, this additional value is available for new development.

In an international company one should perhaps work backwards and determine the surplus available for policyholders' and stockholders' dividends in the "devalued" territory by reference to the estate, first ensuring that sufficient surplus be allocated to the estate to at least offset any reduction in terms of nondevalued currencies due to the devaluation.

One point not previously mentioned is the contribution of local territorial funds to the expenses of the head office. Since these expenses may be regarded as remaining constant relative to the nondevalued currency and since part of the business which supports these expenses has been devalued, any apportionment of expenses, whether related to sum assured or premiums, is likely to result in an increased proportion of the controloffice expenses being charged to the nondevalued territorial fund, until such time as the business in the devalued territory becomes sufficiently inflated to restore the relationship.

Another area where the local branch may be affected by devaluation of the currency of head-office territory is in its retention limit. If the company has been accepting locally a sum assured that is really excessive for its local fund but that has been either formally or informally reinsured in its head-office account, and if the latter is determined relative to the now devalued currency, the effect may be to reduce the retention expressed in local currency.

Another item is financing, either by subscription of capital or, for a

branch operation, by financing the strains which arise by providing the assets required for local deposit. If limits for the amount of strain to be developed each year have been determined relative to the devalued currency, these acceptable levels will now be reduced in terms of local currency, although the increase in the estate will probably justify a redetermination of the levels of strain which can be accepted.

These comments have been in terms of a devaluation such as the 15 per cent by which sterling was devalued. As a result of World War II, the French franc suffered a much greater devaluation, so that the prewar portfolios of a number of life insurance companies had face amounts which averaged the equivalent of only a few dollars. One company chose to pay off all such policies for the full face amount, thereafter using the only remaining assets of real value—property—to finance the commencement of a new portfolio of policies for the much larger sums assured then being effected.

MR. EVAN INNES: What is the effect on pension plans of currency devaluation? The first answer seems to be "No effect," but, when we think about it a little more, there appear to be a number of things to consider.

The first of these is the effect on a country. Devaluations are of two kinds. There can be a devaluation in unfavorable circumstances; that is, when the competitive advantages of the devaluation are offset by a rise in home currency prices arising from pressure of excess home demand, an inflexible home economy, or the operation of the price-wage spiral. A devaluation under those circumstances would not work. There can, however, be devaluation in favorable circumstances; that is, if the supply of exports can be increased without serious rise in home prices, if there is elastic demand overseas, and if there are no import barriers or quotas operating against the import of our goods by foreign countries. In this situation devaluation would have a beneficial effect.

Consider the case of the United Kingdom now. There has been no significant curtailment of demand, although there has been an attempt to depress the economy by increasing unemployment, raising corporation taxes, controlling wages and prices, and generally attempting to create conditions favorable to making devaluation a success.

Everything turns, then, on price and wage controls at home and elasticity of demand abroad, and I am afraid one must question whether all the conditions necessary for success in the British case do exist.

The second thing to consider is the effect on the individual, again taking the United Kingdom as our example. I think that one has to expect that

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there will be an increase in the cost of living, since, in the first place, imported products, which are such a large part of the British economy, are going to go up in price because of the devaluation. Corporate taxes have increased, and sales taxes have increased—all as part of the effort to depress the economy. The standard of living will therefore fall for the ordinary individual if the policy of wage restraint works. However, I do not yet see any signs that the policy of wage restraint is really working; so we can still expect an inflation of 3 or 4 per cent a year if not more, to continue in Britain.

Third, what is the effect on corporations? The main effect, of course, is that the price of imported raw materials is going to rise. But there are other factors, and, turning again to the British case for a moment, we see high corporate taxes, dividend restraints (all part of the necessary attempt to depress the economy), and the need to export about onesixth more in order to make the same dollar income from overseas trade.

Now, after that slightly dismal picture, what is the effect on pension plans?

Let us suppose that the devaluation is associated with inflation. (This is a likely but not a necessary association, because the devaluation might be made purely to redress a trade imbalance not arising from inflation.) If the inflation continues and if the attempt to depress the economy does not work, then pension costs are going to rise. This underlines the need, of which we are all fully aware, for equity investment. It also underlines the need for a timely review of the investment portfolio after the devaluation is too late, in the sense that prices of stocks in enterprises likely to do well in the postdevaluation era will have moved against us if we fail to anticipate events.

In the first place, locally invested funds should benefit from higher interest rates. (We have to expect that there will be a high interest-rate structure in the postdevaluation period in an attempt to keep foreign capital in the country.) This will be of direct benefit to pension funds. Funds invested in foreign nondevalued assets will increase in value.

Pensioners will suffer from the higher cost of living. The general increase in unemployment may be expected to lead to some termination gains, depending on the vesting provisions of the plan.

The picture at which we have been looking is really a view from inside the country. Let us now take a different view and look at a devaluation by a foreign country from the standpoint of a United States corporation with investments in that country. I am talking of capital assets, not people; we will consider below the case in which the overseas asset consists of highly skilled people, expatriates, third-country nationals, and so on. The immediate effect for a United States corporation with overseas capital investment is a fall in the dollar value of that investment, as well as a fall in the dollar value of any overseas indebtedness.

Of course, the devaluation may work; it may be that the devaluation is the stimulus the country needs. This does not mean, however, that, although everything has been going badly, all of a sudden everything is going to go right and the sun will shine and investors will profit. In the case of the United Kingdom, for example, we, that is, the United States corporations, have lost one-seventh of the value of our investment. But, if we can increase our sales and corresponding profit by one-sixth, things will remain relatively even.

What, then, should a United States corporation do if devaluation threatens? I think it is interesting to look at what the British subsidiaries of large United States corporations with extensive overseas operations did at the time of the British devaluation. They maintained minimal cash balances; they paid their overseas bills as quickly as they could; they gave extended overseas credits; they made early declarations of dividends to the American parent; and they made, insofar as they could, forward sales of sterling. These are signs of highly purposeful activity, but they represent no more than palliatives.

The United States has massive overseas investments, as Dr. Pfeffer so well described, and it is the duty of management to protect these investments against a devaluation.

The investment area that we must consider today is that of pension fund assets. If we could immunize these against the effects of devaluation, we would save something worth saving. But let us take a quick look around the world and see what we can do.

Let us start with Latin America, taking Mexico first. If we have a qualified plan in Mexico, we cannot make foreign investments, so we cannot protect the pension plan assets against devaluation. With a nonqualified plan we could invest outside Mexico but would lose the chance of making almost 10 per cent tax-free on a qualified plan investment in Mexico and paying tax-free benefits. I think, therefore, that we must rule out Mexico as a place where we can protect pension plan assets by external investments.

In the rest of Latin America the question seems hardly to arise. Social security covers native employees very largely, barring a few executives whom we can consider in conjunction with United States expatriates generally.

Let us turn next to Canada. You will know that in a qualified plan in Canada 90 per cent of investment income must come from Canadian investments, so the degree to which we can take protective action is very slight and the disadvantages of operating a nonqualified plan for the sake of investment freedom are considerable.

Now look to the Far East—to Japan. Here, with a qualified plan, the employer has no control over investment. I am talking now not of an insured plan but of a pension trust. The employer has to make use of one of ten or fifteen government-supervised trusts, and they have the investment control. Again, we could operate a nonqualified plan, and we could then direct our own investments, but we could make overseas investments only with government consent and there are the usual penalties of no tax relief and so on.

The Philippines have a tax code based on the Washington model, and a qualified pension plan there is exempt from tax; benefits also, are tax-free. There are no restrictions on investment, but there is exchange control, so that we could be hampered in an attempt to make foreign investments.

As for Europe, let us consider Belgium first. In Belgium there is no government control of investment of noninsured plans. There is, however, some threat that control might be imposed similar to that for insurance companies. So, for the present, foreign investments are possible, and there is no Belgian tax on investment income. Belgium shines like a good deed in a naughty world and is the kind of place we are looking for.

In the Netherlands the situation is similar to that in Belgium. We can make overseas investments, but we are subject to scrutiny. There is no exchange control, but we have to get permission from the Chamber of Insurance in order to make foreign investments.

In Germany there is one kind of pension plan that we can set up by which we can make foreign investments, but for that particular type of plan there is the disadvantage of a restricted tax relief on the employer's contributions.

France, Italy, and Sweden leave us little room for private pension plan arrangements, so we shall not consider the protection of pension plan investments in those countries.

As for the sterling area, the main part consists of the United Kingdom, South Africa, and Australia. We are confronted with exchange control, but we can invest outside the area. A pension plan in the United Kingdom, South Africa, or Australia, wishing to make a United States dollar investment, today would pay a dollar investment premium of over 40 per cent, and there are other restrictions and penalties. South Africa requires that you keep at least 40 per cent in government or municipal securities, and Australia has a similar provision. There is room, then, for some protective action, but at a price. Remember that, in those cases where we have to resort to an unqualified plan to gain investment freedom, we may have to accept deferment of tax deductions until the pension is paid; we may have to pay withholding taxes, which we may recover; we have to accept net rather than gross investment income; and we may find that tax will be levied on employees if we have a nonqualified plan. As you can see, the picture is a very gloomy one.

A number of courses of action (or inaction) present themselves. We can take no preventive action. We can say, "Let's match liabilities in a given currency with assets in that currency," and close our minds to the fact that immunization against loss is also immunization against profit. We could be ready to take protective action on a short-term basis, recognizing the problems and the difficulties I have mentioned. We could deliberately pursue a long-term, hard currency investment policy again, counting the cost of doing so. Or we need not fund at all.

The decision not to fund—or to fund in, say, United States dollar securities, regardless of cost, could be made on wider grounds than currency instability alone; for example, there may be political instability and the fear that our pension plan in a foreign country may be subject to the risk of expropriation, quite apart from devaluation. What stands out as practical policy is funding in equities, or no funding, but there is no simple solution and all possibilities must be examined.

At this stage, perhaps, we may pause to wonder whether, in today's world of restrictions on capital exports from the United States and on the return of overseas profits to the United States, this country can afford its foreign investments. What is involved? The United States primary channel to foreign markets is through its overseas production, not through exports. It is a massive operation, as Dr. Pfeffer has reminded us. The United States has a relatively new role as world banker, which justifies (indeed necessitates) a nonliquid position. This role of world banker demands a considerable generosity of spirit from this country and obliges the United States to avoid international use of the dollar in ways likely to impair confidence; so there is a conflict between public and private interest. We may want in our private capacity to take protective steps, but in the public interest (in which I think the United States is a shining example) we are anxious to preserve the international monetary function of the dollar.

Fundamentally, what is lacking is a world definition of and a world enforcement of legal tender.

However, overseas capital investment can consist of skilled people and not just fixed capital, so we will now consider the nomads of international business, the expatriates and third-country nationals. What can we do for them? We can put them into a United States plan and in that way they may be protected against currency devaluation; but we cannot do that if they are employed abroad and are not United States citizens. Even if they can be accommodated in our United States plan, their remuneration, fixed with their overseas obligations in mind, may be inappropriate and may result in distorted pensions.

Alternatively, we can allow them to collect pieces of pensions here and there as they move around in their nomadic way, dragging their pieces of pension entitlement with them; the total can then be rounded up out of corporate current income or from one of the so-called offshore funds. In this way these individuals, who do need special treatment, can be protected against devaluation of the bits and pieces of pensions they have accrued.

We may, however, have reason to be wary of offshore trusts. The laws of the country which is the situs of the trust may change (peacefully or otherwise), and this risk must be weighed against low taxes and comparative freedom of currency exchange.

Finally, an unfunded plan can be established with benefits payable in the United States in United States dollar currency. In this way we avoid the funding problem altogether.

We have considered the possibility of devaluation of the currency everywhere except in the United States. However, if the United States devalues, that is, devalues in terms of gold, most, if not all, of the rest of the world can be expected to follow, so that the status quo will very largely be maintained among countries but with a new price for gold.

Could, then, a United States pension trust buy gold? United States citizens (and this includes pension trusts) cannot lawfully acquire a stock of gold. But United States dollar-invested pension trusts can at least recline in the comfort of knowing that what fundamentally gives the dollar its value is the massive productive capacity of this country.

MR. GERALD M. BROWN: Devaluation cannot be viewed as an isolated happening. It is merely one step, albeit a large one, in a long series of steps. The other steps include depreciation of the currency, cost-ofliving increases, wage increases, money crises, and so on. Devaluation is a deliberate attempt to correct the situation by dramatic governmental action and necessarily carries with it the need for stringent budgeting to encourage internal savings and promote exports.

The principal hope of devaluation lies in two directions—the edge it gives the country's products in other countries and the psychological shock it gives the population. While some people would be aware of the problems prior to devaluation, the actual fact of devaluation brings the problems in front of the whole population. The psychological shock is created because most people are not aware of the difficulties. If the devaluation and the attendant other governmental restrictions can shock the population into changing its buying and saving habits, the problems which led to the devaluation may be reversed.

The immediate effects of devaluation on life insurance are rather small. The morning after devaluation, the currency locally is unaltered, and it is only in export-import matters that an immediate change is felt. Since devaluation is part of a long process, the idea that the local currency is not necessarily a strong currency may accelerate a gradual change already in process. The factors leading up to devaluation—gradual depreciation, cost-of-living increases, and so forth—tend to promote larger sums assured, swings to lower premium plans, and, where possible, equity investments. These trends are furthered by devaluation and the cost-ofliving increase which inevitably follows.

The effects on insurance of the sterling devaluation last November follow the theory. There has been in the United Kingdom for some time a trend toward larger policies and lower premiums, as well as a rapid development in a variety of equity products. These trends have continued in the five months since devaluation with possibly even more emphasis on the equity items. However, the change in Britain's insurance markets and possibly even its devaluation are closely tied into the dramatic shift in incomes in the last ten years. The rapid increase of the middle-income group in Britain has opened up a large insurance market and has increased average policies.

The above comments apply to a country where devaluation is a somewhat unique and startling event. An example of another form of devaluation would be Israel, where money has depreciated at more than 5 per cent per annum over the last ten years. Here depreciation must be looked upon as continuous devaluation and its effects met in other ways. Many Israeli companies sell indexed insurances, where the premiums, values, death benefits, and so forth, are tied in with the local governmental index. The premium income for these policies is invested in Israeli-indexed government bonds. The Manufacturers Life has attempted to avoid the problems in that approach by issuing a basic fixed-amount policy with a rider permitting purchase of evidence-free additional insurance, whenever Israeli currency has depreciated 20 per cent in terms of United States dollars. The policy has been quite successful, and a number of policyholders have taken advantage of the rider.

For a Canadian company operating widely in the United Kingdom

and Ireland, the November devaluation created a series of problems for the over-all operation of the company. These same problems would apply to a devaluation occurring in any one area of a company's activities.

The first effect is on the company's surplus position. Any assets in the devalued currency in excess of liabilities would drop in value at the time of devaluation. However, if the assets had been kept as close to the liabilities as possible, with any surplus being withdrawn, the effect of devaluation is minimized. This approach must be carried out over a long period of time, because governmental restrictions on the withdrawal of money will spring up quickly as the problems leading to devaluation arise.

In Britain an excellent idea would have been the possibility of holding those assets used to cover British liabilities in United States or Canadian dollar investments. However, for some time preceding the devaluation, United States or Canadian dollar investments were permissible only by paying a dollar premium of 30 per cent. Thus shifts of a portfolio in recent months were uneconomical. The Bank of England has now added additional restrictions to the effect that not only should money not be invested in United States and Canadian securities but money should not be invested in other sterling areas, such as Australia and New Zealand. These restrictions are merely requests at the moment, but the bank has indicated that, if they are not followed, legislation will be promptly produced. A number of United Kingdom companies, however, have had a sizable portion of their portfolios invested outside the sterling area, so they profited at the time of devaluation.

Investments as a whole are materially affected by the extraterritorial restrictions of the home governments. In Canada and the United States these restrictions operate in two ways. First, our companies are offering contracts with guaranteed cash and other values. Because of this, it becomes logical and even necessary that our principal investment media be fixed investments rather than equities. The second restriction is the limitation on equity investments as defined by various governments. While the Canadian government is appreciably more liberal in this regard than most states in the United States, the effect is still felt. A combination of these two restrictions tends to push North American companies into fixed assets to cover their liabilities, so, in an area where there is effectively no surplus, devaluation will have little effect on the investment policy.

Any equity-fund arrangement, however, is not subject to the normal insurance restrictions, so devaluation will generally lead to a review of the investment policy for an equity fund. Investments will frequently be shifted to take advantage of the changed position of a number of companies after devaluation. Real estate becomes an appealing investment for such a fund after devaluation, for example.

Most of the problems of devaluation arise with expenses. British business is taxed by means of a ratio of British premium income to totalcompany premium income applied to total-company interest less expenses, approximately. Both premium income and interest less expenses are affected by the devaluation and, in any ratio basis, the effects interact.

General administrative and overhead expenses are suddenly altered by devaluation. The cost of all work done in the home office increases overnight. While expenses in the devalued area may drop initially, they can be expected to rise with the inevitable increase in cost of living following devaluation, and the expense assumptions built into the premiums may no longer be adequate. The degree to which expenses adjust will depend on the split of operations between the devalued area and home office. It is possible that some policies will be more severely affected than others, and the dividend scale should theoretically be reviewed and possibly adjusted for the expense shifts. The increase in earnings, due to the free surplus earnings from Canadian and United States dollar investments, may or may not counteract the increase in earnings and expenses, even if the equity problem is temporarily ignored.

The whole split of functions between the home office and the devalued area probably needs a thorough re-evaluation, even to the extent of a serious review of the merits of subsidiary companies for the various areas of business. While there is technically some possibility of a subsidiary company in a foreign country for Canadian companies, the superintendent is apt to view such proposals with little or no favor. The use of a holding company could solve some problems for a stock company but is not possible for a mutual company. Even for a stock company, the superintendent might view with some alarm the possibility of the control of the insurance business getting away from him. There is not the same problem for United States stock companies.

Companies should explore the feasibility of subsidiaries, especially in different areas of the world. There could be freedom of investment action, and, by the choice of a depressed area with appropriate tax relief for new business, there could be major expense and taxation savings as well. For years the idea of head offices being in other than major centers has been stumbling over the communication problem. This problem has been lessened to a great extent and should continue to decrease. If one could ignore the governmental and practical considerations, one could dream of a "floating" home office set up to take advantage of the cheapest operating area from time to time. At the moment I recommend northern Ireland.

One annoying problem immediately following devaluation concerns the preparation of statements, both governmental and management. At what level should the business be shown in year-end reports? Prior to devaluation, the Canada Life carried United States dollars at par with Canadian and the pound sterling at \$2.80 Canadian. The effect of these two understatements, 8 per cent on United States and 6 per cent on sterling, was an additional margin in our company report. When sterling was devalued by 14 per cent, the question arose as to an adjustment, not only for sterling but also for our treatment of United States dollars. After considering a number of suggestions, our end result was a reduction of sterling to \$2.60 Canadian, a slight overstatement and retention of the 8 per cent understatement implicit in the United States dollar being continued at par with the Canadian dollar. Projections of earnings for management, as well as business in force and other statements, are especially frustrating when a conversion basis is altered.

Devaluation in one area of a company's operation should lead management to consider carefully the whole aim of the company in that area. In my opinion, this is the major effect of devaluation. This may lead to a major shift in activities in that area.

MR. CHARLES G. BENTZIN: Would you explain in more detail the straitjacket in which a fixed gold standard would place a country, for example, Cuba in a year of a bad sugar crop?

DR. PFEFFER: If the entire monetary system of Cuba were dependent on the receipt of gold as a basis for purchasing other commodities, the gross national product would collapse in a bad crop year, because it is completely dependent upon the one commodity which is externally linked. Nothing can be purchased because of a lack of gold. What normally would happen would be an escape from gold to the barter system. The Soviet Union has been forced to do this, using gold as an emergency reserve but generally engaging in barter dealing.

The dependence on a single crop tied to a currency that is beyond the control of a particular country is politically unacceptable. This is one of the reasons the United States itself has refused to be tied to a rigid gold standard. We would have a severe recession in this country if we attempted to adhere strictly to the gold standard, particularly since the supply of gold is a decreasing function. If we had a 1:1 relationship between income and supply of gold, the gross national product would decline. CHAIRMAN IAN G. MICHIE: Dr. Pfeffer, would you like to make any comments on the investment policies of life companies?

DR. PFEFFER: I think that life companies have, without having a formal theory of what is rational conduct, been doing that which is consistent with rational conduct, namely, escaping from the shackles of fixed-dollar commitments, such as government bonds or municipal bonds, to the movement (to the extent that it is possible) into more flexible types of mortgages. Today's mortgages are quite different from the mortgages of twenty years ago. Twenty years ago there was a high probability that a twenty-year mortgage would stay on the books for twenty years. Today the average mortgage turns over in three years. Mortgages with built-in prepayment penalties are thus in the nature of equity investments.

The investment sections of the New York code are predicated on the disastrous experience of the early 1930's. The great hostility toward equity types of investment is inappropriate at the present time. The companies thus locked in will find that they are going to have a shrinking share of the market. The way of breaking out appears to be through the use of a holding company mechanism.

It has been stated that interest rates follow a fifty-year cycle and that we are in about the fiftieth year of a rising curve of the cycle. In the mid-1940's, Edwin Goldenweiser, director of research for the Federal Reserve Board, stated, "Two and one-half percent as a return on fixed income securities is probably going to be a permanent condition in the American economy, because we are a mature economy. The opportunities for expansion have pretty much been exploited so we shall predicate our planning on the basis of a 2.5% rate." He was wrong in 1946 but perhaps not wrong in 1970.