

10. In December 1938, a life insurance company purchased directly from a textile manufacturing company an entire issue of \$1,875,000 of debentures due in 1948. The life company has since purchased additional issues in their entirety in 1939, 1940, and 1951 and participated (together with other insurance companies) in subsequent direct-placement transactions in 1960, 1963, and 1964. At December 31, 1966, the life company held \$26 million of the textile company's note obligations. The remarkable growth of the textile company since the date of the first financing is reflected by the fact that between 1938 and 1966 its net sales increased from about \$27 million to about \$1.4 billion and its total assets from about \$16 million to about \$1 billion. Although part of this growth was due to acquisitions, it may be of interest to note that the number of employees increased from about 8,000 on January 1, 1939, to some 69,000 on October 1, 1966.

These are but a few examples of the way in which life insurance company investments, including pension fund investments, have contributed to the economic growth of the United States. More are included in an appendix hereto. If additional examples are desired, a multitude can be made available by the Life Insurance Association of America and the American Life Convention.

RECOMMENDATIONS FOR THE ENCOURAGEMENT OF PENSION SAVINGS ABROAD

It seems ironic that a question should be raised concerning the desirability of encouraging private pension saving here in the United States at the very time when foreign countries are urging increased pension saving in order to permit the sound financing of economic growth. For example, in the recent report *The Development of a European Capital Market*, which was prepared by a group of experts appointed by the European Economic Community (EEC) Commission, it is pointed out that:

The way in which financing requirements are met depends to a large extent on the composition of the funds available. It is this composition rather than a shortage of savings which explains the structural imbalance to be seen in certain sections of the capital markets in the member states. The supply of funds reaching these markets reflects primarily the following points: (i) Savers generally prefer to hold cash or short-term assets and it would be difficult to alter this liquidity preference radically in the short-term; (ii) Savings which take the form of deposits will remain a major factor in the supply of capital. The financial institutions which collect this form of savings should, therefore, be able to offer medium- and long-term loans and to use their funds on the capital market; (iii) Saving through institutional investors, particularly contractual savings, is inadequate in all member countries except the Netherlands. This inadequacy in part explains why markets are not able to function satisfactorily.²⁶

The report went on to add:

This state of affairs does not seem likely to undergo a spontaneous change, especially now that income redistribution to the advantage of wage earners has raised the savings potential of social classes still unprepared to take a direct interest in the capital market. Consequently, several member states are stimulating the consolidation of savings and the various forms of contractual saving.²⁷

²⁶ *The Development of a European Capital Market*, Summary of the Report of a group of experts appointed by the EEC Commission, Brussels, November 1966, pp. XV-XVI.

²⁷ *Ibid.*, p. XVI.

Again, on p. XXI of the report, in discussing incentives to saving, the EEC Commission experts point to the need to give "top priority" to steps to encourage "contractual savings—in particular those linked with employment contracts."

Early this year the Business and Industry Advisory Committee to OECD and the Atlantic Institute jointly sponsored a major conference on the European capital markets. This conference, held in Cannes, January 19–22, 1967, concluded:

Increased investment is required to assure a rapid increase of production and productivity. With monetary stability and a high level of employment, this brings higher real wages for all. This sequence is the essence of sound economic growth. Both governments and private enterprise require even greater quantities of investment capital as a consequence of the growth of population and the quickening pace of technical progress. At the same time O.E.C.D. member countries ought to increase their flow of capital to developing countries.

This growing demand for capital is not being met by comparable increases in supply. To meet the additional needs, measures must be taken to improve capital markets. Moreover, recourse must be had to more effective use of budgetary policy and adequate self-financing for public and private enterprise.²⁵

In order to improve the capital markets and to increase the supply of capital in OECD countries, a number of recommendations were advanced by the conference. Recommendation II called for action to encourage private contractual savings as follows:

II. To stimulate and expand private contractual savings should be one of the primary policy objectives of the governments. In order to implement this recommendation, the following proposals are made:

A. Pension funds, insurance, and other forms of contractual savings should be stimulated by tax and other inducements, and by further enabling legislation in those countries where it is now lacking.

B. Governmental regulations restricting institutional purchases in capital markets should be relaxed as much as possible.

C. In the field of insurance, the use of funding techniques should be encouraged.²⁶

Thus, as European countries strive to maintain full employment and a strong rate of economic growth, it is becoming more and more clear that they must develop and enlarge their capital markets. They appreciate that a high rate of capital formation under full employment conditions must be financed from savings rather than from monetary expansion. It is not surprising, therefore, that they have recognized that to enlarge the flow of savings for capital formation they must take steps to encourage contractual saving through private pension funds and insurance. The American system of private pension saving is the envy of countries around the world which are striving to find a sound basis for financing economic growth.

SUMMARY AND CONCLUSIONS

The main points presented in this paper may be summarized as follows:

1. The private pension system has a record of outstanding accomplishment and has clearly demonstrated its capacity for growth and improvement. Private pension plans now cover about 25 million em-

²⁵ Recommendations from the *Conference on Capital Markets*, Business and Industry Advisory Committee to the OECD and the Atlantic Institute, Cannes, January 19–22, 1967. p. 1.

²⁶ *Ibid.*, p. 1.

ployees, and there is a strong trend toward increased coverage and more rapid funding and vesting.

2. Pension plans benefit the rank and file of employees. The bulk of such plans qualify under provisions of the Internal Revenue Code designed to insure that they do not discriminate as to coverage and benefits in favor of highly paid employees as compared with employees with modest incomes.

3. A private pension system, which continues to grow and continues to improve, is essential for achieving the best possible retirement protection for our population. Pension plans offer unique advantages for this purpose, in view of their flexibility and ability to adjust to the individual circumstances of particular groups of employees in different firms, industries, and geographical locations.

4. The social security program is a basic ingredient in our system of providing retirement protection. But it is essential to keep a proper balance between private pension plans and the social security system. The latter should not be expanded in wage base and benefit levels to the point where it takes over retirement functions which can be performed better by the private sphere. At the same time it is important to continue to improve private pension plan coverage, vesting, and funding so that pension plans which are now doing a good job can do an even better job. The objective is to develop new pension plans and to improve existing ones so that the maximum number of individuals can benefit from them.

5. The Joint Committee Print's concern that pension saving may have a depressing effect upon the rate of economic growth of the United States is unrealistic. It flies in the face of the experience of the past two decades. If the rate of saving has been excessive, as the Print suggests, how can we explain the persistent upward trend of long-term interest rates during the past 20 years? If effective demand for goods and services has been chronically weak, how can we explain the upward drift of the price level since World War II? The U.S. Government is committed to pursuing fiscal and monetary policies designed to maintain full employment and strong economic growth, with stability in the value of the dollar. Such policies will require a very high rate of saving and capital formation, as is assumed in all of the projections of the growth of the American economy in the years ahead. Viewed in this light, and not in the shadow of the "stagnation thesis," the Print's concern about private pension saving is without justification.

6. The Print's concern that pension saving, because of its contractual nature, tends to be a destabilizing force in the economy is also unfounded. The fact is that the contractual nature of pension saving is highly advantageous from the standpoint of economic stability. Inasmuch as the cash flow for investment of pension funds is regular and predictable, institutions administering pension funds have been able to make forward investment commitments which aid business and industrial firms to plan their capital expenditures on a long-run basis. In an economy in which business and industry expects appropriate fiscal and monetary policies, longrun planning of capital expenditures has become realistic and has been encouraged and facilitated by the contractual nature of pension funds and the forward investment commitment process.

7. The Print's assertion that institutions administering pension funds do not contribute to vigorous economic growth through their investments is entirely at odds with the facts. Generally speaking, private pension savings have been directed into highly productive outlets. The examples which we have presented are typical of the way pension funds are invested—with imagination and with high potential for economic growth. At the same time, these investments have been made with safety, as the record of virtually no investment losses in the past two decades attests.

8. In the decade ahead—indeed, for the foreseeable future—there will be an urgent need for a high rate of saving if we are to achieve our national goals of full employment and faster economic growth with reasonable stability of the value of the dollar. To achieve the rate of saving necessary for growth, we must have a healthy expansion of private pension saving. As Kuznets and others have pointed out so well, there have been powerful forces operating in the past to lower the rate of saving, and these forces will persist. It is even more necessary, therefore, to encourage the growth of contractual savings such as those accumulated through private pension funds.

9. Finally, other countries in the free world—notably in Europe—are so convinced that contractual savings are essential to economic growth that they are urging Government measures to stimulate such savings. The really pertinent questions about private pension savings are: In view of the fact that a very high rate of private pension saving will be sorely needed in coming years to aid in financing sound economic growth in the United States, Is the Government doing enough to encourage pension saving? What further steps can be taken to strengthen the flow of pension savings? These are the significant questions to be asked as we look to the future.

APPENDIX

Additional examples of the way in which life insurance company investments, including pension fund investments, have contributed to the economic growth of the United States are:

1. Some years ago, a firm was established to manufacture high frequency electronic tubes with emphasis on klystron tubes, which had been invented in 1938. A life insurance company loaned this firm \$2 million, in 1956, with the funds being used to retire bank debt and expand the plant. With the help of this loan, the firm grew to the point where its gross revenues amounted to \$145 million in 1966, compared with \$7.2 million in 1955. The company is thriving and has become a diversified electronic manufacturer with foreign operations.

2. A new company was established to engage in the application of paint and other synthetic finishes to continuous coils of steel, aluminum, and other metals. The company was a pioneer in the industry. A life insurance company helped this innovative process by lending the firm \$800,000, in 1959. Additional loans of \$400,000 and \$740,000 were made in 1962 and 1965, respectively. All of these loans were used to finance additional productive capacity. The company's sales rose fivefold between 1958 and 1966, with a proportionate increase in income and employment.

3. In 1958, a life insurance company made a loan of \$115,000 to a farm wagon manufacturer. In addition to farm wagons, the company had a mobile hydraulic crane under development. There have been five additional loans made to the company since that time and the total outstanding in 1966 was \$1,900,000. The loan funds facilitated the growth of the wagon manufacturing firm and made possible the development of the mobile hydraulic crane. During this period sales and employment of the firm have increased about fifteenfold.

4. In 1958, a life insurance company made a \$360,000 loan to a California manufacturer of metal containers for shipping and housing electronic components. Loans to this firm have been increased since 1958 and now total \$2,800,000. During this period the sales of the manufacturer have risen from \$3 million to \$17 million and net worth has increased $5\frac{1}{2}$ times. Employees now number 1,200, compared with 180 in 1958.

5. A small Wisconsin company borrowed \$151,000 from a life insurance company in 1964. The company makes portable hydraulic loaders for trucks and tractors which are used primarily to load bulky items such as logs and cement blocks. The business had been formed only about 9 years earlier and it is very doubtful that it could have obtained funds in the public market. There were two additional loans made by the life insurance company and the total investment, in 1966, was \$400,000. In 1964 the manufacturer had 86 employees and last year it had 220.

6. In 1960, three insurance companies purchased \$16,800,000 of first mortgage bonds of a pipeline in Alaska. This represented 86 percent of the cost of building a 78-mile natural gas transmission pipeline from the Kenai Peninsula to the city of Anchorage, Alaska. Two oil companies who owned and developed the natural gas reserves on the Peninsula advanced the equity moneys of \$2,600,000. The building

of this pipeline from the peninsula across the open water to the city of Anchorage brought for the first time to the 70,000 people in Anchorage a cheap source of fuel available for both heating and the generation of electric power. It also permitted the continued development of the gas fields offshore by the two oil companies. Prior to the delivery of natural gas to the city of Anchorage, the only source of fuel were high-cost coal and oil. Completion of the pipeline also resulted in the expansion of the gas distribution system serving Anchorage, operated by a wholly owned subsidiary of the pipeline company. Prior to the delivery of the natural gas, the distribution company in Anchorage had been a very small company delivering gas obtained as a byproduct of burning coal and oil.

7. In 1943, a life insurance company loaned \$2 million to a rubber manufacturing company having sales aggregating about \$14.1 million. In 1966, this company reported annual sales of \$106.1 million. During the intervening 23 years, the life insurance company has made 12 different loans to the rubber company, substantially contributing to its growth. The life insurance company's present investment in the company is \$15 million.

8. During the period 1951-67, a life insurance company purchased or participated in the purchase of 15 debt obligations issued by an aluminum company and two of its affiliates. These purchases aggregated \$260,810,000 (including a present commitment of \$30 million). The life company's investment in such debt obligations at December 31, 1966 (including the commitment), was \$170,794,000. The dynamic growth of this major integrated aluminum producer during this period is shown by the fact that between 1951 and 1965 its net sales increased from about \$218 million to about \$740 million, and its total assets from about \$319 million to about \$1.2 billion.

9. In 1946, a life insurance company invested \$300,000 in a company which manufactures chemical coating. The finishes are used on a multitude of products including appliances, furniture, wall paneling, automotive equipment and a variety of other items. The company recently entered the field of high-pressure laminated plastic sheets for use on furniture and in residential and commercial building construction for counter tops, wall paneling, etc. At the time of the original investment, the manufacturing company's assets were \$1.5 million. The life company's investment in this company has grown to over \$4.1 million and the manufacturing company's assets are now over \$30 million.

10. A life insurance company's investment in an industrial gas company has risen from \$3 million, in 1961, to over \$19 million. The gas company's assets are now about \$50 million, almost five times what they were 6 years ago. Its major operation involves the recovery and sale of industrial gases for use primarily in welding, oil well servicing, and certain chemical processes. In 1962, the gas company constructed one of the first completely automated nitrogen gas plants in the country. The company serves a market principally in Texas and Louisiana, and, more recently, California and Florida, through new plants in these States.

GUARANTY FUND FOR PRIVATE PENSION OBLIGATIONS

BY DAN M. MCGILL*

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Within the last few years, considerable interest has developed within certain quarters in some type of cooperative arrangement that would assure the fulfillment of legitimate benefit expectations under private pension plans, irrespective of the financial status of the plans or their

*Wharton School of Finance and Commerce, University of Pennsylvania.

sponsors. The idea was given great impetus and a measure of respectability when the President's Committee on Corporate Pension Funds suggested that serious study should be given to the possibility of establishing "a system of insurance which, in the event of certain types of termination, would assure plan participants credit for accrued benefits."¹ Later the National Commission on Technology, Automation, and Economic Progress, in its report to the President and the Congress, under the heading, "Protecting the Earned Benefit Rights of Displaced Employees," stated that:

We favor whatever legislative or administrative measures may be necessary to promote greater equity and security in the establishment and administration of private pension plans. Specifically, we recommend that careful study be given to a legislative system of reinsurance for private pension plans similar to the reinsurance [sic] of bank deposits through the Federal Deposit Insurance Corporation.

More recently, Nelson McClung and his fellow staff economists prepared a document for the Joint Economic Committee of Congress in which they espoused the cause of a pension guaranty fund, not only in the interest of benefit security but as a means of accommodating a lower level of funding.²

The concept has been embodied in various legislative proposals, the earliest of which was a bill introduced by Senator Vance Hartke of Indiana, in 1964, and reintroduced with minor modifications in each subsequent session of Congress. It is contained in the omnibus bill, S. 1103, introduced by Senator Javits during the current session of Congress.

This proposition cannot be evaluated without at least a skeletal description of the milieu in which private pension plans operate.

THE SETTING

The primary purpose of a pension plan is to provide old-age income to retired workers and their widows, the income to continue throughout the remaining lifetime of the individuals involved. The plan may, and frequently does, provide benefits in the event of the employee's death, extended disability, or voluntary withdrawal from the working force prior to retirement. Under a noncontributory plan, the employer (or group of employers, in the case of a multiemployer plan) assumes sole responsibility for providing the benefits contemplated under the plan, although some or all of the cost of the plan may ultimately be shifted³ to the employees (through lower wages), the consumers (through higher prices), or the tax-paying public (through tax deductions). Even under a contributory plan, the employer generally assumes the principal burden of financing the benefit structure. Thus, for the sake of simplicity, the objectives envisioned for the pension plan will be referred to as the *employer's* undertaking, even though the covered employees may share in the financing of the plan and participate (through their elected representatives) in its administration.

¹ "Public Policy and Private Pension Programs", *Report to the President on Private Employee Retirement Plans* (Washington, D.C.: Government Printing Office, January 1965), p. 80.

² *Old-Age Income Assurance: An Outline of Issues and Alternatives*, 89th Cong., 2d sess., 1966, pp. 29-30.

³ It may be argued that under a collectively bargained plan, the employees consciously absorb the estimated cost of the plan by accepting lower cash wages. By the same line of reasoning, one could assert that these employees would bear the cost of a guaranty program.

NATURE OF THE EMPLOYER'S UNDERTAKING

The obligation assumed by an employer in establishing a pension plan may take one of two forms: an undertaking to set aside funds on a specified basis or an undertaking to provide benefits in accordance with a specific schedule. Under the first approach, the employer does not undertake to provide retirement and other benefits in accordance with a fixed scale of benefits, although the scale of contributions will normally be set in the light of an anticipated level of benefits. The contribution commitment may be stated as a percentage of the compensation of covered employees, as an amount per hour or day of work, or in terms of some productivity factor. Regardless of how the commitment is expressed or determined, the employer's obligation to the plan is deemed to be completely fulfilled when he pays over the appropriate sums, even though the assets of the plan eventually prove insufficient to provide the projected level of benefits.

Under the second approach, the employer ostensibly commits himself to contribute whatever sums are necessary to provide the benefits payable pursuant to a formula or schedule set forth in the plan. The plan may call for a unit of benefit for each year of credited service, a composite benefit equal to a specified percentage of compensation (for the entire period of employment, or the years immediately preceding retirement), or a composite benefit expressed as a flat dollar amount. The plan usually recognizes, and gives credit for, some or all of the service performed for the employer in question prior to the inception of the plan, and subsequent benefit liberalizations are generally made retrospective as to years preceding the plan amendment, both practices giving rise to an unfunded accrued liability that would be the primary source of loss to any guaranty arrangement. Except for collectively bargained plans, the employer reserves the right to alter, modify, or terminate the plan at any time—and for any reason.⁴ Moreover, he generally reserves the right to suspend, reduce, or discontinue contributions to the plan, whether or not previous contributions have been sufficient to provide all benefits credited to date. Finally, it is customary for the employer to limit his obligation, in the event of plan termination, to contributions already made to the plan. In other words, if the plan terminates, the participants and pensioners must look to the accumulated assets for the satisfaction of their claims. In a relatively small number of cases, largely confined to the petroleum and steel industries, the employer guarantees to provide all accrued benefits (sometimes only vested benefits) in the event of plan termination, in effect pledging the corporate resources to the satisfaction of accrued pension claims.

METHODS OF FINANCING

In order to meet the benefit commitments, explicit or implicit, generated under a pension plan, the employer generally sets aside funds

⁴ During the first few years of a plan's existence, it can be terminated without retroactive tax penalties only for reasons of "business necessity."

with a bank or insurance company in amounts and at times roughly commensurate with the rate at which the pension costs accrue. In other words, the employer, through an independent funding agency, usually accumulates funds for the payment of pension and related benefits in advance of the dates when the payments are due, a practice known as *funding*. The general procedure is to fund currently accruing benefits during the accounting period in which they accrue. Benefits credited for service prior to inception of the plan are funded, if at all, over an extended period, usually ranging from 12 to 40 years. If the employer is to get a current tax deduction for these contributions (or advance payments), the moneys must be held under an arrangement that ensures their use for the exclusive benefit of the plan participants or their beneficiaries. This requirement is met through transfer of the funds into an irrevocable trust, generally administered by a bank, or through the purchase of insurance or annuity contracts from an insurance company, including those contractual arrangements under which the funds are not allocated to specific individuals until retirement. In some cases, only the benefits of individuals in a retired status are funded, a practice known as *terminal funding*.

Under a relatively small percentage of plans, the employer pays the benefits directly to retired employees, with no advance funding through intermediaries. Some of these plans are large but the great majority are associated with small firms. Occasionally, the basic pension plan of an employer will be funded, with additional benefits being provided on a current disbursement or pay-as-you-go basis. This method of financing would create complications for a pension guaranty arrangement.

Under existing law, an employer is under no legal obligation to fund his accruing pension costs, and he may deduct as an ordinary and necessary business expense reasonable payments to retired employees or their beneficiaries. However, if he wants to enjoy the tax treatment accorded "qualified" pension plans, which would include exemption from current taxation of investment earnings on plan assets, he must as a minimum fund the normal (or current) cost of the plan plus interest on the initial supplemental liability at the rate assumed in the calculation of the liability. This requirement, which is believed by some authorities to be applicable only during the first 10 years of a plan's existence, is designed to discourage a firm from establishing a pension plan with the deliberate intention of terminating it within a few years. The Internal Revenue Service does not inquire into the adequacy of the cost estimates underlying the funding payments, its chief concern being protection of the Federal revenue against *excessive* tax deductions.

Traditionally, the actual contributions to a pension plan (or, under a current disbursement plan, the actual payments to benefit recipients) have been construed to represent the cost of the plan for both tax and general accounting purposes. That is, pension costs have been accounted for on a *cash* basis rather than the *accrual* basis associated with most business transactions. In November 1966, the Accounting Principles Board of the American Institute of Certified Public Accountants, following several years of intensive study and discussion of the account-

ing aspects of pension plans, took the position that beginning January 1, 1967, pension costs should be accounted for on an accrual basis.⁵ The costs are to be computed in accordance with one of the generally acceptable actuarial cost methods (described in Appendix A of Opinion No. 8), using reasonable actuarial assumptions and reflecting the other conclusions of the Opinion.⁶ The Opinion stated that the annual provision for pension cost should not be less than the total of normal cost and an amount equivalent to interest on any unfunded prior service cost, plus, if necessary, an additional sum calculated in such manner as to insure the full accrual over a 20-year period of the costs associated with vested benefits.⁷ The annual provision for pension cost should not be greater than the total of (1) normal cost, (2) 10 percent of the initial past service cost (until fully amortized), (3) 10 percent of the amounts of any increase in prior service cost arising out of an amendment of the plan (until fully amortized), and (4) interest equivalents on the difference between pension charges and amounts funded.⁸ As intimated by item (4) above, the appropriate pension charges are to be made whether or not corresponding payments are made to the funding agency (bank or insurance company). If contributions to the plan are less than the amounts charged to expense, whether attributable to normal cost or prior service costs, the difference is to be shown on the liability side of the balance sheet and described in a manner to make clear that it does not constitute a legal obligation. An excess of contributions over expense charges are to be reflected on the asset side as a deferred charge.

The employer's income tax deductions are still based on his contributions to the pension plan rather than expense charges *per se*.

The new accounting rules apply to all types of pension plans—defined contribution as well as defined benefit plans and unfunded as well as funded plans. It is especially significant that future pension cost accruals under an unfunded plan must be reflected in the employer's balance sheet, which may induce the employer to adopt the practice of funding his pension obligations. The accountants' recommendation that unfunded pension charges under any type of plan be reflected in the balance sheet is likely to cause all employers to fund at a rate at least equal to that at which the pension costs accrue. It may, of course, lead to the practice of computing cost accruals at the lowest acceptable level, thus inhibiting funding. In any event, it should be recognized that in the typical case the employer's legal liability, if the plan should terminate, is limited to the amounts already contributed, even though the balance sheet may show an excess of expense charges over funding payments.

HAZARDS TO BENEFIT FULFILLMENT

The primary source of security for *accrued* pension benefits is a fund of assets, including life insurance and annuity contracts, irrevocably placed beyond the control of the employer and committed

⁵ See Opinion No. 8, *Accounting for the Cost of Pension Plans*, pars. 16, 17, and 18. This Opinion supersedes Accounting Research Bulletin No. 43, ch. 13, sec. A, *Compensation: Pension Plans—Annuity Costs Based on Past Services* and Accounting Research Bulletin No. 47, *Accounting for Costs of Pension Plans*.

⁶ *Ibid.*, par. 24.

⁷ *Ibid.*, par. 17. However, the additional sum need not exceed the amount that would be necessary to amortize the initial past service liability over a 40-year period.

⁸ *Ibid.*, par. 17.

to the payment of benefits (and attendant expenses) in accordance with the terms of the plan. Thus, broadly speaking, any factor or circumstance that interferes with the accumulation of plan assets at approximately the same pace as the benefits accrue is a threat to the ultimate fulfillment of benefit expectations. A deficiency in plan assets as of any given time may be the result of inadequate past contributions or the shrinkage of asset accumulations through unfortunate investments, decline in market value of sound investments, or, in rare cases, misappropriation.

Past contributions may be insufficient to support the current structure of accrued benefits for a number of reasons. First of all, the projected cost of benefits and expenses may have been inaccurate. Cost projections reflect assumptions as to mortality among the participating employees and their beneficiaries; investment earnings on plan assets; employee withdrawals without vested benefits, the pattern of retirement; and the expenses of operation. If benefits are based on compensation, especially earnings during the years immediately preceding retirement, future compensation levels must be predicted. These cost projections are normally prepared by actuaries after consultation with the employer and other interested parties. Wide areas of judgment exist with respect to most of these cost factors and actuaries of unquestioned professional skill, judgment, and integrity can come up with sharply different answers even when working with the same basic data.

The rate at which the total estimated costs are assumed to accrue is determined by the actuarial cost method employed by the actuary. There are several basic actuarial cost methods, with numerous variations and refinements. One family of methods assumes that the cost of the plan accrues at precisely the same rate as the benefits accrue, the cost per \$1 of benefit with respect to any particular individual increasing year by year as the employee nears retirement. The other family of methods projects the total cost of benefits for the covered group, individually or collectively, and assumes that the cost is spread evenly over the total employment period or the remaining years to retirement. Under each of these two basic approaches, the cost of benefits associated with years of service prior to inception of the plan (referred to hereafter as supplemental cost) may be separately calculated and accrued at a rate different from that applicable to the normal cost. These cost methods have no influence on the ultimate true cost of the plan (other than their impact on investment earnings), but they have a significant effect on the rate at which pension costs are charged and presumably funded.

Any of the commonly accepted actuarial cost methods, when employed as a guide to funding policy, can, under the right conditions, and in time, lead to the accumulation of assets equal to or in excess of the actuarial value of accrued benefits. Most employers do pattern their funding contributions after one of the commonly recognized actuarial cost methods and undertake as a minimum to meet the normal cost of the plan plus interest on the initial supplemental cost, if any. There is no legal compulsion to fund the supplemental cost of the plan, and if the cost method in use produces a supplemental cost, the employer may decide not to fund it. In that event, the accumulated as-

sets as of any given time would under many circumstances be less than the actuarial value of accrued benefits.⁹

Even if the employer should undertake to fund the supplemental cost (usually associated with past service benefits or retrospective benefit increases), he will usually spread the funding over an extended period of time, possibly as long as 40 years. He is unlikely to fund more than one-tenth of the supplemental cost in any one year, since he would be unable to deduct currently any greater sum for income tax purposes. Retrospective benefits increases and other plan liberalizations add to the supplemental cost and usually prolong the period needed to achieve a fully funded status. In fact, many plans will never achieve a fully funded condition purely because of periodic plan liberalizations. Clearly, as long as any portion of the cost of accrued benefits under the plan remains unfunded, a termination of the plan will result in the loss of benefits by some participants.

The achievement of a fully funded status does not assure the payment of all benefits in full, even if the plan terminates while that condition exists. The cost estimates of many plans take into account anticipated withdrawals among the employee group and the funding payments are reduced by the amount of estimated nonvested withdrawals. Allowance may also be made for retirements expected to take place beyond the normal retirement age. However, when a plan terminates, these cost reducing factors become inoperative and the benefits that have been credited to that point in time may well exceed the assets that have been accumulated.

The contributions to a pension plan are invested by the funding agency and exposed to the hazards of the capital market. If the funding agency is a life insurance company, the funds must be invested in accordance with the standards set forth in applicable investment statutes. These statutes severely limit the amount of common stock that can be held in the general investment account of an insurer but the limitations are not applicable to special (or separate) accounts set up under group deposit administration annuity contracts. Banks and individual trustees are nominally subject to fiduciary investment statutes, which can be very restrictive, but the instrument creating the trust can and generally does grant broader investment powers to the trustee than those provided by applicable State law, especially in respect to common stock holdings. At the present time the Federal Government imposes no standards of investment conduct, apart from the prohibition against certain types of transactions that would improperly benefit the employer. Legislation now pending before Congress would impose additional standards. Pension funds administered through the general investment accounts of life insurance companies are invested predominantly in high-grade corporate securities and real estate mortgages, while the funds held in separate accounts are invested largely, if not wholly, in common stocks. Funds held by trustees are invested mainly in high-grade corporate securities and common stocks, the proportion of common stocks in some portfolios being well over 50

⁹ When the participant group is immature and growing (or even stationary), and a projected benefit cost method is used, the funding of normal cost plus interest on the unfunded actuarial liability, augmented with actuarial gains, can lead to the accumulation of assets equal to or in excess of the value of all accrued benefits, including those attributable to past service and retrospective benefit increases.

percent, especially at market value. Apart from the inherent risks associated with common stock holdings and the unlikely possibility of forced liquidation of assets, pension plan assets, in general, appear to be relatively well protected against investment risks.

Accumulated pension assets may also be lost through the fraudulent or dishonest behavior of plan administrators. Fortunately, there has been little evidence of this type of behavior thus far, and loss of assets from this source has been infinitesimal. Moreover, a number of bills now before Congress would impose a fiduciary status on all persons exercising control over pension assets and would vest in designated Federal agencies certain investigative and enforcement powers designed to protect pension funds against mismanagement.

If the employer pursues a policy of paying the pension plan benefits directly to the eligible claimants, without using a funding agency, the security of the benefits rests entirely on the ability and willingness of the employer to continue his support of the program. The fulfillment of benefit expectations is subject to all the economic vicissitudes that beset the business enterprise itself. The participants can look to no fund of assets insulated from the hazards of the business. Under the action of the American Institute of C.P.A., to which earlier reference was made, the employer must set up a balance sheet reserve equal to the assumed value of the benefits accruing hereafter. Irrespective of whether the proper amounts are credited to the reserve, the assets offsetting the account are not earmarked for the exclusive benefit of the plan participants and their beneficiaries. If the employer should decide to discontinue the payment of retirement benefits, the pensioners and active employees would have no claim against the assets representing the reserves, unless a court were to hold that in the light of all the circumstances the employer had in effect guaranteed the payment of pension benefits. In that event, the pension claims would not necessarily be limited to the value of the pension reserve. On the other hand, if the employer should become insolvent or bankrupt, the accrued pension rights of employees and participants would be given no preference in the allocation of assets and might not be recognized at all.

APPLICABILITY OF INSURANCE CONCEPTS TO A PENSION GUARANTY FUND

A mechanism to assure the payment of accrued benefits under private pension plans is, in essence, an insurance arrangement, and its feasibility must be tested against the criteria of an insurable hazard.

LARGE NUMBER OF HOMOGENEOUS RISKS

A sound insurance program must encompass a large number of risks in order that losses may be predicted in accordance with the laws of probability, with reasonable assurance that actual results will conform closely to predicted experience. The risks should be homogeneous in order that an equitable rating structure can be developed. In other words, the losses should be spread among the participating risks in an equitable manner. If the total body of risks is not sufficiently homogeneous to permit the charging of a uniform premium rate, it should be possible to classify the risks into subgroups suffi-

ciently large and homogeneous to permit the development of sound rating procedures. A corollary to this concept is that the insurance program must attract a representative cross section of the risks exposed to the hazard, since otherwise the premium rate will be so high as to discourage voluntary participation by all except the worst risks.

There is obviously a sufficiently large number of pension plans subject to the hazard of termination to satisfy this first criterion. The risks are not homogeneous, however, in the sense that they are subject to approximately the same probability of termination. Unless the premium rate is adjusted to the probability of termination—or is so small as to be inconsequential—the better-than-average risks could be expected to shun the arrangement. Even with an equitable and realistic rating structure, pension plan administrators might find the scheme unattractive, since it would involve an added element of cost. It would appear that participation would have to be compulsory to obtain a random selection of risks.

OBJECTIVE DETERMINATION OF OCCURRENCE AND AMOUNT OF LOSS

For an insurance arrangement to be feasible, it must be possible to determine beyond reasonable doubt that the event insured against has occurred, and the amount of loss sustained should be susceptible to fairly precise determination.

This aspect of an insurable risk could prove to be very troublesome for a pension guaranty fund. The basic difficulty would be to define the event insured against. It is an open question as to whether all plan terminations should be covered or only those originating in certain causes. Some would argue, for example, that the guaranty should be restricted to those plan terminations that occurred because the employer went out of business, while others would regard it as immaterial that the employer continues to operate in one form or the other. Varying attitudes are taken toward mergers, cessation of operations in one plant or locality, and so forth. Special problems exist with respect to multiemployer plans. Questions would arise as to whether a discontinuance of employer contributions is merely a suspension, discontinuance, or termination, as those terms are defined in IRS regulations. Presumably, a pension guaranty program could adopt its own definition (or definitions) of the risk insured against, as contrasted with the views of the Internal Revenue Service, but unless the insured event were carefully delineated, complex problems of interpretation would be involved in determining whether a particular event or transaction fell within the prescribed limits.

The determination of the amount of loss would involve potential difficulties. Plans that provide for a specific unit of benefit for each year of credited service would present no difficulties if the annual accrual were a flat amount or based on current earnings. There would be complications with respect to plans that base the benefit on the employee's compensation during the years immediately preceding retirement or provide a basic benefit geared to career average earnings, subject to a minimum benefit related to final average salary. The minimum benefit—which may be financed through an auxiliary (or side) fund, a terminal funding arrangement, or on a current disbursement

basis—may vest at a different rate than the basic benefit and may in fact be subject to its own set of eligibility requirements. Money purchase plans, especially those involving split funding arrangements, would require special consideration; as would plans that provide a composite benefit, subject only to a minimum period of service. Ancillary benefits, such as those payable for the employee's death or disability prior to retirement, would complicate matters, along with special (nonactuarial) early retirement allowances, annuity options of unequal actuarial value, and social security offsets. These problems, formidable as they may appear, could be overcome by a precise definition of the benefits covered, excluding those that would unduly complicate the administration of the program.

Once the aggregate value of covered benefits was determined at point of plan termination, there would still be a question as to what portion of the liability should be transferred to the guaranty fund and when. This question will be considered in detail at a later point.

RANDOMNESS OF LOSS

The occurrence of loss among the risks exposed to it should be random and beyond the control of the person receiving reimbursement for (or benefiting in any other way from) the loss and any person or firm who would otherwise be liable for the payment. Since this condition is seldom met in practice, the objective is sometimes restated as follows: where the occurrence of the loss may be influenced by the actions of the individuals purchasing the insurance or receiving the claim payment, the benefits payable should be such that the occurrence of the loss is always less advantageous financially than the nonoccurrence of the loss.

In the absence of proper safeguards, this prerequisite would not be satisfied by a pension guaranty fund. There are so many ways that the fund could be abused that many persons believe the whole guaranty idea is unrealistic. If not prohibited, an employer could increase benefits retrospectively just before terminating his plan and let the guaranty fund make up the deficiency in plan assets. Or he might discontinue contributions to the plan in anticipation of formal termination. If an employer could terminate his plan at any time and for any reason, with no one having any recourse against him for the unfunded accrued liability, his willingness to continue his plan through periods of adverse economic conditions could be seriously undermined. Most of the opportunities for abuse could be eliminated or minimized by appropriate limitations in the undertaking, but some of the restrictions might produce an arrangement quite different from that envisioned by sponsors of the idea.

LOW PROBABILITY OF LOSS

The probability that any particular exposure-unit will incur a loss during any given year should be relatively low. If losses occur with high frequency, it will generally be more economical for the person or firm exposed to the risk to budget for the losses outside of an insurance mechanism which, of necessity, involves some administrative expense.

Available data would suggest that the probability of plan termination is fairly small, at least in periods of economic prosperity and among plans that have been in operation for several years. Since most plans that terminate are small, the potential losses to benefit claimants is an insignificant percentage of the total exposure.

The latest and most comprehensive study of plan terminations was carried out by the Bureau of Labor Statistics, in cooperation with the Internal Revenue Service.¹⁰ The study encompassed the years 1955-65. During that period, there were 4,259 pension plan terminations, 30 percent of which were due to mergers. Almost half of the terminations involved plans in effect for 5 years or less, and two-thirds of the terminating plans covered fewer than 25 employees. An average of 20,000 employees per year were affected by terminations, about one-tenth of 1 percent of the number exposed to loss.¹¹ In many cases, no accrued benefits were lost and in other cases the losses were less than total.

The rate of plan termination, and resulting benefit forfeitures, would undoubtedly increase sharply during a period of depressed business activity. Also, the very existence of a guaranty scheme might increase the risk of plan termination. On balance, however, it would appear that a pension guaranty fund would stand up fairly well against this criterion.

SIGNIFICANCE OF LOSS

The loss suffered by the insured from the occurrence of the event against which insurance is arranged, should be large enough to constitute an economic burden. Otherwise, the expense of maintaining the insurance mechanism and settling claims might exceed the value of the loss payment. This principle is given effect in private insurance operations through the use of so-called deductibles, which cause the insured to bear the first portion or layer of any loss.

The aggregate loss of accrued benefits occasioned by the termination of a pension plan is likely to be sizable enough to satisfy this criterion. The loss to some of the participants, however, may not be. This suggests that the protection of a pension guaranty fund might properly be limited to individuals having some minimum amount of benefit accruals or having participated in the plan for a specified period of years.

ABSENCE OF CATASTROPHE HAZARD

Under an ideal insurance arrangement, the hazard insured against should not be capable of producing a catastrophic loss to the insuring agency out of one event or occurrence. In reality, many hazards that are regarded as readily insurable can, under certain circumstances, produce losses in the catastrophic area. The problem has been overcome through the use of exclusion clauses and reinsurance facilities.

It is conceivable that in a period of extended economic distress, pension plan terminations could confront a guaranty fund with claims of such magnitude that the solvency of the program would be threatened. At such a time, the financial condition of many firms might be

¹⁰ Emerson H. Beler, "Terminations of Pension Plans: 11 Years' Experience," *Monthly Labor Review*, June 1967, pp. 26-30.

¹¹ *Ibid.*, p. 26.

so precarious that they could not absorb the additional burden of support that would be required. The problems would be alleviated to some extent by the fact that most of the claims against the guaranty fund would represent deferred obligations, which would not have to be fully offset by assets at any point in time. In an extreme emergency, funds could be made available by the Federal Government either in the form of a loan, a direct subsidy, or indemnity payments under a formal reinsurance scheme.

RELEVANT PRECEDENTS

Additional insights into the feasibility of a pension guaranty fund can be gained by examining the essential elements of existing insurance arrangements that fail in one or more important respects to satisfy the conventional concepts of a sound insurance program. Some of these programs are operated under governmental auspices, some under private auspices, some under joint governmental-private auspices, and one—a pension guaranty fund—under the aegis of a foreign government.

GOVERNMENTAL PROGRAMS

The governmental program that is most frequently cited as a precedent for a pension guaranty fund is the Federal Deposit Insurance Corporation. This agency was established in 1933 to restore confidence in the commercial banking system and to prevent another debacle such as that which occurred between 1929–33 and wiped out the savings of millions of American families. Participation in the program is compulsory for banks that belong to the Federal Reserve System but is optional for all other banks. The original act provided only \$2,500 of insurance per covered deposit account, but the maximum protection was later increased to \$5,000, \$10,000, and then \$15,000, where it now stands. The program is supported by annual assessments on member banks at the statutory rate of one-twelfth of 1 percent of aggregate deposit liabilities (not just the amounts protected by insurance) but because of credits for favorable loss and expense experience, the effective assessment rate in recent years has been about one thirty-first of 1 percent of average deposit liabilities. The assessment *rate* is the same for all banks, irrespective of age, size, or quality of management. This feature of the system was severely criticized in the beginning on the grounds that strong, conservatively managed banks would be required to subsidize the weaker, less conservative banks. The argument is no longer heard today, probably because the assessment rate is so low. There were also allegations that deposit insurance would encourage reckless lending and investment practices on the part of insured banks, but these fears proved to be unfounded. While the system has never been tested by a major depression, there is general agreement that deposit insurance has become a permanent feature of this country's financial structure. It is such an essential element of economic stability that the system would be maintained even if a temporary governmental subvention should become necessary.

While there are certain similarities between deposit insurance and the proposed guaranty fund for pension benefits, there are dissimilarities that largely invalidate analogies between the two schemes. From

the standpoint of any one individual, the FDIC insures against loss of a known number of dollars that are currently available to the depositor. The pension guaranty fund would insure against loss of future dollars the number of which might not be presently determinable and the right to which would be contingent on survival to retirement and possibly on continuation of the current employment relationship to retirement. More important, the assets offsetting the deposit liabilities of a bank are in the possession of the bank (or else the bank would be insolvent), whereas the assets needed to liquidate the accrued benefits of a pension plan usually are not in the hands of the funding agency, at least in sufficient quantity. Thus, it may be said that the FDIC insures against loss of assets already in existence, while the guaranty fund would, in effect, provide protection against the loss of assets that never materialized (from the standpoint of the funding agency). The FDIC insures a reality, while the guaranty fund would underwrite a declaration of intention. There are types of insurance that provide protection against failure to perform (reference will be made to them later), but they are not a component of the bank deposit insurance program. To the extent that a guaranty fund would make good on benefit defaults arising out of investment losses, there would be a parallel to the FDIC program.¹²

The Federal Housing Administration administers 15 trust funds for the insuring of various types of mortgages. The oldest and largest of these is the mutual mortgage insurance fund, which insures residential mortgages. Detailed eligibility rules have been promulgated by the FHA and each application for insurance is carefully screened to determine whether it meets the minimum standards of acceptability. Among the factors taken into account are the applicant's income, assets, character, and motivation. All approved applicants pay the same premium, one-half of 1 percent of the mortgage (with the remaining balance being recomputed each year), but there is a provision for a refund of excess premiums upon final liquidation of the mortgage, the dividends varying with the risk classification in which the mortgage was originally placed. Defaults have been low and net claim payments well within the premium income, but, as with the FDIC, the system has not been subjected to the exigencies of a severe and prolonged depression.

There is a basic similarity between mortgage insurance and a pension guaranty fund in that both involve the ability and willingness of an individual or firm to make future payments. A major difference is that with mortgage insurance the obligation to pay is secured by an asset (the home, for example), while the employer's obligation to make payments to a pension plan is neither secured nor legally enforceable (except pursuant to the terms of a collective bargaining agreement). Sensitivity to economic conditions is another common attribute, but conclusive evidence on this point lies in the future.

Many States operate guaranty funds to insure payment of workmen's compensation benefits when the insurer or the employer, as a self-insurer, becomes insolvent. New York has a guaranty fund for

¹² The foregoing discussion is equally applicable to the Federal Savings and Loan Insurance Corporation.

claims under automobile insurance policies and another for life insurance policies. In all these cases, the State fund is protecting benefit rights to the limit of its resources against the broad economic hazard of insolvency—which would obviously be involved in a program to insure pension benefits—and even more specifically, the insolvency of insurance companies. Legislation to establish a Federal guarantee fund to ensure payment of claims against insolvent automobile insurers, especially the so-called high-risk insurers, is pending in Congress.

Somewhat farther afield, but still relevant, are the unsatisfied judgment funds in Maryland, Michigan, North Dakota, New Jersey, and New York (and all the Canadian provinces except Saskatchewan), established for the purpose of enabling the innocent victims of automobile accidents to collect on their adjudicated claims or judgments against financially irresponsible motorists.

PRIVATE PROGRAMS

There are two types of commercially written insurance that throw some light on the feasibility of a pension guaranty fund. The first is credit insurance, which is written by a number of nonlife insurance companies. Under this type of insurance, the insurer promises to indemnify a business firm for bad debt losses in excess of those considered (and agreed upon) to be normal for the firm. The level of losses deemed to be normal for the business, and hence not indemnifiable, is determined by the experience of the firm over a period of past years. The premium charged for the coverage reflects the Dun & Bradstreet credit ratings of the insured's customers. The risk of loss to the insurer is greatly influenced by the economic climate, a characteristic shared with the proposed pension guaranty fund. Another common characteristic is that both the ability and willingness of business firms to meet obligations are involved, although there are legal sanctions associated with credit insurance that might not be operative with a pension guaranty.

The other type of commercial insurance that should be considered is that kind of coverage that goes under the name of *suretyship*. There are various forms of suretyship coverage, including losses against infidelity of employees, but the most relevant one for present purposes is that associated with contract or performance bonds. The basic purpose of a performance bond is to indemnify one party for economic loss sustained by failure of another party to carry out an undertaking in accordance with the terms of an agreement between the two parties. A common example of such an undertaking would be the construction of a building in accordance with certain specifications. Another would be an agreement by a parent company to guarantee payment of interest and principal of a bond issue of a subsidiary. The bond is usually purchased by the party that must perform. If the responsible party does not perform as required and the insurer (frequently called the surety) has to indemnify the aggrieved party, the insurer is then entitled to move against the defaulting party in an attempt to recover the amount of the loss payment. In other words, this is a type of insur-

ance under which the party that procures the insurance and pays the premium is ultimately responsible for the payment of any claims that may arise. It has been suggested by some that this principle should be incorporated into any program that might be established for the guaranty of pension benefits. This would make the employer ultimately responsible (to the extent of his corporate asset) for any benefits paid in respect of his plan by the guaranty fund.

Another precedent for giving the guaranty fund a right of recovery from the employer is the doctrine of subrogation that is applicable to all forms of property and liability insurance. Under this doctrine, which is supported by common law as well as contract language, if an insured loss is caused by the tortfeasance or wrongful action of a third party, the insurance company has a right to seek recovery from the tortfeasor. The citing of this legal principle is not intended to imply that an employer who fails to fund or otherwise meet his pension obligations is a tortfeasor in the legal sense, but in granting more guaranteed benefits than he has funded an employer would cause loss to the insuring agency and under certain circumstances it might be argued that he has wilfully and irresponsibly caused loss to the guaranty fund.

PLANS JOINTLY ADMINISTERED BY GOVERNMENTAL AND PRIVATE AGENCIES

There are a number of insurance programs that involve a partnership of some type between a Federal agency and private insurance agencies. In some of these programs, for example, Federal Employees Group Life Insurance and the insurance provided under the Federal Employees Health Benefits Act, the private agencies are the sole risk-bearers, the Government playing a strictly administrative role. In other programs, for example, Medicare and the provision of health insurance benefits for servicemen's dependents, the private agencies furnish only fiscal and claims services, with the Government assuming the entire risk. In other cases, the Federal Government and private insurance agencies have entered into a joint *underwriting* venture under which the Government assumes that portion of the total risk considered to be uninsurable by private agencies. One case in point is export credit insurance in connection with which private insurers assume the normal business risks and the Federal Government, through a reinsurance arrangement, assumes the political risks. Another example is the Servicemen's Group Life Insurance program under which the participating life insurers assume the normal mortality risks and the Federal Government absorbs the risks associated with military service. Still another arrangement that could be used would be for the private insurers to assume the first or primary portion of the risk, with the Government serving as the residual riskbearer through reinsurance or some other device. This is the approach embodied in the proposed flood insurance program now being considered by Congress and representatives of the insurance industry. This is an attempt to deal with a hazard that, because of the threat of catastrophic losses, has heretofore been considered uninsurable for all practicable purposes.

Under the proposed program, which initially would be operative only in certain designated areas and would cover only one- to four-

family residential properties (and their contents), insurance against flood damage would be made available through private insurers in amounts up to \$15,000 per dwelling unit, subject to an aggregate liability of \$30,000 on structures with more than one unit. Contents could be insured for an additional \$5,000 per dwelling unit, subject to an appropriate deductible. The program would be administered by the Department of Housing and Urban Development which, after analysis of pertinent data and consultation with appropriate agencies, would promulgate two scales of premium rates. The first scale, called "risk premiums" and computed on the basis of actuarial estimates of the risk and expenses involved, would be pitched at a level believed to be adequate to cover all valid claims plus allowances for expenses, contingencies, and profits. The second scale would set forth the rates that would actually be charged for the coverage, and these "chargeable" premium rates would reflect consideration of many factors, including land use controls, flood proofing, and flood forecasting. The Secretary of HUD would be authorized to prescribe chargeable rates lower than those computed on the above bases in order to encourage the purchase of flood insurance. In low-risk areas, the chargeable premium rates for existing properties would be the same as, or only slightly less than, the full-cost rates, but in high-risk areas the chargeable premiums would always be lower, the disparity growing greater with the increase in risk.¹³ The chargeable premium for insurance on a structure that was started or substantially improved within 60 days after flood insurance became available in the area would be identical with the risk premium (full cost) rate.

The protection would be provided through a pool of private insurers, to which all but the smallest companies could belong. The pool would in all cases receive the full-risk premium, with the Federal Government, through the National Flood Insurance Fund, paying the difference, if any, between the risk premium and the premium paid by the policyholder. The National Flood Insurance Fund would enter into an excess loss type of reinsurance agreement with the insurance pool, in accordance with which the Fund would bear all losses in excess of a stipulated amount per year.¹⁴ The pool would pay a reinsurance premium on a basis as yet undetermined.¹⁵

The aspects of this proposed program which might be considered by those studying the feasibility of a pension guaranty fund are (1) close cooperation between the Government and the insurance industry in the planning stages of the program; (2) the concept of a premium rate lower than the actuarial value of the risk, with the difference being borne by the Federal Government in the form of premium equalization payments; (3) assumption by the Government of all claims in excess of a stipulated amount per year; and (4) emphasis on loss prevention.

¹³ Under the tentative scale of *net* risk premiums currently being considered, the rates would range from 2 cents to \$5 per \$100 of coverage. The maximum rate that would be charged any policyholder (with respect to existing properties) would be 50 cents per \$100, plus an allowance for expenses, contingencies, and profits.

¹⁴ It is proposed that the Government pay all claims in any year that exceed \$50 million or 35 percent of the risk premiums earned by the insurance pool, whichever is the lesser.

¹⁵ A proposal under consideration would link the reinsurance premium to the gross profit of the insurance pool on the flood insurance business. In other words, the pool would pay to the National Flood Insurance Fund, as a reinsurance premium, the excess of premiums earned over expenses and claims incurred, less a specified percentage for profit.

SWEDISH PENSION GUARANTY FUND¹⁶

A rather complex but apparently workable system for assuring the payment of pension benefits has been in operation in Sweden, since 1960. While the institutional environment in which this system functions is quite different from that in the United States, lessons can undoubtedly be learned from the Swedish experience.

The system was an outgrowth of a series of collective bargaining agreements between employer and salaried employee associations, reaching into every branch of industry (and certain trade, service, and agricultural undertakings), pursuant to which certain pension benefits were to be provided as a supplement to the national old-age insurance program. The agreements gave the employers the option of purchasing the benefits from the Swedish insurance company (the Swedish Staff Pensioning Society) established by employers about 40 years ago for the sole purpose of underwriting pension benefits or of assuming legal responsibility for the direct payment of the benefits. If the employer elects the first course of action, he fully discharges his legal responsibility by the payment of the necessary premiums and he does not get involved in the pension guaranty mechanism. If, on the other hand, the employer prefers to keep the equivalent of the premium payments in his own firm, he must set up an internal pension fund and register it with a central registration agency, called the Pension Registration Institute (PRI), which has other functions and indeed plays a very active role in the whole pension process by recording benefit accruals, informing employees of their rights, performing actuarial valuations, and paying benefits underwritten by the aforementioned pension insurance company (SPP). The employer's internal fund, referred to as the "PRI fund," must at all times hold assets equal to the actuarial value of all accrued benefits—as calculated and certified annually by the PRI—but the only assets placed in the funds are unsecured promissory notes of the employer. These notes would be enforceable against the general assets of the employer in the event of insolvency or bankruptcy but without any special creditors' preference, except as noted below.

Since the alternative methods of providing the bargained benefits are supposed to be endowed with equal degrees of security—and to be equal in all other respects—and since the worth of the employer's promissory notes is completely dependent upon the financial well-being of the firm, it was necessary to create another agency to underwrite the credit of the employer. This organization, a mutual credit insurance company formed by the employer associations and known as FPG, assumes the pension obligation of an insured employer who defaults on his pension payments and then discharges its responsibilities by the purchase of annuities in the appropriate forms and amounts from SPP, the pension insurance company. It seeks reimbursement for its premium outlays by taking over the promissory notes in the employer's internal fund and competing with other creditors in the resulting bankruptcy proceedings, with no special preference other than with

¹⁶ For a more detailed description of this system see G. M. Ericsson, "PRI—A Self-Insured Pension Scheme in Sweden", *Transactions of the 17th International Congress of Actuaries*, London-Edinburgh, 1964, pp. 554-567 and Sven Hyden, "A New Approach to Financing Private Pension Schemes in Sweden", *International Review of Actuarial and Statistical Problems of Social Security*, No. 9.

respect to benefit rights that accrued during a short period preceding the adjudication of bankruptcy.

FPG makes credit insurance available only to joint-stock companies and economic associations (roughly equivalent to corporations) and only to such enterprises that have been in business for at least 3 years and employ a minimum of five salaried workers. Since there is an average of three and one-half manual workers for each salaried employee, the general effect of this stipulation is to limit the coverage to firms employing a minimum of 20 persons. Applications are carefully screened since the insurance is written for a 5-year term and if not renewed remains in effect for a systematically declining amount of pension liability for an additional 15 years (the time given the employer to convert his pay-as-you-go scheme to a fully insured arrangement). The financial position, economic prospects, and quality of management of the firm are carefully considered, the risk appraisal being at least as rigorous as the standards applied by banks in making long-term loans. Firms that cannot qualify for credit insurance, either because they are too small or too unstable, must purchase the required benefits from the pension insurance company (SPP).

FPG charges a risk premium of three-tenths of 1 percent of the accrued pension liability, plus a nominal loading for administrative expenses. It has the authority, not invoked as yet, to levy cumulative assessments of up to 3 percent of the accrued pension liability over successive 5-year periods. This annual premium rate was adopted after a study of bankruptcies occurring among Swedish corporate enterprises during the period 1929–58.¹⁷ The investigation proceeded on the assumption that the present scheme of supplementary pension benefits had been inaugurated on January 1, 1929. The aim was to discover the amount of moneys that would have had to be set aside annually to cover the accrued pension obligations of the firms that went into bankruptcy, on the severe and unrealistic assumption that in no case would there have been any corporate assets available for the satisfaction of pension claims.

The study revealed that a premium slightly less than two-tenths of 1 percent of the pension debt outstanding would have covered the aggregate losses occurring during the period. Only in the years 1933 and 1934 would the credit insurance company have been unable to meet all claims out of accumulated reserves, the deficit being erased by 1937. With the exception of the year 1957, the insured firms would have paid larger premiums in each of the years from 1935 to 1958, inclusive, than would have been required to pay the claims arising during those years. The premium rate was set at three-tenths of 1 percent in order to permit the building up of reserves that were considered to be a substitute for a large initial guaranty capital fund.

As of the end of 1966, about 1,900 Swedish corporate employers, comprising about 15 percent of the total, had elected to utilize internal funding for the salaried employees' supplemental benefits, with the concomitant use of the credit insurance mechanism. Approximately 200,000 employees and 9,000 pensioners were covered by this arrange-

¹⁷ The investigation was limited to enterprises that belonged at some time during the period to the Swedish Employers' Confederation (SAF), which includes within its membership practically all firms in the manufacturing industry and the majority of those in the building and road transport industries. Bankruptcy was construed to be the equivalent of failure to pay the required contributions to SAF. In other words, any company that failed to pay its dues to the SAF was considered to be bankrupt.

ment, accounting for two-thirds of the salaried employees of firms engaged in manufacturing and commerce. The internal funds of these employers were holding \$452 million in employer promissory notes, with the volume expected to increase by \$100 million annually over the next few years. FPG was holding reserves of \$3,450,000, which constituted 0.76 percent of its liabilities, as measured by the employer promissory notes. The company's objective is to accumulate a reserve of 2 percent of its liabilities by the year 1980. Through June 30, 1967, the company has had to make good on its guaranty in only six cases (three arising during the first 6 months of this year), involving slightly more than \$200,000 (\$180,000 in 1967) in "claim" payments. The company has terminated the insurance coverage of nine firms, advancing \$320,000 in loans to these employers for the purchase of insurance from SPP.¹⁸

This credit insurance arrangement bears a surface similarity to the proposed guaranty of pension obligations in this country in that the basic risk is the insolvency of the employer. There is a fundamental difference, however, in that under the Swedish arrangement all accrued benefits are fully offset at all times by legally enforceable promissory notes of the employer,¹⁹ and the only risk involved is the probability that because of the employer's bankruptcy the notes would not be paid off in full. The Swedish scheme limits the coverage to those employers who can qualify, forcing the remaining employers to purchase benefits from the pension insurance company. Pension plans in this country are too diverse to be adapted to the Swedish scheme, but certain elements of the scheme such as prescribed levels of funding, assumption by employers of legal liability for the payment of pension benefits, and limiting the credit guaranty to those that earn it, deserve serious study.

ISSUES

Many issues would have to be resolved if a pension guaranty fund were to be established in the United States.²⁰ This section analyzes the issues and points to the various courses of action, without attempting to reach final solutions.

¹⁸ The foregoing operating statistics were made available by Mr. Sven O. Hydén, managing director, Pension Guarantee Mutual Insurance (FPG) in a letter to the author dated July 21, 1967.

¹⁹ In Sweden all pension benefits are funded on a level cost basis and the concept of an unfunded pension liability (i.e., a supplemental cost) is not recognized.

²⁰ This presupposes an earlier decision to use a guaranty fund mechanism rather than a suretyship arrangement such as that employed in Sweden. In theory the objectives of the current proposals for a pension guaranty could be achieved by requiring employers to undergird their pension promises by the purchase of a performance bond from a surety company. In the event of a default on pension obligations, the surety company would be expected to make good on the benefit promises through the purchase of annuities from life insurance companies, with recourse against the employer for its net outlays. Among other advantages, this approach would permit the charging of a premium rate commensurate with the individual risk involved. Some supervisory agency would have to determine that the mandatory performance bond was purchased and maintained in force and that employee rights were protected in the event of plan termination. There would also have to be some mechanism, similar to assigned risks pools in automobile and workmen's compensation insurance, to provide coverage to employers who could not purchase the required insurance through regular channels. Since purchase of insurance would be mandatory, the rates charged by the surety companies would have to come under public surveillance. Despite the flexibility of this approach, its feasibility would be completely dependent upon the response of a group of private insurers to a new and hazardous type of coverage. Of course, a new surety company could be established for the sole purpose of writing this coverage, but it is doubtful that such a mechanism would offer any real advantages over the type of guaranty fund described hereafter in this paper.

ADMINISTERING AGENCY

A pension guaranty fund, hereinafter referred to as the PGF or the guarantor, could be established and operated under the auspices of a Federal agency, a private agency, or a combination Government-private instrumentality. The choice would depend in part on political philosophies and in part on the financial mechanism envisaged. Legislation proposed thus far has contemplated administration by a Federal agency which would be feasible under any set of circumstances and would be especially appropriate if the financing scheme should embody the assessment principle, with a minimum accumulation of assets, and if the Government were prepared to assume the greater part of the risk involved.

Administration by a central private agency, specially created for the purpose with representation from employers, labor unions, banks, insurance companies, and other interested parties, would appear to be equally feasible. Private control over the guaranty mechanism might make the whole idea more acceptable to employers (who would be expected to bear all or a substantial part of the cost) and it would be particularly desirable if a major investment function should be envisioned.

Another possible approach would be to utilize a central agency, either governmental or private in nature, for the collection of premiums, adjudication of plan terminations, and other ministerial functions, with the guaranteed benefits being underwritten, for a consideration, by life insurance companies on their own account or as members of a pool. The risks could be assigned to individual companies on a basis similar to that employed with Federal Employees Group Life Insurance, the Federal Employees Health Benefits Act, or Servicemen's Group Life Insurance. The pool arrangement could be patterned after that being considered for the flood insurance program. The primary difference between this approach and the second one mentioned above would be that in one case the central agency would retain the risks taken over from terminated plans, acting as an insurer in the process, whereas in the other case the risks would be transferred to existing insurance companies on some equitable basis.

Any approach that would place upon private agencies the basic risks inherent in plan terminations would probably have to embody some mechanism for governmental reinsurance.

EVENT INSURED AGAINST

The most difficult problem that would have to be confronted in the establishment of a sound and equitable system for assuring the payment of accrued pension benefits would be defining or articulating the circumstances under which the protection of the system could be invoked. One would naturally assume that the guaranty would be applicable only when the pension plan has terminated under certain prescribed conditions, but all bills on this subject now pending before Congress clearly contemplate that the guaranty could be invoked by certain groups of employees even though the plan continues in existence. For example, the Javits bill defines the insured event as "substantial cessation of one or more of the operations carried on by the

contributing employer in one or more facilities of such employer before funding of the * * * liabilities * * *

This type of thinking appears to be a throwback to the concept of a partial termination expressed in IRS regulations in language similar to the above-quoted passage. The IRS was concerned that an employer, in anticipation of a complete termination of his pension plan, might engage in a massive discharge of employees—through individual lay-offs or closing down of specific operations—thus increasing the share of the plan assets that would be available for the officers, supervisors, and highly compensated employees. To forestall such action, the IRS introduced the concept of the partial plan termination, which has the effect of vesting all accrued benefits of the employees involved. In a real sense, the concept was introduced as a substitute for reasonable vesting provisions in the plan at a time when vesting through plan provisions was not as common as it is today.

The most baffling difficulties conjured up in connection with a pension guaranty scheme are concerned with the rights of individuals who lose their jobs while the pension plan to which they belonged continues in operation. The job loss could result from the elimination of specific positions or the closing down of an entire plant, division, or subsidiary. The problem, if there is one, is lack of adequate vesting. If the pension rights of the displaced employees were vested, they would retain a claim to benefits enforceable in due course against the assets of the plan. If the plan itself were eventually to terminate with insufficient assets, unsatisfied claims would be met by the guaranty fund. Thus, the definition of the insured event should not be complicated—perhaps to the point of utter uselessness—by an effort to meet another problem that is not an inherent part of the guaranty scheme. The vesting problem would be largely solved if legislative proposals now being readied by the administration were to be adopted. The remaining discussion assumes that any pension guaranty would apply only to benefit claims arising out of a plan that has terminated in its entirety.

The definitional problem would be further simplified if it could be assumed that a plan termination was always an incident to the final dissolution of the sponsoring firm. This, of course, is not the case. Most firms (more than 80 percent according to the BLS study of terminations) continue in full operation, usually in their original form, after terminating their pension plans. In some of these cases (about one-fourth according to the BLS study), the discontinuance stems from financial difficulties. In the other cases a variety of causes may be at work. Some of the more common reasons, other than financial difficulties, why a pension plan might be discontinued are (1) sale or merger of the sponsoring firm, (2) transfer of the employees to another pension plan, (3) substitution of a profit-sharing plan or other form of deferred compensation for the pension plan, (4) closing of a plant or other subdivision that had its own pension plan, and (5) desire of the sponsoring firm to protect or improve its profit position, and (6) mutual agreement by the parties to a collective-bargaining contract. There are undoubtedly cases where the firm ostensibly goes out of business only to reopen under another name or in another form.

There is serious doubt concerning the propriety—and feasibility—of invoking a pension guaranty when the firm that created the pension

obligations continues to operate in one form or the other. It would clearly be inappropriate to have a guaranty fund assume the unfunded obligations of a plan terminated in order to transfer the employees into another pension plan or a profit-sharing plan, or pursuant to an agreement between the parties to a collective-bargaining contract, presumably to protect or increase cash wages. It would also seem improper to permit a prosperous corporation to slough off unto a guaranty fund the unfunded pension claims of persons who had been employed in a plant or division (with its own pension plan) shut down for presumably sound business reasons. This would have the effect of increasing the labor costs chargeable to the remaining units of the business, an unfortunate but unavoidable consequence. A firm that purchases another should be expected to assume the pension obligations of the acquired firm, the purchase price reflecting the unfunded liabilities. It is recognized that this requirement might force complete dissolution of a firm or one of its subdivisions because of the unwillingness of the prospective purchaser to assume the unfunded accrued pension obligation of the firm to be acquired. Accrued pension benefits should also be protected when two or more firms merge despite the fact that the merger negotiations might be complicated thereby. The guaranty would seem to be justified when the termination was motivated by financial difficulties verified by the administering agency. Yet this would create an unconscionable distinction between participants in pension plans terminated because of financial exigencies and those in plans terminated for other reasons, unless the sponsoring firms undertake to honor out of corporate assets the unfunded benefits accrued to date of termination.

The whole matter would be greatly simplified—with some reduction in the attractiveness of qualifying a plan under Treasury regulations—if the guaranty scheme were established on the basis that the sponsoring firm, or its successor, would have the primary legal responsibility of meeting the cost of the benefits covered by the guaranty, the PGF having only the residual liability. Then it would be possible to define the insured event as the complete termination of a pension plan, without reference to the circumstances surrounding the event. If the sponsoring firm had gone out of business, or was in process of doing so, its obligation to the plan (or the PGF) would be discharged to the extent of available resources in a lump-sum payment. If the firm continued in operation, its obligation could be discharged over a number of years in accordance with the pattern prescribed for the funding of the supplemental liability. (See next section.) In the meantime the PGF would stand ready to assume responsibility for any benefits not ultimately funded by the employer. Unless such a feature can be made part of the guaranty arrangement, it would probably be necessary to define the insured event in terms that would limit the guaranty to plan termination arising out of the final dissolution of the sponsoring firm (or its successor), whether by bankruptcy, insolvency, or voluntary winding up.

Special rules would have to be developed for multiemployer plans, since among other distinguishing characteristics, they have an existence apart from that of any particular employer belonging to the plan. In some industries in which these plans are found, such as the building

trades and the maritime industry, the employment relationship is very tenuous, frequently being limited to one construction job, voyage, or other undertaking. In other industries the employment relationship is more conventional. In either of these settings, it would be desirable to provide some measure of protection to the accrued pension benefits of the employee participants irrespective of whether the current employer or past employers continue to participate in the plan or continue in operation. The preferred arrangement would be for the plan to assume the primary responsibility for the payment of the benefits that would come under the guaranty, so long as the plan continues in operation, with the PGF providing the ultimate guaranty. There would have to be safeguards to protect the plan against abuse, and the contribution rate (or benefit levels) would have to reflect the anticipated cost of the internal guaranty.

A precedent for this type of approach is found in the national industrial group pension plan developed by the Industrial Union Department of the AFL-CIO and jointly underwritten by a number of life insurance companies. If an employer has participated in this plan for more than 3 years and terminates his participation for reasons beyond his control, the accrued benefits of his employees are assumed by the plan on a scale determined by designated priority classes and the number of years during which the employer participated in the plan. After only 3 years of employer participation, the benefits of all employees aged 60 or over with the equivalent of 10 years of credited service (10 "service units") are assumed in full by the plan. The benefits of employees under age 60 but with a minimum of 10 years of service are assumed by the plan on a scale graded upward from 30 percent with 3 years of employer participation in the plan to 100 percent after 10 years of employer participation. Employees aged 72 or over at the time of the employer's withdrawal from the plan who are at least 5 years beyond normal retirement age have their benefits assumed in full by the plan even though the employer participated for less than 3 years. (Apparently, the plan is prepared to assume ultimate responsibility for this class of employees the moment the employer enters into a "participation agreement" with the plan and fulfills its contributions commitment.)

In the absence of an internal guaranty arrangement, the PGF could assume ultimate responsibility for the payment of the covered benefits of employees whose employer withdraws from a multi-employer plan after a minimum period of participation and for reasons beyond his control. The employees would retain claims against the plan to the extent of the funds allocable to them, but the PGF would make good on any insufficiency of assets—despite the fact that the overall plan continues in operation. In other words, the employer's withdrawal from the plan be treated as a plan termination with respect to his employees. The guaranty should not be invoked if the employees' rights are preserved through membership in another plan or in the same plan through subsequent employment with another firm belonging to the plan. This approach would not be applicable to multi-employer plans in industries characterized by temporary employment relationships. In these cases, termination of the master plan would have to be the contingency that invokes the guaranty.

OBLIGATION OF THE GUARANTY FUND

It goes without saying that a pension guaranty mechanism should relate only to benefits accrued to date of plan termination, however that event may be defined. Thus, the PGF should not undertake obligations with respect to benefits that would have been earned had the plan remained in operation and the employee continued in the service of the employer until normal retirement age. Moreover, it does not follow that *all* accrued benefits would be entitled to the protection of the program. Various limitations, discussed later, might be necessary or desirable. Thus, the following discussion should be understood to apply only to the benefits that would be entitled to protection.

Broadly speaking, the obligation of the guaranty fund could be expressed in one of two ways: (1) assurance of ultimate payment of the benefits covered by the program or (2) completion of the employer's funding commitment.

Assurance of Ultimate Payment of Guaranteed Benefits.—The most comprehensive approach would be for the PGF to assure ultimate payment of all covered benefits, irrespective of the amount, source, or cause of the asset deficiency. The deficiency could be caused by inaccurate estimates of cost, failure of the employer to undertake an adequate funding program, lack of time for the completion of a realistic funding objective, or loss of asset values through realized or unrealized capital losses. No minimum standards of funding would be imposed and, in fact, pay-as-you-go plans would be eligible to participate. Risk classifications would be established on the basis of probability of plan termination, and the premium paid in respect of a particular plan would be derived by multiplying the probability of termination times the actuarial value of unfunded benefits. In some cases, this combination of factors might produce a premium charge as large as, or larger than, the annual contributions under a realistic funding program. Losses incurred on liquidation of assets in connection with plan termination, the subject of special provisions in the early legislative proposals, would be blanketed in under this approach insofar as they affect the payment of guaranteed benefits. Benefits not subject to the guaranty would not be protected against liquidating losses, but, as will be noted later, it is possible to devise a claim settlement procedure that would eliminate or minimize the risk of such losses.

The advantages that would be associated with the approach are (1) eligibility of all types of plans, including those financed on a pay-as-you-go basis where the need for protection is greatest; (2) coverage of all sources of asset deficiency, including liquidating losses as they relate to covered benefits; (3) equitable allocation of costs through use of many risk classifications; and (4) absence of mandated standards of funding. All of these advantages would have offsetting disadvantages from other points of view. The approach would lend itself to great abuse because of its sweeping coverage; it might encourage highly speculative investment policies; it would be extremely difficult, if not impossible, to predict the probability of termination among various classifications of plans—which would be especially important in connection with unfunded plans; the need for a governmental subsidy would be greater than under any other approach—because of the fore-

going factors plus absence of minimum funding standards; and finally participation by pay-as-you-go plans (which might be encouraged at the expense of funded plans) would have to be on a voluntary basis unless they are to be brought under some degree of regulatory control, as they have been in the United Kingdom.²¹

Most of the major disadvantages of this approach could be overcome by requiring the covered benefits to be funded in accordance with minimum standards stipulated by law or administrative agency. These standards would concern themselves with actuarial assumptions, actuarial cost methods, and the period of time allowed for the full funding of all covered benefits. If the guaranty were to apply to all accrued benefits, the employer might be expected to fund his normal cost currently and his supplemental cost, if any, over a maximum period of 25 or 30 years. If the guaranty were to apply only to a segment of the accrued benefits, such as those that have vested, the standard might speak only of the maximum period over which the covered benefits were to be funded in full, possibly on the basis of specified mortality and interest assumptions. Alternatively, the standard might require the current funding of the normal cost of the vested benefits and the amortization of the supplemental cost of the vested benefits over a specified maximum period. Another logical standard might prescribe the funding of the normal costs of all accrued benefits for the plan as a whole plus whatever additional sums are needed to assure that all vested benefits are fully funded by the end of 20 years. Whichever approach is used, full funding of all vested benefits should probably be required in 20 years, corresponding to the principle adopted by the AICPA for the accruing of the costs of vested benefits. A funding standard promulgated for only a segment of the total benefits would have to be reconciled with the broader minimum standard articulated by the Internal Revenue Service.

If the plan should terminate before the required level of funding has been achieved, the unfunded portion of the accrued liability would become the obligation of the PGF. The funding of supplemental costs arising after inception of the plan from such causes as retrospective benefit increases, actuarial losses (unfavorable deviation of actual from assumed experience), and revision of actuarial assumptions should also come under the "completion" guaranty, but subject to adequate safeguards against abuse. Since the obligation of the PGF would be stated in terms of *benefit payments*, the strengthening of actuarial assumptions would not add to the existing obligation of the guaranty fund and might in fact diminish it through stepping up the rate of funding. Recurring actuarial losses would be significant in that they would suggest the strong possibility that the employer's funding policy was based on an understatement of the ultimate or "true" cost of the covered benefits.

The major advantage of this modification would be the reduction of the risk assumed by the PGF through the systematic funding of covered benefits on the basis of presumably realistic cost estimates.

²¹ In the United Kingdom, the penalty for nonapproval of a plan by the Inland Revenue Department is the current taxation of employee participants in respect of employer contributions. If the plan is not funded, the contributions are imputed to the employees.

The major disadvantage would be the exclusion of plans operating on a pay-as-you-go basis, unless such plans were forced to convert to a funded basis. There would be other disadvantages, such as the employer's authority to create additional liabilities for the PGF, without any recourse against his own corporate assets, and the risks associated with speculative investment policies.

The viability of the modified approach is clearly dependent upon the enforcement of minimum standards of funding. There should be sanctions other than suspension or cancellation of coverage since these actions would penalize only the plan participants for whose protection the program was established in the first place. One possible sanction that would be effective, assuming availability of assets, would be to make the employer financially responsible for any defaults on scheduled funding payments. The sanction might take the form of a tax penalty, possibly equal to the funding deficit, that could be diverted to the PGF to offset its increased liability. The tax payment could be refunded, at least in part, if the employer later made restitution to the plan.

A more comprehensive remedy, that could be applied with or without a funding requirement, would be to make the employer primarily responsible for any deficiency in plan assets, with the guaranty fund being only contingently liable. Procedurally, the PGF would assume full and direct responsibility for the fulfillment of benefit expectations, but would have right of action against the employer to recover any asset deficiency. The PGF would be regarded at law as a creditor of the employer and could be given an appropriate preference in an insolvency or bankruptcy proceeding. Making the employer legally responsible for the payment of accrued benefits would encourage conservatism in the granting of benefits and in the financing of the benefits. It would eliminate most of the possibilities of abuse (or selection against the fund) and make it possible for the PGF rules to be far less restrictive as to coverage, benefits, and funding. On the other hand, it could discourage the voluntary establishment of qualified plans. For constitutional reasons, it might be necessary to limit the employer's legal liability to benefits accruing after enactment of the pertinent legislation.

Completion of the Employer's Funding Commitment.—The second basic approach would be to limit the liability of the PGF to the completion of the employer's funding program for covered benefits, without regard to the sufficiency of the projected contributions. In other words, the guaranty would attach to the *funding* commitment rather than to the *benefit* commitment. In theory, this approach could be followed without any standards of funding other than those imposed by the IRS as a condition for continued qualification but for all practical purposes it would have to be grounded on minimum standards comparable in nature and scope to those suggested in the preceding section. The initial accrued liability for covered benefits could be increased by benefit liberalizations, subject to necessary safeguards, but a recomputation on the basis of revised actuarial assumptions could be permitted only with the approval of the PGF. Under this procedure, the dollar amount of the PGF's potential aggregate liability could be definitely determined at any time. It would be the

unfunded portion of the explicitly recorded accrued liability for all covered benefits of all plans encompassed by the program. If the covered benefits of a terminated plan could not be satisfied in full when account is taken of the PGF's obligation, benefits would have to be scaled down to manageable proportions.

As with the benefit guaranty approach, there would have to be sanctions to enforce compliance with the mandated standards of funding.

This arrangement would insulate the guaranty fund against the effects of unrealistically low cost estimates on the part of the employers, an obvious advantage to the PGF and to employers who fund on the basis of adequate cost estimates. It would also protect the PGF against the undesirable consequences of unduly venture-some investment policies, unless the fund assumed responsibility for increases in unfunded liability arising out of realized and unrealized capital losses—as it might well do. The primary disadvantage of this approach is that the risk of inadequate asset accumulations would be shifted to the plan participants. It also fails to deal with the problem of the pay-as-you-go plan.

The obligation assumed by the PGF under this approach would be tantamount to assuring the fulfillment of benefit expectations if (1) the PGF prescribed the actuarial cost method and actuarial assumptions to be used and the period of time allowed for the full funding of all covered benefits, (2) the funding standards were enforced, (3) the PGF assumed responsibility for unfunded actuarial losses, and (4) the PGF or an insurer assumed the actuarial risks associated with benefits that survive a plan termination.

PLANS COVERED

A number of questions are involved with respect to the plans that would be brought under a pension guaranty program. The most fundamental question is whether all plans eligible for coverage would be required to participate in the program. The answer is clearly in the affirmative. There would be too much selection against the PGF if employers were permitted to elect coverage. There would be an understandable tendency for financially stable firms to stay out of the system and for the less stable ones to elect coverage. Worse yet, the latter firms, where the need of a guaranty is greatest, might also elect to remain outside the program. There might be a universal reluctance to participate in any undertaking that would add to the cost of doing business and, if not properly structured, might be grossly abused. Compulsion seems to be the only answer, despite the fact that this feature might narrow the range of plans that could be brought into the program.

If the program were to be made compulsory, it would have to be restricted to plans "qualified" under the Internal Revenue Code and implementing regulations, unless a new control mechanism is developed. At the present time the only effective club that the Federal Government has over pension plans is denial of the tax treatment that is accorded plans which meet certain specifications, designed to prevent discrimination in favor of stockholders, officers, supervisors, and highly paid employees. Conceivably, Congress could enact a law making it

unlawful to hold out the promise of pension benefits, however the promise might be hedged, unless the anticipated benefits were funded in a prescribed manner, but the prospects of such legislation in the near future seems remote. There is the possibility, of course, that a pension guaranty mechanism might prove to be so attractive that employers would convert their nonqualified plans into qualified plans in order to take advantage of the coverage.

Some have questioned whether multiemployer plans should be compelled to participate in the guaranty scheme. The probability of termination is probably lower among multiemployer plans as a group than among single employer plans, which would lessen the need for the guaranty. On the other hand, multiemployer plans are probably funded at a lower level than single employer plans, as a class, which would suggest the need for a benefit guaranty. Many of these plans would have difficulty meeting the minimum standard of funding mentioned earlier, since a substantial percentage only pay interest on the supplemental liability rather than amortizing it. Considerable opposition to compulsory participation could be expected by multiemployer plan administrators. On balance, however, it would seem that the guaranty scheme should be applicable to all qualified plans, whether they be single employer or multiemployer plans.

In order to protect the system, a plan should not be eligible for coverage for the first few years of its existence. Otherwise, an employer, in contemplation of an event that would invoke the protection of the system, could establish a plan with liberal past service benefits and let the PGF assume most of the financial burden. The need for protecting the system against this potentiality would depend on other provisions of the program, including the definition of the event insured against and the benefits that would be entitled to the guaranty. The required length of the probationary period is strictly a matter of judgment but it should perhaps be no shorter than 3 nor longer than 10 years. It is of some significance in this regard that the BLS study of pension plan terminations cited earlier²² showed that half of the plans examined, terminated within 5 years after establishment.

A question might be raised as to the desirability of excluding from participation in the program plans covering fewer than some specified number of employees, such as 25. There is no doubt that the probability of termination is the highest among the smaller plans. The BLS study revealed that two-thirds of the terminations were accounted for by plans covering fewer than 25 employees. The issue here is whether the program should be structured in such a manner as to cover the area of greatest need or to minimize the financial burden on continuing plans. Clearly, a guaranty program could be surrounded by so many safeguards that it would cover only the most unlikely occurrences, with commensurately low cost to the participating plans. In the light of the other safeguards recommended in this paper, it would seem unnecessary—and socially undesirable—to exclude plans purely on the basis of size.

Another question of considerable moment is whether all plans falling within the eligible group would automatically be embraced in the program or whether the administering agency would have the authority

²² See footnote 10, p. 209.

to exclude those plans not measuring up to minimum underwriting standards. This is primarily a question of priorities. Is the paramount objective the protecting of benefit expectations or the integrity of the guaranty fund? If the participants in the less secure plans are to be denied the protection of the system, much of the latter's value would be sacrificed. On the other hand, employers who are meeting their pension obligations in a realistic and forthright manner can properly object to assuming a portion of the pension obligations of other employers, possibly their competitors. The issue would be blunted if a number of risk classifications could be established, with the premium being roughly commensurate with the risk of plan termination. The problem would also be diminished if the projected cost of the program turned out to be a modest or even negligible proportions.

A related question is whether a plan that falls outside the category of plans that must participate, could be brought within the scope of the program by election of the plan administrator. This should be permitted and encouraged if the aim is to maximize the coverage of the program. On the other hand, the privilege would open the door to selection against the program. Voluntary election of coverage would probably be feasible if a sound underwriting procedure could be devised and enforced.

BENEFITS COVERED

As was stated earlier, the protection of the guaranty fund would extend only to benefits accrued as of the date of plan termination or, more precisely, the occurrence of the event insured against. However, the protection need not extend to all accrued benefits. A distinction might logically be made between benefits credited for service prior to inception of the plan and those that accrued thereafter. If only the latter benefits were to be "insured," the major costs of the program would be eliminated but by the same token much of the *raison d'être* of the program would be destroyed. The principal problem lies with past service benefits and others granted retrospectively after the plan was established.

Another distinction that might be made is that between vested and nonvested benefits. While the Hartke bills have envisioned the guaranteeing of all accrued benefits and the Javits bill all future service benefits, the current thinking in administration circles seems to incline toward the guaranteeing of only vested benefits. This thinking, however, is apparently based on the assumption that Congress will enact legislation requiring that all benefits vest after 10 years of continuous service irrespective of the participant's age (except that service prior to age 25 could be ignored). The contemplated legislation would provide an orderly transition by requiring only the *vesting* of benefits accruing *after* the date of the legislation but with *recognition* of the years of service *prior* to that date.²³ For example, an employee with 9

²³ In his speech before the American Pension Conference on May 11, 1967, Assistant Secretary of the Treasury Stanley S. Surrey indicated that other transitional approaches were under consideration. One approach would be to require the vesting of all benefits, whether accruing before or after enactment of the relevant legislation, after 20 years of continuous service, with the minimum required period being systematically reduced so that after 10 years the target standard of 10 years would be operative. Another approach would make the 10-year standard effective immediately but only with respect to one-tenth of the participant's accrued benefits, with the percentage grading upward in uniform steps each year and reaching 100 percent at the end of 10 years. Under neither of these alternative approaches would there be any distinction between past and future service benefits.

years of credited service at the time of the legislation would achieve a vested status after 1 more year of service but only the benefits that accrued during the 10th year would be vested. Benefits for all subsequent years would, of course, be fully vested. All employees with 10 or more years of credited service at the time mandatory vesting became effective would be vested in all benefits accruing thereafter. A participant with 5 years of service would achieve a vested status after 5 more years but only with respect to the benefits accruing during the last 5 years and thereafter.

Under this concept the question arises as to whether the guaranty would attach only to the benefits that would be vested under the proposed minimum standard or to those that have vested on a more liberal standard pursuant to the terms of the pension plan. While relatively few plans other than those funded through individual insurance or annuity contracts vest benefits with less than 10 years of credited service many vest past service as well as future service benefits. Moreover, all benefits of retired persons are considered to be vested and all those of employees eligible to retire may be so regarded. Any plan that has had a vesting provision for a number of years is likely to have a greater volume of vested benefits that would be generated by the proposed minimum standard. High governmental sources indicate that the Administration will take the position that benefits vested by plan provisions more liberal than the mandatory minimum should be subject to the guaranty.

Other distinctions among accrued benefits could be justified. In a privately circulated memorandum, an official of a major automobile company proposed that the guarantee attach to all the accrued benefits of persons in a retired status and those within 10 years of normal retirement. With respect to all other employees, the guaranty would attach in annual increments, reaching 100 percent only after the plan had participated in the guaranty program for 10 years.

There would have to be a determination as to the types of benefits to which the guaranty would attach. It is obvious that it would apply to retirement benefits but would it cover death, disability, special early retirement, and other ancillary benefits? It would seem that the guaranty ought to cover only such ancillary benefits that have matured and are in an active-payment status.

It would be necessary to deal specifically with plan liberalizations that increase the unfunded liability of the plan, especially increases in the scale of benefits. The threat to the solvency of the fund is apparent. The guaranty should not attach to newly created benefits for a period of years. It would make sense to impose the same probationary period as that applicable to newly established plans.

It would probably be desirable to place a dollar limit on the benefits that would be guaranteed for any one participant, since there is an element of social insurance in the whole undertaking and some employers would inevitably subsidize the pension plans of other employers to some extent. The limit should be stated in terms of the monthly income provided at a retirement age specified in the law.

IMPLEMENTATION OF THE GUARANTY

The implementation of the guaranty would involve two basic issues: (1) determination of the amount of the PGF's liability and (2) manner in which the guaranty would function.²⁴

Determination of the Guarantor's Liability.—The determination of the guarantor's liability would be divided into three steps. The first step would be to ascertain in terms of prospective monthly income the dollar amount of covered benefits accrued as of the date of plan termination. This could present difficulties if the benefits covered by the guaranty are not carefully defined. However, it is assumed for the purpose at hand that the guaranty would be limited to *vested* benefits, including those vested on a voluntary basis. It is further assumed that plans will be required by law to state precisely what benefits are vested, the conditions under which they vest, and how the amount of vested benefits are computed. There should be no distinction between the benefits vested upon termination of employment and those vested upon plan termination except as may be necessary to meet the Treasury requirement that all accrued benefits vest on plan termination to the extent that they are funded. Otherwise inequities may be created as between employees who are laid off in anticipation of the winding up of a business and those who are still employed at the point of technical termination of the plan.

The second step would be to derive the actuarial value of the guaranteed benefits. Procedurally, this would be simple if only basic retirement benefits are vested. Their valuation would involve only mortality and interest (and possibly expense) assumptions. If any ancillary benefits are vested, additional factors might have to be considered. The basic question here would be whether to use the assumptions that had guided the employer's funding policy or the assumptions that would be applied by the agency that would have final responsibility for payment of the benefits—the residual risk bearer. The decision would be influenced or perhaps controlled by the payment mechanism adopted, to be discussed in the next section.

The final step would be to compare the actuarial liability derived in step 2 with the value of the assets considered to be available for the satisfaction of the guaranteed benefits. The law might state that all unallocated assets are to be applied on a first-priority basis to the payment of guaranteed benefits. Presumably it would not direct the recapture of assets used to purchase nonvested benefits from an insurance company or reallocate assets needed to honor benefit commitments to persons in a retired status even when the benefits do not qualify for the guaranty. It might recognize the priorities established in the plan document for the allocation of uncommitted assets in the event of plan termination. Conceivably it might recognize no priorities and thus assume that guaranteed benefits are entitled to only their pro rata

²⁴ It is assumed for purposes of this discussion that the PGF's obligation would be to assure payment of the guaranteed benefits. If its obligation were limited to the completion of a projected funding program, the amount of its liability would be determined on a basis different from that described herein, but its obligation could be carried out under any of the approaches outlined.

share of the assets. Whatever the concept applied, the theoretical liability of the guarantor would be measured by the difference between the actuarial value of the guaranteed benefits and the value, at book or market, of the assets applicable to those benefits. The actual liability would depend upon the manner in which the guarantor discharges its obligation.

Manner in Which the Guaranty Would Function.—The guarantor could discharge its responsibility in a number of ways, the choice depending to some extent on the nature of the guarantor and to some extent on the manner in which the funded benefits are to be paid out.

It would seem logical that responsibility for the payment of benefits *purchased* from an insurer prior to termination of a covered plan would be retained by the insurer, with future dividends or experience refunds going to the PGF. Legal complications would ensue if any other course of action were to be attempted. Thus, the problem reduces to the procedure to be followed when the plan assets are held in trust or in an unallocated fund with a life insurance company.

One approach would be for the funding agency to retain the assets, paying benefits pursuant to the terms of the plan until the assets are exhausted, with the guarantor then assuming responsibility for payment of the remaining guaranteed benefits. If the guaranty program were to give guaranteed benefits first claim to available assets, distributions would have to be limited to those persons whose benefit rights were protected by the program, unless the assets appeared to be more than sufficient to meet the priority claims. In the latter event, it would be necessary to divide the assets into two accounts, one being held for guaranteed benefits and the other for nonguaranteed benefits.

This approach would have a number of virtues. The guarantor's liability would be determined on the basis of actual, emerging experience; competitive relationships between and among banks and insurance companies would not be distorted (as might happen under other approaches); it would not be necessary to transfer funds to the guarantor, thus avoiding the risk of liquidation losses and minimizing the asset accumulation of the guarantor—an especially desirable objective if the latter is a governmental agency; and (a minor point) the pensioner would receive only one check per month rather than one from the funding agency and another from the guarantor.

On the negative side, this approach would not lend itself as well as some others to an employee guaranty of an asset deficiency, however it might be formulated. The true deficiency would not be known for many years, by which time the employer might have gone out of business. It would be possible, of course, for the guarantor to levy an assessment on the employer at the time of plan termination in an amount equal to the actuarially estimated deficit. Secondly, potential complications would be involved if it became necessary to divide the accumulated assets between guaranteed and nonguaranteed benefits. The present value of the guaranteed benefits would have to be actuarially estimated and only by sheer coincidence would the estimated and ultimately realized costs be the same. Theoretically, the guarantor should incur no liability but if the cost estimate proves to be too low, it would have to assume the deficit. On the other hand, if the estimate were too high, individuals with nonguaranteed claims would have

been unnecessarily deprived of some of their benefits. A third complication would arise if the trust agreement between the bank and the employer were to call for dissolution of the trust upon termination of the plan, with the assets to be applied to the purchase of annuities. There is no reason why such an agreement could not be enforced if the asset allocation formula were not inconsistent with the guaranty program, since this would immediately fix the amount of the guarantor's obligation. Finally, in the latter stages of liquidation of a trust, liquidity problems could arise, possibly resulting in some otherwise unnecessary capital losses.

A second approach would be for the funding agency to pay that portion of each employee's total guaranteed benefit that could be provided by the assets in its possession, with the guarantor concurrently paying the remaining portion. This would necessitate an actuarial estimate of the benefits that could be paid by the funding agency, with possible discrimination against either the guaranty fund or the individuals with nonguaranteed benefits if the estimates should prove wrong, as would be virtually certain. This method would avoid transfer of funds at time of plan termination and would leave undisturbed existing competitive relationships.

A third approach that would involve approximately the same advantages and disadvantages as the first two would be for the guarantor to transfer to the funding agency the additional sums actuarially estimated to be needed to pay the guaranteed benefits. The benefits would be charged to the pension fund as they were paid, even if the funding agency should be an insurer. In other words, the insurer would not underwrite the benefits, offering only investment and disbursement services. If the sums transferred proved to be inadequate, the guarantor would advance additional funds as the needs manifested themselves. If the sums turned out to be excessive, the funding agencies would be expected to return the unused funds to the guarantor. A delicate question that would be involved in this arrangement would be the extent to which the funding agency could invade the corpus (or fund) for its expenses and possibly a profit. Another—equally sensitive—question would be the extent to which the PGF could influence or direct the policy to be followed by the funding agency in the investment of the moneys entrusted to it.

A fourth approach would be for the funding agency to transfer to the guarantor a sum equal to the assets assumed to stand behind the guaranteed benefits. Unless the assets were transferred in kind, the funding agency should be permitted to spread the liquidation over a period of years to avoid capital losses or other forms of adverse financial consequences. If the employer were to be held responsible for the asset deficiency, the amount of his liability should be fixed at point of plan termination but he should be permitted to spread his payments to the guarantor over a period of years, possibly equal to the remaining years in the original period over which he was to have funded the benefits. In other words, if the employer were supposed to have the guaranteed benefits completely funded within 20 years from plan inception or a later event, and the plan should terminate within 10 years, he would be given 10 years in which to make up the deficiency—as under the original schedule. If he should go out of business before com-

pleting the payments, the unpaid amounts would become a claim against his business assets with whatever preference the law might assign to it.²⁵

The guarantor might discharge its obligation in one of two ways. The first would be for the guarantor to act as the risk bearer and pay the guaranteed benefits directly to the claimants as they become due. Any benefit amounts not taken care of by the assets transferred to it from the funding agency would be borne out of the guarantor's general assets. This would be the logical course of action if the guarantor were to be a private agency jointly administered by the private organizations participating in the private pension movement. If the guarantor were a public agency, it might be preferable for it to discharge its obligation immediately and cleanly by the purchase of nonparticipating annuities from individual insurers or a pool of insurers formed for that purpose. Under this procedure there would be no uncertainty concerning the guarantor's ultimate liability, and the amount of the employer's liability, if any, would be promptly and definitely determined. Furthermore, the assets securing the benefit rights would be kept in the hands of private agencies. If the decision were made to deal with individual insurers, appropriate rules would have to be promulgated with respect to the qualifications of the insurers and the process by which the insurers would be chosen. The latter would presumably be on the basis of competitive bids. A different set of procedures would be needed if a pool of insurers were to be used, with safeguards to assure that the rates are not excessive.

Under all these approaches benefits not subject to the guaranty would be paid, to the extent that assets are available, by the funding agency holding the assets at the time of plan termination, unless the trust agreement (or other legal document) specified some other arrangement.

FINANCING THE GUARANTY

The final issue, and a most crucial one, concerns the principles that might be followed in the financing of a guaranty fund. As with the other issues, there are a number of facets to be considered.

The first matter, about which there seems to be general agreement, is the determination of the base or bases to which premium or assessment rates would be applied. If the program were to include specific protection against liquidation losses at time of plan termination, the premiums for that component should be based on the amount of assets in the plan. The premium *rate*, of course, would have to be derived from some estimate of the volume of liquidation losses to be expected and under what circumstances. The risk would appear to be limited primarily to trust fund plans and separate accounts of insurers. Since it is improbable that this particular risk would be separately dealt with in a guaranty scheme, no further attention will be given to it.

The premium base for the fundamental risk that would be involved in the program, namely, inadequate accumulation of assets, should be the unfunded liability for the accrued benefits eligible for the guar-

²⁵ The concept of requiring the employer to fulfill his funding commitment would be equally applicable to the other approaches described herein, but the implementation of the requirement would differ somewhat.

anty. This, of course, requires a valuation of both the liabilities and assets subject to the guaranty. In the interest of uniformity, the benefits would have to be valued on the basis of the accrued benefit cost method which concerns itself only with the benefits assumed to have accrued, explicitly or implicitly, as of the date of valuation. The projected benefit cost methods take both accrued and future benefits into account and produce results that can be quite different from the values derived by the accrued benefit cost method. More important, certain of the projected benefit cost methods are structured in such a manner that they never produce an *unfunded* accrued liability. Under those methods, the assets on hand plus the present value of future anticipated contributions always equal the present value of total prospective benefits. Thus, for purposes of the guaranty fund, the liabilities would have to be computed on the basis of the accrued benefit cost method, irrespective of the cost method used for funding and other purposes.

Under the accrued benefit cost method, assumptions need be made only with respect to mortality, interest, and possibly expenses. Since the values derived for a particular set of benefits are greatly influenced by the mortality and interest assumptions, especially the latter, it would undoubtedly be necessary, in the interest of equity, for the administering agency to specify the assumptions to be used. The standard might well be based on the nonparticipating annuity rates currently being charged by the leading life insurance companies. The assets would have to be valued on a realistic basis and if liabilities are valued at "market" annuity rates it would seem appropriate to use the market value of assets. The values would be certified by independent or public accountants. The difference between the actuarial value of the accrued guaranteed benefits and the value of the assets allocated by law or plan provisions to the benefits coming under the guaranty, would constitute the premium base.

Another matter, with respect to which there is no clear-cut answer, is whether the system should be financed on the basis of advance premiums, assessments, or a combination of the two. It is essentially a question of whether premiums would be paid before or after the fact. In general, advance premium arrangements are considered preferable to assessment schemes. In this particular case, however, the circumstances would suggest careful consideration of the assessment approach. On the basis of available data, it would be extremely difficult to predict the claims that would arise under a guaranty program. Any scale of premium rates that might be set would likely prove to be excessive or inadequate until claims experience can be accumulated. Moreover, since claims would undoubtedly be clustered in periods of economic adversity, it would be necessary to accumulate substantial reserves. In the minds of some, this would be an undesirable development if the guarantor should be a Government agency.

The assessment approach would avoid the difficulties of estimating claims in advance. The assessments would be based on realized experience, and the claims and expenses would be apportioned over the participating plans in proportion to their respective unfunded liabilities—as under the advance premium method. There could be an initial assessment to provide "working capital" with annual assessments being levied thereafter. The basic objection to the assessment approach would

be that it would not accumulate sufficient funds to meet the claims generated by a severe and prolonged depression. The assessment rate would have to be increased at the very time that the covered firms, as a group, would have the least capacity to respond to the assessment. Some firms might default on their assessment, causing a heavier burden to be placed on the other firms. The financial crisis might be so acute that in order to shift a greater proportion of the claims to the stronger firms, the administering agency might levy assessments on a basis other than unfunded liabilities (for guaranteed benefits). There would also be a question as to whether the amount of the assessments would be determined by the timing of plan terminations, the retirement of the individuals affected, or the actual payment of benefits. If either of the latter two events should serve as the basis for assessments, the wrong generation of plans would bear the burden of past plan failures. Finally, it is argued by some that the assessment approach is wrong in principle, in that the plans that create the losses for the guaranty fund (and by inference were the poorest risks from the beginning) bear the smallest share of the aggregate burden. The plans that terminate the first year, for example, would pay only the initial assessment. It would appear, however, that the same objection could be made to an advance premium plan of insurance to the extent that accumulated reserves do not meet all claims.

A compromise approach would be to charge annual premiums at a minimum level, using the assessment authority to make up any deficits that might arise.

If an advance premium were to be charged, it should reflect the best estimate as to the rate at which claims will occur over a future period encompassing all phases of the business cycle. A study of past business failures should be helpful in this regard. If the analysis indicates that the guaranty fund could be sustained by premiums that would be regarded by the business community as inconsequential, a uniform premium rate should be developed. If the burden would appear to be consequential, it would be desirable to consider a rating structure that would differentiate as to (1) age of firm, (2) size of firm as measured by the most significant indices, and (3) period during which the pension plan has been in operation. The purpose would be to predict, and to reflect in the premium rate classifications, the probability of plan termination among the various business firms covered by the program. It would probably be necessary to place an upper limit on the premium rate for the most hazardous classifications in order not to place an intolerable burden on financially insecure firms.

Finally, it would be necessary to consider a reinsurance arrangement if the guaranty fund were to operate under private auspices. The Government would be the logical reinsurer, and it would be appropriate for the fund to pay a premium for this service. The reinsurance premium might be absorbed out of the regular premium paid by the participating firms or it could be the basis of a separate levy. The program should be self-supporting in the long run even if the fund operates under governmental auspices, but the borrowing power of the Government should be used to meet a short-run excess of claims over accumulated resources.

A MINIMUM PROGRAM

Thus far this paper has concerned itself with the basic question of whether some type of pension guaranty arrangement would be technically feasible and the issues that would have to be resolved if such a program were to be established. It should be clear at this point that a guaranty scheme would be feasible from a technical standpoint if certain conditions were satisfied and adequate safeguards were built into the system. Some of the conditions and safeguards would involve regulatory controls that employers, unions, and other elements of the pension establishment have in general opposed as being potentially detrimental to the continued sound growth of the private pension movement. They would also limit the scope of the arrangement to such narrow bounds that the social objectives underlying the proposal might be frustrated in large part.

Resolution of the fundamental question of whether a properly structured and delimited guaranty scheme should be established is beyond the purview of this paper. That is a political decision that will have to be made by Congress in its wisdom. The contribution of such an institution to the public weal must be balanced against whatever harmful consequences might flow from it. Without taking a position for or against the proposition, the remainder of this paper suggests the characteristics or features that should be associated with any guaranty scheme that might be brought into existence. The proposals envision a minimum program, with the thought that extensions and liberalizations could be introduced as experience with the system indicates the wisdom of such action.

ADMINISTERING AGENCY

The program should be administered by a Federal agency. It would have to be brought into existence by Federal legislation, and it would seem appropriate to enforce the law through a public agency. If there are to be effective remedies for noncompliance with the requirements of the law, the Government should apply them directly rather than through a private intermediary. Moreover, it would be simpler to make the Government the residual risk bearer, as it probably must be, if it acts as the fiscal agent for the program. This recommendation contemplates that private insurers would underwrite the guaranteed benefits of terminated plans, which would minimize the accumulation of assets in the administering agency. In any event, the Federal Government is holding billions of dollars in various trust funds at the present time with no apparent harm to the economy; so the accumulation of a few billion more in a trust fund for private pension beneficiaries would cause no difficulties other than increasing the cost of the program to employers because of the relatively low yields on the Government securities held by the trust fund. Moneys in the trust fund not needed for current operations should be invested in obligations of the Federal Government not private securities.

EVENT INSURED AGAINST

The guaranty should extend only to benefit claims arising out of complete plan terminations. Coverage of partial terminations would

not only create complex problems of claim adjudication but would open the door to countless forms of abuse, possibly to the point of rendering the system inoperable. It would be almost impossible to define the insured event if various kinds of partial terminations were to be brought within the contemplated coverage. Many of the problems cited by critics of the guaranty fund proposal are centered in the concept of partial terminations. Exclusion of partial terminations would lessen to some degree the social utility of the system but if a reasonable level of vesting is brought about, whether by mandate or voluntary action, the employees in the greatest need of, and with the strongest claim to, the benefit guaranty will enjoy the protection of the system.

Not only should the guaranty be limited to complete plan terminations, it should be invoked only when the firm goes out of business. It would be grossly unfair to other employers, some of them competitors, if a firm could terminate its pension plan, transfer to the guaranty fund the responsibility for making good on the unfunded guaranteed benefits, and then continue in business, its competitive position improved by reduction in its labor costs. This would be comparable to having the Federal Deposit Insurance Corporation assume responsibility for losses to bank depositors while permitting the bank to continue in uninterrupted operation with no loss to itself or its stockholders. If the firm were sold to, or merged with, another company, the surviving company should be required to assume the accrued pension obligations of the acquired firm, at least to the extent they come under the aegis of the guaranty fund. The requirement would be deemed satisfied if the surviving company were to provide benefits under its plan to the former employees of the acquired company in an amount at least equal to the unfunded benefits of the plan of the liquidated company.

The lack of protection for benefit rights in terminated plans of employers who continue in business should be rectified by requiring the employer to continue funding contributions in respect of the benefits that would become the obligation of the guaranty fund in the event that the employer should go out of business. The funding would normally continue at the rate prescribed for going plans, but the administering agency should be given the authority to relax (or spread out) the funding contributions in the light of the financial situation of the employer. If the employer should go out of business before completing the funding schedule the unpaid amounts would not become a claim against his assets and the guaranty fund would assume full responsibility for the payment of the unfunded benefits entitled under the law to the guaranty. There would have to be provisions in the law designed to prevent the employer from avoiding his obligations by ostensibly going out of business and then reopening under another name or in another form. If the business were sold or merged, the continuing company would have to assume the funding commitment of the acquired firm. Likewise, if a plan is terminated in order to transfer the participants to another plan, new or existing, the continuing plan should assume the obligations of the old.

The foregoing principles would have to be modified in the case of multiemployer plans. Where more or less permanent employment relationships exist, the guaranty should become operative with respect

to the employees of a particular firm upon withdrawal of that firm from the plan for reasons beyond its control and subject to a minimum period of participation. The guaranty of the PGF would be residual in character if the multiemployer plan had an internal guaranty mechanism. When the plans deals with strictly transitory employment relationships, it would appear that the guaranty could become effective only upon termination of the plan itself. In the meantime, the benefits entitled to the protection of the guaranty should find their fulfillment in the accumulated assets of the plan. While the minimum funding standards outlined in the following sections should be fully applicable to multiemployer plans, it would probably be impracticable to try to enforce the completion of projected funding schedules in the event of plan termination or the withdrawal of a participating firm from a continuing plan, especially in the face of transitory employment relationships.

OBLIGATION OF THE GUARANTY FUND

A pension guaranty fund is feasible only if superimposed on minimum standards of funding. Technically, it would be sufficient if these standards related only to the benefits subject to the guaranty. However, in order to preserve the protection now afforded nonguaranteed benefits through IRS minimum funding requirements and to harmonize the funding requirements of the guaranty system with the cost accrual position of the accounting profession, it is recommended that the law require annual contributions to a pension plan equal to the normal cost of currently accruing benefits—whether or not guaranteed—plus whatever additional sums are necessary to have all guaranteed benefits fully funded within 20 years after the effective date of the coverage. Any additional guaranteed benefits that might be granted *retrospectively* by plan amendment would have to be funded in full within 20 years after such amendment. Evidence that the minimum level of funding is being maintained would be furnished annually or triennially through certification from a member of the American Academy of Actuaries who would be free to choose his own actuarial assumptions and cost method in respect of the nonguaranteed benefits. The administering agency would specify the actuarial assumptions and possibly the actuarial cost methods to be used for guaranteed benefits. This is based upon the assumption that only *vested* benefits would be guaranteed, the valuation of which would require only mortality interest, and expense assumptions. The administering agency should be given the authority to collect delinquent funding contributions, extending into insolvency or bankruptcy proceedings.

As indicated above, the guaranty fund would incur obligations only when a pension plan termination is accompanied or followed by the liquidation of the sponsoring firm except for multiemployer plans. At that point, its obligation would be to assure the ultimate payment of the guaranteed benefits of the plan. That is, its obligation should be stated in terms of *benefit payments* rather than the completion of a *funding objective* per se. The theoretical measure of its obligation would be the difference between the assumed present value of the guaranteed benefits and the value of the assets available for payment of the

benefits. Any benefits already purchased from an insurer would be subtracted from both sides of the equation.²⁶ The true measure of the obligation would be what it would cost the guarantor to purchase the guaranteed benefits from an insurer or to pay the benefits directly to the eligible recipients.

Stating the guarantor's obligation in terms of benefit fulfillment would suggest that the system should underwrite the entire asset deficiency, whatever the cause. It would surely be appropriate to absorb any deficit arising out of actuarial losses since the guarantor would be dictating the assumptions. The underwriting of capital losses would be a little more debatable if there were no restrictions on investment policy. On balance, however, and in the interest of simplicity, it would seem desirable for the system to cover capital losses also. A deficiency arising out of a retrospective benefit increase or other type of plan liberalization would also be covered so long as the benefits involved come under the guaranty.

In accordance with an earlier recommendation, the guaranty fund would have no recourse against the assets of a liquidating firm, except for delinquent funding payments.

PLANS COVERED

Participation in the guaranty scheme should be compulsory for all eligible plans. Compulsion would be necessary to get adequate participation and to protect the guaranty fund against adverse selection. Eligibility should be limited to plans that "qualify" under IRS regulations, which unfortunately would rule out pay-as-you-go plans whose participants would have the most to gain from a benefit guaranty. There would be little danger to the system in admitting any plan that would voluntarily subject itself to the funding requirements and other features of the system.

Multiemployer plans should be required to participate with whatever modifications might be necessary to fit their particular circumstances. The basic modifications that might be appropriate have been indicated above. Many of these plans could be expected to object to the proposed minimum standards of funding, as well as minimum vesting provisions, but it is highly desirable that these plans meet the same funding and vesting standards as single employer plans.

Plans should be eligible for coverage only after they have been in operation for a minimum of 5 years and presumably should not be forced into membership until they have benefits subject to the guaranty, which could involve a period as long as 10 years. This would greatly reduce the cost of the system and discourage the establishment of plans for the sole purpose of enjoying the benefit guaranty. Almost half of the terminations studied by BLS occurred among plans that had been in operation for 5 years or less. Only a fourth of the plans had been in existence for more than 10 years.

Conventional insurance theory would suggest that all eligible plans should be expected to make application for coverage and demonstrate

²⁶ It would be reasonable to require the insurer to amend its contract to provide that future dividends or experience refunds in respect of guaranteed benefits would be payable to the guaranty fund.

to the satisfaction of the administering agency that its financial condition and economic prospects are such as to justify membership in the system. Extension of the guaranty to liberalized benefits would also be subject to underwriting. In practice, such screening would impose a heavy—perhaps intolerable—administrative burden and, more important, would conflict unduly with the social goals of the program. Thus, all qualified plans in operation for more than 5 years at the time the guarantee fund is established should be automatically covered irrespective of the financial condition of their sponsors. Other eligible plans should likewise be automatically covered as soon as they satisfy the 5-year probationary period and have benefits entitled to the guaranty.

BENEFITS COVERED

The guaranty should be limited to benefits vested under the terms of the plan or by operation of law. However, it should encompass not only benefits earned after inception of the plan but also those credited for service prior to that date. It should also extend to all benefits of those employees who have retired or are eligible to retire with normal or reduced benefits. It should not be applicable to those benefits that vest only by virtue of discontinuance of the plan.

In order to assure a minimum level of protection under the program and to prevent complete avoidance of the guaranty by employers inclined in that direction, it would be necessary for the law to require a minimum degree of vesting, applicable to both single employer and multiemployer plans. As was pointed out earlier, there is a strong probability that the administration will recommend legislation that would provide for vesting of future service benefits after 10 years of service, with recognition being given to prior years of service in determining whether the minimum period has been satisfied. Since it would be many years before this legislative mandate would produce a level of funding equivalent to that found in many plans today, it would be desirable for the guaranty to include benefits voluntarily vested under the terms of the plan.

Vested benefits created through a retrospective liberalization of the plan should not be eligible for the guaranty until 5 years after the liberalization. This restriction would be necessary to protect the fund against those who would otherwise grant benefit increases just prior to winding up their business.

The monthly benefits of any particular employee should be guaranteed only to the extent that they do not exceed the lesser of 50 percent of his monthly compensation at the time of plan termination or \$500. Ancillary benefits should be guaranteed only if they are in a payment status at the time of plan termination. The amount of such benefits entitled to the guaranty should be reasonably related to the amount of monthly retirement benefit guaranteed under the program.

IMPLEMENTATION OF THE GUARANTY

Upon occurrence of a plan termination coming within the scope of the guaranty, as determined by the administering agency, the guaranty fund would assume full responsibility for the payment of all guaranteed benefits. It would take title to, or assert in some other

appropriate manner its jurisdiction over, the assets in possession of the funding agency assumed to be available for the satisfaction of guaranteed benefits. Its jurisdiction should extend only to unallocated funds, thus excluding insurance or annuity contracts already purchased for specific individuals. This would discriminate somewhat in favor of allocated funding instruments, which may provide for the purchase of nonvested benefits, but the difference in treatment appears unavoidable. It would not seem equitable or to be good public policy to cancel benefits already purchased. On the other hand, it would seem appropriate for the guaranty fund law to specify that vested (that is, guaranteed) benefits, including those payable to retired employees, will have the first claim to all unallocated funds. If all of the funds are not needed to provide for the guaranteed benefits, the excess would remain with the funding agency for application to nonguaranteed benefits pursuant to terms of the plan.

The guarantor should discharge its obligation by purchase of insurance or annuity contracts from a pool of life insurance companies for the full amount of guaranteed benefits. This would fix immediately and irrevocably the amount of funds needed to underwrite the guaranty and, hence, the amount of assets that should be transferred from the funding agency. If there were delinquent funding obligations outstanding against the employer, the guarantor would be authorized and directed to seek collection of these sums from the assets of the liquidating firm, with whatever creditor's preference Congress might see fit to provide. Any sums collected in excess of the deficit originally assumed by the guarantor would be turned over to the original funding agency for application to nonguaranteed benefits.

In order to minimize liquidation losses, the funding agency should be permitted to spread the transfer of assets over a period of time, perhaps up to 5 years. The assets should be transferred in a systematic manner (in installments), with the funding agency having the option at all times of transferring the remaining assets in one sum. Investment earnings on the moneys still held by the funding agency would inure to the benefit of the guarantor.

The pool of insurers from which the guaranteed benefits would be purchased would have to be set up and administered in a manner to assure right of participation by all qualified insurers and to protect the interests of the guaranty fund. Arrangements similar to those established for Federal Employees Group Life Insurance and Servicemen's Group Life Insurance would appear to be suitable. The benefits should be purchased on a nonparticipating basis in order to determine definitely and immediately the magnitude of the guarantor's obligation, thus contributing to an equitable allocation of plan assets between guaranteed and nonguaranteed benefits.

FINANCING THE GUARANTY

The guaranty system should be supported by contributions from employers whose pension plans fall within the scope of the program, the objective being to make the program self-supporting as to both benefit obligations and administrative expenses. The primary source of support should be annual premiums levied on the basis of the unfunded accrued liability for guaranteed benefits. For the purpose of

determining the premium base, the actuarial liability of the accrued benefits would be computed on the basis of annuity rates (reflecting mortality, interest, and expense assumptions) provided by the guarantee fund. These rates should bear a reasonable relationship to the nonparticipating rates for deferred and immediate annuities being quoted on a plan closeout basis by the principal group annuity companies. The assets would be valued at market, the certification being made by a public or independent accountant. Account would be taken of only those assets allocable to guaranteed benefits.

The premium rate should be based upon the best statistical evidence as to the probable rate of termination among the plans covered by the guaranty and the magnitude of the losses that would be sustained by the guaranty mechanism. Technically, there should be rate differentials based upon the age and financial strength of the sponsoring firm but for all practical purposes it would seem appropriate to charge a uniform rate. It might be necessary to have a different rate (or rates) for multiemployer plans if the modifications suggested earlier are made applicable to them. As a general proposition the rate, or rates, should be set at the lowest justifiable level, with the understanding that assessments would be levied to make up any deficits. There should be a limit on the amount of assessments that could be levied in any one year, such as five times the annual premium. The premium rate should be subject to upward or downward adjustment as experience with the program develops.

The guaranty fund should have borrowing authority sufficient to absorb any deficits that might arise in the short run. Deficits of considerable magnitude could develop in the course of a severe depression. If the claims against the funds should reach catastrophic proportions—out of reach of even the assessment authority of the administering agency—the Government should assume an appropriate share of the total burden in recognition of the fundamental nature of the risk.

SUMMARY

Within the last few years, strong interest has developed within certain quarters in some type of cooperative arrangement that would assure the fulfillment of legitimate benefit expectations under private pension plans, irrespective of the financial status of the plans or their sponsors. The concept has found its way into various legislative proposals, some of which are currently pending before Congress.

The Setting

The need for a guaranty arrangement must be evaluated against the background of the limitations on the employer's undertaking in respect of a pension plan. The employer may undertake, unilaterally or pursuant to the terms of a collective-bargaining agreement, to set aside funds on a specified basis, such as an amount per man-hour or man-day of work, without formal reference to the scale of benefits that can be provided by such contributions. The employer's obligation to the plan is completely fulfilled when he pays over the appropriate sums to a funding agency, even though the assets of the plan eventually prove insufficient to provide the level of benefits projected on the basis of the anticipated contributions. On the other hand, the

employer may undertake, voluntarily or in response to union demands, to contribute whatever sums are necessary to provide a fixed scale of benefits set forth in the plan. The benefit formula of such a plan usually recognizes, and gives credit for, some or all of an employee's service performed for the employer in question prior to the inception of the plan, and subsequent benefit liberalizations are frequently given retrospective effect, both practices giving rise to an unfunded accrued liability that would be the primary source of loss to any guaranty arrangement. Except for collectively bargained plans, the employer reserves the right to alter, modify, or terminate the plan at any time and to suspend, reduce, or discontinue contributions whether or not previous contributions have been sufficient to provide all benefits credited to date. It is also customary for the plan to state that the employer's obligation, in the event of plan termination, shall be limited to contributions already made to the plan. In other words, the participants and pensioners must look to the accumulated assets of the plan for the satisfaction of their claims.

In order to meet the benefit commitments, explicit or implicit, generated under a pension plan, the employer generally sets aside funds with a bank or insurance company in amounts and at times roughly commensurate with the rate at which the pension costs accrue, a practice known as *funding*. Under a modification of this practice called *terminal funding* only the benefits of retired employees are funded. In a relatively few cases, the employer pays the benefits directly to retired employees, a method of financing known as current disbursement or pay-as-you-go. Under existing law, an employer is under no legal obligation to fund his accruing pension costs, but if the plan is to enjoy the tax treatment accorded a "qualified" status under IRS regulations, he must as a minimum fund the normal cost of the plan plus interest on the initial supplemental liability. Moreover, under a rule recently adopted by the public accounting profession, the employer must charge to expense his annual pension cost accrual and to the extent that he does not hereafter fund the expense charges, he must reflect in his balance sheet the cumulative excess of charges over funding contributions.

The pattern of accounting charges and funding payments is based upon estimates of future costs prepared by actuaries who make assumptions as to mortality, investment earnings, disability, nonvested withdrawals, salary scales, and retirement ages. It is assumed that normal costs, as determined by so-called actuarial cost methods, will be funded currently and that supplemental costs, if any, will be funded—if at all—over an extended period of time, usually ranging from 12 to 40 years. As of any given time, the assets of a pension plan may be less than the actuarial value of the accrued benefits because of inaccurate estimates of cost, failure of the employer to undertake a funding program that would ultimately meet all costs, lack of time for the completion of a realistic funding objective, or loss of asset values through realized or unrealized capital losses. A pension guaranty fund would be designed to deal with an insufficiency of assets, as respects covered benefits, at time of plan termination or under other specified circumstances.

Applicability of Insurance Concepts

Such an arrangement would be based upon insurance principles, and its feasibility should be tested against the criteria of an insurable hazard. There are (1) large number of homogeneous risks; (2) objective determination of the occurrence and amount of loss; (3) randomness of loss; (4) low probability of loss; (5) significance of loss; and (6) absence of catastrophe hazard. The first criterion would be met if all eligible plans were compelled to participate. The second would be satisfied only if the contingency insured against were clearly—and perhaps narrowly—defined and the benefits to be insured were precisely articulated. Losses would not occur in random fashion unless many safeguards were built into the system. The fourth and fifth criteria would be fulfilled to a reasonable degree, as would the sixth. Losses of catastrophic dimensions could occur during depressed economic conditions but the problem would be minimized by the fact that most of the claims would represent deferred obligations and would not have to be fully offset by assets in the guaranty fund at any point in time. In any event, a temporary shortage of assets could be met by a governmental subvention or loan.

Additional insights into the feasibility of a pension guaranty fund can be gained by examining the essential elements of existing insurance arrangements that fail in one or more important respects to satisfy the conventional concepts of a sound insurance program. Lessons can be learned from the Federal Deposit Insurance Corporation; the various Federal mortgage insurance funds; State guaranty funds to insure payment of automobile, workmen's compensation, and life insurance claims; and State unsatisfied judgment funds to protect against financially irresponsible motorists. In the private sector, credit insurance and performance bonds provide protection against the unwillingness or financial inability of business organizations to meet their obligations, a risk greatly influenced by the economic climate. Then there are a number of insurance programs that involve a partnership of some type between the Federal Government and private insurance agencies. In some of these programs, the private agencies are the sole risk bearers, the Government playing a strictly administrative role. In others, the private agencies furnish only fiscal and claims services, the Government assuming the entire risk. In still other cases, the Federal Government and private insurance agencies have entered into a joint *underwriting* venture under which the Government assumes that portion of the total risk considered to be uninsurable by private agencies. Finally, the Swedish pension guaranty fund, which has been in operation since 1960, provides actual experience with a pension guaranty undertaking.

Issues

Many issues would have to be resolved if a pension guaranty fund were to be established in the United States. The first would be whether the fund, hereinafter referred to as the PGF or the guarantor, would be established and operated under the auspices of a Federal agency, a private agency, or a combination Government-private instrumentality. Any of these approaches would seem to be feasible, the choice depending in part on political philosophies and in part on the financial mechanism envisaged.

The most difficult problem that would have to be confronted would be defining or articulating the circumstances under which the protection of the system could be invoked. The most basic question is whether the guaranty would become operative only upon termination of the entire plan or also upon other occurrences that would adversely affect the benefit expectations of a substantial percentage of the covered employees. Another fundamental question is whether the pension guaranty should be invoked when the firm that created the pension obligations continues to operate in one form or the other, even though the plan has been completely terminated. A plan may be terminated under any number of circumstances that would raise doubts concerning the propriety of transferring to the PGF the responsibility of meeting benefit expectations. The whole matter would be greatly simplified if the guaranty scheme were established on the basis that the sponsoring firm, or its successor, would have the primary legal responsibility of meeting the cost of the benefits covered by the guaranty, the PGF having only the residual liability. Special rules would have to be developed for multiemployer plans, since among other distinguishing characteristics, they have an existence apart from that of any particular employer belonging to the plan.

Another crucial issue would be the nature of the obligation that the PGF should assume in respect of the benefits covered by the guaranty. One concept would call for the PGF to assure ultimate payment of all guaranteed benefits, irrespective of the amount, source, or cause of any asset deficiency that might exist upon occurrence of the contingency insured against. In theory, this concept could be applied without any mandated standards of funding, but it would be far more practicable if it were bulwarked by an enforceable requirement that the covered benefits be funded in accordance with minimum standards concerned with actuarial assumptions, actuarial cost methods, and the period of time allowed for the attainment of a fully funded status. The approach would be even more feasible—but even less palatable to employers—if the sponsor of a terminated plan were made primarily responsible for any insufficiency of assets, with the PGF being only contingently liable. Another concept would limit the PGF's obligation to the completion of the employer's funding program for covered benefits, without regard to the adequacy of the projected contributions. In other words, the guaranty would attach to the *funding* commitment rather than the *benefit* commitment.

A number of questions are involved with respect to the plans that would be brought under a pension guaranty program. The first question is whether participation in the program would be compulsory or optional. If participation is to be compulsory, one must confront the problem of what categories of plans can be forced to come under the system. Other questions would relate to the advisability of excluding from coverage plans that (1) have been in operation less than a specified period of time, (2) have fewer than a stipulated number of participants, (3) can not meet reasonable underwriting standards, and (4) voluntarily seek coverage. Finally, there is the question whether multiemployer plans should be required to participate.

It would be necessary to define the classification of accrued benefits to be guaranteed. Various distinctions could be made. The program

might differentiate as to (1) future service versus past service benefits, (2) vested versus nonvested benefits, (3) mandatorily vested benefits versus voluntarily vested benefits, and (4) retirement versus ancillary benefits. Special rules would be needed to protect the PGF against benefit increases and other plan changes that would enlarge the unfunded liability. Moreover, it would be desirable to place a dollar limit on the monthly benefits that would be guaranteed for any one participant.

The implementation of the guaranty would involve: (1) determination of the dollar dimensions of the PGF's obligation, and (2) a decision as to the manner in which the guaranty would be carried out. If the guarantor's obligation were to assure payment of all guaranteed benefits, its obligation would be measured by the difference between the actuarially computed value of the covered benefits less the value, at book or market, of the assets considered to be available for the satisfaction of such claims. It would be necessary to prescribe or recognize rules for the allocation of assets as between guaranteed and nonguaranteed benefits. If, on the other hand, the guarantor's obligation were to complete the funding program of the terminated plans, its liability would be equivalent to the present value of the remaining payments.

The guarantor's obligation as to *benefits* could be discharged in a number of ways each with its own advantages and disadvantages. The funding agency could retain the assets allocable to the covered benefits, meeting benefit claims as they come due until the assets are exhausted, with the guarantor then assuming responsibility for payment of the remaining guaranteed benefits. Secondly, the funding agency could pay that portion of each employee's total guaranteed benefit that could be provided by the assets in its possession, with the guarantor concurrently paying the remaining portion. Thirdly, the guarantor might transfer to the funding agency the additional sums actuarially estimated to be needed to pay guaranteed benefits, the funding agencies providing only investment and disbursement services. Finally, the funding agency might transfer to the guarantor a sum equal to the assets deemed to stand behind the guaranteed benefits, with the guarantor assuming responsibility for the payment in full of all covered benefits. This it could do by paying the benefits directly to the claimants as they come due or by purchasing nonparticipating annuities in the proper amount and form from individual life insurers or a pool of insurers formed for that purpose. Any of the foregoing approaches could be used, with modifications, to discharge a guaranty expressed in terms of a *funding* objective.

The basic issue in the financing realm is whether the guaranty fund would be supported by advance premiums, assessments, or a combination of the two. The use of the advance premium approach would necessitate estimates of future claims and the accumulation of substantial reserves. The assessment method would avoid these complications but would have offsetting disadvantages. Under both approaches, it would be necessary to establish a base against which to levy premiums or assessments and to decide whether to create a number of risk classifications. The need for reinsurance facilities would also have to be considered under either approach.

A Minimum Program

A pension guaranty arrangement would be technically feasible if certain conditions were satisfied and adequate safeguards were built into the system. Some of the conditions and safeguards would involve regulatory controls that employers, unions, and other elements of the pension establishment have in general opposed as being potentially detrimental to the continued sound growth of the private pension movement. They would also limit the scope of the arrangement to such narrow bounds that the social objectives underlying the proposal might be frustrated in large part.

Resolution of the fundamental question of whether a properly structured and delimited guaranty scheme should be established is beyond the purview of this paper. If such a program should be deemed to be in the public interest, it is suggested that it be structured initially along the lines set forth hereafter, with the thought that extensions and liberalizations could be introduced as experience with the system indicates the wisdom of such action.

The program should be administered by a Federal agency with the necessary enforcement powers and the authority to serve as residual risk-bearer if circumstances demand it.

The guaranty should extend only to benefit claims arising out of complete plan terminations, being further limited to those situations in which the sponsoring firm goes out of business. The lack of protection for benefit rights in terminated plans of employers who continue in business should be rectified by requiring the employer to continue funding contributions in respect of the benefits that would become the obligation of the guaranty fund in the event that the employer should go out of business.

The fund should undertake to assure payment of all guaranteed benefits, irrespective of the source of the asset deficiency. However, this obligation should be protected by a legal requirement that all covered plans be funded at a rate sufficient to meet the currently accruing cost of all benefits (whether or not guaranteed) and to have all guaranteed benefits fully funded within 20 years after the effective date of the coverage. Firms that terminate their plans before completing this funding objective would be expected to continue their funding payments until their funding commitment is fulfilled.

Participation in the program would be limited to "qualified" plans, which would be compelled to come under the program as a condition for qualification. Plans should be eligible for coverage only after they have been in operation for a minimum of 5 years, but there should be no other underwriting requirements. Specifically, there should be no minimum size requirement. Multiemployer plans should be expected to participate, subject to appropriate modifications in the definition of the insured event and possibly the premium rate.

The guaranty should be limited to benefits that have vested under the terms of the plan but the law should require both single-employer and multiemployer plans to provide a minimum degree of vesting. Vested benefits created through a retrospective liberalization of the plan should not be eligible for the guaranty until 5 years after the guaranty. There should be a limit on the amount of monthly income that would be guaranteed in respect of any one individual, the amount being defined in terms of payment at an age specified in the law.

Upon termination of a covered plan, the guarantor should take title to the assets in possession of the funding agency assumed to be available for the satisfaction of the guaranteed benefits. It should then discharge its obligation by the purchase of nonparticipating insurance or annuity contracts from a pool of life insurers for the full amount of guaranteed benefits. This would fix immediately and irrevocably the amount of funds needed to underwrite the guaranty and, hence, the amount of assets that would have to be transferred from the funding agency. In order to minimize liquidation losses, the funding agency should be permitted to spread the transfer of assets over a period of time.

The guaranty system should be supported by contributions from employers whose pension plans fall within the scope of the program, with the objective of making the program self-supporting as to both benefit obligations and administrative expenses. The primary source of support should be annual premiums levied on the basis of the unfunded accrued liability for guaranteed benefits. For the purpose of determining the premium base, the actuarial liability of the accrued benefits would be computed on the basis of annuity rates (reflecting mortality, interest, and expense assumptions) provided by the guaranty fund. There should be provision for assessments, within stipulated limits, to meet costs not covered by the regular premiums. The guaranty fund should have borrowing authority sufficient to absorb shortrun deficits and should be empowered to assume an appropriate share of the total burden on a continuing basis if claims should reach a level beyond that which could be supported by reasonable contributions from the participating firms.

AN ANALYSIS OF PROPOSALS FOR IMPROVING THE FUNDING AND FINANCIAL MANAGEMENT OF PRIVATE PENSION FUNDS

BY PETER O. DIETZ* and H. ROBERT BARTELL, Jr.**

The recent report, "Old Age Income Assurance: An Outline of Issues and Alternatives," prepared for the Joint Economic Committee puts forth several suggestions which, if adopted, would greatly influence the funding and investment management of private pension funds. These suggestions would affect the size and certainty of retirement incomes for a large proportion of the population and the employment costs of most corporations. The particular suggestions we have reference to are those regarding removal of public incentives for funding of private plans,¹ revision of funding requirements,² government-sponsored reinsurance of plans,³ and regulation of fund managers and their investment decisions.⁴ The purpose of this paper is to summarize our reactions to these proposals recognizing that they will undoubtedly be covered individually at some length in other papers prepared for the committee. In concluding, we present what we judge to be reasonable proposals for altering the present arrangements for funding and fund management.

The report suggests that private pension plans be discouraged through the elimination of tax deductibility for contributions and tax exemption for fund income. This would certainly reduce the incentive for establishing new private plans and expanding present ones. The outcome would ultimately be to generate additional pressure for expanded benefits and coverage under OASDI. Eventually we could envision the withering away of the private pension system if tax incentives were eliminated and the social security system enlarged.

The question of whether the Nation would be served best by a predominantly public retirement system or a mixed, public-private system, as we have at present, is one too complex to be argued in depth here. Our own preference is for the present system with some modifications. This preference is influenced by (1) the high value we place on the freedom to choose various levels and combinations of benefits under private plans, (2) the belief that pension fund savings add to total saving and thus enlarge the fund of capital necessary for economic and social advancement, and (3) the conviction that primary reliance on decentralized investment decisions will lead to more effective use of such capital. Assuming this preference for a vigorous

* Associate professor of finance, Northwestern University.

** Associate professor of managerial economics, Northwestern University.

¹ U.S. Congress, Joint Economic Committee, Subcommittee on Fiscal Policy, *Old Age Income Assurance: An Outline of Issues and Alternatives*, U.S.G.P.O., 1966, pp. 5-7, 31.

² *Ibid.*, pp. 17-18.

³ *Ibid.*, pp. 29-30.

⁴ *Ibid.*, pp. 22, 30.

private component in a mixed system is held by the majority of those concerned, there are still important considerations as to how the present system might be improved through public policy.

I. FUNDING

A major question raised is whether or not present funding arrangements for private plans should be changed. On the one hand some observers propose an increase in funding requirements, while others question the necessity for the current level of funding in the majority of plans. Which of these views should national policy encourage? It is true that there is little need to fund a tax supported plan such as OASDI. The same thing might be said for private plans taken as a whole. Theoretically it is surely correct that there is little need for funding beyond a small liquidity reserve for plans sponsored by growing industries and companies. Under such circumstances pensions can be paid out of future earnings. On the other hand, declining industries and firms should have fully funded plans. Since there are always declining industries and firms, if companies are to be treated alike, national policy should require full funding of all plans for employees to be protected properly. If companies are to be held to different funding requirements, how would one go about deciding which firms will grow and which decline? The U.S. economy is dynamic, and, therefore, it is difficult to forecast with certainty which companies and industries will grow for a 5- to 10-year period ahead let alone for the period of a 30- or 40-year pension obligation.

Today most financial analysts and economists would undoubtedly agree that the telephone-communications industry and the air-transport industry are growing; therefore, no funding should be necessary. Fifty years ago similar agreement would have concluded that funding was unnecessary in the traction, coal mining, railroad, and telegraph industries. Today the private traction industry is virtually dead, employment in railroads is declining and a major company in the telegraph industry faces financial problems because of the lack of a funded pension plan. Funding protects retirement income of workers several decades away, and it would be unwise to base a funding policy on the presently anticipated growth of individual firms or industries. Therefore, all plans should be as fully funded as financial resources permit unless there is a universal reinsurance program for all liabilities. Such a reinsurance program, we believe, is undesirable for reasons indicated below.

It has been argued that full funding leads to excess savings in the economy and overly conservative investment policies. To suggest that the economy is subject to oversavings is to take a narrow view. Worldwide needs for capital are undoubtedly far in excess of savings. The problem is not one of excess savings but rather one of developing effective channels of investment. Indeed, it has been argued that the growth of pension fund assets has provided a major impetus to the development of U.S. capital markets.⁵ The need for worldwide investment is so great that the U.S. has had to put restrictions on the

⁵ For further development of this argument see: Sidney E. Rolfe, *Capital Markets in Europe*, sponsored by Atlantic Community.

movement of capital to limit balance-of-payments deficits. Although it may be argued that foreign investment is too risky for pension fund assets, growth in pension systems can release other assets for international development.

There is the further evidence of capital shortage in the secular rise in long-term interest rates over the last two decades. It is hardly necessary to point out the tremendous capital needed in the future for the profitable development of space, underwater technology, urban renewal, and transportation and communication facilities, to mention just a few capital intensive areas of the American economy.

The question remains as to whether or not the funding of pension plans will lead to more efficient allocation of capital than would occur with a pension system financed primarily on a pay-as-you-go basis with reinsurance. The funding of pension plans places retirement savings in the hands of financial institutions whereas in nonfunded plans the savings are invested by the sponsoring corporations.⁶ Since financial institutions are free to invest in a full range of alternatives, aggregate productivity of capital should be greater than if funds were invested solely in the assets of the company sponsoring the plan. Tax-deductible pension contributions and tax exemption for fund earnings foster the establishment of funded plans and thereby improve the capital allocation process.

The argument that national economic goals are fostered through financial intermediary channels rather than through direct corporate savings can only be supported if the investment managers do a good job of allocating capital. Some indication of this is given in table 1 which shows the portfolio composition of various types of pension funds at the end of 1966. Corporate noninsured funds have been most aggressive in terms of common stock investments while multi-employer and union plans have been more aggressive in the mortgage market. State and municipal funds historically invested primarily in various Government obligations. Thus their record in terms of aggressive capital investment has been poorest of all. Insured pension funds are heavily committed to corporate bonds and mortgages due to legal restrictions, but have been turning more to equities as these restrictions are liberalized.⁷ If there is to be an indictment of pension fund investment, it is that too much emphasis has been placed on fixed-income obligations whereas investment objectives indicate very little need for fund liquidity. However, the record has been improving and, as will be pointed out in the section on investment management, will continue to improve if properly fostered.

Further evidence concerning the quality of investment management and the productivity of pension fund assets is found in a preliminary report of a research study of pension fund investment management by the Financial Executives Research Foundation.⁸ This re-

⁶ We are not arguing that corporations bear the cost of pensions. Under various circumstances, the costs may be shifted to employees, customers, stockholders, or the taxpaying public. We are concerned here with who holds the assets from which future benefits will be drawn. It seems unlikely that a company with an unfunded plan would pay higher wages or charge lower prices than if it had a funded plan. Thus, no matter who ultimately bears the cost of the benefits, the company with an unfunded plan should end up with more resources to invest.

⁷ Insured pension funds are not shown in table since investments are not reported separately from other insurance company assets.

⁸ Dietz, Peter O., "Measuring Rate of Return on Pension Funds," *Financial Executive*, July 1966.

TABLE 1.—PORTFOLIO COMPOSITION OF NONINSURED PENSION FUNDS, 1966 (PERCENTAGE OF BOOK VALUE)

	Dec. 31, 1966		Fiscal year 1966, State and local government
	Corporate	Nonprofit and multiemployer	
Total assets (billions of dollars).....	\$58.7	\$5.8	\$35.2
	Percent	Percent	Percent
Cash and deposits.....	1.1	4.0	0.9
U.S. Government securities.....	3.7	7.7	19.9
State and local governments.....	0	0	7.1
Corporate bonds.....	38.2	37.1	50.3
Corporate stock.....	46.7	30.1	5.1
Mortgages.....	4.9	16.3	11.6
Other assets.....	5.4	4.8	5.1
Total.....	100.0	100.0	100.0

Source: U.S. Securities and Exchange Commission, "Private Noninsured Pension Funds, 1966," release No. 2219. Bureau of the Census, U.S. Department of Commerce.

port shows that average annual rates of return for 20 corporate noninsured funds ranged from 5.4 to 9.6 percent with the median return 6.7 percent for the 5-year period, 1959-63. If one looks at the annual returns of common stock investments in these same portfolios the rates range from 8.1 to 15.3 percent with a median of 9.4 percent. The same report indicates median annual common stock returns of 22.3 percent for the 5-year period, 1954-58, and a median stock return of 16.1 percent for the period 1954-63.

II. REINSURANCE

Among the most interesting suggestions now before the Congress of the United States are various proposals for reinsuring pension plans. Although a complete analysis of reinsurance is beyond the scope of this paper, we would like to examine the effect on pension fund investment of various forms reinsurance might logically be expected to take.

It is vital to recognize that on a total basis reinsurance premiums cannot pay pension benefits. Benefits can only be paid out of the assets of the plans. Therefore, in the long run, funding provides the best method for covering the costs of pensions from the employers point of view as well as providing greater security for the employee. The now well-known *Studebaker* case is usually cited as an example of the need for reinsurance. Had the UAW and the employer insisted on more adequate funding in relation to promised benefits, the *Studebaker* difficulties would have been less serious. Undoubtedly, one of the great dangers of the reinsurance concept is that it may be relied on to provide security for an ill-conceived or deliberately underfunded pension plan. For example, some companies may consider the funding of a given level of benefits as more costly than the premiums for reinsurance of the same benefits, and, therefore, minimize funding. To the extent that reinsurance is used in place of sound funding, the security of private pension promises will be weakened.

The practical problems involved in the development of a reinsurance system are many. Two of the most difficult, the problems of which risks are to be insured and the question of an equitable premium rate structure are directly related to investment management.

To be insurable, a risk must encompass a large number of homogeneous risks, the incidence of loss must be spread randomly over time and probable total losses should be calculable.⁹ Although there are a large number of pension plans it is not clear that the risks associated with each are homogenous. There are distinct differences in the degree of probable loss among plans. This will cause different, although not insurmountable, problems in determining an adequate and equitable premium structure. A much more serious problem, however, is that pension losses, whether either benefits are guaranteed or plan assets are insured, are not likely to be random through time. That is losses would tend to cluster in times of economic stress.

An adequate insurance program where the risks being covered are neither homogenous nor random will almost surely have to depend on Government support. Since risks are not homogenous it will be necessary to require all plans to participate in order to avoid the problem of adverse selection. Even with a premium structure supported by low risk plans, the Government will have to be prepared to finance the plans in case of catastrophic losses.

It is generally agreed that any feasible reinsurance plan would insure liabilities and not assets. However, the question of providing protection against the contingency that assets in the pension fund will decline in value has also been raised. To insure either real or paper assets against value erosion is akin to insuring the value of the assets of all firms in the economy. To insure the assets of all productive enterprises in the economy against dynamic risk is unthinkable since no one could ever determine the potential losses.

One system of insurance based on assets might be an arrangement which discounted assets to reflect the probability of decline in value. For example, assets held in cash or Government securities might be assumed to have no discount. Corporate bonds might have a 5 percent discount, while corporate stocks or real estate might be discounted at 25 percent. The problem of setting the discount should be enough to discourage such a system. But the potential effect of such a system on the capital markets could be unwelcome. The insuring agency would be placed in the position of de facto regulation of investment policy for all pension funds. This is the very antithesis of what a free investment market demands. For this reason, section 402 of the Javits bill, "Pension and Employee Benefit Act of 1967," dealing with foreign securities is too restrictive. Since we find no way of insuring assets we would conclude that if a plan had assets equal to the vested liabilities of the fund, no insurance would be necessary.

We turn now to the question of insuring the liabilities of the plan. As we have just indicated, there is no need to reinsure liabilities which are covered by assets. Thus only unfunded liabilities need be insured. The category "unfunded liabilities" is often vague and includes liabilities which may never have to be paid. Contrast this with the deposit liabilities of commercial banks, and savings and loan associations which are always precisely determinable, and, therefore, more readily insurable. Therefore, it is suggested that the maximum insurance coverage would be confined to unfunded vested liabilities.

⁹ See Dan M. McGill, "Guaranty Fund for Private Pension Obligations," p. 199 in this compendium.

The term vested liabilities is more readily definable by actuaries than unfunded liabilities. However, even when attempting to define unfunded vested liabilities, a determination must be made of the assets in the fund. Here, two choices are readily apparent: book value of assets or market value.

Given this choice, market values are clearly preferable. Book value may have no relationship to the economic value of the fund. At the end of 1966 the market value of the assets of private noninsured pension funds was \$6.4 billion (or 10 percent) greater than book value. To use book value would generally punish those trusts that had done the most effective investment job. Moreover, only admitting book values would lead to putting a premium on fixed-income rather than equity investment. This would tend to reduce return on investment over the long run and increase pension costs.

The choice of market values is not without problems. In the first place, market values tend to fluctuate so that the amount of insurance to cover unfunded vested liabilities would fluctuate, and generally be greatest when losses are high. Secondly, valuing assets at market values could lead to unnecessary investment speculation by unprincipled fund managers. For example, assume a pension plan in which vested liabilities are far greater than admitted assets. The plan could be fully insured by the use of reinsurance schemes. Meanwhile risky investments could be made in the expectation of rapidly increasing asset values without the normal contributions needed to properly fund the plan. If the investments worked out, this would be fine, but if not, the reinsurer is left holding the bag.

Although the concept of reinsurance might be politically attractive, it introduces unnecessary economic problems in the private pension field. First, the problem of preventing potential abuses has been pointed out. Secondly, there is the problem of defining liabilities and assets. Third is the potential adverse effect such a system would have on the investment practices of pension trust. Finally, there is the question of setting equitable premiums. More than likely, the best financed plans will need little or no insurance. New and poorly financed plans would need the most reinsurance. These are exactly the plans that need to be insured, so the system will run great risks of adverse selection and could easily become bankrupt unless soundly financed plans are inequitably "taxed" to pay for defaults. In the absence of irrefutable evidence that reinsurance is necessary and practical, national policy demands that we strengthen funding requirements rather than adopt a reinsurance system.

III. THE PRESENT FINANCIAL MANAGEMENT SYSTEM

In this discussion of financial management we assume that in the foreseeable future there will be no major changes in the financing of private pension plans. That is, like today, each will invest its own funds with only general rules imposed as to the disclosure of assets. In this sense then we strongly support the conclusions of the President's Committee on Corporate Pension Funds that, "in view of the wide legitimate differences regarding the most advantageous balance of retirement funds investments, the committee does not believe it

would be desirable on the basis of evidence to date to require conformity to a prescribed rule with respect to the proportion of stocks to other investments.”¹⁰

The question then which might be legitimately asked is whether or not the present system of private investment provides sufficient safeguards for employee-beneficiaries, and whether the invested assets are producing returns which reflect efficient management.

The great majority of plans are financed by employer and employee contributions which are invested by one or more third-party fiduciaries. This third party is variously an insurance company, bank trustee, or investment counselor. Thus a dual system has been created. This arrangement has as its major advantage the fact that the fiduciary's first responsibility is the preserving the corpus of the fund. That is, the fiduciary represents the beneficiary in assuring the financial integrity of the fund. On the other hand, the fund sponsor has the responsibility for selecting the trustee. This gives the sponsor, whether it be a corporation or joint union-management board, the right to measure investment results and the attendant right to change the trustee if the investment results are unsatisfactory. The dual system thus provides the necessary balance between the sponsor's desire to lower costs of the plan by increasing return on assets and the need to preserve the assets in the fund. The record shows that where defaults on pension promises have occurred it is due to either inadequate funding or malfeasance, not poor investment management. Such a system of dual control puts a premium on high rates of return which can be used either to reduce contributions or to increase benefits or both, without incurring excessive risks. The pressure on fiduciaries to earn adequate rates of return will assure the efficient investment of the economy's pension fund saving.

Another major advantage of the private system as it is presently structured is that each fund is an entity of its own. This provides flexibility to tailor each fund's investments to its own needs that no other system could provide.¹¹ While it is a well-known fact that most pension funds need little liquidity because contributors are greater than benefit payments, this is not so for mature or declining funds. The amount of liquidity risk which can be taken depends on the spread between contributions and benefit payments. This clearly differs among funds.

The question of what portion of the fund can be invested in variable-income assets is still a matter on which experts may disagree. However, one approach which may be used is to invest that portion of the assets needed to cover earned benefits of retired employees with secondary reserves invested in fixed income assets. The remainder could then be invested in riskier assets. Clearly these characteristics would differ from fund to fund. Since liabilities can change as plans mature or alter benefit provisions, a financing mechanism is needed which can reflect these changes. Such changes can be made much more quickly

¹⁰ "Public Policy and Private Pension Programs," President's Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs, U.S. Government Printing Office, January 1965, p. XV.

¹¹ This is not precisely true for all insured plans. However, recent developments leading to segregation of pension fund from other insurance company assets make this flexibility more nearly attainable.

on a single fund basis than could ever be accomplished under a universal system.¹²

The system of private investment will work and improve only as long as techniques for measuring investment performance are adequate. The sponsor must have a fair and accurate method for determining investment excellence. Progress in the field of performance measurement has been rapid in recent years.¹³ Work in this area is continuing under the offices of such noteworthy financial groups as the Financial Executives Research Foundation and the Association of Bank Audit Control & Operation. These groups are concerned not only with measures of return but with improving methods for measuring risk as well. As these extensive research efforts are concluded the ability of sponsors to measure results and for trustees to appraise their own performance will improve. The result is bound to increase competition among fiduciaries to improve investment practice and provide superior investment management.

IV. RECOMMENDATIONS

1. We have pointed out that funding is necessary to protect the rights of individual employees. In this regard, we fully support the funding recommendations of the 1965 report of the President's Committee. However, we would go further and suggest that the maximum time to amortize unfunded liabilities be reduced to 20 years for plans over 5 years old and 25 years for plans under 5 years of age. This will somewhat reduce funding requirements for new plans where costs may be excessively high. Any new past service costs as a result of benefit increases should be amortized in not more than 20 years for all plans. We prefer to see less benefit promises and more assurance that those that are promised are paid.¹⁴ This is entirely in keeping with the concept of private pension plans as supplementary to the minimum retirement benefits provided by OASDI. Furthermore, we highly recommend that the present minimum funding period imposed by the Internal Revenue Service be dropped. We see no economic justification for restricting contributions for the funding of past service benefits. To avoid the capricious use of these contributions to reduce taxes, a company making payments in any given year in excess of the required 4 or 5 percent reduction of unfunded liabilities must reduce any remaining portion of these liabilities in subsequent years at the 4 or 5 percent minimum. This would eliminate the practice of making large contributions in some years followed by no contributions for several years.

2. We have shown that the development of a dual management system provides the necessary balance between return on investment and safety. It is strongly urged that all plans be managed in this manner and it is recommended that all new plans be placed under dual management to be qualified for IRS pension plan treatment.

¹² For a further discussion of differing investment goals of pension funds, see: Dietz, Peter O., *Pension Funds: Measuring Investment Performance* (The Free Press, New York, 1966), chapter III; and Sieff, John A., "Construction of a Retirement Fund Portfolio," *Financial Analysts Journal*, July-August 1965.

¹³ For example: Dietz, Peter O., op. cit.

¹⁴ We are not arguing that all plans are underfunded, but only that some plans need to raise their level of funding. To improve the certainty of benefit promises, higher minimum funding requirements are an alternative to reinsurance.

However, it is a well-known fact that some of the oldest and best managed plans are company run. To protect these plans a grandfather clause to this provision is recommended. In these special cases moderate investment restrictions may be desirable. For example, only 4 or 5 percent of assets should be invested in any one security; liquidity reserves for all accrued liabilities for those retired under the plan may be desirable. The remainder of the fund might be invested in any assets subject only to the 4- or 5-percent rule. These moderately restrictive rules would be sufficient to protect employees in these special cases and at the same time impose no investment penalty on most of the so-called company or union run plans.

3. As a further safeguard of employee interests, investments in securities of the sponsor or trustee of a pension plan (or a profit-sharing plan which is intended primarily to finance pension benefits) should not be permitted. Although some such investments have been successful in isolated cases in the past, there is no economic justification for them. Such investments are always subject to potential abuse and the possibilities of self-dealing. This provision would include any securities and/or real estate and should apply to all plans whether company or union sponsored. Although the Federal Government would probably have no jurisdiction over State and municipal plans, the same principles should apply and they should refrain from purchasing securities of their own taxing districts.

There is one and only one possible exception to this provision. That is the unusual case of a company that for some reason does not have cash to meet funding requirements. In such cases companies have been known to contribute securities of some form. Although we do not believe such contributions are in either the company's or the employee's best interest, it is better than no contribution at all. In order to maintain qualified status such securities should be liquidated in not more than 5 years, and if a reinsurance scheme were to be developed, in no case should such securities be included as admitted assets.

4. As another measure for improving the effectiveness of the dual system of sponsor-trustee control, we would urge that each fund be required to report annually to the Department of Labor a complete listing of its security holdings. This would represent only minimum interference with the carrying out of investment programs while providing the necessary data for monitoring investment performance. Competition among investment managers would be encouraged thereby, and this would enhance the operation of the system rather than detract from it, as some have suggested. Experience with the New York State Disclosure Act which requires such reporting and the voluntary disclosures of some funds indicate that this places no undue burden on the fund or trustees. This information would also serve to improve the level of debate regarding the potential dangers of concentrating control over corporate enterprises in the hands of trustees.

These recommendations have been made with the expectation that they will strengthen the private pension plan movement by increasing the security of employees covered under these plans and by encouraging a free and dynamic system of pension fund investment which will reduce pension costs and be reasonably free of any possibilities of self-dealing or malfeasance.

CORPORATE FIDUCIARIES OF EMPLOYEE BENEFIT FUNDS

BY C. WADSWORTH FARNUM*

AN OUTLINE OF RESPONSIBILITIES AND SUPERVISION

It is generally acknowledged that the banks in the United States have a very great responsibility for the management and safeguarding of pension and profit-sharing funds under private, tax-qualified plans. Banks serve as trustee for more than two-thirds of all accumulated reserves under such plans amounting to more than \$70 billion. We respectfully submit that an examination of the legal responsibilities and the safeguards to protect the interests of beneficiaries is appropriate to a study of "Old Age Income Assurance." Especially is this so in the light of the number of proposals before Congress concerning audits, disclosures, financial statements, and standards of fiduciary conduct relating to trust funds. This statement is intended as a broad, general outline of how pension and profit sharing plans are handled by bank trustees for the protection of interested parties.

INTERESTED PARTIES

Banks are considered quasi-public organizations. They are entrusted with the handling of the funds of the public in a number of very important capacities. The savings and checking account are the best known of their services, and the larger banks have been handling personal trusts and estates for years. It was not surprising that at the very outset employee benefit funds gravitated to the banks. We in Bankers Trust Co. have been serving as trustee of employee benefit funds for 40 years, and other banks have also had a long and successful experience as trustees of such funds.

We, and other banks that act as trustee, appreciate the importance of the trust placed in us and recognize the broad social and economic areas affected by these funds:

1. The trust fund is the primary source to which an employee must look for his benefits upon retirement or other termination of service. This is especially significant to an employee if his company should go out of business, or, if, because of financial circumstances or other reasons, the plan is discontinued.

*Senior vice president, Bankers Trust Co., New York.

AUTHOR'S NOTE. This paper concentrates on an important aspect of "Old Age Income Assurance System"—the aspect of the procedures and safeguards of corporate fiduciaries in their handling of employee benefit funds. Because corporate fiduciaries manage more than two-thirds of the accumulated reserves under private employee benefit funds, we believe that a thorough understanding of the corporate fiduciary and its function is a necessary part of the study.

2. The company has an interest in the soundness of fund investments since the results directly affect its employee-employer relations and an unfavorable experience can result in an increase in future costs or in a reduction in benefits payable to employees.

3. There is a genuine public concern with what happens to participants' benefits after retirement or other termination of employment.

4. While the study is primarily one dealing with "Old Age Income Assurance," the economic aspect of the large amounts of savings that are being accumulated in these trusts is very important to the country. Aside from the immediate effect, the constructive investment of these funds will influence future productivity of industry which is the ultimate source from which benefit payments will be made to employees under these plans. (Papers will be presented by other authors which will discuss this subject fully.)

5. In multiemployer-union plans, a board of trustees (representatives of employers and the union) has the direct responsibility for supervising the plan. If a bank is used as an ancillary trustee for handling funds of the plan, the relationship between the bank and the board of trustees is similar to that which exists between the bank and the company in single employer plans. (In the interest of brevity, the discussion is confined to the bank-company relationship in single employer plans.)

We believe that the extent of existing governmental, legal and internal safeguards of pension and profit sharing funds held by bank trustees for the protection of these varied interests should be seriously considered in any new study of the need for new legislation.

FIDUCIARY RESPONSIBILITY

In the report to the President on private employee retirement plans, the Committee stated that "the general standards of conduct for any trustee have been long established by law and custom. These include the degree of prudence that must be exercised in investing the funds of others. Similarly, transactions that unfairly benefit other parties at the expense of the trust constitute unfaithfulness on the part of the trustee and may provide a ground for legal proceedings under State laws by the employer-grantor against the trustee."

The time-tested standard is that a trustee is required to employ such diligence and such prudence is in the care and management of trust property as in general prudent men of discretion and intelligence employ in their own affairs. A bank trustee may in some important respects be held to an even higher degree of care since it holds itself out to be an expert and because it is better equipped than the ordinary man. (Scott on Trusts, sec. 174-1.)

The trustee has an undivided loyalty to the trust. The typical employee benefit trust is a dedicated fund to be held and managed for the benefit of employees and their beneficiaries, and the trustee is required to measure each action taken in the trust in terms of whether it serves this dedicated purpose. Section 1.401-1(a) (3) (iv) of the Treasury Regulations provides the following in relation to employee benefit trusts which seek the tax advantages of a qualified trust:

"It must be impossible under the trust instrument at any time before the satisfaction of all liabilities with respect to employees and their beneficiaries under the trust, for any part of the corpus or income to be used for, or diverted to, purposes other than for the exclusive benefit of the employees or their beneficiaries."

A specific provision incorporating this language or similar language will be found in the trust agreement of all qualified employee benefit trusts, and the bank on becoming trustee accepts the responsibility for carrying out this provision in relation to its management of the trust fund. The consequences for failure to comply with this requirement can be considerable. It can result in a breach of trust with potentially severe penalties. It can also result in loss of the tax-exempt status which may be costly to the company and in some plans may reduce the benefits accruing to employees. Thus, it is in the self-interest of the trustee, the company and the employee to make very sure that this requirement is fulfilled.

ACCOUNTABILITY TO THE COMPANY

In the typical employee benefit trust, the interest of the company is closely allied to the interest of the trust and the employees. A good employee-employer relationship is valuable to the well being of the company, and employee benefit trusts have become an important part of this relationship. As mentioned previously, the company is concerned with the soundness of fund investments and the good management of the trust.

In our experience with employee benefit trusts and in the experience of other banks, the company is taking an increasing interest in checking, auditing and appraising the work of the trustee:

1. It has become universal practice for the banks to give the company a statement at each month end of all receipts, disbursements, investment changes, and other transactions in employee benefit trusts during the month.

2. The bank also renders a formal annual accounting to the company after each year end covering all of its activities during the year. This annual accounting is usually the basis of the financial statements on the trust which are made available to employees and which are filed annually with the Internal Revenue Service, the Department of Labor and other governmental agencies.

3. The bank's records of an employee benefit trust are open to examination by the company and its auditors at all times.

4. As a result of various research projects, accepted methods are being established to measure the investment performance of employee benefit trusts.

In the typical employee benefit trust, the company has reserved the right to remove the trustee and to appoint a successor. Most companies recognize that a very real responsibility goes along with this right, and they have internal procedures for following the transactions of the trustee currently, they require that their independent auditors review the records of the trust, they meet with their trustee periodically to be informed on the investment policies of the trustee, and they require their management to report to their board of directors on the trust.

This is a form of supervision which is thorough and at the same time flexible, and is far superior to anything that could be achieved through legislative action.

INTERNAL AUDITING

The Association for Bank Audit, Control & Operation, of which most banks are members, sets forth in a statement of principles of internal auditing that "a major obligation of a bank's board of directors is the establishment of proper internal controls to protect its customers, stockholders, directors and staff."

Internal auditing has as its basic purpose the prevention and detection of loss. The auditor's responsibility flows directly to the management to whom he makes regular reports. Significant in the audit program set forth by the association for pension and profit sharing trust functions are the following:

- (1) Verification of authority for action taken under the trust instrument.
- (2) Compliance with applicable statutes and regulations.
- (3) Determination that assets are adequately safeguarded and properly presented in financial reports.
- (4) Determination that liabilities are completely disclosed and any pending litigation affecting trust accounts reviewed.
- (5) Audit of trust income, expenses and acquisitions and disposal of assets.
- (6) Evaluation of insurance coverage of trust assets.

In many banks the bylaws requires that the auditor appear personally before the board of directors or its examination committee to report on the major findings of the auditing program. This would include any violation of trust statutes and regulations.

States may require examination by internal auditors accountable to the board of directors. As an illustration, in New York, section 122 of the banking law requires an annual examination of the bank by the board of directors and section 123 requires that a report be made to the board of directors of the bank after completion of the examination and a copy filed with the superintendent of banks within 10 days after such meeting. Monetary penalties are levied against the banks for each day's delay in filing reports of examination. The superintendent may also require the banks to employ independent auditors. As a further protection to trust funds, many banks engage completely independent outside auditing firms to review and supplement the work of the internal auditor.

COMPTROLLER OF THE CURRENCY

Regulation 9 issued by the Comptroller of the Currency enumerates in considerable detail the fiduciary powers of national banks and collective investment funds. The responsibility for the proper exercise of fiduciary powers is placed in the board of directors of the bank. All matters relating thereto, including the determination of policies, the investment and disposition of property held in a fiduciary responsibility, and the direction and review of the actions of all officers and employees in the exercise of its fiduciary duties are the responsibility of the board.

The board must insure that trust accounts are periodically reviewed to determine the advisability of retaining or disposing of assets. The Comptroller requires that the trust records be kept separate and distinct from other records of the bank. A record must be kept of all pending litigation in connection with the exercise of fiduciary powers.

A committee of directors, excluding officers of the bank, must cause suitable audits at least once during each year to be made by auditors responsible only to the board. The purpose is to ascertain whether the trust department has been administered in accordance with law, the Comptroller's regulations, and sound fiduciary principles. Among other things, the regulations set forth powers of banks relating to investments, self-dealing, custody of investments, and collective investments.

FEDERAL RESERVE

All member banks are subject to examination by the Federal Reserve examining staff. The Federal Reserve assists the Comptroller of the Currency in carrying out examinations in accordance with the provisions of Regulation 9. A concept of the extent of the examination is set forth in the following statement:

"The scope of the examinations of pension trusts held by banks includes a survey of overall policies, practices and procedures in connection with new-business solicitation and acceptance of accounts, legal opinions and other documentation, investments, fees and internal controls and audits. In addition, individual pension trusts are reviewed as to investments and administration. Particular attention is given to unusual investments, investment concentrations, and investments in stock or obligations of the employer corporation. Investments held are scrutinized to determine conformity to the provisions of the governing trust instruments and the provisions of the Internal Revenue Code and regulations of the Treasury Department. In the case of investments in securities of the employer, the examiner ascertains that proper disclosures have been made to the Treasury Department."

STATE BANKING DEPARTMENTS

In addition to internal and Federal audits, State banking departments examine trust departments of State banks. For instance, in New York State a special trust examining staff of the State banking department makes a comprehensive examination each year of the administrative and operating policies, procedures and acts of all divisions of trust departments. The usual scope of audit functions involving principal, income and expenses is covered. Further, the examination by State examiners includes, among other items, the following:

- (1) Investigation of matters involving ineligible investments, self-dealing, holdings of stock in close corporations, etc.
- (2) Verification that investment reviews are made by the board of directors and the recording of minutes for each trust fund.
- (3) Verification of any objections to filing of trustees' reports.
- (4) A check on any threatened litigation against the bank based on its fiduciary activities.
- (5) Verifications of commissions charged to trust.

There is no question that State and Federal examiners are diligent in their audits; searching questions are asked and written answers required of responsible officials of the bank. In a large bank, trust examinations will extend over a period of months. Naturally, any breach of trust, disloyalty to beneficiaries, self-dealing, improper delegation of responsibility, failure to keep and render proper accounts, failure to control property and many other irregularities which the audit might disclose would subject the bank to severe penalties.

TREASURY REGULATIONS

Section 6033 of the Income Tax Regulations requires the bank trustee to file an annual return with the District Director of Internal Revenue. Among the data made available are detailed answers to questions relating to any transactions concerning a company's possible self-dealings with the trust assets covering borrowing, compensation, purchase and sale of company securities, and delivery of assets to the company. Either the bank trustee or the company must furnish a statement of receipts and disbursements and a balance sheet of the trust funds. Copies of the trust agreement and all amendments are filed with the Treasury Department.

DISCLOSURE ACT

The Welfare and Pension Plans Disclosure Act requires, under part IV of Annual Form D-2, the submission of financial data for trust funds. The fund data includes a statement of assets and liabilities, statement of receipts and disbursements, supporting schedules for specific receipts and disbursements and party-in-interest transactions. A copy of the trust agreement is included among other documents relating to pension and profit sharing plans. As required by the act, the administrator of the plan must make the information available for examination on request by a participant or beneficiary. The Secretary of Labor is also required to make the information available for public examination.

INVESTMENTS

Pension and profit sharing trusts make no distinction between principal and income. Typically, the modern trust agreement gives the bank trustee broad powers of investment. Irrespective of these broad powers, the common law of prudence governs the actions of the trustee.

Some companies, however, prefer to place investment restrictions in the trust agreement. For example, the agreement may provide for investments restricted to legals for fiduciaries or legals for life insurance companies or a prohibition on company securities. Whatever the restrictions may be, the trust funds deposited with a bank are protected against a breach of trust through elaborate internal and governmental audits and controls. State laws protect the trust beneficiary. For instance, in New York State, section 100-b of the banking law provides that all investments by a bank shall be at its sole risk, and the capital stock, property and effects of the bank shall be liable for

losses, unless the investments are proper and permitted in the trust instrument. This section also prohibits any corporate fiduciary from purchasing securities from itself.

In some instances, a company may choose to assume the responsibility for the investment of the funds. Here the bank is under the duty of following the instructions of the company. We believe that the company, in exercising the investment function under a trust instrument, assumes a fiduciary responsibility and its acts must be judged by the same high standards as a bank. The officers and directors of the company may find themselves personally liable, and action can be brought by stockholders as well as employees. Similarly, investment advisers selected by a company to manage trust funds will also find themselves governed by fiduciary standards. Where the bank does not manage investments, nevertheless it continues to be responsible for the proper accounting and safekeeping of the assets.

PAYMENTS OF BENEFITS

In the majority of the employee benefit trusts, the bank as trustee makes the benefit payments directly to the employees or their beneficiaries. In pension plans, the company usually certifies to the bank that the employee is eligible for payments and determines the amount of pension or other benefit to be paid. In profit sharing and savings plans, the procedure is similar except that the bank frequently maintains the record of the accounts of employees and makes the determination of the amount payable. In those cases where the bank does not make payment of benefits, the bank transfers funds to the retirement committee or other committee of the company, which makes payments. They continue to be fiduciary funds in the hands of the committee, and the committee, we believe, has the same responsibilities as a bank trustee has in the proper distribution of the funds.

Upon receipt of the certification by the company, the bank assumes the obligation for proper payment. If a mistake is made in paying (1) the wrong amount, or (2) the wrong person, the bank is required, pursuant to long-standing trust practice, to reimburse the trust for any unrecoverable loss. Also, the trust is protected against loss due to forgeries.

SUMMARY

In summary, bank trustees are held to a high degree of fiduciary conduct. Banks are closely controlled and governed by well-established statutes and by internal, Federal and State audits, examinations, and procedures. Significant penalties are imposed upon banks when they commit a breach of trust or fail to comply with Government requirements. Financial statements of each trust fund are rendered to the company, to the Treasury Department, and to the Labor Department. In considering the need for additional legislation in the areas of disclosure, audits, and financial data, we respectfully suggest that existing controls of bank trustees be recognized.



