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OLD AGE INCOME ASSURANCE

A COMPENDIUM OF PAPERS ON PROBLEMS AND POLICY ISSUES
IN THE PUBLIC AND PRIVATE PENSION SYSTEM

SUBMITTED TO THE
SUBCOMMITTEE ON FISCAL POLICY
OF THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

Part VI: Abstracts of the Papers

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LETTERS OF TRANSMITTAL

DECEMBER 28, 1967.

To the Members of the Joint Economic Committee:

Transmitted herewith for the use of the members of the Joint Economic Committee and other Members of Congress is the concluding part, Part VI, "Abstracts of the Papers," of the compendium entitled "Old Age Income Assurance," prepared for the Subcommittee on Fiscal Policy.

The views expressed in this document do not necessarily represent the views of members of the committee or the committee staff, but are statements of issues and alternatives intended to provide a focus for hearings and debate.

WILLIAM PROXMIRE,
Chairman, Joint Economic Committee.

DECEMBER 27, 1967.

HON. WILLIAM PROXMIRE,
*Chairman, Joint Economic Committee,
Congress of the United States,
Washington, D.C.*

DEAR MR. CHAIRMAN: With this letter I am forwarding to you Part VI, "Abstracts of the Papers," of the compendium on problems and policy issues in the public and private pension system entitled "Old Age Income Assurance."

Part VI consists of abstracts of the papers appearing in Parts I-V. These abstracts were prepared for the subcommittee by Dr. Nelson McClung with the editorial assistance of Anne McAfee and the advice and suggestions of members of the committee's professional staff. The preparation of abstracts was undertaken with a view to making the discussions in the compendium more accessible. The abstracts by no means are substitutes for the papers. We offer them as a frankly experimental effort in the communication of the committee's work and welcome comments on their usefulness.

As the Executive Director's letter indicates, the abstracts reproduce the views of the authors of the papers as faithfully as possible; the opinions and conclusions expressed should not be viewed as those of the committee staff, the subcommittee, or individual members.

MARTHA W. GRIFFITHS,
Chairman, Subcommittee on Fiscal Policy.

DECEMBER 26, 1967.

HON. MARTHA W. GRIFFITHS,
*Chairman, Subcommittee on Fiscal Policy, Joint Economic Committee,
U.S. Congress, Washington, D.C.*

DEAR MADAM CHAIRMAN: I am submitting the concluding part, Part VI, "Abstracts of the Papers" of the compendium of papers entitled "Old Age Income Assurance." This study was prepared at your request in order to bring together current thinking on questions of retirement income programs and thereby contribute to policy decisions by focusing attention on the more promising solutions of the income problems of older people.

The compendium, which is being issued in five parts, confirms the fact that programs to aid older people have grown in number, size, and complexity, and that the coordination of these programs and their combined impact on the income of older people have received too little attention. Clearly, public policy issues exist with respect to coordination of these programs, appraising their effects on the economy and improving equity.

Part VI contains abstracts of the papers appearing in the preceding five parts. These abstracts were prepared by Dr. Nelson McClung, consultant to the subcommittee, with the advice and suggestions of members of the staff. He was assisted in the editorial work by Anne McAfee.

The abstracts present the essential policy views and recommendations of the authors and the conclusions from their research. The standard of relevance employed in preparing the abstracts was usefulness to those responsible for the formulation of retirement income policy. We sought to distill from the papers those opinions which would reveal most clearly policy preferences and the analysis that would be most helpful in evaluating alternative retirement income programs. Naturally, the abstracts are not a substitute for the fuller, more detailed arguments of the original papers. Nor are the authors themselves in any way responsible for the abstracts presented.

Part VI also contains a bibliography of literature relating to retirement income policy. It also includes an index to the papers in Parts I through V.

JOHN R. STARK,
Executive Director, Joint Economic Committee.

OLD-AGE INCOME ASSURANCE

Part VI: Abstracts of the Papers

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Guidelines of OLD AGE INCOME ASSURANCE

BYRON L. JOHNSON: PENSIONS, PRODUCTIVITY, FREEDOM,
AND SECURITY

The United States is deep into the third phase of its experience with provision of income assurance to the aged. This new phase of private pensions programs poses very serious questions of policy deserving the most thoughtful consideration. This paper reviews some key questions, identifies some policy conflicts, and suggests possible sources of action for a fourth phase which needs prompt attention.

Shall the retirement system increase freedom while increasing security or sacrifice freedom in order to increase security? One of the original reasons for adopting a nationwide program of old-age benefits was to assure the worker that his rights would follow him in every covered employment and that he would be fully protected. The intent of the law was to provide him with security while underwriting his freedom. Ten years later the Employment Act of 1946 declared it the intent of Congress to promote and maintain maximum employment, production, and purchasing power. Obviously, the intent of Congress requires that each worker be enabled and encouraged continuously to seek and to accept that position, that job, and that industry where he might make his own maximum productive contribution, even though it may mean a change in employments. Unhappily, this has been somewhat inhibited by the widespread growth of private pension plans. Unless the plan provides for vesting and unless the worker stays with the employer long enough to earn a vested right, he will find that when he exercises his freedom to change jobs he loses either all of his retirement security or that portion which is not fully vested. The net effect of private pension plans is either to reduce the mobility of workers and thus inhibit maximum production rather than promote it, or to the extent that workers exercise their freedom in order to maximize their contribution to productivity, the plan causes workers to reduce or abandon their security.

Whose responsibility is old-age income assurance? The worker has a right to view with a somewhat critical eye the manner in which the union, the employer, the trust fund or insuring agency, and the Government have discharged their individual and joint responsibilities to him and his family. For the cumulative impact of their choices has been significantly to impair his freedom if he wishes to protect his security or significantly to impair his security if he chooses to exercise his freedom. Both the worker and the Nation, therefore, have an interest in full, immediate, and complete vesting of both the worker's and the employer's contribution. Otherwise the worker faces an

"immobility trap." The Congress has an obligation to face plainly the consequences of its past behavior and to undertake corrective steps which will better protect the worker's security and his freedom by appropriate changes in Federal retirement programs, in the Federal income tax, and in the law concerning welfare and pension plans.

Are we meeting the changing purposes of pensions? From the outset existing law has tended to stress minimum protection together with some reward roughly related to the past productive contribution of the worker. Pensions may be designed to provide retired persons with an equitable share in the growing output. Pensions can be and sometimes are directly protected against inflation and the rising cost of living. Pensions sometimes build estates. It would be possible for the Social Security Act to be amended to provide some combination of these purposes: Minimum protection, plus adequacy related to prior income, plus an automatic adjustment for productivity and for changes in the Consumer Price Index. The social security program now serves the essential purposes of an estate by assuring income to surviving dependents.

Are we planning for a healthier future? More people are living longer. Planning for later years must adjust to that fact. With better health and better medical care, the number of years that persons reaching 65 live will significantly lengthen. Shall law and public policy require full retirement at age 65 or some earlier date? Shall the aged spend an ever-increasing number of years in retirement, with the frequent waste of human potential? Does not the present program seem for those able to work and those desiring to work after age 65 a logical absurdity? Is it not a social waste when one thinks of the great persons who have made their major contributions to the human race after the age of 65? Is it not a human tragedy to put a person on the shelf by reason of a date upon the calendar rather than his own requirements and desires?

Will pension trust funds prove good for the American economy? Father Harbrecht suggests that our society has passed from a property system to a power system. He states:

The pension trusts are becoming one of the primary centers of power in the newly emerging social system. The concentration of power they represent is not the result of a drive for power itself but of the social forces that have been at work for other purposes. They are vast aggregations of wealth, neither public nor private (except in the sense that they are not owned or controlled by the state). They are "owned" by no one in any meaningful sense of the term. Such a phenomenon in a capitalist society, which is traditionally considered the distinction between public and private ownership to be adequate and complete, challenges us to find a rational framework to accommodate it. The old conceptual framework has no room for the pension trusts.

He suggests that the time has come to declare that:

The assets of the pension funds rightfully belong to the employees. Control by the employees for whom these funds were created is nonexistent. The employee does not become independent by reason of a body of capital wealth gathered for his benefit, but through his dependence on this wealth he has become subject to the decisions which are made by others concerning his welfare. Capital reserves dedicated to an employee's future may work to free him from want but they do not make him more independent. The employee gains economic security without corresponding economic power * * *. While there is no gain in economic power for the employee, there is a considerable increase of power in the corporate employers, in the decisions which are made by others concerning his welfare * * *. Power follows property and it does so inevitably. Thus power has

come to those who control the concentrations of property that have been created to serve our workers * * *. The growth of these new powers along with the powers already in the hands of the corporations is producing a society whose economic life is based on a structure of the power that results from the control of property. It is not a society organized by individual property ownership and diffused power. Property ownership is not the organizing principle; power is.

In an article in their publication, *Business Conditions*, for September 1966, the staff of the Federal Reserve Bank of Chicago found 1965 net receipts of private and State and local pension funds to be \$12 billion. They found these funds heavily invested in corporate stocks and bonds. They found the market value of these funds to exceed the total assets of savings and loan associations or of life insurance companies, exclusive of reserves of the insured pension plans. Stocks now represent the major portion of the new investments. The article concludes:

A number of questions arise concerning the growing common stock investments of private pension funds and State and local plans * * *. First is the question of control or lack of control over managements of firms in which stock is purchased. There is little evidence that pension fund managers have attempted to use their voting powers to control operating management. In fact, many trustees specifically avoid any participation in annual meetings or proxy fights. But here is a dilemma. These trustees are among the most knowledgeable stockholders and presumably have a duty as well as a right to scrutinize and criticize the activities of firms in which they hold shares.

A broader question arises about the economic effects of pension funds stock purchases. Newly issued bonds or mortgages provide the funds for new investments but common stock is purchased almost invariably in a "second-hand" market. Money is transferred from the funds to existing holders of stock certificates. No data are available on the use of funds by individuals who liquidate stocks. Experience of pension funds with stock investments has been "favorable" in that capital gains have been achieved * * *. The apparent success of the decision to invest in stocks has been validated in large degree by the purchases of those making the decisions. Pension fund managers buy stocks expecting prices to rise and it may be that prices have risen in large degree because pension funds have directed a large portion of their net inflow to stock purchases.

Pension programs tend to become virtually a contract form of savings which are relatively inflexible and not significantly reduced during economic downturns. Trust funds, therefore, may well be said to be a built-in destabilizer rather than a built-in stabilizer. As the size of funds increases and the annual outlays for such programs increase, it may become more and more important to examine the impact of the flow of these funds on the economy.

This brings up an even larger question about tax policy, investment, and corporate structures: against the market value of common stock last year, roughly \$3 was paid out on each \$100 of value and \$4 of earnings was retained. Present tax concessions to capital gains continue to encourage this process and have operated to discourage the use of new issues of common stock to raise funds for the corporate enterprise. It would be more equitable to distribute corporate earnings to the stockholders. Those whose tax rates were low would rather have cash dividends than capital gains. Those whose tax rates were high have no special reason in equity or in economic policy to be favored with a tax concession. Management would then undertake to issue new common stock to provide additional investment capital for its expansion. This would mean that investors including pension funds could buy new shares rather than simply bid up existing stocks.

A free competitive enterprise capitalistic economy presumes that along with power there goes not only responsibility but also accountability. The power piling up in trust funds is virtually without accountability, for the covered employee is not by himself a competent analyst. He cannot know from looking at a portfolio or an annual report whether the funds have been competently, properly, or wisely invested and he does not know, nor perhaps care, whether the vast power over the lives of individual corporations accumulating in trustees' hands is being used in his best interest or in the best interest of the corporate enterprise over which they are gaining increasing control. Legislation must increase his protection and remedies beyond those now available.

Do pension funds assure equity? Because pension plans are mostly in their early years, they have not yet been a major handicap to mobility. But as workers become conscious of their growing apparent equity in such plans, the inhibitions on freedom and mobility can be expected to grow and criticism to mount. Constructive action to improve the worker's equity becomes increasingly important to him and to the rate of growth of the national economy, which requires mobility.

There is serious need for the Congress to order a regular gathering of data with respect to the impact on pension plans of terminations, mergers, sales, shutdowns. Bernstein summarizes many specific situations and discusses some of the case law. He concludes "constant changes in employer location, organization, and ownership, which are so characteristic of our economy, constitute an indeterminate but substantial threat to the continuity of employment and therefore to pension expectations which are based primarily upon single employer plans. Contractual and judicially fashioned job transfer rights for employees would mitigate their impact to a limited extent. However, more basic changes in pension arrangements probably are required if they are to be able to overcome the limitations of single employer plans when subject to the strains of such exigencies."

Many private plans provide that the benefit shall be based upon the earnings during the last few years before retirement. This protects the worker both with respect to his highest income and to the price level at the time of retirement. However, plans do not usually adjust benefits to rising living costs after retirement. Some beneficiaries will live as long as 30 years after retirement. For them, the benefits in later years will be scandalously low. Neither the employer nor the union feels a strong obligation to the person already retired.

If the worker is not protected through vesting in the event of turnover, if he is not protected in the event of shutdown or merger, if his benefits are not protected against inflation, if the retired worker is not protected against falling behind as the retirement years wear on, how shall he be protected? It will take an act of Congress to provide greater assurance of the worker's legal rights.

Assigning the equity in the funds to the covered workers would be a major step forward. I renew the suggestion that the Congress actively study the possibility of providing a Federal program of voluntary supplemental group annuities. This would be administered for groups working under one or a group of employers and covering all employees in such a group. The contributions, whether from employees or em-

ployers or any combination thereof, should be fully and immediately vested and be completely cumulative for the worker whether he be covered by one employer or by 10 such covered employers in a course of a working lifetime. The benefits under such a program could be paid out, based upon total contributions plus accumulated earnings, on a straight actuarial basis to the worker with the usual standard options. If the Congress saw fit to do so, it could subsequently add a productivity and a cost-of-living adjustment to these annuities. It is highly unlikely that private pension plans would ever be able to offer such adjustments. Such an adjustment would more than compensate for the lower earnings rate on Government trust funds.

ROBERT TILOVE: INCOME FOR THE ELDERLY THROUGH
WORK-LIFE EXTENSION, ASSET CONVER-
SION, AND PENSION IMPROVEMENTS

Our development into an urban and industrialized society has aggravated the problems of security in old age. It was once possible for an older person to work part time on a farm or in a small business and to live as part of an extended family, sharing living costs and contributing economically. Now the generations live apart. Economic participation has increasingly shifted to an all-or-none basis—either full-time employment or no job at all. By shifting him from the farm or small town to the city, by reducing his opportunities for continued economic production, by separating him in a household apart from his children and grandchildren, modern work and living conditions have exposed the older worker to greater hazards of insecurity.

Greater opportunities for work should be provided for older workers. There is a large pool of unused productive power among unemployed persons 55 and older who either lost their jobs or had to leave them because they were physically too demanding and who could not, with the handicap of age, find new ones. There are many who could do useful work accommodated to their reduced capacity with great benefit to both their morale and their income. There has been much discussion of job redesign to convert job content into something more suitable for older workers, much of it too retraining employees who have grown too old for maximum efficiency on their existing jobs. Another significant possibility for lengthening worklife lies in the development of second careers. What is involved is the possibility that a worker will be able to leave a physically demanding job while he is still in vigorous middle age and shift to a job at which he can continue to be productive into the middle and late sixties.

A way should be developed for elderly persons to convert the equity they hold in their homes into lifetime income without having to abandon their homes. It does not seem reasonable for an elderly person to have to get along on an inadequate income while he or she holds a frozen asset that will be passed on to a child or other relative.

An adequate social security system is an essential basis for the economic security of the aged. While private pension plan coverage has grown rapidly and covers a little over half the employees in private nonagricultural industry, there is a sharp limit to their ultimate ex-

tension. There are large segments of industry for which it is hazardous to predict the establishment of pension plans. Small employers and highly competitive marginal enterprises may feel that they lack the ability to pay for pensions; if their workers are unorganized, they may never set up plans. In many industries, job turnover may make individual employer pension plans virtually meaningless. In making OASDI benefits more adequate, major emphasis should be placed on avoiding the erosion of benefit levels because of changes in wage and price (cost-of-living) levels. The problem can be broken down into two categories. One is the matter of determining benefits at the point of retirement on the basis of current or recent wage level. The other is maintaining the adequacy of benefits through the period of retirement. With respect to the former, one remedy proposed has been to base OASDI benefits on earnings in the 5- or 10-year period preceding retirement or on the 5- or 10-year period of highest covered earnings. This may not work out as equitably or effectively as a formula which would—for purposes of computing benefit amount—revise earlier wage credits in proportion to the change in general wage levels from the year in which the employment occurred to the year preceding retirement. Such an arrangement would take full account of a lifetime of earnings but adjust it to current conditions by correcting for changes in general wage levels. For adequate protection against increases in the cost of living after retirement, an automatic cost-of-living adjustment should be provided.

There are schools of thought that place little value on private pension plans. The viewpoint implied is that whatever private pension plans claim to accomplish in terms of public good could be accomplished better by a public program. Overlooked by that approach is the fact that what has been accomplished by employers and unions in supplementing social security with private plans was not accomplished and might never be accomplished at all through legislation. It also overlooked the value for a democratic, pluralistic, and dynamic society of arrangements that can be developed outside of Government on the initiative of employers and unions and without depending on majority consensus.

Vesting—particularly after a substantial period of service—and adequate funding are both desirable goals from the standpoint of employees and of the public. Whether those steps should be compelled by legislation is another question. Claims have been made that no more than 40 or 50 percent of the workers covered by private pension plans will ever receive a cash benefit from the plans because they will leave the employment covered before fulfilling plan eligibility conditions. Those findings have a certain plausibility but they are nevertheless inappropriate. The real question is not the probability that a young man or woman will remain with the same employer to retirement age but rather the following: what percentage of the older worker population is covered by pension plans and will be eligible for pension benefits? The observation that the great majority of older workers covered by pension plans will fulfill their eligibility requirements does not entirely resolve the question. The objection can still be raised that these older workers represent a select population, the survivors of a process of attrition, and that what is missing from the picture is the ultimate fate of the workers who left that employment. Whether private pen-

sion plans are an illusion or provide valuable benefits is amenable to a simple answer. After discount by their actuaries of the forfeitures of benefits which will occur as the result of job turnover, these plans have built up benefit rights worth more than \$100 billion.

Vesting provisions have become significantly more extensive. These vesting provisions are in addition to early retirement provisions, which are today common practice and generally make benefits available by age 55. Also, evidence indicates that the spread of vesting has been accompanied, particularly in recent years, by a trend toward more liberal eligibility rules. Industrywide or multiemployer pension plans, which provide about 20 percent of total pension coverage, add another element of protection for workers who change jobs—continuity of pension coverage if the worker shifts from one job to another within the scope of the multiemployer plan. Reciprocal or integration agreements between industrywide plans is another development which has enlarged the area of protection for a worker in the event of a change in jobs. The essential problem with legislating vesting is that it would impose a cost on a pension plan at a time when the employer and the union might consider—and perhaps rightly—that other claims to the resources available to the plan should take priority.

Pension plans have gone through successive stages of development. Their first emphasis was on benefit amounts for workers facing immediate retirement. Then they branched out into disability provisions, early retirement, survivors' benefits, and now vesting. Compulsory vesting would take all pension plans, regardless of their age, their resources, and the other demands upon them and create a priority for vested benefits. It might be a good idea for proposals for compulsory vesting to be framed so that the requirement were contingent on the level of benefits, so that such a requirement would not cut down on the resources available for improving benefits that are as yet meager. It should be recognized that pension plans have been designed to cover long-service employees—and almost always on the assumption that they would not also have available benefits based on relatively short service elsewhere before or after. With compulsory vesting, this assumption would no longer hold and provisions for vesting benefits should logically contemplate the entire span of work life during which vested rights could be acquired.

Proposals for required funding are subjected to some of the considerations pertinent to the proposals for compulsory vesting. To compel adherence to a funding schedule would represent an enforced order of priority that would cut down on what new plans or plans with limited resources could do in the way of immediate benefits. At what point does social policy dictate that an adequate schedule of funding takes priority over the other claims? Another consideration affects industrywide plans. An industrywide plan typically undertakes a unique funding obligation, namely the obligation of fulfilling benefit rights in the event that a particular contributing employer goes out of business. Fulfillment of pensions in the face of business turnover represents an implicit cost to these plans, a cost which represents a margin otherwise applicable toward fulfilling a schedule of full funding.

The general idea of reinsurance to fulfill pension promises in the event of default by the plan is attractive, but its feasibility has yet to be

established. Comparisons to savings or mortgage insurance are not convincing. The risks which reinsurance of pension plans would have to cover include the following: (1) The risk that the company will go out of business; (2) The risk that the assets of the pension fund might depreciate; (3) The risk that the actuarial assumptions on which the projection of benefit commitments was calculated proved erroneous.

The great majority of pension plans are invested responsibly in ways intended to serve the interest of the beneficiaries. However, there may be cases where self-interest on the part of those who manage a pension fund leads to undesirable investments. It would serve a useful purpose if unorthodox investments were subjected to disclosure. It would give the public and the affected employees knowledge to which they are entitled and it would tend to impose restraint on those responsible. It would seem possible to pinpoint disclosure so that only the extraordinary investments are regularly disclosed. There have been cases in which trustees for large pension plans have engaged in acts which might expose them as trustees to civil suit and yet no one has sued them. The answer lies in the fact that those entitled to enter suit are employees and pensioners, without the resources for legal action and their interests are diffuse. These considerations argue for legislation to empower a Government agency to enter suit to enforce the fiduciary responsibilities of trustees and others handling pension funds.

JOHN McCONNELL: ROLE OF PUBLIC AND PRIVATE PROGRAMS IN OLD AGE INCOME ASSURANCE

Much of the continuing controversy regarding coverage and benefit payments in the Federal old-age insurance system is related directly to a failure to understand or an unwillingness to accept the fact that OASDI is social insurance, created to combat the widespread and persistent problem of dependency in old age. Hence, adequacy of coverage and benefit payments must be the primary objective. Quite proper efforts to include some features of equity in the old-age insurance system nevertheless, from the very beginning, have confused the social insurance role OASDI. These features, such as relating benefits to earnings coverage as an attribute of private employment and payment of benefits as a right earned by prior employment, desirable as a reflection of American ideals, have undoubtedly aided and abetted those who test the effectiveness of the Federal old-age insurance system against the principles of equity as found in private insurance.

Adequacy with respect to coverage can be precisely defined. All permanent residents of the United States should be assured protection against dependency in old age. The definition of adequacy with respect to old-age insurance benefits is not nearly so clear-cut as for coverage. The role of OASDI in providing income for older people has been severely challenged by (1) the proponents of private pension plans, and even more important by (2) those who claim that, because of social insurance principles, too large a proportion of the Nation's transfer

payments now go to those older persons who are not and are not likely to become dependents, while millions of children, widows, and the disabled in younger age brackets are very poorly provided for. Using the poverty level index, in 1966 only 25 percent of all aged beneficiaries had incomes above the poverty level, if OASDI benefit income is omitted, but 36 percent were kept above the poverty line by the OASDI benefit income. It would require an expenditure of \$2.2 billion annually to raise the income of the remaining 39 percent to the poverty line. The primary cause of low-benefit levels appears to be the low level of prior earnings of so many of those currently receiving benefits. Hence, in order for OASDI to provide incomes high enough to lift 4 million older persons and couples above the poverty line, a minimum benefit of \$100 per month would be needed.

Unquestionably there has been a phenomenal growth in persons covered, size of benefit payments, and number of beneficiaries of private pension plans since 1950. The rate of growth has been declining rapidly, however. At current rates of growth, approximately half the labor force will not be covered by private pension plans in the foreseeable future, and apparently the population over 65 is now increasing faster than the number of beneficiaries—by the order of about 3 to 2. If the Nation is serious about providing an adequate income for older retired people, it will have to do so through a greatly improved public old-age insurance system. There is the question of whether, in the face of all the other needs, additional funds should be spent on older people. Numerous economists have proposed the introduction of some form of needs test to reduce the cost of old-age benefits, using the saving to improve the well-being of dependent children, widows, and the sick and disabled. A decision on such an issue is most difficult, but there are other ways of reclaiming insurance benefits received by those who are above the economic support line—for example, taxing OASDI benefits attributable to the employer's contribution, which would not undermine the contributory character of the OASDI system. There is a great deal to be said for finishing the job of providing adequate income for all older people using the present system. This goal is now within sight.

ROBERT BALL: SOME REFLECTIONS ON SELECTED ISSUES IN SOCIAL SECURITY

Our national social insurance system as we have it today (with all the need there is for improvement) is right now a tremendously successful program, which has changed the face of America in one short generation. Twenty-four million people who otherwise would be among our most economically vulnerable group—the retired aged, widowers, and orphans, and the totally disabled—have income they can count on month after month as a matter of right. That this has been accomplished with the enthusiastic acceptance of the vast majority of Americans speaks well for the principles on which the program is founded. These principles have not only been widely accepted but have stood the test of practical operation for a generation.

People like to earn what they get and they like to have other people earn what they get. The relationship to work explains much of the great strength of contributory social insurance. I do not believe at all, as some have come to believe, that the difference between people's attitudes toward an income determined or needs test program and social insurance is primarily a matter of style of administration. Although I believe we should do everything we can to make the needs test less onerous and to make an assistance or income-determined program as considerate of individual self respect as possible, it is not in the nature of people to feel as comfortable about receiving money payments because they can prove that they otherwise lack enough to live on as they feel when they get money payments in return for work and contributions.

Although in Europe social insurance started out as a program for low-income people, in the United States from the very beginning it has applied without regard to the amount of one's earnings. That is, the first \$7,800 of earnings for everyone is covered under the system. Our social security system is therefore not primarily a poor man's system but is also of great importance to people of all income levels—middle income people and those with more than average income as well as the poor. Social security has been our most effective weapon in the war on poverty to date. It has made the difference between being poor or not poor for more people than all other programs combined. We have, then, a system of universal usefulness, relied upon by people of various income levels; at the same time, a very high proportion of the people drawing the system's benefits would be below the poverty line in the absence of these benefits.

If one were to design a transfer system solely to deal with poverty—if nothing else were involved but this one issue—one could well question whether low-paid wage earners should be able to contribute toward their own protection and whether from the standpoint of their income position they might not be better off in a separate program that paid them income-determined benefits from general revenues. But there are deep-seated values in the tradition of self-help and self-earned rights that support the independence of the beneficiary and security of the payment and that cannot be gained in any other way. Even further, I think one can generalize beyond this to say that to the extent possible the poor are served best when served by the same institutions as the rest of the community rather than separately. Sometimes separation is necessary but I would argue that, for the sake of the poor, we should avoid it where we can. Our interest, as individuals and as a people, in institutions that we all have a personal stake in seems to hold up better than our interest in institutions that are to help other people. We want the institutions that serve all of us to be good all of the time; our interest in institutions specifically designed for the poor tends to be sporadic and occasional.

Undoubtedly, however, there is a point at which it is unwise to provide fully sufficient benefits through a contributory system. A good public assistance program, to which people can turn as a reasonable acceptable alternative to social insurance, can help preserve the values

and principles of the contributory program by making it unnecessary for social insurance to try to do the whole job. A temptation that we are faced with right now is that, in this first generation of coverage under social insurance, there are so many of the poor among retired people—those whose jobs (or in the case of widows, whose husband's jobs) were not covered until relatively recent years—that one is tempted to push up the minimum under contributory insurance so that it is reasonably adequate in itself. But to go too far in this direction is to risk undermining the principle of the benefit-wage relationship to solve what, in major impact, is a relatively short-run problem. We compromise, correctly I believe, when realizing that the low-paid worker regularly under the program will get much more than the minimum, we try to arrive at a minimum for the short-term contributor that will do a lot of good now but will not be so high as to endanger for the long run the principle that benefit essentially should grow out of work and contributions.

The other basic issue on the benefit side is how much social insurance should do for middle income and higher paid people. To what extent is the Federal system to be thought of not as guaranteeing a minimum level of living but designed to maintain in retirement a reasonable relationship of income to the past earnings of workers at all levels—middle and higher earnings as well as low-income levels? There is now widespread acceptance that our arrangements for retirement should be made up of a universal Federal system supplemented by private pensions. It probably is not true that we count on most workers in the future having protection under both social security and private pensions. We need to give some thought, it seems to me, to ways in which we can assure that postretirement benefits will be adequate for persons who do not have a private pension supplement so that the income of such people, in all likelihood the great majority of workers, is reasonably related to their previous level of living.

In considering the proper course of development for either social security or private plans, it is important to take into account what effect a given plan of action or inaction in one area will have on the other. There is, in my opinion, a great need for more analyses comparing the social efficiency of the two approaches. For example, there has been considerable criticism of the incidence of the social security payroll tax but very little recognition that the incidence of the cost of private plans is undoubtedly very similar. Questions are raised around the issue of supplying more than the minimum income guarantee in a social security system that is compulsory, but little recognition is given to the fact that coverage under private pension plans is not really a matter of individual choice and that the private plans are institutional arrangements through which people earn protection as they work, just as under social security—automatically. Comparative analyses would, I believe, make clearer the considerable differences between the arrangements in terms of a worker's freedom to move from job to job, the security of payment, the ability of the systems to adjust to rising price and wage levels, the ability to provide universal coverage, and other differences pertinent to social efficiency.

One of the most important issues in connection with long-range financing of the social security program is whether, if benefits are to

be raised substantially, we are willing to have the contribution rate—which applies equally to lower paid and higher paid workers—raised sufficiently to cover the cost or whether some of the additional financing should come from general revenues. There is some leeway for improvement in the future without a Government contribution and without increasing the contribution rate. Of course, it may well be that in America we will want to increase benefits substantially more than can be financed by a higher earnings base and out of rising earnings. If we do, it is at this point that the issue of a Government contribution will be seriously considered. If benefits at the lower wage levels are to be substantially higher than they are, the most disadvantaged need more of a subsidy. And those at average and above-average earnings levels do not want too much of the subsidy to come from payroll contributions that would otherwise be available for benefits of one kind or another to them.

Early retirement is an example of another as yet unresolved problem. More than half of all people now retiring do so before age 65 and therefore get reduced benefits. In the long run, if allowed to continue such a situation might actually reverse the long-range trend of reduction in the old-age assistance roles. On the average, the longer a person is in retirement, the more likely he is to have used up whatever resources he took with him into retirement, and the more he becomes wholly dependent on his social security income. Thus, those people taking early benefits may later on have to apply in increasing numbers for assistance.

As over the next several years we consider the steps to be taken to improve the economic security of the American people, I believe that the method of social insurance will be called upon to do an even bigger job than it is doing today. I believe this is true because it is greatly advantageous to build on a going system of universal application based upon principles that have wide acceptance and have proven enduring. At the same time I believe we will have to ask ourselves what is appropriate for social insurance and what is not. The idea of insuring against the loss-of-work income has wide application in any attempt to improve our economy security arrangements. But the institution of social insurance should not be expected to cure the problem of income deficiency singlehanded, nor should its failure to do everything make us value less the great contribution to security that this institution can appropriately make.

In my judgment, solutions to the many-sided problem of income deficiency will be found not in a single program but in a variety of programs—both public and private. In this field the simple, single answer—while intellectually appealing perhaps—will not produce satisfactory results.

ANDREW A. MELGARD: ECONOMIC SECURITY IN OUR FREE SOCIETY

During the 20th century, as our free society has progressed from depression toward affluence, there has developed a need for a national dialog on issues and alternatives in the field of economic security for the individual and the family. A key part of this discussion involves old-age income assurance goals for our present and future elderly

citizens. In addition to the dialog, there is a large need for further research and study to give us the facts necessary to more clearly define the alternatives before us.

Our present approach to economic security is pluralistic. We have a mixed system of social, employer, and individual efforts and programs. One of the major issues is: How will responsibility for the economic security of the individual be shared by Government, employer, and the individual himself? This and similar issues have serious social, economic, and political implications. The issues must be considered in the light of our national goals of economic growth, full employment, and price stability. Since economic security provisions involve all Americans from the newest baby to the oldest citizen, we must take into account the economic changes that will occur over long periods of time. We need to continue public policy that encourages economic security programs that help in the formation of much needed capital. The manner in which inflation and increased taxes destroy economic security achievements needs to be reviewed. Support is needed for the appropriate use of fiscal and monetary policy that will control inflation which is so destructive of the values of the retirement income received by the elderly.

We need to critically reexamine all of our social insurance and welfare programs to determine whether they can continue to operate efficiently as methods of income redistribution in our new affluent economic environment. Of major importance is the degree of priority we should give to new or enlarged social insurance programs. The share of national income that should be allocated for public assistance and social insurance, and whether to increase or decrease the amount, poses a serious question. We need to list the inadequacies of social insurance in providing for highly individualistic needs; the limitations of private security mechanisms to fulfill the social needs of low income or nonincome groups; and what the public interest requires as a reasonable mix of both public and private approaches. Since these issues are so vital, there is need for restraint on the part of all those who join in the dialog.

Thus far, with our pluralistic approach we have achieved the highest levels of economic security the individual and the family have ever known. Some believe that what has succeeded so well is being threatened. The threat to our uniquely American system comes from the exponents of total security for the individual provided by Government through social insurance based on pay-as-you-go tax redistribution. This Great Welfare Society would offer one layer of protection. There would be no employer provided layer and no individually provided layer. The Government would provide for all the economic hazards faced by the individual. In doing this, taxes on corporations could be so heavy that little in the way of fringe benefits could be offered. Furthermore, withholding taxes would be so heavy on the individual he would tend to consume all take-home pay and have little if anything left for savings.

More social insurance programs and more Federal control of corporate and individual efforts to provide economic security could deprive us of the economic growth we need and undermine our capacity to sustain and improve our present corporate and individual economic

security programs and plans. Our private enterprise economic system has provided our citizenry with the highest income and standard of living that has ever existed. Social security and private pension plans and related fringe benefits will be improved and will continue to help the individual and the family meet their economic security needs. It is imperative, however, that management have discretion in providing pension and other fringe benefits.

If the Federal Government were to take over the private pension system or stunt its growth, then the way would be clear for total welfare state concepts to be used. The implications for individual initiative, limited government, collective bargaining, and the private enterprise economic system are obvious. The ultimate question is whether the Federal Government should completely control both public and private plans for retirement. If it does, then after a lifetime of work, the average retired American may find his financial income and freedom dependent on year-to-year decisions made in Washington.

It is equally imperative that the American citizen retain the freedom to manage the economic value of his life beyond the floor of protection offered by the Federal Government and the employee benefits provided by his employer. A complete takeover by the Federal Government of control of all retirement income could destroy this freedom. Without such individual economic freedom, there would be no political freedom, no free society.

COMMENTARY BY THE NATIONAL ASSOCIATION OF MANUFACTURERS

The vigor and efficiency of private pension plans is confirmed by their growth. Coverage, vesting, and benefits have constantly been improved by free interaction of competitive forces. Competition in a free society being a principle motivator, present trends toward earlier vesting, greater funding, and broader coverage will continue. Because of the diverse needs and circumstances of various industries and economic sectors of society, further improvement of private pension plans will best be effected through voluntary action and labor-management negotiations, not through rigid formulas imposed by law or Government regulation.

The argument that private pension plans are recipients of tax favoritism and, therefore, should be subject to substantial new Government controls is without merit. The existing treatment of private plans is consistent with broad tax policy and confers no special privilege or subsidy. Private pensions are already subject to many existing statutory and administrative rules which provide responsible fiduciary practices and equitable treatment of employees.

With respect to the social security system there are large questions concerning the extent to which future generations can be expected to contribute to the system and the extent that future national income can safely be set aside by fiat without impairing capital formation and economic growth. Social security should retain its character as a basic

retirement system which is financed by contributions by employers and employees. But the primary means by which old-age income assurance should be further expanded is through the more flexible arrangements of private pension plans.

MARION B. FOLSOM: PRIVATE PENSIONS AND THE PUBLIC INTEREST

The underlying reasons why industrial concerns consider pension plans desirable were explained in an article in the September 1929 issue of the *Atlantic Monthly*, by M. B. Folsom, treasurer of Eastman Kodak Co., who served on the original Social Security Advisory Council and later as Secretary of Health, Education, and Welfare. "Removing the older man who is no longer able to produce makes way for younger people and has a stimulating effect upon the whole organization. Employers all feel that up to the age of declining strength, longtime service on the part of many employees is a business asset. An organization which takes adequate care of its superannuated people appeals to the workers. A well-established pension plan undoubtedly serves to attract employees, even at younger ages, who are of a more stable nature and, to that extent, affects turnover and the general character of the working force. The reputation of an employer in a community is enhanced by the fair treatment of the older employees, and this is a definite business advantage. Good, humane management will not permit employees of long service to be discharged if they have not adequate means of sustenance. Yet good management cannot keep employees on the force when they are no longer productive. The solution is the inauguration of a sound and adequate pension plan."

In a report on welfare and pension plans, the subcommittee of the Senate Committee on Labor and Public Welfare gives the following reasons for rapid growth of pension programs: "(1) During and since World War II, high corporate taxes coupled with tax deductions for contributions to pension funds permitted the establishment of these programs at low net cost; (2) wage stabilization programs during and since World War II and the Korean conflict froze wage rates but permitted increased employee compensation in the form of these "fringe" benefits; (3) court decisions in the years 1948-50 made welfare and pension matters a bargainable issue; (4) since 1948 the labor unions have put on a drive to obtain welfare and pension programs, citing as one reason for the development of these programs the inadequacies of benefits under the Government programs."

While cold statistics are no proof of how well or how badly pension plans meet public objectives, they are an indication of the relative merit of pensions to the public. One of 10 Americans now receives social security benefits, and 2.7 million persons received \$2.9 billion in private pension benefits in 1966 alone. Private pension plans are a very young institution. Many private plan critics ignore this youth. Of the 132,000 qualified plans in existence today, over 131,000 did not exist 25 years ago when the Internal Revenue Code of 1942 was passed

giving tax inducement to established plans. In revising the Internal Revenue Code in 1942, Congress gave industry a significant inducement to set up private pension plans for economic, business, and social purposes. Without social security and private pension plans to help retirees maintain an adequate standard of living (based on their preretirement standards), many retirees would have become charity cases. If private plans are not permitted to expand, there is one obvious outcome: the necessity of increased Government intervention to supply pensions to the public through social security, public assistance, or other tax-supported schemes. And this leads to the question of how much more this will cost in increased taxation, compared with the supposed loss of \$1 billion from the tax treatment of private plans.

We hesitate to enter into the field of economics with its various theories and jargon. Undoubtedly, the concept of "laissez-faire" is largely dead, having received a mortal blow since 1932. Keynesian economics of a government-planned economy have been with us since that time. And the new economics of the Kennedy era continues the massive Government involvement in fiscal policy. If tax inequities do exist in pension-related areas, they are just one small part of our entire tax structure problem. Perhaps this point is best summed up by Louis Rolnick, director, welfare and health benefits, International Ladies Garment Workers. "It is undeniable that this tax treatment constitutes an indirect public subsidy to the plans. I find this, however, to be the least persuasive of the considerations cited as justifying additional regulations. The President's Cabinet Committee Report relies heavily for its recommendations on vesting on the theory that equity requires identification of employer payments as a kind of deferred wage. If we adopt this premise, it follows that such payments are normal production costs and should not be taxable in any event. Estimates of annual revenue losses range from \$1.2 billion to \$3.4 billion. I am sure that these figures stack up favorably against a whole host of tax-involved public subsidies for institutional schemes which are far less easily identified as being in the public interest."

While public officials are arguing about the appropriate period of vesting, industry is itself solving the problem of vesting through plan design, competitive pressures, and collective bargaining. Trends indicate that vesting is becoming much more liberal in many plans as automation and labor mobility increase in our society. We also believe that this right to determine vesting should remain within the private domain. Vesting, after all, requires money—and the employer and employee should determine how this money should be spent.

The concept of minimum or no funding and reinsurance requires some analysis. One of the most comprehensive evaluations of the reinsurance concept was given by P. C. Basset when he appeared before the Senate Committee on Finance in Washington, D.C., August 15, 1966. "Such a program, I believe, may encourage minimum funding by employers, since the security of pensions will no longer be a compelling reason for funding. It may be cheaper to pay the premium than to fund adequately the pension plan, thus stimulating the wrong kind of pension planning. If a reinsurance program were undertaken, I believe the Government would quickly find itself in the business of establishing a wide variety of investment standards, payment standards, funding standards, and other criteria for pension

plans which would result in placing all such programs under a governmental straitjacket, thus depriving these plans of the inherent flexibility which, I believe, lies at the root of their success and value."

Mr. Basset's comments show the value of study needed in this entire area: "Until these studies are completed and until substantial consideration and evaluation have been given to them, I would urge the Congress not to take action. Private retirement programs, adopted by corporations for the benefit of their employees, constitute a unique and constructive American development which, on the whole, is serving the Nation extremely well. In light of the long-range nature of these programs and their past success, the Government has an obligation to move deliberately and cautiously in changing the ground rules under which they operate. Certainly to date, there has been no clear demonstration either of the need for, or constructive results that would result from, a program of Federal reinsurance for unfunded pension benefits."

ROGER FLEMING: STATEMENT ON BEHALF OF THE AMERICAN FARM BUREAU FEDERATION

Our official policy resolutions on this subject are limited to brief statements on social security and self-employed retirement plans. Social security programs should be designed to supplement rather than replace individual thrift and personal responsibility. Any increase in social security benefits should be limited to those which can be financed without an increase in taxes or the use of general tax revenue. A retiree's social security benefit should not be reduced because of his current earnings. Small employers should be permitted to pay social security taxes on an annual basis. The financing of the social security program by payroll taxes disguises the cost of the benefits and lulls the taxpayer into a false sense of well-being. We support a method of tax collection which will require people to pay their share directly rather than through withholding by their employers. In fairness to young workers, the social security taxes paid by individuals—but not those paid by employers—should be graduated on the basis of age. We strongly support the Self-Employed Individual's Tax Retirement Act as amended in 1966.

JAMES F. OATES, Jr.:* PRIVATE PENSION PLANS IN THE UNITED STATES

The Equitable believes that as long as Government leaves to private initiative the negotiation of wages above specified minimum levels, it should similarly leave to private initiative the provision of retirement income above minimum (social security) levels. Further, the private pension movement, which has mushroomed within the past two decades from modest proportions to an accumulation of \$100 billion on behalf of 25 million people is entitled to the informed interest and support

* For the Equitable Life Assurance Society of the United States.

of the public at large. Every reasonable support should be given to nondiscriminatory plans, however modest their beginnings and however gradual their liberalization. Incentives to more rapid funding and vesting can be increased without revenue loss and to the benefit of the country as a whole. The extension of certain desirable regulation of a fiduciary character and broader policies of meaningful disclosure are in the public interest and should be encouraged. In general, those proposals that are likely to be helpful are those that allow wide scope for individual plans and bargaining and impose only broad regulatory standards upon the complex and competitive forces that have produced the extraordinary progress of these past decades.

CHARLES A. SIEGFRIED: STATEMENT FOR THE METROPOLITAN LIFE INSURANCE CO.

As the economy grows, more and more saving is necessary for investment to keep the expanding labor force employed and to help raise its productivity. This ultimately raises the standard of living of the whole population. Life insurance and private pension funds contribute to the economic growth of the Nation because this money is invested in machinery and buildings for production, public utilities, housing, and so forth. Social security, by contrast, tends to reduce aggregate saving because of the redistributive effect of the taxes used to finance the program. Social security should be regarded as a minimum basic layer of protection and not as a means for providing the full income desired at retirement. If social security is kept at sound basic levels, employers will be able to provide additional and excellent private group plan coverages. Furthermore, individuals will be able to afford personal supplemental measures. Private plans should, wherever practicable, contain appropriate vesting provisions and funds should be conservatively invested to secure certainty of payment of benefits. The plans should provide for appropriate disclosure to assure sound administration. Private saving accumulations, whether in pension funds or elsewhere, are needed to provide strong, noninflationary and sustained economic growth, not only for the prosperity of the Nation in general, but also specifically to make sure that programs like social security are able to meet their annual obligations out of national income. Naturally, an expanded system of private pensions would not rule out improvements in the social security program, if they were consistent with sound financial and economic development.

STATEMENT OF THE NEW YORK LIFE INSURANCE CO.

We recognize the importance and desirability of the social objectives reflected in the report to the President on private employee retirement plans. We would, however, postulate one caution that any requirements mandated on the private pension system recognize that funding and other improvements are costly, and must not be raised too quickly to too high a level, a level that would inhibit the growth and vitality of the private system. Important as these issues are, those raised by the Joint Economic Committee print with respect to private saving

and investment seem to us to be far more important. Apart from private savings the only other sources of investment funds that we can think of are monetary expansion and government saving. We would like to be strongly on record to the effect that neither of these other sources constitutes a safe substitute for private savings in the investment markets. In the light of the heavy demands the various objectives of national policy are placing on the economic system, the need for additional investment in almost all lines of endeavor should place a high premium on private savings, private savings from any source at any time. We think it would be a grave mistake in public policy if the Government were to move in any way that would discourage the further growth of the private pension system and the saving it furnishes to the American economy.

MERTON BERNSTEIN: STRENGTHENING PENSION EQUITIES
THROUGH EMPLOYEE CONTRIBUTIONS AND A CLEARING HOUSE OF
CREDIT

The declining use of contributory plans is widely thought to be a direct consequence of the Federal tax law under which employer contributions to plans are tax deductible but those of employees are not. So, for example, in 1949 the pattern-setting Basic Steel Industry Fact Finding Board recommended noncontributory plans because, among other considerations, each dollar of the tax deductible employer contributions would result in more benefits than employee dollars which would first be taxed as income and then, after subtraction of taxes, contributed.

This trend away from contributory plans may have been, and probably was, accelerated when it was found that an employee can be given a raise equal to his own pension contributions without increasing his current taxes by having the employer assume the employee's pension contribution. This means an increase in take-home pay without an increase in employee income tax and, as a result, a raise which probably costs the employer less than a taxable wage increase.

Unions and employees are kidding themselves, it seems to me, if they honestly believe that a noncontributory plan results in greater economic benefits for employees than contributory plans. The evidence on benefits vesting—as far as it goes—is against them; opinion of informed commentators is against them; their own position on OASDI financing is against them. Maturity and realism should counsel that, as with social security, employees have greater security and more leverage in the operation of contributory than noncontributory plans. Moreover, we have seen how ineffectual the antidiscrimination provisions of the code regulations and rulings may be; so that, in fact, where employee separations are numerous, employer contributions can rebound mostly to the benefit of management officials. In contrast, whatever dollars are contributed by an employee are practically universally returnable to him, often with interest upon separation—and, as observed, vesting has been more common in contributory plans.

The revival and expansion of the contributory method would be a powerful, practically self-enforcing preventive measure against favoring the management elite, for it would be impossible to divert

the employee contributions to the benefit of the not-to-be-favored groups. In addition, to the extent that effective vesting is promoted by employee contributions, the prohibited discriminations are more readily prevented. Realism seems to favor a revival of the contributory plan and perhaps tax changes to stimulate it, or more accurately to remove the present tax encouragement for noncontributory plans. The policy of according deductibility to employer contributions but not to employee contributions should be reversed because employee contributions strengthen employee benefit rights and minimize discriminations in favor of stockholders and highly compensated employees.

In this country, no device other than vesting or multiemployer plans has been seriously considered to provide retirement income to able-bodied employees separated before retirement age. No proposal for vesting in the United States has included any device or institutional arrangement whereby vested rights follow the employee, rather than, as at present, having the employee and his credit go separate ways until retirement.

The possibility of small, perhaps minuscule benefits, the incompatibility of benefit provisions, disproportionately high administrative costs, attrition of fixed benefits by inflation, withdrawal of contributions, their lack of utility for the disabled, and the nonparticipation of vested deferred benefits in plan improvements, all argue for the desirability of collecting the bits and pieces of employees' vested pension credits into one more adequate benefit, a benefit based upon contributions which have earnings and growth up to the date of retirement. Indeed, as will be shown, such a combination of credits can facilitate liberal vestings. Outside of the multiemployer plans, such piecing is not presently possible; no device exists in this country for transferring and cumulating credits. In my discussions, starting in 1959, with officials of insurance companies, banks, pension consulting firms, unions, management, Government, and academics, I found interest in some device to coordinate plans or benefits. But I encountered no fixed ideas, except that some want to exclude or minimize the role of the Federal Government.

At any given point in time it is possible for an actuary to place a monetary value upon the pension credits of an employee. This sort of valuation is done routinely in Norway, where white-collar workers' private pension credits are universally transferrable. The value of the separated employee's past credits are simply transferred to the plan into which he moves and the new plan gives him whatever credits he is entitled to by virtue of the payment made. Whenever a plan is less than fully funded, the award of a fully paid up benefit or credit to a separated employee favors that employee to the possible detriment of the employees who remain behind in the plan. To allow for this contingency, the credit to be conferred upon departing employees could vary according to the state of funding. Both plans, the one the employee leaves and the one he joins, must have provisions for the transfer. Only the last plan would be responsible for the benefits, under its own formula—having received and credited value from all prior plans in which the employee participated.

Whether individual plan provisions, without supporting institutions or devices, are sufficient to facilitate transfer values for exiting employees is to be doubted. A "clearinghouse" could facilitate and, in

addition, supplement the transfer value provisions of individual plans—and thereby stimulate them. Indeed, such an arrangement might be the indispensable condition of a workable system of transferring pension credit values.

A pension clearinghouse could perform one or more of the following functions: (1) Maintain records of "cold storage" vested credits, with the credits themselves remaining with the plan under which they were earned. (2) Facilitate the actual transfer of the value of vested credits for employees leaving one plan and entering another. (3) Receive transfer values for separated employees who do not enter a new plan, thereby providing the advantages of a developing group plan. (4) Provide basic coverage for small groups of employees for whom regular plan coverage is impractical due to high cost and the uncertain longevity of the job or indeed of the employer.

A clearinghouse probably would effect economies in the administration of vesting. More importantly, if a clearinghouse were widely used, the cost of vesting could be reduced, perhaps substantially. Presently the cost of any vested rights conferred by a plan is borne by that plan alone. Whatever the pattern of employee turnover, under conventional vesting all the money is outbound. Under a clearinghouse (or mutual bilateral) arrangement some incoming employees would bring funds with them. Of course, the incoming employee would get the full benefit of any funds he brings and so there is no "profit" to the plan he joins on that account. But to the extent that employees arrive with money for credits, the receiving employer is required to contribute less in order to provide any given level of benefits. Therefore, the receiving employer can base his plan on a longer period during which pension credits are earned.

Employers would "contract" for a period of time to provide clearinghouse coverage for employees separated from private plans. The contract would provide that all employees separated under age and service conditions specified by the employer (entirely at its option or in conformity with a collective bargaining agreement) would be given transfer value credits computed in a specified fashion which would be paid over to the clearinghouse. In the event of plan termination, the value of vested credits could be transferred to the clearinghouse rather than dissipated in cash payments or paid-up annuities for small amounts. The contract requirement of equal treatment would not be so much to protect the clearinghouse as to insure fair operation of each employer's plan. Small companies could contract for clearinghouse group plan coverage for all of their employees.

The clearinghouse would not serve its purposes if cash withdrawal were permitted, as is now the practice when employees are separated from jobs under contributory plans. Recognizing that sometimes participants may have urgent needs for cash which their other savings are insufficient to meet, some consideration might be given to limited grounds for borrowing against the contributions made on behalf of an employee. Such an arrangement would be terribly awkward under OASDI; however, as private plans represent supplementary and more voluntary savings, consideration should be given to such a feature. There would seem little purpose to forcing a participant into charity while he has thousands of dollars to his credit in the clearinghouse group plan. But the exigencies should be limited to bona fide emer-

gencies. Such availability might make this form of saving more attractive to employees and hence encourage the funding of larger benefits which require larger savings.

A clearinghouse could be established and operated: (a) wholly by private institutions already operating in the pension field; (b) wholly as an agency of the Federal Government; or (c) by some combination of private and public (Federal Government) institutions.

A private clearinghouse could be established as a corporation whose shares are available to all groups with an interest in this field. The proportion of ownership available to any group probably should be decided in advance of incorporation, with at least ownership participation available to any institution in the pension field. One possible measure of the percentage available to the respective groups and participants might be the amount of the retirement plan business done. However, that is not the only conceivable measure, for some may have a greater interest in "transients" than others. Perhaps the value of actual or potential vested benefits would be more an appropriate measure.

Unions are in a position to take the initiative in providing clearinghouse arrangements. In essence this is what some of them have done in negotiating multiemployer agreements which provide for accumulation for all pension credits in multiemployer groups without the requirement of adherence to any one employer. Industry-wide and area-wide multiemployer plans are a form of clearinghouse which meet some of the problems of normal turnover and the other hazards to continuity of employment. But they do not meet the whole problem, especially where the job opportunities in the units covered are shrinking. They do not meet the needs of those who cannot continue in the same industry because of injury and debility or family considerations. They do not meet the needs of workers whose skills are useful in more than one industry. As automation reaches broader areas of industry, commerce, and service trades, "industry" classification becomes less and less significant and job shifts across industry lines, already common, may be expected to increase.

In the OASDI system the Federal Government already has the operating procedures for collecting and keeping records of practically all the employed and self-employed. These procedures are fully rationalized, fully functioning, efficient, and cheap. Employers already report employee earnings and remit payroll taxes to the Internal Revenue Service, which transfers equivalent amounts to the credit of OASDI. To duplicate any major part of this system would be rather wasteful. If a government fund were operated by a group of experienced investors, empowered to invest in all kinds of securities and investments, probably a portfolio could be devised so as to attain both security of principal and a higher rate of earnings than is now realized on the Government's retirement trust funds.

In a combined Federal-private arrangement, the Federal clearinghouse could operate transfer facilities and a group plan. It could invest portions of its accumulated funds in deposit administration plans and with bank trust companies and purchase paid-up annuities for those retiring—much as some smaller funds use "split funding." A major difficulty with the purchase of paid-up insurance for active plan participants would be the frequent—indeed constant—separation

of short-term participants moving to individual company plans. However, insurance companies could participate on a deposit administration basis, with a guaranteed rate of earnings which would balance investments with corporate trustees without such an insurance. In this fashion, the traditional private institutions would handle the investment of the funds on a contract basis and some annuities might be purchased only when the participant retired, although some might prefer drawing benefits directly from the fund on a variable annuity basis.

The clearinghouse could assume all the responsibility except fund management. The Federal clearinghouse would entrust its funds to a Pension Finance Corporation which would receive fees for managing funds. The PFC would have authority to invest in Federal securities and guaranteed investments, State and local obligations, and private obligations and securities. Such an arrangement would combine many of the advantages of Government administration and private investment. The arrangement would overcome the objection that a potentially multibillion dollar fund managed by Government officials would give too much financial and political power to the Federal Government.

PEARL A. CHARLET:* PUBLIC POLICY AND PRIVATE RETIREMENT PROGRAMS—A SUGGESTION FOR CHANGE

Much of the current debate about such aspects of the private pension approach as funding, vesting, portability, etc., is in truth directed to an unspoken questioning of the need for a pluralistic system of retirement income, when both private and public systems appear to be directed toward the same goal. Such debate hides the real need for deliberation about the fundamentals of the present two-part system for old-age support.

The primary objectives of the two systems are necessarily different. The social security program is concerned with the social need of assuring a basic subsistence level of income for all older citizens. The fact that old age and survivors insurance is related to work earnings may actually be more of an "accident" resulting from the need to create acceptance of the program as an insurance system (rather than a need-related welfare program) than a deliberate design by the architects of the system. Certainly, the ultimate benefits received from the system by individuals bear little relationship to their payments into the system, since they are related to the individual's needs as society defines them. The private pension system is primarily a device for transferring earnings during the working years into income for support in old age. The private pension plan deals only with replacement of work-related income—it is precluded by its basic nature from concerning itself with the income problems of the non-working segment of the population.

Much of the criticism that has been directed at both public and private systems for old age support results from the confusion that

* Hewitt Associates.

arises in trying to adapt social aspirations to an economic device or vice versa. Each of the major systems has a role to play and a function to perform and neither system should be measured or judged in terms of the purposes of the other. Thus, we find that the private system is criticized for its failure to adhere to the social values of a public system and the public system is criticized for its failure to produce benefits of an "adequate" amount.

Three somewhat obvious conclusions can be drawn from the experience of the past 90 years. First, changing economic and social conditions of the past century have led to general acceptance of the desirability of organized systems for old age income maintenance. Second, the private movement of business and industry to provide income assistance for aging workers was a logical outgrowth of the employment of large numbers of workers in a single business enterprise which made earlier forms of providing for older workers impractical and obsolete. The same reason may be cited for initiation of retirement systems for employees of governmental units. Third, government has assumed the dominant role in the creation and maintenance of old age income systems. The original role of Government was limited to that of employer, then expanded via tax legislation to encourage other employers to establish programs, and finally, to the enactment of compulsory legislation requiring workers and employers alike to contribute to the financing of old age. A fourth related point, which may not be obvious, is that the effectiveness of permissive tax legislation as an incentive to the accumulation of retirement income is directly related to the impact of taxation on the income of individuals rather than on the income of business.

Old-age income flows from a number of organized sources: first, veterans' pensions; second, Old-Age Assistance; third, Old Age and Survivors' Insurance; fourth, public employee retirement systems; fifth, private retirement plans. There are a number of variants of private retirement plans: first, the corporate pension plan; second, the joint labor-management pension plan; third, association plans; fourth, self-employed plans; fifth, bond purchase plans; sixth, tax sheltered annuities; and other arrangements. It is readily apparent that most of the methods in use are for the primary purpose of simplifying the complicated tangle of rules and regulations covering the operation of qualified private retirement plans to the point they can be made economically attractive to small groups.

For society the most desirable arrangement, of course, would be for every older citizen to continue his preretirement standard of living out of his own resources accumulated during a working career of full and adequately compensated employment. The minimum that most Americans are willing to settle for is assurance that no one in our society is without the basic necessities of life, but fixing responsibilities for this minimum is another matter, as is identifying the need by classification or by individuals. In the absence of adequate and clear-cut private channels for satisfying minimum income needs of older citizens, Government has assumed the responsibility first at the local community level, later at the State level, and now largely through Federal sponsorship of programs in cooperation with State and local government.

Minimum income objectives are met chiefly through the mechanism of the OASDI program, supplemented where required by Old-Age Assistance payments and veterans' pensions. The OASDI program grants benefits on the basis of past work history without regard to financial need, while the other two programs are based entirely on need and have no relation to work history. Somewhere in between the ideal of a continued preretirement standard of living and the subsistence amount from Government programs is the "modest level" of living standard. This is a level that private retirement plans commonly attempt to reach when benefits are added to those of social security. Expansion of social security to provide a modest level of living would put increased pressures on the system and could destroy the balance mechanism to the point of endangering the basic floor of protection it now provides.

It appears that universal coverage of workers under private retirement plans that will insure a modest level of living in retirement is not likely to be achieved under the existing system of tax incentives for employer-sponsored retirement plans. To achieve this goal, we must look for avenues outside the employment relationship. We must seek some form of tax equality for individuals who work for corporations, for small employers, or for themselves. If public policy recognizes the accumulation of retirement income through the employment relationship as a social aim worthy of encouragement by special tax treatment, is not the accumulation of retirement income outside the employer-employee relationship equally worthy? A program for extending an incentive for building retirement income through private sources should be based on the following characteristics:

- (1) Universality. There must be one system that permits equal opportunity for all income producers to accumulate retirement income.

- (2) Equality. Because tax incentives produce a form of subsidy only for those who take advantage of them, they should be available to taxpayers on a relatively equal basis. Equality cannot be achieved through programs restricted to the employment mechanism.

- (3) Simplicity.

- (4) Flexibility of choice. Any universal mechanism must have a structural flexibility to allow a variety of objectives of individuals in vastly differing circumstances to be met through a wide choice of methods and rates of individual savings.

- (5) Economy. Maximum incentive for private retirement income accumulation will result only from a program that permits personal retirement objectives to be met at the lowest possible cost in time and money.

If the objectives of maintaining private systems of retirement income are judged worthy of encouragement through tax incentives and if the characteristics outlined above appear to be appropriate guidelines for achieving these objectives, it would seem that such an alternative source of old-age income should be thoroughly explored and appraised. There should be no hesitation about conducting such an exploration on the grounds that it represents a substantial departure of the present form of private retirement systems.

The conclusion of the President's Committee on Corporate Pensions that private pension plans should continue as a major element in the Nation's total retirement security program seems to reflect the majority opinion of people in Government and industry. The review which we have presented of the background, history, current status, and outlook for the future of the private retirement system appears to support this conclusion. However, there is one deficiency of the private retirement system which will not be overcome by the processes and changes in the system that might develop through forced action, such as have been proposed, or through voluntary action, such as might come in the normal future development of the system. This deficiency is the apparent inability of the private system, as presently structured, to achieve universality of coverage.

Thus in answer to the challenge of the Joint Economic Committee of the Congress of the United States to view these problems from a systemwide standpoint, it seems important to recognize this essential deficiency in the private system. If public policy should continue to provide appropriate incentives to private plan growth and by improving the basic soundness and equitable character of such plans, set a firmer foundation for their future development then it follows that devices which could correct this deficiency should be widely explored.

It is toward this objective that the Retirement Certificate Plan is suggested as an illustration of one alternative for consideration. This plan would permit each taxpayer to have a tax deferralment up to x percent of his gross annual income set aside for retirement, subject to some dollar maximum that would provide an appropriate level of living in retirement. The allowable tax deduction in any year would be the x percent of his gross annual income used to purchase Retirement Certificates by the individual or his employer or, if larger, the amounts contributed to a qualified plan by the employee or his employer in his behalf for both current and past service. Any difference between the employer's contribution and the x percent deduction could be taken by the tax payer as a deduction from gross income in the current year.

A system for holding funds in an acceptable depository would be required. The prime concern would be assurance that the tax-free funds would remain on deposit until the individual's retirement. An appropriate vehicle, for example, other than devices presently defined by legislation, might be a series of Retirement Certificates, bearing a maturity date coinciding with the taxpayer's 60th birthday, issued as evidence of the taxpayer's bona fide retirement saving. Such certificates could represent actual investment in government obligations, trust funds, insurance contracts, mutual fund shares, or special funds created for the purpose by responsible fiduciary institutions. The choice of investment would be at the option of the taxpayer or his employer in the case of company contributions. Funds would be paid out at any time after retirement at age 60 or later or at the death of the taxpayer but distributions should commence no later than age 70. Funds could also be released on proof of total and permanent disability without adverse tax consequences. Funds paid out on matured Retirement Certificates would be taxable as ordinary income when received.

It is interesting to note that such a basic change in the private system might in itself, by reason of its characteristics, effect many

of the other changes proposed as necessary for improvement of the private system. The nature of a change, such as adoption of a universal tax incentive with the tax privilege related directly to the individual taxpayer rather than limited to application through the employer-employee relationship, would appear to lead to the natural achievement of the goals of portability, vesting, and adequate funding without the need for specific mandatory regulation of private plans to achieve this result.

While this is not intended to presume a final answer, it is hoped that it will illustrate sufficiently the possibility of extending the private retirement system to produce the characteristic of universality to warrant further exploration and consideration by those concerned with the determination of public policy for the entire area of retirement income.

The objectives of such effort should be to develop a better way (1) to encourage individuals to accumulate funds for their own retirement, to encourage employers to assist their employees to provide for their own retirement income and to encourage employers to provide funds for their employees' retirement income; (2) to provide equity among all groups of taxpayers by extending to all the same opportunity to accumulate tax-deferred retirement funds; (3) to preserve freedom of choice and action for individuals and employees in meeting their own needs and preferences in the provision of retirement income.

ABSTRACTS OF PAPERS INCLUDED IN PART II: *The Aged Population and Retirement Income Programs* of OLD AGE INCOME ASSURANCE

LENORE EPSTEIN BIXBY, THE AGED POPULATION: ECO-
JANET H. MURRAY, NOMIC STATUS
ERDMAN PALMORE:

The major purpose of the 1963 Survey of the Aged was to measure the economic and social situation of a representative sample of all persons aged 62 and over in the United States in order to serve the detailed information needs of the Social Security Administration and of the Advisory Council on Social Security appointed in 1963. In considering adequacy of benefit levels and the retirement-test provisions, such information was needed not only for beneficiaries under the Old-Age, Survivors, Disability, and Health Insurance (OASDHI)¹ program, but also, on a comparable basis, for other aged persons.

The survey collection took place in early 1963, with most of the information relating to the year 1962. The Bureau of the Census was responsible for the sample design and the collection and tabulation of the data. The universe was composed of the civilian population aged 62 and over residing in the 50 States and the District of Columbia. Institutional residents were included. The basic interview unit for the survey was an "aged unit," defined as "a married couple, either member of which was aged 62 or older, or a nonmarried² person who was aged 62 or older." About 8,500 aged units consisting of about 11,000 aged persons was the expected sample size; altogether, useful questionnaires were completed for 7,515 aged units, a completion rate of about 88 percent.

Results from the survey were released through presentation of major findings to the Advisory Council in late 1963 and early 1964, a series of articles in the Social Security Bulletin, research notes, and papers given at meetings of professional societies by members of the staff of the Social Security Administration. Data from the 1963 survey were among those utilized in the congressional hearings that preceded passage of the 1965 Amendments to the Social Security Act, establishing health insurance for the aged as well as providing certain improvements in social security-insured status and benefit provisions.

Within the relatively homogeneous group of the aged, there is considerable diversity. Even in the one thing that elderly people have in common—their "age"—there is an extensive range. Of the 22 million persons aged 62 and over who were covered in the 1963 survey of the aged, 4 million were in the "youngest" group, the 62 to 64 age range,

¹ In this report, the current terminology "OASDHI," has been adopted, although the health insurance provisions were not enacted until 1965.

² Divorced, separated, widowed, or never married.

but 1 million were more than 20 years older. More women than men live to be very old; yet 45 percent of those aged 62 and over were men. Although old age is the period of retirement, more than a fifth were employed. Typically, the aged received benefits under the OASDHI program; yet more than a third did not receive such benefits.

The emphasis is on those aged 65 and over rather than those aged 62 and over, and comparisons are then made with the younger group. The more restricted aged population, those aged 65 and over, contained relatively more women, more widowed, more nonemployed, more OASDHI beneficiaries, and more persons with only an elementary school education than the more broadly defined group that includes those aged 62 and over.

With regard to the income of the aged, the survey revealed the low-income status of a majority of the aged. The median income of married couples aged 65 and over was found to be \$2,875, and for nonmarried men and women, \$1,130.

There is, of course, considerable income diversity within the older population. This is apparent when median incomes of the major population subgroups used in the survey are compared. These subgroups are: the OASDHI beneficiaries and nonbeneficiaries; the three age groups 62 to 64, 65 to 72, and 73 years and over; and the three marital groups (couples, nonmarried men, and nonmarried women). The group with the highest incomes were the nonbeneficiary married couples aged 62 to 64 with a median income of \$5,900 (\$2,950 per person). The nonbeneficiary women aged 73 and over had the lowest incomes, as half of these women had incomes of less than \$720. Earnings are important in providing a higher level of income for those in the younger age groups. OASDHI benefits are important in keeping income from falling to the lowest levels when, with advancing age, labor force participation is greatly curtailed.

Earnings decreased with advancing age for both men and women and for full- as well as part-time workers. It remained the pattern for each of these groups even when the number of weeks worked was held constant, as, for example, among full-time, year-around workers. Thus, not only did the aged work less with advancing age, but in addition they worked at jobs that were lower paid.

In the aggregate, including spouses under age 65, nearly two-fifths of the income of people aged 65 and over in 1962 was from retirement programs; 30 percent, social security benefits; 6 percent, railroad retirement and other Government programs; and 3 percent, private pensions. With the addition of veterans' benefits (4 percent) and public assistance (5 percent), it is evident that public programs provided nearly half of the income of the elderly (45 percent). Nevertheless, earnings were still an important source of income for the aged; they provided nearly a third of the income; income from assets—interest, dividends, and rents—provided almost half as much. Other miscellaneous sources, including small amounts of contributions from relatives not in the household, made up the remaining 5 percent.

Although money income is the customary and certainly the best single measure of the economic situation of any population group, the financial position is better understood if asset holdings and amount of debt are also known. The survey found that the median value of the asset holdings of couples aged 65 and over was \$11,180, and nonfarm

homes accounted for almost one-third of total assets. When equity in the home was excluded, the median value of the assets of married couples was \$2,950. Nonmarried men and women had less than one-third these amounts. Savings in the form of financial assets—deposits in banks and savings accounts, U.S. savings bonds, marketable securities, and collectable loans to others—may be especially important as a resource if serious illness strikes or other emergencies arise. More than two-fifths of total assets were in these forms, and more than half of these were liquid assets. Investment in other real estate and in a farm (the farm house was treated as part of the value of the farm) or business constituted the remainder, about a quarter, of asset holdings. Personal debts were very small in relation to assets—about 1 percent. Approximately 75 percent of the married couples and 90 percent of the nonmarried men and women reported no personal debt.

Asset holdings, especially financial assets, increased as income increased. Because of a difference in the rate of increase between home equity and financial assets, the relative importance of these forms was quite different between low- and high-income groups. In the low-income third, more than half the holdings were in home equity; only a fourth was in the form of financial assets. In the top-income third, half the assets were in the form of financial assets and only a fourth in home equity. In general, the proportion owning assets and the median amounts of these holdings declined with age.

A measurement was also devised which combined the data on the income and assets of the survey units, taking account of their age and sex. Called "potential income," it involved an arbitrary proration of assets, plus earned interest, over the expected life of the survey units. Although a statistical construct, it provided a means of grouping units with approximately the same economic position when both income and assets are considered and thus for showing how the size distribution of current money income would be altered when assets are taken into account this way.

Median incomes were increased about 10 percent when prorated assets excluded the owned home and more than 30 percent when equity in the owned home was included. The increases in the medians were appreciably greater for those aged 73 and over than for those aged 62 to 64 or 65 to 72, because of the shorter period of life expectancy for which assets were prorated. The findings showed that asset holdings were larger at the higher income levels than at the lower. Inequality in the distribution of income was greater for potential than for actual income.

The 1963 Survey of the Aged confirmed the fact that a substantial proportion of people aged 65 and over not in the labor force had income insufficient to meet their needs, even if they were receiving OASDHI benefits. In 1965, the amendments to the Social Security Act provided a 7-percent increase in benefits. This increase was not quite enough to restore the purchasing power lost since the previous raise, and made no significant improvement in the economic status of older people. The 1967 amendments provided an across-the-board benefit increase of 13 percent. It remains to be seen if living costs will be stabilized enough for this increase to upgrade living standards for the retired in the near future.

The 1963 survey findings highlighted an emerging problem; namely, the unfavorable situation of the large numbers taking the reduced

benefits, available to women since November 1956 and to men since August 1961, at ages 62 to 64. The majority of these early retirees had little income besides their small benefit. The problem of generally low-benefit levels is thus compounded for a group with many years ahead of them. It appears that a provision intended to ease the way for workers forced out of the labor force prematurely may be creating a new group of very poor people, and this trend is continuing. According to a newly developed statistical series,³ just over half of the men retiring in each year 1962-66 accepted an actuarial reduction in order to obtain a benefit before age 65. For women it was slightly above 60 percent in 1966, as it had been in 1960-62, but closer to 70 percent in 1963-65. The average monthly benefit awarded in 1966 to men who elected a reduction was barely \$84, compared to \$102 for men awarded a regular benefit (not reduced) payable immediately. For women the pattern was similar—\$64 for those electing a reduction, compared with \$80 for women awarded a regular benefit currently payable. Research is in progress on the reasons why so many workers choose early benefits in reduced amounts.

It has been customary to look to the characteristics of the younger beneficiaries for an indication of the shape of things to come. The oldest have always been in the worst financial plight. It has been assumed that, as older beneficiaries died and others entered retirement with years of higher wage levels behind them, beneficiaries as a group would be much better off. The small income advantage enjoyed by the age group 65 to 72 compared with the beneficiaries aged 73 and over raises a question concerning this assumption, even for those who retired on full-rate benefits. So, too, does the fact that for beneficiary couples the asset holdings were about the same for those aged 65 to 72 as for those older. True, persons under 73 and not yet retired had larger assets than those on the benefit rolls, but in this group, men aged 62 to 64 had less than those aged 65 to 72.

The proportion of the aged who are eligible for OASDHI benefits is still growing. As of July 1, 1967, an estimated 89 percent of persons aged 65 and over were either OASDHI beneficiaries or eligible for OASDHI but not retired. As even more persons become eligible, there will be fewer with cash incomes as pitifully small as those reported in 1962 by most nonbeneficiaries aged 73 and over. Moreover, rising earnings levels will be reflected in slowly increasing basic benefit levels, and the growing proportion of women eligible for retirement benefits should improve the situation of couples and nonmarried women alike, unless these gains are offset by the large numbers taking reduced benefits. Also, the almost universal availability of medicare to those over 65 should release some cash income and free for other living costs some assets that might otherwise have been held for medical emergencies. Relatively fewer persons should need public assistance.

If the labor-force participation rate for aged men continues downward, however, as it did between 1962 and 1966, the numbers of the aged with relatively high incomes may be decreased. There may be relatively fewer past age 65 who will do as well as the nonbeneficiary couples and nonmarried men aged 65 to 72 did in 1962. Although some

³ "Another Dimension to Measuring Early Retirement." Social Security Bulletin, December 1967.

of them received retirement benefits under other programs, the great majority were at work in 1962.

Coverage of private pension plans has grown sharply during the past 15 to 20 years. Aged persons with private pensions in addition to OASDHI benefits make out comparatively well. Their numbers are still small, however, in relation to the size of the aged population. Even 10 or 15 years from now, it is expected that no more than 25 to 30 percent of the aged will be drawing income from private pensions.

Thus, there seems little doubt that OASDHI will remain the major source of retirement income. The level of benefits under the program will continue to determine the level of well-being of the retired.

A new survey to be conducted by the Social Security Administration this year will provide by early 1969 a general review of the economic situation in 1967 of the population aged 65 and over.

ELIZABETH M. HEIDBREDER, OLD-AGE INCOME PROGRAMS
WALTER KOLODRUBETZ,
ALFRED M. SKOLNIK:

The American people over the years have developed a variety of programs to assure a continuing money income for older people who no longer have an income from work. This network of income maintenance programs has to be considered as a whole, for it is the combination of protection which people have and the cumulative effects of the combined arrangements which are significant. Private pension plans cannot reasonably be considered separately from the public program; for those who have private plan coverage, it is the combination of social insurance with the supplementary protection of the private plan which constitutes the "retirement system."

Primary emphasis in this report is on the old-age income-maintenance aspects of these public and private programs, but some attention is also given to disability and survivor provisions. Health insurance programs for the aged are included because of the obvious impact that medical bills have upon the income status of the aged.

Most of the program descriptions refer to provisions as of the end of 1967. The provisions of the 1967 amendments to the Social Security Act are included in the discussion of the old-age, survivors, disability, and health insurance program.

The Federal social security program is today the major source of retirement income for aged Americans and the major potential source of retirement income for the entire working population. It is also an important source of income for disabled workers and for survivors of workers. Any discussion of pension programs must, therefore, revolve around this basic Federal social insurance program—old-age, survivors, disability, and health insurance (OASDHI), not only because of the large aggregate impact but also because of its importance to the individual worker. Private retirement plans and separate public programs have considerable effect on income maintenance for sizable segments of the population and will also be examined in this report.

At the end of June 1967, 72.1 million persons or about 93 percent of the 77.6 million in paid employment had their major job in employment covered by the contributory OASDHI program. Of these 72.1

million, roughly 1.9 million—mainly State and local government employees—had not actually been brought under the program, but were eligible for OASDHI coverage under the special voluntary coverage provisions applying in certain employment areas. For the most part, the 5.5 million workers not covered in June 1967 were in one of two major categories: (1) Government workers—primarily Federal—who are covered under their own staff retirement system (about 2.5 million); and (2) persons who were irregularly employed at the time or had earnings that did not meet certain minimum requirements (about 3 million). The latter include many who will eventually qualify through additional earnings or as the wives of insured workers.

The above figures on OASDHI coverage include several million workers who are also covered under other governmental compulsory retirement systems. About three-quarters of a million workers are under the contributory railroad retirement system which is closely coordinated with the OASDHI system. About 3 million military personnel in the Armed Forces are covered by their own noncontributory system as well as by OASDHI. More than 6 million State and local government employees are covered by contributory staff retirement systems, of whom almost three-fourths are also covered by OASDHI.

Thus, today all but 4 percent of the people at work are earning public retirement protection for the future and many in this 4 percent will earn protection as they move to other jobs.

The nearly universal coverage of OASDHI assures workers that their protection will follow them whenever they shift to one job from another. Earnings with different employers and in different types of employment are combined and given full credit toward the computation of an individual's retirement benefits.

The impact of this continuous coverage and of complete portability of credits earned is reflected in the fact that 92 percent of the persons now turning age 65 are estimated to be eligible for monthly cash benefits under the program; and 95 percent of all children and their mothers can count on monthly survivors' insurance benefits if the family breadwinner dies.

Supplementing the coverage of the public retirement system are private retirement plans in industrial and nonprofit employment. At the beginning of 1967, about 26 million wage and salary workers, or over a third of those who were covered by OASDHI, were also covered by private pension or deferred profit-sharing plans designed to build on the Federal social insurance system and provide additional benefits.

Two other sources of income during old age are veterans' benefits and public assistance. For aged veterans with service-connected disabilities, compensation is paid without regard to other income or resources. For aged veterans with non-service-connected disabilities, pensions are payable under an income test. Public assistance is available under the various State laws for those aged needy persons who meet a means test. The 1963 Survey of the Aged shows that of the aged men receiving OASDHI benefits, 12 percent were also receiving veterans' benefits and 7 percent public assistance. Among women beneficiaries, the respective ratios were 5 and 8 percent.

Largely as a result of the extension and maturing of the OASDHI program in recent years, the number of the aged (65 and over) who do not receive any public retirement or other income maintenance benefits is relatively small. The Survey of the Aged shows that in 1962, 89 percent of married couples aged 65 and over and 80 percent of non-married persons had income from social insurance, public assistance, or veterans' benefits. Since then, the Social Security Act has been amended to provide for a partial blanketing in of certain people aged 72 and over who had insufficient covered employment to qualify for regular social security benefits.

Table 1 shows the estimated public retirement benefit status of 19.4 million persons 65 and over as of July 1, 1967. By far the largest public benefit program was OASDHI. Almost 16 million aged persons were receiving social security payments. Another 1.3 million of the aged were eligible for OASDHI but still had substantial income from earnings and did not meet the "retirement test" which is required to receive social security retirement benefits. Only about 1.2 million aged persons, or 6 percent of the total, were not eligible for any public retirement benefit. Of these, 0.9 million were recipients of public assistance.

TABLE 1.—ESTIMATED PUBLIC RETIREMENT BENEFIT STATUS OF THE POPULATION AGED 65 AND OVER,
JULY 1, 1967
[In millions]

Beneficiary status	Persons aged 65 and over
Total aged population ¹	19.4
OASDHI beneficiaries ²	15.9
Eligible for OASDHI but not retired.....	1.3
Receiving other public retirement benefits ³	1.0
Not eligible for any public retirement benefits ⁴	1.2

¹ Office of the Actuary, Social Security Administration.

² Cash benefit status.

³ Government employee or railroad retirement beneficiaries not receiving OASDHI.

⁴ Includes 900,000 recipients of old-age assistance.

Private retirement plans in 1967 were estimated to be paying pension to more than 3 million persons, of whom perhaps 2¾ million were age 65 and over. These annuitants, plus their wives, are estimated to comprise about 18 percent of the entire population aged 65 and over. It is anticipated that over the next dozen years the proportion of the aged with dual protection—from both OASDHI and private pensions—may rise to 25 or 30 percent.

The tremendous growth in coverage and beneficiaries under the various public and private programs is shown in tables 2 and 3. The evolution of the dual public-private system is explored in this report with brief analysis of the most important features which characterize the major components. Special emphasis is placed on the supplementary private retirement plans because they illustrate the wide variety of arrangements that are available under a nongovernmental system.

TABLE 2.—COVERAGE UNDER MAJOR TYPES OF RETIREMENT PROGRAMS ¹

[In thousands]

Year	OASDHI ²			Railroad retirement	Federal civil service ³	Armed Forces ⁴	State and local government ⁵	Private plans
	Total	Wage and salary	Self-employment					
1940.....	30,400	30,400	-----	1,177	675	472	1,400	4,100
1945.....	38,900	38,900	-----	1,682	2,802	12,295	1,800	6,400
1950.....	40,400	40,400	-----	1,360	1,670	1,483	2,600	9,800
1955.....	56,700	56,700	-----	1,222	2,000	2,964	3,400	15,400
1960.....	59,300	51,400	8,000	930	2,138	2,507	4,400	21,200
1965.....	66,300	59,700	6,600	763	2,338	2,685	5,800	25,400
1966.....	69,200	62,400	6,800	747	2,450	3,126	6,400	26,400

¹ For OASDHI, State and local government, private pension plans, end of year; for railroad retirement programs, average employment fiscal years; for Federal retirement systems, number as of June 30.

² Coverage in effect, including State and local employees for whom coverage has been arranged, railroad employees and all members of Armed Forces.

³ Active employees covered by the civil service retirement system.

⁴ The Army, Navy, Marines, and Air Force plus the Coast Guard.

⁵ Estimated by the Social Security Administration.

Source: Social Security Bulletin, June 1967, table Q-2; Railroad Retirement Board, 1966 Annual Report; Civil Service Commission, "Statistical Abstract of the United States, 1966"; Skolnik, Alfred M. and Joseph Zisman, "Growth in Employee-Benefit Plans, 1954-57," Social Security Bulletin, March 1959; Kolodrubetz, Walter W., "Growth in Employee-Benefit Plans," Social Security Bulletin, April 1967; and unpublished data.

TABLE 3.—RETIREMENT BENEFICIARIES UNDER MAJOR TYPES OF PROGRAMS ¹

[In thousands]

Year	OASDHI ²	Railroad retirement ²	Federal Government			State and local government	Private plans
			Civil service system	Armed Forces and other Federal			
				Total	Armed Forces ³		
1940.....	77.2	102.0	47.4	33.4	(1)	113	160
1945.....	591.8	129.1	62.5	38.6	(1)	155	310
1950.....	1,918.1	174.8	111.0	73.3	(1)	222	450
1955.....	5,443.2	329.2	164.9	105.2	98.3	335	980
1960.....	10,309.7	444.0	263.3	178.9	168.4	535	1,780
1965.....	13,918.2	498.4	359.4	387.9	373.4	735	2,750
1966.....	14,573.5	525.1	400.1	432.2	416.5	785	3,110

¹ Private plans include survivor and disabled beneficiaries. OASDHI totals include disabled beneficiaries and their dependents when they attain age 65. All other plans exclude survivor or disabled beneficiaries. For OASDHI, average monthly number; for railroad retirement programs and public employee retirement systems, number on rolls June 30 for private pensions, number of beneficiaries end of year.

² Includes dependents of retired workers.

³ The Army, Navy, Marines, and Air Force.

⁴ Not available.

Sources: Social Security Bulletin, Statistical Supplement, 1965, table 7; Dales, Sophie R. "Benefits and Beneficiaries Under Public Employee Retirement Systems, Calendar Year 1965," (Research and Statistics Note No. 10), Social Security Administration, May 1, 1957; Skolnik, Alfred M. and Joseph Zisman, "Growth in Employee-Benefit Plans, 1954-57," Social Security Bulletin, March 1959; Kolodrubetz, Walter W., "Growth in Employee-Benefit Plans," Social Security Bulletin, April 1967; U.S. Committee on Retirement Policy for Federal Personnel, Retirement Policy for Federal Personnel Jan. 22, 1954, 83d Cong., 2d sess., S. Doc. 89; and unpublished data.

There have been tremendous advances in the public and private sectors with respect to providing arrangements for economic security in old age. More than nine out of 10 workers are currently building up retirement protection through OASDHI and among those already aged, 89 percent are receiving or could receive OASDHI benefits. More than one-third of those covered by OASDHI are also building up protection under private pension plans and roughly one-fifth of the aged have a private pension income to supplement their OASDHI monthly checks.

Despite the rapid growth in private plan coverage during the past 20 years, continuation of the growth pattern is uncertain. The most rapid gains to date have been in those industries that lend themselves to coverage most readily. The manufacturing, transportation, public utilities, and mining industries, which account for less than half the employment in private nonfarm establishments, have about 80 percent of all workers now covered by retirement plans. These industries are characterized by large-scale operations and strong unions. It is estimated that from one-half to two-thirds of the workers in these industries are covered by private retirement plans.

This is in sharp contrast with the situation in the wholesale and retail trade and service industries which have many small employers and high rates of employee turnover. Probably less than one-fifth of the workers in these industries are covered.

The groups left uncovered so far represent in large part those whose characteristics are least amenable to incurring any long-term obligations involved in private pension plans. The voluntary nature of the coverage makes it dubious that many small, marginal, and seasonal employers will seek pension plans.

Even with the continued growth of coverage, there remains the question of how many persons will actually build up sufficient credits with a single employer to qualify for pensions. Many factors tend to prevent persons with retirement credits from eventually qualifying for private pensions. The high frequency of job turnover, age and long-service requirements for benefit eligibility, and lack of vesting provisions or restrictions on such provisions combine to limit the number of persons who will actually receive a private pension in old age.

In addition, adverse economic conditions in individual industries or firms may result in the curtailment of benefit rights or in the reduction of the resources that could be devoted to making the plan financially solvent. There is also much uncertainty as to the rights of individuals in case of layoffs, abandonment of the plan, sale or merger of the business, and bankruptcy of the employer.

Over the next dozen years, the proportion of the aged with dual protection—from both OASDHI and private pensions—might rise to 25 or 30 percent, compared with 18 percent today. There is no real likelihood in the foreseeable future, however, that a majority of older people will become eligible for supplemental pensions. Too much of the problem of income maintenance for old age is a problem of survivors' insurance for widows which is seldom covered by private pension plans; too many jobs are difficult to include in private pension plans; and very early vesting would be required to supply protection to the large number of workers that change jobs frequently.

These are the reasons that the President's Committee on Corporate Pension Funds stressed that the public OASDHI program is the basic instrument for assuring adequate retirement income to workers. In addition to universality of coverage and portability of credits earned, the largest public program has the advantage that its financing rests on the entire economy rather than on a single firm or industry. The scope of public program protection is also broader in most cases than in the private plans—it includes cash benefits for survivors in the case of the death or disability of an insured worker, and virtually all aged

persons 65 and over (whether retired or not) have the protection of medicare. Furthermore, a social insurance program can be adjusted with relative ease to rising earnings levels and to changing standards of living, whereas private plans find it difficult to meet the additional costs invariably involved in adjusting benefits for those on the rolls.

Although private pensions cover fewer workers than the public system, they are a significant element in the Nation's total retirement program. For OASDHI beneficiaries in receipt of such pensions, the supplementary benefit means the difference between a less than modest and a reasonably comfortable level of living. This is especially the case with respect to career employees and regularly employed members of the labor force with average and above-average earnings.

In addition, private plans offer a flexibility which is not available under a public program. This flexibility permits employers to adapt their plans according to special circumstances, needs, and financial ability. For example, in some occupations and in some industries special types of provisions, such as lower retirement ages, may be desirable. In other instances, retirement provisions may be used to attract and hold good employees, to reduce labor turnover and its attendant costs, and to make it easier to retire those who are unproductive.

This summary of the scope and complexity of our dual public-private retirement system has been necessarily brief. Although the main outlines are fairly clear, adjustment of its components to the emerging needs of our society is a continuous process. The type of review and analysis of the system included in this compendium is a vital part of the adjustment process. We, therefore, welcome the opportunity extended by the Joint Economic Committee to contribute to this compendium.

BENJAMIN BRIDGES, JR.: CURRENT REDISTRIBUTIONAL EFFECTS OF OLD-AGE INCOME ASSURANCE PROPOSALS

Aged persons have a number of possible sources of purchasing power: Earnings, prior savings, personal gifts, private charity; and public assistance, social security pensions, and other pensions. In addition, they enjoy tax benefits and are aided under a number of Government expenditure programs directed expressly toward meeting their needs. This paper does not deal with all of these old-age income sources but only with the collective old-age money income transfer programs (public pensions, private group pensions, and public assistance) and with income tax concessions for the aged.

The programs dealt with here can be examined from different economic viewpoints (i.e., various of their economic aspects can be stressed). Each program has a significant element of current redistribution or current transfer and in addition most have one or more of the following aspects: Insurance, savings, deferred compensation, and lifetime redistribution. This paper does not deal with all of these characteristics but only with the element of current redistribution. It presents estimates of the distributions of current benefits, taxes, and net benefits (benefits minus taxes) under old-age income pro-

grams among family groups. Families are classified into groups according to relative economic status and age of family head. In other words, estimates are presented of the distributions of gross and net increases and decreases in currently spendable income resulting from the operation of the various old-age income programs.

It is recognized that the programs dealt with here differ in a number of significant ways. Despite their differences some of these programs often are considered as possible alternatives for others in this group. For example, alternative mixes of social security and old-age assistance benefit increases are being considered as means of reducing poverty among the aged. Increases in social security benefits and income tax concessions for the aged likewise can be considered as alternative ways of increasing the incomes of retired workers. In order to provide bases for choices among alternatives, it is useful to analyze these programs consistently from each of the relevant viewpoints. In this paper I have tried to analyze the current redistribution effects of these various programs in a consistent manner; analysis of the other important aspects of these programs is beyond its scope.

It should be emphasized that the distributional estimates presented here are just that, estimates. They are subject to a number of conceptual and data limitations. For example, economists' knowledge concerning the incidence of some taxes is quite sparse. Moreover, the survey data used in this study contain sizable response and sampling errors. In view of the conceptual and data problems that have not yet been resolved, this paper should be considered an interim report. We at the Social Security Administration have underway several research projects that should result in considerably improved current redistribution estimates. It is hoped, however, that this paper will stimulate others to make further contributions to solving some of these conceptual and data problems. No policy recommendations are offered in this report. Its primary purpose is to present an analysis that should prove helpful in evaluating certain aspects of the equity or fairness of various old-age income programs.

In these tabulations the measure of relative economic status used is the welfare ratio. The welfare ratio of a family is the ratio of its before tax-before transfer income (numerator) to its basic income needs (denominator). The numerator of this ratio is before tax-before public transfer income as reported in the Bureau of Labor Statistics Survey of Consumer Expenditures. Before tax-before public transfer income is BLS before-tax money income minus income from public-transfer programs. The denominator of this ratio is the Social Security Administration's low-cost level income. These low-cost level cutoffs vary (and by sizable amounts) with family size and composition (which are assumed to reflect family income needs). These cutoffs are similar in nature to SSA's poverty or economy-level income cutoffs, but are about 30 percent higher than the poverty cutoffs.

Welfare ratios are used in this paper as ordinal measures of economic status. No allowance was made for the possibility that at higher levels of welfare the relative income requirements of the various family types might differ significantly from those at lower levels of welfare. The average size of aged families (those with heads aged 65 or over) is 1.8 persons; the average size of nonaged families (those with heads under 65) is 3.4 persons. Among aged and nonaged families

and especially among the latter there is considerable variation in family size and hence in income needs. For example, the low-cost-level income of a one-person nonfarm family is approximately \$1,800; for the seven-person nonfarm family with five children under age 18 it is approximately \$6,200. Aged families receive most of the transfer payments under the old-age income assurance programs but nonaged families pay most of the old-age income assurance program taxes. It can be seen that the differences in income needs between aged and nonaged and between transfer recipients and taxpayers are quite significant and that the differences in income needs within these groups are also quite significant. Thus it is important to adjust for these differences and the use of welfare ratios is one way of making such adjustments.

TABLE 1.—DOLLAR EQUIVALENTS OF WELFARE RATIOS FOR DIFFERENT NONFARM FAMILIES WITH MALE HEADS, 1960-61 AVERAGES

Welfare ratio	1-person family with head under age 65	4-person family with 2 children under age 18	7-or-more-person family with 5 children under age 18
\$0.50	\$960	\$1,939	\$3,094
.75	1,440	2,908	4,641
1.00	1,920	3,877	6,188
1.50	2,880	5,816	9,282
2.00	3,840	7,754	12,376
2.50	4,800	9,693	15,470
3.50	6,720	13,570	21,658

It is assumed that there is no shifting of transfer payments. Some shifting of transfers occur, but our knowledge about its nature and extent is so limited that in this study it seems best to abstract from this shifting problem. The shifting of transfer payments takes various forms. Transfer payments cause reductions in earnings via reduction in work effort, reduction in contributions from relatives, and reduction in other transfer payments (e.g., higher social security benefits may result in lower public assistance payments). These types of shifting generally tend to reduce the progressivity of transfer payments. The tax incidence assumptions used in this paper are fairly similar to those used in most other tax burden studies.

The trust fund programs analyzed in this paper (social security, Government and railroad pensions, and private pensions) cause aggregate demand changes. Accordingly, it was assumed that the Federal Government changes its general taxes proportionately in order to offset the inflationary or deflationary effects of these programs. We denote the earnings tax or contribution as the "unadjusted tax or contribution." The tax or contribution plus the personal income tax paid on the pension income minus the decrease in Federal personal income resulting from backward shifting of employer taxes or contributions plus the change in Federal general tax revenue resulting from the offsetting proportional change in Federal tax rates is the "adjusted tax or contribution." We denote benefits minus unadjusted tax or contributions as "unadjusted net benefit" and benefit minus adjusted tax or contribution as "adjusted net benefit." For the trust fund programs (social security, government civilian, and railroad pensions, and private pensions) this paper analyzes the distributional effects of both unadjusted and adjusted taxes or contributions and net benefits. It might be argued that the increase in the balance of the trust funds should be allocated

among families by employee contributions, by benefits, or by some other series. The property rights of individuals in these trust funds are often quite uncertain; thus, the allocation of these fund increases among families becomes extremely difficult both conceptually and empirically.

In this paper, the tax rate is the ratio of an economic status class' tax to its adjusted before tax-before transfer income (or AGI); benefit rate is the ratio of a class' transfer payment or tax benefit to its adjusted before tax-before transfer income (or AGI); net benefit rate is the ratio of a class' benefit minus tax to its adjusted before tax-before transfer income (or AGI). A tax is progressive, proportional, or regressive when the tax rate increases, remains constant, or decreases, respectively, as the welfare ratio (or AGI) increases; a benefit is progressive, proportional, or regressive when the benefit rate decreases, remains constant, or increases, respectively, as the welfare ratio (or AGI) increases; the net benefit is progressive, proportional, or regressive when the net benefit rate decreases, remains constant, or increases, respectively, as the welfare ratio (or AGI) increases.

TABLE 2.—AMOUNTS OF BENEFITS, TAXES OR CONTRIBUTIONS, AND NET BENEFITS, BY PROGRAM AND AGE OF HEAD, 1960-61 AVERAGES

[In millions of dollars]

Program and age of head	Benefit	Unadjusted tax or contribution	Adjusted tax or contribution	Unadjusted net benefit	Adjusted net benefit
Public assistance:					
All families.....	3,318	3,318	3,318	0	0
Head under age 65.....	2,343	2,854	2,854	-511	-511
Head aged 65 or over.....	975	464	464	511	511
Veteran and military programs:					
All families.....	4,610	4,610	4,610	0	0
Head under age 65.....	3,126	3,932	3,932	-806	-806
Head aged 65 or over.....	1,484	678	678	806	806
Social security:					
All families.....	11,873	12,126	11,873	-253	0
Head under age 65.....	2,897	11,328	11,050	-8,431	-8,153
Head aged 65 or over.....	8,976	798	823	8,178	8,153
Government civilian and railroad pensions:					
All families.....	2,981	4,911	2,981	-1,930	0
Head under age 65.....	873	4,631	2,904	-3,758	-2,031
Head aged 65 or over.....	2,108	280	77	1,828	2,031
Private pensions:					
All families.....	1,762	5,437	1,762	-3,675	0
Head under age 65.....	449	5,036	1,785	-4,587	-1,336
Head aged 65 or over.....	1,313	401	-23	912	1,336
Combined programs:					
All families.....	24,544	30,402	24,544	-5,858	0
Head under age 65.....	9,688	27,781	22,525	-18,093	-12,837
Head aged 65 or over.....	14,856	2,621	2,019	12,235	12,837

There are various ways of comparing the progressivity of different taxes or benefits. By looking at cumulative percentage distributions by welfare classes, one can easily determine whether benefit or tax A is on the average (1) more progressive than B; (2) less progressive than B, or (3) not clearly either more or less progressive than B. For example, let us examine the upward cumulative percentage distributions of tax A and tax B. If for every welfare interval (under 0.50, under 0.75, etc.) A's cumulative percentage is greater than (is less than) B's cumulative percentage, then tax A is less (more) progressive than tax B. If A's cumulative percentage is greater than B's for some welfare interval and less than B's for others, then tax A on the average is not clearly either more or less progressive than tax B.

Comparison of transfer programs

Public assistance benefits are sharply progressive; social security, and government employee-railroad worker benefits are progressive throughout the welfare scale; those for veterans and military personnel are progressive from zero to 2-2.49 and irregular above 2; and those paid under private pensions are progressive from zero to 1.50-1.99 and irregular above 1.50. Benefits range from most to least progressive in the following order: (1) public assistance; (2) and (3) social security and payments to government civilian workers and railroad employees; (4) benefits for veterans and the military; and (5) private pensions.

TABLE 3.—CUMULATIVE PERCENTAGE DISTRIBUTIONS OF BENEFITS, BY PROGRAM, WELFARE RATIO INTERVAL, AND AGE OF HEAD, 1960-61 AVERAGES

[In percent]

Welfare ratio interval and age of head	Public assistance	Veterans and military programs	Social security	Government civilian, and railroad pensions	Private pensions	Combined programs
All families:						
Under 0.....	0.7	0.6	1.0	2.3	0	1.0
Under 0.49.....	82.8	36.8	50.1	54.0	15.0	50.0
Under 0.74.....	88.5	45.9	61.6	63.3	24.7	59.9
Under 0.99.....	93.3	52.1	69.8	67.5	35.2	66.9
Under 1.49.....	97.2	67.4	80.6	75.3	50.2	77.6
Under 1.99.....	98.2	80.0	87.6	84.6	58.7	85.2
Under 2.49.....	99.5	85.4	92.6	90.5	70.8	90.4
Under 3.49.....	100.0	94.4	97.1	96.0	78.7	95.6
Total.....	100.0	100.1	99.9	100.0	99.9	100.0
Head under age 65:						
Under 0.....	.1	.2	.7	.5	0	.5
Under 0.49.....	78.4	22.4	34.4	33.0	4.8	39.7
Under 0.74.....	84.7	30.8	44.5	42.5	9.4	48.0
Under 0.99.....	91.1	37.5	54.5	50.4	16.0	55.7
Under 1.49.....	96.6	56.6	69.3	59.7	33.7	69.3
Under 1.99.....	98.0	71.5	81.5	72.9	49.7	80.0
Under 2.49.....	99.5	78.8	90.2	81.2	76.4	87.3
Under 3.49.....	100.0	91.7	96.2	94.4	91.1	95.3
Total.....	100.0	99.9	100.0	99.9	100.0	100.0
Head aged 65 or over:						
Under 0.....	0	1.4	1.2	3.0	0	1.3
Under 0.49.....	93.3	67.0	55.2	62.6	18.4	56.7
Under 0.74.....	97.7	77.5	67.2	71.8	29.9	67.6
Under 0.99.....	98.6	82.7	74.8	74.5	41.8	74.2
Under 1.49.....	98.6	90.0	84.4	81.7	55.9	83.0
Under 1.99.....	98.6	97.7	89.8	89.4	61.9	88.6
Under 2.49.....	99.7	98.8	93.6	94.3	69.0	92.4
Under 3.49.....	100.0	99.5	97.6	96.6	74.6	95.7
Total.....	100.0	100.0	100.1	100.0	100.0	100.0

For nonaged families public assistance benefits are sharply progressive; social security benefits are progressive throughout the welfare scale; veterans and military pensions are progressive in the zero to 2-2.49 range and irregular above 2; benefits for government civilian workers and railroad employees are progressive from zero to 1-1.49 and irregular above 1; and private pension benefits are progressive from zero to 0.75-0.99 and irregular above 0.75. The following order develops when these benefits are ranked from most progressive to least progressive: (1) public assistance, (2) social security, (3) government civilian-railroad, (4) veteran-military, and (5) private pensions.

For aged families public assistance benefits are sharply progressive; social security benefits are progressive throughout the welfare scale; government-railroad and veteran-military benefits are progressive over most of the welfare scale; private pension benefits are progressive from zero to 1.50-1.99 and irregular above 1.50. The rank of aged benefits from most to least progressive is as follows: (1) public assistance, (2) veteran-military, (3) and (4) government-railroad and social security, and (5) private pension. Note that for the nonaged, veteran-military benefits are fourth most progressive and for the aged they are second most progressive.

Unadjusted taxes paid by government and railroad employees are progressive except at the very top of the welfare scale. Unadjusted social security taxes, on the other hand, are roughly proportional over the lower part of the scale and regressive over the upper part and veteran-military and public assistance taxes are regressive over the lower part and over the upper part they are progressive. Private pension contributions are regressive over the lower fourth of the scale, progressive over the next fourth, and proportional over the upper half of the scale. When ranked from most to least progressive over the lower half of the welfare scale (under 1.50) the taxes or contributions fall in the following order: (1) government civilian-railroad systems, (2) veteran-military systems, (3) private pensions, and (4) and (5) social security and public assistance. Ranking the taxes or contributions over the upper half of the scale (1.50 and over) produces the following most-to-least progressive pattern: (1) veteran-military, (2), (3), and (4) unadjusted private pension, unadjusted government civilian-railroad, and public assistance, and (5) unadjusted social security tax. The latter is clearly the most regressive of these five taxes and contributions.

TABLE 4.—CUMULATIVE PERCENTAGE DISTRIBUTIONS OF UNADJUSTED TAXES OR CONTRIBUTIONS, BY PROGRAM, WELFARE RATIO INTERVAL, AND AGE OF HEAD

[In percent]

Welfare ratio interval and age of head	Public assistance	Veterans and military programs	Social security	Government civilian, and railroad pensions	Private pensions	Combined programs
All families:						
Under 0.....	0.1	0.1	0.1	0	0.1	0.1
Under 0.50.....	3.4	1.7	2.3	.1	2.1	2.0
Under 0.75.....	5.6	3.0	5.0	.6	3.7	3.9
Under 1.00.....	8.9	5.1	10.4	2.6	6.6	7.6
Under 1.50.....	19.7	13.6	26.2	13.2	16.9	19.9
Under 2.00.....	34.8	27.2	46.8	30.3	33.8	37.6
Under 2.50.....	48.8	40.9	63.8	46.9	49.3	53.4
Under 3.50.....	67.7	60.7	84.5	71.3	71.7	74.7
Total.....	99.9	99.9	100.0	99.9	100.1	100.0
Head under age 65:						
Under 0.....	.1	.1	.1	0	0	0
Under 0.50.....	1.7	.9	1.4	.1	1.0	1.0
Under 0.75.....	3.3	1.8	3.8	.6	2.3	2.6
Under 1.00.....	6.6	3.9	9.1	2.6	5.2	6.2
Under 1.50.....	17.7	12.6	25.1	13.3	15.5	18.7
Under 2.00.....	34.0	27.1	46.3	30.7	33.2	37.2
Under 2.50.....	49.0	41.7	63.6	47.8	49.5	53.7
Under 3.50.....	69.2	62.9	84.6	72.0	72.5	75.5
Total.....	100.0	99.9	100.0	100.0	100.0	99.8
Head aged 65 or over:						
Under 0.....	0	.1	.4	0	.3	.2
Under 0.50.....	14.3	6.6	15.2	.4	15.0	11.2
Under 0.75.....	20.1	10.3	21.7	.8	19.6	15.9
Under 1.00.....	23.8	12.8	27.7	1.9	22.6	19.6
Under 1.50.....	32.2	20.3	41.3	10.8	32.5	29.6
Under 2.00.....	40.4	28.4	54.0	24.0	39.6	39.5
Under 2.50.....	48.0	36.4	66.4	33.6	46.0	48.7
Under 3.50.....	58.8	48.1	83.0	61.8	60.2	63.9
Total.....	99.9	99.9	100.0	100.0	100.1	99.9

After adjustment, the government-railroad tax is progressive except at the very top of the welfare scale; the social security tax is roughly proportional over the lower part of the scale and regressive over the upper part; the private pension contribution is regressive over the lower fourth of the scale, progressive over the next fourth, proportional over most of the upper half, and regressive at the very top.

TABLE 5.—CUMULATIVE PERCENTAGE DISTRIBUTIONS OF ADJUSTED TAXES OR CONTRIBUTIONS BY PROGRAM, WELFARE RATIO INTERVAL, AND AGE OF HEAD

[In percent]						
Welfare ratio interval and age of head	Public assistance	Veterans and military programs	Social security	Government civilian, and railroad pensions	Private pensions	Combined programs
All families:						
Under 0.....	0.1	0.1	0.1	0	-0.1	0.1
Under 0.50.....	3.4	1.7	2.4	-0.5	3.2	2.1
Under 0.75.....	5.6	3.0	5.1	-1.1	5.5	4.2
Under 1.00.....	8.9	5.1	10.4	2.0	10.3	8.2
Under 1.50.....	19.7	13.6	26.1	14.1	25.2	21.4
Under 2.00.....	34.8	27.2	46.5	33.5	48.7	39.9
Under 2.50.....	48.8	40.9	63.3	51.4	67.7	56.0
Under 3.50.....	67.7	60.7	83.8	77.8	93.8	77.3
Total.....	99.9	99.9	99.8	99.8	99.8	99.9
Head under age 65:						
Under 0.....	1	1	1	0	-1	0
Under 0.50.....	1.7	0.9	1.5	0.1	1.6	1.2
Under 0.75.....	3.3	1.8	3.9	0.6	3.8	3.0
Under 1.00.....	6.6	3.9	9.2	2.8	8.5	7.0
Under 1.50.....	17.7	12.6	25.0	14.7	22.5	20.3
Under 2.00.....	34.0	27.1	46.0	33.9	46.1	39.6
Under 2.50.....	49.0	41.7	63.2	52.0	65.2	56.3
Under 3.50.....	69.2	52.9	84.1	77.4	90.6	78.1
Total.....	100.0	99.9	99.9	100.3	100.0	99.9
Head aged 65 or over:						
Under 0.....	0	1	4	0	0	2
Under 0.50.....	14.3	6.6	15.1	-16.0	-96.4	12.5
Under 0.75.....	20.1	10.3	21.7	-20.0	-100.0	17.7
Under 1.00.....	23.8	12.8	27.5	-21.3	-110.7	21.9
Under 1.50.....	32.2	20.3	40.7	-2.6	-164.3	33.3
Under 2.00.....	40.4	28.4	53.0	28.1	-142.9	43.8
Under 2.50.....	48.0	36.4	65.0	45.4	-121.5	53.5
Under 3.50.....	58.8	48.1	81.0	110.7	-132.2	69.1
Total.....	99.9	99.9	99.7	100.0	199.9	100.1

¹ Total contribution is negative.

In the lower half of the scale, a most-to-least-progressive ranking lists the taxes and contributions in this order: (1) government-railroad, (2) veteran-military, and (3), (4), and (5) private pension, public assistance, and social security. An upper-half ranking results in the following realignment: (1) veteran-military, (2) and (3) government-railroad and public assistance, (4) social security, and (5) private pension. Unlike the case before adjustment, the private pension contribution is the most regressive.

Public assistance and veteran-military net benefits are progressive throughout the welfare scale; government-railroad net benefits, whether adjusted or unadjusted, and the unadjusted private pension net benefit are progressive except at the very top of the scale; the adjusted private pension net benefit and the adjusted or unadjusted social security net benefit are progressive over the lower part of the scale, proportional over most of the upper part, and regressive at the very top.

TABLE 6.—RATIO OF ADJUSTED NET BENEFIT FOR EACH WELFARE RATIO INTERVAL TO BENEFIT FOR ALL WELFARE RATIO INTERVALS, BY PROGRAM, 1960-61 AVERAGES

Welfare ratio interval	Public assistance	Veterans and military programs	Social security	Government civilian, and railroad pensions	Private pensions	Combined programs
All families:						
Negative.....	0.006	0.005	0.009	0.023	0.001	0.009
Under 0.50.....	.794	.351	.477	.545	.118	.473
Under 0.75.....	.829	.429	.565	.634	.192	.556
Under 1.00.....	.844	.470	.594	.654	.249	.586
Under 1.50.....	.775	.537	.545	.611	.250	.561
Under 2.00.....	.634	.527	.410	.510	.101	.452
Under 2.50.....	.507	.444	.292	.390	.032	.343
Under 3.50.....	.323	.336	.132	.181	-.150	.182
Total.....	.001	.001	0	.001	-.003	.001

Ranking adjusted net benefits over the lower half of the welfare scale produces the following most-to-least progressive pattern: (1) public assistance, (2) government-railroad, (3) social security, (4) veteran-military, and (5) private pension. The following order developed when these net benefits are ranked over the upper half of the scale: (1) public assistance, (2) veteran-military, (3) government-railroad, (4) social security, and (5) private pension. Clearly, the public assistance net benefit is the most progressive and the private pension net benefit is the least progressive of these five net benefits.

When the nonaged are considered separately, the net benefits for public assistance and veteran-military programs are progressive throughout the welfare scale; the unadjusted or adjusted social security net benefits are progressive over the bottom part of the scale, roughly proportional over most of the upper part, and regressive at the very top; the private pension net benefit is progressive over most of the scale before adjustment and afterward is progressive over the lower part, roughly proportional over most of the upper part, and regressive at the very top; the government-railroad net benefit, before and after adjustment, is progressive over the lower part of the scale and roughly proportional over the upper part.

For the aged (unadjusted or adjusted) social security and veteran-military net benefits are progressive throughout the welfare scale; the (unadjusted or adjusted) private pension net benefit is irregular over the lower part of the scale, progressive in the middle part, and irregular in the upper; the public assistance net benefit is progressive in the lower part of the scale, proportional over most of the upper part, and progressive at the top; and the government-railroad net benefit is progressive in the lower part of the scale, proportional in the middle part, progressive over most of the upper part, and regressive at the very top.

Social security benefits account for 48 percent of the combined benefits of \$24.5 billion; veterans and military benefits for 19 percent; public assistance benefits, 14 percent; government employee and railroad benefits, 12 percent; and private pension benefits, 7 percent. Benefits for retirement, disability, survivors, and public assistance account for one-half, one-sixth, one-sixth, and one-seventh, respectively, of the total amount. Fifty percent of the dollar amount of these benefits goes to those with welfare ratios of less than 0.50; these benefits are progressive throughout the welfare scale.

Sixty percent of these benefits go to aged families and the remainder to the non-aged; the average transfer rates for the two groups are 32.2 and 2.6 percent, respectively. The combined benefits of the non-aged include public assistance benefits (one-fourth), veterans and military benefits (one-third), social security benefits (one-third), government civilian and railroad benefits (one-tenth), and private pension benefits (one-twentieth). Combined benefits are distributed among the aged in the following proportions: public assistance benefits (one-fifteenth), veterans and military benefits (one-tenth), social security benefits (six-tenths), government railroad benefits (one-seventh), and private pension benefits (one-twelfth). Retirement benefits and those payable to the disabled, survivors, and public assistance recipients account for one-fifth, one-third, one-fourth, and one-sixth, respectively, of benefits to the non-aged; the comparable proportions for the aged are seven-tenths, one-twelfth, one-tenth, and one-tenth.

TABLE 7.—COMBINED OLD-AGE TRANSFER PROGRAMS: BENEFIT, TAX, AND NET BENEFIT RATES, BY WELFARE RATIO INTERVAL AND AGE OF HEAD, 1960-61 AVERAGES¹

(In percent)					
Welfare ratio interval and age of head	Benefit	Unadjusted tax	Adjusted tax	Unadjusted net benefit	Adjusted net benefit
All families:					
0 to 0.49.....	189.7	9.0	7.9	180.7	181.8
0.50 to 0.74.....	25.9	6.1	5.5	19.8	20.5
0.75 to 0.99.....	10.6	6.8	6.1	3.8	4.5
1.00 to 1.49.....	5.2	7.4	6.4	-2.2	-1.2
1.50 to 1.99.....	2.8	8.0	6.8	-5.2	-4.0
2.00 to 2.49.....	2.1	8.1	6.6	-5.9	-4.5
2.50 to 3.49.....	1.6	8.0	6.5	-6.4	-4.9
3.50 and over.....	1.0	6.8	4.9	-5.8	-3.9
0 and over.....	6.1	7.5	6.1	-1.4	0
Head under age 65:					
0 to 0.49.....	112.3	8.4	7.7	103.8	104.6
0.50 to 0.74.....	12.2	6.8	6.2	5.4	6.0
0.75 to 0.99.....	5.2	7.1	6.4	-1.9	-1.1
1.00 to 1.49.....	2.9	7.6	6.6	-4.7	-3.7
1.50 to 1.99.....	1.7	8.2	6.9	-6.5	-5.3
2.00 to 2.49.....	1.3	8.3	6.8	-7.0	-5.5
2.50 to 3.49.....	1.0	8.2	6.6	-7.1	-5.6
3.50 and over.....	.5	7.0	5.1	-6.5	-4.6
0 and over.....	2.6	7.7	6.3	-5.0	-3.6
Head aged 65 or over:					
0 to 0.49.....	277.6	9.7	8.3	267.9	269.3
0.50 to 0.74.....	58.9	4.5	3.8	54.4	55.1
0.75 to 0.99.....	48.3	4.8	4.1	43.5	44.1
1.00 to 1.49.....	27.5	5.5	4.8	22.0	22.7
1.50 to 1.99.....	17.6	5.4	4.4	12.2	13.2
2.00 to 2.49.....	13.0	5.6	4.5	7.5	8.5
2.50 to 3.49.....	7.7	6.2	4.9	1.5	2.8
3.50 and over.....	3.6	5.3	3.5	-1.7	1.1
0 and over.....	32.2	5.7	4.4	26.4	27.7

¹ Includes public assistance, veteran and military programs, social security, government civilian and railroad pensions, and private pensions.

Forty percent of nonaged benefits go to those with welfare ratios of less than 0.50; the comparable figure for the aged is 57 percent. Benefits for both the nonaged and the aged are progressive throughout the welfare scale.

Social security taxes represent 40 percent of the \$30.4 billion total in unadjusted taxes and contributions and the remainder is accounted for by the public assistance (11 percent), veterans' and military taxes (15 percent), government civilian and railroad taxes (16 percent), and private pension contributions (18 percent). Seventy-four percent of the total is obtained through payroll taxes or contributions and 26 percent from general revenues. The unadjusted tax is regressive from 0 to 0.50–0.74 in the welfare scale, progressive from 0.50–0.74 to 1.50–1.99, proportional from 1.50–1.99 to 2.50–3.49, and regressive above 2.50. Of an adjusted tax total of \$24.5 billion, payroll receipts, general tax revenues, the increase in Federal income tax due to the taxing of pensions, and the decrease in Federal income tax due to the backward shifting of employer taxes account for 92, 15, 1, and minus 7 percent, respectively. The adjusted tax is regressive from 0 to 0.50–0.74 in the scale, progressive from 0.50–0.74 to 1.50–1.99 and regressive above 1.50. Non-aged families pay 91 percent of unadjusted taxes and 92 percent of adjusted taxes. The average unadjusted and adjusted tax rates for the non-aged are 7.7 percent and 6.3 percent, respectively; the comparable rates for the aged are 5.7 percent and 4.4 percent.

For all families, the unadjusted and adjusted net benefits are minus \$5.9 billion and \$0 billion, respectively. For each welfare class under 1, the unadjusted or adjusted net benefit is positive; for each class above 1 the net benefit is negative. The unadjusted or adjusted net benefit is progressive from 0 to 2.50–3.49, and regressive above 2.50. For non-aged families, the unadjusted and adjusted net benefits are minus \$18.1 billion and minus \$12.8 billion, respectively; the comparable figures for the aged are plus \$12.2 billion and plus \$12.8 billion. The average unadjusted and adjusted net benefit rates for the nonaged are minus 5 percent and minus 3.6 percent, respectively; for the aged the comparable rates are plus 26.4 percent and plus 27.7 percent. For each dollar of benefits paid, the nonaged have unadjusted and adjusted net benefits of minus 74 cents and minus 52 cents, respectively; the comparable figures for the aged are plus 50 cents and plus 52 cents. The unadjusted or adjusted net benefit is positive for each nonaged welfare class below 0.75; for higher classes the net benefit is negative. The unadjusted net benefit of the aged is positive in eight classes and negative in the 3.50-and-over class; the adjusted net benefit is positive in all nine classes. Among the nonaged the unadjusted or adjusted net benefit is progressive from 0 to 2.50–3.49 in the welfare scale, and regressive above 2.50; the unadjusted or adjusted net benefit for the aged is progressive throughout the scale.

Distributional effects of income tax concessions for the aged

The tax concessions analyzed here are the exemption for social security and railroad benefits, the age exemption, the retirement income credit, and the special medical deduction for the aged. For the latter three I had to rely on data from the Internal Revenue Service.

Social security and railroad employee benefits are exempt from taxation under the Federal personal income tax. Many economists on

equity grounds favor taxing that portion of social security and railroad retirement pension income which is not a return of the employee's contributions; they disagree as to the proper tax treatment of social security and railroad survivor and disability benefits. This paper presents some crude estimates of the effects of substituting the present tax treatment provisions for a representative set of "proper" provisions. This "proper" set of provisions exempts disability benefits and 10 percent of retirement and survivor benefits; this 10 percent is assumed to be a return of employee contributions. The remainder of retirement and survivor benefits is not exempt from taxation. This concession decreases Federal revenue by \$0.8 billion and is regressive from zero to 0.50–0.74 in the welfare scale and progressive above 0.50; the net benefit is regressive from zero to 0.50–0.74 and progressive above 0.50.

Under present tax law, employer contributions to qualified private pensions are deducted from employer taxable income and are not included in employee taxable income. In addition, the investment income of private pension trust funds is not taxable. The distributional effects of these tax concessions or removing these concessions are quite uncertain. This paper does not present any distributional estimates for these tax concessions.

Taxpayers and spouses aged 65 or over receive additional \$600 Federal income tax exemptions. The retirement income credit also decreases Federal personal income tax revenues. All taxpayers may deduct medical expenses in excess of 3 percent of adjusted gross income. In 1960 and 1961, however, aged taxpayers were not subject to this limitation and could deduct expenses in full up to certain maximums, a provision that was repealed after the passage of medicare. Aged taxpayers receive virtually all of these three tax benefits, which in the year studied amounted to \$850 million. Of the total, age exemptions accounted for 69 percent, with the retirement credit (13 percent) and medical deductions (17 percent) making up the remainder. The combined benefit is regressive from \$0 to \$2,000–\$2,999, progressive from \$2,000–\$2,999 to \$3,000–\$9,999 and regressive above \$8,000. For aged taxpayers the combined benefit is regressive from \$0 to \$2,000–\$2,999 and progressive above \$2,000.

TABLE 8.—CUMULATIVE PERCENTAGE DISTRIBUTIONS OF BENEFITS, BY AGI INTERVALS AND TYPE OF BENEFIT, 1960-61 AVERAGES

[In percent]			
Adjusted gross income intervals	Age exemption	Retirement credit	Medical deduction
All returns:			
\$1,000 to \$1,999.....	10.4	4.5	0
\$1,000 to \$2,999.....	27.7	18.8	1.4
\$1,000 to \$3,999.....	40.9	36.7	4.1
\$1,000 to \$4,999.....	52.6	52.8	7.5
\$1,000 to \$5,999.....	60.9	60.8	10.9
\$1,000 to \$7,999.....	72.3	75.1	17.0
\$1,000 to \$9,999.....	78.2	82.2	20.4
\$1,000 to \$14,999.....	85.8	91.1	27.9
\$1,000 and over.....	99.9	100.0	100.0

For each income class between \$1,000 and \$5,000 the combined net benefit is positive; for all other classes it is negative. The net benefit is regressive under \$3,000 and progressive above \$2,000. For nonaged

and aged families the net benefits are minus \$690 million and plus \$690 million, respectively, and the average net benefit rates for the two groups are minus 0.23 percent and plus 2.76 percent. For each dollar of tax benefit, the nonaged have a net benefit of about minus 80 cents and the aged have a net benefit of about plus 80 cents. Regardless of income class, the net benefit is negative among the nonaged and positive among the aged. The net benefit for the nonaged is roughly proportional from \$1,000–\$1,999 to \$4,000–\$4,999 and progressive above \$4,000; for the aged it is regressive under \$3,000 and progressive above \$2,000.

MOLLIE ORSHANSKY: COUNTING THE POOR: BEFORE AND AFTER FEDERAL INCOME-SUPPORT PROGRAMS

In 1959, 24 percent of the Nation's households—counting as households both one-person units and families of two or more persons—had so little income as to be counted poor. Seven years later, only 17.7 percent had too little money income to support the number dependent on them. What is perhaps of greater significance than the general improvement is that more of the poor in 1966 were persons of limited earning capacity or those whom age, home responsibilities, race discrimination, or other factors kept out of the labor force altogether.

Children—particularly if they live in a home without a father—and old people are at a disadvantage, compared with persons aged 18 to 64, when it comes to earning. The number of children under age 18 being reared in poverty went down from 16.6 million in 1959 to 12.5 million in 1966, but the number near poor dipped by only 0.4 million to reach 6.6 million. All told, even in 1966, after a continued run of prosperity and steadily rising family income, one-fourth of the Nation's children were in families living in poverty or hovering just above the poverty line.

As a group, persons aged 65 or older were even worse off than the youngsters. Those counted poor in 1966 numbered 5.4 million, the same number as the count of aged poor 2 years earlier, and only half a million less than the count in 1959. In 1966, the 1.2 million aged couples in poverty represented one in five of all families counted poor; in 1959, these couples had accounted for only one in six of the total. In similar fashion, the financial fate of the aged living alone was better than it once had been, but it still spelled poverty for the majority (55 percent). As compared with the situation in 1959 when aged unrelated individuals accounted for fewer than one-fifth of all households tagged poor, in 1966 every fourth household in poverty was that of an aged person living alone.

Such findings did not signify that these elderly persons as a group had less income than they used to have. It was rather that, thanks to social security and related programs, more of them had enough income to try going it alone—choosing privacy, albeit the privacy of poverty, rather than being an "other relative" in the home of their children. But despite spectacular improvement aided in large meas-

ure by increases in the number drawing OASDI benefits, and in the size of the checks, persons aged 65 or older remained the most poverty-stricken age group in the Nation.

Though the odds that households headed by women would have insufficient income were less than they used to be, the improvement was less marked than for units headed by men. In 1959, of all households counted poor, 5.4 million had a woman at the head and 8 million were headed by a man. By 1966, the number poor with a man at the head dropped 2.4 million, but the number poor and headed by a woman remained unchanged.

The number of poor families with a man at the head and children under age 18 went from 3.8 to 2.4 million in 1966. But the 1½ million poor families headed by a woman with children numbered almost as many as those poor in 1959. Thus, though the total count of children in poverty was one-fourth less than it had been 7 years earlier, the number poor in families with a woman at the head was actually one-tenth higher.

The peril of poverty for the child with several brothers and sisters remained high: The family with five or more children was still 3½ times as likely to be poor as the family raising only one or two, and, just as in earlier years, almost one-half the poor children were in families with five or more children. The number of poor families with five or more children remained almost unchanged—0.9 million in 1966, compared with 1.1 million in 1959—with the added disadvantage that 29 percent of them now were headed by a woman, instead of 18 percent as in 1959. What is more, the economic deprivation associated with a father's absence was more common than it used to be: from 1959-66 the proportion of all children under age 18 who were in a family headed by a woman rose from 9 to 11 percent; and in parallel fashion it was one in three of all poor children in 1966 who were minus a father, not one in four as in 1959.

There was other evidence that economic growth had not helped all population groups in equal measure. The nonwhite population generally had not fared as well as the white during the 1959-66 upswing, though by the end of the period it was making greater strides than at the beginning. To be sure, in 1966 it was one in three nonwhite families who were poor compared with one in 10 white families whereas in 1959 it was one in two nonwhite families and one in seven white families who were poor. It is also a fact that the nonwhite made up about one-third of the Nation's poor in 1966, compared with just over one-fourth in 1959—a widening disadvantage explained only in small part by the greater population growth among the nonwhite.

The farm population, though still poorer than the nonfarm, had reduced the incidence of poverty by nearly one-half, a rate of improvement twice that registered by the nonfarm population. But with the nonfarm population growing while the farm population steadily declined, it was likely that many families had merely exchanged a farm address for a city one at which they might be even worse off than before.

It is clear that in the period since 1959, poverty, which never was a random affliction, has become even more selective, and some groups initially vulnerable are now even more so. There is still no all-

embracing characterization that can encompass all the poor. Some are poor because they cannot work; other are poor even though they do. Most of the poor receive no assistance from public programs; others remain poor because they have no resources but the limited payments provided under such programs. And public programs to help the poor are in the main geared to serve those who cannot work at all or are temporarily out of a job. The man who works for a living but is not making it will normally find no avenue of aid.

Age and poverty

In 1966, persons age 65 or older accounted for 18 percent of the 29.7 million persons counted poor, though they made up only 7 percent of the nonpoor population. This reflected the fact that, among persons age 65 or older, nearly 1 in 3 was in a household with income below the poverty line compared with only 1 in 7 persons under 65.

The heavy poverty burden of the aged results from several factors. Compared with those younger the aged have a preponderance of women, particularly women living alone. Women at all ages are likely to be poorer than men, and persons living alone are more often poor than those who are part of a family group. Fewer of the aged are in the labor force than is true for the rest of the adult population, and in our society those who do not or cannot work will almost always be poorer than those who do.

Of those in households with not enough income to come up to the poverty standard, almost two-thirds were women, but only half of the aged in nonpoor households. Moreover, of the women in the nonpoor units, 2 in 5 were living as the wife of a family head; of the aged women in poverty only 1 in 4 was sharing the income of a husband. For those aged living in another's household rather than in their own, it was usually a younger relative, and a nonpoor one at that with whom they were sharing.

Three out of 4 of the "other relatives" did not have enough money to live by themselves except in poverty, but most of these were living with a family group that did have sufficient income for the entire household to be labeled nonpoor.

Half of all the aged poor were living by themselves, the majority of them women—reflecting how little income this group has. But the status also reflected the fact that more and more people, including women, are enabled to continue maintaining a household in their old age because they now can count on some regular income, even if only an inadequate one.

In 1959, 97 percent of the men aged 65 or older and 75 percent of the women had some money of their own. By 1966 the proportion reporting some income was 99 percent for men and 83 percent for women. Over the same period the number of aged living by themselves (or with nonrelatives only) increased from 24 percent to 27 percent.

On the average, aged couples or persons living alone must get along on less than half the money income available to a young couple or single person—a difference greater than any possible differential in living requirements. The fact that for a variety of reasons, more and more aged persons are spending their last years living by themselves or just with a spouse rather than as part of a larger family group emphasizes the significance of the income disadvantage of such elderly households.

Between 1959 and 1966 the number of nonaged one-person households rose by only 6 percent, but the number of elderly men and women living alone—or with nonrelatives only—was a third greater in 1966 than in 1959. In parallel fashion, with youngsters marrying and starting their families at an earlier age than they formerly did, the number of childless couples under age 65 rose by only 2 percent in this 7-year period, whereas the number of aged couples increased by a fifth. There are thus relatively more elderly persons who must manage by themselves on their own meager resources.

The fact that aged men and women are less likely to work regularly than younger persons and that they earn less when they do work is the main reason why poverty is so much more prevalent among the aged. As a case in point, fewer than a fourth of all men 65 or older and heading a family in 1966 worked throughout the year compared with five-sixths of those under 55. Indeed, of the family men under 55, even among the poor, nearly three in five worked all year but only one in 10 of the aged heads of poor families did so. As a result, whether poor or nonpoor, male heads under 55 were able by their earnings to provide at least 70 percent of the family's total money income. Among the aged families the man's earnings represented less than 30 percent of total income among the nonpoor, and only 6 percent among the poor.

When families are matched by work experience and by sex of the head, aged families are not so much worse off than others. The poverty rate for families of all aged men is nearly triple that of younger ones, but when the family head works the year round the rate of poverty among the aged is only twice that of the others. And, indeed, when the family head does not work at all, the average aged family will do better than a corresponding younger one because social security and other public support programs are more readily available to older people. Among the families headed by men who did not work at all in 1966, 28 percent of the aged were in poverty, compared with 37 percent when the head was aged 55 to 64 and 40 percent if he was under age 55.

The poverty gap and public income support programs

The latest statistics on the aggregate dollar amount by which poor households fell short of their estimated income need are for 1965, when the total poverty roster numbered 31.9 million persons, of whom 14 million were under age 18 and 5.3 million were at least 65. At that time the SSA poverty income standards were about 4 percent lower than in 1966—to conform to the change in the estimated cost per capita of the U.S. Department of Agriculture economy food plan which serves as the core of the SSA poverty index.

In 1965 the total dollar poverty gap—the aggregate difference between required and actual income—stood at \$11 billion. This figure represented an overall reduction of 20 percent since 1959, but now one-fifth of the gap represented unmet needs of families with children and headed by a woman, compared with one-sixth then. In contrast, the share of the total gap accounted for by families with children and a man at the head dropped from 37 percent in 1959 to 34 percent in 1965. A fourth of the aggregate shortfall—\$4 billion—quantified the unmet income needs of the 4-million aged households in poverty.

It must be remembered that aggregate deficits as computed represent a needs-resources gap still remaining after payments of public assist-

ance, OASDHI benefits, and any other public programs aiming to help families with insufficient income of their own. Many receive no such help. It has been estimated that only about a fourth of all persons counted poor receive any public assistance and the proportion of poor households receiving help is even less. In 1965 only a sixth of all households with income for the year below the poverty line had received any public assistance payment.

Of the 60½ million households in the United States in March 1966—counting as a household an unrelated individual as well as a family of two or more—19.5 million or just under one in three reported that someone in the household received payment from a public income-maintenance program sometime during 1965. For two-thirds of these households, social security benefits made up at least part of the public income payment. As one would expect, households with an aged head were much more likely to receive support from a public program than households with a head under age 65—6 in 7 of the older households, compared with only one in five of the younger ones. Even among young families of a woman with children under age 18, only half received any help from a public program, and the program involved was more often public assistance than social security.

Among the households with payment from public assistance, which makes payments only to those considered in need by the standard of the State in which they live, 81 percent of the recipient households in 1965 had so little income otherwise that they would fall below the poverty line in the absence of any public assistance payments. But the amounts of assistance were so small that even with the payments counted in, two-thirds of all households receiving public assistance were found among the 11.2 million households designated poor in 1965—as the poor are counted in terms of money income including public transfer payments. In other words, of the households poor before receiving any public assistance, 5 out of 6 were still poor after they got it. By contrast, among households with a payment from the social security program, which doesn't limit its payments with a means test, only about half of those poor before they drew their OASDHI checks were still poor afterward. Before OASDHI benefits were added to income, about six out of 10 households receiving benefit checks fell below the poverty line; after OASDHI benefits were added to income, only three in 10 were still below the poverty line.

A household that had received program payments, but was not presently counted among the 11.2 million poor, is considered to have been removed from poverty by the program if the amount paid was more than the amount by which after-transfer income exceeded the appropriate poverty income threshold. The estimates were made separately for OASDHI, public assistance, other programs taken as a unit, and finally total payments from all programs combined. All transfer payments combined succeeded in averting poverty for about 1 in 3 of young payee households—that is, households headed by a man or woman under age 65—whose total income from sources other than public income programs was below the poverty line, and about 1 in 2 aged households that would otherwise be poor. Compared with social security or other programs taken as a group, public assistance—with its payments limited by State standards of need generally well be-

low the poverty line—was less than half as effective in keeping households off the poverty rolls.

It is clear that a considerable number of households presently classed as nonpoor achieve such status only because of public income payments. If it had not been for the public programs, the number of households poor in 1965 would have registered 16 million instead of the 11.2 million now shown in the poverty series: This means that as defined fewer than 1 in 5 was counted poor rather than the 1 in 4 that the count might have been otherwise. The social security program itself was responsible for keeping at least $3\frac{1}{2}$ million households off the poverty roster: If there had been no OASDHI payments but only the actual payments under other public programs the number of poor households would have been 14.8 million. But more than this, the profile of poverty would have been different without existing public-income programs. Of the 11.2 million households poor in 1965 as presently defined—after all transfer payments have been added to income—37 percent had an aged head and 63 percent a head younger than 65. With no payments under existing programs, the 16 million poor households would comprise 48 percent with an aged head and 52 percent with one under 65. And the proportion of poor households headed by a man—about 1 in 2 of the poor as presently defined—would rise to almost 3 in 5.

This change in the poverty profile wrought by transfer payments reflects, of course, the profile of households receiving the payments. Social security, the program serving the largest number, has more beneficiaries age 65 or older than persons under 65. And as a group public-income programs are more effective in removing poverty among payee families of men than among families of women.

Social security as an antipoverty program

The social security program is designed to make up some of the income lost when a worker ceases work because of age, total disability, or in the event of his death. OASDHI benefits go to retired or disabled workers and their dependents or to dependent survivors of deceased workers as a matter of right—on the basis of contributions out of earnings and in amounts related to those earnings. Obviously, such a program will have objectives and commitments beyond merely eliminating poverty yet for many OASDHI beneficiaries who must depend on their benefits for a good measure of their support, it is the antipoverty role that is overriding. And, indeed, in sheer numbers of those for whom poverty is averted the social security program is more important as an antipoverty mechanism than any other single public income program.

Of the 19.5 million households in 1965 who received any public income support, 13 million—or 2 in 3—had at least one member receiving OASDHI benefits during some part of the year. Of the total of $4\frac{3}{4}$ million payee households pushed over the poverty line by their public program payments, in three out of four the social security benefit checks alone could have made up the income deficiency. And even for those whom the payments left in poverty, the social security benefit was able to ease the burden by narrowing the gap between the income the households did have and what they needed according to the minimum poverty criteria.

All told, 37 percent of all households currently defined as poor in 1965, in terms of money income including any transfer payments, received OASDHI benefits while a total of 54 percent received payments under all public programs combined. Obviously, OASDHI benefits would be a better protector against poverty for the aged than for those under age 65: 70 percent of the households in which anyone was drawing social security in 1961 were headed by an aged person.

The antipoverty effect of economic growth is largely confined to households of young earners. In contrast the antipoverty contribution of social security is primarily in lifting the burden of privation from the aged: The number of households with an aged head counted poor in 1965 would be two-thirds again as high—7.1 million rather than the 4.1 million now shown as poor—were it not for OASDHI benefits. Of the 9 million aged households enjoying these benefits in 1965, two-thirds were poor in terms of money income before adding in the benefits, but only one-third of all aged beneficiary households were still in poverty after counting in their benefits with other money income.

Although it served the aged better, even for households headed by a person under age 65 OASDHI benefits played a sizable role in correcting poverty. (In some of the young households, it was undoubtedly an aged "other relative" who was the actual beneficiary.) Instead of the 7.1 million households with a nonaged head counted poor in 1965—in terms of money income including public transfer payments—there would have been 7.7 million households poor if there were no OASDHI benefits, or a number in poverty 8 percent larger than presently defined.

Among families with children under age 18 and a woman younger than age 65 at the head, the number below the poverty line would be 14 percent greater than at present but for the existence of the social security program. About 0.6 million of these 2.7 million families reported drawing OASDHI benefits in 1965. For two-thirds of these beneficiary families their income with the benefits excluded was below the poverty line. When the OASDHI benefits were added, however, only a third of the young beneficiary families were left with money income below the poverty line.

Among poor households headed by someone age 65 or older, those receiving any social security benefits in 1965 had less unmet need—using as a measure the difference between their actual income for the year and the minimum requirement according to the SSA poverty index. Aged households who were poor but weren't receiving OASDHI benefits had an income deficiency \$200 or \$300 greater than those drawing benefits. Among aged poor persons living alone, for example, a fifth of the men and almost a third of the women who were non-beneficiaries needed at least \$1,000 more income than they had to come out of poverty—implying they were living on a current rate of income no more than one-third their estimated minimum requirements. By contrast, among aged one-person households living in poverty but drawing social security, only 1 in 25 was this far below the poverty line.

As a group households receiving social security benefits are more likely to be poor than those without—though if a household is poor it is likely to be closer to its minimum income need when OASDHI

payments are available than when they are not. The corollary can also be shown—among households not poor, those not receiving social security are likely to enjoy a larger income relative to their estimated minimum need than nonpoor households who do receive social security payments. Among elderly men living alone with income for 1965 above the poverty line, only half of those receiving social security benefits had as much as \$750 income—including the benefit payments—over what the poverty criteria stipulates. But among nonpoor elderly men living alone and not receiving OASDHI benefits in 1965, half had at least \$2,560 more income than the poverty cutoff. On the other hand among nonpoor aged men living alone and drawing benefits, those with other income high enough so they would not be poor even without the OASDHI payment as a group averaged almost as much in income above the poverty line (after receiving the benefits) as those who got no benefits at all.

The figures suggest that in our society today the relationship between OASDHI benefits and earnings being what it is, it is better—from the standpoint of avoiding poverty—for the aged to work than not to work. If one cannot work, it is better to be able to draw social security benefits than not. But if one does draw benefits, it is better not to need the money. It is obvious that the same factors which would enable a worker (or his dependents) to look forward to a relatively high benefit in old age—namely, a continuous work history with earnings close to or greater than the maximum payroll base—are the same factors which would predispose a worker to maintain his opportunity to earn even in retirement, and to acquire during his working years those other resources—cash savings, private pension rights, an owned home—which can help make retirement living more comfortable.

It is safe to conclude from the evidence that though public transfer programs do much to lessen the number of poor they could do much more. It is clear that for many already receiving help from public programs it is the degree of that help that must be increased if they are to escape poverty, but new programs or extensions of existing ones are required for those now in poverty and receiving no help at all.

A majority of aged persons today already receive income from one public program or another. As a group then, aged households now poor or near-poor will benefit more from increased amounts payable under such programs than from a changed eligibility requirement for payment. But both types of improvement will be needed for poor or near-poor households headed by someone younger than age 65.

GEORGE KATONA, RETIREMENT IN PROSPECT AND RET- JAMES N. MORGAN: ROSPECT

We know far too little about the current economic situation of retired people and the factors which make for the prevailing great differences in the well-being of the retired, some of whom are well off while others are not. Some data collected in the 1966 survey of consumer finances will be presented here in order to indicate the importance of some crucial factors that influence the financial position of the retired, stimulate more intensive work on these issues, and provide a tentative basis for predictions.

Income level represents a crucial question in assessing the economic status of the retired. The cash income of all respondents is determined in the surveys of consumer finances by asking not fewer than 18 questions regarding the amount received from various kinds of income sources of the family head as well as of other family members. The younger the retired family head (or a single retired person), the higher is this income on the average. The median income of retired people who are 70 years of age or older is particularly low. The most crucial difference among age groups is in their education, a factor known to be related to income level among those not retired. No doubt the older retired people had much lower incomes before retirement than the younger retired people, both because their retirement was at an earlier time and because they had less education. Median family income of the retired people is related to their age at retirement and to planned versus unexpected retirement. People who retired when they were fairly young had much higher incomes during retirement than people who retired when they were older. Furthermore, those who retired when planned had much higher incomes than those who did not.

Income represents one indicator of economic position, but the latter no doubt depends on several additional considerations as well, such as the available assets and the expenses of the retired. Rather than generate somewhat arbitrary measures of economic welfare, we asked survey respondents for a subjective evaluation of their standard of living in comparison with the one they had before they retired. In this respect practically no differences were found among younger and older retired people. In each age group about one-third said that their current standard of living was lower than the one before retirement, and a small percentage (approximately 5 percent) that it was higher than the one before retirement. The majority of retired people said that their standard of living was the same. It appears, then, that the substantial income differences between younger and older people did not make for major changes in their feelings about their standard of living. This finding reinforces the notion, derived from the relation between age of the retired and their education, that the income differences among the retired are greatly influenced by differences in their preretirement income. It should be added, however, that planned versus unexpected retirement was found to make a difference in the changes in the standard of living people reported. Among people who retired as planned, 22 percent said that their standard of living was lower than the one before retirement, while among those who retired unexpectedly, 44 percent said so.

Data on the income of retired people indicate a substantial improvement in the income of the retired during the 6 years prior to 1965. The income of the retired is lower than the income of the nonretired. But it is only slightly lower than the income of people age 65 or more who are not retired.

There is some evidence of an increasing desire to retire early. In the past, early retirement has been frequently associated with trouble: Illness, obsolescence of job skills, and unemployment. But people at the other end of the scale may constitute a new source of early retire-

ment in the future, those who planned and saved and retired early because they could afford it. While at present the majority of those who had retired early did not retire as planned, in the future a different relation between planned and unexpected early retirement may prevail. The distributions of when people said they planned to retire indicate that members of the labor force may be divided into three almost equal groups, those who plan to retire early, those who plan to retire at age 65 to 69, and those who wish to work as long as possible or do not think of retirement. The most powerful single factor leading people to plan to retire early (before 65) was the size of their expected pension income.

Since measures of attitudes, expectations, and perceptions taken at a point in time are possibly as much the result of a man's plans for the future as a cause of them, we can only say that there are some sensible interrelationships between attitudes and plans in the area of retirement, and that they are considerably weaker than the (likewise meaningful) associations between economic factors and planned retirement. Some of these economic factors are positive: expected money and non-money income or earnings after retirement. Some are negative: expected obligations to dependents or to a mortgage lender. Indeed, there appear to be an appreciable number of people with obligations that do not end until after they are 60, which makes early retirement difficult. It is also interesting to note the reasons people give for retiring early or planning to do so. The simple finding is that the reasons given for planning to retire early are mostly financial: "I'm able to afford it." But a negative reason, poor health, is also given by a substantial minority to explain their plans, and by most people who did retire early, to explain why they did so. Indeed, among the retired, who retired early and unexpectedly according to their report, seven in 10 mentioned health as a reason. And it is clear from other data in our report, these people are in the worst economic circumstances.

Clearly, the income position of retired people has improved in the recent past and will improve further in the future. This trend resulted from the spread of collective security arrangements (old-age insurance and private pension plans), as well as from the fact that on the average those who retired during the last few years and those who will retire during the next decade had and will have higher preretirement incomes than those who retired many years ago. It should be noted that the impact of private pensions plans on the economic position of the retired was fairly restricted up to now. Because of the recency of many private plans, in 10 or 20 years a much higher proportion of the retired will benefit from private pensions than of those currently retired. It has been assumed frequently that these changes influence not only the standard of living of the retired but also the saving performance and the inclinations to save of the nonretired. During the last few years it was possible to find out whether those who participated in private pension plans saved more or less than those who did not participate. A positive correlation was found between coverage by private pension plans and individual saving. Those with private pension plans were found to have added more than those without such plans to bank deposits and securities during the year before the survey,

as well as in 2 preceding years, and their interest in savings ("saving mindedness") was also higher. The findings were obtained on a basis of a multivariate analysis in which such crucial factors as income level, age, and amount of financial reserves were held constant. The findings support the assumption, confirmed in a variety of studies of consumer behavior, that felt needs and wants are not static. Under the impact of favorable developments, levels of aspiration are stepped up. Concrete and attainable rewards stimulate behavior. On the other hand, the feeling of being very far from one's goal tends to accentuate the perceived difficulties and may stifle motivation.

JAMES SCHULZ: AGED RETIREMENT INCOME ADEQUACY— SIMULATION PROJECTIONS OF PENSION- EARNINGS RATIOS

A prior study by the Bureau of Labor Statistics of the earnings replacement potential of U.S. private pensions and the social insurance system was based upon hypothetical calculations using rather unrealistic assumptions. This paper reports the results of a stimulation study which attempts to project pension earnings ratios for a future retired population using more realistic assumptions. It also attempts to take into account some of the characteristics of prevailing pension systems which influence this ratio. The simulation projects pension earnings ratios for persons retiring in the United States between 1960 and 1980. The projections indicate that U.S. pension systems as they are presently developing are failing to generate for large numbers of aged persons retirement income sufficient to meet generally accepted international and national standards of pension earnings ratio adequacy.

What is an adequate P/E ratio at retirement? Much of the relevant theoretical discussion in economics has focused on individuals' time preferences (preference for current versus future consumption). The individual chooses the appropriate savings rate required to make available after the earning period the funds desired for retirement living. The individual is assumed to be rational, assumed to choose the appropriate P/E ratio in line with his preferences, and then assumed to save the necessary amounts. Survey data show however, that large proportions of the U.S. population in the past have either been unwilling and/or unable to provide for old age. Possible explanations for this are: (a) the difficulty of retirement planning given the vicissitudes of the economy affecting income, employment, and prices; (b) a myopic outlook of many individuals regarding current versus future consumption needs; and/or (c) a failure by individuals to take into account in retirement planning longer years of retirement living due to declining mortality and early retirement.

Determination of a recommended target P/E ratio for the United States must take into account the following considerations:

- (1) The wealth positions of aged units,
- (2) Elimination in retirement of expenditures associated with employment,

- (3) Rising illness incidents due to age but declining medical expenditures due to medicare and related health programs,
- (4) Declining aged tax liabilities and elimination of fringe benefit payroll deductions in retirement,
- (5) Elimination of household expenses associated with child rearing,
- (6) Possible declining physical activity and associated expenditures or rising recreational expenditures due to increased leisure time.

Various organizations and individuals in the United States have discussed or suggested what the appropriate P/E ratio should be. The P/E ratios that have been recommended range between 0.50 and 0.75 and are therefore somewhat higher than ILO international guidelines.

Table 1 shows hypothetical social security P/E ratios for workers with and without inclusion of the supplemental spouse benefit. The usefulness of this table is limited by the fact that the ratios assume "normal" retirement and take no account of earnings over the taxable limit.

TABLE 1.—SOCIAL SECURITY P/E RATIOS¹ (1965 LAW)

Average monthly taxable earnings ²	Ratio	
	Excluding supplemental	Including supplemental
\$100.....	0.63	0.95
200.....	.45	.68
300.....	.37	.56
400.....	.34	.51
500 ³	.31	.48

¹ Source: Robert M. Ball testimony before the Committee on Ways and Means, Hearings on H.R. 5710, pt. 1. Washington: Government Printing Office, 1967, pp. 223-224.

² Average monthly taxable earnings depend upon the social security taxable wage ceiling existing during the relevant years.

³ Not achievable for persons retiring currently. See (b) in preceding text.

TABLE 2.—RATIO OF MEDIAN NORMAL RETIREMENT BENEFITS PLUS SOCIAL SECURITY TO PRERETIREMENT EARNINGS, WINTER 1962-63

Item	Annual earnings and service periods							
	\$3,600		\$4,800		\$6,000		\$8,400	
	20 years	30 years	20 years	30 years	20 years	30 years	20 years	30 years
Excluding social security.....	17.3	25	13.5	19.5	12	17.2	10.9	18.6
Including social security.....	55.0	63	48.0	54.0	39	44.0	40.0	38.0

Source: Based on Donald J. Staats, "Normal Benefits Under Private Pension Plans," Monthly Labor Review, vol. 88 (July 1965), table 4.

Table 2 shows that private pensions currently do a poor job of income replacement for the middle income groups. Only at the lower earnings levels (together with long years of coverage) are P/E ratios greater than 0.50 achieved when the hypothetical private pension benefits are added to social security.

It is possible to estimate what the P/E ratio will be for future retired workers by using simulation techniques. The simulation model

used to make the projections presented here was developed to investigate the economic circumstances of future retired persons by projecting 1980 pension income and asset distributions for them. The simulation takes into account important factors affecting pension income which were omitted from the estimates presented above. It takes into account unemployment, job change and vesting, trends and pension coverage, variable earnings level, early retirement, and rising pension benefits.

If the projected P/E ratios are tabulated by the preretirement earnings group of the pension recipients, the effect of minimum benefit provisions can be shown. Tables 3 and 4 show tabulations of the distribution of P/E ratios for married males and unmarried females by 8 preretirement earnings groups. The average earnings for 5 years prior to retirement are used as a measure of preretirement earnings.

TABLE 3.—PROJECTED ¹ RATIO AT RETIREMENT OF TOTAL PENSION INCOME ² TO PRERETIREMENT EARNINGS FOR NONAGRICULTURE MARRIED MALES BY PRERETIREMENT EARNINGS GROUP

[Percentage distribution]

Ratio	Average preretirement earnings ³							
	Less than \$3,000	\$3,000 to \$3,999	\$4,000 to \$4,999	\$5,000 to \$5,999	\$6,000 to \$7,999	\$8,000 to \$9,999	\$10,000 to \$11,999	\$12,000 to \$15,999
Less than 0.20 ⁴	5	9	15	13	15	28	29	43
0.20 to 0.29.....	9	14	21	17	16	31	28	25
0.30 to 0.39.....	9	21	23	35	29	18	21	19
0.40 to 0.49.....	16	18	20	14	13	11	11	8
0.50 to 0.69.....	30	20	14	17	19	7	9	3
0.70 to 0.99.....	11	12	5	3	6	3	3	1
1 or more.....	23	6	3	1	1	0	0	0
Total.....	⁵ 100	100	100	100	100	100	100	100

¹ Source: Simulation model.

² Social security, private, and/or Government employee pensions.

³ Average of 5 years prior to retirement.

⁴ Includes persons receiving no pension but with some earnings.

⁵ Less than 1 percent.

⁶ Totals may not sum to 100 percent due to rounding.

TABLE 4.—PROJECTED ¹ RATIO AT RETIREMENT OF TOTAL PENSION INCOME ² TO PRERETIREMENT EARNINGS ³ FOR NONAGRICULTURE UNMARRIED FEMALES BY PRERETIREMENT EARNINGS GROUP

[Percentage distribution]

Ratio	Average preretirement earnings							
	Less than \$3,000	\$3,000 to \$3,999	\$4,000 to \$4,999	\$5,000 to \$5,999	\$6,000 to \$7,999	\$8,000 to \$9,999	\$10,000 to \$11,999	\$12,000 to \$15,999
Less than 0.20 ⁴	23	5	5	5	9	9	22	17
0.20 to 0.29.....	4	7	6	22	21	29	39	25
0.30 to 0.39.....	8	17	15	19	21	31	17	33
0.40 to 0.49.....	10	20	23	18	20	17	17	8
0.50 to 0.69.....	18	37	31	27	25	10	4	8
0.70 to 0.99.....	17	11	11	7	5	5	0	4
1 or more.....	22	4	8	2	0	0	0	4
Total.....	⁵ 100	100	100	100	100	100	100	100

¹ Source: Simulation model.

² Social security, private, and/or Government employee pensions.

³ Average of 5 years prior to retirement.

⁴ Includes persons receiving no pension income but with some earnings.

⁵ Totals may not sum to 100 percent due to rounding.

TABLE 5.—PROJECTED¹ RATIO AT RETIREMENT OF TOTAL PENSION INCOME² TO TOTAL PRERETIREMENT³ EARNINGS FOR NONAGRICULTURE COUPLES BY PRERETIREMENT EARNINGS GROUP

[Percentage distribution]

Ratio	Average preretirement earnings							
	Less than \$3,000	\$3,000 to \$3,999	\$4,000 to \$4,999	\$5,000 to \$5,999	\$6,000 to \$7,999	\$8,000 to \$9,999	\$10,000 to \$11,999	\$12,000 to \$15,999
Less than 0.20 ⁴	0	3	10	4	9	16	12	20
0.20 to 0.29.....	2	6	14	9	16	19	23	28
0.30 to 0.39.....	8	19	18	28	19	22	24	22
0.40 to 0.49.....	15	9	12	16	16	20	21	15
0.50 to 0.69.....	21	38	28	31	25	20	14	14
0.70 to 0.99.....	13	8	11	8	12	4	4	1
1 or more.....	40	17	7	3	2	1	1	0
Total.....	100	100	100	100	100	100	100	100

¹ Source: Simulation model.² Social security (primary and supplemental), private, and/or Government employee pensions.³ Average of 5 years prior to retirement.⁴ Includes couples receiving no pension income but with some earnings.⁵ Totals may not sum to 100 percent due to rounding.TABLE 6.—PROJECTED¹ RATIO OF TOTAL PENSION INCOME² TO PRERETIREMENT EARNINGS³ FOR RETIRED NONAGRICULTURAL MALES⁴

[Percentage distribution]

Ratio	Age at retirement		
	Less than 60	60 to 64	65 or over
Less than 0.10.....	16	6	3
0.10 to 0.19.....	50	19	10
0.20 to 0.29.....	23	27	16
0.30 to 0.39.....	5	21	26
0.40 to 0.49.....	3	11	15
0.50 to 0.59.....	1	5	12
0.60 to 0.69.....	1	4	7
0.70 to 0.79.....	0	3	5
0.80 to 0.89.....	0	1	2
0.90 to 0.99.....	0	1	4
1 or more.....	1	1	4
Total.....	100	100	100

¹ Source: Simulation model.² Social security private pension and/or government employee pension.³ Average of 5 years prior to retirement.⁴ Married males only.⁵ May not sum to 100 percent due to rounding.TABLE 7.—PROJECTED¹ P/E RATIOS FOR NONAGRICULTURE MALES, USING ALTERNATIVE MEASURES OF PRERETIREMENT EARNINGS

[Percentage distribution]

Ratio	Earnings prior to retirement		
	1 year before	5-year average	10-year average
Less than 0.20 ²	29	24	20
0.20 to 0.29.....	20	20	19
0.30 to 0.39.....	19	22	22
0.40 to 0.49.....	12	12	13
0.50 to 0.69.....	13	14	15
0.70 to 0.99.....	4	5	7
1 or more.....	3	3	4
Total.....	190	190	100

¹ Source: Simulation model.² Includes persons receiving no pension income but with some earnings.³ Totals may not sum to 100 percent due to rounding.

Very high ratios are projected for a larger proportion of workers with low earnings. The proportion of projected retirees with P/E ratios under .50 rises sharply for income groups above \$4,000. For example, 79 percent of married males in the \$4,000–\$4,999 earnings group are projected to have P/E ratio under .50. For married males in the \$8,000–\$8,999 group the percentage under .50 increases to 88 percent.

Table 5 presents ratios which incorporate both the supplemental social security pension of the spouse in total pension income and any preretirement earnings of the wife (which lowers the P/E ratio) in total preretirement average earnings. The net result is an improvement in the P/E ratio. Table 5 shows P/E ratio estimates for actual aged couples retiring in the next two decades, almost all of whom are covered by social security. Looking at couples whose average earnings for 5 years prior to retirement were between \$4,000 and \$5,000, table 5 shows that over half are projected to have a P/E ratio (based on all pensions) of less than .50. These lower P/E ratios are due principally to two factors not taken into account in the calculations of table 1: (a) Large number of workers retire early with reduced pension benefits and, (b) Workers' average taxable earnings for social security benefit purposes are always lower than the average preretirement earnings as defined in this study.

JUANITA M. KREPS, LIFETIME EARNINGS AND INCOME
DONALD E. PURSELL: IN OLD AGE

Analysis of the variation in the annual income of a particular family as it moves through the life cycle is meager, limited by lack of data and by the time and expense involved in longitudinal research. Information on variations in the family's needs at different stages is similarly scant. Yet the central question involved in one of our major transfers of income—the social security benefit—has to do with the extent to which we wish to smooth the income between age groups by raising benefits for retired families via taxes on the young and middle aged.

In general, the average earnings of different age cohorts observe the same pattern for most occupations. Immediately after entry into the labor force, annual earnings are low, the income of each successive cohort rising until peak earnings are realized by the age group 45 to 54. The 55 to 64-year-old workers, the oldest cohorts who are fulltime participants in the labor force, have incomes significantly lower than the previous group. Retirement income is typically less than a third of peak annual earnings. Variations in family needs, however measured, are dependent primarily on family size and age composition and there is no necessary correlation of these needs with earnings at different stages of the family cycle. Even for the family whose lifetime earnings are adequate to meet a specified standard (e.g. the poverty level or the modest but adequate standard), a substantial amount of temporal reallocation may therefore be necessary.

Without reference to the question of how this redistribution is achieved, this study examines, first, the available data on income and

expenditures for several occupations at different ages of the family head, noting particularly the excess of income over spending (or vice versa) in each stage. Since the amount of this excess or deficit is estimated from cross sectional data, it does not of course reveal the financial picture of a particular family as it progresses through work-life. To show a typical family's income-expenditure relationship through time, it is necessary to project earnings through the work-life span, taking into account the increase due to experience and seniority as well as the rise attributable to economic growth, and to estimate the increase in expenditures that may be expected to accompany the increase in income. Such a projection of the income and spending patterns of families through their working years provides some estimate of the discretionary range of income available either for financing higher consumption during worklife or for transferring additional income claims to retirees.

Estimates of the 1960-61 average annual money income (after taxes) in six occupations are shown in table 1.

TABLE 1.—AVERAGE ANNUAL MONEY INCOME AFTER TAXES BY AGE AND OCCUPATION, 1960-61

Age	Self-employed	Professional	Clerical	Skilled	Semiskilled	Unskilled
Under 25.....	\$4,528	\$4,990	\$4,459	\$4,676	\$4,602	\$3,246
25 to 34.....	7,645	7,240	5,704	5,993	5,351	4,495
35 to 44.....	9,466	9,159	6,675	6,993	6,042	4,882
45 to 54.....	9,429	10,722	6,804	7,232	6,136	4,521
55 to 64.....	8,100	9,156	5,851	6,730	5,760	4,180

Source: Bureau of Labor Statistics, "Consumer Expenditures and Income," supp. 2, pt. A to Report 237-238, pp. 30-61.

The data reported in the survey of consumer expenditures provides a rough picture of the consumption levels achieved by the families headed by persons of different occupations and ages.

TABLE 2.—AVERAGE ANNUAL EXPENDITURES BY AGE AND OCCUPATION, 1960-61

Age	Self-employed	Professional	Clerical	Skilled	Semiskilled	Unskilled
Under 25.....	\$5,912	\$5,088	\$4,526	\$4,814	\$4,544	\$3,469
25 to 34.....	6,905	6,941	5,632	6,144	5,367	4,599
35 to 44.....	8,701	8,795	6,668	6,733	5,947	5,051
45 to 54.....	8,694	9,933	6,815	6,945	5,971	4,540
55 to 64.....	7,639	8,281	5,672	6,251	5,629	4,064

Source: BLS Report No. 237-238 pp. 30-34.

Annual incomes exceed expenditures of the self-employed and professional workers' families for most of the age cohorts, leaving sources of savings at practically all stages of worklife. Semiskilled workers, whose expenditures are held below income during the middle and later years, also have a small margin for saving. Clerical and skilled workers barely balance expenditures with income in total, with the years of slight deficits roughly offset by years of small savings. In the case of unskilled workers, no balance of income with expenditure is achieved except very briefly in the 55-to-64 age period.

Cross sectional data do not, however, shed any light on the probable income-expenditure patterns of today's labor force entrant, nor do they provide an adequate basis for estimating his capacity for accumulating income for old age. In the course of his worklife, income at the various

age levels will be rising in some rough accord with overall economic growth. By the same token, today's retiree did not receive the income during his worklife that the cross sectional picture indicates. If he came up through the ranks of his occupation, his income at each stage was lower than the income now being paid; growth has raised the earnings of each of the occupational levels he once occupied. The income problems of many of the present retirees can be explained by reference to their relatively low earnings in an earlier, less productive economic era.

One may direct attention to the income of the future aged by making some assumptions regarding the earnings of today's labor force participant as he moves through the worklife cycle and combining these projected lifetime earnings with probable expenditure patterns. Under these assumptions, it is possible to illustrate the combined effects of economic growth and experience on worklife income.

TABLE 3.—ESTIMATED AVERAGE ANNUAL INCOMES THROUGH WORKLIFE, WITH ECONOMIC GROWTH COMPONENT INCLUDED FOR WORKERS AGED 25 AND UNDER IN 1960-61

Age	Self employed	Professional	Clerical	Skilled	Semiskilled	Unskilled
Under 25.....	\$4,528	\$4,990	\$4,459	\$4,676	\$4,602	\$3,246
25 to 34.....	10,149	9,681	7,785	8,111	7,179	5,918
35 to 44.....	17,582	17,845	12,388	12,784	10,722	8,899
45 to 54.....	23,591	23,316	15,385	17,106	13,955	11,031
55 to 64.....	32,946	26,322	17,994	22,487	17,489	13,780

Source: Income data for workers under 25 taken from "Survey of Consumer Income and Expenditures," BLS Report 237-238, tables 15a-15e. Incomes for 25-34 and succeeding cohorts calculated by compounding the growth rates indicated in table 3, and adding the 1960-61 differences in incomes of age cohorts (table 1).

If consumer expenditures continue to absorb the proportions of income used for that purpose in 1960-61, the bulk of the gradually rising incomes of labor force participants will be absorbed by their rising consumption but the residual will nevertheless be significant for men in many occupations. For the professional and self-employed persons, the worklife totals would of course be quite high; skilled and semi-skilled would also have substantial balances and the clerical worker somewhat less. Since expenditures exceed income for the unskilled workers at most ages, a portion of the projected rise in incomes would need to be used to equate expenditures and income. Some net saving could result in the last 10 years of worklife, should the projected expenditures-income ratio be the same as that observed in the cross-sectional data.

For a large number of the future aged, the question of income maintenance would appear to be largely a matter of income allocation through the family's life cycle. Increased willingness to forgo some larger portion of earnings during worklife, in return for a higher level of income in old age, is crucial to the longrun solution of the problem. The methods by which earnings are reapportioned somewhat more evenly over the lifespan are of course well known. Private savings provide the simplest and most direct means of smoothing lifetime income; higher annual earnings, particularly if they are accompanied by stability of employment, will surely result in the accumulation of larger volumes of privately held assets. One recent set of projections supports the thesis that the asset position of the future aged will be enhanced, barring severe inflations or depressions.

If it could be supposed that retirement would be only partial, and retirees could earn substantial amounts after age 65, income prospects would be much improved. But the downward drift of retirement age and the persistence of compulsory retirement plans reflect a shortening of job opportunities for the elderly and this trend is likely to be reversed only in extremely tight labor markets. In any event, there would remain the problem of adequate retirement income for those men who are too old to work and for aged widows. It is important, therefore, to recognize the necessity for relying on retirement income altogether for perhaps a decade of the male's life and a somewhat longer period for the female.

The composition of the aged's incomes has changed markedly during the past 20 years, with earnings coming to be a smaller and pension incomes a much larger proportion of the total. Up to now, private savings have been only a minor source of income for most retirees; in most cases, equity in a home has been the major asset held at the time of retirement. The failure of present retirees to accumulate savings is understandable. Their earnings were low during worklife and periods of unemployment were frequent. Even now, average earnings in some occupations are too low to support a family without the acquisition of debt and the earnings of today's retirees were even lower.

But the earnings of most future retirees—particularly those retiring after 1980, who entered the labor force after the depression of the 1930's—have been increasing steadily. Their capacity for saving will be much greater than that of any previous generation. The important question is whether in fact savings will be accumulated and in what volume. If current consumption absorbs most of their disposable incomes, regardless of income levels, the gap between earnings and retirement income will widen further.

If, on the other hand, the projected rise in earnings is accompanied by a willingness to save for the retirement years, a smoother distribution of income through the life cycle will be achieved. Although it can be demonstrated that higher disposable income has usually been accompanied by increased consumption rather than increased savings, it can also be argued that previous generations of workers have not had sufficiently high and stable incomes to permit lifetime savings of any magnitude. A continuation of present rates of growth, plus an increased awareness of retirement as a life stage, may combine to produce better financial preparation through savings.

Alternatively, an increase in the volume of income transferred from workers to retirees via social security benefits (and through private pensions) would achieve the purpose of evening out lifetime income. Clearly, today's earnings can support a much higher retirement income than the low wages of the past allowed; future earnings, being higher, can carry an even higher tax rate. For the worker, the method by which he "saves" for old age is perhaps less important than the amount saved as a proportion of his earnings. Both private saving for retirement and public transfers to retirees have the effect of reducing the consumption of workers and increasing the consumption of retired persons. The private method has the advantage of allowing a family to do its own lifetime budgeting and saving for old age and the disadvantage of permitting it to do neither.

The earnings projections made here and elsewhere may prove to be optimistic. Moreover, since they are estimates of future average earnings, they are of limited usefulness in consideration of the lowest wage earners within any occupation, those workers who suffer handicaps of low education and skill, physical disabilities, etc. The income maintenance problems of these marginally employed persons are magnified by old age but they exist in some measure throughout worklife as well. It is important to view their income problem as one that pervades their entire lifespan, requiring manpower and educational programs, as well as income supplements, at most stages of their lives. The broader issue of incomes of those persons who in the future retire from a lifetime of productive labor can then be considered within the context of their ever-rising earning capacities. These higher lifetime earnings obviously can support much higher levels of living in old age if we choose to view man's income claims as accruing through his lifetime rather than through his worklife. Needless to say, the shorter the worklife relative to the total lifespan, the more important becomes the lifetime income view.

LOWELL E. GALLAWAY: THE ECONOMIC IMPACT OF OASDHI ON THE AGED

We have attempted two things: (1) an evaluation of how well the income maintenance systems that were inaugurated in the 1930's have performed from the standpoint of improving the social welfare of the aged, and (2) an assessment of what the future holds with respect to the economic impact of income maintenance systems on the social welfare of the aged. On the first count, the result is optimistic, with the basic conclusion being that income maintenance systems, such as OASDHI, have made a fundamental contribution to improving the social welfare position of the aged. Such a conclusion depends primarily on the proposition that the declines in labor force activity, which have been characteristic of the elderly in the post World War II period, are essentially the result of the aged having voluntarily chosen to substitute leisure for work-related income in response to the presence of additional amounts of transfer payment income of the retirement benefit type. If such a conclusion is not accepted (i.e., if the declines in elderly labor force activity are viewed as being basically involuntary in character), it is difficult to view the historical performance of our income maintenance systems in an optimistic fashion. Rather, the strong evidence which is indicative of a consistent deterioration in the relative money income position of the aged over the past 20 years must be viewed as being symptomatic of a decline in social welfare among the aged—a decline which has not been mitigated by our income maintenance systems and, in fact, may have been worsened by them. However, there is convincing evidence to support the thesis that the changes in aged labor force activity have been primarily voluntary in character.

The assessment of the future prospects of income maintenance among the aged suggests on the one hand that the relative deterioration in the money income position of the aged will be slowed by a

lessening of the decline in elderly labor force activity but will probably be reinforced by the impact of early retirement options on the labor force activity of the aged. However, the latter may be interpreted in the same fashion as the declines in labor force activity previously discussed. In fact, they may be viewed as indicative of an improvement in social welfare among those exercising the early retirement options. Further, it can be argued that, by extending these options to younger ages than 62 and providing actuarial increments for postponing retirement beyond age 65, substantial increases can be had in the amount of social welfare produced by the old-age benefits originating under OASDHI.

These conclusions permit us to close on an exceedingly positive note. The historical record of income maintenance is one which indicates a substantial improvement in social welfare among the elderly while the future would seem to be just as favorable. How favorable it is depends in part on ourselves but the prospects are certainly promising.

RAYMOND MUNTZ: MINIMUM INCOME AS A RETIREMENT POLICY OBJECTIVE

Now, unlike under earlier concepts of "retirement," pension income is no longer conditional on withdrawal from the work force. Retirement now means withdrawal from the current employer only. A person's pension or "retirement" status no longer is a reliable indicator of his labor market status.

Even this model of the retirement decision involves rational choice between alternatives. This is appropriate to understanding retirement that is voluntary, that is undertaken from a posture of some bargaining position with life. When a professional person considers retirement, he calculates his income from pensions and assets and what he wants to do with his remaining time and what standard of living he needs. He may have choices to make between retiring at 62 or waiting until 65. But for understanding public policy toward retirement, it is necessary to distinguish this kind of decision from the kind of choice an unemployed packinghouse worker or miner with no prospects has to make on reaching 62. Should he apply for social security? Surely he is not facing a decision in the same sense as the professional because he really has no choice. The decision to apply for social security is made for him by a complete absence of opportunities. We can even define retirement for the poor as a poverty of choices. If a modern meaning of retirement is a range of choices in income and work opportunities, then by definition the poor cannot make a retirement decision.

Impoverishment during retirement can lead to bitterness, alienation, or dependence, which is reason enough that the matter is of public concern, but the greater significance may be intergenerational effects. Poverty begets poverty in its wake. An aged parent who becomes dependent contributes to "the life cycle squeeze" and the gap between aspiration and attainment. Longevity patterns today are such that an aged parent may become a dependent burden at the very time when the claims of one's own children are greatest, particularly in embarking on expensive education or career training. A parent's capacity to help

structure the important life decisions of his children can be restricted by obligations to his own parents. Close observers of the political support for medicare noted that it seemed to come not only from the aged but also from middle-aged persons with both parents and children of their own. In order that retirement not contribute to perpetuating poverty, real income must be predictable as well as adequate when the retirement decision is made so the grandchildren can be helped in making the right career and life decisions.

If I am right about what retirement is coming to mean for Americans, then it is possible to summarize public policy objectives for the aged in terms that are manifest if not widely attained. We can recognize the range of shared values by distinguishing four levels of equity. First, we want everyone to live at least at a minimum level that is not poverty. Second, we desire a higher modest level for those who have contributed through work, even poorly paid work, some of their lifetime. Third, we wish to make employment opportunities available for the aged so that those who are able and desirous of doing so can supplement their incomes beyond a minimum or modest amount. Fourth, we also wish to encourage savings and private pensions so that those most productive and prudent can retire without severe contraction in their personal standards of consumption.

The social security program is a big contender for an incremental role to achieve these objectives, but here we must note the actual and potential dangers created by its early retirement provisions. Early retirement benefits are actuarially reduced. They retiree is stuck with a reduced benefit for the rest of his life or until retiree benefits are liberalized. In this sense, early retirement can be a kind of engine of poverty and it is of increasing concern that over half of male retirees are retiring early on reduced benefits. There is evidence that many of them are motivated by the very absence of alternative opportunities that typifies the aging poor—no job or jobs at such low wages that the reduced benefit is the preferable alternative.

If social security is entering a dubious area in early retirement, unemployment insurance is withdrawing from an area that it should insure—the wages and salaries of aged workers. Some States deny or reduce benefits because of pension income even where the individual continues to demonstrate work force attachment. These States are mistakenly assuming that pension income proves withdrawal or retirement in the old sense. This presumption is maintained even in the face of evidence to the contrary, such as compulsory retirement contract clauses, active search for work after such retirement, or taking another job after retirement.

OASDHI was enacted to take the wind out of the Townsendites, to take older people out of the labor market, to make the improvident provide for their old age so that the provident wouldn't have to care for them later, to give all persons—including the provident—some protection against the risks to savings inherent in the private economy, and to serve as a buffer to poverty in old age. All of these functions have been or are being served. The question remains: How much more of a contribution toward eliminating aged poverty should be expected of social security?

Unfortunately there has been a polarizing of opinion with regard to the role of OASDHI. Those who give first priority on all issues to the war on poverty feel that OASDHI, with only a fraction of additional revenue going to the poor, is too inefficient a use of funds for antipoverty purposes. There are others, more concerned with the aged generally or identified with the history of OASDHI, who fear any further bending of OASDHI from its earnings-related-benefit schedule; they feel that its success and broad support are largely due to social insurance principles which make poverty criterion irrelevant. A third view, sometimes appearing as a revision of the second, acknowledges that OASDHI is the key to eliminating poverty but fails to be explicit about the magnitude of change required before a substantial cut in the aged poverty deficit can be achieved through social security.

Our findings suggest that each of these viewpoints involves some distortion. It appears possible to extend social insurance principles and at the same time to reduce poverty. Although it would be necessary to achieve some degree of general revenue financing, this can be begun in ways that will continue both the popularity and the integrity of the system. A substantially expanded OASDHI program with 35 to 50 percent higher benefits than at present can serve the multiple objectives of the aged, including the aged poor, and reduce the residual aged poverty gap to about \$1 billion.

YUNG-PING CHEN: POTENTIAL INCOME FROM HOMEOWNERSHIP: AN ACTUARIAL MORTGAGE PLAN

Despite the proliferation of public and private measures for income maintenance, anxiety about income insecurity in old age still persists. This anxiety in part reflects desires for ever larger income in retirements as the cost of living rises and the standard of living in the economy improves. It also reflects limitations of the existing measures in providing adequate income for old age.

Although the aggregate money income of the aged (65 year of age or over) consists of several components, many still receive low and sometimes inadequate incomes. While the current income position of the aged may be low, their economic position is improved when ownership of assets, including homeownership, is taken into consideration. If the assets of the aged could be converted to income prorated over the remaining life of the holder, their income positions would be significantly improved in some cases, and still noticeably bettered in many others. In other words, even though the actual money income of the aged may be low, their potential income from assets may be quite high.

Since homeownership represents a highly significant portion of the asset holding of the aged, this paper deals with the potential income from that source. It is suggested that an actuarial mortgage plan could be devised to liquidate home equity, viewed as a type of savings, in an orderly and systematic manner to help meet recurrent needs for currently spendable income. Although there are other methods of turning home equity into current income such as sales and loan

approaches; this paper introduces a housing annuity which would pay the homeowner monthly income with guarantee of lifetime tenure in his own home. The actuarial mortgage plan, if implemented, would mean a new source of income for those older homeowners who are willing to use home equity to raise their income in old age. The proposed plan would be a completely voluntary measure, which is in full accord with the freedom-of-consumer choice, and which serves to widen the range of choices to older persons when their income from conventional sources becomes low and/or inadequate.

MARGARET S. GORDON: THE CASE FOR EARNINGS-RELATED SOCIAL SECURITY BENEFITS RE- STATED

The U.S. social security system has been attacked by certain critics in the last few years on the ground that a large proportion of its benefits go to the nonpoor. This line of criticism is not dissimilar in nature from certain earlier attacks on the system but, whereas previous opposition was almost entirely from conservative circles, some of the recent critics of the system are liberal economists who are concerned about achieving a more effective attack on poverty. Their emphasis is on the alleged inefficiency of a system of income maintenance under which a large proportion of the poor go unaided while a large proportion of the transfers of income involved go to the nonpoor. The unemployment insurance system is regarded as a more serious offender on this latter score than OASDHI. Most of the social scientists who criticize the social security system support some version of a negative income tax or social dividend proposal, differing among themselves, however, as to whether the proposed scheme should replace or merely supplement the existing income maintenance system.

In this paper I argue (1) that the efficiency of an income maintenance system in transferring income from nonpoor to the poor at any given point in time should not be the sole criterion on which it is judged; (2) that existing social insurance systems are designed instead to bring about a greater degree of income stability over the life cycle by replacing part of the income lost by workers and their families as a result of economic risks and contingencies such as unemployment, old age, disability, and death of the breadwinner; (3) that there is room in an affluent society, and need for, both an earnings-related social insurance system and some type of system aimed at guaranteeing a minimum floor of income, at least to those among the poor who are too young or too old or too disabled to work, and to female family heads with young children; (4) that there has been a decided tendency in other industrial countries toward dual systems of income maintenance for the aged and, in some cases also, for the disabled and survivors—one providing a minimum pension and the other an earnings-related pension usually designed to supplement the minimum; and (5) that we should consider seriously a dual system at least for the aged and, indeed, have begun to take certain steps in that direction.

Social insurance programs are based on the principal of presumptive need; i.e., that families and individuals confronted by such contingencies as unemployment, disability, old age, and death of the

breadwinner will tend in the great majority of cases to be in need of income maintenance payments. Thus they are aimed at preventing such families and individuals from falling into poverty when these contingencies occur. Proof of poverty is not a condition of eligibility, however. Benefits are paid as a matter of right to those who meet specified eligibility conditions, which generally take the form of requirements that the individual must have worked a certain length of time and have received certain minimum earnings in covered employment before meeting the contingency of old age, disability, death of the breadwinner, or unemployment. In country after country that adopted social insurance programs from the 1880's onward, this principal had great psychological appeal to the working classes, which had developed deep-seated feelings of resentment toward the demeaning aspects of the means tests on which older types of poor relief were based.

Workers also liked the feeling that, under the contributory system of financing which was generally adopted in social insurance programs, they and/or their employers paid for the benefits they would ultimately receive. Also highly significant from an economic point of view is the fact that the worker or his widow does not have to exhaust whatever meager savings may have been accumulated before being entitled to benefits.

It is important to recognize that various versions of the negative income tax or social dividend proposals would have very different implications for existing social insurance programs and would undoubtedly have different effects on incentives to work and to save. Very drastic changes, for example, would be brought about by proposals of the Friedman type, which would replace all other income maintenance systems by a negative income tax designed to restore a given percentage of the poverty income gap—in Friedman's case, 50 percent. Such a scheme would offer no protection whatever to unemployed workers and their families unless the family income was below the poverty line to begin with or fell below the poverty line in a given calendar year as a result of unemployment.

Among the adjustments that probably would be made by unemployed workers and their families, judging from existing data on the impact of unemployment, would be dipping into savings, borrowing money, piling up bills, getting help from relatives, moving to cheaper quarters, and other family members seeking work. The frequency and severity of such adjustments clearly would be substantially increased under Friedman's proposal. These considerations also apply in part to social insurance provisions for partial replacement of income loss attributable to temporary or permanent disability, whether of an occupational or nonoccupational character.

Social insurance has many advantages as a method of providing for partial replacement of income loss attributable to old age or the death of the breadwinner. Under proposals of the Friedman type, most workers who were not adequately protected by a private pension would sustain a severe loss of income at the time of retirement. Among elderly OASDHI beneficiaries, neither private pensions nor asset income contribute large proportions of aggregate income. Many of today's retired aged, of course, accumulated their savings in a period when real earnings were well below recent levels and it was correspondingly more difficult to save.

Those who believe in confining the social security system to the single goal of providing a minimum floor of income are actually expressing a preference for a greatly increased role for private and public employee benefit plans, although the issue is seldom put in this way. Thus the real question becomes one of a choice between strengthening the social security system versus permitting private and public pension plans to absorb a considerably larger proportion of total contributions to retirement systems than they do at present. Although progress has been made toward improving the protection offered by private pension plans since the early 1930's, not only as a result of rapid expansion in the proportion of workers covered but also through liberalization of benefit formula and vesting provisions, there are many remaining problems that would have to be faced if public policy were to move in the direction of relying relatively more heavily on private pension plans as a means of providing for retirement income.

There is little evidence in other industrial countries of any tendency to turn away from earnings-related old-age insurance systems in favor of means tested or income tested old-age pension systems. In fact, a predominant tendency, since the early decade of national old-age pension systems in the latter part of the 19th century, has been away from systems basing all pensions on an income or means test. By the middle 1950's, the basic national old-age pension system in the majority of industrial countries was a contributory, earnings-related old-age insurance system, while a few countries had contributory systems providing flat benefits.

Historically, there have been two main lines of development of income maintenance programs for the aged, disabled, and survivors. The predominant line of development was the adoption of contributory earnings-related pension systems patterned after the pioneering German law of 1889. The Scandinavian and British countries, on the other hand, tended to follow the pattern established by another early old-age pension law, that adopted by Denmark in 1891, under which pensions were provided for the needy aged poor on the basis of an income test.

TABLE 1.—TYPES OF NATIONAL OLD AGE, SURVIVORS, AND INVALIDITY PENSION SYSTEMS, 20 COUNTRIES, 1932

Contributory earnings-related pensions	Flat pensions or old-age assistance	Combination
Old-age, survivors, and invalidity: Austria. Belgium. Czechoslovakia. France. Germany. Hungary. Netherlands.	Income-conditioned pension or assistance payment: Old-age, survivors, and invalidity: Austria. Denmark. Old-age and survivors: New Zealand. Old-age: ¹ Canada. Norway. South Africa.	Contributory earnings-related pension and income-conditioned supplement: Old-age and invalidity: Sweden.
Old-age and invalidity: Chile. Italy. Portugal.	Contributory pension and noncontributory income-conditioned pension: Old-age, invalidity, and survivors: Great Britain.	
Old-age: Spain.	Income-conditioned old-age pension and contributory invalidity insurance: Ireland.	

¹ 18 States in the United States had old-age assistance programs but many of these were optional for the counties.

Source: Barbara N. Armstrong, "Insuring the Essentials" (New York: Macmillan, 1932), pp. 611-632.

TABLE 2.—TYPES OF NATIONAL OLD-AGE, SURVIVORS, AND INVALIDITY PENSION SYSTEMS, 27 COUNTRIES, 1954

Contributory earnings-related pensions	Flat pensions or old-age assistance
Old-age, survivors, and invalidity: Argentina ¹ Austria ¹ Belgium Chile Czechoslovakia ¹ France ¹ Germany (Federal Republic) Hungary Italy Japan ¹ Netherlands ¹ Poland Portugal Switzerland ¹ Old-age and invalidity: Finland ^{1 2} Old-age and survivors: United States ¹	Income-conditioned pension or assistance payment: Old-age, invalidity, and survivors: Australia Old-age and invalidity: Denmark South Africa Old-age and survivors: Norway Contributory pension: Old-age, invalidity, and survivors: Great Britain ¹ Spain Old-age and survivors: Israel Combination: Old-age, invalidity, and survivors: Canada ¹ Ireland ¹ New Zealand Sweden

¹ These countries also had old-age assistance programs and, in some cases, assistance programs for invalidity and survivors.

² In Finland, the survivors benefit was a lump sum.

Source "Old-Age, Survivors, and Invalidity Programs Throughout the World, 1954," U.S. Social Security Administration (Washington, D.C.: U.S. Government Printing Office, 1954).

TABLE 3.—TYPES OF NATIONAL OLD-AGE, SURVIVORS, AND INVALIDITY PENSION SYSTEMS, 28 INDUSTRIAL COUNTRIES, 1967

Contributory earnings-related pensions	Combination
Argentina ¹ Belgium Chile Germany (Federal Republic) Hungary Poland Portugal Spain Venezuela Flat pensions: Income-conditioned pension: Australia South Africa Contributory pension: Ireland ¹ Netherlands Combination of flat pensions: Denmark ³ New Zealand ¹	Contributory earnings-related pension and income-conditioned minimum pension guarantee: Austria Contributory earnings-related pension and income-conditioned pension: Czechoslovakia France Italy Switzerland ² Universal pension and contributory earnings-related supplement: Finland ¹ Norway Sweden Universal pension, income-conditions supplement, and contributory earnings-related supplement: Canada ¹ Contributory flat pension, contributory earnings-related supplement, and income-conditioned pension: United Kingdom Contributory flat pension and income-conditioned supplement: Israel Two contributory systems: Japan ¹ Contributory, earnings-related pension and flat noncontributory pension: United States ¹

¹ These countries had old-age assistance programs and, in many cases, assistance programs for invalids and survivors.

² Switzerland also has an income-conditioned minimum pension guarantee for beneficiaries of its contributory system.

³ Under a new supplementary pension system, adopted in 1963, the pension varies with years of contributions but not with earnings.

Source: "Social Security Programs Throughout the World, 1967," U.S. Social Security Administration (Washington, D.C.: U.S. Government Printing Office, 1967).

Since the mid 1950's, there has been a decided tendency toward the adoption of various combinations of flat and earnings-related pensions systems. In 1967, only nine of our countries were in the group which lacked any type of flat pension system and relied on a contributory earnings-related system, supplemented, if at all, by a traditional public assistance system. The national pension systems in six of our countries provided exclusively for flat benefits, but there were only two of these countries—Australia and South Africa—in which all pensions continued to be income conditioned. However, there were 13 countries with combinations of earnings-related and flat benefit systems by 1967.

Clearly, there was increasing pressure in a number of countries for a combination of approaches which would provide both an effective minimum floor of income to pensioners, especially the aged, and adequate earnings-related benefits to retired workers who had been covered by a contributory earnings-related pension system for a considerable period of years.

Even in Great Britain, with its long tradition of flat, egalitarian benefits, earnings-related supplements recently have been adopted for all its short term social insurance programs, while an earnings related supplementary pension scheme dates back to legislation enacted in 1959. In Britain, as elsewhere, it has been primarily the postwar experience of steadily rising earnings, in contrast with the stagnating or declining wage levels of the twenties and thirties, which has built up pressure for earnings-related supplementary social insurance programs that would prevent workers from suffering a severe drop in income at the time of retirement or when beset by unemployment, illness, or long-term disability. But the pressure for change also reflected recognition of the fact that a system financed by flat contributions, which had to be geared to the wages of the lowest earners, encountered great difficulty, despite periodic parliamentary action to increase contributions and benefit levels, in providing benefits which would meet reasonable standards of adequacy. Moreover, the goal of minimizing the extent to which needy individuals would have to turn to public assistance had not been achieved, since, particularly in the case of the aged, social insurance benefits were so inadequate that large numbers of elderly pensioners turned to the national assistance system for aid, while a great many others could have qualified for assistance payments but refrained from applying.

There is widespread recognition of the fact that the present \$44 minimum monthly OASDHI benefit for an individual and \$66 for a couple falls far short of providing even a subsistence level of living. Moreover, a large proportion of retired workers whose benefits are based on the minimum primary insurance amount actually receives less, since they are persons who have been awarded reduced early retirement benefits. It is scarcely surprising that the administration proposals for increases in social security benefits submitted to Congress early in 1967 placed a good deal of emphasis on increases in minimum benefits. The administration proposals represent only one combination among a number of possible approaches to achieving a more adequate minimum and not necessarily the most desirable combination. Perhaps the most serious objection to them relates to the distribution of the financial burden. It would continue to be largely true, as it has been for many years, that the income redistribution that takes place through the OASDHI system would mainly consist of transfers from average-income families to low-income families.

The United States is out of step with other industrial countries. Among the 24 countries with contributory insurance type pension systems, 17 had provisions for a contribution to the system from general government revenues. There would seem to be a strong case for a contribution from general Federal Government revenues in the United States, particularly in connection with any proposal to raise minimum benefits sharply. Upper, middle, and high-income receivers would then bear a larger proportion of the financial burden of providing a

more adequate minimum but, at the same time, would be relieved of part of the burden of public assistance expenditures. Moreover, this approach would have the advantage of shifting a larger proportion of the burden of providing a minimum floor of income from State and local taxes to Federal taxes. On the other hand, it may be asked whether it is logical to achieve the goal of a more adequate minimum within the OASDHI system if the link between contributions and benefits is to be further attenuated in the process. Other approaches to a minimum floor of income for the aged, disabled, and survivors might as well be considered.

One of the possible alternative approaches is the provision of a uniform flat pension without an income test to all residents in certain age, disability, or survivorship categories. Like family allowances that are not subject to an income test, such universal pension payments represent an example of the so-called "demogrant" type of income maintenance payment that is based neither on need nor on prior contributions but purely on demographic characteristics or a physically disabled condition. The concept of presumptive need is surely involved, as in social insurance programs. Universal pension systems are found in Canada, Denmark, Finland, New Zealand, Norway, and Sweden, in varying combinations with supplementary pension systems or income condition pensions.

Universal pensions represent an egalitarian approach to providing a minimum floor of income for the aged, disabled, and survivors and, as such, tend to be found in countries with strong egalitarian traditions. It can be argued that, at least as contrasted with income conditioned pensions, universal pensions on the scale found in Canada and Sweden are unlikely to have a disincentive effect on saving or to provide an inducement for persons approaching retirement age to transfer assets to their adult children. Their effect on incentives to work is less easy to assess. Presumably, the receipt of a modest pension payment that is subject neither to an income test nor a requirement to retire would not tend to induce withdrawal from the labor force on the part of persons capable of continuing to work, in the absence of other sources of retirement income. However, when the universal pension payment is supplemented by an appreciable earning-related pension, as will be the case in Canada and Sweden when their supplementary pension schemes reach maturity or by a sizeable private pension, the combined income maintenance payment may in a good many cases be large enough in relation to earning capacity to provide a positive inducement to retire on the part of persons who would tend to postpone retirement if the universal pension alone were available. The fact that universal pensions are paid to some persons who do not need them is not objectionable if they are largely financed through taxes borne by persons who will ultimately receive the pensions, as in Canada and to some extent in Sweden, and if the income tax structure is progressive so that pensioners with sizable incomes are liable for tax payments that exceed the pension.

Suppose we were to consider a universal pension of \$50 a month for individuals and \$75 a month for couples both members of whom were age 65 and over, financed, perhaps, in much the same manner at the Swedish universal pension. Under the proposal, OASDHI cash benefits would then become supplementary to this basic pension. On the basis of such a proposal, along with, let us say, the benefit increases

recommended in August 1967 by the House Ways and Means Committee, total benefit payments received by those now getting minimum OASDHI benefits would go up from \$44 to \$100 a month for an individual and from \$66 to \$150 for a couple, or to \$1,200 for individuals and to \$1,800 for couples. These amounts would bring elderly individuals a great deal closer to Orshansky's nonfarm poverty line criterion of \$1,435, while couples would be brought virtually up to the \$1,850 criterion. Individuals currently receiving average OASDHI benefits of \$84 would receive total benefit payments of \$134.50, or \$1,614 a year, while couples receiving average benefits of \$142 would get \$235 a month or \$2,820 a year. These amounts may be compared with Orshansky's nonfarm low income criterion of \$1,685 for an elderly individual and \$2,340 for an elderly couple. In short, such a universal pension would bring minimum beneficiaries aged 65 and over considerably closer to the poverty line and average beneficiaries almost to the low-income line or well above it in the case of couples.

There are currently about 18.5 million persons aged 65 and over, of whom about 18 percent, or 3.1 million, are wives. Assuming that perhaps a half million would not meet reasonable residence and citizenship requirements, we may very roughly estimate the annual cost of the suggested universal pensions at \$9.9 billion. However, there would be certain offsetting savings. First, there should be a substantial savings in current expenditures for old-age assistance. Second, if this type of universal pension system were adopted, the case for modification of the present income tax advantages for the elderly, including exemption of OASDHI benefits, would be very strong, but there are numerous ways in which the provisions could be modified and politically it might be very difficult to achieve much restoration of tax revenues lost as a result of these special provisions.

The major argument in favor of this approach, as opposed to increasing minimum OASDHI benefits sharply on the basis of general revenue financing, is that it would bring about a significant improvement in the income status of all those aged 65 and over but would provide the largest proportionate increases in income for those who have little or no income, without disturbing the existing structure of OASDHI contributions and benefits. It would also in my opinion have the very great advantage of substantially improving the income status at age 65 of persons retiring on actuarially reduced OASDHI benefits before age 65. As matters stand now, these persons, many of whom apply for early retirement benefits because of ill health or involuntary unemployment, receive reduced retirement benefits for the rest of their lives in most cases.

DONALD F. BELLAMY: THE CANADA PENSION PLAN: A SUPPLEMENTARY INSURANCE SYSTEM

The development of Canada as an urban industrial nation only after the 20th century arrived and a parallel persistent trend away from an agricultural economic base partly account for delays, in comparison with older nations, in the development of old-age security measures. The first major step taken in 1908 was a voluntary Government annuity system, which had limited use until the rapid expansion

of industrial pensions starting in the 1940's. To this was added in 1927 an income conditioned pension at age 70. This program by 1950 supplied income benefits under restrictive eligibility rules to over 40 percent of Canadians over 70. A \$40-monthly universal transfer payment, or demogrant, at age 70 under the Old Age Security Act came in 1951. The Canada Pension Plan passed in 1965 added a second supplementary layer to the basic demogrant system of 1951.

A general acknowledgement of incompleteness in Canada's assumption of social responsibility provided a seedbed for the development of a new system. From the inception of the demogrant in 1951, there was frank recognition among legislators that the brand new program enacted was not the full answer to old-age security that some had thought. Dissatisfaction with existing private retirement arrangements was an important contributing factor in the development of a second layer compulsory contributory governmental program in Canada. The amount of benefit under the demogrant at age 70 and old-age assistance payable at 65 was placed at \$40 monthly in 1951. Both benefits were adjusted to \$55 in 1957 as a result of sharply rising living costs prior to this year when two general elections were held. The lack of relationship of these payments to an acceptable level of adequacy was always admitted and this remained a thorny issue. The policy was clearly stated that the Federal universal flat rate benefit at 70 was never intended to be more than a floor beneath private pensions and other means.

Strong pressures for change in the Canadian approach to social security also came from those who cared about the high cost of financing the pay-as-you-go demogrant program, by the 1960's climbing relentlessly toward a \$1-billion yearly cost. That pressure coincided with and was compounded by difficulties associated with national monetary problems. Total benefit payments under the Old Age Security Act in 1960 of \$575 million or approximately 1.6 percent of the GNP of \$36.3 billion. As a consequence of past reluctance to increase contributions for the demogrant, the payout (absorbed by periodic Federal subsidies) exceeded revenues in the program by 600 million for the years 1952 to 1959. Of more profound significance, in the directions to be taken in financing social security for the aged, was a pressing need for investment capital as a prerequisite for implementing development policies. A policy of encouraging private investments in conjunction with provision for old-age retirement was implemented in 1957 through a voluntary legislative savings measure under which income tax deductions for retirement savings were permitted. One of the announced aims was to make available to the corporate trustees or insurance companies concerned a reservoir of savings for productive investments. Nor was the potential of public pension fund investments unnoticed by governmental authorities. In an early (1963) version of the Canada Pension Plan, a proposed pay-as-you-go method of financing was attacked by Quebec's political leaders largely on the ground that an accumulation of reserves was essential for the development of that Province. In taking the unusual step of contracting out of the Canada Pension Plan and legislating its own Quebec Pension Plan, the Province intended to supply needed capital for economic development at interest rates commensurate with the risks taken.

The Canada Pension Plan which came into effect on January 1, 1966, was intended to insure for substantially all members of the Canadian labor force the opportunity to accumulate the rights to an earnings-related, graduated benefit retirement pension with supplementary features. With a few exceptions, all persons between the ages of 18 and 70 years possessing work-related income of at least \$600 yearly as employees or \$800 as self-employed persons are required by law to contribute to the Canada Pension Plan. The criteria for exclusion are familiar in other such programs: Difficulty in reaching certain occupations, doubt that there is an employer-employee relationship, payment is not in cash, taxation of earnings could only produce financial hardship to the contributor, and legal factors.

The first 10 years of the operation of the Canada Pension Plan constitute a transitional period during which benefit rights are to be built up. The plan established a permanent association between benefits and increasing prices and wages. The first adjustment mechanism to go into effect is a pension index. This index is reckoned as the 12 months average of the national consumer price index from July 1 of one year to the next June 30. The result is a figure for the pension index to be applied in calculating the benefits in the January next following the June date. When the pension index rises less than 1 percent above the pension index for the previous year, benefits remain the same. If the index rises more than 2 percent above the pension index for the previous year, benefits rise by 2 percent and the excess is disregarded. The intentions behind the 1- and 2-percent limits are as follows: When the price rise for a year is small, no increase to the pension is necessary; the possibility that large increases from year to year will be short lived makes full provision undesirable. Further, adjusting to price increases larger than 2 percent might also add to an inflation.

In order to take account of variations in productivity, to the extent these are reflected in earnings, the ceiling placed on contributory earnings (initially \$5,000) is varied by the use of an earnings index after completion of the transitional period in 1976. An additional use for this second measure is adjusting the contributor's earnings record at the time his benefit payments begin. By this means the worker's lifetime earnings levels are brought up to date upon retirement, thus maintaining a relationship between earnings in a year and the earnings ceiling for that same year. The earnings index is calculated by dividing average earnings reported on all contributors' tax returns during the first 8 years of the most recent 10 calendar years by the average of all salaries and wages reported on tax returns during a fixed period. Specifically, the latter fixed period is the 8 years 1966 to 1973, inclusive. The use of the 8-year period should smooth the fluctuations which occur on a year-to-year basis. It should be noted that this index, unlike the pension index, may decline in value. Another approach considered as a method which would produce a relationship between rising purchasing power and pension benefits was to base the calculation on final earnings of the contributor. This approach was rejected from the consideration that many wage earners reach their peak earnings in their mid-40's and early fifties. The use of the earnings in the contributor's highest years would have provided another adjustment, yet this approach would not effectively

take into account a rise in the general earnings level in subsequent years of the worker's employment.

The contributory old-age benefit payable from January 1, 1967, amounts to 25 percent of the average monthly earnings on which contributions were made. These average monthly pensionable earnings are calculated from the persons earnings during his working lifetime after the plan begins or after he reaches age 18. Full pensions under the Canada Pension Plan become payable only after 10 years operation of the program. During the 10-year transitional phase, the beneficiary receives up to 10 percent of the maximum benefit for each year in which he has made contributions to the plan. Without taking account of changes resulting from the use of the automatic adjustment, the maximum benefit payable after 10 years is \$104.17 monthly. Government estimates of the combined benefits of the Canada Pension Plan and Old Age Security by 1976 range from a maximum of \$126 monthly for the 65-year-old single man with a history of \$300 monthly earnings to \$236 for 70-year-old married men with \$400 monthly earnings.

Between ages 65 and 70, the elderly person must be retired from regular employment in order to qualify for the benefit. A retirement test is administered so as to relate payments to the degree of separation from paid work and to provide incentive where the elderly person displays extra initiative or has unusual financial needs. In computing pension benefits for those who retire before age 70, a two-step formula is used. The monthly exempt earnings permitted are 1.5 percent of pensionable earnings for the year. In the first 2 years before adjustment becomes applicable in the plan, the pensioner suffers no penalty if he has earnings up to \$75 monthly, or \$900 yearly, based on the calculation of 1.5 percent times \$5,000. The first reduction in the benefits takes place on annual earnings between 12 and 20 times the \$75 monthly exempt figure. Benefits are reduced by 50 cents for each dollar of earnings within the range \$900 to \$1,500. At the latter figure and above it there is a second reduction in the pension benefit of \$1 for each dollar of earnings. Once having reached the age of 70, however, the person is no longer subject to these benefit reductions.

In the determination of benefits for the Canadian program, each contributor may exclude 15 percent of the years since the inception of the plan or since he became age 18, provided the number remaining does not fall below 10 years. This provides an opportunity for those who have low or zero earnings by reason of education, illness, unemployment, or absence from the country to qualify for somewhat higher benefits than they would receive otherwise. An additional drop-out provision applies to those who choose to work past age 65. This provision may give such persons the opportunity to build up larger pension benefits.

Lump-sum death benefits and income payments to widows, orphans, disabled widowers, and disabled persons, make the benefits under the plan comprehensive in scope. Entitlement to supplementary income benefits is to be delayed for several years after the inception of the plan for administrative and financial reasons. Full widow's benefits are payable where the contributor's widow has reached 45 years of age at the time of widowhood. If there are dependent children or the widow is disabled, benefits are payable at any age. This payment

is the flat rate sum of \$25 plus a percentage amount. The latter is 37½ percent of the sum her husband would have received at age 65 calculated on the rate of his average earnings prior to death. No benefits are payable to widows under age 35 who have no dependent children. Where widowhood occurs between 35 and 45 years, however, benefits are the previously described widow's benefits reduced by one-twentieth for each month that she is short of her 45th birthday. An important aspect of the supplementary payments under the plan is the disability benefit for persons who become incapable of taking employment. The benefits for such persons are the flat rate payment of \$25 monthly prior to adjustment in addition to 75 percent of the retirement pension which would have become payable at 65, given a continuation of the same average earnings level by the contributor.

Commencing January 1, 1966, virtually all employees are required to contribute 1.8 percent of their earnings between the exempted amount of \$600 a year and the maximum of \$5,000 a year, with equal matching contributions by the employer (self-employed persons make both payments). The reserves over and above immediate requirements are to be made available by the Federal Government for the purchase of provincial securities in the same proportion as the funds are contributed by the people in the respective Provinces. (The exception is the Province of Quebec which operates a plan comparable to the Canada Pension Plan and in which reserves are provincially controlled.)

Contributions to the Canada Pension Plan for the first 20 years are expected to provide a gradual accumulation of funds. Intermediate cost estimates, assuming a 3 percent per annum average increase in earnings, indicate that by 1985 the fund will amount to \$7.1 billion. With a 4-percent increase per annum, the figure will be \$8 billion. Thereafter, the reserves are expected to decline and disappear by about the year 2000. In permitting the allocation of reserves to the purchase of provincial securities, the expectation is that the funds will be used for Provincial Government investment in schools, hospitals, and other development projects. After the first 20 years, the funds should be withdrawn gradually from use by the Provinces. Analysis of the implications of this or other economic aspects of plan funding are not undertaken in this paper.

The indications are that the contributions bear most heavily on persons of moderate income—that is approaching \$5,000 per annum—beyond which point contributions decline as a percentage of earnings. The contribution structure under the plan is such that below the maximum earnings the contributions are progressive in character.

Based on simple and quite imperfect criteria of potential needs and levels of adequacy provided by the benefits, the Canada Pension Plan has both important limitations and, as well, its own obvious advantages as a piece of social welfare legislation. The fact that the demogrant continues and provides the basic old-age pension in the country and that a simply administered and apparently acceptable guaranteed supplement are important features of old-age security during and beyond the transitional period of the Canada Pension Plan leads one to wonder, aside from important political considerations, whether these obviate the necessity for having another supplementary benefit system on a contributory basis. On economic grounds, the importance of the

Canada Pension Plan appears substantial. Even so, its main objective, to provide investment capital, is to disappear in perhaps 20 years, unless the contribution is increased to replenish the reserves. In the transitional phase, however, the provision of funds to support capital investment by the Provinces would seem to be the main justification for the fund.

GASTON RIMLINGER: SOCIAL INSURANCE AND ECONOMIC GROWTH: A MODEL OF THE GERMAN SYSTEM

One of the basic decisions a country has to make in social insurance relates to the long-run adjustments of pension to changes in the income level of the economically active population. There are three main alternatives: (1) Pensions may be left unchanged; (2) they may be adjusted for changes in the cost of living, leaving their real level unchanged; (3) they may be adjusted for changes in real per capita national income. The alternative adopted affects the income redistribution between those at work and those on retirement. This is a question of social policy which is normally determined in the political process.

If the objective is to allow retired persons to maintain their real income, it is necessary either to control the price level or to adjust pensions for changes in the cost of living. But in an economy with a rising per capita output, this objective implies acceptance of a decrease in the standard of living of pensioners relative to that of the active work force. With current retirement ages and the trend toward longer life, the tendency of such a policy is to create large economically underprivileged minorities. The alternative objective is to maintain the relative standard of living of pensioners. If pension levels are to remain fixed, this requires a policy of falling prices; the cost of living should be allowed to drop in proportion to the rise in productivity.

Deflationary policies are not likely to be considered suitable for the purpose of allowing pensioners to share in a country's economic growth. Aside from the probable negative impact on the level of economic activity, the redistributive effects of a falling price level go far beyond those intended for social insurance beneficiaries. The more direct method is therefore to adjust pensions for changes in per capita income, either in an ad hoc fashion or at regular intervals. A greater degree of equity can be achieved no doubt if adjustments are made systematically, rather than in response to changing political winds.

In the United States adjustments have been irregular and not infrequently timed for their political effects. West Germany is one of the countries that has attempted to make adjustments on a more rational economic basis. The German social insurance system was reorganized in 1957 to link pension levels at retirement and during subsequent years to the growth of the national economy. Officially, the system attempts to maintain for the retired person the relative standard of living he achieved during his working life. The pensions are designed to protect the income position of the individual pen-

sioner in relation to other pensioners as well as the relative income of all pensioners vis-a-vis the active work force.

To achieve these objectives, German social insurance pensions are based on the following economic variables: (1) The ratio of the lifetime covered earnings of the individual to the covered earnings of all individuals during the same period; (2) the individual's number of years of work in employment covered by social insurance; and (3) the average level of covered earnings of all individuals at the time of a particular person's retirement. The pension at retirement is simply the product of these variables multiplied by a constant specified by law. Once in force, the pension becomes a function of the growth of average earnings in the county. This relationship is not automatic but depends on annual reviews.

The German social insurance system clearly tends to bring about a significant redistribution of income between those on pensions and those still at work. If we assume that incentive is mainly a function of relative earnings, this is not likely to have adverse incentive effects, although the relatively high pension levels are bound to affect the pattern if not the level of consumption, saving, and capital formation. The argument that may be advanced against the German system is that it does not redistribute income enough among individuals, that it extends into retirement the income inequalities that were generated by the market system during the working years. The validity of this argument, however, must be tested on social and political grounds rather than in the economic sphere. Actually, more redistribution takes place than is implied in the model which I have presented because of child supplements to the pension and because years of illness, training, and involuntary unemployment are counted as years of work.

ABSTRACTS OF PAPERS INCLUDED IN PART III: *Public Programs of*
OLD-AGE INCOME ASSURANCE

E. A. GAUMNITZ: CONSIDERATIONS AFFECTING SOCIAL
SECURITY DURING THE 1970's

A few decades ago when the social security program was in its infancy there was a considerable amount of attention given to the similarities and dissimilarities between social and private insurance programs. It was pointed out that benefit formulas in relation to payments by individuals bore a closer individual actuarial proportionality in a private than in a social insurance system. That is, the approximation to actuarial equivalence in a private insurance program not only exists in the aggregate but also on a class-by-class basis. A given social insurance program may be based in its benefit structure on a very reasonable set of criteria; however, the progressive and regressive incidence on individuals of combined programs should be studied.

A study should be made to attempt to lay a philosophical foundation for judging the desirable proportionality that should exist between present provision for future existence compared with allocation of resources to solve current problems. It would appear that a constantly rising percentage of social income allocated for preparing for the future should not be carried to an unproductive limit. This is especially serious when social and private systems are combined in their effects, and when private savings of those in higher income groups would be on the rise in spite of graduated income and inheritance taxes. The question is whether or not there should be a desirable upper limit on the proportion of present income used for provision for the future.

During the past few years, it has been evident that economic security, especially in an affluent society, does not lead to social or emotional stability. In fact, some have argued that greater provision for retirement income beyond a reasonable minimum provides more time for individuals to become dissatisfied and therefore emotionally disturbed about aspects of security other than those of an economic nature. Studies should be made to uncover relationships between economic and noneconomic disturbances in society.

Greater flexibility in private pension systems together with the existence of social schemes have perhaps tended to decrease restrictions on job shifts. In general, employment mobility should be contributory to the proper allocation of human resources. However, studies should be made to ascertain the social and psychological costs of mobility.

Extreme changes in marriage and birth rates associated with the disturbances of World War II are going to yield sharp fluctuations in the numbers and proportions of our population that reach age 65

before this century is over. Such rapid changes when their impact is felt upon our retirement programs will affect the funds available for investment and therefore the base for growth in our industrial system.

JOSEPH A. PECHMAN, THE OBJECTIVES OF SOCIAL
HENRY J. AARON, SECURITY
MICHAEL TAUSSIG:

Social security serves two related but conceptually distinct objectives. The first is to guarantee minimum income support for the aged, the disabled, and dependent survivors. In recent years, the success of the program in achieving this welfare goal has been increasingly judged by the degree to which it keeps beneficiaries out of poverty. The second objective is to help moderate the decline in living standards when the earnings of the family head cease because of retirement, disability, or death. This earnings replacement objective is independent of the goal of preventing poverty; benefits go to families at all income levels. Both objectives of social security must be carefully defined because acceptance of the current program and proposals for improving it hinge on the public's evaluation of their comparative importance.

In one view of the world, social security must, by assumption, "distort" the allocation of consumption and is, therefore, an unjustified interference with individual choice. Many persons may be forced to "save" more of their income than they would desire. In the extreme case an individual with no dependents who is certain he cannot survive to retirement age would "prudently" save nothing for his retirement. Yet social security taxes deprive him of the opportunity to dispose freely of a substantial part of his income. Social security also interferes with the freedom of workers to decide how to invest that portion of their income claimed by social security taxes. If they are skilled investors, they might use these funds to purchase assets with yields higher than the returns which social security implicitly provides. Such individuals would not gain from social security; actually, they may have a lower total income in retirement.

Although attractive to anyone who values individual freedom in making economic decisions, this conception of the role of individual choice in providing for retirement is unrealistic. It does not take account of the fact, which even the most severe critics of social security will generally concede, that voluntary savings cannot yield the poor worker (i.e., the workers whose income is close to the amount necessary for subsistence) an income sufficient for retirement. Furthermore, even individuals who have sufficient earnings during their working lives may have insufficient savings at retirement either because they incorrectly gage their retirement needs or because their personal investments turn out badly.

Once society agrees on a minimum income guarantee, however, a further decision is required on the conditions under which the guarantee will be provided. The Government can either provide minimum subsistence payments to each eligible person regardless of his other income or it can make them available only if his income falls below a stipulated level. The former method—the universal demogrant—

is followed in Canada and some other foreign countries. The latter method—the welfare approach—is exemplified by the public (including old age) assistance programs in the United States.

The welfare method has one great advantage over the universal demogrant: if the proportion of the aged requiring Government help is small and if the administrative cost of determining need is not excessive, the objective of preventing destitution is accomplished at minimum expense by limiting payments to those with demonstrated need. Nonetheless, the welfare method has been rejected by most people because of two aspects. First, a welfare program separates people into two groups—those who support themselves and those who require Government help. Second, the welfare method may weaken individual incentives to save for retirement needs. The price of rejecting the welfare method of dealing with the aged poor is vastly higher expenditures to attain the same objectives. This price should be explicitly acknowledged as the cost of avoiding the humiliation of the means test and any discouragement of private savings that might occur.

The argument thus far supports the establishment of a Government program that guarantees a minimum of income support for the aged, but many of the characteristic features of the social security system go much further. While minimum benefits fall well below the officially defined poverty thresholds, benefits at the upper end of the scale are above subsistence levels and bear some relationship to the individual's lifetime earnings. A number of arguments have been made in support of such a system; in combination they add up to an impressive case.

Decisions about saving for retirement are vastly more difficult than nearly any other economic decision which most people are called upon to make. They depend upon subjective appreciation of wants in a much later period—possibly four or five decades. They require an individual to consider his future stream of earnings and other income and to recognize several possibilities: that he will be married and have a family; that he may be unemployed involuntarily for considerable periods of time; and that he may become disabled or die prematurely. To save intelligently, the individual must also be able to appraise the probable future purchasing power of the income from various assets. Most important of all, the individual may not be aware of his mistakes until he is close to retirement when the consequences are irremediable.

Even if an individual plans ahead and gauges accurately his retirement needs, it is questionable that he has sufficient knowledge about other relevant considerations to make the necessary saving consumption decisions. Deficiencies in Government economic policies that permit depressions and inflations may sweep away the carefully planned saving of even the most provident and skillful investor. The available evidence suggests that the problem of uncertainty may explain why people do not save enough. A person who is saving for retirement generally faces the investment dilemma of choosing between fixed-yield assets that offer little protection against inflation and other instruments that require financial sophistication or carry considerable risk.

Given the limited coverage of private pension plans, the inadequacy of their benefits for many covered workers, and their other

shortcomings, they can hardly be expected to provide sufficient earnings protection in old age for more than a minority of the work force for many years to come.

It becomes difficult to hold to the principle of individual responsibility when the consequences of individual mistakes are extreme. The case for social intervention becomes overwhelming when it is recognized that one individual's mistakes affect not only his own well-being but also that of his family, friends, and local community. Even those true believers in individual responsibility who could bear with equanimity the suffering of the individual responsible for his fate find it difficult to justify the suffering of other innocent persons.

The factors discussed thus far lead to the conclusion that the payment of retirement benefits above subsistence levels of income is consistent with valid social objectives. But to justify the need for some social intervention in providing for retirement is easier than to determine the proper degree of intervention. Some compromise is necessary between amounts no greater than those necessary to guarantee subsistence income levels and amounts related to incomes at the upper tail of the distribution. But the choice within this wide range is a pragmatic decision. The high replacement rate for the low earner and the minimum benefit can be interpreted as a guarantee of minimum income support for the aged. The larger absolute benefits paid to the high earner can be viewed as an effort to meet the objective of preventing drastic declines in the incomes of the nonindigent aged. This interpretation of OASDI benefit structure corresponds roughly to the traditional social security concepts of social adequacy and individual equity.

Belief in the insurance nature of the relationship between an individual's OASDI benefits and taxes is the basis of the image of social security. The most important implication of this image is the belief that each individual pays for his own benefits and therefore that he receives his benefits not as a matter of public charity but rather because the benefits are his earned rights. This view largely explains why being a social security beneficiary carries no stigma. It is also responsible for the belief that benefits cannot legally be withheld from any entitled person. Another feature of the system—the relationship of both benefits and contribution to an individual's earnings during his working life—seems to imply and be implied by the insurance analogy. Basing benefits on previous earnings is accepted as a simple matter of equity: Individuals who pay more into the fund receive higher benefits when they retire just as individuals who choose to pay higher insurance premiums subsequently receive larger annuities from private insurance companies.

Nevertheless, when the terminology of social security is stripped away and the structure of the system is examined it is clear that the private insurance analogy is largely invalid. Decisions about how retirement benefits should be distributed and how they should be financed are in principle independent. In practice the relationship between individual contributions (that is, payroll taxes) and benefits received is extremely tenuous. Present beneficiaries under OASDI receive benefits far larger than those to which they would be entitled based on the taxes paid by them or paid on their behalf. Furthermore, this situation will continue indefinitely—though to a decreasing extent—as long as Congress maintains benefit levels in line with

higher wage levels. This arises because OASDI is not an insurance system but a transfer payment system that distributes to the aged a share of the gains from the growth in the overall productivity of the economy.

The key distinction between the two approaches—private insurance and social security—turns on whether an individual currently in the labor force and paying taxes into the social security trust funds is paying for the benefits of current retired workers and survivors or for his own or his family's future benefits. In individual insurance, each person's premiums are contractually tied to his own and his family's future benefits. In social security, on the other hand, the level of payroll taxation is set to defray costs of benefits for the currently retired. The money which workers currently pay into the fund is not stored or invested but is paid concurrently as benefits to the various categories of current beneficiaries. Workers pay for benefits to eligible nonworkers. The future benefits of present workers, their dependents, or their dependent survivors will be paid in similar fashion out of the contributions of the working population as of some future date.

Thus, the analogy of an individual paying for his own insurance policy with contributions based on earnings is not applicable to social security. Unlike a private insurance firm OASDI does not have to accumulate large reserve funds to meet its future financial commitments. When benefits promised to current workers come due, the funds will be provided out of tax revenues as of that future date. The financial soundness of the social security program does not depend, as it does for a private insurance firm, on prudent financial management of present premium income but rather on the Government's effective power of taxation. The Government's ability to collect taxes sufficient to provide adequate social security benefit in the future depends critically on the maintenance of a sound Federal tax system in a healthy growing economy. The faster the rate of economic growth, other things equal, the lighter the burden of taxation that will be required to finance any given level of future social security benefits.

The practical importance of discarding the insurance analogy is not to discredit the concept of social security but rather to dispel basic misconceptions about certain aspects of the OASDI program. Once the insurance analogy is seen to be false, the social security contribution must be regarded as a tax, not an insurance premium, nor, indeed, as a contribution in the generally accepted sense. The financial interchange between generations does not depend on the existence of a particular tax—the payroll tax. It arises because each generation of workers undertakes to support the eligible nonworking population and implicitly expects similar treatment. In place of the insurance analogy, social security should be regarded as an institutionalized compact between the working and nonworking generations, a compact that is continually renewed and strengthened by every amendment to the original Social Security Act. When viewed in this light, a social security program has the eminently desirable function of forcing upon society an explicit decision at each point of time on the appropriate division of income and consumption between workers (the young) and nonworkers (the old survivors, and disabled). Workers and nonworkers alike participate in the democratic process that shapes this vital

distributional decision. The social security system is the mechanism by which society settles the issue of intergenerational (worker—non-worker) income distribution through the political process rather than leaving its resolution to private decisions and the market.

GEORGE A. BISHOP: ISSUES IN FUTURE FINANCING OF SOCIAL SECURITY

The process of liberalizing social security benefits is likely to continue bringing with it a continued increase in social security taxes. This prospect raises important questions which the present study tries to answer at least in part. Among these questions are the following: (1) Is the tax burden of caring for the aged likely to become unduly heavy? (2) More specifically, is the burden of taking care of the aged likely to strain the limits of the payroll tax? In other words, has the payroll tax about reached the upper limit to which it can be pushed? (3) Have we substantially abandoned the contributory principle in favor of a social adequacy concept in OASDI programs? (4) What are the alternatives in attempting to resolve the conflicts between social adequacy and the strains of increasing payroll taxation?

These are the major questions examined here. Other questions touched on include the following: (1) Do recent increases in social security benefits call for a substantial change in the present income tax treatment of the aged? (2) Is it likely that the expansion of social insurance will endanger the growth of private pension plans and private provision for old age through other means? (3) How are OASDI programs to be related to direct welfare programs?

Prof. Eveline Burns of Columbia University in a recent article entitled "Social Security in Evolution: Toward What?" has distinguished three stages in the evolution of social insurance in most Western countries. The first she described as follows: "* * * the initial form in which social insurance bore everywhere the imprint of its private insurance analogy. Benefits were closely related to contributions; equity, rather than adequacy, which scarcely came into question, was emphasized; coverage was limited to the best risks with sizable previous employment records; and the costs were assessed solely on the potential beneficiaries and their employers." Stage II she described as characterized by "* * * almost irresistible pressures to extend coverage—to additional persons and additional risks—and these extensions would in turn modify the principles and policies governing eligibility, benefits, and methods of financing. As the poorer and more irregularly employed were brought into the system, the strict relationship between benefits and earnings would become even more untendable because of the necessity to insure a meaningful benefit to covered workers with low earnings." Finally, stage III would be reached when "* * * thanks in large measure to the wide spread of social insurance, there was general acceptance of the doctrine of public assurance, without a means test, of a minimum income for all." The evolution Professor Burns has described is certainly not immutable. While it is not an exact description of the growth of social security in the United States, her outline does indicate possible directions of change. The present study is mainly concerned with the question of alternatives to following such

stages further in the United States. The answers suggested to the major questions listed above are as follows:

1. The future tax burden for the aged. The most recent projections of the Bureau of the Census indicate that the ratio of the population age 65 and over will remain nearly a constant proportion (about 18 percent) of the population age 20 to 64 through 1985. Thus the burden on the working population will depend primarily on the extent to which retirement and other benefits to the aged are increased in relation to average wages and salaries. Unlike some other countries the United States is not currently in the position of having to shoulder an increasing tax burden because of a substantial rise in the proportion of the aged to the working population.

2. Is the burden of taking care of the aged likely to strain the limits of the payroll tax? Has the payroll tax about reached the upper limit to which it can be pushed? While the proportion of the aged to the working population will not change substantially in the next few decades, it is likely that Congress will endeavor to improve the economic position of the aged and to extend the range of risks covered by OASDI programs. Such changes could well require significant increases in payroll taxes in excess of those already scheduled under present law. Under existing law the combined employer and employee tax rate is scheduled to reach 9.8 percent of taxable wages up to \$6,600 in 1969, and under the bill currently pending in Congress (H.R. 12080) the rate would reach 9.6 percent of \$7,600. The scheduled rate in H.R. 12080 will exceed 11 percent of taxable wages by 1973. The maximum tax on an employee in 1968 would be increased from \$290.40 under present law to \$334.40 under H.R. 12080. The maximum combined tax on employer and employee would increase from \$580.80 to \$668.80. These are heavy taxes on an income of \$6,600 or even \$7,600. By way of comparison, a family with two children and an income of \$5,000 in 1967 would pay a Federal income tax of \$306 (assuming standard deductions). If this family had more than one wage earner, its direct payroll taxes would exceed its income tax.

The employee also bears some part of the employer's portion of the tax whether the tax is assumed to be shifted forward in the prices of goods and services or to be shifted backward in the form of lower money wages. (It is also possible that some portion of the tax falls on profits and other nonwage income.) Moreover, a combined payroll tax rate approaching 10 percent of taxable wages is likely to have significant effects on business decisions on investment in capital equipment and on the hiring of unskilled workers. A 10 percent tax on labor may intensify problems of unemployment or partial unemployment among those groups whose unemployment rate is already high.

The level of the payroll tax may be limited by another type of consideration. It would not be reasonable, in the view of many people, to levy social security payroll taxes at a rate in excess of what benefits of a similar nature would cost if the employee were to provide them to private forms of saving and insurance. The payroll tax has risen to a level such that if a young worker today, with earnings at least equal to the maximum taxable base, computed the total of his expected payroll taxes plus interest over his lifetime, the value of his "contribution" would in many cases substantially exceed the discounted value of his expected benefits. While experts differ in their views of how these cal-

culations should be made, such comparisons suggest a definite kind of limit to payroll taxes. Young workers who begin to find themselves in this situation can be expected to offer more and more objection to increased payroll taxes. Moreover, a general economic question is involved. It concerns allocating to social insurance, through payroll taxes, resources that would have more value in the purchase of private insurance and pensions. The significance of such a limitation may be disputed by those who point out that the insurance analogy is a very loose one and the objective of "social adequacy" is more important. This leads to the third major question dealt with in this study.

3. Have we substantially abandoned the contributory principle in favor of a social adequacy concept in OASDI programs? From the beginning the Old-Age and Survivors Insurance program was a mixed system aimed in part at relating contributions to benefits ("individual equity") and in part at making benefits adequate in terms of rough standards of minimum consumption levels. These two concepts of "social adequacy" and "individual equity" are generally conflicting because very low income groups cannot be expected to pay a full "price" for the benefits provided under social security. The old-age benefit structure, moreover, is heavily weighted in favor of those with low earnings records. The old-age retirement benefit in 1966 amounted to 62.9 percent of the first \$110 of average monthly covered wages plus 22.9 percent of the next \$290 of average monthly covered wages plus 21.4 percent of the remainder. In addition, the provisions for minimum amounts of monthly benefits give the system a strong emphasis on social adequacy. The pressure to go further in this direction was illustrated by the 1967 proposal of the administration to raise the minimum old-age retirement benefit from \$44 per month to \$70 per month. Such an increase would have been almost exclusively based on the concept of social adequacy. In fact, the Ways and Means Committee modified this proposal to provide a minimum benefit of \$50 per month, at least partly on the grounds that an increase in the minimum to \$70 would be too great a departure from the principle of a wage-related, contributory system. In short, while we have not entirely abandoned the contributory principle in that benefits and administrative costs in the aggregate are paid for through payroll taxes, the financing of these programs has, in the course of time, put less emphasis on the relation between the individual's contributions and the benefits he will receive.

4. What are the alternatives in attempting to resolve the conflicts between "social adequacy" and the strain of increasing payroll taxation? Recent debates and pressures for change suggest various possibilities for revision in OASDI financing. Four major alternatives are examined: (a) Continue approximately the present balance between the objectives of social adequacy and individual equity, accepting the possibility of increased conflicts and strains as the payroll tax rate and base increase. (b) Provide a general revenue contribution to OASDI trust funds with a probable increase in the emphasis given to social adequacy. (c) Modify the payroll tax by substantially increasing the maximum taxable wages or introducing an exemption to reduce the burden on low-income groups. (d) Separate the benefits schedule in two portions, one of which would be closely related to contributions on an individual equity basis, and a second which would

be based explicitly on adequacy considerations and be financed separately by general revenues. The choice among those alternatives depends in part on value judgments concerning the relative importance of the objectives involved. However, technical and economic issues are also involved. The chief issues of both kinds in brief are as follows:

a. Maintaining the present system. Through a long political process the United States has developed a social insurance system that provides a working balance between the objectives of adequacy and individual equity. This balance is being strained as the payroll tax burden grows. Some view this "strain" as a useful restraint on excessive expenditures for benefits. On a more technical level, the present system of payroll tax financing contains an important fiscal control device. The system requires the levying of additional payroll taxes at the same time that increased benefit levels are adopted and the taxes are set so as to meet expected benefits and administrative costs over a long period. This is a device that is often absent in the Federal Government's general budget, although similar procedures have been proposed for administrative budget programs.

A general revenue contribution to OASDI trust funds could be fitted into the same type of fiscal control procedure. For example, any proposed increased levy for social security could require an increase in income taxes earmarked for OASDI trust funds. Even with such a procedure, benefits might increase faster than with exclusive reliance on the payroll tax both because income tax revenues are more responsive to economic growth and because Congress might be more ready to use an income tax levy than a payroll tax increase to raise the benefits schedule. Until recently, however, the payroll tax was relatively low. People generally appeared to have had an exaggerated idea of the extent to which they were paying for their own benefits. The increase in benefits may have seemed of more significance to the public generally than the increase in taxes. The attitude toward payroll taxes could change markedly. At current and prospective payroll levels, an income tax increase for the purpose of raising benefit levels might seem to be an easy way out of the conflict between adequacy and individual equity.

b. Providing a general revenue contribution. Many who argue for a general revenue contribution do so because they want a large increase in social security benefits. They see such a contribution as a means of raising benefits to more adequate levels in relation to minimum family budget standards. Moreover, it is argued that not only is the payroll tax high but this is a poor way to finance increases in benefits. If the OASDI system is to become an instrument for preventing or removing poverty, it would hardly be fair to do so with a payroll tax that reaches its maximum at \$6,600 or \$7,600. An increased emphasis on social adequacy would more logically be achieved through taxes levied on the general taxpayer.

Historically, another argument has been used for a general revenue contribution. It is that in the transitional stage to a mature social insurance system, most people become eligible for benefits even though they have not contributed anything like the full cost of those benefits. Until most workers have contributed during a full working lifetime, at rates commensurate with the benefits they will receive, there is a large windfall accruing to current beneficiaries. This windfall, it is

argued, constitutes an unfunded liability the burden of which should be borne by all taxpayers through general revenues rather than through the payroll tax alone. Use of the payroll tax is largely justified by the relation between an individual's contribution and his benefits, so that the redistribution in favor of current beneficiaries receiving windfalls should be met by a general levy.

c. *Modifying the payroll tax.* A closely related proposal is to modify the payroll tax to make it more like an income tax: To allow personal exemptions and to increase substantially the maximum wage base. This would relate the tax burden more closely to ability to pay and check the increasing regressivity of the total tax structure that goes with increased reliance on the payroll tax. A higher maximum wage would also mean increased benefits. Under the present benefit structure, which is heavily weighted in favor of those with low earnings records, a higher maximum tax base would serve to increase the emphasis on social adequacy. Benefits would go up for those earning as much or more than the maximum taxable wage, but not in proportion to the increase in wages or payroll taxes. Such an alternative would depart further from the contributory or individual equity basis of financing.

d. *Separating benefits schedule and its financing into two portions.* The conflict between the objectives of social adequacy and individual equity suggests the possibility of separating the major elements in OASDI programs designed to meet these different objectives: One which would emphasize insurance elements and another which would emphasize welfare or adequacy elements. In the broadest terms the welfare element consists of that part of benefits which is determined primarily on the basis of adequacy—in particular, the minimum benefits which bear no relation to average covered wages of the beneficiary except that covered wages must be very low. The insurance element consists of that part of benefits which is, or can be, related to average covered wages. Such a separation would involve a substantial revision of the benefit structure and raise many problems of defining an appropriate relation between benefits and the individual's contributions.

Some countries have developed social security systems which distinguish more clearly than in the United States between contributory social insurance programs and other forms of social security. Canada, for example, now has a two-tier system consisting of a universal old age pension, financed by a surcharge on the individual income tax, the corporation income tax, and the federal sales tax, plus a contributory Canada pension plan financed by payroll taxes much more closely related to benefits than in the United States. Each part of the system is financed through a separate trust fund. Thus, the fiscal control element is present in both parts of the system.

A separation of insurance elements means a greater reliance on the benefit principle of taxation. The economic argument here is as follows: Where the benefits of public expenditures go to specific groups of individuals and where taxes for the support of these expenditures can be effectively levied on these same groups, the public will, on the whole, be better off than if these expenditures were financed out of general revenues. Isolating an insurance element in social security raises questions of whether there are insurable risks that

are unlikely to be met by private enterprise and private saving and for which compulsory coverage by a governmental system may be justified.

From the beginning of the social security system compulsory provision for old age has been justified in part by the argument that without such provision many of the aged would become public charges. This argument still has relevance in a period of growing incomes and substantially full employment though perhaps less than in the 1930's. As family income increases, provision for their own retirement becomes one of the services that more and more people want to buy. Forcing people to save through social insurance may appear to be an undue interference with individual choice. However, the evidence seems to be that social security has had the effect in the past of heightening peoples' awareness of the need for saving for old age and protection against risks of death and disability. Whether or not this effect may continue is another matter. If social security taxes continue to rise, the ability of people to save in other ways may be limited. It would not seem reasonable to compel purchase of Government insurance on a scale that would check the growth of private provision for old age. However the arguments may be arrayed on the question of compulsory saving for old age, at least a minimum of such compulsion is accepted in most Western countries. Acceptance of such compulsion seems to be a part of the decline of dependence on the family as an old age security system.

Certain limitations of private provision for old age continue to provide a justification for a governmental system. Even though an employee might not choose to save toward his old age, some portion of the cost of a minimum old age pension has come to be regarded as a necessary part of the cost of production of goods and services. Our social insurance system compels nearly every employer as well as his employee to contribute to OASDI. The employee remains covered and, in a sense, receives credit for his and his employer's contribution no matter how often he changes jobs. These features of quick vesting of pension and insurance rights and of portability are the very features that are difficult to provide for all employees under existing private pensions. This difference between private and social systems is due in part to the fact that the building up of investment reserves is the essential means by which private plans insure that funds will be available for pensions when covered employees retire. A social insurance system with nearly universal coverage does not need this device to insure payment. The Government's promise to pay, although not in the form of a contract, is sufficient for most people and it is backed primarily by the power to tax rather than by a reserve fund. For this and other reasons, Congress in effect accepted a virtual pay-as-you-go system with only limited reserves for contingency purposes.

A pay-as-you-go social insurance system is a current taxing process to meet current benefit payments and expenses. This process may have little effect on the national rates of saving and investment; if anything, the effect is to reduce the rate of national saving because those who currently pay taxes are generally net savers, while beneficiaries generally are dissaving. Private pension funds, on the other hand, according to recent studies, have a substantial effect in increasing the national rate

of saving. This consideration would become important if social insurance were provided on such a scale as to check the growth of private pension funds or private saving in other forms.

A separation of "welfare" and "insurance" elements in OASDI programs could mean a more efficient and equitable financing system. But it would be difficult to accomplish. It would involve complex problems of relating benefits to contributions; some value judgments on the importance of the objectives of "social welfare" and "individual equity"; and basic economic and political decisions in drawing an appropriate line between social and private insurance.

COLIN D. CAMPBELL, COST-BENEFIT RATIOS UNDER
ROSEMARY G. CAMPBELL: THE FEDERAL OLD-AGE INSUR-
 ANCE PROGRAM

What is the relationship between the value of accumulated old-age insurance taxes that persons pay into the OASDI trust fund and the retirement benefits that they can expect to receive on reaching age 65? If there were a close relationship between taxes paid in and the value of benefits received, the Federal old-age insurance program would conform to the popular conception of it as a kind of public insurance system. Workers covered by social security usually believe that they are paying for their future old-age benefits with the taxes they pay during their working years. They conceive of themselves as purchasing an insurance policy and for a person with the average life expectancy the value of the taxes paid in would be similar to the value of the benefits received.

In keeping with this insurance concept of the program, social security benefits have often been referred to as annuities and the tax-payments have been called premiums. Originally, the Social Security Administration expected to accumulate a large trust fund. When the Federal old-age insurance program began, financing it by payroll taxes—even though regressive—was justified on the basis that it was an insurance system. Though the tax would be a much larger percentage of the income of the poor than of the rich, both would be paying for an annuity to be received during their old age. Such taxes would be in accordance with the benefit principle of taxation. Also, as an insurance program, no means test would be necessary to qualify for benefits on reaching age 65. Benefits were granted to all retired persons who qualified because it was believed that most—more or less—would have paid for their old-age pensions.

Early in its development, the Federal old-age insurance program departed in practice from this insurance concept. From 1937 to 1950, planned tax increases from the original 2 percent were continuously postponed. There have been eight amendments raising benefits, including the benefits of those already retired. "New start" provisions permitting persons to use high-income years and shorter periods as a basis for benefits were adopted in 1939 and 1950. Coverage has been expanded several times to bring in additional beneficiaries who have contributed little to the fund. The 1965 amendment extends coverage to self-employed physicians and improves benefits for divorced wives and

widows who remarry. More and more the system has provided pensions for all retired persons regardless of whether they have paid for them.

A worker retiring in 1967 who has paid in the maximum is entitled to an annual pension of \$1,631, plus \$816 for an aged wife, a total of \$2,447. As shown in table 1, a pension of this amount discounted at 4 percent for the average expected length of life—14 more years—is worth \$26,631. Social security benefits are worth 5 times the value of the payroll taxes paid in.

TABLE 1.—COST-BENEFIT RATIOS FOR PERSONS ALREADY RETIRED UNDER THE FEDERAL OLD-AGE INSURANCE PROGRAM

Age and starting date under OASI	Retirement date	Average annual wage	Total value of OASDI taxes ¹	Total value of taxes for old-age insurance alone ²	Annual pension for man and wife	Value of pension for 14 years ³	Cost-benefit ratio (col. 5 divided by col. 7, percent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Married man:							
40 in 1937.....	1962	Maximum base.....	\$3,782	\$3,026	\$2,330	\$25,353	12
37 in 1937.....	1965	do.....	5,200	4,160	2,371	25,804	16
35 in 1937.....	1967	do.....	6,579	5,263	2,447	26,631	20
35 in 1937.....	1967	$\frac{3}{4}$ maximum base.....	4,934	3,947	2,023	22,017	18
35 in 1937.....	1967	$\frac{1}{2}$ maximum base.....	3,289	2,632	1,618	17,609	15
Married man, with a tax payment computed in terms of constant dollars: 35 in 1937.....	1967	Maximum base.....	8,700	6,960	2,447	26,631	26
Married man with working wife: 35 in 1937.....	1957	do.....	13,157	10,526	3,262	35,501	30
Single person: 35 in 1937.....	1967	do.....	6,579	5,263	1,631	17,750	30
Self-employed, married man: 49 in 1951. ⁴	1967	do.....	3,635	2,908	2,447	26,631	11

¹ Compounded at E-bond rates until 1963 and 4 percent thereafter.

² 80 percent of col. 4.

³ Discounted at 4 percent interest.

⁴ First covered in 1951.

Many retired workers have had an even more attractive bargain. Social security pensions may now be based on covered wages only since 1951, and the lowest 5 years in wages may be excluded. It is possible for a worker retiring in 1967 to obtain a pension worth \$26,631 even if he paid no taxes before 1956 but maximum taxes since then. At age 65, the value of such a person's taxpayments for old insurance would be only \$3,037. He would receive almost 9 times what he has paid in. Most workers who have been "blanketed" into the system since it began have received similar bargains, although over time the low cost-benefit ratios of these workers will disappear. Coverage was extended to domestic workers, farm wage workers, and the self-employed in 1951; self-employed farmers in 1955, dentists and military servicemen in 1956, and self-employed physicians in 1965. In 1950, only 62 percent of the labor force was covered compared with over 90 percent in 1967.

The estimated cost-benefit ratios for different groups of persons retiring in 1967 shown in table 1 indicate that the prevailing concept of social security as an insurance program in which workers are purchasing an annuity is incorrect. In fact, a significant net transfer over their lifetime is being made to the 15 million persons who are currently receiving old-age pensions.

For young persons, cost-benefit relationships are uncertain. The tax rate on payrolls, the maximum wage base, and benefit levels may

be raised in the future and future trends in interest rates are difficult to forecast. Nevertheless, an examination of the cost-benefit ratios in the current law for young persons entering the system shows some of the problems ahead.

TABLE 2.—COST-BENEFIT RATIOS FOR PERSONS OF DIFFERENT AGE SCHEDULED UNDER THE CURRENT FEDERAL-OLD-AGE INSURANCE PROGRAM

Age and starting date	Re- tire- ment date	Average annual wage	Total value of OASDI taxes ¹	Total value of taxes for old-age insurance alone ²	Annual pen- sion	Value of pension for 14 years ³	Cost-bene- fit ratio (col. 5 divided by col. 7) (percent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Married man:							
30 in 1937	1972	Maximum base....	\$11,000	\$8,800	\$2,636	\$28,688	31
22 in 1937	1980	do	20,873	16,698	2,776	30,212	55
22 in 1945	1988	do	32,002	25,602	2,848	30,995	83
22 in 1949	1992	do	38,932	31,145	2,871	31,246	100
22 in 1955	1998	do	50,108	40,087	2,963	32,247	124
22 in 1967	2010	\$6,600 or more....	68,076	54,461	3,024	32,911	165
22 in 1967	2010	\$4,950	51,057	40,846	2,496	27,164	150
22 in 1967	2010	\$3,300	34,038	27,230	1,927	20,977	130
Married man with working wife: 22 in 1967	2010	\$6,600 or more each.	136,152	108,922	4,032	43,881	248
Single person: 22 in 1967	2010	\$6,600 or more....	68,076	54,461	2,016	21,941	248
Self-employed, married man: 22 in 1967	2010	do	49,608	39,686	3,024	32,911	121

¹ Compounded at E-bond rates of interest until 1963 and 4 percent thereafter.

² 80 percent of col. 4.

³ Discounted at 4 percent interest.

Table 2 shows that if workers have paid in the maximum taxes and expect to continue to do so until retirement, the break-even point under the present law is 39 years of age. Workers older than this gain; workers less than 39 years of age lose. For those with incomes below the maximum wage base, the break-even age is even lower. Young men who are married and earn less than the maximum wage base have relatively small cost-benefit ratios, even though in both cases shown in table 2 the cost exceeds the benefit. In addition, cost benefit ratios are relatively low for self-employed young persons starting employment in 1967 but very high for single persons.

What can definitely be said about the current tax and benefit schedules is that benefits must be increased in the future if young persons today are going to get their money's worth. But, if benefits are increased in the future, will payroll tax rates also have to be increased? This will depend primarily on the extent to which growth in the labor force and increases in the productivity of labor can support the required increases in revenues without an increase in tax rates. Also, it will depend on whether or not the maximum wage base of the payroll tax is raised with increases in labor productivity. The historical development of the social security system has been toward the granting of more adequate benefits to persons regardless of whether they have paid for them. If this trend continues, substantial additional revenue will be needed to support both the insurance and the welfare objectives of the social security system. Continuous increases in the maximum wage base and either higher payroll tax rates or the development of other sources of revenue will probably be necessary.

Despite different possible assumptions, the studies of cost-benefit ratios that have been made by various authors lead to similar conclusions. The first is that the insurance concept of the social security system in which workers are supposed to be purchasing an old age annuity with the taxes they and their employer are paying is largely a myth. It is a popular analogy and is often repeated in newspaper editorials and statements by public officials but there is, in fact, little to support it. The second conclusion is that cost-benefit ratios vary considerably depending on the age, sex, income and occupation of a person. Some of these differences are the result of ad hoc changes in the program as it is developed. There is a need to re-examine social security as a program of income transfers in order to assure that it is fulfilling the objectives of public policy. Although it is usually assumed that the social security system redistributes income so as to benefit lower income groups, it is not obvious that it is actually doing so. The final conclusion is that unless the tax paid by the employer is not, in fact, a cost to the employee, the cost-benefit ratios of young entrants into the labor force have become very high. Because scheduled benefits may be raised in the future, the terms of the current law do not necessarily mean that young persons are not going to get their money's worth. They do indicate a need for a social security model which explicitly assumes increasing benefit levels. One of the objectives of such a model might be to provide a closer balance between cost and benefits for young workers.

YUNG-PING CHEN: INFLATION AND PRODUCTIVITY IN TAX-BENEFIT ANALYSIS FOR SOCIAL SECURITY

The purpose of this paper is to offer some preliminary answers to the following questions bearing upon the retrospective and prospective views of the relationship of social security taxes and social security benefits. (1) Do workers gain or lose on their taxes for social security? (2) As a means of financial protection, is private insurance superior to social security from the standpoint of monetary costs or could a worker obtain more benefits from a private insurance contract if he purchases it with the taxes otherwise paid into social security? (3) How are the relationships of taxes to benefits influenced by considerations of price inflation and productivity gains, especially with reference to the future?

A worker is a gainer if he has a tax benefit ratio of less than unity. The larger the gains, the smaller the ratio. A worker becomes a loser if his tax benefit ratio is greater than unity. Many estimates of tax-benefit relationships have been computed for the worker whose earnings were at least equal to the maximum taxable earnings. With respect to tax contributions, these estimates assumed either no backward shifting or full backward shifting of the employer portion of social security taxes. On the benefit side, some estimates considered only the combined retirement benefits for the worker and his wife. Finally, tax benefits relationships have been estimated in current dollars terms

with a certain assumed rate of interest for compounding taxes and discounting benefits.

However, the maximum earner is not typical; the case of the worker whose earnings are near the average taxable earnings needs to be investigated. The assumptions of both no backward shifting and full backward shifting of the employer social security taxes are extreme; it would be instructive to consider the possibility of partial backward shifting. Since different family circumstances occasion varying benefit payments, tax-benefit relationships need to be computed for persons of diverse family statuses. Tax benefit relationships in current dollar terms are significantly altered if they are recomputed in constant dollar terms; when tax payments and benefit receipts span long periods of time, price inflation has the effect of raising the rate at which taxes are compounded and benefits are discounted.

There are gainers in social security but, depending on earnings levels and family statuses, some gain more than others, with the same assumptions regarding the shiftability of employer's taxes and the rate of interest. If price inflation is recognized in tax benefit ratios, the gainers are not gaining as much—in real terms; they contribute about 50 percent more than what they are shown to contribute in current dollars.

It should be realized that the gains belong either to persons who have or will have lived to receive retirement or disability benefits or to those who have survivors to be paid benefits. Moreover, these persons will not become gainers unless they have been awarded benefits for a period of time long enough so that their benefit receipts outdistance their tax payments. Of course, there are always losers either because they will not live to be awarded benefits; they do not have survivors who become entitled to benefits; or they or their survivors will receive benefit payments for a short period of time.

Tax benefit ratios will be low for the participants in social security who have retired or will retire in the next 20 years or so. However, the ratios will be high and in some cases very high for those who will be retiring in the more distant future, when estimated taxes and benefits are based on the provisions in the current law.

Under the assumptions used in computing tax benefit ratios for future years shown in the following table, there are still gainers in certain circumstances. There are losers but some lose more than others, depending on earnings levels and family status, given the same assumptions on the shiftability of employer taxes and the interest rate. In constant dollar terms, gainers gain less and losers lose more than is shown in calculations based on current dollars; this, in effect, means that the higher rate of interest used in compounding taxes and discounting benefits, the smaller the gain or the greater the losses. Of course, it should be emphasized that the losers identified in this section refer to the workers who are assumed to pay taxes for 43 years and to receive benefits for 14 years. These workers may become gainers if they pay taxes for a shorter period of time or receive benefits for a longer period of time with the result that they receive more than they have paid in taxes.

TABLE 1.—RATIOS OF TOTAL TAXES (1966-2008) TO TOTAL BENEFITS (2009-22) UNDER ALTERNATIVE CONDITIONS: THE MAXIMUM EARNER AND THE AVERAGE EARNER

Worker and taxes	Employee's retirement benefit						Employee's retirement and wife's benefits						Maximum family payments					
	I	II	III	IV	V	VI	I	II	III	IV	V	VI	I	II	III	IV	V	VI
Maximum earner:																		
Employee taxes.....	1.16	0.69	0.53	0.51	0.39	0.45	0.77	0.46	0.36	0.34	0.26	0.30	0.53	0.32	0.24	0.23	0.18	0.20
Combined employee-employer taxes.....	2.32	1.39	1.07	1.01	0.78	.89	1.55	.93	.71	.67	.52	.60	1.05	.63	.49	.46	.35	.41
Employee taxes plus 50 percent of employer taxes.....	1.74	1.04	.80	.76	.58	.67	1.16	.69	.53	.51	.39	.45	.79	.47	.36	.34	.27	.31
Average earner:																		
Employee taxes.....	90	52	40	39	30	35	60	35	27	26	20	23	45	26	20	20	15	17
Combined employee-employer taxes.....	180	104	80	78	60	69	120	70	54	52	40	46	90	52	40	39	30	35
Employee taxes plus 50 percent of employer taxes.....	1.35	.78	.60	.59	.45	.52	.90	.52	.40	.39	.30	.35	.67	.39	.30	.29	.23	.26

1. The maximum earner is the worker whose earnings are at least equal to the maximum taxable earnings. The average earner is the worker whose earnings are at the level of the average taxable earnings. Calculations in table 3 assume tax payments for 43 years and benefit receipts for 14 years.

2. Tax-benefit ratios are obtained by dividing the total compounded value of taxes by the total discounted value of benefits. To illustrate, the ratio is 0.5 when the discounted value of benefits is twice as much as the compounded value of taxes; the ratio is 2 when the compounded value of taxes is twice as much as the discounted value of benefits.

3. Formulas for computing the total compounded value of taxes and total discounted value of benefits are explained in the text. The benchmark year for compounding and discounting is the year 2008.

4. Tax-benefit ratios for the 6 cases (I through VI) are computed according to the conditions listed in the table at end of notes.

5. Maximum taxable earnings in cases II and III are assumed to be changed every 10 years. Projections of the maximum taxable earnings in future years are based on the relation between average taxable earnings and maximum taxable earnings from 1937 to 1965. The data on the average taxable earnings in past years were provided by the Office of the Actuary, Social Security Administration, letter to the author, Apr. 7, 1967. Average taxable earnings after 1966 are assumed to increase at 3 percent per year.

6. The annual rate of increase in cases III and V (4.2 percent) is the average rate of increase in benefit payments to the retired worker from 1940 to 1966, computed from "Average Monthly Benefit Amount in Current Payment Status for the Selected Types of Beneficiaries, in Actual and Constant Dollars, December 1940-66," a table provided by Dr. Benjamin Bridges, Jr., Division of Research and Statistics, Social Security Administration, April 1967.

ALTERNATIVE CONDITIONS AFFECTING TAX-BENEFIT RATIOS

Item	Case				
	I	II	III	IV	V
Maximum taxable earnings	1966-2008, \$6,600	1966-75, \$6,600; 1976-85, \$9,000; 1986-95, \$12,000; 1996-2005, \$16,000; 2006-8, \$20,000	Same as in II	1966, \$6,600; increasing at 5 percent per annum	Same as in IV
Worker's earnings	\$6,600, 1966-2008 (maximum earner); \$3,215, 1966-2008 (average earner)	1966, \$6,600 (maximum earner); \$3,215 (average earner), both increasing at 3 percent per annum	do	1966, \$6,600 (maximum earner); \$3,215 (average earner), both increasing at 5 percent per annum	Do.
Benefit computation formula	Annual benefits are based on the average of the taxable earnings in the last 10 years of employment (1999-2008). The benefit formula is: (a) 62.97 percent of the first \$1,320 of annual earnings; (b) 22.50 percent of the annual earnings between \$1,320 and \$4,800; (c) 21.40 percent of annual earnings over \$4,800 up to \$6,600. Under this formula, the primary insurance amount (PIA) as a ratio to the average taxable earnings (ATE) for the maximum earner is approximately 30 percent; for the average earner, it is about 39 percent.	Annual benefits are based on the average of the taxable earnings in the last 10 years of employment (1999-2008). The benefit formula is: (a) 62.97 percent of the first \$1,320 of annual earnings; (b) 22.50 percent of the annual earnings between \$1,320 and \$4,800; (c) 21.40 percent of annual earnings over \$4,800 up to \$6,600. Under this formula, the primary insurance amount (PIA) as a ratio to the average taxable earnings (ATE) for the maximum earner is approximately 30 percent; for the average earner, it is about 39 percent.	Benefit in the first year (2009) is the same as in II. Benefits in later years are assumed to increase at 4.2 percent per annum.	Annual benefits are based on the average of the taxable earnings in the last 10 years (1999-2008). PIA as percent of ATE for the maximum and average earners are the same as in I.	Benefit in the first year is the same as in IV. Benefits in later years are assumed to increase at 4.2 percent per annum.
Combined employee-employer tax rates	1966, 7.7 percent; 1967-68, 7.8 percent; 1969-72, 8.8 percent; 1973-2008, 9.7 percent	Same as in I	Same as in I	Same as in I	Same as in I

Unrealistic though they may seem, the ratios of case I are not meaningless for they reflect the provisions of existing law. However, since the present law is virtually certain to change, these estimated ratios are of doubtful predictive value. With these ratios as a point of departure, I explore five other possibilities under alternative assumptions regarding the maximum taxable earnings, workers' earnings, and the benefit formula. The tax rates used in all cases I through VI are those in effect now and those scheduled in the present law for future years.

The assumptions underlying the second projection are more realistic and hence more meaningful. Case II is illustrative of how tax-benefit ratios would be affected by rising earnings and a rising maximum taxable earnings base. Case II assumes that the taxable earnings ceiling will be adjusted upward at 10-year intervals and the workers' earnings will increase at a rate of 3 percent annually. Case II uses the benefit formula in the present law.

From 1940 to 1966 benefit payments to the retired worker had been increased at an average annual rate of 4.2 percent. In the light of this historical record, it would be of interest to compute the effects on tax benefit ratios of a changing benefit formula, without altering the conditions of the maximum taxable earnings and the workers' earnings assumed in case II. Case III, in which benefit payments are increased annually by 4.2 percent, is set up for such a purpose. The tax-benefit ratios in case III are all lower than those in case II. As compared with the ratios in case I, the ratios in case III are more than 50 percent less. The maximum earner loses only in one case, having a ratio of 1.07, whereas the average earner loses in none.

The effects on tax-benefit ratios when workers' earnings and the taxable earnings maximum are both rising at 5 percent instead of the 3 percent per year are illustrated by the ratios in case IV. All ratios except one are less than unity for the average earner as well as for the maximum earner. The highest ratio for the maximum earner is 1.01; for the average earner it is 0.78.

Analogous to case III, is case V in which maximum taxable earnings and workers' earnings are both rising at 5 percent per annum but benefit payments are assumed to increase at an annual rate of 4.2 percent. As expected, tax-benefit ratios in this case are lower than those in case IV. The highest ratios for the maximum and for the average earners are 0.78 and 0.60, respectively.

Cases III and V are illustrative of the effects on tax-benefit ratios of increases in benefits which allow for inflation plus something more. It would be of interest to appraise the effects on tax-benefit ratios of just continuous and automatic adjustment for price inflation. Case VI assumes that the maximum taxable earnings and the workers' earnings both rise at 5 percent per annum and that benefit amounts are raised annually in accordance with the assumed rate of advance in the general price level of 2 percent. Tax benefit ratios in case VI are higher than those in case V but lower than those in case IV. None of the ratios are in excess of unity either for the maximum earner (with the highest ratio of 0.89) or the average earner (his highest ratio being 0.69).

In order to examine the proposition that a young worker of today will receive more financial protection if he purchases private insurance with the tax dollars he and his employer are paying into social security, it is necessary to compare these two methods in terms of the compara-

tive costs for the same benefits. Putting aside health benefits, social security provides (1) old-age, (2) survivors, and (3) disability benefits in a single package. Since no private insurance carrier offers an equivalent policy, precise comparisons are most difficult. With the aid of actuaries in and out of the insurance industry, several sets of estimates have been obtained on the premiums required by commercial insurance carriers for providing the benefits that social security offers.

		Present values of premiums and taxes at 3 percent interest (for survivors and disability benefits)	
Worker		Private insurance	Social security
A.....		\$2,500-\$3,000	\$1,250
B.....		3,500- 4,200	2,100
C.....		5,700- 7,400	4,600

		Present values of premiums and taxes at 3-percent interest (for retirement benefits)	
Worker	Annual premium	Private insurance	Social security
A.....	\$120-\$180	\$2,700-\$3,000	\$2,960
B.....	150- 230	3,800- 5,200	4,900
C.....	250- 375	6,300- 8,500	10,800

		Present values of premiums and taxes at 3-percent interest (for all 3 benefits)	
Worker		Private insurance ¹	Social security
A.....		\$5,300-\$6,000	\$4,210
B.....		7,900- 8,700	7,000
C.....		13,200-14,200	15,400

¹ The totals in the column are not equal to the summation of the figures quoted for the separate policies, because a company's rates may be low on one policy while high on another.

The workers A, B, and C referred to in the tables differ in relevant respects only in regard to earnings in 1966 and years thereafter. Worker A receives \$1,800 per year, worker B \$3,000 per year, worker C \$6,600 per year.

With respect to survivors benefits and disability benefits, there seems to be a distinct cost advantage in social security vis-a-vis private insurance for the three hypothetical workers A, B, and C, with the assumed age, earnings, and family circumstances. As for retirement benefits alone, workers A and B appear to do as well in terms of comparative costs for coverage either under social security or private insurance, while worker C suffers a cost disadvantage. Taking the package of all three benefits, social security is shown to offer a cost advantage to workers A and B and to present worker C with a cost disadvantage. The tax-free nature of social security benefits increases the cost advantage to workers A and B and lowers the cost disadvantage to worker C. Even worker C may not suffer the cost advantage if he is required to pay premiums higher than those assumed in the computations for disability benefit coverage from private insurance. It should be pointed out the comparisons are based on monetary costs. Not treated in the study are the costs associated with compulsion under social security and those associated with seeking information for private insurance coverage.

One of the important assumptions upon which the above conclusions are based is that, when a worker buys private insurance, he will have the funds which his employer now contributes to social security. In other words, implicit in these comparisons is the full backward shifting assumption regarding the social security taxes paid by the employer. Under the alternative assumptions of no backward shifting and half backward shifting, different conclusions as to the relative costs emerge. It can be readily appreciated that worker C begins to encounter a cost disadvantage when more than 75 percent of his employer's taxes are shifted to him.

Worker	Present values of premiums and taxes at 3-percent interest (for all 3 benefits)			
	Private insurance	Social security		
		No-backward shifting	Full-backward shifting	Half-backward shifting
A.....	\$5,300-\$6,000	\$2,105	\$4,210	\$3,150
B.....	7,900-8,700	3,500	7,000	5,250
C.....	13,200-14,200	7,700	15,500	11,550

JOHN A. BRITTAIN: THE REAL RATE OF INTEREST ON LIFE-TIME CONTRIBUTIONS TOWARD RETIREMENT UNDER SOCIAL SECURITY

Paul Samuelson pictures a growing nation as "the greatest Ponzi game ever contrived" with its growth making possible ever-expanding social security benefits: "The beauty about social insurance is that it is actuarially unsound. Everyone who reaches retirement age is given benefit privileges that far exceed anything he has paid in. And exceed his payments by more than 10 times as much (or five times, counting in employer payments)." On the other hand, Milton Friedman speaks of a "raw deal" for young workers: "Retired persons currently enjoy a bonanza. But youngsters currently entering the system are getting a raw deal . . . To finance the excess payments to the growing number of retired, taxes have had to be raised repeatedly. As a result, the benefits promised younger workers are much smaller than the equivalent of the taxes paid on their wages." These disparate opinions invite a review of the arguments and a systematic evaluation of the evidence. However, the stress here will be on the real rate of interest or return on contributions under the system, rather than on the lifetime tax-benefit ratios referred to by Samuelson and Friedman. Projections by means of an abstract model suggest that even under a variety of assumptions the prospective return to most new participants under social security is far less attractive than indicated by Samuelson but better than the "raw deal" suggested by Friedman. In particular it will be argued that most participants will fare much better than investors in fixed dollar claims have in recent decades but much less well than long-run investors in equity capital.

Perhaps baffled by the diversity of opinion on how individuals are faring under the system, Congressman Ullman recently asked social security officials how he should answer his constituents on this issue: "I would like an answer to the basic question that concerns the young person coming under the social security system as to whether this is a

sound financial investment or whether he is being taken—whether he could invest his money elsewhere more wisely.”

The stress in the basic model is on average taxes and benefits per worker under assumed growth patterns and it is assumed that the average worker pays the average tax. This per capita approach abstracts temporarily from the ceiling on taxable earnings and variations in the relative position of different types of earners and focuses on earner-beneficiary transfers. It also must be acknowledged that introduction of assumptions concerning growth of the system introduces an element of arbitrariness into the analysis. However, it seems likely that almost any plausible growth assumptions will provide a more realistic analytical basis than the static assumptions concerning taxes and benefits accepted reluctantly in previous studies. Similarly, it is believed that a proportional imputation of the employer tax is preferable to ignoring its burden altogether. However, at this stage the only imputation is at the aggregate level, since only average taxes and benefits per worker are being considered. Assuming that workers as a whole bear the entire tax, it follows that the average tax per worker must include the tax nominally assigned to employers, regardless of how it is distributed among workers.

The model to be suggested approximates certain features of the current and developing social security system and incorporates available official data such as projections by the Social Security Administration of the population by age group and mortality rates by sex. The result is a mixture of theoretical and empirical elements. It abstracts from many of the details of the present tax-benefit structure in an effort to focus on the key effects of the growth process. The present analysis also departs from earlier work in another way. Instead of assuming particular rates of return, the criterion stressed is the estimated yield to a particular type of participant on his “investment” in social security.

The basic assumptions of this simple growth model are (1) real earnings per employee grow at a fixed rate r ; (2) real retirement benefits per beneficiary grow at the same rate r and therefore are related to average earnings by a fixed factor k ; and (3) the system is financed on a pay-as-you-go basis.

The real rate of interest on contributions is defined as the particular rate of return which would equalize the real accumulated tax (plus imputed yield) and the present value of real benefits discounted at the same rate at the point of retirement. This is the yield which produces a tax-benefit ratio of unity. The projected rate of growth of average real earnings is put alternatively at 2 percent and 3 percent. Two alternative sets of population and mortality projections developed by the Social Security Administration are also used. One set was prepared on “low cost” (high birth rate and high mortality) assumptions and one on “high cost” assumptions. Another factor in the total tax accumulation is the age when work is begun. Even if all workers paid the average annual tax it would be necessary to distinguish between those starting early and those starting late. The taxes were accumulated from two alternative starting ages. One earner was assumed to start work on his 18th birthday at the beginning of 1966 and pay the average tax over his working career; the other was as-

sumed to start at age 22. Both were assumed to retire at age 65. The projected real rate of return was placed alternately at 1.5, 3, 5, and 8 percent.

Tax benefit ratios are so heavily dependent on the rate of return assumed that any absolute evaluation of the tax benefit relationship provided to different groups under the system would be arbitrary. More meaningful is the implied rate of return for each group—the rate which equalizes the value of the tax and benefits streams. If past experience is a plausible guide, social security participants in the categories shown in the table will fare much better than they would if offered the option of a private savings program. On the other hand, these relatively attractive rates of return fall considerably short of the long-run yield on equity capital in recent decades.

The yields projected for these average earners under various assumptions range from 2.78 percent to 6.28 percent. This spread indicates substantial income redistribution among categories of participants. However, even the least favored group (single male, starting work at 18 facing a high-cost system and a slow-earnings growth rate) would fare much better over the long run than private savers have in the past. Clearly the key assumption of the present analysis is that benefits keep pace with earnings.

Graduation of the benefit-earnings schedule produces a substantial graduation in the yield-earning relationship. For example, the yields for \$2,000 earners are generally one and one-half percentage points or more higher than for those earning \$6,600 or more and paying the maximum tax. However, even the most unfavorable projection for the latter continues to show a real rate of return over 2 percent which is generally better in the long run than the savings account yield.

TABLE 1.—ESTIMATED REAL RATES OF RETURN ON CONTRIBUTIONS, VARIOUS ASSUMPTIONS AND EARNINGS LEVELS, 1966 LAWS

[In percent]

Assumptions				Taxable earnings levels				
r	Cost	Age	Type ¹	\$2,000	\$4,000	\$6,000	\$6,600+	Mean
2.....	L	18	M	3.78	2.82	2.39	2.30	2.92
2.....	L	18	F	4.27	3.34	2.93	2.85	3.43
2.....	L	18	C	5.34	4.43	4.02	3.94	4.52
3.....	L	18	M	4.72	3.73	3.30	3.21	3.83
3.....	L	18	F	5.22	4.26	3.84	3.76	4.35
3.....	L	18	C	6.28	5.36	4.97	4.88	5.51
2.....	L	22	M	4.46	3.49	2.98	2.89	3.53
2.....	L	22	F	4.97	3.98	3.53	3.44	4.06
2.....	L	22	C	6.10	5.13	4.71	4.62	5.23
3.....	L	22	M	5.51	4.47	4.02	3.92	4.58
3.....	L	22	F	6.00	5.01	4.57	4.48	5.11
3.....	L	22	C	7.17	6.18	5.75	5.66	6.28
2.....	H	18	M	3.66	2.68	2.24	2.15	2.78
2.....	H	18	F	4.12	3.18	2.76	2.68	3.28
2.....	H	18	C	5.22	4.29	3.88	3.80	4.38
3.....	H	18	M	4.59	3.58	3.15	3.06	3.68
3.....	H	18	F	5.06	4.09	3.67	3.58	4.21
3.....	H	18	C	6.16	5.23	4.82	4.73	5.32
2.....	H	22	M	4.36	3.31	2.86	2.76	3.42
2.....	H	22	F	4.83	3.82	3.39	3.30	3.92
2.....	H	22	C	6.06	5.01	4.58	4.48	5.12
3.....	H	22	M	5.40	4.35	3.89	3.79	4.46
3.....	H	22	F	5.88	4.87	4.43	4.33	4.98
3.....	H	22	C	7.05	6.06	5.63	5.54	6.16

¹ The 3 types of recipient are: M (single male or married male with wife who worked); F (single female or married female with nondependent husband); and C (couple eligible for wife's benefit).

Yields over 7 percent appear in the table, but these are for the unlikely case of a earner who waits to start work until age 22 but nevertheless commands an income only slightly more than half the mean. However, yields of over 6 percent are projected at this income level for those beginning at age 22 and eligible for wife's benefits.

Congressman Ullman asked whether social security is a sound investment for a young person or whether he is being "taken." This question has two aspects. In the first place the differentials among the yields to individuals require evaluation. Second, are the absolute levels of the yields sufficient to justify this compulsory saving?

Obviously some participants in social security are faring much better than others, but this type of differentiation also exists under the generally approved graduated income tax. The relatively high rate of return to low income groups under social security is consistent with their being assigned a low burden under the income tax. The relatively high return to couples who did not have the benefit of a wife's income may well be consistent with the objective of redistributing income in favor of those with greater need. However, this is by no means certain, since nonworking wives may tend to be concentrated among high income couples. It is clear, of course, that neither of these redistributational features is consistent with the insurance analogy frequently associated with the system but that is irrelevant to their appraisal.

Less acceptable in terms either of values or logic, if we continue to think in terms of lifetime tax-benefit relationships, are the higher yields for women and late entrants to the work force. The true yield to the self-employed may be considerably higher than to earners at the same reported level.

If we depart from the lifetime tax-benefit frame of reference and consider current tax and benefit structures independently some of the above appraisals no longer seem valid. For example, the progressiveness of the relationship between retirement benefits and lifetime income cannot hide the fact that the tax used to finance benefits is heavy and regressive now and throughout the earner's working career. Even though the working poor may ultimately get out more than they put in, it does not necessarily follow that the later progressivity of the benefit structure is sufficient to compensate for the prior hardship imposed by the payroll tax. On the other hand, the benefit advantage of women due to lower mortality may well be a progressive feature but this depends on the assumption that women tend to have lower incomes during retirement. Finally the extra tax paid by early starters compared to late starters with the same income may be justifiable on grounds of ability to pay. In any case, the separate appraisals of taxes and benefits generally produce different answers from those suggested by the lifetime rates of return.

Also relevant, in addition to these various differentials, is the absolute level of these rates of return on contributions under the program. The aggregate or overall yield to participants as a whole is probably on the order of 4 percent. It is not easy to evaluate an overall projected rate of return on social security contributions of 4 percent. This yield is very attractive compared to past experience with fixed dollar claims; it would probably also look good in comparison with the real yield on an installment purchase of a private insurance annuity. However,

these are all dwarfed by past long-run yields on equity. In any case, it should be acknowledged that a comparison of the 4-percent projection with the yield on equity is artificial in some respects. A public retirement scheme comparable to a private plan such as that developed by the Teachers' Insurance and Annuity Association, which provides for equity investment, is not feasible under a pay-as-you-go system. The present active population would not only have to finance pensions for the currently retired but also would contribute to a mammoth equity trust fund. Furthermore, there is no reason to believe the high real yields earned on equity in the past would be impervious to the large new demand for securities which would be generated. The bidding up of price-earnings ratios (while cutting dividend rates) would probably yield real capital gains at the outset but a highly unstable situation would be in prospect as selling of equities by the retired population began to offset buying on behalf of earners.

As a substantial improvement on the past yields on fixed claims a 4-percent real return under a pay-as-you-go social security program seems tolerable for provision of the basic retirement floor. This avoids the uncertainties connected with a funded equity program and permits retention of some generally acceptably redistributive features not likely to survive the more precise individual earmarking to be expected under funding. On the other hand, the larger this compulsory saving under social security the less earners will be able to invest privately in mutual funds or other devices for periodic investment in higher yielding equity capital. This consideration is at least relevant to determination of the optimum size of the social security program.

It is essential to stress also that the 4-percent yield itself is hardly a riskless proposition. Aside from the fallible growth rate projections, there is not at present any guarantee that benefits will keep pace with earnings as postulated in the present model. The social insurance package would look more attractive if the taxpaying population were guaranteed that the future earners would pay enough to allow their retirement income to keep pace. In the absence of such assurances, younger workers are likely to be more impressed by Colin Campbell's analysis of existing and proposed tax and benefit schedules than by the hypothetical projections of the model discussed here. The raw deals he portrays cannot be ruled out without a public commitment to tie current benefits to current earnings indefinitely. Without such guarantees continued grumbling by younger workers can be expected.

The lack of intergenerational contractual obligations is not the only ground for discontent on the part of social security taxpayers, however. Although there is a modest degree of progression in the yield-earnings relationship, the yields at the low end of the income scale are probably highly unattractive to the poor. Low-income families frequently choose or are compelled to borrow at very high interest rates. It is therefore difficult to justify forcing them to save, even at a real interest rate of 7 percent under social security; they may at the same time (and in part as a consequence) be borrowing at 36 percent or more. In the context of a war against poverty it is an anomaly that a 10-percent combined employer-employee payroll tax is collected on a \$2,500 income of a family of four even though this family is recognized as incapable of paying any income tax. The payroll tax is regressive because of the earnings ceiling and especially burdensome to the work-

ing poor who get little offsetting help from welfare. Whatever the ultimate payoff at age 65, the magnitude of this compulsory saving can hardly be regarded as trivial by workers living in an income range we have defined as poverty.

The import of this reasoning is not that participation in the social security program should be made voluntary; this would have the virtually certain result that many people would reach retirement age with few resources and poor prospects. Rather, the heavy and regressive burden of the present payroll tax structure on the working poor deserves recognition and alleviation. Despite the durability of the insurance principle the present tax benefit package is already progressive and can be made more so by reforming the payroll tax. One proposal already receiving attention calls for financing part of the social security program out of general revenues. However, this would not eliminate the taxation of poor families. This could be accomplished by a more far-reaching measure which would allow the payroll tax to be credited against the income tax and include refunds in cases in which the payroll tax was the larger. As a more modest alternative the payroll tax itself could be graduated. An attractive and less far-reaching reform aimed simply at ending this taxation of the poor would be institution of exemptions under the payroll tax. Appropriate exemptions would be those implied by the currently reigning definition of poverty. Some other countries have already moved a step in this direction by including a taxable floor in addition to a ceiling. The exemption device would be more equitable because of its allowance for family size and structure. In any case, the main point is that families found to be in poverty should not be forced to contribute substantially even though their projected return under social security may appear attractive to others more fortunately situated in the income distribution.

It should be reiterated that the projected yields reported above are based on an abstract model of earnings and benefit growth that is no more than a rough approximation of past reality. If the model and the official demographic projections are fairly realistic, new contributors will in the aggregate get neither a very good buy nor a very bad one but will fare moderately well. The evaluation of the redistributive features of the system is more subjective and depends upon whether one thinks in terms of lifetime rates of return or separate tax and benefit structures. From either viewpoint, however, a guarantee that benefits will keep pace with earnings and the alleviation of the burden of the payroll tax on the poor would contribute to making social security a substantially more attractive institution.

DAVID DONALDSON: ON THE OPTIMAL MIX OF SOCIAL INSURANCE PAYMENTS

Economists are given to thinking in terms of perfect markets. When markets are perfect many things don't matter. These things are practically the whole business of public-policymakers. A justification for social insurance is that insurance markets are poorly developed and one cannot purchase protection against all risks. Insuring, used in this sense, is an activity engaged in by everyone. Although in a perfect market one can sell goods received in kind and thereby secure

his preferred consumption; in normal markets this is not so. Policy-makers should be aware of the opportunities which market imperfections create to achieve objectives of social policy more economically through provision in kind than through cash payments. It will sometimes be the case that the disincentive effects of insurance can be avoided through provision in kind. In addition to cash and kind there is the promise made in cash adjusted for changes in the price level. Government could contribute to the reduction of imperfection in insurance markets by issuing real bonds.

RICHARD D. YOUNG, MATHEMATICAL APPROACHES TO
GASTON V. RIMLINGER: THE MACROECONOMICS AND PLAN-
 NING OF OLD-AGE PENSION SYS-
 TEMS

The American social security system has become a vast undertaking which affects the present or future welfare of nearly every citizen. By the end of 1965 over 163 million people had been issued social security account numbers. Today OASHDHI is paying benefits to 23 million people and collecting contributions from about 70 million employees and self-employed persons. Most striking is the fact that over the last 15 years income and expenditures of social insurance have risen over twice as fast as gross national product. Macroeconomic magnitudes of this order inevitably raise questions about the longrun stability of the system. It is obvious, for example, that social insurance expenditures cannot indefinitely increase faster than the gross national product. Much less obvious, however, is the rate of benefit increase that can be sustained in the long run and the characteristics of a plan consistent with this rate. The objective of this paper is to work out mathematical approaches that may assist social security planners in dealing with such problems in a rigorous analytical manner.

Since the inception of the social insurance program, critics have raised doubts in the popular mind about its solvency and issued ominous warnings about its ultimate burden. There seems to be implicit in such warnings the view that later generations will bear a heavier contribution burden in relation to benefits than earlier generations. Students of social insurance answer the question about solvency by pointing out that in a public insurance program there is no need to provide actuarial reserves against future contingencies. These are met from future income. But this means that the relationship between contingent benefits and future taxable income is of critical importance. This relationship leads directly to the question of benefit versus burden for succeeding generations.

We shall assume that in order to be sustainable the rates of contribution and benefit must not only adequately meet the needs of the present generation of beneficiaries but that they must also meet the needs of each succeeding generation and at the same time they must avoid allowing one generation to become a net burden on another. In other words, we need to devise an old age pension plan that meets the criteria of both social adequacy and intergenerational equity. We use this concept of equity to mean that each generation is entitled to benefits equal to the interest compounded value of its own contributions. The benefit

increases which are consistent with this plan, assuming that they are also consistent with wage-pension preferences, can be considered sustainable increases.

From our *continuous growth model* we draw the following conclusions:

1. Total benefits paid by the system should increase at a rate which is the sum of the rates of increase of wages and the work force.

2. The obligation of this system—that is, the present value of the total debt of the system to the working generation—should be in the long run increase at the same rate.

3. Any equity rule that systematically pays more or systematically pays less in benefits than total contributions plus interest at the combined rate of growth of wages and the work force will be either unstable or socially inadequate in the long run.

4. The status of social security as an alternative to private provision of retirement income depends on the relationship of the combined rates of growth of wages and the work force to the riskless lending interest rate. If this market rate is systematically below the combined rates of growth in wages and the work force, then social security may offer a better alternative than private saving per dollar invested as a means of providing for retirement income. This would provide a new justification for social security. If the market lending rate were systematically above the combined rates of growth in wages and the work force, then a corresponding (per dollar) cost of social security both exists and is calculable.

We contend that our *linear programming model* is a planning tool. It is directly useful as a rational, disciplined mechanism for detailed planning in terms of empirical data and requirements. It has immense direct value because it provides an ideal junction through which general theory may be used to shape detailed and specific plans. The linkage between theories and plans is through the parameters of the linear programming model.

Informal planning methods, however competently and effectively employed, typically do not separate questions of fact, value, and logical implication. For the outsider at least it is frequently difficult to distinguish analysis and intuition, objective and subjective information, personal and general value judgments. This does not mean that informal planning is necessarily chaotic or irrational; we only contend that it is generally incomprehensible to outsiders and only partially understood by many insiders. Moreover, planning efforts on problems that involve considerable intrinsic complication are frequently accomplished by circumscribing the problem to a point where attention may be confined to a small manageable subset of the potentially relevant variables and relations.

Simplification of the planning problem and the shift of attention to parameter specification should have two important effects. A more efficient allocation of the planner's effort in estimating the important unknowns in the problem should result. A more portentous result is that application of general theories (economic, statistical, sociological, etc.) to the problems of parameter specification is quite immediate, while the application of such theory in informal planning procedures is much less direct and obvious. Thus by adopting programming meth-

ods, the planners achieve gains in potential access to an immense reservoir of useful knowledge.

At present, parameter specification would in practice have to be accomplished under the dominant influence of informed, intelligent, subjective judgment. With time, the accumulation of experience and reliable theory should narrow the range of subjective discretion and decrease the expected impact of subjective error. We would emphasize that the existence and use of a planning procedure that invites the application of theory is critical to the evolutionary development of a symbiosis of theory and practice.

Our purpose has been to relate our analysis to a more general view of the social security planning problem. This problem requires a practical synthesis of complex empirical data and predictions, a balancing of the interest of present and future generations, and compliance with underlying administrative and economic realities. While it is obvious that theoretical work by economists, sociologists, statisticians, etc., can be useful to the planner, the exact means of applying such expertise are less obvious. Basic reliance, of course, must always be placed on the synthetic ability of the informed, intelligent planner. But well-defined, systematic procedures that guarantee optimality if appropriately used can certainly benefit the planning process. Such procedures are increasingly beneficial if they explicitly formalize the channels through which empirical predictions, value judgments, and theoretical results—for example, from economics—impinge on the final plan.

JAMES H. SCHULZ: "EARLY RETIREMENT" TRENDS AND PENSION ELIGIBILITY UNDER SOCIAL SECURITY

In recent years significant changes regarding retirement security have taken place in the United States. Improved and broadened social security, mushrooming private pension plans, medicare, and extended economic prosperity should provide better retirement protection in the future. But will they? Will the changes which have occurred and are occurring in the U.S. institutional provisions for retirement security significantly improve the economic circumstances of future generations of older people?

In order to investigate the future economic circumstances of the retired aged population, a simulation model has been constructed to incorporate and represent the essential features of the major private and public pension systems existing in the United States. In addition, the model has been designed to take into account relationships among important demographic and work force variables influencing the pension position and savings behavior of individuals in the economy.

The results were definitely not encouraging with regard to the future economic situation of retired aged. The study found that, while the existing pension system can be expected by 1980 to have produced a sizable shift upward in the distribution of pension income for aged persons, there would still be a large proportion of aged units in 1980 with very low pension incomes. In addition, using various different

measures of income adequacy, it was found that little or no improvement in the adequacy of aged income (from pensions and assets) can be expected relative to the rising incomes of the rest of the U.S. population.

TABLE 1.—PROJECTED TOTAL PENSION INCOME DISTRIBUTION FOR RETIRED COUPLES AND UNMARRIED INDIVIDUALS, 1980¹

[In percent]

Total pension income	Couples	Unmarried units
Less than \$1,000 ²	5	32
\$1,000 to \$1,999.....	16	19
\$2,000 to \$2,999.....	28	31
\$3,000 to \$3,999.....	25	11
\$4,000 to \$4,999.....	14	5
\$5,000 to \$9,999.....	12	3
\$10,000 and over.....	(8)	(5)
Total.....	4 100	100

¹ Pension income includes benefits from social security, private pensions (including State and local plans), and Federal retirement programs.

² Includes units without pensions.

³ Less than 1 percent.

⁴ Totals may not sum to 100 percent due to rounding.

TABLE 2.—INCOME DISTRIBUTION OF RETIRED COUPLES, 1962 AND 1980 PROJECTIONS

Couples	Under \$1,000	\$1,000 to \$1,999	\$2,000 to \$2,999	\$3,000 to \$3,999	\$4,000 and over	Total
1962 ¹	7	32	31	13	16	100
1980 money pension plus asset income ²	4	11	20	26	40	100
Real pension plus asset income ³	11	29	31	18	11	100

¹ Based on data from U.S. Social Security Administration, 1963 Survey of the Aged.

² Simulation projection run 2 assumptions.

³ Assumes average price level rise in future will be at the same rate which occurred during the 1955-65 period (1.6 percent yearly).

The projected asset picture for older people was somewhat better. Given strong saving behavior, aged units in 1980 could be expected to have accumulated substantially greater total assets than aged units possessed in 1962. Whether personal savings behavior for retirement will change significantly for a large segment of the population still remains to be seen. The research results summarized above indicate a possible need for additional action to improve the incomes of future aged persons.

There is a rapidly accumulating body of data which indicates a significant rise in early retirement (i.e., before age 65) among male workers in the United States. Data from the current population survey, for example, show that nonparticipation in the labor force among men aged 55 to 64 rose from 11.5 to 15.5 percent between 1956 and 1966.

The reasons for this trend are not definitely known. A 1963 survey of salary and wage workers, aged 62 to 64 (retiring since 1967), found, however, that only 9 percent reported retiring because they preferred leisure. Almost 75 percent reported retiring because of poor health (53 percent) or involuntary loss of job (22 percent). Whether poor health was the real reason for those who gave it as an explanation for retirement or just a rationalization by some unable to find work is not known. Using a rather stringent disability definition, the Bureau of Labor Statistics found only 30 percent of men, aged 60 to 64, who

were not in the labor force in 1966, unable to work because of long-term mental or physical disabilities. The appropriate percentage probably lies somewhere between the Social Security and the Bureau of Labor Statistics findings. Other possible reasons for early retirement include age discrimination and unemployment arising out of cyclical fluctuations or technological change.

The solution to the problem of a rising number of unemployed older workers is not necessarily to force these workers into earlier and earlier retirement with smaller and smaller retirement pensions. This is the solution of the overwhelming bulk of private pension systems in the United States, which drastically cut pension benefits of early retiring workers. There are at least three major costs associated with such a solution. First, by encouraging, and in many cases forcing, workers to retire early with reduced private and public pension benefits, the resulting retirement income may be seriously inadequate. Second, there is the loss in real output arising out of the consequent reduction in the labor force. Third, by institutionalizing age 60 as the initial eligibility age for social security, Congress may, in effect, be setting a guideline which would tend to push the average age of retirement in the United States lower.

TABLE 3.—PROJECTED¹ RATIO OF TOTAL PENSION INCOME² TO PRERETIREMENT EARNINGS³ FOR RETIRED NONAGRICULTURAL MALES⁴

[Percent distribution]

Ratio	Age at retirement		
	Less than 60	60 to 64	65 or over
Less than 0.10.....	16	6	3
0.10 to 0.19.....	50	19	10
0.20 to 0.29.....	23	27	16
0.30 to 0.39.....	5	21	26
0.40 to 0.49.....	3	11	15
0.50 to 0.59.....	1	5	12
0.60 to 0.69.....	1	4	7
0.70 to 0.79.....	0	3	5
0.80 to 0.89.....	0	1	2
1.0 or more.....	1	1	4
Total.....	⁵ 100	100	100

¹ Source: Simulation model.

² Social security, private pension, and/or Government employee pension.

³ Average of 5 years prior to retirement.

⁴ Married males only.

⁵ May not sum to 100 percent due to rounding.

The replacement ratios for men retiring before age 60 were much worse than those for men retiring at the "normal" age of 65 or more. For example, only about 3 percent of those retiring before age 60 are projected to have a replacement of 50 percent or more of their average annual earnings from pension income. In contrast, a little less than one-third of those retiring at age 65 or after are projected to have a replacement above 50 percent.

Social security eligibility (with actuarial reduction) at age 60 or some other age could give greater retirement flexibility to older workers. But this expansion of the worker's freedom of choice regarding retirement planning necessitates an economic environment which allows him to work if he is willing and able. If he is unable to work because of age discrimination or because he lacks an appropriate skill

or just because of the lack of jobs in a depressed labor market, retirement flexibility becomes meaningless. Early social security eligibility then becomes a sop or substitute for public assistance. At the same time it forces the worker into a situation of having to elect lower pension income in retirement for the rest of his life.

What is needed is improvement in public and private disability coverage and provisions, institution of extended unemployment compensation benefits for older workers similar to those in the Javits-Hartke amendment, and job retraining and age discrimination legislation. These measures, together with a vigorous labor market sustained by appropriate monetary-fiscal policy, would create the environment necessary to expand retirement flexibility.

HUGH MACAULEY: TAX MEASURES PROVIDING INCOME ASSISTANCE TO OLDER PERSONS

Not only is tax preference an available option, it is popular with both givers and receivers and is often chosen. The former may prefer tax relief over increased payments because new or heavier taxes are avoided, the benefits do not appear as Government expenditures which are subject to annual review and frequent criticism, and the arrangement does not require a new or expanded agency or bureaucracy to administer the benefits.

The arguments against tax preference are equally imposing but they appeal to different persons. If the need is to help the aged, a reduction in the income taxes of older persons is of benefit only to those who have both age and income. The Treasury estimates that in 1966 tax preferences to the aged costing \$2.3 billion annually were going to 11 million of an estimated 18 million aged persons. Only one-fourth of these benefits went to persons whose incomes (including social security and railroad retirement benefits) were \$3,000 or less. An additional one-fourth went to persons with incomes between \$3,000 and \$5,000. The remaining one-half went to the 15 percent of the population with incomes over \$5,000. Second, we have often seen how tax preference granted to one group generated political pressure to extend the benefits to similar or closely related groups. Third, a system of taxation, already complex from special provisions, becomes increasingly difficult or impossible to comprehend as new exemptions are added.

While the Old-Age, Survivors, Disability and Hospital Insurance program, as part of a broader social security program, is itself financed with a tax, the emphasis here will be on the income tax treatment of the payments and benefits made under the Old-Age Insurance (OAI) part of the program. It may be felt by some that, while the income tax exemption of OAI benefits helps only the aged who are relatively better off, at least the exemption does not hurt those in the lower brackets. If, however, the loss in general revenue from this source must be replaced, income taxes and/or other taxes must be increased. For every \$3 that a family making over \$15,000 has to pay in taxes to make up for the loss in revenues, a family making less than \$2,000 must pay \$1. Those in the lowest income brackets receive no benefit from the tax exemption of OAI benefits but they will help to make up the tax loss. The exemption of these benefits from tax does not conform

to the accepted standards of either vertical or horizontal equity and several writers have proposed that the benefits be included in taxable income.

The proper tax treatment of amounts paid as worker's contributions is not so widely agreed on as the tax treatment of benefits. A stronger case can be built if one combines the generally accepted definition of income supported by most economists, that income is the algebraic sum of changes in net worth plus consumption, with the treatment of insurance as proposed by Vickery. His point is that insurance against a future loss of income is analogous to a business expense and should be deductible under a personal income tax. Thus, the contribution made under OAI could be viewed as a legitimate expense of guaranteeing future income under given contingencies and should not be a part of adjusted gross income. The later payment of benefits would then be taxable. For the individual the system would involve a deferral of tax from the time when the contribution was made until the time when benefits were received. But since the OAI program is operated on the basis that contributions should approximately equal benefits in each year, there would be no deferral of adjusted gross income for the Treasury.

The proposed tax treatment would result in a much larger tax base because all benefits would be included in adjusted gross income while only contributions by employees and self-employed persons are now included. However, because those who receive benefits are likely to have lower income at the time of receipt, the tax rates and total taxes collected could be lower. In 1957, Muntz estimated that the taxation of benefits and the tax exemption of contributions would produce a net revenue decline of about \$300 to \$400 million.

Under most private pension plans employers, and sometimes employees, contribute to a fund to provide pensions to workers when they retire. The tax treatment of payments into the funds largely parallels that of OAI but the treatment of benefits differs. Employee contributions are included in the employees taxable income; employer contributions are generally excluded; earnings of the pension funds are generally not taxable. Benefit payments are considered in part a return of previously taxed contributions, which are not taxed, and in part a payment from contributions of the employer and the earnings of the pension funds, which are taxable. It is the exemption from present tax accorded to contributions by employers and the exemption of earnings of pension funds that are considered tax favor. Yet two arguments may be offered to support the present treatment: One on the basis of definition of income and one on the comparison with treatment of similar payments.

Payments by employers into a pension fund are customarily required by an agreement between employer and employees. These payments cannot be recaptured by the employer until all obligations of the fund are met. The payments would appear then to be legitimate costs of doing business paid to the fund and properly deductible to the employer, although Surrey argues that these conditions are not sufficient. Surrey holds out the possibility that employer contributions could be held deductible for the employer but considered as income to the employee but that this treatment would apply only where the employee receives a vested interest in the fund. However,

vesting does not customarily mean that the employee is assured a payment from the fund. Should he die before retirement, he will receive little or nothing. Contributions by employees to pension funds are taxed to the employee and this may be considered proper. Employee contribution under pension plans customarily belong irrevocably to the employee and will be returned to him even if he should die before retirement. They are, in effect, a form of savings.

With respect to the taxation of pension fund income, the beneficiaries of increased net worth will be those contributors who live to retirement; but they have no present tangible claim and, hence, no increase in net worth. Nor will they have a claim until they retire and, even then, the amount will depend on how long they live. The argument that pension plans and similar deferred compensation arrangements receive tax preference and provide the aged with a tax forgiveness or tax deferral subsidy is not valid. Given the concept of income that underlies our income tax and given the tax treatment of OAI benefits, railroad retirement benefits, and most retirement plans, pension plans are not receiving more favorable or preferential treatment. There would seem to be no tax subsidy to this form of old-age income.

Taxpayers over age 65 are allowed a double exemption when computing their taxes. While taxpayers over age 65 find their after-tax income increased because of this provision, this gain is subject to the general criticism previously cited: the benefit goes to those persons over 65 who have income high enough to be taxable and the value of the benefit and the revenue loss to the Government vary directly with the taxpayers marginal tax rate—the greatest tax saving going to those whose incomes are the highest. A natural sympathy extends to those who are old and it may be that society believes they deserve to receive more income before they are required to pay tax. This means, however, that younger persons with the same income will pay a higher tax, even though their problems may be equally or more serious, but different, revolving around educating their children, buying a home, financing a business, or providing for their old age. Both the existing and proposed extra exemptions must be supported with arguments as to why the needs of the elderly exceed those of the young. If there are such needs, they might better be handled as special deductions as is done with the medical expense deductions.

The retirement income credit is one of those provisions that arose because of the most-favored-taxpayer philosophy. Given the exemption of certain forms of retirement income, the retirement income credit may be justified to some extent on grounds of horizontal equity. However, the provision applies only to investment income, is reduced if the taxpayer has wage income, and is completely eliminated if his wage income is as much as \$3,000. Thus, it is not all income of the aged that benefits from this provision but only certain forms. Further, wage income suffers relative to retirement income not only by being taxable but also by reducing the tax credit. In effect, a tax rate from $1\frac{1}{2}$ to 2 times as high as normal is imposed on this limited amount of wage income between \$1,200 and \$3,000 for single persons over 65. In a period of relatively full employment, there would seem to be little reason for taxing labor income more heavily than nonlabor

income; and, even in a period of unemployment, a better policy might be to increase effective demand rather than to encourage people to leave the labor force.

The tax measures that have been discussed do not exhaust the forms in which preference is given to older persons. There are or have been other provisions that give liberal medical deductions, reduce the property tax on homes of the elderly, and exempt from tax gain from the sale of a residence, but these are minor factors in the total tax picture. The tax measures that have been discussed at length and the tax treatment of closely related forms of income such as that from self-employment retirement plans, military retirement benefits, civil service retirement benefits, et cetera, are the source of most of the tax benefits.

ELIZABETH DERAN: SOME ECONOMIC EFFECTS OF HIGH TAXES FOR SOCIAL INSURANCE

No one can pinpoint the particular stage at which the shortcomings of the social security tax turn into serious problems but it seems likely that the crucial period has already arrived or certainly will arrive before the final stage of the presently scheduled increases has taken effect. When receipts from a tax account for 17 percent of total Internal Revenue collections, are 72 percent the size of the collections from the corporation income tax and 37 percent the individual income tax—as Treasury estimates for the OASDHI tax in fiscal 1967—then the tax surely has grown large enough that its effects become meaningful to the economy. When a tax has reached a level at which it can exert an important influence on business and family decisions then surely the time has come to examine its characteristics carefully. This paper considers some of the economic distortions which might follow when the social security tax is levied at a high enough rate for its effect to be significant. The problems involved in changing to some other form of financing are examined and some tentative suggestions for avoiding or reducing the more dangerous effects are offered.

Taxes can exert an effect on the economy in two broad ways: (1) the taxpayer may take action to reduce the tax's pinch on himself and his tax reducing activity then initiates repercussions in the economy; or (2) the taxpayer may decide he cannot mitigate the effect of the tax (or learns from unsuccessful attempts that he cannot do so) and then makes adjustments to the lower income position in which he finds himself. The effects on the economy in case of (2) will not differ under two kinds of tax (say, a payroll tax and income tax) of equal yield, provided the same taxpayers are subject to both taxes. But in case of (1) the nature of the tax can make a considerable difference in the available avenues of escape and the consequent effects on the economy.

Since the OASDHI tax applies to wages and salaries, an employer can reduce his tax liability by changing his factor mix so as to reduce labor utilization in achieving a given production goal. The most obvious approach lies in the introduction or expansion of labor saving capital equipment. The practicability of such an adjustment, however, depends heavily on industry conditions.

TABLE 1.—PRESENT VALUE OF EMPLOYER OASDHI TAX ON 1 WORKER 1966-75 BY INDUSTRY

	Average annual earnings ¹	1966 value of 1966-75 tax on 1 worker		
		Under prior law	Under 1965 amendments	Additional tax under 1965 amendments ²
All mineral industries.....	\$6,800	1,670	2,459	789
Metal mining.....	7,200	1,670	2,459	789
Anthracite mining.....	6,400	1,670	2,385	715
Bituminous coal and ignite mining.....	7,000	1,670	2,459	789
Oil and gas extraction.....	6,500	1,670	2,422	752
Nonmetallic minerals mining.....	6,400	1,670	2,385	715
All manufacturing industries.....	5,800	1,670	2,161	491
Food and kindred products.....	4,800	1,670	1,788	188
Tobacco manufacturing.....	4,600	1,600	1,714	114
Textile mill products.....	3,900	1,357	1,453	96
Apparel and other.....	4,700	1,635	1,751	116
Lumber and wood products.....	5,100	1,670	1,930	230
Furniture and fixtures.....	6,650	1,670	2,459	789
Paper and allied products.....	6,500	1,670	2,422	752
Print, publishing, etc.....	7,600	1,670	2,459	789
Chemicals and allied.....	8,300	1,670	2,459	789
Production of petroleum and coal.....	6,200	1,670	2,310	640
Rubber and plastic products.....	4,200	1,461	1,565	104
Leather and leather products.....	6,300	1,670	2,347	677
Stone, clay and glass.....	7,600	1,670	2,459	789
Primary metal industries.....	6,700	1,670	2,459	789
Fabricated metal products.....	7,300	1,670	2,459	789
Machinery, except electric.....	6,600	1,670	2,459	789
Electrical machinery and services.....	8,000	1,670	2,459	789
Transportation equipment and ordnance.....	7,000	1,670	2,459	789
Instruments, etc.....	5,200	1,670	1,937	267
Miscellaneous manufacturing.....	5,400	1,670	2,012	342
All wholesale and retail trade.....	7,200	1,670	2,459	789
Wholesale trade.....	4,700	1,635	1,751	116
Retail trade.....	4,300	1,496	1,602	106
All services.....	3,700	1,287	1,378	91
Hotel, roominghouses etc.....	4,200	1,461	1,565	104
Personal service.....	6,200	1,670	2,310	640
Miscellaneous business service.....	5,000	1,670	1,863	193
Automobile repair service.....	6,600	1,670	2,459	789
Miscellaneous repair service.....	6,000	1,670	2,236	565
Motion pictures.....	4,900	1,670	1,826	156
Amusement and recreation.....				

¹ For 1965, rounded to nearest \$100.² At 5 percent compound interest computed as follows: Value under prior tax = .34789W, W \$4,800. Value under 1965 amendments = .372587W, W \$6,600.

Source: U.S. Department of Commerce. The National Income and Products Accounts of the United States, 1929-65, table 6, 5, p. 109.

The differences between the two sets of discounted OASDHI tax values suggest how much more an employer can now consider paying for labor saving machinery per labor unit replaced as a consequence of the tax increase. The largest difference occurs in the industries with average salaries equal to or exceeding the new base. For instance, in manufacturing of transportation equipment, to take one example, the value of the additional tax on one worker for 10 years comes to \$789. Suppose a manufacturer of transportation equipment had been considering a piece of equipment which would last 10 years and replace 10 men but with a price somewhat too high. The 1965 amendment might make the contemplated investment worth while, since it increased by \$7,890 the discounted value of the labor to be replaced. But for such equipment the increased value of the replaced labor in the case of the operator of a hotel would amount to only \$910 or of a retailer \$1,160.

One rather drastic, and necessarily long run, adjustment to the tax comes about if the employers change product or line of business in an

effort to minimize the tax. We can reasonably anticipate that the inter-industry tax rate differentials and opportunities for successful tax adjusting behavior will lead to changes with the net result a waste of some resources. Assuming that the pretax pattern of production (in terms of input techniques and output composition) was as efficient as possible under all existing constraints aside from the tax, then any changes made in response to the tax necessarily will move the economy to a less efficient position.

TABLE 2.—ESTIMATED COST OF DISTORTION UNDER OASDI TAX ON EMPLOYERS, SELECTED INDUSTRIES, 1963

	OASDI tax (millions)	OASDI tax as per- cent of national income originat- ing in industry	Industry per- centage minus average percentage	Cost of distortion (millions)
	(1)	(2)	(3)	(4)
Farms.....	\$81.0	0.46	-1.16	\$117.1
Agricultural services, forestry, and fisheries.....	19.5	1.62	-----	0
Metal mining.....	13.0	1.62	-----	0
Coal mining.....	21.8	1.82	+ .20	2.4
Crude petroleum and natural gas.....	44.1	1.52	- .10	(1)
Mining and quarrying of nonmetallic minerals.....	19.3	1.93	+ .31	(1)
Contract construction.....	495.2	2.05	+ .43	22.3
Food and kindred products.....	255.6	1.91	+ .29	5.6
Tobacco manufactures.....	12.3	1.02	- .60	2.2
Textile mill products.....	114.7	2.44	+ .82	15.8
Apparel and other fabricated textile products.....	145.0	2.54	+ .92	24.1
Paper and allied products.....	99.6	1.92	+ .30	2.3
Printing, publishing, and allied industries.....	139.9	1.92	+ .30	3.3
Chemicals and allied products.....	155.5	1.50	- .12	(1)
Petroleum refining and related industries.....	36.6	.80	- .82	15.4
Rubber and miscellaneous plastic products.....	65.2	1.98	+ .36	2.1
Leather and leather products.....	41.2	2.42	+ .80	5.4
Lumber and wood products, except furniture.....	72.2	2.00	+ .38	2.6
Furniture and fixtures.....	52.3	2.18	+ .56	3.8
Stone, clay, and glass products.....	99.9	1.96	+ .34	3.0
Primary metal industries.....	202.7	1.76	+ .14	1.2
Fabricated metal products.....	188.3	2.05	+ .43	8.5
Machinery, except electrical.....	262.0	1.87	+ .25	4.3
Electrical machinery.....	238.1	1.93	+ .31	5.9
Transportation equipment and ordnance.....	356.6	1.61	- .01	(1)
Instruments.....	58.0	1.66	+ .04	(1)
Miscellaneous manufacturing industries.....	52.1	2.08	+ .46	2.6
Local, suburban, and highway passenger trans- portation.....	45.2	2.66	+1.04	9.2
Motor freight transportation and warehousing.....	139.8	2.03	+ .41	5.8
Water transportation.....	38.2	2.12	+ .50	2.2
Air transportation.....	35.8	1.88	+ .26	(1)
Pipeline transportation.....	3.7	.92	- .70	(1)
Transportation services.....	12.1	2.02	+ .40	(1)
Communication.....	129.1	1.32	- .30	4.4
Electric, gas, and sanitary services.....	112.4	1.09	- .53	14.4
Wholesale and retail trade.....	1,449.4	1.97	+ .35	44.8
Banking, credit agencies, holding and other invest- ment companies.....	152.9	2.01	+ .39	5.8
Security and commodity brokers.....	19.6	1.40	- .22	(1)
Insurance carriers, brokers and real estate.....	236.1	.53	-1.09	266.9
Hotels and other lodging places.....	54.7	2.28	+ .66	5.2
Personal services.....	95.6	1.80	+ .18	(1)
Miscellaneous business services.....	117.2	1.78	+ .16	(1)
Auto repair, auto services, and garages.....	36.7	1.62	+ .05	(1)
Miscellaneous repair services.....	19.8	1.52	- .10	(1)
Motion pictures.....	20.0	2.23	+ .61	1.7
Amusement and recreation services, except motion pictures.....	39.9	2.00	+ .38	1.4
Medical and other health services.....	223.6	1.66	+ .04	(1)
Legal services.....	22.7	.67	- .95	1.5
Nonprofit membership organizations.....	77.5	1.68	+ .06	(1)
Miscellaneous professional services.....	65.5	1.39	- .23	1.2
All industries listed above ²	6,489.2	1.62	-----	612.4

¹ Less than \$1,000,000.

² Excludes railroad transportation, education services, private households, government and government enterprises, rest of the world.

Source: Department of Commerce, "The National Income and Product Accounts of the United States, 1929-65," pp. 20-21; unpublished data provided by Social Security Administration.

Estimates of the cost of the tax distortion, based on two probably unrealistic but computationally helpful assumptions, appear in column 4. These two assumptions are (1) that employers pass the tax forward in the form of price adjustments and (2) that the price elasticity of demand approximates unity in all industries concerned. Granted these assumptions, it follows that, because the tax induced change in price results in an equal percentage change in quantity in the opposite direction, production will be higher in an undertaxed industry and lower in an overtaxed industry than under neutral taxation.

The preceding discussion makes it clear that the OASDHI tax, like any other tax, exhibits the usual quota of faults, all of which become more acute as the level of the tax rises. In view of these shortcomings, should we abandon the present method of financing the social security system by turning in part to general revenue financing as some have suggested? For all practical purposes, general revenue financing amounts to income tax financing. The choice between financing additional benefits by increasing one tax rather than another looks like the Scylla-Charybdis passage. For instance, one might prefer the income tax because it allows new firms to develop but, since the income tax also allows insufficient marginal firms to continue to operate, perhaps the OASDHI tax with its harsher treatment of marginal firms would be preferable. The income tax and payroll tax, in fact, would appear to be a nicely complementary pair as long as both are kept below seriously repressive levels. In any event, it obviously would be unrealistic to contend that the faults of the social security tax exert a more oppressive effect than those of the income tax, since both can exhibit extremely unpleasant characteristics as rates increase.

In the past, three important factors have led to the need for increasing taxes to finance the social security system: (1) the anticipation that benefits must be increased to maintain a decent standard of living for our elders; (2) the intergeneration transfer, which will continue to some degree until the early part of the next century; (3) the interbracket income distribution, which has been quietly increased in intensity with resultant changes in the entire philosophy of the system. The time has come to consider the matter of increasing benefits in a realistic framework. The basic problem stems from considering the social security pension as providing the older persons entire support rather than as the floor it was originally meant to be and in fact is for many of the retired.

One comfort about the intergeneration transfer problem is that time alone will heal it, provided, of course, it doesn't damage the system irreparably before then. Something along the line suggested by Professors Buchanan and Campbell might reduce the current strain on the system: a bookkeeping adjustment which would treat the cost of the intergeneration transfer as a national debt (and hence chargeable against general revenues) rather than an obligation on the social security trust fund. This done, it likely would be possible to reduce social security taxes while maintaining present benefits or, alternatively, increase benefits considerably while freezing rates at the present level.

The redistribution element has gradually increased over the years, particularly with respect to those pensioners receiving benefits determined by the legal minimum. Obviously, not even an ascetic could manage on the present \$41 per month or even on the \$70 suggested

by President Johnson. In fact, it is impossible to use the social security system to provide a suitable income for people at the lower end of the income spectrum unless we are willing to junk the entire underlying philosophy and transform the social security system into a particularly wasteful welfare mechanism. Another point to consider is the fact that an unknown portion of those receiving minimum benefits have not necessarily been low-income earners. It is easily possible for employees of Federal civil service, railroads, and State systems not linked to social security to qualify for minimum benefits by taking part-time jobs in covered industries for a few years. The higher the minimum benefits the more the people will be tempted to take the trouble to qualify. If, on the other hand, the needs of the genuinely poor were met through a welfare arrangement outside the social security system, few of those retired under other Government programs would qualify for the heavily subsidized minimum pensions.

An important choice lies before Congress today. It can transform the social security system into a peculiar sort of welfare program or can make the repairs that will return the system to the sound principle of an earned pension for all Americans. Two important steps will go far toward reducing costs without undermining the philosophy or financial soundness of the system: (1) The cost of the one time only intergeneration transfer should be identified—a difficult but not impossible chore—and subsidized out of general revenue, (2) the concept of a minimum benefit should be recognized as a wasteful device which has reached an inappropriately high level relative to the rest of the benefit schedule. Action suggested under step (1) would make possible an overall increase in benefits without accompanying increases in rates or base but it is unrealistic to try to use the social security system alone to provide an adequate living for all of our elderly citizens. We can and should meet the needs of our indigent aged through a generous but separate Federal program. If Congress will act with courage to preserve the original concept of the system, endless generations can continue to accept their checks with the satisfaction and self-respect that go with an earned retirement.

ROBERT N. SCHOEPLIN: INCOME TAX INDUCEMENTS FOR PERSONAL RETIREMENT SAVING

The Federal Government has four broad courses of action in improving the guaranteed maintenance income for the aged: (1) Increase the benefit schedule under OASDHI; (2) adopt and expand complementary public assistance programs; (3) introduce a new income transfer program, such as a negative income tax; (4) provide inducements—usually through tax incentives—to accelerate the rate of private saving. This paper focuses on the issue whether income tax inducements can significantly increase the rate of personal retirement saving. A particular form of incentive has received recent attention. The basic proposal is to create a special Federal income tax deduction for current personal retirement saving (including current employer pension contributions in some variants of the proposal).

The present individual income tax does tend to discourage personal saving for future needs—by the compound effect of permitting

current deductions for borrowing charges coupled with the taxation of interest earnings on savings. This announcement effect can be mitigated by permitting special income tax treatment of selected transactions, thereby increasing net (after tax) yields on taxpayer investment. This difference in net yields is the stimulus for increased personal savings. Response will depend on the interest elasticity of personal savings to changes in net yields and, of course, the magnitude of change in yield.

Assume that an individual intends to save \$400 from gross income. Income taxes first must be paid and \$260 will remain as the basis of retirement saving if our taxpayer faces a 30-percent marginal tax rate. The taxpayer invests in 6-percent corporate bonds, subject to an annual levy on current earnings of the same 30-percent marginal tax rate. If our saver presently is 35 years old, his final fund at age 65 from this single contribution will be \$962. In order to compare alternative tax effects, we must relate this final fund to the initial gross saving of \$400. Our individual finds that, because of his income taxes, his effective net (after tax) yield is 2.97 percent on his initial \$400.

Now assume that the individual can deduct his allowable personal pension saving from current taxable income, thereby avoiding any present tax liability. Second, earnings on investment are subject to tax only at ultimate withdrawal. Taxes also are levied on the original principal on withdrawal. Our figurative saver can now invest his entire \$400 in the same 6-percent corporate bonds. He will find at the end of 30 years that his gross final fund has grown to \$2,297. Our individual now must include these moneys in reportable income at time of withdrawal. Assume that the entire final fund is withdrawn at age 65 and that the individual marginal tax rate is 18 percent. This reduced marginal tax rate reflects the pensioner situation of lower total reportable income in retirement years. For his efforts, the taxpayer now has \$1,884 net purchasing power at withdrawal. This represents an effective net (after tax) yield of 5.30 percent on the original \$400 gross intended saving.

However, a taxpayer is not restricted to these two income tax alternatives: there are other attractive options to increase net (after tax) yields. Capital gains is a familiar alternative. In the capital gains as in the standard approach, an individual establishing a retirement saving fund first must pay income taxes on current earnings before investment. If the interim earnings on principal are not realized for tax purposes until retirement, these sheltered earnings will be subject to a capital gains marginal tax rate. Using the same illustrative parameters as in the first two tax options, our taxpayer will realize a \$1,409 net final fund, or an effective net (after tax) yield of 4.29 percent. Taxpayers have other preferential tax treatment options in addition to this orthodox capital gains approach.

Preferential tax treatment may be combined with one or more investment constraints. These restrictions will reflect the intended policy objectives of the program. A principal object of both the current United States self-employed deduction and the Canadian universal pension deduction is to promote retirement savings—not speculative investment. Restrictions limiting the nature of investment and constraints against premature withdrawal before retirement, therefore,

are consistent with the above goal. However, one must weigh these adverse features against any net yield advantage, if these constraints are unique to the personal pension deduction.

Our illustrative taxpayer may have an opportunity to invest in real estate with an expected effective net yield of 6.50 percent under capital gains, instead of the 5.30 percent effective yield from corporate bonds under the personal pension deduction. The capital gains option presently is available to the taxpayer; if he chooses this route, the personal pension deduction will not have increased the rate of personal savings.

In addition to restraints on forms of investment, personal pension deductions generally severely limit or outright prohibit the withdrawal of funds before some specified retirement age. Consequently, one may postulate that participation in such a program—*ceteris paribus*—is directly related to the age of the taxpayer; that is, inversely related to the number of illiquidity years between contribution and retirement age. An analysis of Canadian participation does not reject this hypothesis. Furthermore, preliminary analysis of Canadian participation data indicates that individuals covered by company contributory pensions will reduce personal pension contributions accordingly and to some degree the two programs are substitutes.

The introduction of new income tax inducements, then, may not significantly increase the rate of personal retirement saving. Certainly this is the experience of the personal pension deduction instituted on a limited basis in the United States and as a universal taxpayer deduction in Canada. An appreciation of the true relative net yield advantages to participation, coupled with investment and liquidity constraints, may explain the small taxpayer response. Individuals generally have existing alternatives that discount the superficial attractiveness of the personal pension deduction.

RAY M. PETERSON: OLD-AGE INCOME ASSURANCE BY LIFETIME INCOME SPREADING WITH DEFERRED TAXATION AS THE NATURAL TREATMENT

We need to recognize the importance of the application of the income-spreading principle on a lifetime basis with particular reference to provisions for old-age income assurance. This principal may be expressed simply and briefly as tax-free input and taxable output. Contributions and investment return thereon which are irrevocably devoted to the provision of retirement life income are free of income tax when made or earned but the entire retirement income is included in taxable income when received. The payout principle is sound for two fundamental reasons: (1) the encouragement of savings accumulations for retirement purposes constitutes a strong force working to provide additional capital from which, in turn, may be gained the increase in productivity needed in a nation's economy to provide the desired retirement benefits; (2) it is fair and reasonable that an individual's income should be spread and acknowledged as realized

over the entire period of life and not limited to the active earning years. It is proper that an individual pay an income tax only when income is in hand and available for living costs. It is important to distinguish between forms of savings which a person may use freely in a manner and at a time of his choosing and a form of savings devoted irrevocably to retirement benefits. In order to avoid objectionable and unfair discrimination, the payout principle should apply only to retirement programs where the benefit of accumulations can be taken only as a life income after retirement or is subject to tax penalties if taken in any other form. A "locked-in" status should exist.

The underlying theme of lifetime income spreading is that, by appropriate tax treatment, all persons, through individual, group, or institutional programs, public and private, may spread the labor rewards of working years over their entire lifetime, including the non-earning years of retirement and pay an income tax only as such income and accumulated investment returns thereon are in fact received. No distinction should be made as to the source of the contributions—that is, whether from the individual or his employer.

As a measure that is an affirmative response to the current and laudable interests by Government officials and others in improving the performance of private pension plans, employee contributions under qualified plans should be tax deductible provided they are "locked in"; i.e., nonwithdrawable or withdrawable only with a tax penalty. Such a measure would have several distinct advantages: (1) discrimination against employee contributions vis-a-vis employer contributions would be removed; (2) the present discouragement of contributory plans would be discontinued; (3) the prospect of greater benefits would be enhanced since the level of benefits for contributory plans is generally higher than that for noncontributory plans; (4) contributing employees would have identifiable and fully vested equities that are in terms of dollars and that would be properly considered by employees as their personal savings for retirement purposes; (5) vested benefits, derived from employer contributions, now frequently lost by withdrawal of employee contributions upon employment termination, would be preserved; (6) the income-spreading operation would be completed since investment earnings on employee contributions, under employer-instituted pension plans are now free of tax until the employee receives a benefit; (7) since the contribution input of private pension plans would be treated uniformly, then, for the purpose of developing appropriate rules for integrating private plan benefits with OASDI benefits to meet the non-discrimination requirements of the law, the question, artificial in many circumstances, of just who was paying the cost or bearing the burden is not so evident a consideration.

Persons not covered by employer-instituted pension plans or not eligible for SEITRA plans should have the opportunity to set aside tax-deductible contributions from earned income for retirement purposes on a basis that assures dedication to such purposes. Funding arrangements should include the use of the facilities of banks, trust companies, life insurance companies, mutual funds, special Government bonds, etc. Statutory limits should be fixed and appropriately adjusted to recognize any contributions or benefits under employer-instituted pension plans.

The application of the lifetime income spreading principle to the OASDI system would call for the tax deductibility of employee tax contributions along with the inclusion of benefits in taxable income. For persons who have no taxable income from which to deduct the social security tax contribution, and actual tax credit should be provided based on the initial marginal tax rate, now 14 percent. This tax deductible arrangement is more favorable, of course, at the higher levels of earnings than at the lower levels because of the progressive income tax rates. Those in higher income brackets, however, would be those persons, generally, who would in fact pay a tax on their social security benefits when received, thus producing a substantial order of equity. The need for recognition of past social security tax contributions would be achieved by, say, including benefits in taxable income only after they have been in receipt for 1 year; however, the vast majority of present recipients have received tax-free benefits in excess of their tax contributions paid from taxable income.

If the occasion arises when serious consideration is being given by the Congress to general revenue support for the OASDI system, such tax treatment, aside from its own real merits, deserves first consideration as an appropriate liberalization that is a strain on general revenues but is more logical than direct general revenue support. If this change in the tax treatment of OASDI benefits and employee tax contributions were made at a time of a modest increase in gross tax contributions and a general increase in benefits, employee net tax contributions would remain substantially unchanged and the increase in benefits would make the taxation of benefits more acceptable (or less unacceptable) to those who have been receiving tax-free benefits.

Present law permits lump-sum settlements in lieu of a lifetime retirement income. Such a settlement is taxed as a long-term capital gain under employer-employee plans provided, generally, that 100 percent of the pension value is taken. So far as serving the end of providing old-age life income, the law is deficient on two counts: First, it is wasteful in that it virtually compels the cancellation of all retirement income values in order to enjoy the capital gain tax treatment; second, it fails to provide assurance that pension contributions, or a major part thereof, are irrevocably dedicated to providing old-age life income. In order to improve this situation, serious consideration should be given to adopting a tax treatment and limitation similar to those in Canada and the United Kingdom where no more than 25 percent of pension values may be taken as a lump sum. Although such lump sum is tax free in these countries, it would be fair to apply the tax treatment that now is in effect in the United States for SEITRA plans.

There is need to recognize that pension benefits provided under employer-instituted plans, while a form of compensation, represent deferred compensation that is quite different in character from current compensation, that is, salaries and wages, and are benefits that, under the doctrine of constructive receipt, should be includable in taxable income only when received. Such benefits are designed to serve a different economic purpose—not to provide current income but to provide retirement income. Their tax treatment should recognize their true and unique character. Any attempt to apply the tax principles that are appropriate for wages and voluntary savings derived therefrom is

merely a theoretical, however interesting, exercise. Although the theoretical benefit of deferred taxation is frequently spoken of as arising solely from the lower-income tax rates in retirement, it is evident that the mere deferment of tax on contributions and investment earnings is more important in these theoretical exercises than the difference in tax rates.

In appraising favorable tax treatment—that is, the effect on Federal revenues of the tax provisions relating to qualified plans—the comparison should be made with the alternative of pay-as-you-go financing by the employer and not with a funded nonqualified plan. In advance accounting for pension costs by either internal balance sheet reserves or a qualified advanced funding operation, the contributions, actual or assumed, and the investment earnings, actual or assumed, must match the pension payments dollar for dollar over the duration of the pension operation. At first blush, assuming uniform corporate income tax rates throughout the pension operation, it would appear that the capitalized value of tax deductions on the pay-as-you-go basis should be equal to the capitalized value of the corresponding tax deductions for contribution and investment earnings under advanced funding. The situation, however, is not that simple. It is complicated by the need to recognize the value of money to the government over a span of years, the net earnings rate of a pension fund, the gross earnings rate of the employer's business, and the period of years over which investment earnings are realized or recognized: that is, the average date from which funding contributions would be made to the average date of pension payments.

Very generally, where the rate of investment earnings of a pension fund is high in relation to the gross earnings rate of a business, there is a decided tax advantage to the Government from advance funding. This high rate of investment earnings of a pension fund will affect taxes either by materially reducing deductible amounts (and hence increasing the taxes collected on an advance funding basis) or by materially increasing the amount of benefits that are not deductible during the payout period on a funded basis; that is, the employer is at a disadvantage since he cannot deduct these enhanced amounts which would have been deductible on the pay-as-you-go basis. The longer the investment earnings period the larger is the area that is favorable to the Government under advance funding. Where the rate of investment earnings of a pension fund is quite low in relation to the gross earnings rate of a business, advance funding is to the financial disadvantage of both the employer and the Government. In some cases, advance funding is to the advantage of the employer and not to the Government.

If the \$6.2 billion employer contributions made in 1965 on a collective basis for qualified plans were not currently deductible by employers, many employers would shift to pay-as-you-go financing. Although current revenues in this event would be temporarily increased, deductions corresponding to advance funding contributions and the investment income thereon would eventually be taken that could range from amounts of significantly greater value to significantly lesser value than contributions and investment income. Such abandonment of advance funding would weaken employee pension security and diminish an

important source of savings and capital supply. As for the employee's situation, it would be intolerable to ask an employee to include in taxable income the value of accrued benefits at the point of vesting (assuming that such value under collective funding could be precisely determined—a highly invalid assumption) which could amount to as much as 3 or 4 years' annual wage or salary. Under contributory plans, where vesting of benefits provided by employer contributions is usually forfeited if a terminating employee cashes out his own contributions (for example, the civil service retirement plan), how and when would the employee be taxed on the value of vested benefits? There is no unconditional vesting until retirement age when the value, again, could be several years' wage or salary. The case for special treatment can be sustained only if there is an equitable and workable alternative. It should be evident that there is no such alternative and, consequently, the present tax treatment of employer contributions is the natural method.

In addition, it is appropriate to recognize that, if advance funding of pension plans provides additional capital and, in turn, increased productivity, Federal revenues will be enhanced by taxation of the income associated with this increased productivity. It is then fair and reasonable to recognize, also, that any such additional revenue can be a significant offset to any net loss of revenue resulting directly from advance funding, whether such loss is of a theoretical mathematical character or results from extending the principle of deferred taxation to employee pension plan contributions and to retirement provisions of persons not covered by such plans, as recommended in this paper.

ABSTRACTS OF PAPERS INCLUDED IN PART IV: *Employment Aspects of Pension Plans* of OLD AGE INCOME ASSURANCE

JOSEPH J. MELONE: MANAGEMENT AND LABOR CONSIDERATIONS IN THE ESTABLISHMENT OF PRIVATE PENSION PLANS

Many attempts have been made over the years to explain private pensions in terms of an underlying concept, rationale, or philosophy. These various attempts all seem to fall within one of the following general concepts or rationales: (1) business expediency, (2) human depreciation and (3) deferred wage. Business expediency, by the very nature of the concept, implies that the establishment of a plan is a management prerogative and that the primary motivation for the creation of such plans was the economic benefit, direct or indirect, that accrued to the employer. But as the economy became more and more industrialized and pension plans became more prevalent, there was increasing interest in the view that employers had a moral obligation to provide for the economic security of retired workers. The view that employers have a moral responsibility to provide for older employees was expressed as early as 1912 by Lee Welling Squier as follows: "From the standpoint of the whole system of social economy, no employer has a right to engage men in any occupation that exhausts the individual's industrial life in 10, 20, or 40 years and then leave the remnant floating on society at large as a derelict at sea." This rationale of private pensions has come to be known as the human depreciation concept. The validity of the human depreciation concept of private pensions has been challenged by many pension experts. In recent years a view of private pensions that has achieved broader acceptance is the deferred wage concept. This concept views a pension benefit as part of a wage package which is composed of cash wages and other employee fringe benefits. The deferred wage concept has particular appeal with reference to negotiated pension plans. The assumption is made that labor and management negotiators think in terms of total labor costs. Therefore, if labor negotiates a pension benefit, the amount of funds available for increases in cash wages is reduced accordingly. The deferred wage concept has also been challenged on grounds that only a small proportion of the plans provide for the full and immediate vesting of all benefits. However, it can be logically argued that full and immediate vesting is not a necessary condition to acceptance of the deferred wage concept of private pensions.

A systematic method of meeting the problem of superannuated employees can be easily justified on sound management ground. Practically every employee eventually reaches a point where, due to ad-

vanced age, he is a liability rather than an asset to the employer. That is to say, at some advanced age, an employee's contribution to the productivity to the firm is less than the compensation he is receiving. The employer has several courses of action open to him when an employee reaches this point. First, the employee can be terminated without any further compensation or any retirement benefits as soon as the value of his service is less than the salary he is receiving. Second, the employer can retain the superannuated employee in his current position and at his current level of compensation. Third, the employer could retain the superannuated worker but transfer him to a less demanding job at the same or a reduced level of compensation. This approach does not solve the problem of superannuation; it merely defers it, since a point will be reached where the employee's productivity is considerably below even a minimum level of wage. The fourth alternative available to the employer in meeting the problem of superannuation is to establish a formal pension plan. The problem of superannuation, then, exists in all business firms. Any solution, except the unlikely alternative of arbitrary termination of older workers without any retirement benefit, results in some cost direct and/or indirect to the employer. The decision, therefore, is which solution is best suited to the needs and financial position of the employer. For a large number of employers, the formal pension plan approach has proved to be the superior solution.

Qualified pension plans offer significant tax advantages to participants generally, and in particular, to employees currently in high income tax brackets. For the latter employees, deferred compensation schemes may be favored over equivalent cash wage increases. Since the high salaried senior officers of corporations often make the decisions regarding the establishment and design of employee benefit plans, their role as participants under the plan may influence their decisions on these matters. However, in the case of large corporations, cost and other considerations minimize or eliminate the personal tax situations of key employees as factors influencing the establishment or design of a pension plan. In the case of a small, closely held corporation, on the other hand, one can readily see how the tax implications for stockholder-employees may be a decisive factor in the establishment and design of a pension plan.

Under wartime wage stabilization, employers in competing for labor could not offer the inducement of higher wages. The War Labor Board attempted to relieve the pressure on management and labor for higher wage rates by permitting the establishment of fringe benefit programs, including pensions. This policy further stimulated the growth of pension plans during this period.

Labor leaders have had mixed emotions over the years regarding the desirability of employer-financed pension plans. In the 1920's, labor generally did not favor such plans for its membership. It held the view that pensions represented an additional form of employer paternalism and were instituted to encourage loyalty to the firm. In the latter part of the decade of the 1940's, there was increasing antagonism on the part of the public against what were viewed by many persons as excessive union demands for cash wage increases. Some union leaders argued that social security benefits were inadequate and a supplement in the form of private pension benefits was

considered to be necessary. Also, certain labor officials believed that the negotiation of employer supported pensions would weaken the resistance of the latter toward liberalization of social security benefit levels.

As the number of plans increases, employees come to expect a pension benefit as part of the employment relationship. Employers who do not have such a plan are at a competitive disadvantage in attracting and holding personnel. Therefore, some employers feel they must install a plan even though they are not convinced that the advantages generally associated with a pension plan outweigh the cost of the benefits. Many employers have established plans out of a sincere desire to reward employees who have served the firm well over a long period of service. Also some employers may feel a moral responsibility to make some provision for the economic welfare of employees during their retirement years.

Part of the growth of private pensions must be attributed to the fact that a formal group savings approach has certain inherent advantages. In addition to the administrative efficiency of group savings arrangements, it is argued that the small increase in consumer prices that might be required to provide pension benefits is a relatively painless method of meeting the risk. The economic principal of marginal utility would support the conclusion that the disutility of the small increase in prices for all consumers would be less than the burdens that burdens that would be borne by those individuals who would have inadequate retirement resources in the absence of pension benefits. Although it can be argued that employees would, in the absence of private pension programs make equivalent provision for old age through increased levels of individual savings, the evidence seems to point to the conclusion that a number of people would not do so. Thus, it might be economically more efficient if at least part of the risk is met through a forced saving private pension scheme.

Although a pension plan might be established for one or more of the reasons indicated, it is pertinent to the discussion to note the motivations for establishing the plan on a multiemployer basis rather than a single-employer arrangement. Multiemployer plans constitute a significant force within the private pension movement and the growing discussions of portable pensions suggest the need for separate treatment here of this form of private pension.

Arguments favoring a multiemployer arrangement. (A) From the standpoint of the employer. (1) Uniform contribution rates. Multiemployer pension plans are often found in highly competitive industries. In many instances product differentiation is relatively minor, making product price an extremely important competitive factor. Therefore, the economics of the industry may preclude the establishment of single-employer plans requiring varying employer cost commitments. (2) Adaptability to the needs of small employers. An industry composed of many small employers is indeed one ideal condition for a multiemployer plan. Several advantages may accrue to small size firms in a plan of this type, for example, expense savings and wider choice of funding instruments.

(B) From the standpoint of the union. (1) Uniform benefits. (2) Portability of pension credits. The portability of pension credits is an important characteristic of these plans to employees in industries

characterized by skilled craftsmen, numerous small employers, intense competition, and a high rate of business failure. Without the opportunity to transfer service credits, employees in certain industries would be unable, generally, to meet the requirements for a pension benefit. This feature of multiemployer plans is also advantageous to the union in that it may encourage membership loyalty. A high rate of turnover of the employee force is not of itself sufficient justification for the establishment of a multiemployer plan. There must be some cohesive force which will tend to keep these employees in employment covered by the plan. For that reason, this pension arrangement is particularly suited for the skilled trades. This is not to say that multiemployer plans are undesirable in the unskilled trades. A multiemployer plan may be desirable in an industry marked by a high rate of business failures. (3) Increased control over plans. The practice of joint administration is not limited to multiemployer plans. However, the scope of authority of jointly administered single-employer plans is usually restricted to the approval of pension applications or the handling of employee pension disputes. In multiemployer plans, joint administration means an equal voice by management and labor in all matters affecting the plans. The employee representatives have access to all cost information and share equally in investment decisions. (4) Identification of benefits with unions.

Arguments against a multiemployer arrangement. (A) From the standpoint of the employer. (1) Decreased control over plans. Under a negotiated single-employer plan, the employer generally has complete control over the management of the pension plan. True, to the extent that benefit levels and other plan provisions may be negotiated—including the possibility of employee representation in certain administrative functions—some employer control over the plan is surrendered. In a multiemployer plan, however, the employees are represented in all decisions affecting the plan. A significant degree of employer control, therefore, is surrendered in these latter plans. Furthermore, the employers are represented by a specified number of trustees. Although all employers usually have a voice in the choice of their representatives, obviously all cannot actively participate in plan management. However, the joint board can serve as a valuable educational process for both management and labor. Management may be able to better acquaint labor leaders with the financial aspects of pension programming. On the other hand, management may gain better insights into labor's view of the role of pensions in the collective bargaining process. (2) Loss of employer identity in plan. The lack of employer identity with the plan encourages employees to view the plan as a "union plan." (3) Impairment of employee loyalty. To some employers, transferable credits nullify one of the basic purposes of a pension plan. (4) Inequity in employer costs. All participating employers contribute to the fund at a uniform rate. However, most employers in the plan do not have identical pension cost characteristics. The employers with the less favorable cost factors benefit from this pooling arrangement. (5) Inflexibility of benefit structure. (6) Inflexibility of financing arrangement. Multiemployer plans are usually fixed contribution-fixed benefit plans. This restricts the ability of the individual employer to vary his contributions with economic circumstances.

B. From the standpoint of the union. The major drawback of these plans is that they prevent the union from negotiating more liberal benefits from the more economically favored employers.

Since the question of vesting is a principal issue in the current dialog on private pensions, it might be well to include an evaluation of the issue in terms of management and labor motivations in the establishment of these plans. Regardless of the motivating factor involved, an employer is encouraged to establish a plan only if he envisions some implicit or explicit offsetting economic advantages. Of the possible types of benefit, that is, normal retirement, early retirement, disability retirement, death benefit, and vesting benefit offered under a pension plan, vesting offers the least obvious prospect of an offsetting economic advantage in the opinion of most employers. This fact presents one of the most important impediments to the widespread adoption of liberal vesting provisions in private plans. On a macroeconomic basis, vested benefits enhance considerably the effectiveness of the private pension movement. There is no question that liberal vesting provisions, other things being equal, would increase both the number of benefit recipients and the average size retirement benefit provided under private plans. Furthermore, vested pensions would tend to reduce employer resistance to hiring older workers and probably increase labor mobility. These advantages are formidable and obvious. It is equally obvious that the immediate advantages of vested benefit accrue primarily to the employees involved. From the point of view of the firm—the one which must pay in part or in full for the benefit—the economic advantages are at best indirect. It seems that a rapid expansion and liberalization of vested benefits will result only if employers receive more direct economic offsets to the additional cost of vested benefits. The most obvious offset would be for employees to recognize the added cost of these benefits in evaluating the adequacy of the wage package as a whole. The possibilities of this occurring depend in large part on the degree of importance attributed to this benefit by labor unions and employees.

It would seem that labor unions are in an ideal position to encourage the adoption of effective vesting provisions. First of all, vesting is consistent with the objective and rationale of private pensions from the viewpoint of labor. And, second, unions are in a position, through adjustments of other wage demands, to offer the employer an economic justification for providing vested benefits. Vesting, therefore, fits in neatly with organized labor's goal of increasing the economic security of their members. However, if the union official looks upon the plan as being for the benefit of the union members and for the purpose of encouraging loyalty to the union, he may have little interest in negotiating a vested benefit. Although the argument that employees are, as a matter of right, entitled to full and immediate vesting is unsound, one can readily understand why labor desires the inclusion of vested benefits in negotiated plans. Nevertheless, the cost of a benefit provision approaching full and immediate vesting would be substantial, thereby significantly reducing the possibilities for improvements in other benefit areas of the wage package.

Much has been said and written regarding the protection of employee expectations under private pension plans. The fact is that no one seems to know very much about what the expectations of employees

really are under these plans. The rather substantial costs of liberal vesting provisions will require a greater employee appreciation of the nature of the benefit, if a widespread adoption of these provisions is expected. Although the evidence is fragmentary, it does raise some doubts as to whether employees would be willing to sacrifice a substantial proportion of future wage increases in exchange for vested pension benefits.

Although social welfare goals are not the primary motivation for establishing private pensions, one cannot conclude that such plans do not contribute to the welfare of Americans. Many critics of private pensions would argue that the basic issue is not whether these plans contribute to social welfare goals but rather whether they contribute enough to this objective. The real fundamental issue, of course, is what constitutes the most efficient means of achieving social welfare objectives. Solutions that concentrate on enhancing the welfare of private pension plan participants while ignoring the possible impact of these suggested solutions on the effectiveness of the employer to perform its more fundamental social and economic functions are at best short-sighted solutions. If one wishes to argue that private plans should provide portability of pension credits, he should do so with a full appreciation of the environment in which these plans operate. That many do not is evidenced by the fact that few proponents of compulsory vesting provisions in pension plans have tied to their recommendation the requirement that employers be required to establish a private pension plan. This would seem to be the only equitable way of legislating reasonably liberal vesting provisions. In the absence of a requirement that all employers establish a pension plan, compulsory vesting would impose an additional cost burden on only those employers who have agreed to provide employees with some pension coverage, limited though it may be. This requirement might place some of these employers at a competitive disadvantage in relation to firms not providing any pension program. Furthermore, compulsory vesting would unduly favor those employees lucky enough to be employed by firms that have pension plans as contrasted with their counterparts in companies not offering such a program. This additional governmental protection would increase the gap in the degree of economic security that probably already exists between these two groups of employees. Pension plans are found predominantly among large manufacturing concerns, public utilities, and financial institutions. Furthermore, the large and more powerful labor unions have all negotiated pension coverage for their members. Thus, covered employees probably already enjoy a greater degree of job security and a higher than average level of cash wages and other fringe benefits than employees in firms without pension plans.

STATEMENT OF AMERICAN TELEPHONE & TELEGRAPH CO.

The basic reason for the adoption and continuance of pension plans in the Bell System has been a conviction that they have furthered the efficient and economical operation of the business. The underlying reason for the business necessity of an adequate pension system is the social atmosphere and pressures which would inhibit or prevent retirements in the interests of business efficiency unless there were an ade-

quate plan. It is significant that this atmosphere will differ as between industries and over the course of time. We therefore urge that the assessment of adequacy continue to be left to employers or employers and unions, in the light of their circumstances.

Private pension plans promote the efficiency of business. It is, therefore, good public policy to promote their inception, continuance, and improvement because business efficiency is a necessary ingredient in a healthy, free economy. If pension plans were to be taxed or legislated out of existence, the U.S. Treasury might indeed realize a modestly larger immediate share of current income but it would be at the expense of sharing in a larger future income. If a pension plan is to serve the purpose of making possible the orderly retirement of employees whose usefulness to the business has declined, it must provide for higher as well as lower paid employees a scale of retirement income reasonably proportionate to their preretirement income. Pension plans, when employer contributions are limited to a scale sufficient to accomplish the business purpose of orderly retirement of older employees, do not depress the wages of younger or short-service employees. There is no pension expense associated with employees whose employment terminates before any right to a pension vests. A popular but erroneous impression is that money is accumulated for such individuals whereas, in fact, money is not accumulated on an individual basis and account is taken in advance of estimated turnover so that no funds are ever provided. Younger employees in general place little value on the long-range prospect of receiving a pension. They understandably would expect their wages to be competitive. The expense to a business of hiring and training a series of short-service employees may equal or exceed the cost of providing pensions for employees who would fill the available jobs until retirement. Under these conditions, granting such transient employees pension right in addition would unduly increase the total remuneration of such employees.

The Bell System Cos. have long favored advance funding of pensions and have themselves been doing so since 1927. However, funding involves questions of practicality for individual plans at various times. Legal requirements for rapid funding are likely to do more harm than good by inhibiting establishment of new plans and liberalizing amendments of existing plans. It cannot be assumed that the result of new funding requirements would simply be more funding. Part of the result may be fewer or less adequate plans.

While recognizing the appeal of spreading the risk of pension plan failure, the Bell System Cos. believe that reinsurance may well be impracticable of attainment without seriously limiting the desirable flexibility and variability of pension plans, both as to their terms and as to funding. The likelihood of harm to the private pension system due to ill-advised and too hasty action along these lines is so great that much more study of the need and of possible consequences is desirable. As matters stand, however, the private pension system functions extremely well and lives up to expectations for the overwhelming majority of those intended to be provided for. And their existence does not impose an economic burden on the large segment of the population who do not receive pensions.

The great variations in pension benefits, in actuarial assumptions, and in degrees and methods of funding make it difficult to conceive that it would be practical or equitable to carry a pension credit from one

entirely separate plan to another. Also, if fund assets were to be transferred from one pension plan to another for an individual, the assets transferred would have to be limited so that the security of other individuals was not impaired.

J. J. JEHRING: DEFERRED PROFIT SHARING AND OLD-AGE INCOME ASSURANCE

The furnishing of retirement benefits for employees is only one function of deferred profit-sharing programs in the United States. An other, and a much more important role for these plans, is to furnish incentives to all the factors of production, that is, labor, management, and capital, to reach high levels of productivity. Special tax advantages were not given to deferred profit-sharing plans primarily because they were the means of furnishing retirement benefits for employees. The rationale was to encourage the use of such programs through favorable tax treatment because it was decided that profit-sharing plans would not only provide incentives but would also spread capitalism and, as a result, could benefit the economy if they were to become wisely used in American business. Only later with the advent of the interest in retirement was it stated in the law that deferred profit-sharing plans could be used to furnish retirement benefits. The main contribution profit sharing can make to old-age income insurance comes from whatever incentives it can provide to increase productivity.

A pension plan is primarily a program to provide fixed and determinable benefits for employees after they reach retirement age through a spreading of the cost over the entire group of employees. A deferred profit-sharing plan is best viewed as a method of providing the individual employee with the opportunity for creating an estate for himself and his family. One of the most significant differences between the pension and the deferred profit-sharing program is that the former must be viewed as a single purpose plan while the latter is in reality a multipurpose benefit plan. Unlike the pension program where many of the workers covered by a given plan at a given time will never receive any benefits from that plan, practically all the workers covered by deferred profit-sharing plans receive some benefit from the plan in which they are currently participating.

WILLIAM J. HOWELL: PROFIT SHARING AND OLD-AGE INCOME ASSURANCE

Those deferred profit-sharing plans which lack incentive realization and whose predominant result is to provide old-age income insurance fall along with private pension plans into the purview of the Committee study and ought logically be treated taxwise in the same manner. But economic society and the public interest have greater need of those deferred profit-sharing plans with realized productivity motivation and with those plans that promote self-development, self-reliance, and financial independence even before retirement and accordingly greater governmental encouragement of these plans is called for. The burden of providing retirement security can be

divided in varying degrees between Government and business, but the challenge of increasing the productivity of the private sector so vital to the public interest has to be met by private enterprise and the least and the most the Government can do is to be sure that its system of taxation and enforcement of free competition constitute a favorable climate and incentive for the greatest productivity in private enterprise.

Deferred profit-sharing plans would seem to warrant more encouragement by tax policy, since there are inherently less discriminatory than pensions. We see a great loss if deferred profit-sharing plans open to salaried or clerical workers only, were prohibited per se. A company may not wish to include plant or hourly workers because it may have a serious limitation in managerial sensitivity or skill needed to create a profit relationship with hourly or plant employees. Vesting in deferred profit-sharing plans is usually quite rapid because it is found that too slow vesting dims the commonly sought productivity incentive. In regard to funding, under deferred sharing plans, there is no real practical issue as to adequacy of funds to pay benefits for there are no guarantees, nor as to the pay-as-you-go alternative, for the accumulations belong to the participants who would be extremely unamenable to any legislation that did not require segregation of such funds from employer funds.

The availability of portability would not be of interest to the great majority of deferred profit-sharing plan participants because of the predominant choice of lump-sum withdrawals on early terminations. A vast amount of the social interest in many areas is successfully delegated to the private sector. I don't think that any government agency can become as expert in making private sharing plans work as can the private companies operating the plans together with their various types of advisers.

It is my opinion that in most cases a small firm with apparent good prospects, as soon as it has passed a few years of age, ought to seriously consider a deferred profit-sharing program. Later, it could add a private pension plan, when it became confident it had the stability to assume the long-term fixed financial commitment inherent therein. If profit sharing is not adopted early, as ever-increasing employee benefit costs make for increased employment cost rigidity, the need for a teamwork incentive program like profit sharing will become increasingly more acute. Only through increasing productivity are higher and higher compensation costs bearable, and the best assurance of continuing the requisite productivity improvement lies in productivity motivation.

NATIONAL FOUNDATION OF
HEALTH, WELFARE, AND
PENSION PLANS, INC.:

THE ROLE OF JOINTLY TRUST- EED PENSION PLANS

This may be the ultimate issue concerning the future role of the private pension system: Will the growth of the private pension system, through the establishment of new plans and improvement of present ones, continue in an environment of greatly expanded Federal requirements that would substantially increase the costs of plans and eliminate private sector goals for them? Private pension plans have

differing goals that arise out of the needs of each work group. The effectiveness of a particular pension plan cannot be measured by its achievement of the goals of other plans or of social security. If we are to have a private society at any level of social or economic activities, private groups must be allowed to work toward their goals unencumbered by Government dictation.

It is generally recognized that there must be assurance that pension plans are not established for the benefit of a few favored persons. The suggestion that plans vest participants in their earned benefits after a reasonable period of service also appears to be based upon the desire that benefits (or tax advantages) do not go only to a favored few.

The Federal labor law requires that joint labor-management funds be jointly trusted. Some funds are operated in the same offices as are used for union activities. However, the employer trustees are as responsible for the efficient operation of a fund as are the union trustees, wherever the office may be located. Many jointly trusted funds are administered in other fashions. Some are operated by a contract administration firm. Some are operated in the offices used by an employer association representing management. Some are operated on a self-administered basis in facilities separate from either union or employer association offices.

There are positive advantages of union participation in the operation of plans. The typical jointly trusted plan is in a multiemployer industry in which each employer unit is relatively small. The labor union and an employer association, rather than any single employer, provide ongoing organizational structure. The only effective way of establishing and operating plans in many situations is through direct union involvement.

What should be the criterion for evaluating other alternatives to the present private pension structure? The National Foundation suggests that the one which appears to find general acceptance is whether an alternative will help the growth of the private pension system in terms of ultimate coverage for benefit purposes and of the benefits provided by each plan. Requiring employee contributions would necessitate detailed individual accounting. Maintaining a legal staff to represent beneficiaries would clearly increase administrative costs significantly.

One can only imagine the difficulties that might be caused if every imagined wrong could be investigated by a legal staff paid for by each fund or by a public agency. Perhaps an alternative that should be explored extensively is a disclosure procedure that would make available to all participants meaningful information about plan provisions and operations.

Many jointly trusted pension funds provide significant protection for workers who move from job to job because most of these plans cover many employers. There also is considerable activity among these plans directed toward the establishment of reciprocity arrangement within particular work classifications and it appears that there is a general trend toward more liberal vesting in particular plans. Although these considerations may not be sufficient to avoid the national community's preference for a mandatory vesting provision in all qualified plans, any legislative proposals in this area should consider the objective of encouraging the private pension system.

Funding requirements, if very stringent, could demand significant increases in employer contributions or result in reductions in planned

benefits for many jointly trustee plans. It is hoped that any funding requirement enacted would allow for a buildup of funds over a period long enough to avoid significantly disrupting contributions levels.

The situations of wrong doing in both jointly managed and single employer pension funds have been rare. Apparently present laws are usually effective in discouraging potential wrongdoers.

The private pension system presently covers about half of the Nation's wage and salary workers. More needs to be done to encourage the expansion of this system to those not covered. It is generally agreed that a significant limiting factor is the small size of some employers who do not have plans. Why should there not be study on the part of the Federal Government, and particularly by the Treasury Department, into all possible alternative approaches for the single qualification of multiemployer plans that do not provide joint trusteeship? It would be well also for those who service pension plans to attempt to provide for the easy establishment of plans by small employers, either individually or in groups. Many approaches offered to small employers today have relatively large administrative charges, which reduce their effectiveness.

JACK BARBASH: THE STRUCTURE AND EVOLUTION OF UNION INTERESTS IN PENSIONS

The effects of the union interest in pensions may be summarized as follows:

1. For mass production industry the union pressure converted pensions from the practice by a coterie of enlightened employers into a mass phenomenon.

2. The bargaining effect on the prenegotiation pensions has been to eliminate the contributory feature, to progressivize the benefits structure in favor of the low-paid worker, to make pension benefits more responsive to the changing economic environment and to strengthen the employees rights to the pension.

3. In the small-employer sector—which is also in part low wage—the union presence has made the difference between pensions and no pensions.

Other effects more conjectural and therefore subject to further analysis but nevertheless tenable are:

1. The shock effect on the installation of pensions by nonunion employers to forestall unionization and to compete in a tight labor market.

2. On the assumption that the employee, in the absence of a pension plan, would have received the cost equivalent in the form of a direct wage increase, negotiated pensions generated a more efficient and rational allocation of the employees wages: more efficient because the pension rights were purchased more economically on a group basis, more rational because the negotiated pension plan increased the incidence of retirement protection among wage earners beyond the level likely through individual saving for retirement.

3. If this last is open to question on the ground that the allocation of wage increase increments to retirement is not necessarily more rational at any given level of income, it is nevertheless probable that

the negotiated mix as between direct wage increases, pensions, and other fringes is likely to be more responsive to utility in any particular case than a legislatively mandated allocation. The assumption here is, of course, the subordinate place of the negotiated pension to the public system.

This exploration of union pension interests has implications for several of the issues raised in the ongoing appraisal of private pensions and particularly in the Joint Committee staff document, *Old Age Income Assurance: An Outline of Issues and Alternatives*, and the somewhat more moderate report of the President's Committee on Corporate Pension Funds. The issues selected for discussion in this paper are primarily those with a special bearing on negotiated pensions and will be examined under the following heads: (1) the rationality of the collective-bargaining decision for pensions, (2) the effect of the union pension interest on the employee's freedom, (3) negotiated pensions and the public interest.

The rationality issue centers on the efficacy of collective bargaining as an instrument for negotiating pensions. The sectional interests which constrain the union decision on pensions are the need for immediate benefit for those employees about to retire, the allocation of the wage increase increment among the claimants for direct wage increases and other rights in the pension plan, the employer's ideology and ability to pay, the external effect on other employers' bargaining with the union, the enhancement of power, pride, and prestige for the union and its leaders.

As this recital makes apparent the union negotiators seek to enhance values that are not always directly relevant to the most efficient pension planning because, of course, pension transactions are not the union's primary business. It is, however, very difficult to judge how far the collective bargaining settlement has forced departure from the maximum efficiency ideal. First, there is no ideal standard of efficiency with operational significance. Moreover, every other context in which pensions occur is heavily infused with comparable political, nonpension elements. The history of old-age protection under social security reflects one expedient compromise after another.

But collective bargaining may have some affirmative attributes favoring rational pension outcomes. It makes possible diversified and relatively rapid adjustments to the changing economic situation. The short-run time horizon of collective bargaining makes possible experimentation at relatively little incremental risk. If an arrangement doesn't work out it can be changed at the next negotiations, or in the case of the pooled funds, at the next meeting of the board of trustees. In any case, a relatively small number of workers are affected. The power of incremental changes to achieve major alterations has been demonstrated in the liberalization of vesting, the widening scope of pension portability, the strengthening of funding, and the accretion of alternate and supplementary benefits. At the same time experience decreed the passing of the OASI offset and the tempering of union demands for joint administration. Collective bargaining also makes possible more flexible arrangements as among diverse market structures and groups of employees. Nor have the unions or management had to rely solely on commonsense but have been able to turn increasingly to a corps of experts for technical guidance and advice.

It was feared that progress in negotiated pensions would be made at the expense of the proportionately greater loss in social security pensions. In point of fact, the first major revision of the Federal old-age insurance system only came after the negotiated pension takeoff. And as this is written, the unions once again constitute the major force behind the current push for improvement in the federal system. To be sure the union pressure for improvement in social security reflects a social policy objective; it also reflects a pressure-group strategy of shifting to the public system part of the cost currently carried as a charge against the wage increase increment so as to maximize the collective bargaining buying power in pension benefits. There is some evidence already that the unions are asking for insurance improvements to replace the medical-care benefits for retirees now covered by the medicare provisions of the Federal old-age system.

The unions have been taken to task for "the willingness which they have shown to bargain for plans with large promised benefits but weak vesting. They have therefore been parties to these discriminatory arrangements which in actual practice favor the old company and union male hands at the expense of younger workers and women * * * upon whom the incidence of high turnover mainly falls."

This way of formulating the criticism presents many difficulties. First, the criticism and recommendations based on it—the President's Committee, for example—misunderstand the nature of the problem and as a result the recommendations while worthy are not especially helpful. The unions are not opposed to vesting and full funding. The question which the critics have to deal with is (a) what standards of vesting and funding should the unions press for and (b) what should the union give up in return because, of course, vesting and funding represent costs and the union, as we have seen, bargains within a fairly narrow cost constraint.

There is, second, the failure of critics to specify why vesting is worth delayed benefits or possibly no plan at all; or conversely why the union choice of immediate benefits for retirees and a gradual liberalization of vesting and funding is necessarily less rational. As noted earlier there are grounds for arguing that the negotiated pension as a supplement to the public pension may contribute toward a more rational allocation of the wage increase increment than would a legislatively mandated funding and vesting standard. But in any case the resolution of the question is not self-evident.

Third: What is the basis for the assumption that the job-changing young man or woman worker, those most affected by a lack of vesting, will not be reemployed in an establishment covered by a pension plan where he or she will acquire a vested right? "There is," as Tilove points out, "at least a 50-50 probability that [the] next employment is covered by a pension plan and since most turnover occurs before age 40, that he has adequate time on the new job to become eligible for a pension."

Fourth: No account is taken of the strong likelihood that the contract viewed as a whole has provided compensating benefits for those separated before their pension rights accrue, in the form of severance pay, prorated vacation benefits, and life insurance and maternity benefits under the welfare plan.

A second order of issues has to do with the implication of pensions for freedom of employee choice. Lester has studied the survey results

on worker preference as between direct wages and benefits and concludes that "workers generally, without much year-to-year change, place a high value on insurance-type benefits as part of their compensation" and lists pensions as one of the benefits for which "workers seem to have a strong preference, despite the inherent limitations on individual spending involved in compensation in these forms."

The "high valuation" workers put on benefits, which Lester finds most marked in unionized, high-wage industry, and high-wage areas, "appear to be largely separate from the tax advantages from employee purchase and the price advantages from group purchase." He speculates that "the automatic character, convenience, and security of a company program are attractive features to persons on hourly pay."

There are only a few instances where unions have polled their membership on its preferences as between wage increases or pensions. More commonly, choices are reflected less perfectly in votes on contract demands and ratifications and on-strike calls and strike terminations, where the pension question is only one of the issues, albeit often an important one. The voice of the membership is probably plainer on pensions at the first adoption of the plan and in major revisions. Afterward the pension question along with other issues is up for continuous discussion at conventions, wage policy conferences, and union meetings. The present movement for special early retirement reflects, as we have seen, strong pressure from younger workers for jobs. Sometimes the voice of the membership seems plainer than it actually is because it is represented by a Reuther or a Lewis. When the members take the supporting action to back up the words of the leaders, the evidence is that they are aware of the substantial costs which they are likely to incur in the form of lost wages due to strikes.

The historical record of almost a century attests to the unmistakable and persisting concern by workers with the insecurities of old age, and to the innumerable experiments carried on by unions, employers, and governments in response to these concerns. Later the "tragic" inadequacy of OASI brought the unions to negotiated pensions, and developments since then have continued to reflect the constantly enlarging interest in retirement in union and public policies.

The question of individual freedom arises in connection with whether pension administration is structured to deal with the needs of the individual worker under the plan; or, obversely, whether the union can use the pension plan "to control the behavior of members." Union pension and beneficiary systems have been used occasionally in the past to enforce conformity to national union interests on local groups and on individual union members. The unions for their part criticized the industrial pension programs of the past as instruments of employer coercion.

The negotiated pension systems all have grievance channels established either for the general run of union-management disputes over contract interpretation or special channels for handling individual pension complaints. Some pension plans provide for arbitration which incidentally has rarely been used. In any case, the pension administration does not seem to have generated serious disagreements.

Negotiated pensions have been accompanied by an increase in compulsory retirement provisions. More specifically, there has been a tendency for more of the negotiated plans "to require employees to retire at earlier dates * * * probably influenced by the unemployment prob-

lem." "There is some hint," according to Slavick's investigation, "* * * that the presence of a union may be associated with the rigidity with which compulsory retirement is administered." The quid pro quo for compulsory retirement has been a more adequate and in some instances an earlier retirement benefit.

Another variant on the free choice question is whether the sectional interests of the worker are not being prejudiced by the "union interest in the financial soundness of the plan, at least as that is affected by pension payout. It [i.e., the union] should concentrate solely upon seeing to it that the plans actually pay the pensions which workers have been led to expect." This observation is applicable mostly to the multiemployer plan and in any case seems to misunderstand collective bargaining as a process. The American union has to bring both adversary and common purpose interests to collective bargaining on pensions or on anything else. The union and management will disagree over the allocation of the net proceeds or on management efficiency but the union cannot push its adversary interest to the point where the enterprise capacity to pay and to provide employment is undermined. There is no other way to carry on collective bargaining, although from time to time the tolerance of the enterprise to absorb union conditions is misjudged and both the union and the enterprise go under.

Conflict of interest of another sort is involved in pension situations where a union official advances his personal fortunes at the expense of the members. The Federal and State detailed investigations of insurance and pension funds disclosed "no cases of outright dishonesty involving a private [pension] plan or fund" although this had been a serious problem in the pooled insurance funds. Hoffa's investments for the Central States Teamsters fund "became the basis for criminal charges against him" but there has been no evidence of serious malfeasance or incompetence in pension administration generally.

The final category of questions on which this study of negotiated pension plans may have some bearing is associated with the "public interest." The form which the public interest issue commonly takes presents two problems. First is the problem of vagueness in the standard for determining the public interest. The public interest stated only as "the interests of all workers" or of "the whole community" offers no guide to practical policy choices.

The second difficulty lies in the problem of what may be termed as public interest "utopianism." Thus we are told that the standard for pensions ought to be "total service to society" instead of the "accidents of work history." Leaving aside whether total service to society can be defined for administrative purposes, its utopianism consists of the fundamental reconstruction required to achieve this standard; that is to say, there is an ethos and \$100 billion plus in pension reserves, both rooted in these "accidents of work history." It is not possible to anticipate the consequences of such a reconstruction so as to provide a rational basis for policy choices.

The same sort of public interest utopianism is evidenced in "the provision of pensions [as] inherently a public function." It may be inherently a public function but the consequences of nationalizing 25,000 or so pension plans cannot be foreseen with sufficient certainty to judge whether the effort at nationalization is justified.

Not only must policy based on the "inherent public character of pensions" be utopian, it is also of very questionable worth on its merits. The question of negotiated pension efficiency aside, there is much to recommend it as a decentralizing influence in American life. Pensions administered through thousands of plans in addition to the public systems contribute to the pluralism which ranks so high in our political and democratic values.

Many public interest questions are capable of concrete definition and yield a scheme of incremental reform with rationally predictable results. Two such questions can be dispatched simply. The union presence in the negotiation of pensions does not of itself appreciably affect the use of pension power for corporate control or the corporate securities market and is therefore not discussed here. Another question involving a concrete public interest deals with the influence of competition on pension plan performance. The staff study concludes that competition "exerts unfortunately too little influence in setting standards of pension plan performance." Special concern is expressed over the absence of competition among life insurance companies, banks and plan trustees for fund management.

The union experience which has bearing on this question has to be drawn from health insurance bargaining. There, competition by brokers and insurance companies for the business of the pooled funds has had mixed results. While informed competitive bidding may minimize the price of health insurance, there are numerous instances where shortrun economies from competition proved to be illusory and contributed to the corruption of union and health fund officials. The consensus of practical opinion is that, as important as competitive bidding is, the reputation of the insurance company for efficient and fair administration is more important. In any case, in respect to pension administration, the insurance companies are on the rise and exerting a competitive influence.

One needs to turn again to the health insurance experience for evidence on another aspect of competition: In this instance the suggestion is for suppliers of annuities to compete for the business of pension plan members. Alternate choice plans as between group practice and indemnity have had a decade or so of experience in health insurance and Muntz concludes that the effectiveness of multiple choices varies with the "health intelligence" of plan participants. There is too much evidence that employees and their families often do not understand good medical care and may prefer unscientific medicine because they are accustomed to it. Would the purchase of annuities on some competitive basis involve an analogous "pension intelligence"? Answers must be mostly speculative at this time.

There is finally the public interest question in adequate safeguards for negotiated pensions through public regulation. This is not the place for an extended discussion of the effectiveness of regulation except simply to catalog the elements of the regulatory scheme which negotiated pensions are exposed to. The tax laws accord preferential treatment to pension funds if segregated in irrevocable trusts and "used for the exclusive benefit of employees" without "discrimination as to coverage and benefits." The National Labor Relations Act, as it relates to pensions, is interpreted to require bargaining if requested and to protect employees from discrimination by unions and employers on account of union activity. Another title of this law requires

employer representation on a union pension fund to which an employer contributes. The Welfare and Pension Plans Disclosure Act deals only with disclosure of financial operations and is precluded from regulating the internal management of pension plans. Five States have also passed disclosure laws. Disclosure of the terms of corporate retirement plans for the protection of investors is provided for in the Securities Exchange Act. Fiduciary responsibility of pension plan trustees and administrators is covered as already noted in the Internal Revenue Code and in the common law of trusts. Major stress on defects in protection of employee rights in pension plans has been put on weakness in the law of fiduciary obligation and most insistently on the inadequacy of funding and vesting practices.

This recital is only of consequence to suggest that there is (a) a regulatory scheme and (b) a continuing and informed discussion of the shortcomings of the pension movement. But the discussion is far from providing a conclusive policy choice expressive of the definitive public interest. The positive policy suggestions which fall at all within the scope of this paper are very modest indeed. As to legislation, a strong case seems to have been made out for legislation in the appropriate jurisdiction authorizing public officials to litigate the fiduciary responsibilities of trustees, etc., and perhaps to serve as ombudsmen in dealing with employee grievances under pension plans. A strong case for additional disclosure seems also in order especially in respect to the details of pension plan investment practices. Public policy on funding and vesting seems to be contingent on the facts in two critical areas: (a) The relationship between turnover at various ages and in diverse occupations and the continuity of pension rights; and (b) the relationship between plan termination and pension rights.

WALTER P. REUTHER: FEDERAL LEGISLATION AND PRIVATE PENSION PLANS

The 27 million covered persons, including some presently retired, amounted to fewer than 45 percent of the labor force, excluding Government employees. A recent study has shown a serious imbalance in the distribution of this coverage by amount of earnings: 26 percent of employees earning \$3,000 to \$5,999 yearly have pension coverage, 47 percent of employees earning \$6,000 to \$9,999 yearly have pension coverage, 52 percent of employees earning \$10,000 or more yearly have pension coverage. Other studies have shown that the bulk of employees who do not have pension coverage are those who work in small employment units. Even those employees who are covered by a private pension plan may end up with few or no retirement benefits from that plan because they do not meet various eligibility requirements of the plan or because the assets and income of the plan prove insufficient to pay their benefits. These shortcomings have been the subject of considerable public discussion. It would appear that we are finally approaching the time for action and that we should concern ourselves with concrete proposals rather than statements of general objectives. While there are advantages in taking as comprehensive a view as possible of the problems involved, there is some tendency to use the desire for broad solutions as an excuse for inaction on even those problems which are of immediate and pressing importance. While I urge that

everyone should have the assurance of an adequate retirement income from social security, I am also convinced of the need for encouraging the supplementation of social security with a sound system of private pension plans. So far, however, the Federal Government has restricted its encouragement of private plans to the granting of tax relief to plans which meet standards that are not really comprehensive enough to assure that the desired results will be accomplished. Therefore, additional legislation more directly aimed at achieving these results should be adopted.

A. The establishment of pooling and guarantee arrangements which cannot be independently developed by the private plans.

1. *Federal reinsurance program.*—No group can consider itself immune to the tragedy that results when workers who, having worked many years for a company and nearing retirement age, see their jobs and their anticipated retirement incomes disappear as the result of circumstances beyond their control. It may have been reasonable many years ago to assume that everyone (and every business) could be held responsible for his own success or failure. Today, however, most people and businesses are tremendously affected by the decisions and actions of others. Even the Federal Government, by shifting contracts from one firm to another, may cause dislocations involving hundreds or thousands of workers and shutdowns of the firms employing them. To the extent that an employer does not deliberately terminate a pension plan, it is his employees' benefits that are protected through reinsurance. Thus, this is comparable to the workmen's compensation program in which the employer has some control over the contingency involved but the benefits go to the employees. By the use of maximum limits on the benefits guaranteed, administrative or judicial review to disqualify those situations in which the employer clearly has acted only for his personal benefit, and similar techniques, abuse of the program can be held to a minimum. There have been several other lines of criticism with respect to the reinsurance proposal which, in my opinion, do not face up to a major issue involved. The Federal Government should quickly establish a Federal pension reinsurance program.

2. *Purchasing power bonds.*—Another problem facing private pension programs is the need to assure that funds set aside currently will many years in the future provide benefits which are adequate in real terms. Since this problem primarily results from our national inability to maintain a constant price level, finding a solution is an obligation of the general community as well as of the individual private plan. The Federal Government should issue purchasing power bonds which would be available as pension investments and which would grow in value along with increases in the price level. It may even be feasible to reflect in the value of such bonds our advancing economic progress so that retirees can equitably share improvements in the national standard of living. Investment in such bonds should be permitted only if the plan includes a provision that benefits will be correspondingly increased.

3. *Recording of vested benefits by the Social Security Administration.*—In addition to the need for legislative requirements concerning

vesting in private plans, there is also an urgent need for a simple recording arrangement so that those benefits which are vested for individuals are not forfeited through inaction. Since practically everyone is covered by the social security system and will almost certainly apply for his benefits under that system, it would help if each social security record included information about private plan benefit rights. Therefore, I propose that the Social Security Administration establish a procedure whereby each plan would notify it whenever an individual acquires a vested right to a benefit. When the individual subsequently applies for social security benefits, he would then be given a list of the private plans under which he has accrued vested benefits.

B. Determination of ground rules concerning the design of private plans in order to assure equity to individual participants.

1. *Nondiscrimination requirements.*—While it is quite clear under the present tax laws that pension benefits may not be discriminatory in favor of highly paid employees as compared with lower paid employees covered by the same plan, it is still common for separate plans to be established covering different classes of employees and for the program covering lower paid employees to be less favorable than the one covering higher paid employees. Similarly, plans covering hourly paid employees frequently are less favorable than plans covering salaried employees with comparable earnings levels. As a general principle, pension benefits, including social security, should not be discriminatory in favor of highly paid employees, even if such benefits are provided by plans separate from those covering other employees, unless such differences are due to recognized exceptional circumstances.

2. *Minimum vesting requirements.*—The establishment of minimum vesting requirements is long overdue since the present tax and other legislative restrictions permit plans which disproportionately favor those employees who continue to be active participants under the plan until they obtain retirement age. A group pension plan should not be merely a forced savings arrangement. A pension plan represents wages which are earned by a group of employees and used for the benefit of that group as a whole. Using an acceptable concept of a "pension benefit," Congress should require vesting of all accrued pension benefits for employees with 10 or more years service.

C. Supervision of the handling and administration of the assets of private pension plans.

1. *Minimum funding requirements.*—We believe that funding through an insurer or a trust fund independent of the employment unit involved is generally the best method which has been available for assuring that benefit payments will be made. Too often, however, termination occurs before sufficient assets have been accumulated to assure such benefit payments. A Federal reinsurance program is the only feasible way of providing such assurance. Funding serves other purposes. Both management and labor need a generally acceptable estimate of the long-run cost of a pension plan, since it would be equally undesirable to establish a plan which initially appears to involve fairly low costs only to discover after some years that such costs are seriously under-

estimated as it would be to avoid establishing any plan at all because of unfounded fears concerning the possible cost. There is clearly room for further technical exploration but that does not diminish the need for a funding standard which will guide all plans in the future.

2. *Regulation of investments.*—The long-term nature of pension obligations and the flexibility that exists in valuing the assets of pension funds may encourage some fund managers to indulge in highly speculative investments. Disclosure requirements which will eliminate these occurrences should be adopted promptly. Under most plans, the earnings of the funds serve to reduce the need for employer contributions. The investment manager's decision should be guided not merely by the rate of return on a particular security but also by the community's need for funds of specific types, such as mortgages for low-cost homes, community and area development projects, etc. Some arrangements should be required whereby the participants covered by a pension program have an opportunity as a group to instruct the plan managers with respect to corporate stock voting rights. Congress should adopt measures to clearly fix fiduciary responsibility and to require that funds be invested and managed in the overall best interests of the covered group.

3. *Plan administration.*—It is a proper function of the Government to review administrative decisions, whether on the basis of spot checks or upon appeals of individuals, in order to see if the benefits which a plan purports to provide are in fact paid.

In conclusion, the first priority is to make substantial improvements in social security. We must utilize the social security program to assure everyone an adequate retirement income; the voluntary and diversified nature of the private plan precludes dependence upon them for other than supplementary benefits. These supplementary benefits, however, are needed to assure all Americans the standard of comfort, decency, and dignity that they have a right to expect after ceasing their active employment because of old age or disability. In some cases, retirement earlier than permitted under social security is a high-priority goal; in others, there is a need to provide benefits related to preretirement incomes above the limit recognized for social security purposes. The combination of public and private pension plans would then truly be the mechanism for assuring the financial security of retirees and could become one of the major tools for meeting the long-range goal of achieving an equitable distribution of the increasing quantity of goods and leisure time available as the result of our advancing technology.

HARRY DAVIS: VESTING PROVISIONS IN PRIVATE PENSION PLANS

In recent years, vesting—the right of a participant to receive his accrued pension benefits if he leaves the plan before he is eligible for retirement benefits—has become one of the most discussed aspects of pension plans. The Bureau of Labor Statistics recently repeated the analysis it made nearly 5 years ago of the vesting provisions in

the pension plans filed under the Welfare and Pension Plans Disclosure Act. It found that the incidence of vesting increased from 67 percent of the plans in the winter of 1962-63 to 70 percent in mid-1967. The proportion of pension plan members belonging to plans with vesting increased from 60 to 64 percent.

Vesting increased, both relatively and absolutely, in single employer and multiemployer plans; in negotiated and nonnegotiated plans; and in contributory and noncontributory plans. By far the strongest gains were made by multiemployer plans; the number with vesting nearly doubled and the number of covered workers rose by more than a fourth. Despite these gains, however, multiemployer plans—almost all of which are under collective bargaining—continued to lag far behind single employer plans. Although about three out of four members of single employer plans belong to plans with vesting provisions, only one out of four members of multiemployer plans have that type of protection. However, single-employer plans often made vesting contingent upon the worker leaving his contributions in the plan or on his being terminated involuntarily.

During this period, the requirements for vesting were liberalized by plans covering several million workers. For example, almost one out of five plan members in 1967 can qualify for full vesting after 10 years of service, regardless of their age, compared with only one out of 17 in 1962-63.

About four-fifths of the workers covered by contributory plans in 1967 had vesting protection compared to three-fifths of the workers covered by noncontributory plans. This disparity results from the heavy concentration in the latter group of multiemployer plans without vesting. If limited to single employer plans, nine out of 10 workers in contributory plans had vesting compared to seven out of 10 in noncontributory plans.

Vesting was provided more frequently to workers in nonnegotiated than in negotiated plans: About 73 percent of the workers in nonbargained plans were in plans with vesting provisions, compared to 59 percent of the workers in bargained plans.

The low incidence of vesting in negotiated multiemployer plans accounted for most of the difference between bargained and nonbargained plans. Among single employer plans, about three-fourths of the workers had vesting both in bargained plans and in nonbargained plans.

Three types of vesting provisions are found in private pension plans: Immediate full vesting, deferred full vesting, and deferred graded vesting. About one out of 1,000 plans had an immediate full vesting provision under which benefits are vested as soon as they are earned. However, most plans with vesting—about seven out of 10—had deferred full vesting provisions that postpone vesting until the participant has met certain age, service, and/or other requirements. The remaining three out of 10 plans had deferred graded vesting provisions under which a member acquires the right to a given percentage of his accrued benefits after satisfying minimum age and service requirements. This percentage increases as additional service requirements are met until all accrued benefits are vested.

In addition to service requirements, minimum age requirements—usually 40 years—were specified by about three out of five plans. How-

ever, plans covering about half of the workers had no age requirements; they vested the benefits of all workers meeting their service requirements, usually 10 years.

Employees covered by plans with deferred graded vesting generally qualify at an earlier age and with less service to vest part of their equity than those under plans with deferred full vesting. To become fully vested under graded plans, however, usually required much longer service than under most deferred full vesting plans.

Ten or fifteen years of service were most frequently required to vest the first step of the worker's equity in deferred graded plans.

The amount initially vested usually ranged from 10 to 25 percent of accrued normal pension benefits. To become fully vested, nine out of 10 workers covered by graded plans had to have 15 years or more of service and often as much as 20 to 30 years.

A worker that met the specified age and service requirements usually would be vested regardless of the reason for the termination of his employment. However, plans covering one out of eight workers in plans with vesting—mostly those negotiated by the steelworkers—required that the employee be separated involuntarily.

The employee generally receives his vested benefit in the form of a life annuity, commencing at the normal retirement age specified in the plan. The amount of the benefit is determined by the normal retirement benefit formula, using the member's credited service and earnings at the time his membership terminated.

In about two out of three plans, the benefit was payable only at normal retirement age, usually 65 years. Employees could elect to receive the actuarial equivalent of vested benefits before normal retirement age in one of three plans which covered four out of nine workers. An actuarial reduction was specified in three out of four plans, covering over half the workers, that allowed the employee to receive his vested benefit before normal retirement age. Most of the remaining plans had specific reduction factors, such as 6 percent a year for each year before age 65.

JOSEPH KRISLOV: THE EXTENT AND CONSEQUENCES OF PENSION PLAN TERMINATIONS

Despite the lack of detailed information, some conclusions seem warranted. Relatively few plans—covering relatively fewer workers—have been terminated. Probably a very small proportion of covered workers—perhaps no more than a few percent—have been affected. Most members of terminated plans have probably lost some benefits. Only fragmentary information exists as to the actual losses from termination as a result of the failure of successor plans to grant full credit for the newly acquired member's past service. While more information is available on the consequences of complete termination, it would be premature to generalize.

Barring a serious recession, it does not seem likely that the number of terminations will rise significantly in the future. There may be some small increase as pension plans spread. Only the financially stable companies develop pension plans initially. As coverage becomes wide-

spread, pressure is exerted on all employers to adopt programs. Marginal employers who adopt pension plans in response to these pressures are more likely to discontinue operations than their better financed competitors.

On the other hand, it is likely that the losses suffered by members of terminated plans may diminish in future years. Plans terminated in the next decade (without any successor plans) are likely to be better financed than their counterparts in the past. Continued public discussion of and legislative interest in private pension plans will undoubtedly focus attention on the need for funding. Moreover, the many plans developed in the post-World War II period will have been in existence for more than two decades and should, therefore, have made considerable progress toward full funding.

The losses suffered by members when a successor plan does not grant full credit for service with the absorbed company depends upon a decision of the plan's trustees. They can choose to honor all, part, or none of the credit is earned by their newly acquired employees. Increased employee awareness of the value of these credits may result in considerable pressure on trustees to grant full credits. This awareness and consequent pressures will probably develop among organized but not among unorganized workers.

JOHN M. GROGAN (ARTHUR AN ACTUARIAL ANALYSIS OF
STEDRY HANSEN CON- THE LOSS OF PENSION BENE-
SULTING ACTUARIES): FITS THROUGH THE TERMINA-
TION OF PRIVATE PENSION
PLANS

To assist Congress and other interested parties in the evaluation of various proposals for changes in Federal laws governing private pension plans, we have made an actuarial analysis of a recent Government study of pension plan terminations in order to determine the approximate rate of benefit loss in the system as a whole.

The study, covering 4,259 plans which terminated during the years 1955-65, was made jointly by the Bureau of Labor Statistics, U.S. Department of Labor, and the Internal Revenue Service, U.S. Department of the Treasury. The results were reported in the *Monthly Labor Review*, June 1967, in an article "Terminations of Pension Plans: 11 Years' Experience," by Emerson H. Beier of the Division of Industrial and Labor Relations, Bureau of Labor Statistics.

The total number of employees included in the plans at the time of termination was 225,000. This constitutes an average of about 20,000 workers per year or approximately one-tenth of 1 percent of the total covered population in the United States. Although the incident of plan terminations proved to be rising with the continuing spread of private plans, the study noted that the ratio of terminated plans to continued plans remained constant at around 1 percent. The study shows that terminated plans tend to be small and relatively shortlived. Mergers accounted for the greatest number and percentage of terminations and covered employees as a single category but the combina-

tion of two separate but similar categories—financial difficulties and the dissolution of the employer's business—is greater, totaling 43.6 percent of all plans and 36 percent of all covered employees. In concluding his report, Mr. Beier observed:

Reasonably accurate estimates of the magnitude of benefit losses cannot be obtained from any Government reporting system now in operation.

By applying minimum contribution-to-benefit ratios and other minimum cost factors that result from IRS rules, however, it is possible to estimate the maximum benefit loss that could have occurred under the reported termination conditions. Furthermore, by determining the benefit loss under employer practices more liberal than IRS minimum requirements, it is possible to create a range within which actual losses are likely to fall.

Our study demonstrates that by using any of the common cost methods with a 20-year funding program a representative plan after only 15 years will have sufficient assets to provide from 80 percent to over 100 percent of the total accrued benefits. Even with a minimum funding policy a plan after 15 years could be expected to be able to provide over 40 percent of the total accrued benefits for all active employees after providing full benefits for retirees. We submit that this demonstrates a high level of stability and protection inherent in the present pension system due to funding and cost methods established by present law and regulations.

HUGH FOLK: PRIVATE PENSIONS AND LABOR MOBILITY

The term "labor mobility" describes both propensity to change jobs and actual job changing. These two meanings are related to the two principal problems arising from the interrelation of pensions and mobility:

- (1) The tendency of pensions to reduce the propensity to move and,
- (2) the effect of actual movement in keeping some persons who work in jobs covered by pensions during part of their work lives from eventually receiving pensions.

One obvious and important function of mobility in serving the goal of economic efficiency is its permissive role in the growth of new firms, industries, and regions. Another important function is promoting movement out of declining industries, firms, and regions. Mobility is also socially desirable in a free country because workers need practical alternatives to sticking with the present employer. The foregoing reasons are arguments for some labor mobility but they do not tell us how much is desirable. If a worker stays on a job because he likes it despite the presence of alternatives, he is not a serf bound by a "new industrial feudalism." If a worker is more productive in his present job than in another, then the goals of maximum social output and of maximum private income are both served by his staying on the job,

assuming the employer pays him the value of his current productivity (marginal revenue product). The employer may pay less in current wages than his value to the firm and accumulate the difference in deferred payments, such as pensions, that will be paid to the worker if he stays at work but will be forfeited if he leaves employment too early. Where this does occur, however, it seems to me unfair that the worker's entire accumulated withheld compensation should be used as a pledge against his quitting.

We have derived a number of predictions about employer and worker behavior from simple assumptions about the profit maximizing and cost minimizing behavior of employers and the utility maximizing behavior of workers. We found that (1) workers will have lower mobility when they are covered by an unvested pension plan, unless they attach no value at all to the pension—the effects should be larger with higher earnings and greater age; (2) workers will favor pensions more if there is a tax advantage (as there is in the United States); (3) workers pay for part of their pensions through reduced wages, if they value pensions at all; (4) employers will adopt a pension if it increases their profits and it will increase their profits only if it reduces mobility and allows turnover savings (such as preventing the loss of employer financed training), except when tax savings to the worker are great enough that he prefers a lower outlay by the employer with a pension to a higher outlay without a pension; (5) in equilibrium, the value of the accrued pension rights of a worker will exceed or equal the capital value of the worker to the firm (the value to the firm of the employer investment in the worker's job skills); (6) employers can allow partial or graded vesting for most workers at all ages and full vesting for many older workers without paying more to workers than they had planned—if they do not, they are exploiting the worker.

The analysis suggests that unvested pensions will reduce mobility if workers value pension and that profit maximizing employers will adopt pensions unilaterally only if they believe mobility will be reduced. Direct evidence of the association with low mobility is quite limited and does not provide unequivocal support for the effect of pensions on mobility. There is good evidence that mobility has decreased considerably since World War II:

(1) the manufacturing quit rate has declined, even when account is taken of variations in economic conditions;

(2) annual voluntary job changing declined between 1955 and 1961;

(3) average length of job tenure increased from 1951 to 1966.

Although this is not direct evidence of association between the spread of pensions and the decline of mobility, the change in prevalence of pensions has been larger than changes in other factors that might have influenced mobility.

The lengthening of job tenure that is both an indicator and a result of reduced mobility necessarily has resulted in an increase in the proportion of workers who can expect to receive private pensions when

they retire. Even so, mobility is great enough that only one-fifth of the workers who are nominally covered by pensions have vested pension rights. Only a small fraction of all workers in each age group have vested pensions, so that only a minority of workers of any age can expect to receive a pension with any certainty. The spread of vesting that appears to accompany the maturing of pension plans obviously has a long way to go before retirement income will be secure for a majority of nominally covered workers.

The general economic policy objective of efficiency has not been thwarted by the decline in labor mobility which has probably occurred. Thus, even if it could be shown that mobility had definitely declined and that this decline could be traced to the spread of unvested pensions, there is no presumption that remedial action is needed for reasons of economic efficiency.

The principal reason for public regulation of vesting is equity. The pension system receives a substantial subsidy in the form of tax deferral for contributions to qualified plans because pensions presumably serve a public function. The receipt of pensions by retiring workers is capricious. Many workers with long service never receive pensions because they are laid off or quit before retirement age. The worker who quits presumably moves to a more desirable job but this does not mean that his loss of unvested pensions is not exploitation, at least in the technical sense. An unvested pension plan is a lottery system, in which only the small proportion of workers, who by choice or chance stay with the firm until retirement age, receive a prize. There is no presumption that winners have performed a public service that deserves a subsidy or that the workers who do not receive pensions do not deserve a subsidy. Those who have attempted to justify unvested pensions sometimes ground their arguments on a collectivistic theory of wages (inconsistent with a capitalistic labor market) in which the workers as a group receive pensions to which no individual has a severable interest. Without special tax treatment, of course, the employer could not deduct pension cost as a business expense, unless the cost could be credited to specific persons who could then be currently taxed for the value of the benefit earned.

Proposals to require certain standards of vesting and funding for pensions, which have been proposed, seldom include full and immediate vesting because of the considerable expense and administrative inconvenience involved. Any requirement of vesting is likely to make pensions more equitable and to increase mobility. If mobility increased, the vesting provision would appear to have a cost but this would be fallacious. If the worker moves because his pension is vested and would not have moved if his pension had not been vested, then a pension would have been paid for his completed service in any event, so that vesting costs can be based on actual turnover rates, without an allowance for any mobility increase attributable to the adoption of vesting. Vesting imposes additional cost on the plan only to the extent that mobility is already high. Under the excessively conservative turnover assumption of little or no turnover among employees with long tenure, made by many firms, the projected additional costs of vesting

are likely to be small. No doubt, this is one of the contributing influences in the spread of voluntary vesting among plans.

It is a paradox that, if pensions reduce turnover in a firm, the adoption of vesting is not very costly but, if turnover is high, then vesting is not needed to counter excessively low mobility. Thus, if public policy is to regulate pension plans with respect to vesting, it should do so on grounds of equity and fairness, rather than for supposed reasons of economic efficiency. Such grounds are hardly new. Public policy has long expressed itself on a similar question by requiring the payment of wages in cash, conceiving that the enhancement of the liberty of the many more than outweighed loss of liberty suffered by the employers. With respect to pensions, of course, the question is much clearer because tax deferral of contributions to a qualified pension fund is a privilege rather than a right.

ALLEN J. LENZ: EARLY RETIREMENT AND INCOME MAXIMIZATION

The military retirement system functions to encourage and permit withdrawal of career personnel from the military forces at relatively young ages, in order that the military organization may maintain a desired degree of "youth and vigor." Most military retirees enter the civilian labor force after completing their military careers. During the second career years, the retirement annuity is not an old age pension. Rather, at least in part, it serves to compensate military retirees for reduced civilian employment income levels which stem from a late entry into civilian employment.

The existing retirement system and the 20-year retirement option have maintained "youth and vigor" in the military forces and assisted in attaining a more rapid and regular promotion flow. However, there are some indications that short (20-year) military careers may be more economically rewarding than longer careers, and indeed, provide a positive economic incentive to early retirement for certain categories of personnel, including the more highly educated officers.

Most civilian employers do not permit retirement at such early ages that the employee can "retire" and transfer to another employer, thereby earning an active employment wage and simultaneously drawing a retirement annuity from the prior employer. However, a recent lowering of the minimum retirement age now permits civil servants with 30 years of service to retire from civil service and draw an unreduced annuity at age 55. There is reason to expect that this early retirement option may, in the future, imperfectly serve the best interest of the civil service organization, tending to encourage early withdrawal of the more valuable employees but doing much less to encourage egress of the less productive workers.

A retirement system which provides a positive incentive for early retirement from the work force of one employer in order to transfer to the work force of another employer not only may be undesirable from the standpoint of the original employer but may be undesirable

for society as a whole because it may tend to encourage an inefficient allocation of resources.

A retirement conditional pension promise is a very blunt instrument for management's use in screening out inefficient employees. So long as the retirement is optional, not mandatory, the initiative rests with the employee. Early retirement is likely to have a greater economic appeal to those employees who are still highly productive and who have good outside employment alternatives—those management would most like to retain.

Before offering an early retirement option, employers should carefully assess not only the dollar costs of the plan but also the pattern of economic incentives it will establish for individual employees. Unless youth and vigor is a requirement of the organization, there would seem to be little merit in an early retirement option. Even when a requirement for youth does exist, an early retirement program can imperfectly serve the organization and society.

BETTE S. MAHONEY, THE ECONOMICS OF MILITARY RETIREMENT
ALAN E. FECHTER:

This paper examines some economic implications of the military retirement program, which is noncontributory and, in general, vested only after military personnel have completed 20 years of active military service. The absence of vesting before 20 years was expected to inhibit mobility of military personnel prior to 20 years and the retirement income received by retirees was expected to reduce their labor force participation after they had retired.

Examination of loss rates of active duty military personnel by years of service completed revealed that losses peak at the end of the first tour of duty and gradually decline until 20 years of service are reached at which time they peak again. Both the decline and loss rates after the initial peak at the end of the first term and the 20-year peak are consistent with the hypothesis that the military retirement system inhibits mobility. However, it was not possible to attribute the declining loss rate solely to the military retirement program. Mobility tends to diminish with age and experience independent of the effects of this program. The peak in loss rates at the 20-year point undoubtedly reflects the military retirement program and may be attributed to both the vesting of the pension and the wider range of civilian employment opportunities open to younger retirees.

Differences in labor force behavior among military retirees and between retirees and comparable other civilians, classified by age and level of school completed, were consistent with theoretical expectations. Retirees with low weekly wages and high family incomes other than wages of retirees tended to have low labor force participation rates. In addition, retirees generally had lower participation rates than comparable other civilians. This difference may be attributed in part to the military retirement income which is received by military retirees and is not available to other civilians and in part to differences in other

elements of family income or in other determinants of labor force behavior between retirees and civilians. Estimates of the effect of family income of retirees, exclusive of their wages and salaries, on their labor force behavior were derived from a multiple regression on the income and labor force behavior of retirees classified by age and education. They revealed that the income elasticity of participation rates was relatively low (less than one in most cases) and that it was extremely low in the youngest age groups. The estimates were very sensitive to differences in functional forms used.

MELVIN LURIE: THE EFFECT OF NONVESTED PENSIONS ON MOBILITY

We have reopened the question, raised by Ross and others, of whether nonvested pension plans deter voluntary employee movement. The higher education industry was studied because it was unique among manufacturing and nonmanufacturing industries in that there was an almost equal division of firms having vested and nonvested pension plans; thus it was possible to make a cross section analysis of the effect of vesting on mobility.

The cross section analysis of the voluntary separation rates of institutions of higher education shows that for the higher education industry as a whole, mobility was as large in nonvested institutions of higher education as it was in vested institutions of higher education. This finding supports Ross' conclusions that labor resources have not become immobilized because of the increased use of pensions and other non-wage benefits.

When, however, the higher education industry was subdivided into its college and university components, we found that the voluntary movement of university faculty was affected by the extent to which their pension plans were vested, while the movement of college faculty was not affected by vesting. The insensitivity of college faculty and the sensitivity of university faculty to equity losses from movement under nonvested pension systems found further support in the analysis of average faculty salaries, particularly the relatively low salary of the locked-in full professor at a nonvested university and in the analysis of salary dispersion. We suggest that the differential behavior of faculty can be explained, at least in part, by differences in research potential. We also speculate that those faculties who had a large investment in research training would also have a high propensity to be mobile and would choose a university career; a low propensity for mobility is likely to be associated with a smaller investment in research training and faculty in this grouping would choose a college career.

Further subdivision of the data showed that (a) faculty in privately controlled institutions of higher education were more sensitive to vesting than faculty in publicly controlled institutions of higher education and (b) faculty in nonsouthern institutions of higher education were more sensitive to vesting than faculty in southern institutions of higher

education. Again, we speculate that faculty who anticipated gains from being mobile would choose employment in privately controlled non-southern institutions of higher education.

In summary, it seems that faculty in the aggregate are not very different from industrial workers in the aggregate with respect to the decision to resign from their job; neither group seems to allow their mobility decisions to be influenced by losses in pension plan equities. This study also shows, however, that the aggregate data may conceal the differential effects that nonvested pension systems may have on the mobility of particular groups of employees. It may be suggested that, if the aggregate data on industrial workers were subdivided by occupation, similar differential effects would be observed.

ABSTRACTS OF PAPERS INCLUDED IN PART V: *Financial Aspects of Pension Plans* of OLD AGE INCOME ASSURANCE

JOHN O. BLACKBURN: THE MACROECONOMICS OF PENSION FUNDS

A striking feature of history in the U.S. is the rapid growth and spread of pension arrangements which involve a degree of compulsion—both with respect to public and private institutional arrangements. Pension claims by households against public and private institutions now represent a major financial instrument. As a form of financial saving, or as a means of channeling household savings into the hands of investing sectors, pension equities already funded amount to some \$175 billion. If unfunded pension claims were included, the sum would be larger by several hundred billion. Indeed, by some ways of reckoning total pension obligations, they may exceed in the aggregate all other types of financial claims except common stocks.

From the standpoint of the household, a claim to future payments constitutes an asset which might be measured as the discounted present value of future payments already earned. The corresponding liability, from the standpoint of the paying sectors, is the discounted present value of future payments likely to be made on the basis of work already performed by each employee. Viewed in this light, the aggregate "asset" of households and "liability" of pension-paying sectors is a roughly calculated \$720 billion. Since there are some conceptual and computational difficulties in measuring pension claims on a present value basis, our analysis is of funded claims.

Under neo-classical assumptions of smooth full employment adjustments in interest rate, prices, and capital output ratios, an increase in the share of income and output saved would pose no problems. Under post-keynesian assumptions, additional savings induced by pension plans again need not threaten either price stability or full employment. However, the years following 1957 were either years of unemployed resources or Federal budget deficits or both. The only post-1957 years in which private investment absorbed private saving forthcoming at more or less full employment were 1965 and 1966. The Federal budget on a national income accounts basis had a slight surplus in those years. Yet that volume of private investment, abetted until late 1965 by monetary ease and longer still by the investment credit and liberalized depreciation rules, may well turn out to be unsustainable.

If pension saving does raise the implied full employment growth rate in output beyond that consistent with the growth in the labor force and labor productivity and if the capital-output ratio, interest rate, profit rate and technological developments do not easily reconcile these divergent rates, then a balanced budget economy would tend toward

stagnation and chronic unemployment. The use of monetary and especially fiscal policy to offset pension saving would result in a growing public debt.

Thus, private pension saving would take place at the expense of public dissaving. Private pension claims are then indirectly supported by a public liability—wholly, if the increase in public debt equals the accumulations of private funds; partly, if “excess saving” is only part of pension saving. The important result of analyzing this case is the following: as to saving, investment, income and private wealth (including the present value of future pension payments), private pension funds plus public deficits are analogous to unfunded public pensions. When OASDHI is underfunded, private wealth (including the expected value of future pension benefits) exceeds national wealth. The Government has a liability equal to the under funding of OASDHI. Future tax revenues will, in effect, pay the pensions. In the private pension fund, public debt case, private wealth again exceeds national wealth but the public liability to be tax financed (at least as to interest) appears not as OASDHI underfunding but as explicit debt.

There is yet another aspect of pension saving which needs our consideration; namely, the influence of tax concessions on aggregate saving. Under present arrangements, some 40 percent of personal saving and subsequent investment earnings thereon escape current taxation. Various assumptions as to deferment periods, discount rates, tax rates during retirement and the like produce widely varying estimates of the effective tax benefit. Nevertheless, the implied rate of taxation on pension saving is materially lower than on income in general. If over-saving is our problem, we are subsidizing saving through tax policy in such a way as to require even larger offsetting public deficits than would be required without the subsidy.

TABLE 1.—PERSONABLE DISPOSABLE INCOME, PERSONAL SAVING, AND PENSION SAVING, 1946-65

[In billions of current dollars]

Year	Personal disposable income	Personal saving		Pension saving	
		Amount	Percent of personal disposable income	Amount	Percent of personal saving
1946.....	160.7	15.9	9.9	1.6	10.1
1947.....	170.6	8.1	4.7	1.8	22.2
1948.....	191.0	14.3	7.5	2.1	14.7
1949.....	189.6	10.4	5.5	2.9	27.9
1950.....	208.2	14.4	6.9	3.0	20.8
1951.....	227.8	18.5	8.1	3.4	18.4
1952.....	239.9	19.8	8.3	4.3	21.7
1953.....	254.1	19.8	7.8	4.5	22.7
1954.....	258.8	17.8	6.9	4.8	27.0
1955.....	277.1	17.6	6.4	5.4	30.7
1956.....	295.4	22.8	7.7	6.0	26.3
1957.....	310.5	22.8	7.3	6.5	28.5
1958.....	321.5	25.0	7.8	7.3	29.2
1959.....	340.1	21.9	6.4	8.2	37.4
1960.....	353.1	20.1	5.7	8.1	40.3
1961.....	367.9	24.7	6.7	11.4	46.2
1962.....	389.0	25.3	6.5	9.4	37.2
1963.....	407.7	24.3	6.0	10.3	42.4
1964.....	440.1	30.6	7.0	11.6	37.9
1965.....	469.9	29.7	6.3	12.8	43.1

Source: Author's estimates, prepared from data by Department of Commerce, Securities and Exchange Commission; data adjusted for saving through Government funds.

Non-OASDHI funds now total some \$150 billion; in 1980 they will likely reach \$350 to 470 billion, depending on developments in coverage, funding practices and like variables. The implications of this development reach into many areas in the economy and raise many questions. For example, the share of the national wealth which is owned through pension fund intermediaries will rise from the present 6 to 7 percent to some 10 percent. Nevertheless, the major issue is the impact of pension saving on aggregate saving and the resulting public deficits which might be required to keep the economy in the neighborhood of "full employment" somehow defined.

If one takes the view that our major problem has been that of too little saving, then there is no policy problem at all. In the "oversaving" case, which I think on balance to be the most likely case, Federal policies might take two directions: one is to realize the growth rate implied by a savings share and savings level which tends to outrun "sustainable" investment through measures to accelerate technological change, along with other measures to raise the rate of increase in labor productivity. A second direction is a fiscal policy resulting in a growing Federal debt. An alternative policy which seems to merit careful consideration is the development of a reinsurance plan which will assure employee benefits but require a lower level of funding for private plans. As it bears on funding practices, reinsurance is a policy substitute for Federal deficits.

HENRY AARON: THE SOCIAL INSURANCE PARADOX

If the sum of the rates of growth per capita wages and population exceeds the rate of interest and if the rate of interest equals the marginal rate of time preference and the marginal rate of transformation of present into future goods, then the introduction of some social insurance pensions on a pay-as-you-go basis will improve the welfare position of each person. If saving and, hence, investment and, hence, the rate of growth of income are reduced as the level of social insurance increases, this conclusion does not necessarily follow. If the rate of growth is unaffected, the effective rate of return on premiums paid for such social insurance will exceed the marginal rate of time preference and, consequently, people in the active labor force would willingly forgo some current consumption in order to obtain such returns. Individually they are unable to do so; collectively they can.

If a small trust fund is accumulated, the proceeds from which are invested, the addition to welfare will be smaller than if no fund is accumulated and, in the limiting case of a full reserve, no increase in welfare will occur.

If the rate of interest exceeds the sum of the rate of growth of real wages and the rate of growth of population, then introduction of social insurance either on a pay-as-you-go or a funded basis will reduce welfare, unless (a) market imperfections render the preexisting situation suboptimal, (b) the social welfare function calls for income redistribution, or (c) there are economies of scale in social insurance.

DAVID CASS, A REEXAMINATION OF THE PURE
MENAHEM E. YAARI: CONSUMPTION LOANS MODEL

The discussion of retirement income arrangements has revealed certain theoretical issues; this paper is addressed to two of these. First, it demonstrates that, in an economy consisting only of households, efficient retirement income arrangements whether funded or pay as you go are current transfer plans. All output produced in a period is consumed during that period in some proportions by the economically active and the economically inactive. In order to avoid the loss of efficiency associated with the holding of unproductive stocks of goods, a funded arrangement, however, requires that there be a financial intermediary to keep account of each active household's contribution to the current income of the economically inactive and its corresponding claims on the output of active households in future periods. This is one aspect of efficiency in retirement income arrangements: Does the scheme permit an economical allocation of income over time?

For a prodigal people, the financial intermediary feasibly may be a private institution but, for a frugal people, necessarily must be a public institution and, moreover, one whose willingness to issue debt is not constrained by conceptions of what is prudence in the affairs of an ordinary household. This result may appear to be purely a consequence of unrealism in the model, for why should not the introduction of a business sector, holding a stock of productive assets, provide an outlet for household savings? Professor Aaron points out that his conclusion rests on the assumption that the rate of economic growth does not depend upon whether the retirement income scheme is funded or unfunded. Yet, if pension saving is devoted to expansion of the capital stock, the rate of growth will be higher with than without funding. If the addition of pension saving to total saving means that aggregate planned saving regularly exceeds planned investment, the rate of economic growth will be lower with funding, unless this excess is offset by Government deficits. This is the point which Professor Blackburn makes.

Imagine an economy in which all investment is carried out by business firms. Suppose, further, that investment, whatever its annual rate, is never either more or less than the available supply of business retained earnings. Then, in this economy, investment equals business saving and the rate of economic growth is independent of household saving, at least to the extent that growth is uniquely a function of business investment and net household saving is always offset by Government deficits. In such an economy, the pure consumption loans model is exactly applicable and the decision to fund a retirement income program actually is a decision to debt finance a portion of Government expenditure, unless households can be persuaded to debt finance consumption to the extent of pension saving.

In our own economy, the nonfinancial business sector, in fact, is largely self-financed and a theoretical model which treats all saving as taking the form of loans for consumption (government spending being regarded as collective consumption) is an approximately exact representation of reality. We observe, for example, that in recent years

pension funds have been displacing households as holders of corporate equities. To the extent that pension fund net acquisitions of corporate securities are matched by household net liquidations, then in fact pension saving goes to finance consumption and government, except for such household receipts from sales of securities as may be devoted to unincorporated business finance.

The paper by Professors Cass and Yaari identifies two issues: (1) does a retirement income program permit the economy to remain continually on its efficiency frontier of full employment, and (2) given that, does it lead the economy to the optimum point on the efficiency frontier from the standpoint of individual allocations of income over time. On the second issue, which we took up first, we can give present arrangements a good score, as does Dr. Murray at the beginning of his paper. But, on the first issue, we must recognize that we cannot assume without question that pension saving necessarily adds to real economic growth and, thereby, helps to meet ultimate pension obligations. Pension saving, apart from a Government financed full employment policy, may not lighten the burden of pensions but add to that burden by reducing the real income out of which they will be paid.

ROGER F. MURRAY: ECONOMIC ASPECTS OF PENSIONS: A SUMMARY REPORT

The economic aspects of pensions are as broad as the flows of income, consumption and saving, and the network of public and private arrangements which characterize an urban industrial society. In this paper, we have reviewed the creation and development of a mammoth pension structure and have attempted to preview its future growth and progress in attaining maturity. In the process of looking at these several segments of the whole, we have been at pains to remind the reader that pensions are not a separate structure but a part of the warp and woof of the fabric of our economy. We may reflect briefly on some of the implications of this study of economic aspects of public and private pensions.

IMPLICATIONS FOR SAVING AND ECONOMIC GROWTH

The social security and other pension programs of the Federal Government act to sustain consumption and to depress the ability of individuals to save. The present system of payroll taxes to finance the OASDI system is less powerful in this direction than the financing of noncontributory programs through general revenues. It is simply not possible to lift living standards of the aged without the redistribution of income which these and other fiscal activities involve. The size and especially the prospective growth of these redistributive arrangements should, however, be taken into account in any appraisal of the influence of the total Federal tax structure on economic growth.

The pension plans covering employees of State and local governments and individuals in private employment, to the extent that they are systematically funded, generate saving which is substantially a net addition to total saving in the economy. This is especially significant because the saving permits investment in business capital and housing.

The flow of funds to finance business plant and equipment, inventories, research and development, and trade credit plays an increasing role in enlarging and improving the efficiency of productive capacity.

On the basis of our projections, the net flows into the markets for corporate securities and mortgages from both State and local government and private pension plans will increase from \$10.4 billion a year in 1965 to more than \$12 billion by 1975 and over \$14 billion by 1980. These figures for net flows ignore the funds also provided in the form of corporate retained earnings of portfolio equity securities. To that extent, the projections represent an understatement of the volume of business capital financed. In any event, unless there is a major change in the trends presently indicated, it is clear that while these funds will finance a growing amount, they will contribute a diminishing share to the growth of capital assets in the business sector. This may or may not be disturbing to our expectations for economic growth, depending upon how we anticipate developments in other influences on the saving and investment process.

The projections, of course, are only an expression of the probable net effects of many influences. The realization of substantially higher returns can depress the level of contributions and of pension savings. An acceleration in the pace of the extension of coverage, in the trend toward more liberal vesting provisions, and in the rate of funding can continue to increase the rate of pension saving for another span of years. Our analysis of the working of the pension structure is, therefore, more illustrative than predictive.

Our exploration of the question of the burdensomeness of pension arrangements suggests that there is no precisely determinable level of what the economy can afford without sacrificing some of its vitality and potential for growth. The size of the net burden attributable to the structure of benefit programs is apparently not great, especially if the plans for employees of State and local governments and private organizations continue to carry an important share of the provision of benefits.

The need for improved data and techniques for the measurement of the gain-loss patterns involved in huge transfers of income has been demonstrated by our analysis. The fruitfulness of further investigation and research in this area is evident for the informed evaluation of the economic consequences of alternative courses of action.

To set tax-supported pension programs apart from all of the other fiscal operations of government and to attempt to assess their influence on incentives and productivity gains is to create an artificial and unreal framework of analysis. Rather, the issue of what we can afford in the way of old-age income provision must be considered together with the whole range of public policies which affect the returns to different factors of production. Indeed, the interrelations between these and other public welfare objectives must be examined and constantly reexamined in a changing economic environment. It is idle to appraise the influence of pension commitments running far into the future apart from the whole range of commitments being made in other areas. What we can afford, in some meaningful sense, is the total share of real output that can be diverted from the factors of production which provide it without impairing the incentives and motivations for continued expansion and growth.

IMPLICATIONS FOR ECONOMIC STABILITY

Pension and disability benefits clearly operate as contracyclical influences in the direction of economic stability. Retirements tend to increase when employment opportunities wane. The level of contributions, especially in private plans for the funding of past service liabilities and in profitsharing plans, is sensitive to changes in corporate profits. Income maintenance is aided by rising benefits in periods of slack employment, and pension saving declines slightly in periods of less active demand for business capital investment.

In any case, the regularity of benefit payments is another of the built-in stabilizers in the economy. Public and private pension programs will continue to provide a growing share of the income payments not susceptible to cyclical variations in aggregate economic activity.

The question has been raised as to whether pension saving is not too stable in times of deficient aggregate demand for consumer goods and services. As a consequence, it is argued, the cyclical changes in saving rates which contribute to stability are muted by the regularity of pension saving. One answer is that the limits on the variability of pension saving are not entirely indigenous to the pension structure. In the case of private plans, indeed, corporate managements have preferred to use variable contributions as a method of averaging income. Public regulation to assure the fulfillment of pension promises seeks to regularize contributions and so does the Internal Revenue Code. Financial analysts and the public accounting profession seek regular recognition of pension costs as they are incurred and not when flexible contributions are actually made to the fund. Also, variability in employer contributions is not feasible under the budgeting practices of State and local governments.

Essentially, however, the reality is that pension systems are not well designed to provide variability in saving flows. The long-term nature of their contracts calls for regularity in provisions to meet them. Finally, equity investment is a major outlet for the saving flow, and there is some presumption that rates of return will prove higher on investments made during periods of slack economic activity. The stabilizing influence of pension fund investing on the secondary market for equity securities would diminish if pension saving flows were permitted to be highly variable.

One of the most important aspects of economic stability is the question of inflation. We have repeatedly observed that inflation can erode the value of pension promises and warned that, unless the burden of income transfers is willingly borne by the working members of society, they will acquiesce in policies which lighten the burden by inflation. This unfortunate outcome of the pension movement is not now in sight. But neither has the full burden been felt. The volume of claims to be presented has only well begun its long rise. Capital formation at a high level has spurred real output. Pension saving in the future may contribute less to this progress if, in fact, saving is the limiting factor on economic growth.

As we move into the period of substantial rise in benefit payments and witness the diminishing pace of pension saving, it will be necessary to adjust fiscal policy to the changing situation. Again, the availability of more precise measures of possible future effects of income redistribu-

tion through pension programs will be required to judge the adjustments most appropriate to the emerging situation.

IMPLICATIONS FOR THE CAPITAL MARKETS

The stability of net fund flows makes pension systems almost unique among the major supplies of funds to the capital markets. Apart from the mild cyclical fluctuations mentioned above, no unpredictable changes in inflows need be anticipated by the portfolio manager. Another unique characteristic is the absence of valuation problems. There is no requirement, as with a deposit-type financial institution or a life insurance company, to demonstrate on a certain day an excess of assets over liabilities on the basis of some prescribed or conventional valuation of assets.

These two salient characteristics, the absence of both liquidity and published statement requirements, impart different dimensions to the portfolio management decision to be made in relation to the long-time horizon of pension commitments. Despite pressures to show good performance, the outcome of decisions is still to be judged over an extended period of time. If the illiquidity of a financial asset carries a premium in yield, pension funds are in about the best position to capture it. Hence the evolution of portfolio management has been steadily in the direction of holding less liquid assets, even in State and local government retirement systems.

The stability of lending and investing in the capital markets obscures some variability in the pace of forward commitments for directly placed corporate obligations and mortgage loans. The tendency to enlarge forward commitments in periods of strong demand for funds may have the effect of contributing to a situation in which idle balances are being activated and velocity is rising. However, there can be no important shift into claims on pension funds and pension fund managers have little capacity or inclination to supply liquid assets, such as Government securities, to holders of idle balances. The important role of these funds, therefore, is a rather neutral financial intermediary between savers and investors, with little impact on income velocity or the money markets.

We have observed that both State and local government and private plans, as suppliers of loanable funds, have shown a strong preference for corporate securities. Our projections for the future show a continuation of the growth of participation in the area of real estate finance. Slow but steady progress has been made in solving the administrative and expense problems of handling mortgages. It is now possible for a pension fund to secure most of the services normally encompassed in home-office administration from organizations which economically perform these functions. A mortgage portfolio can be handled with almost the ease and economy of a bond portfolio. If net yields after allocated expenses are competitive, risk factors considered, there will undoubtedly be a substantial growth in pension fund mortgage lending across the Nation in conventional as well as FHA-insured and VA-guaranteed loans. By the late 1970's, the volume could easily be comparable to the average net acquisitions of mutual savings banks in recent years.

The ownership of real estate equities would appear to be a natural avenue of investment. Sale and leaseback financing has been, in fact, a growing outlet. The tax-exempt status of a private pension plan, however, can be impaired by engaging in an unrelated business. The operation of income-producing property, especially if the purchase is financed with borrowed funds and only an equity position is retained, is susceptible to being considered such an unrelated business. The tax benefits from accelerated depreciation to a real estate operator, and his ability to introduce substantial financial leverage, usually justify his paying a higher price for property than a pension fund is prepared to pay without these possibilities. Hence, pension fund ownership of true real estate equities is not likely to grow rapidly in the years ahead.

Corporate equity securities, we have seen, are likely to continue to occupy a major position in privately organized pension programs and to become increasingly important in State and local government retirement systems. Common stocks have historically produced a higher total yield than bonds or mortgages for the holder in a position to accept price volatility and irregularity in the realization of long-term rates of return. Pension funds are particularly well situated to accept these disadvantages of corporate equity securities. The principal limitation on their role is the need to support guaranteed annuity contracts and the problems with stocks as an investment medium for employee contributions subject to withdrawal and borrowing privileges.

In the accumulation of pension fund assets for the provision of future benefits of indeterminate amount, common stocks have especially desirable characteristics. The recent changes in life insurance operations to provide for separate accounts for corporate stocks should stimulate the rate of accumulation over the immediate future. Whether the benefits of equity investment will be more widely shared with present and future pensioners by use of the variable annuity contract is less certain. The 15-year record of the College Retirement Equities Fund in providing variable benefits for educators is persuasive of the merits of this approach, but many employee groups are not anxious to trade off the certainty and stability of retirement income for the possibility of a materially higher but fluctuating average level of benefits. There are also communication problems involved, and CREF's experience may not be readily transferable to other situations. Nevertheless, a trend toward the greater use of variable annuity arrangements is the most important single factor which might affect our projected capital market flows.

Our projections show modest purchases of U.S. Government securities at some point in the future and an early cessation of net liquidation. This reflects the assumption that in the course of an orderly approach to public debt management of the 4½ percent interest rate ceiling on long-term bonds will be removed and that the Treasury will find occasions to offer securities which are attractive in comparison with alternative investments in terms of yield, freedom from an early call provision, and marketability. There is always room for marketable securities, especially as the concentration in direct placements, mortgages, and common stocks limit flexibility in portfolio management at times.

Fund management has been criticized both for being too cautious and for accepting too great risks. Equating the proportion in common stocks with high risk ignores what we know of the role of diversification—the right combination of high-risk equities, with a minimum of covariance between them, can comprise a portfolio with very limited risk. The investment of pension funds in unseasoned, marginal enterprises, on the other hand, clearly raises questions as to whether the trustees are observing the long-established standards of the prudent-man rule.

There has not been any visible pattern of relating the aversion to risk in the pension fund portfolio to the risk characteristics associated with the enterprises which contribute to it. If there were, we should expect to find the highest acceptance of risk among pension funds for State and local government employees or public utilities. Conversely, the greatest aversion to risk should be characteristic of plans for employees in highly cyclical or chronically unstable activities. Actually, almost the reverse is true. This may be a result of transferring to fund investment management decisionmaking the attitudes and outlook most frequently applied to the organization's internal investment decisionmaking.

Generalizations about the cautiousness of fund managements are, therefore, difficult to make. All kinds of portfolio policies are emerging and being followed. The spectrum of policies is nearly as broad as the range of investment opportunities. Over time, the funds will flow to the areas of the best returns, the allowance for risk being taken into account not perfectly but at least rationally.

Within the framework of recognized standards of fiduciary responsibility, then, the flow of pension saving will continue to spread through most segments of the capital markets. It is not material if these funds acquire predominantly seasoned equity securities, for example, because those who sell to pension funds may be in a position to reinvest in companies with greater risk exposure. In an aggregate flow-of-funds view of the capital markets, the significant factors are aggregate sources and uses, the absence of compartmentalization of markets, and a market structure which permits prompt responses to changing demands.

The growth of insured and noninsured pension plans for individuals in private employment, because of their flexibility in the allocation of saving flows, has probably done more than any other single development to improve the breadth and responsiveness of the capital markets to changing patterns of demand. They provided a major remedy to the shortage of equity capital in the period immediately following World War II, as evidenced by the subsequent recovery in the value of corporate earning power to previous levels. They have contributed to a closing of the yield differential between directly placed and publicly offered corporate bonds in the upper-quality ranges. They may have aided the responsiveness of certain classes of mortgage yields to bond yields.

The picture which emerges is of an additional source of funds for the capital markets with a minimum of permanent commitments to any particular sector of those markets. In the years ahead, we can anticipate somewhat greater flexibility in the allocation of fund flows

and greater responsiveness to yield differentials which express the comparative intensity of demands for funds. Our projections are illustrative of possible patterns of response, but what actually takes place will be a function of the changing pressures in the marketplace. On balance, these public and private pension accumulations have made a major contribution to the efficiency of the capital markets in channeling funds to the most productive areas of investments.

IMPLICATIONS FOR FINANCIAL INSTITUTIONS

The increasing readiness of noninsured private pension trusts and State and local government retirement systems to participate in the mortgage market on a much larger scale suggests that life insurance companies, savings and loan associations, mutual savings banks, and commercial banks will find new competition for loans. Some of these institutions have already been working to establish relationships and to provide essential services to fund administrators. Mortgage bankers are also active in tailoring their facilities to these new markets. Such arrangements and correspondent services will undoubtedly develop further.

Efforts to develop a secondary market for mortgages seem unlikely to engage the interest of pension fund portfolio managers. The possibility of resale is well down on the list of desired objectives. Greater uniformity of mortgage terms and characteristics would, however, be an attractive feature of mortgage market developments.

Unless there is a major change in the saving habits and motivation observed in our study, other financial institutions will have good markets for financial services which either supplement or complement pension saving. Mutual fund plan accounts, efficient financing of household capital, additional life insurance protection, and variable savings accounts are a few of the possible areas of growth which may be stimulated by the extension of pension coverage.

IMPLICATIONS FOR PUBLIC POLICY

The Cabinet Committee appointed by President Kennedy chose as the title of its report "Public Policy and Private Pension Programs." Major sections of that report dealt with economic aspects of pension growth and the public interest in private pensions. Although it is not within our province to make or endorse policy recommendations, certain of our findings are relevant to the Committee's analysis.

The Committee recognized that it is essential to the operation of public and private pension programs that the highest standards of fiducial responsibility be maintained. More complete disclosures of portfolios and changes in them were recommended. Also, the Committee advocated strengthening statutory provisions for enforcing recognized standards of fiducial responsibility in preference to the application of regulations or formulas which would reduce the flexibility of asset management.

Our analysis of portfolio management indicates that diversity and flexibility of investment decisions account for much of the contributions of these funds to the more efficient functioning of the capital markets. At the same time, we have found no reason to conclude that

more complete disclosure to participants would hamper portfolio management.

Another relevant issue of public policy is the question of concentration of economic and financial power. Limitations on the purchase of employer securities in private funds have long been recognized on the grounds that collateralizing a promise with the promisor's evidence of debt or a share in its equity is no security at all. At the same time, this type of limitation seeks to prevent use of the pension funds for purposes of control, support of the market for employer securities, facilitating acquisitions or control of other companies, and in other ways transforming the fund into an agency for purposes other than its intended one, the funding of pension commitments. In this report we have accepted the view that the governing considerations in portfolio management decisions will be comparative yield expectations and not the search for control or opportunities to exert influences on portfolio companies.

Certain safeguards are already operative. The most important is the established requirement that a trustee show undivided loyalty to his trust. Conflicts of interest must be avoided. The record of life insurance companies and bank trustees is excellent in this respect. Economic pressures are equally powerful in the same direction. Increasing emphasis on the quality of investment management to reduce the cost of pension benefits has strengthened the competitive forces at work. As large employers have divided their funds among a number of bank trustees or placed different funds under the management of different trustees, the measurement and appraisal of results have emerged as a practical prohibition against any course other than strict attention to the business of investing.

It is true, of course, that some very large concentrations of assets are emerging, particularly in the case of State-administered public employee retirement systems. Despite a few lapses from undivided loyalty to their participants, public fund administrators also have an excellent record of probity. Examinations of many cases by State insurance departments reinforce the system of internal controls. The trustees of these systems have their good names, and often public office, at stake in the administration of the retirement systems.

Admittedly, it is not feasible for a State retirement system to split its assets among several trustees as industrial corporations have frequently done. But concern is more properly with lethargy and lack of flexibility in assets management which may affect these large pools of capital, especially when governmental units show reluctance to employ qualified staffs to deal with financial management responsibilities of these proportions.

Our study suggests, therefore, that competitive factors and greater disclosure are exercising strong pressures against the abuse of economic and financial power. It is clearly appropriate, however, that these issues in the realm of public policy should be examined and debated. In a relatively short span of years, public and private efforts have brought major new financial institutions into being. Mass coverage of the contingency of loss of income because of age or disability has been extraordinarily successful and shows promise of even further development. It is only prudent that we should take stock of both the economic and public policy issues which emerge, in this case, from the

realization of accomplishments beyond our expectations. We can only hope that this kind of review will take place again and again, each time with better grounds for reaching judgments. We can also expect that it will become common knowledge that the validity of pension promises ultimately rests on the capacity of our economy to grow in productivity and to achieve higher standards of living for citizens of all ages.

H. ROBERT BARTELL, JR., PENSION FUNDS OF MULTIEMPLOYER INDUSTRIAL GROUPS,
ELIZABETH T. SIMPSON: UNIONS, AND NONPROFIT ORGANIZATIONS

Part I: *Growth in Multiemployer and Union Pension Funds, 1959-64*,
by H. Robert Bartell, Jr.

Assets of multiemployer and union pension funds are small in comparison to corporate pension funds, but their rate of growth is substantially higher than that of corporate funds.

The high growth rate of multiemployer and union funds is a reflection of their younger average age.

Assets of multiemployer and union pension funds, like corporate funds, are highly concentrated in a relatively few large funds.

Assets and coverage of multiemployer and union pension funds, unlike corporate funds, are concentrated in nonmanufacturing industries. An exception is the large accumulation of assets in funds covering employees in the apparel and other finished-textile products industry.

The portfolio composition of multiemployer and union pension funds shows significant differences when compared to corporate pension funds. However, these reflect, in part, differences in structural characteristics and, in part, highly atypical responses to investment choices by a few large multiemployer and union funds. The remaining differences are fast diminishing because of shifts in investment choices by the average multiemployer and union fund and because of the slower growth rates of atypical funds. For the future, although we can expect the two types of fund—multiemployer and corporate—to become more alike in portfolio composition, it is likely that dissimilarities will always exist because of the persisting structural differences, that is, average size and liquidity needs, and because of investment preferences.

Most unions do not take an active role in shaping the investment policies of pension funds covering their members. For the most part, this responsibility is delegated to professional investment managers, such as commercial bank trust departments. Many of the funds that do not delegate the function of portfolio management nevertheless follow the pattern of investment diversification common to bank administered pension funds.

In the funds covering members of the TCWH, IBEW, ILGW, ACWA, and UMW, the effect of union policy on portfolio composition is clearly discernible. In all of the other unions with substantial pension fund assets, union policy per se appears to play little or no role in shaping fund investment policy.

Union policy does not appear to be a factor affecting the type of union participating in the administration of multiemployer funds. The unions which control or jointly administer large aggregates of pension fund assets demonstrate a wide variety of structures, leadership, and approaches to unionism. The common characteristic of these unions is that some members work in some establishments or are included in small bargaining units attached to medium- or large-sized companies, or that employment with a single firm in the trade or industry for a long period of time is improbable. These characteristics are common to a wide range of unions. Since approach to unionism does not appear to be a deciding factor influencing union involvement in multiemployer and union pension funds, it should not be surprising that union policy plays, in the aggregate, only a minor role in shaping the investment of pension funds.

Part II: *Pension Funds of Nonprofit Organizations*, by Elizabeth T. Simpson

Although many of the pension funds of nonprofit organizations have been in existence 40 to 50 years or longer, there are good reasons for believing that the group as a whole will continue to show a fairly substantial growth rate. This is in contrast to the normal pattern as shown by corporate pension funds. The latter have been increasing, but at a consistently declining rate.

There are two reasons for the expected steady growth in nonprofit pension funds: First, only about one-third of all units of nonprofit organizations had pension plans at the end of 1960 and only about one-fifth of the employees were eligible for coverage; second, once some individuals have the prospect of a small income after retirement, they realize they need more. As pointed out by Cagan, economists are aware of the tendency of group pension plans and GI insurance to cause certain individuals to increase their saving in other forms. Employees of nonprofit organizations other than ministers only became eligible for OASI coverage in 1951, and ministers in 1955. Most employees are now covered, also a large proportion of Protestant ministers, rabbis, and some Catholic priests. For those covered by OASI but not by a private plan, it is not difficult to see that income after retirement will probably be low compared to needs. In general, directors of nonprofit organizations are aware of this fact and are trying to establish pension plans or raise low benefits through increased premium assessments.

The groups for which pension funds are expected to expand markedly are lay employees of religious bodies; lay teachers and other employees of parochial schools and private schools; hospital workers, especially registered nurses and nonprofessional employees other than clerical workers and nonprofessionals in Catholic and Protestant charitable organizations. There are also indications of substantial future growth in funds for retirement or support of aged Catholic priests.

It must be noted that the expected growth in pension funds of nonprofit organizations will not all show up in the figures on private noninsured funds, since over half the funds were insured in the years 1958-64. While in the past some of the plans insured with agency companies have changed over to noninsured funds, and this trend is

likely to continue, when smaller organizations set up plans they will probably be insured. Also, TIAA and CREF have such a large proportion of the higher educational field and the advantage of portable pensions that few if any of their funds are likely to be transferred to noninsured funds.

A combined portfolio of all pension funds of nonprofit organizations amounted to \$3.4 billion at the end of 1964, with 39 percent invested in corporate and other bonds, 28 percent in mortgages, and 22 percent in common stock. It should be noted that these figures include noninsured funds at book value and CREF at an estimate of book value computed only in this paper. When market values are substituted for the two series, the total is \$3.7 billion, with 30 percent invested in common stock; 35 percent in bonds, excluding U.S. Government; 26 percent in mortgages. In that year the combined funds purchased \$136 million in common stock, \$127 million in mortgages, and \$100 million in corporate and other bonds. The expected sustained rate of growth in total pension funds of nonprofit organizations suggests a continued flow of funds to the securities markets.

ARTHUR S. FEFERMAN, COMMENTS OF THE AMERICAN
JAMES L. O'LEARY: LIFE CONVENTION AND LIFE
INSURANCE ASSOCIATION OF
AMERICA

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 employees, 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, long-run 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.

DAN M. MCGILL: GUARANTY FUND FOR PRIVATE PENSION OBLIGATIONS

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 guarantee 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 guarantee 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 thereafter 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 guarantee 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 guarantee 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 guarantee 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 guarantee 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 guarantee fund, which has been in operation since 1960, provides actual experience with a pension guarantee undertaking.

Issues

Many issues would have to be resolved if a pension guarantee 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 guarantee 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 guarantee should be invoked when the firm that created the pension obligation 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 guarantee 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 guarantee, 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 guar-

antee. 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 guarantee 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 guarantee 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) cannot meet reasonable underwriting standards, and (4) voluntarily seek coverage. Finally, there is the question whether multi-employer 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 benefits 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 guarantee would involve: (1) Determination of the dollar dimensions of the PGF's obligation, and (2) a decision as to the manner in which the guarantee 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. Second, 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. Third, 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 guarantee 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 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 would 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 pro-

tection 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 short-run 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.

PETER O. DIETZ,
H. ROBERT BARTELL, JR. : AN ANALYSIS OF PROPOSALS FOR
IMPROVING THE FUNDING AND
FINANCIAL MANAGEMENT OF
PRIVATE PENSION FUNDS

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. The particular suggestions we have reference to are those regarding removal of public incentives for funding of private pension plans, revision of funding requirements, government sponsored reinsurance of plans, and regulation of fund managers and their investment decisions. Our own preference is for a vigorous private component in a mixed public-private retirement system; nevertheless, there are still important considerations as to how the present system might be improved through public policy.

A major question raised is whether or not present funding arrangements for private plans should be changed. 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. Funding protects retirement income of workers several decades way and it would 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.

It has been argued that full funding leads to excessive saving in the economy and overly conservative investment policies. To suggest that the economy is subject to oversavings is to take a very narrow view. Worldwide needs for capital are undoubtedly far in excess of savings. The problem is not one of excessive savings but rather one of developing effective channels of investment.

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 non-funded plans the savings are invested by the sponsoring corporation. (It seems unlikely that a company with an unfunded plan would pay higher wages or charge lower prices than if it had funded plan. Thus, no matter who ultimately bears the cost of the benefit, the company with an unfunded plan should end up with more resources to invest.) 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 channel rather than through direct corporate savings can only be supported if the investment managers do a good job of allocating capital. If there is to be 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.

The practical problems involved in the development of a reinsurance system are many. 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. The question of providing protection against the contingency that assets in the pension fund will decline in value has 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. Since we find no way of insuring assets, we would conclude that if a plan had assets equal to vested liabilities of the fund, no insurance would be necessary. 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. 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. 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 highest. Secondly, valuing assets at market values could lead to unnecessary investment speculation by unprincipled fund managers. Although the concept of reinsurance might be politically attractive, it introduces unnecessary economic problems in the private pension field. 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.

With respect to fund management, a question which might be legitimately asked is whether or not the pension 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 fiduciary. 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 preserving the corpus 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 change the trustee if the investment results are unsatisfactory. 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 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. 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.

Recommendations

(1) We 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. We prefer to see less benefit promises and more assurance that those promised are paid. Furthermore, we highly recommend that the present minimum funding period imposed by the IRS be dropped.

(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 the IRS pension plan treatment.

(3) As a further safeguard of employee interest, investment 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. 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 principle should apply and they should refrain from purchasing securities of their own taxing district.

(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

listings 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 and this would enhance the operation of the system rather than detract from it as some have suggested.

C. WADSWORTH FARNUM: CORPORATE FIDUCIARIES OF EMPLOYEE BENEFIT FUNDS

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. 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 varied interests should be seriously considered in any new study of the need for new legislation.

A trustee is required to employ such diligence and such prudence in the care and management 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.

In our experience with employee benefit trusts and 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 renders a formal annual accounting to the company after each year end covering all its activities during the year. (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.

Internal auditing has as its basic purpose the prevention and detection of loss. Significant in the audit program set forth by the Association for Bank Audit, Control and Operation for pension and profit-sharing trusts 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.

Regulation 9 issued by the Controller of the Currency enumerates in considerable detail the fiduciary powers of national banks and collec-

tive 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.

All member banks are subject to examination by the Federal Reserve examining staff. State banking departments examine trust departments of State banks. 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, and so forth.
- (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 the trust.

Section 6033 of the Income Tax Regulations requires the bank trustee to file an annual return with the District Director of Internal Revenue. The Welfare and Pension Plans Disclosure Act requires, under part IV of Annual Form D-2, the submission of financial data for trust funds.

Typically, the modern trust agreement gives the bank trustee broad powers of investment. Some companies, however, prefer to place investment restrictions in the trust agreement. 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. In some instances, a company may choose to assume the responsibility for the investment of the funds. 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.

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